

Full Line Catalog
No. 890



Contents

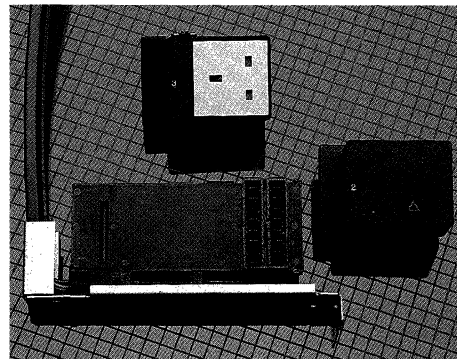
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Distributors, Worldwide Sales Offices — See last pages of catalog

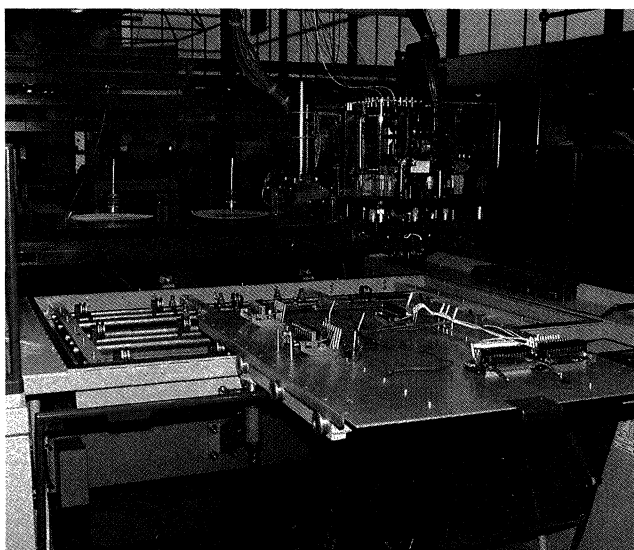


DENSE PACKAGING SYSTEMS	<i>Modular Interconnection Systems .100" x .100" (2,54mm x 2,54mm) Single and Dual Row</i>	A
RIBBON CABLE SYSTEMS	<i>.050" (1,27mm) Center Ribbon Cable Connectors, Mating Headers and Transition Connectors</i>	B
IDT	<i>Insulation Displacement Interconnection Components</i>	C
CABLE	<i>Planar Cable Standard Round Conductor Flat Cable and Various Shielded and Heavy Duty Types</i>	D
PCB INTERCONNECTIONS	<i>Printed Circuit Board Interconnection Products, .049" to .200" (2,0mm to 5,08mm) Center Crimp Terminals, Housings, Connectors, Headers</i>	E
SIMM SOCKETS & EDGE CONNECTORS	<i>SIMM Sockets for SIP Packages Edge Connectors</i>	F
FFC CONNECTORS	<i>Flat Flexible Circuitry Connectors For Membrane Switch Tails, Planar Cable FFC/FPC</i>	G
FIBER OPTICS	<i>Fiber Optic Links Simplex and Duplex Types TTL Compatible</i>	H
TELEPHONE CONNECTORS	<i>Telephone Connector Products Modular I/O Connectors</i>	I
SOCKETS	<i>Sockets For Transducers, Transistors, Integrated Circuits</i>	J
PIN AND SOCKET CONNECTORS	<i>Pin and Socket High Current and Special Purpose Components</i>	K
SWITCHES	<i>Control Panels and Pushbutton Switches</i>	L
APPLICATION TOOLING	<i>Application Tooling Hand, Semi-Automatic, Fully Automatic Crimp, Insulation Displacement, Robotic Packaging</i>	M
SOLDERLESS TERMINALS	<i>Solderless Terminals Quick Connects, Splices, Cable Ties, Tooling</i>	N
SHIELDED I/O CONNECTOR SYSTEM	<i>For High Speed Data Busing, Terminates Round and Flat Shielded Cables</i>	O
D-SUBMINIATURES	<i>Panel Mount Types with Crimp Removable Contacts, PCB Mount Styles</i>	P
ENVIRONMENTAL CONNECTORS	<i>Rugged Industrial Connectors</i>	Q
RF COAXIAL CONNECTORS	<i>BNC, TNC, N, Twin-Ax, UHF, BSA, SMA, SMB/SMC, MCX, BNO, TNO</i>	R

molex Technology

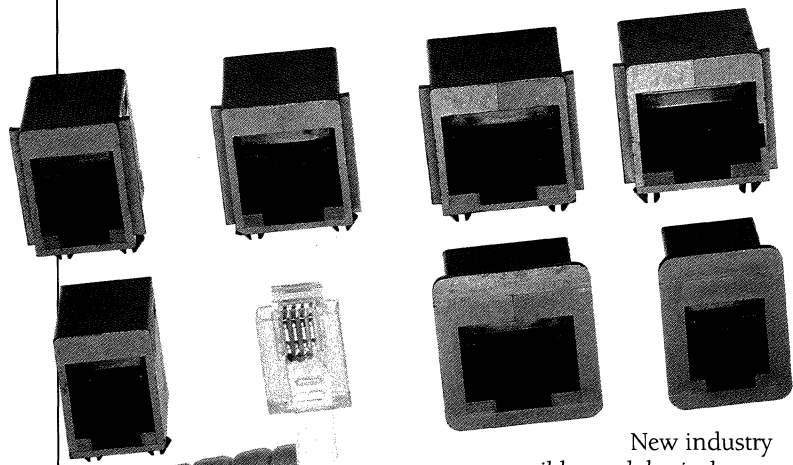
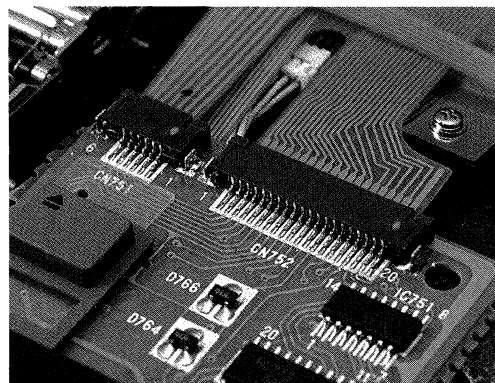


Our capability of providing electrical, telecom, and computer interconnection systems for modular office landscape will be expanded to international markets.

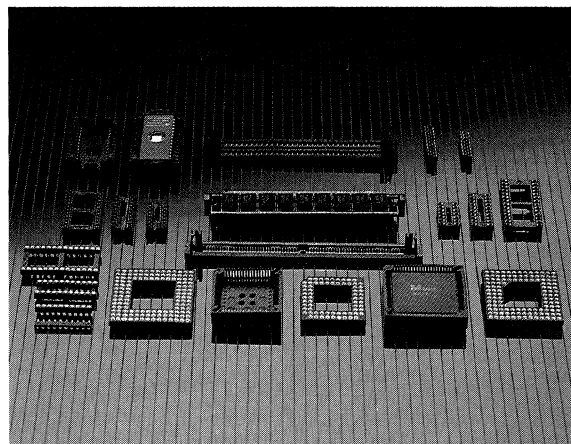


Our automatic heavy gauge I.D.T. harness machine will be unveiled at the March Nepcon West Show.

Our leadership in the miniature interconnection systems market expands to surface mount connectors.

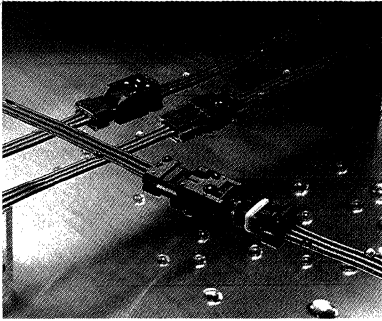


New industry compatible modular jacks are available in a variety of mounting types and packaged for robotic placement.

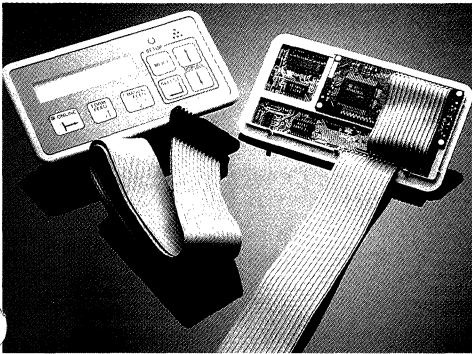


Our socket product line has expanded to include new ROM memory module, I.C., Zip, PLCC, P.G.A. and smaller .050" center SIMM versions.

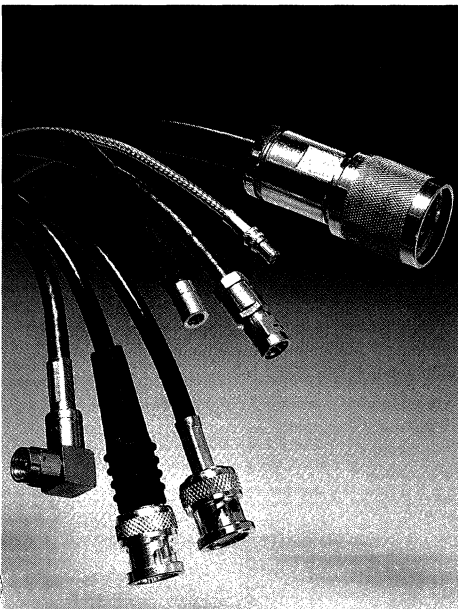
A variety of robotic packaging systems are available including vision applications.



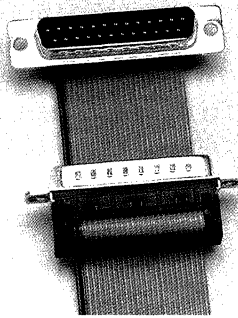
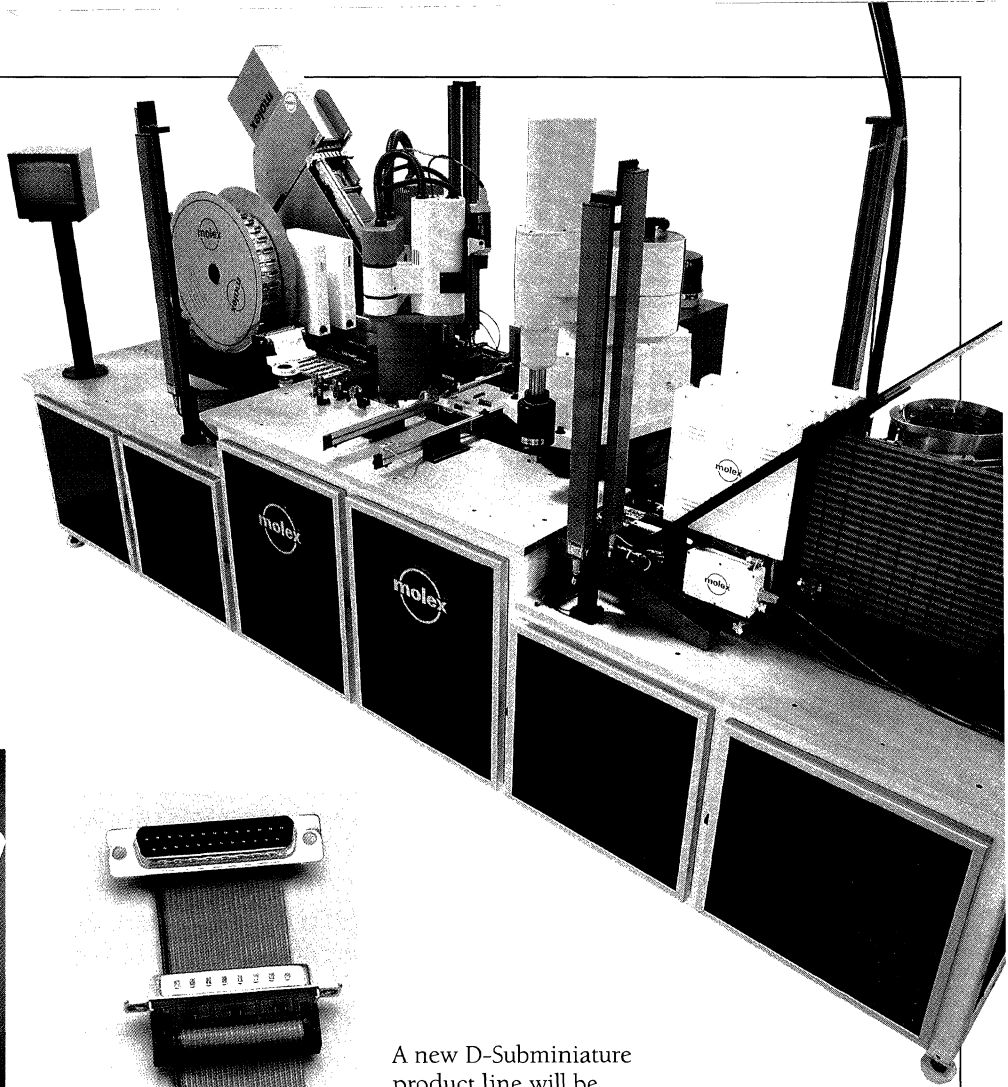
Smallest environmentally sealed connector system available, designed for automotive use.



Hybrid control panels incorporating tactile switches, LEDs, resistors, capacitors, LCB and cable interconnection in this application is an excellent example of the complexity and advancement of switch technology at Molex.

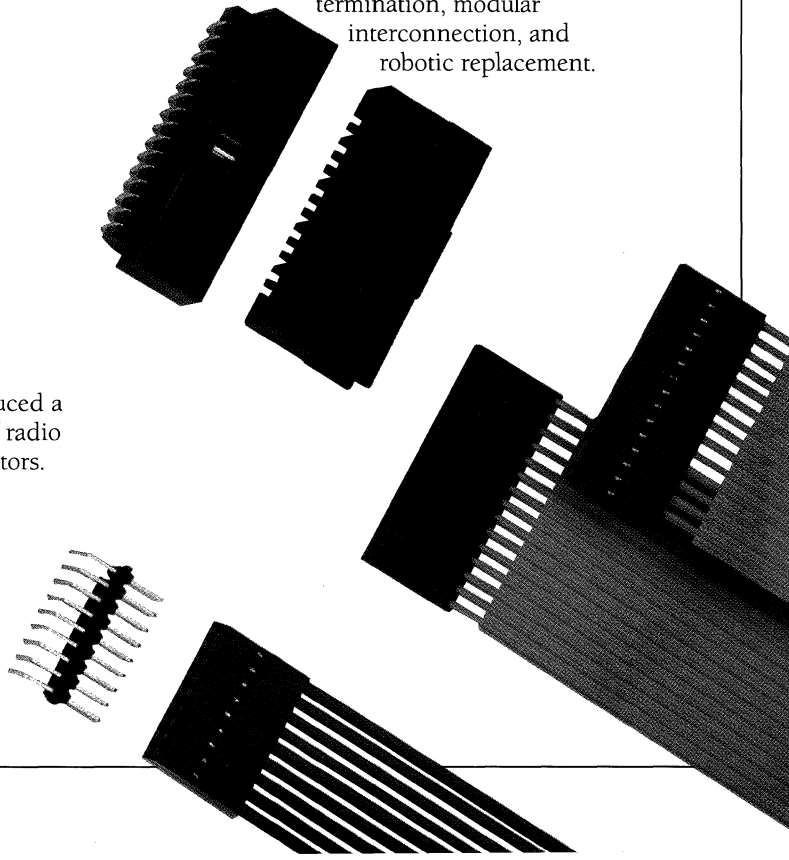


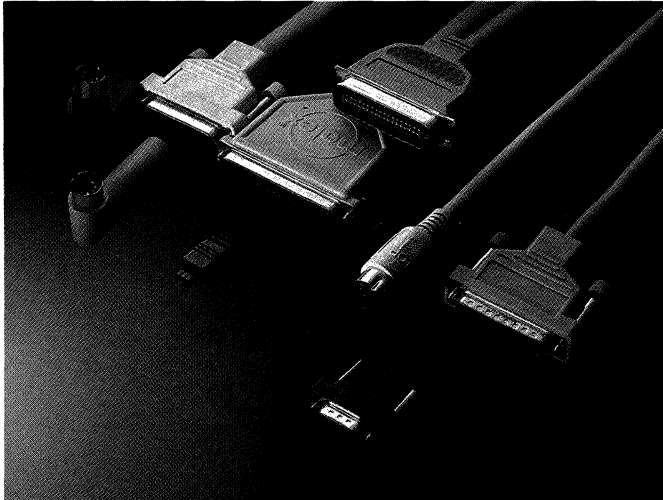
Molex has introduced a broad new line of radio frequency connectors.



A new D-Subminiature product line will be marketed in 1989.

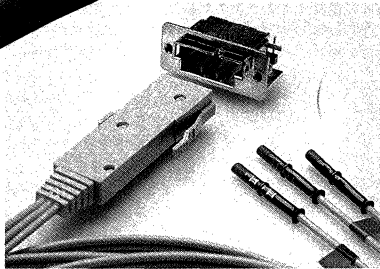
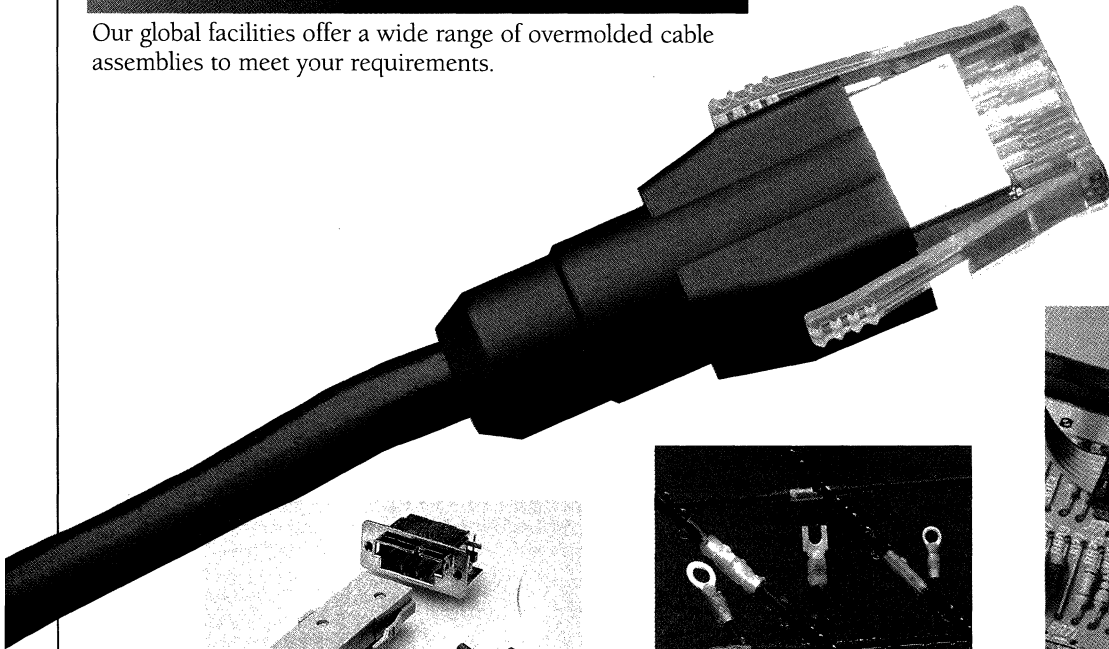
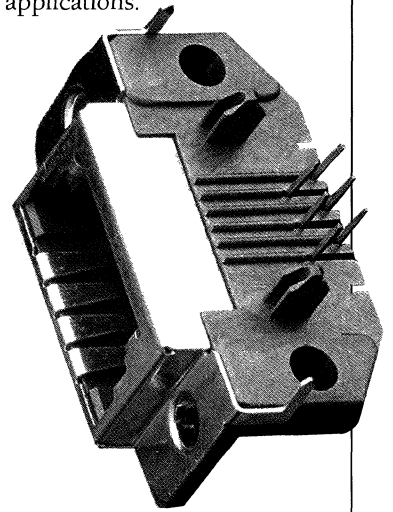
C-Grid SL system was designed especially for automated wire or cable or FCC termination, modular interconnection, and robotic replacement.



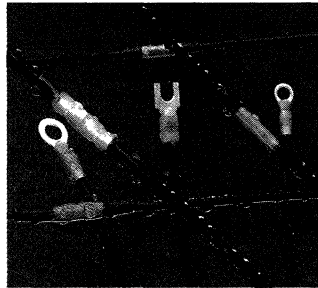


Durable, SEMCONN shielded cable/plug assemblies reduce labor costs in a wide range of easy-in/easy-out applications.

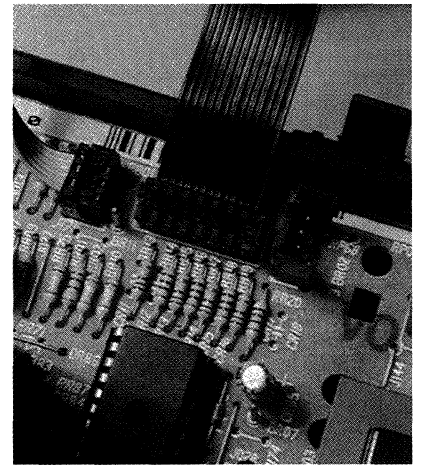
Our global facilities offer a wide range of overmolded cable assemblies to meet your requirements.



New 3 channel 40 Mhz analog fiber optic link is available.



Molex-ETC's new Perma-Seal nylon wire splices seal and protect wire junctions.

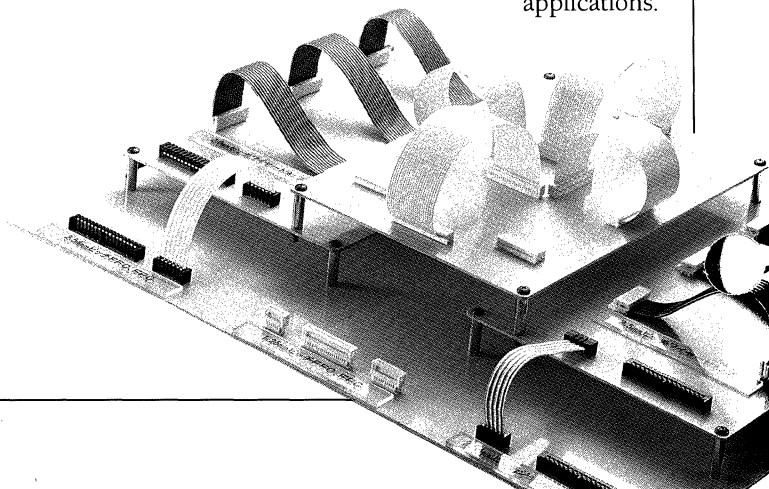


Overmolded cable assemblies provide signal input-output for computer/peripherals.



Environmentally sealed connector for a variety of industrial applications.

Miniature flat flexible circuitry and cable connector for dense packaging applications.



Cross Reference



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02-05-110X	2107	19K
02-05-111X	2107	19K
02-05-120X	2107	19K
02-05-121X	2107	19K
02-05-51XX	2107	19K
02-05-52XX	2107	19K
02-06-110X	4529	14K
02-06-11XX	4559	14K
02-06-5201	1787	14K
02-06-520X	4529	14K
02-06-5211	4559	14K
02-06-611X	1560/1561	14K
02-06-6122	1778	14K
02-06-620X	1786	14K
02-06-X103	1778/1779	14K
02-06-X10X	1560/1561	14K
02-06-X13X	1854/1855	14K
02-06-X14X	1854/1855	14K
02-06-X20X	1786/1787	14K
02-06-X23X	2189/2190	14K
02-08-110X	1881	19K
02-08-120X	8980	23K
02-09-1145	2605	10K
02-09-1148	8048	10K
02-09-115X	41483	10K
02-09-11XX	2273	10K
02-09-11XX	4272	10K
02-09-1208	6271	10K
02-09-120X	2151	10K
02-09-120X	4550	10K
02-09-12XX	6310	10K
02-09-210X	4706	20K
02-09-211X	7239	10K
02-09-216X	4549	10K
02-09-217X	42138	10K
02-09-220X	2152	10K
02-09-513X	1380/1381	10K
02-09-514X	1380/1381	10K
02-09-514X	1433/1434	10K
02-09-5166	4549	10K
02-09-5169	4550	10K
02-09-51XX	1189/1190	10K
02-09-520X	6271	10K
02-09-520X	6310	10K
02-09-612X	1380/1381	10K
02-09-612X	1380/1381	10K
02-09-614X	1433/1434	10K
02-09-61XX	1189/1190	10K
02-09-810X	1973	10K
02-09-8113	2606	10K
02-09-X100	1189/1190	10K
02-09-X106	1189/1190	10K
02-09-X10X	1189/1190	10K
02-09-X112	7238	10K
02-09-X11X	1380-1381	10K
02-09-X132	1376/1377	10K
02-09-X134	1376/1377	10K
02-09-X136	2870/2871	10K
02-09-X14X	1433/1434	10K
02-12-X40X	1219/1220	16K
03-04-40X1	1840	18K
03-04-4121	1840	18K
03-06-X011	1625	11K
03-06-X02X	1625	11K
03-06-X03X	1625	11K
03-06-X04X	1625	11K
03-06-X05X	1625	11K
03-06-X06X	1625	11K

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03-06-X081	1649	12K
03-06-X09X	1625	12K
03-06-X12X	1625	12K
03-06-X15X	1625	12K
03-06-X24X	1625	12K
03-06-X36X	1772	12K
03-09-X011	1619	7K
03-09-X014	1951	7K
03-09-X02X	1545	7K
03-09-X03X	1396	7K
03-09-X042	1490	7K
03-09-X04X	2163	7K
03-09-X052	1653	7K
03-09-X06X	1261	7K
03-09-X09X	1292	7K
03-09-X12X	1360	7K
03-09-X15X	1375	7K
03-12-X02X	4306	15K
03-12-X06X	4154	15K
03-12-X12X	2201	15K
05-01-006X	2697	32K
05-02-007X	2699	32K
05-02-00XX	1457	21K
05-05-020X	1943	31K
05-06-0307	2799	31K
05-06-0308	2799	31K
05-06-030X	2176	31K
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05-06-040X	2328	31K
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05-06-040X	2698	18L
05-06-040X	2698	31K
05-12-100X	2482	33K
05-12-110X	6482	33K
05-30-000X	1938-4	6J
06-02-1XX5	41644	32K
06-02-1XX5	41645	32K
06-02-3011	2211	30K
06-02-3031	2191	30K
06-02-3111	2177	30K
06-02-314X	1852	30K
06-06-3063	10402-63	18L
07-01-7XX1	1461	21K
08-01-0105	2014	23F
08-01-010X	1797	23F
08-01-0110	2012	23F
08-01-011X	4295	23F
08-01-0203	4837	19F
08-01-020X	4574	19F
08-03-0101	1917	23F
08-03-0303	4366	19F
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08-05-0105	2014	23F
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08-06-0101	1797	23F
08-06-0102	1797	23F
08-06-0105	2014	23F
08-07-0101	1917	23F
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08-50-011X	2878	25F
08-50-011X	4018	24E
08-50-016X	6438	23E
08-50-0183	7248	23E
08-50-0185	7258	23E
08-50-018X	6838	23E
08-50-027X	8993	28K
08-50-032X	40445	12E
08-52-06XX	4166	54E
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08-55-0118	40144	11E
08-55-0124	7879	11E
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08-56-0123	7258	23E
08-56-013X	6438	23E
08-56-0150	4018	24E
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08-58-018X	6838	23E
08-65-012X	7258	23E
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08-70-0060	5190	80E
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09-06-0XX9	7674	16C
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09-06-XXX9	7674	16C
09-07-0XX5	7664	18C
09-07-0XX6	7660	17C
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09-07-2XX0	7674	16C
09-07-XXX9	7674	16C
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09-18-512X	1840	18K	10-13-10X5	3011	46E	10-87-4XX5	40510B	11B
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15-04-0219	2560-1	28E	15-29-95XX	40312G	4B	15-45-32XX	71395	117A/118A
15-04-0220	2560-2	53E	15-29-96XX	40312G	4B	15-45-33XX	71395	117A/118A
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1840	09-18-5XXX	Still available. Contact Factory
2373	09-66-1XX1	Still available. However, new versions 41662, 42472 or 41772 preferred
2391	09-65-1XX1	Still available. However, new versions 42461, 41761, 41671, 42491 or 41791 preferred
2402	09-64-1XX1	Still available. However, new versions 41661, 42471, 42441 or 41741 preferred
2403	09-60-1XX1	Still available. However, new version 41681 preferred
2420	09-75-1XX1	Still available. However, new versions 41672, 42492 or 41792 preferred
2461	09-67-1XX3	Still available. However, new versions 41661, 42471 or 41771
2534	09-88-2XX1	Still available. However, new version 41682 preferred
2630	09-74-1XX1	Still available. However, new version 41671, 42491 or 41791 preferred
5204	29-13-4XX1	Obsolete; no replacement
5207	10-30-8031	Not available in 3, 4, or 5 circuit versions. Offered in circuit sizes 6 through 15
	10-30-8041	
	10-30-8051	
5240	29-11-0133	Not available in circuit sizes 13-16. Offered in circuit sizes 2 through 12
	29-11-0143	
	29-11-0153	
	29-11-0162	
5274	09-75-2074	Circuit size 7 not available
5386	39-51-0XX2	Obsolete; no replacement
5410NAPB	39-51-0XX3	Still available; contact factory. Though recommended replacements are 5513, 5512, 5533, or 5532 series
5418NA	39-51-0XX3	
5420NAPB	39-51-0XX9	
5428NA	39-26-5XX4	
6393	09-88-1XX1	Still available. However, new version 41681 preferred
6777	15-25-9XX1	Obsolete; replace with 71003
	15-25-9XX3	
7720S	38-00-2452	Version "K" no longer offered as standard item
8160A&D	38-10-03XX	Obsolete; no replacement
	82-28-8XX2	
40195	38-00-03XX	Obsolete; replace with 41000 or 420000
41459	26-41-4414	Still available; contact factory
52043	52043-0310	Available in circuit sizes 4-20 only
	52043-2110 thru -3010	
AM60181	11-20-0979	Pneumatic machine no longer offered. Use manual bench tool, Eng. No. AM60161
	11-20-0980	
	11-20-0981	
	11-20-0684	
	11-20-0681	
70088	15-44-5603	Obsolete; no replacement
	15-44-5604	
70090	15-44-5601	Obsolete, no replacement
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	15-44-5605	
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70246	70246-XX01	Order No. changed to 70246-XX21 70246-XX20 70246-XX05 70246-XX22 70246-XX07
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	70246-XX10	
	70246-XX02	
	70246-XX12	
70400 A, C, D, G, H	22-56-XXXX	Redesigned and replaced by 14-56-XXXX
70475 A, C, D, G	15-44-XXXX	Redesigned and replaced by 14-44-XXX and 14-45-XXXX
	15-45-XXXX	
	15-45-XXXX	
713XX	15-83-01XX	Use SEMCONN panel ground version
	15-83-04XX	Use SEMCONN PCB ground version



SERVICE & COMMITMENT

About Molex ...

- Serving customers since 1938
- Sales revenue, fiscal 1988 (year ended June 30) \$502 million ... 30% increase
- Projected R&D for fiscal '89, \$31 million up from \$27 million in '88
- Employees worldwide: over 6,100
- Manufacturing facilities: 42 on five continents

'88 In Review ...

- A record 187 new products introduced
- A record 83 patents granted worldwide
- Facility expansions in Hong Kong, South Korea, Taiwan, and Japan
- New 100,000 sq. ft. plant opens in Singapore
- Construction begins on a new plant in Brazil
- Ground broken for a new plant in Huntsville, Alabama (Acustar Supplier Park)
- Sales office opens in China
- New facility in Guadalajara, Mexico
- Second plant added in Ponce, Puerto Rico
- 1988 marks Molex's 50th Anniversary
- Seventy-one percent of sales are outside of the U.S.
- Molex honored as Illinois' Employer of the Year

Our Philosophy ...

Service to the Customer ... Worldwide What It Means to You:

Developing and Maintaining Close Customer Contact

Well-Designed, Innovative Products

Lowering Your Total Applied Costs

Quality Products Which Meet Your Needs

Employees Who Believe in Doing the Exceptional to Serve You

Preferred Version Products

In a few cases Molex manufactures equivalent products with slightly different features in more than one region of the world. The leadtimes are longer for those versions which are not locally manufactured or stocked.

The wording "Preferred Version in _____" has been added near the Ordering Information for those products which are only being actively promoted in one or two areas of the world. This is to steer you toward the alternate product which will be listed nearby.

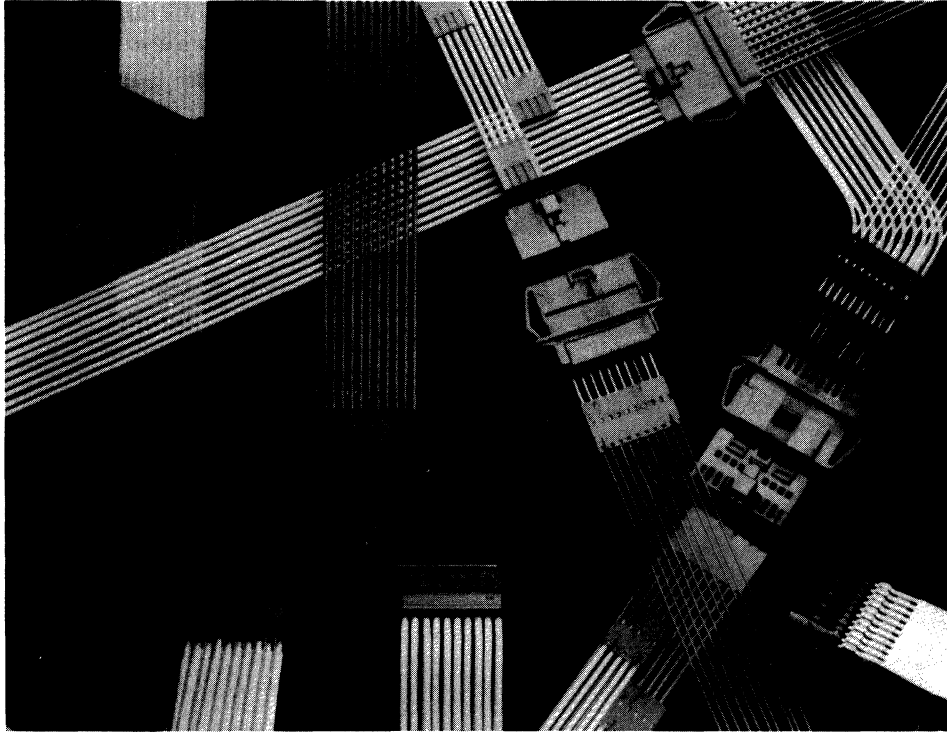
All information contained herein, including illustrations, specifications and dimensions, is believed to be reliable as of the date of publication, but is subject to change without notice. Current sales drawings and specifications are available upon request. Molex makes no claims or warranties as to the application of these products or their suitability or fitness for any particular purpose. Accordingly, it is recommended that each user independently test and evaluate products for their intended use.

C-Grid™ High Density Connectors



A

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C-Grid High Density Connectors



A

Introduction

Molex presents its modular .100" center interconnection products ... **C-Grid™**, our **dual row system for digital circuit boards** and **C-Grid SL™**, our **single row fully stackable wire-to-board and wire-to-wire system**.

Both families feature similar material and electrical specifications and both utilize .025" pins, and selective plating.

C-Grid, based on a .100" grid, is designed for dense electronic packaging. It is comprised of straight and right angle headers in several styles including breakaway, shrouded, and end-to-end stackable. Also featured are board-to-board and wire-to-board connectors. Two-circuit shunts, which act as a switch, complete the C-Grid product family. A line of insulation displacement type application tooling is offered to terminate the wire-to-board connector.

C-Grid single row boasts preassembled, single piece construction, modularity, design flexibility and automated harness-making capabilities when combined with our tooling.

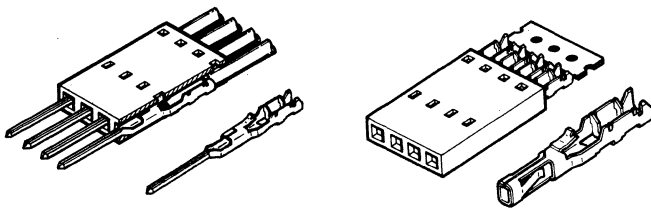
These four low profile, stackable housings form the basis of the single row system. Each housing accommodates either male or female terminals, ID-type or crimp. All the other components in the C-Grid SL system revolve around these four housings.

The "A" version is infinitely stackable on the X-Y matrix.

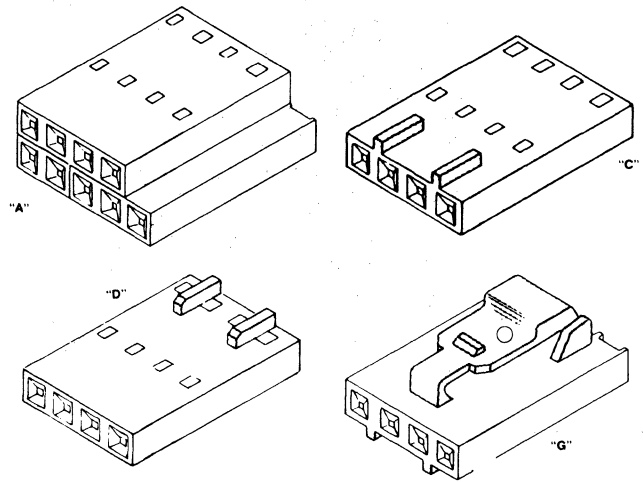
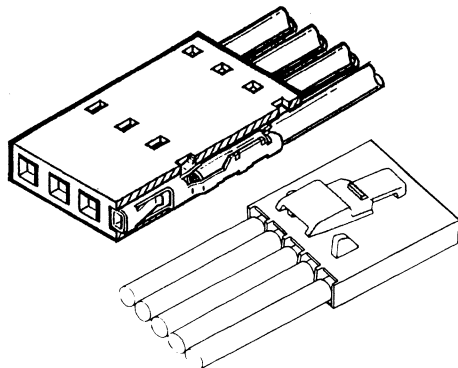
The "C" version has ribs on the front end which polarize and also prevent the housing from twisting off the mating pins during mating/disconnect.

The "D" version has back ribs which polarize, guide and maintain the connector into position within its interim module.

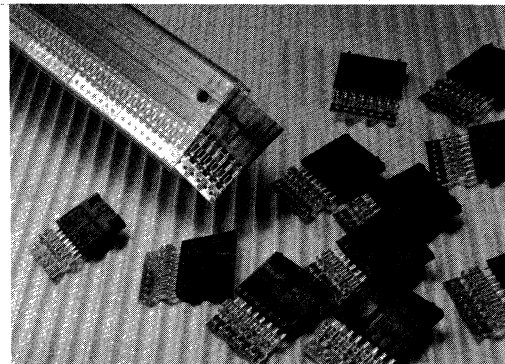
The "G" version has front ribs, a positive locking latch and anti-entanglement ribs to prevent wires from catching under the latch during harness-making and storage.



Preloaded assemblies are then loaded into plastic tubes which protect the product during shipping and also allow the connector to be integrated into highly automated harness production.



C-Grid single row boasts preassembled, single piece construction of its insulation displacement-type connector assemblies. These are created by interlacing two reels of male or female terminals stamped on .200" centers and feeding into the housings.



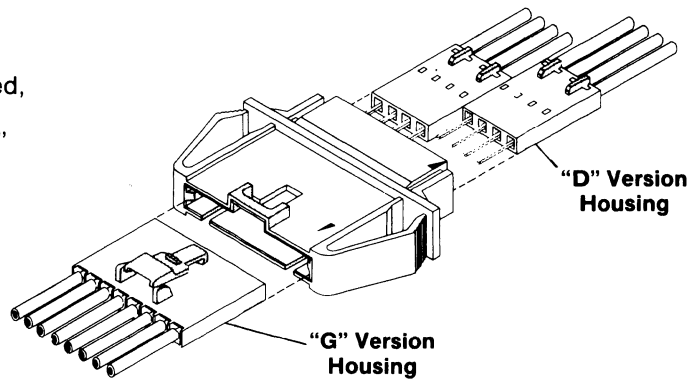
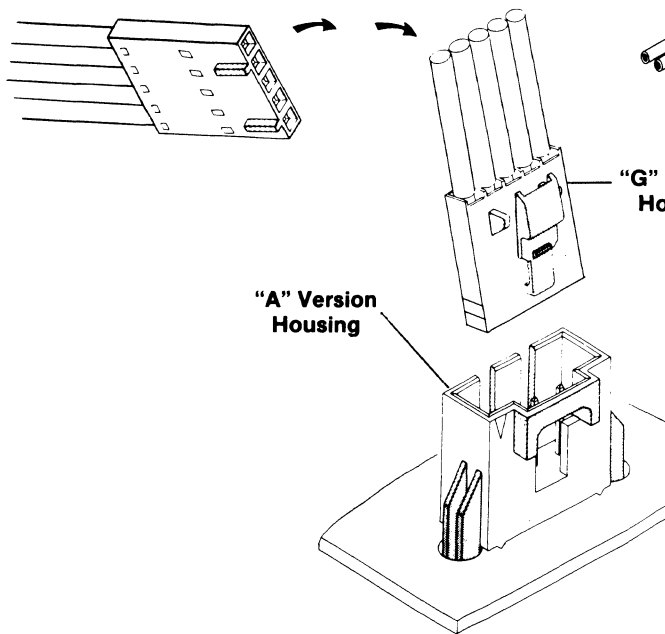
After termination the housings are locked over the terminal and the carrier strip is broken off. This automated process, with built in diagnostic systems, assures quality products.

C-Grid High Density Connectors



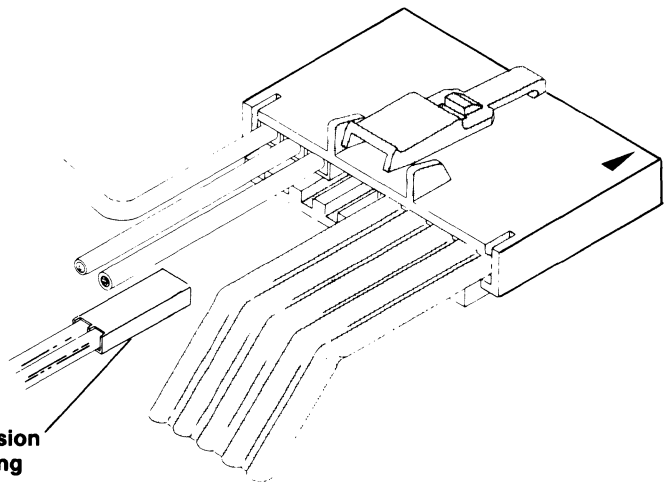
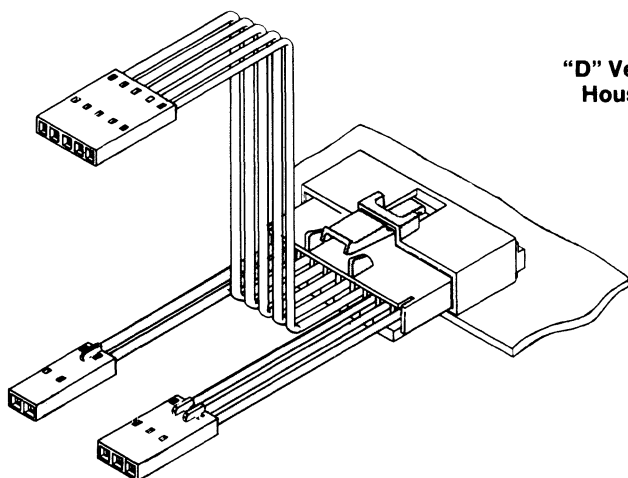
A

Shown: Wire-to-wire connection using male connectors in "D" version housings. The ribs interface to slots on the underside of the panel mount. Once loaded, the panel mount is fitted into place in the panel. Completing the connection, the female connector, "G" version, is guided through the other end of the panel mount via polarization slots. Positive latch ensures a tight lock.



Shown: Wire-to-board connection using a shrouded header, "A" version, with PC board locks and a "G" version female connector. The polarizing ribs on the connector prevent it from breaking or bending the pins on the header during mating and disconnect. Note positive latching feature.

Shown: Gang loading of subassemblies in an interim clip module. The slots in the clip guide the "D" version housing during loading and also prevent the housings from drifting within the clip.

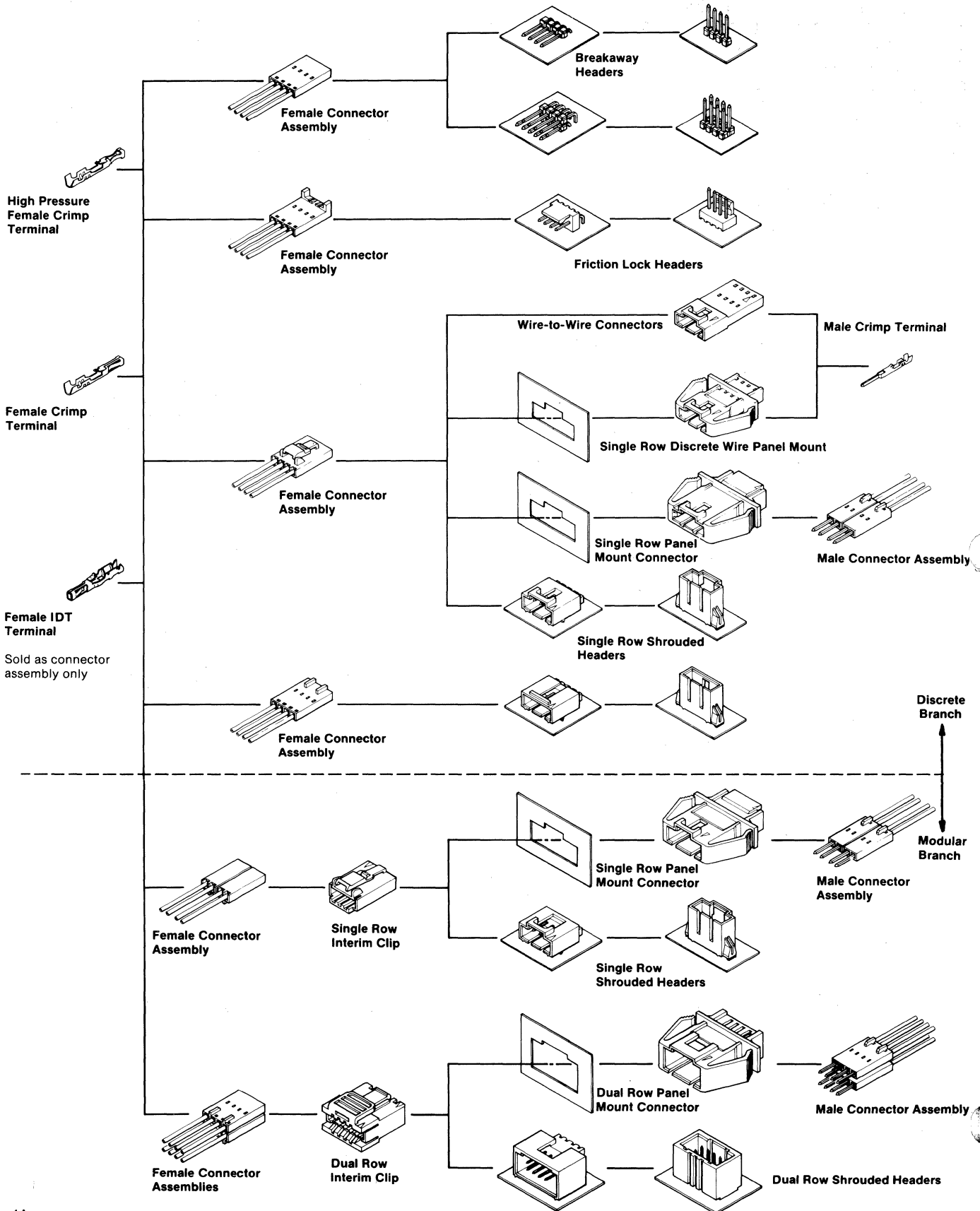


Shown: Modular wire-to-board interconnection.

C-Grid™ Modular Interconnection System



A



Specifications for C-Grid Crimp Terminals



A

70021 Male Crimp Terminal

Terminal Material:
Phosphor bronze

Plating:
30 μ " select gold over nickel
15 μ " select gold over nickel
200 μ " electro tin over copper

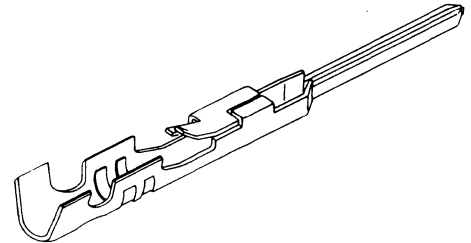
Current Rating:
3.0 amps (24 AWG) 30°C rise over ambient

Initial Contact Resistance @ Rated Current:
5 milliohms

Maximum Insulation Diameter and Wire Gauge Range:
.064" - 22-24 AWG
.060" - 24-30 AWG
.025" - 32-36 AWG

Pin Height (Measure from Top of Housing):
.300" maximum
.280" minimum

U.L. Listed and CSA Certified



70058 Female Crimp Terminal

Terminal Material:
Phosphor bronze

Plating:
30 μ " select gold over nickel
15 μ " select gold over nickel
200 μ " select gold over copper

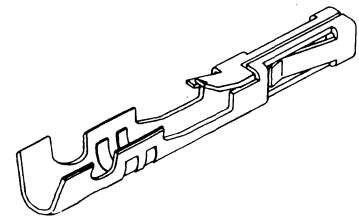
Current Rating:
3.0 amps (24 AWG) 30°C rise over ambient

Initial Contact Resistance @ Rated Current:
5 milliohms

Minimum Mating Pin Height:
.200" (measured from top of housing or PCB to top of pin)

Mating/Unmating Force:
Mating max. insertion 6.0 oz.;
Min. withdrawal 2.5 oz. (with gold)

UL Listed and CSA Certified



Maximum Insulation Diameter and Wire Gauge Range:
.064" - 22-24 AWG
.060" - 24-30 AWG
.025" - 32-36 AWG

71851 High Force Female Crimp Terminal

Terminal Material:
Phosphor Bronze

Plating:
30 μ " select gold over nickel
15 μ " select gold over nickel
200 μ " electro tin over copper

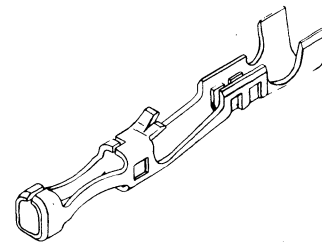
Current Rating:
3.0 amps (24 AWG) 30°C rise over ambient

Initial Contact Resistance @ Rated Current:
5 milliohms

Maximum Insulation Diameter and Wire Gauge Range:
.064" - 22-24 AWG
.060" - 24-30 AWG
.025 - 32-36 AWG

Minimum Mating Pin Height:
.200" (measured from top of housing or PCB to top of pin)

Mating/Unmating Force:
Insertion Force - 23 oz. (tin),
14.7 oz. (gold)
Withdrawal Force - 10 oz. (tin),
9 oz. (gold)

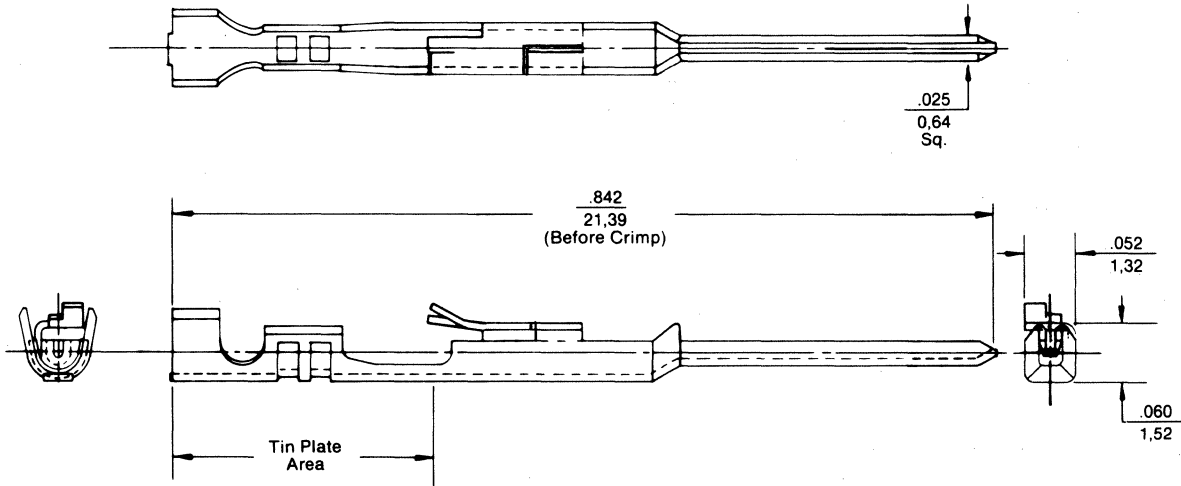
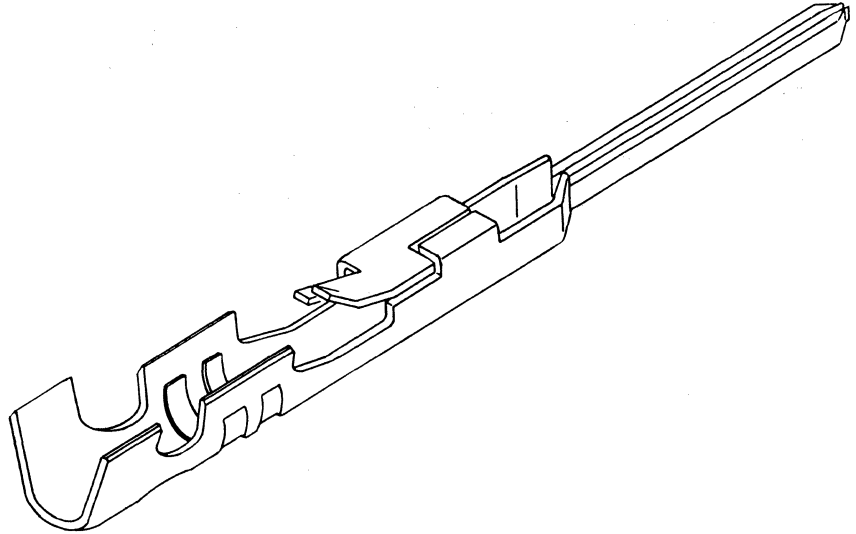


C-Grid Male Crimp Terminal

A

70021 Series

- For use with connector housing 70066 and panel mount 70107
- Terminals accommodate wire ranges 22 and 24, 24-30, and 32-36
- Three plating specs
- Available on reels or loose
- Mates with 70058 series box crimp terminals and 70400 insulation displacement-type connector assemblies



Dimensions/Ordering Information

*Plating Spec	Wire Range (AWG) Stranded	Insulation Max. Outside Dia.	Order No.	*Plating Spec	Wire Range (AWG) Stranded	Insulation Max. Outside Dia.	Order No.
REEL FORM				LOOSE FORM			
1	22-24	.064	● 16-02-0116	1	22-24	.064	● 16-02-0117
	24-30	.060	● 16-02-0078		24-30	.060	● 16-02-0110
	32-36	.025	● 16-02-0080		32-36	.025	● 16-02-0113
2	22-24	.064	● 16-02-0081	2	22-24	.064	● 16-02-0115
	24-30	.060	● 16-02-0077		24-30	.060	● 16-02-0109
	32-36	.025	● 16-02-0079		32-36	.025	● 16-02-0112
3	22-24	.064	● 16-02-0107	3	22-24	.064	● 16-02-0114
	24-30	.060	● 16-02-0105		24-30	.060	● 16-02-0108
	32-36	.025	● 16-02-0106		32-36	.025	● 16-02-0111

***Plating Specifications:**

1. 30 μ min. gold in select area over 50 μ min. nickel overall with 75 μ tin/lead 60/40 to 80/20 in select area.
2. 15 μ min. gold in select area over 50 μ min. nickel overall with 75 μ min. tin/lead in select area.

● U.S. Standard Product, available through Molex franchised distributors

3. 200 μ min. post-plate electro/tin over 100 μ min. copper.

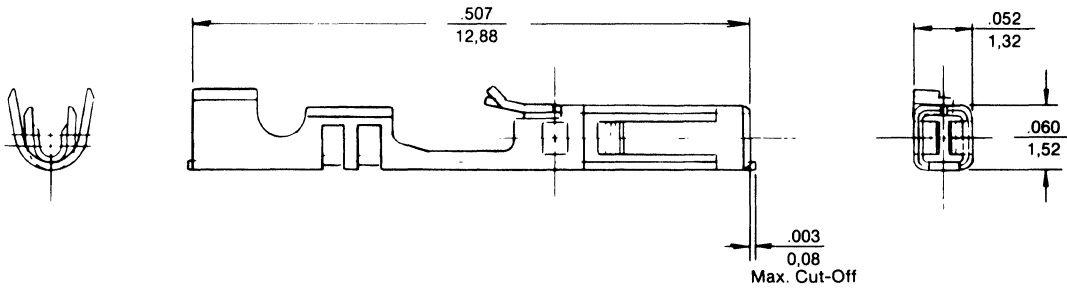
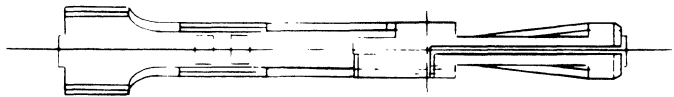
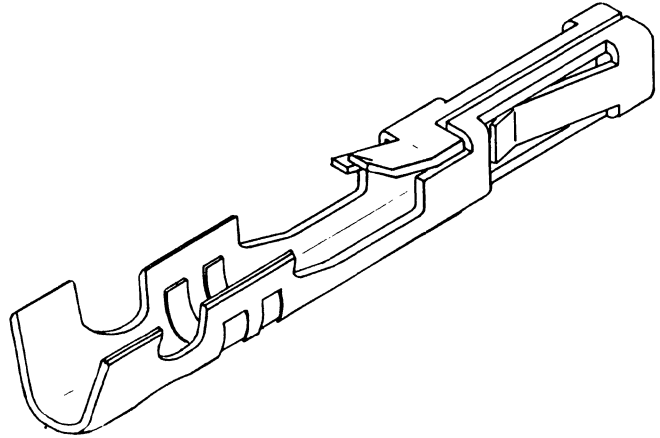
C-Grid™ Box Female Crimp Terminal



A

70058 Series

- For use with all versions of connector housings 70066 and 70450
- Terminals accommodate wire ranges 22 and 24, 24-30, and 32-36
- Three plating specs
- Available on reels or loose
- Dual beam, fully enclosed box contact with locking lance
- Mates with .100" center single- or dual-row headers or .025" pins



Dimensions/Ordering Information

*Plating Spec	Wire Range (AWG) Stranded	Insulation Max. Outside Dia.	Order No.	*Plating Spec	Wire Range (AWG) Stranded	Insulation Max. Outside Dia.	Order No.
	REEL FORM				LOOSE FORM		
1	22-24	.064	• 16-02-0088	1	22-24	.064	• 16-02-0104
	24-30	.060	• 16-02-0083		24-30	.060	• 16-02-0098
	32-36	.025	• 16-02-0085		32-36	.025	• 16-02-0101
2	22-24	.064	• 16-02-0087	2	22-24	.064	• 16-02-0103
	24-30	.060	• 16-02-0082		24-30	.060	• 16-02-0097
	32-36	.025	• 16-02-0074		32-36	.025	• 16-02-0100
3	22-24	.064	• 16-02-0086	3	22-24	.064	• 16-02-0102
	24-30	.060	• 16-02-0069		24-30	.060	• 16-02-0096
	32-36	.025	• 16-02-0084		32-36	.025	• 16-02-0099

***Plating Specifications:**

1. 30 μ min. gold in select area over 50 μ min. nickel overall with 75 μ tin/lead 60/40 to 80/20 in select area.
2. 15 μ min. gold in select area over 50 μ min. nickel overall with 75 μ min. tin/lead in select area.

- U.S. Standard Product, available through Molex franchised distributors
- 3. 200 μ min. post-plate electro/tin over 100 μ min. copper.

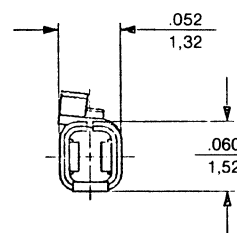
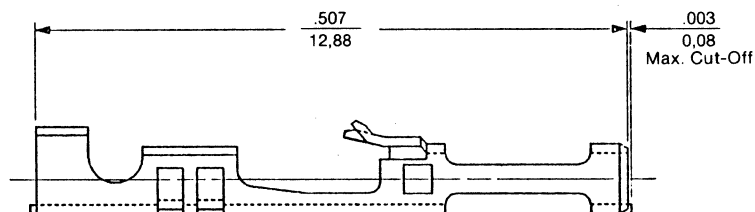
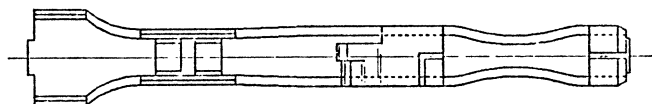
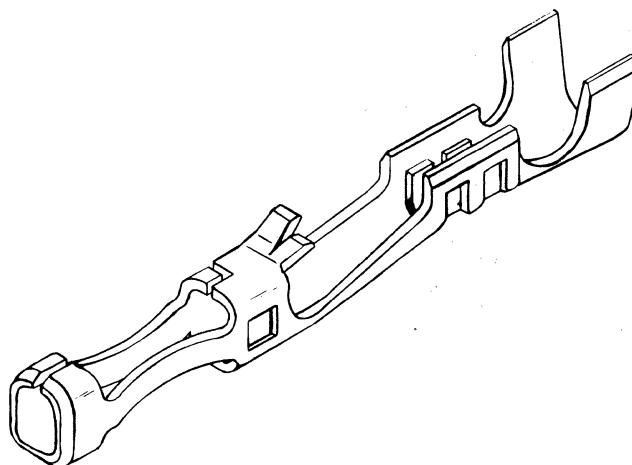
Other platings available upon request.

High Force Female Crimp Terminal

A

71851 Series

- For use with all versions of connector housings 70066 and 70450
- Terminals accommodate wire ranges 22-24, 24-30 and 32-36
- Dual beam, fully enclosed box contact with locking lance
- Three plating specs
- Available on reels or loose
- Mates with .100" (2,54mm) center single row and dual row headers and .025" (0,64mm) pins
- Higher mating force than standard crimp terminal:
Insertion force - 23 oz. (tin), 14.7 oz. (gold); Withdrawal force - 10 oz. (tin); 9 oz. (gold)



Dimensions/Ordering Information

*Plating Spec	Wire Range (AWG) Stranded	Insulation Max. Outside Dia.	Order No.	*Plating Spec	Wire Range (AWG) Stranded	Insulation Max. Outside Dia.	Order No.
REEL FORM				LOOSE FORM			
1	22-24	.064	● 16-02-1111	1	22-24	.064	● 16-02-1115
	24-30	.060	● 16-02-1113		24-30	.060	● 16-02-1117
	32-36	.025	● 16-02-1122		32-36	.025	● 16-02-1123
2	22-24	.064	● 16-02-1124	2	22-24	.064	● 16-02-1125
	24-30	.060	● 16-02-0119		24-30	.060	● 16-02-1109
	32-36	.025	● 16-02-1120		32-36	.025	● 16-02-1121
3	22-24	.064	● 16-02-1110	3	22-24	.064	● 16-02-1114
	24-30	.060	● 16-02-1112		24-30	.060	● 16-02-1116
	32-36	.025	● 16-02-1118		32-36	.025	● 16-02-0119

● U.S. Standard Product, available through Molex franchised distributors.

1. 30 μ min. gold in select area over 50 μ min. nickel overall with 75 μ tin/lead.
2. 15 μ min. gold in select area over 50 μ min. nickel overall with 75 μ tin/lead in select area.

3. 200 μ min. post-plate electro/tin over 100 μ min. copper.

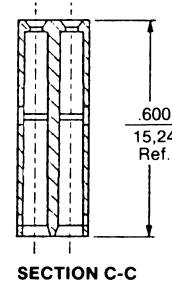
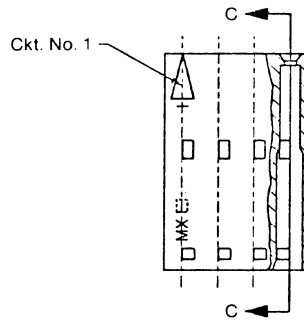
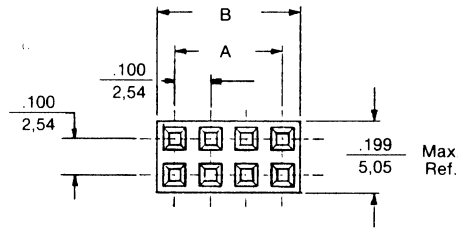
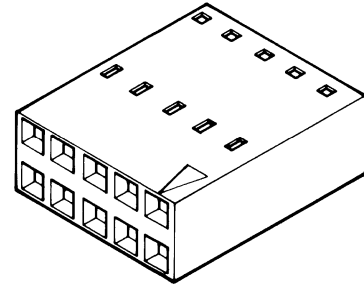
Dual Row Crimp Connector Housing



A

70450 Series "A" Version

- End-to-end and side-by-side stackable on .100" grid
- For use with 70058 and 71851 box crimp terminal
- Mates with Molex dual row headers 8723, 8724, 7723, 70203 and 8624; Also mates with Molex Interim Clip 70013 and MX50 headers 40501 to 40512
- Circuit sizes 4-54



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55
14	.600 15,24	.699 17,75												

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	• 22-55-2041	16	• 22-55-2161	26	• 22-55-2261	36	• 22-55-2361	46	• 22-55-2461
6	• 22-55-2061	18	• 22-55-2181	28	• 22-55-2281	38	• 22-55-2381	48	• 22-55-2481
8	• 22-55-2081	20	• 22-55-2201	30	• 22-55-2301	40	• 22-55-2401	50	• 22-55-2501
10	• 22-55-2101	22	• 22-55-2221	32	• 22-55-2321	42	• 22-55-2421	52	• 22-55-2521
12	• 22-55-2121	24	• 22-55-2241	34	• 22-55-2341	44	• 22-55-2441	54	• 22-55-2541
14	• 22-55-2141								

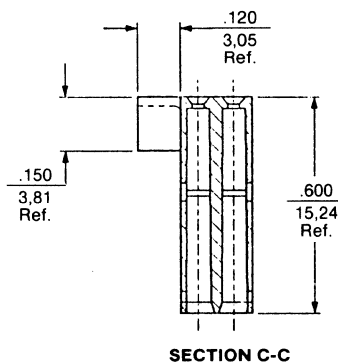
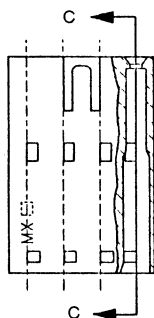
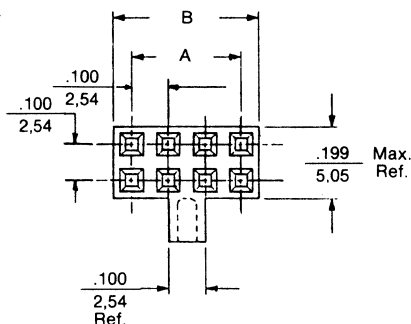
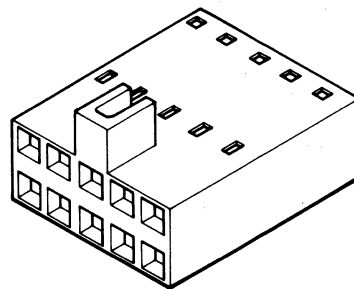
• U.S. Standard Product, available through Molex franchised distributors

Dual Row Crimp Connector Housing

A

70450 Series "B" Version

- Polarized
- End-to-end stackable
- For use with 70058 and 71851 box crimp terminals
- Mates with Molex dual row headers, MX50 headers
- Circuit sizes 4-54



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1,200 30,48	1,299 32,99	36	1,700 43,18	1,799 45,69	46	2,200 55,88	2,299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1,300 33,02	1,399 35,53	38	1,800 45,72	1,899 48,23	48	2,300 58,42	2,399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1,400 35,56	1,499 38,07	40	1,900 48,26	1,999 50,77	50	2,400 60,96	2,499 63,47
10	.400 10,16	.499 12,67	22	1,000 25,40	1,099 27,91	32	1,500 38,10	1,599 40,61	42	2,000 50,80	2,099 53,31	52	2,500 63,50	2,599 66,01
12	.500 12,70	.599 15,21	24	1,100 27,94	1,199 30,45	34	1,600 40,64	1,699 43,15	44	2,100 53,34	2,199 55,85	54	2,600 66,04	2,699 68,55
14	.600 15,24	.699 17,75												

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	• 22-55-2042	16	• 22-55-2162	26	• 22-55-2262	36	• 22-55-2362	46	• 22-55-2462
6	• 22-55-2062	18	• 22-55-2182	28	• 22-55-2282	38	• 22-55-2382	48	• 22-55-2482
8	• 22-55-2082	20	• 22-55-2202	30	• 22-55-2302	40	• 22-55-2402	50	• 22-55-2502
10	• 22-55-2102	22	• 22-55-2222	32	• 22-55-2322	42	• 22-55-2422	52	• 22-55-2522
12	• 22-55-2122	24	• 22-55-2242	34	• 22-55-2342	44	• 22-55-2442	54	• 22-55-2542
14	• 22-55-2142								

• U.S. Standard Product, available through Molex franchised distributors.

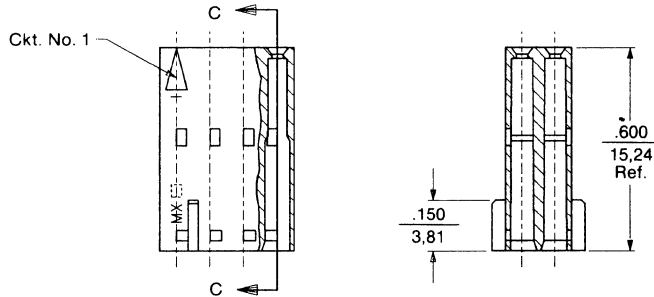
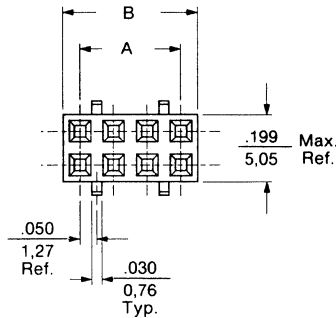
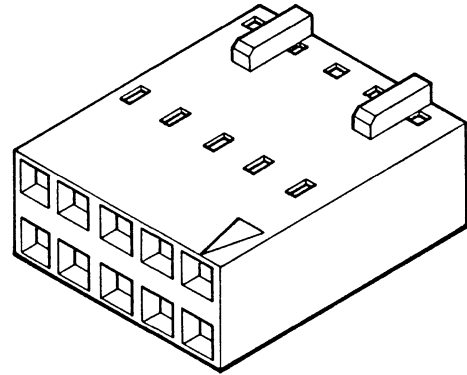
Dual Row Crimp Connector Housing




A

70450 Series "C" Version

- Polarized
- End-to-end stackable
- For use with 70058 and 71851 box crimp terminals
- Mates with 70013 dual row interim clip



 **Universal Polarizing Pin**
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55
14	.600 15,24	.699 17,75												

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	• 22-55-2043	16	• 22-55-2163	26	• 22-55-2263	36	• 22-55-2363	46	• 22-55-2463
6	• 22-55-2063	18	• 22-55-2183	28	• 22-55-2283	38	• 22-55-2383	48	• 22-55-2483
8	• 22-55-2083	20	• 22-55-2203	30	• 22-55-2303	40	• 22-55-2403	50	• 22-55-2503
10	• 22-55-2103	22	• 22-55-2223	32	• 22-55-2323	42	• 22-55-2423	52	• 22-55-2523
12	• 22-55-2123	24	• 22-55-2243	34	• 22-55-2343	44	• 22-55-2443	54	• 22-55-2543
14	• 22-55-2143								

• U.S. Standard Product, available through Molex franchised distributors.

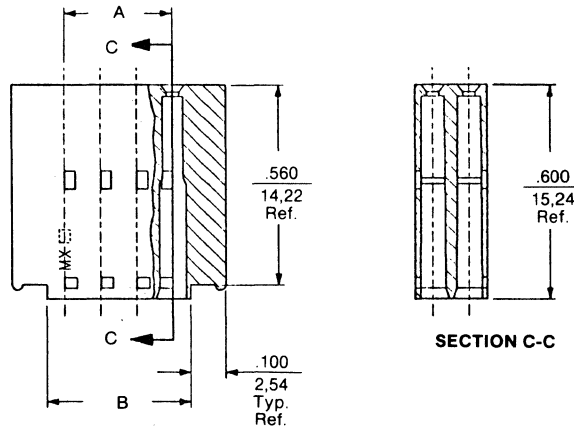
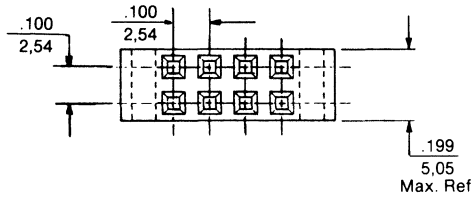
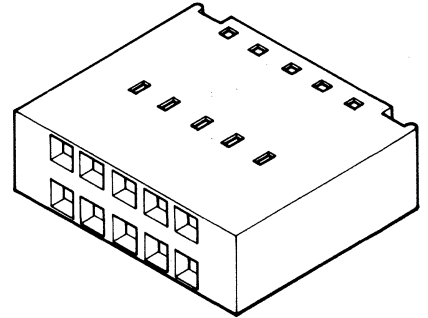
Dual Row Crimp Connector Housing



A

70450 Series "D" Version

- Side-by-side stackable
- For use with 70058 and 71851 box crimp terminals
- Mates with Molex dual row headers MX50 with latch/eject levers
- Circuit sizes 4-50



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	14	.600 15,24	.699 17,75	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85
6	.200 5,08	.299 7,59	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
8	.300 7,62	.399 10,13	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
10	.400 10,16	.499 12,67	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
12	.500 12,70	.599 15,21	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31			

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	• 22-55-3040	14	• 22-55-3140	24	• 22-55-3240	34	• 22-55-3340	44	• 22-55-3440
6	• 22-55-3060	16	• 22-55-3160	26	• 22-55-3260	36	• 22-55-3360	46	• 22-55-3460
8	• 22-55-3080	18	• 22-55-3180	28	• 22-55-3280	38	• 22-55-3380	48	• 22-55-3480
10	• 22-55-3100	20	• 22-55-3200	30	• 22-55-3300	40	• 22-55-3400	50	• 22-55-3500
12	• 22-55-3120	22	• 22-55-3220	32	• 22-55-3320	42	• 22-55-3420		

• U.S. Standard Product, available through Molex franchised distributors.

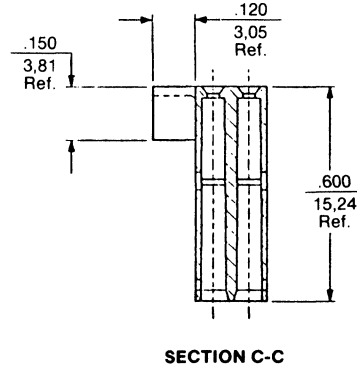
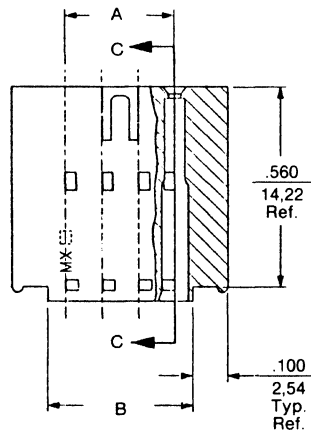
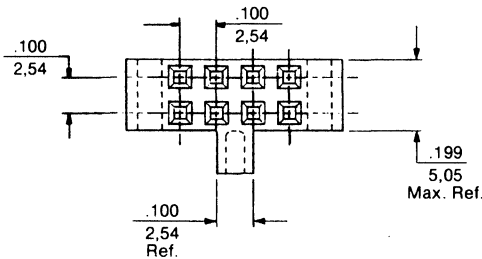
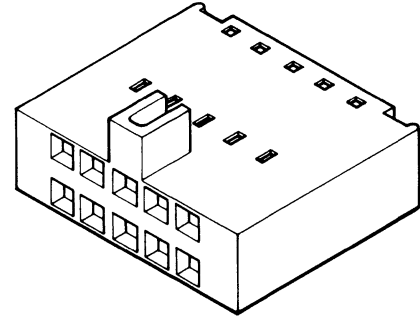
Dual Row Crimp Connector Housing




A

70450 Series "E" Version

- Polarized
- For use with 70058 and 71851 box crimp terminals
- Mates with Molex dual row headers MX50 with latch/eject levers
- Circuit sizes 4-50



 **Universal Polarizing Pin**
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	14	.600 15,24	.699 17,75	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85
6	.200 5,08	.299 7,59	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
8	.300 7,62	.399 10,13	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
10	.400 10,16	.499 12,67	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
12	.500 12,70	.599 15,21	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31			

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	• 22-55-3041	14	• 22-55-3141	24	• 22-55-3241	34	• 22-55-3341	44	• 22-55-3441
6	• 22-55-3061	16	• 22-55-3161	26	• 22-55-3261	36	• 22-55-3361	46	• 22-55-3461
8	• 22-55-3081	18	• 22-55-3181	28	• 22-55-3281	38	• 22-55-3381	48	• 22-55-3481
10	• 22-55-3101	20	• 22-55-3201	30	• 22-55-3301	40	• 22-55-3401	50	• 22-55-3501
12	• 22-55-3121	22	• 22-55-3221	32	• 22-55-3321	42	• 22-55-3421		

• U.S. Standard Product, available through Molex franchised distributors.

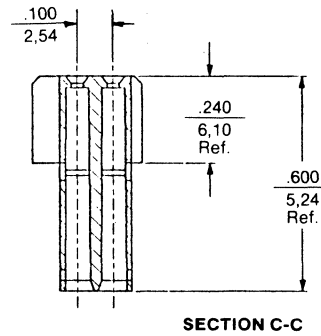
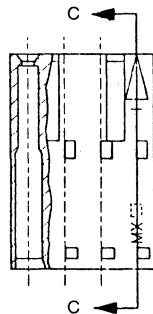
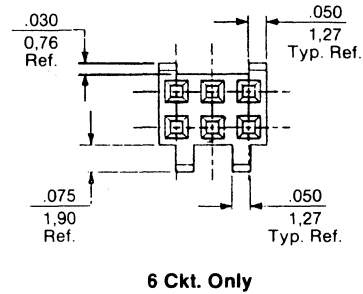
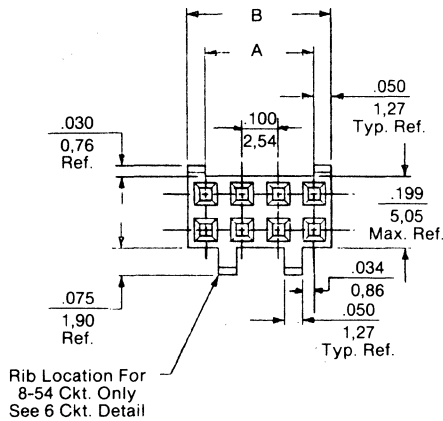
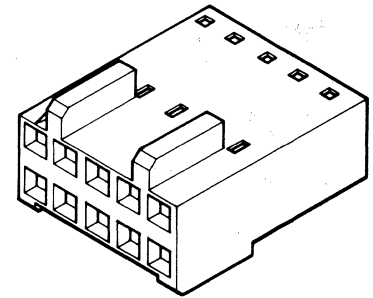
Dual Row Crimp Connector Housing



A

70450 Series "F" Version

- Polarized
- End-to-end stackable
- For use with 70058 and 71851 box crimp terminals
- Mates with Molex dual row headers 8723, 8724, 70227, 70229
- Circuit sizes 4-54



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55
14	.600 15,24	.699 17,75												

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	—	16	● 22-56-6167	26	● 22-56-6267	36	● 22-56-6367	46	● 22-56-6467
6	—	18	● 22-56-6187	28	● 22-56-6287	38	● 22-56-6387	48	● 22-56-6487
8	● 22-56-6087	20	● 22-56-6207	30	● 22-56-6307	40	● 22-56-6407	50	● 22-56-6507
10	● 22-56-6107	22	● 22-56-6227	32	● 22-56-6327	42	● 22-56-6427	52	● 22-56-6527
12	● 22-56-6127	24	● 22-56-6247	34	● 22-56-6347	44	● 22-56-6447	54	● 22-56-6547
14	● 22-56-6147								

● U.S. Standard Product, available through Molex franchised distributors.

Single Row Crimp Connector Housings

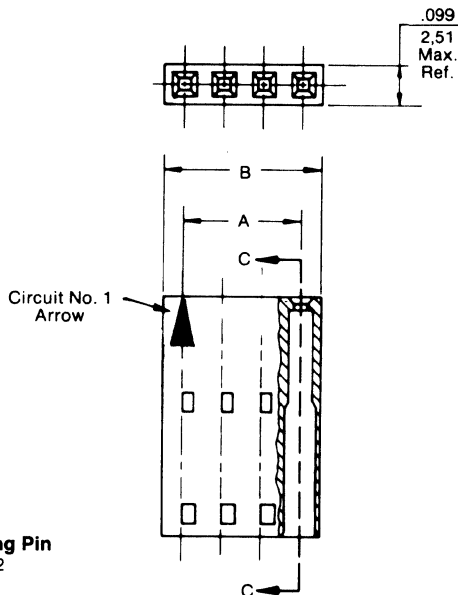
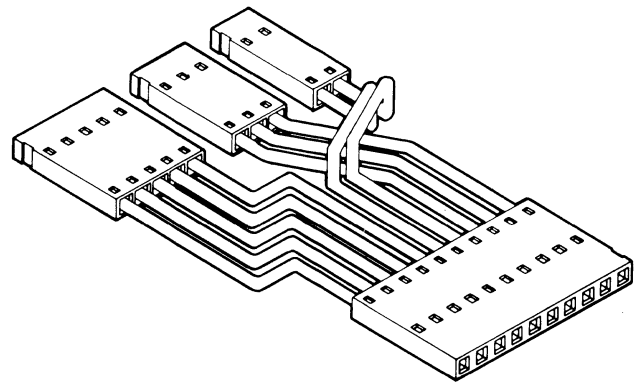
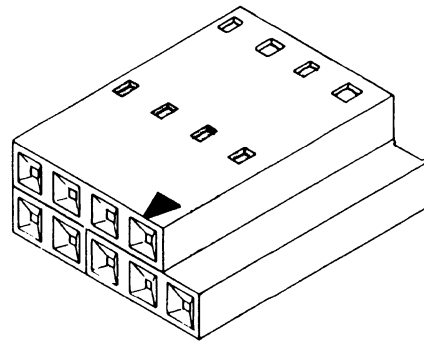


A

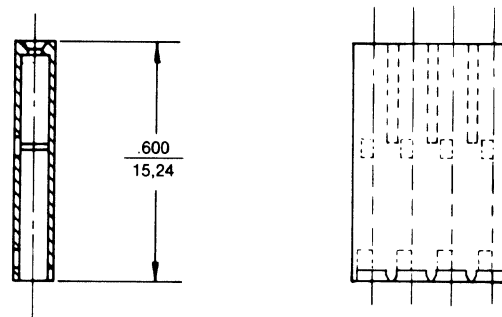
70066 Series


"A" Version, Non-Polarized, End-to-End and Side-by-Side Stackable

- For use with crimp terminals 70021, 70058 and 71851
- Mates with unshrouded headers 7723, 70203, 8624, 70343 and 70344
- Circuit sizes 2-25



Section C-C



 **Universal Polarizing Pin**
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 50-57-9002	7	• 50-57-9007	12	• 50-57-9012	17	• 50-57-9017	22	• 50-57-9022
3	• 50-57-9003	8	• 50-57-9008	13	• 50-57-9013	18	• 50-57-9018	23	• 50-57-9023
4	• 50-57-9004	9	• 50-57-9009	14	• 50-57-9014	19	• 50-57-9019	24	• 50-57-9024
5	• 50-57-9005	10	• 50-57-9010	15	• 50-57-9015	20	• 50-57-9020	25	• 50-57-9025
6	• 50-57-9006	11	• 50-57-9011	16	• 50-57-9016	21	• 50-57-9021		

• U.S. Standard Product, available through Molex franchised distributors

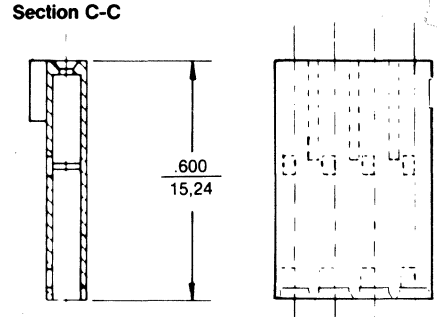
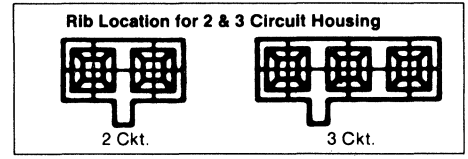
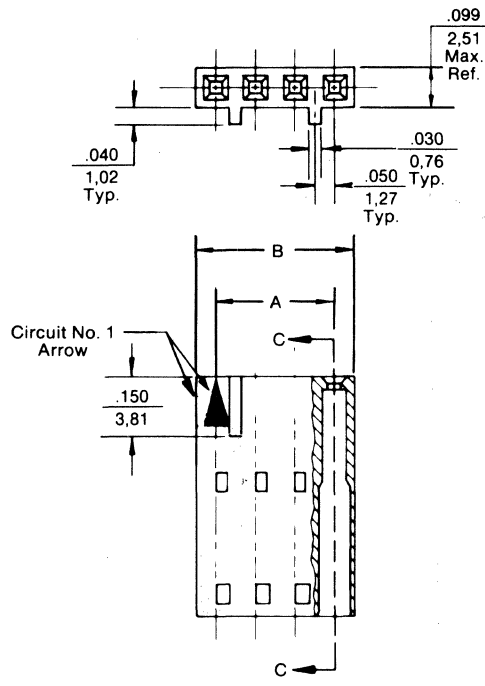
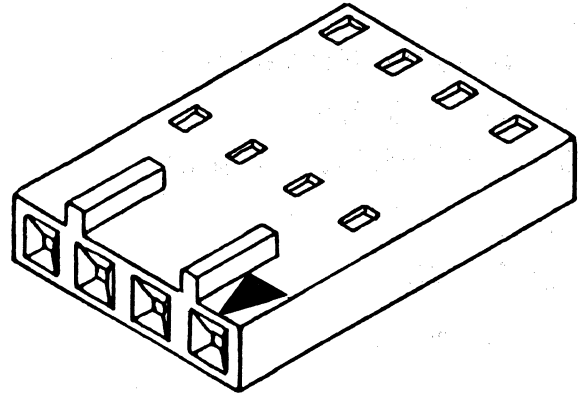
Single Row Crimp Connector Housings



A

70066 Series "C" Version, End-to-End Stackable

- Front ribs prevent contact damage when unmating the connector from a header. The housing cannot be twisted off pins
- For use with crimp terminals 70058 and 71851;
- Mates with C-Grid SL shrouded headers, without positive latch, 70544, 70546, 70554, 70556
- Circuit sizes 2-25



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	50-57-9202	7	50-57-9207	12	50-57-9212	17	50-57-9217	22	50-57-9222
3	50-57-9203	8	50-57-9208	13	50-57-9213	18	50-57-9218	23	50-57-9223
4	50-57-9204	9	50-57-9209	14	50-57-9214	19	50-57-9219	24	50-57-9224
5	50-57-9205	10	50-57-9210	15	50-57-9215	20	50-57-9220	25	50-57-9225
6	50-57-9206	11	50-57-9211	16	50-57-9216	21	50-57-9221		

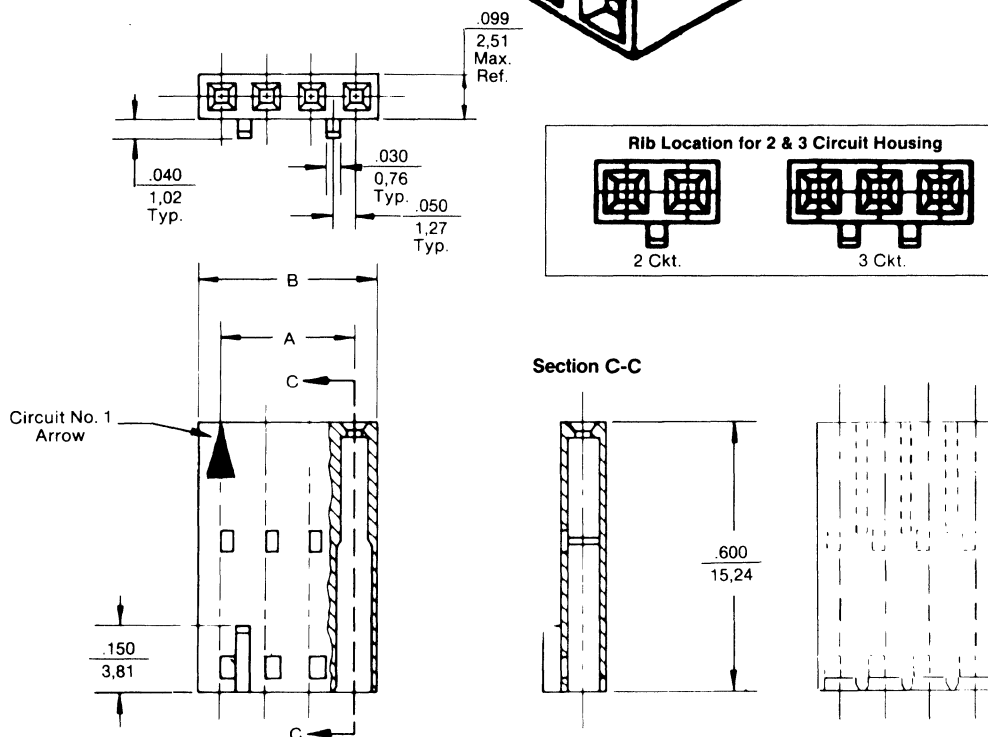
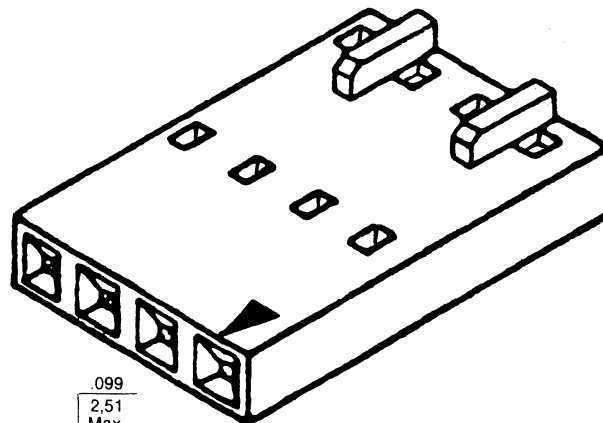
Single Row Crimp Connector Housings



A

70066 Series "D" Version, End-to-End Stackable

- Back ribs maintain position of connector housings in clips; prevents lateral movement when another housing is removed from the module
- For use with crimp terminals 70021, 70058 and 71851
- Mates with panel mounts 70104, 70022 and 70018 and with interim clips 70004 and 70013
- Circuit sizes 2-25



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 50-57-9302	7	• 50-57-9307	12	• 50-57-9312	17	• 50-57-9317	22	• 50-57-9322
3	• 50-57-9303	8	• 50-57-9308	13	• 50-57-9313	18	• 50-57-9318	23	• 50-57-9323
4	• 50-57-9304	9	• 50-57-9309	14	• 50-57-9314	19	• 50-57-9319	24	• 50-57-9324
5	• 50-57-9305	10	• 50-57-9310	15	• 50-57-9315	20	• 50-57-9320	25	• 50-57-9325
6	• 50-57-9306	11	• 50-57-9311	16	• 50-57-9316	21	• 50-57-9321		

• U.S. Standard Product, available through Molex franchised distributors.

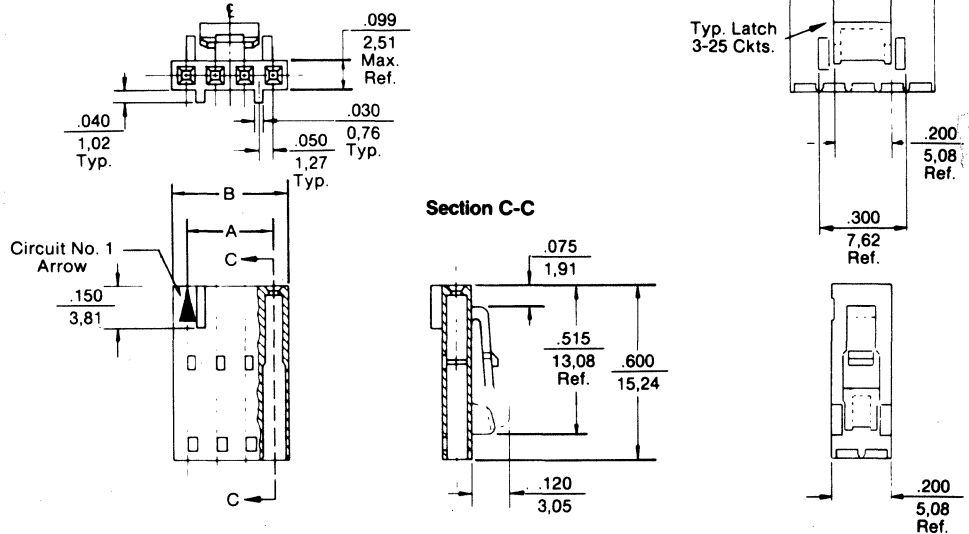
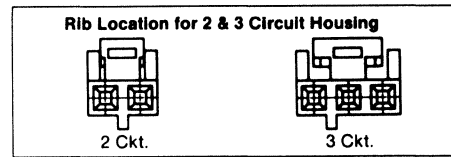
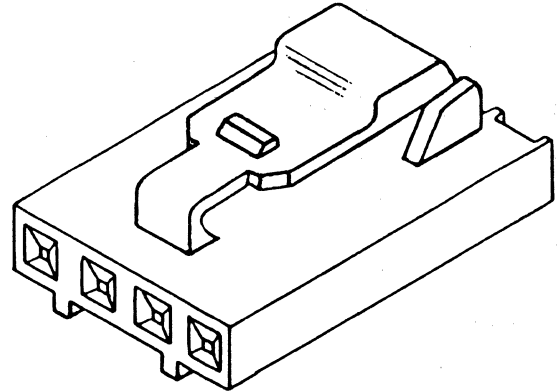
Single Row Crimp Connector Housings



A

70066 Series "G" Version, End-to-End Stackable

- For use with crimp terminals 70058 and 71851
- Anti-entanglement ribs prevent discrete wires from catching under latch during harness manufacturing and storage
- Positive latch secures the housing into mating part
- Front ribs prevent contact damage when unmating the connector from a header. The housing cannot be twisted off pins
- Mates with latching headers 70543, 70545, 70553 and 70555, and panel mounts 70018 and 70107



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 50-57-9402	7	• 50-57-9407	12	• 50-57-9412	17	• 50-57-9417	22	• 50-57-9422
3	• 50-57-9403	8	• 50-57-9408	13	• 50-57-9413	18	• 50-57-9418	23	• 50-57-9423
4	• 50-57-9404	9	• 50-57-9409	14	• 50-57-9414	19	• 50-57-9419	24	• 50-57-9424
5	• 50-57-9405	10	• 50-57-9410	15	• 50-57-9415	20	• 50-57-9420	25	• 50-57-9425
6	• 50-57-9406	11	• 50-57-9411	16	• 50-57-9416	21	• 50-57-9421		

• U.S. Standard Product, available through Molex franchised distributors

Specifications for Dual Row Female IDT Connectors



A

Female Insulation Displacement Connector Assembly

This specification covers ID terminal, engineering series 70028, preassembled into housing 70450, becoming assembly 70451.

Material:

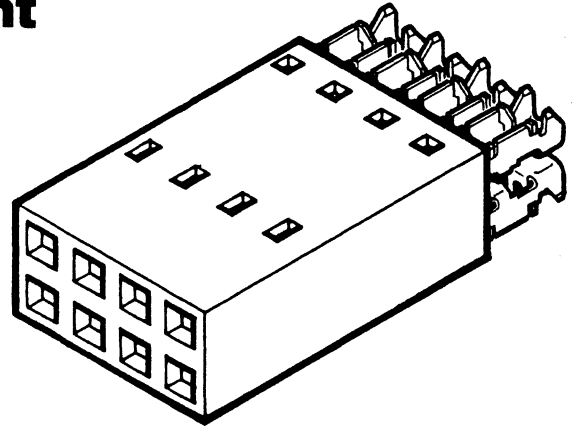
Housing - 94V-0 glass filled polyester, black
Terminal - Phosphor bronze

Electrical:

Contact Resistance - Less than 15 milliohms
Insulation Resistance - 10,000 megohms
Dielectric Strength - 600 VAC r.m.s. for 1 minute at sea level to 5,000 ft.
Current Ratings -
28 AWG 1.2A
26 AWG 1.8A
24 AWG 3.0A
22 AWG 3.0A
Capacitance - <1.2 picofarads

Platings:

No. 1 - .000015 min. gold plate in selected area over .000050 min. nickel plate overall, with .000075 min. electro-tin/lead (60/40 to 80/20) in selected area
No. 2 - .000030 min. gold in selected area over .000050 min. nickel plate overall, with .000075 min. electro-tin/lead (60/40 to 80/20) in selected area
No. 3 - .000200 min. electro-tin plate over .000015 min. copper plate overall



Environmental:

Operating Temperature Range - -40°C to 105°C

Mechanical:

Pin Height - Max: .320"; Min: .200" (measured from top of housing or P.C. board to top of pin)
Wire Range - Accepts wire range from 28 to 22 AWG stranded, with .053" max. outside insulation diameter - **discrete wire only**
Terminal Pullout Force from housing - Will withstand gradual applied force of 4 lbs. for 15 seconds
Insertion/Withdrawal Forces -
6.0 oz. max. (standard contact)
2.5 oz. min. (standard contact)

UL listed, CSA certified

Recommended Molex Cable Eng. Nos. to use with 70400 Series connectors:

7307	8996
24241	8997
24226	24369
7767	24389

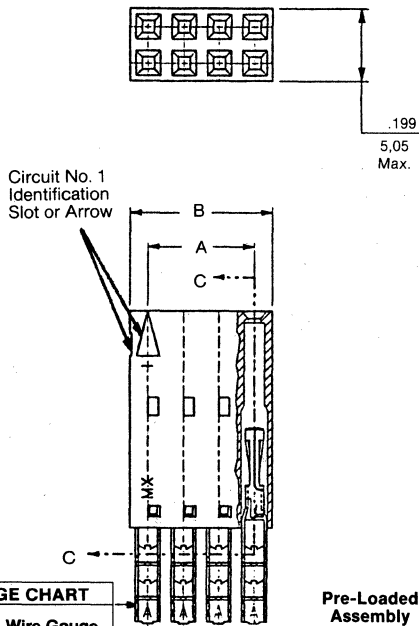
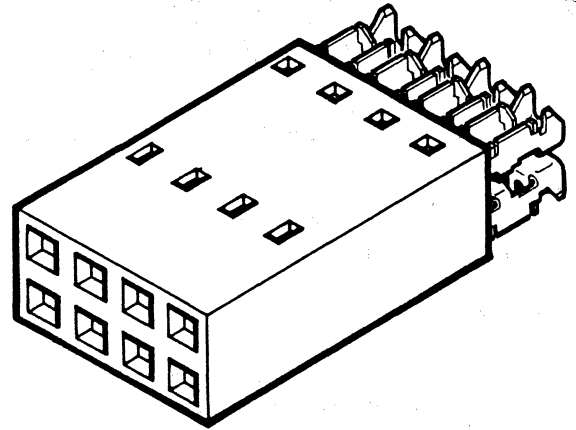
Dual Row Female Insulation Displacement Connector



A

70451 Series "A" Version

- End-to-end and side-by-side stackable on .100" grid
- Mates with Molex dual row headers 8723, 8724, 7723, 70203 and 8624; Also mates with Molex Interim Clip 70013 and MX50 headers 40501 to 40512
- Circuit sizes 4-54

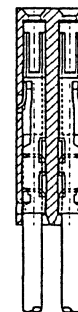
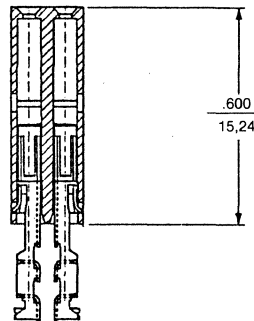


WIRE GAUGE CHART	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Pre-Loaded Assembly

SECTION C-C

Final Assembled Position



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1,200 30,48	1,299 32,99	36	1,700 43,18	1,799 45,69	46	2,200 55,88	2,299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1,300 33,02	1,399 35,53	38	1,800 45,72	1,899 48,23	48	2,300 58,42	2,399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1,400 35,56	1,499 38,07	40	1,900 48,26	1,999 50,77	50	2,400 60,96	2,499 63,47
10	.400 10,16	.499 12,67	22	1,000 25,40	1,099 27,91	32	1,500 38,10	1,599 40,61	42	2,000 50,80	2,099 53,31	52	2,500 63,50	2,599 66,01
12	.500 12,70	.599 15,21	24	1,100 27,94	1,199 30,45	34	1,600 40,64	1,699 43,15	44	2,100 53,34	2,199 55,85	54	2,600 66,04	2,699 68,55
14	.600 15,24	.699 17,75												

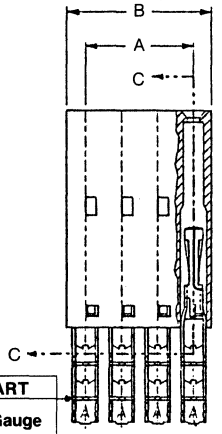
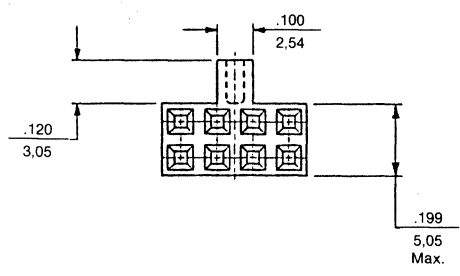
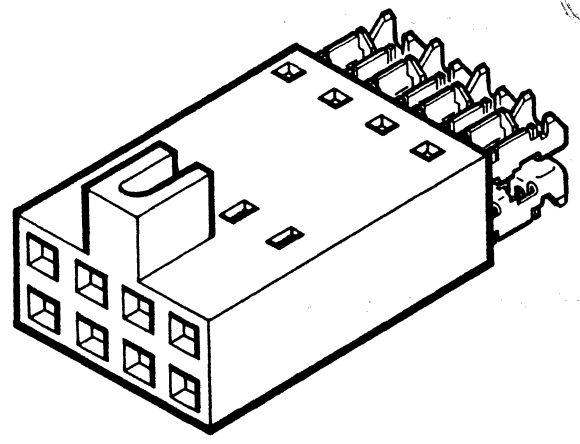
Dual Row Female Insulation Displacement Connector



A

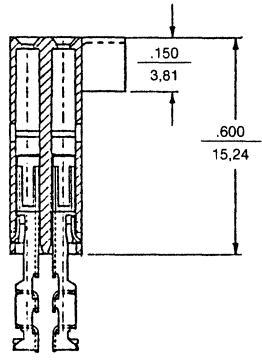
70451 Series "B" Version

- Polarized
- End-to-end stackable
- Mates with Molex dual row headers, MX50 headers
- Circuit sizes 4-54

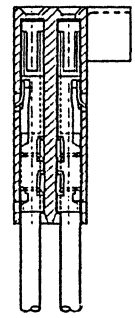


Pre-Loaded Assembly

SECTION C-C



Final Assembled Position



WIRE GAUGE CHART	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

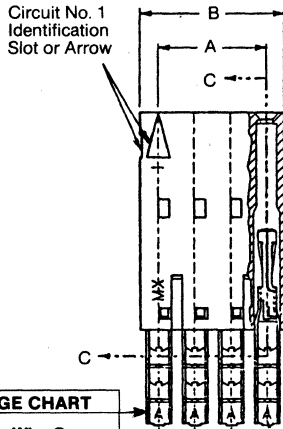
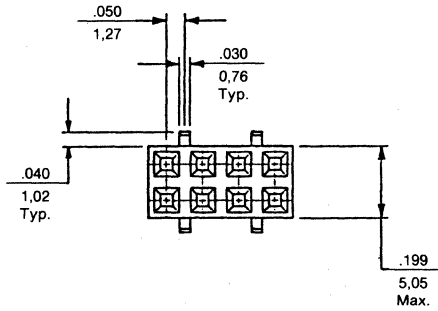
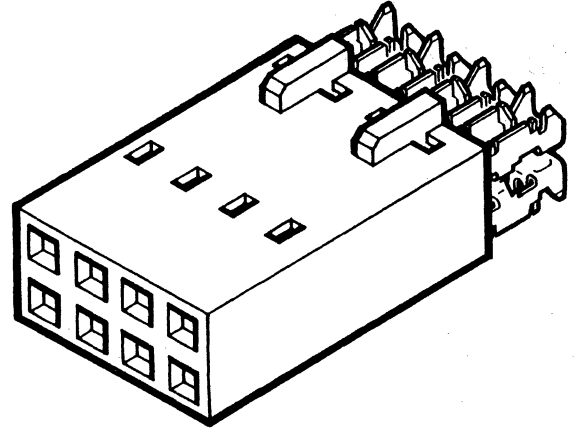
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55
14	.600 15,24	.699 17,75												

Dual Row Female Insulation Displacement Connector

A

70451 Series "C" Version

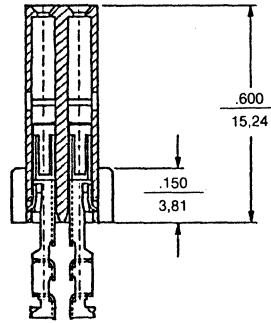
- Polarized
- End-to-end stackable
- Mates with Molex dual row interim clip



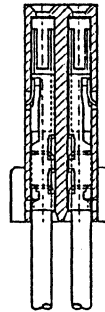
WIRE GAUGE CHART	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Pre-Loaded Assembly

SECTION C-C



Final Assembled Position



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55
14	.600 15,24	.699 17,75												

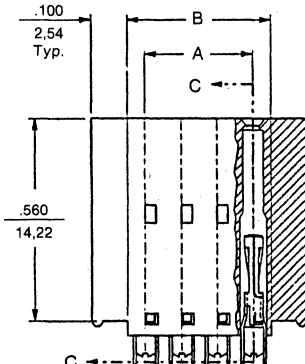
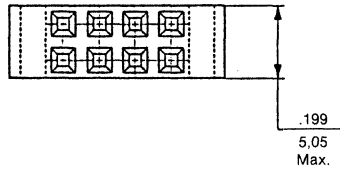
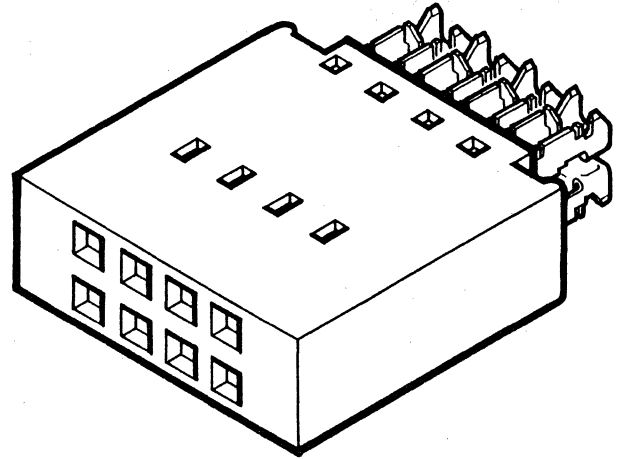
Dual Row Female Insulation Displacement Connector



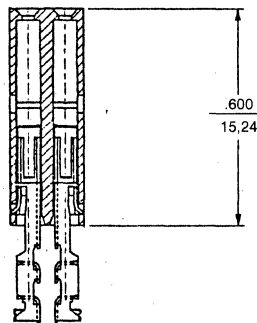
A

70451 Series "D" Version

- Side-by-side stackable
- Mates with Molex dual row headers MX50 with latch/eject levers
- Circuit sizes 4-50



SECTION C-C



Final Assembled Position



Pre-Loaded Assembly

WIRE GAUGE CHART	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Universal Polarizing Pin
Order No. 15-04-0292

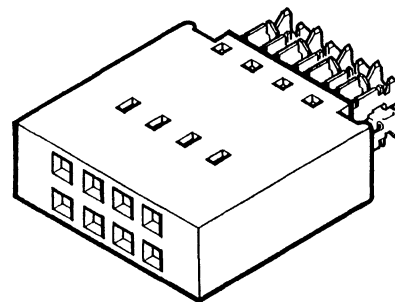
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	14	.600 15,24	.699 17,75	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85
6	.200 5,08	.299 7,59	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
8	.300 7,62	.399 10,13	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
10	.400 10,16	.499 12,67	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
12	.500 12,70	.599 15,21	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31			

Dual Row Female Insulation Displacement Connector Assembly



70451 Series "D" Version



Ordering Information

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 200 MICROINCHES TIN
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Wire Accommodation 28 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	14-57-3048	28	14-57-3288	4	14-57-5043	28	14-57-5283	4	14-57-2043	28	14-57-2283
6	14-57-3068	30	14-57-3308	6	14-57-5063	30	14-57-5303	6	14-57-2063	30	14-57-2303
8	14-57-3088	32	14-57-3328	8	14-57-5083	32	14-57-5323	8	14-57-2083	32	14-57-2323
10	14-57-3108	34	14-57-3348	10	14-57-5103	34	14-57-5343	10	14-57-2103	34	14-57-2343
12	14-57-3128	36	14-57-3368	12	14-57-5123	36	14-57-5363	12	14-57-2123	36	14-57-2363
14	14-57-3148	38	14-57-3388	14	14-57-5143	38	14-57-5383	14	14-57-2143	38	14-57-2383
16	14-57-3168	40	14-57-3408	16	14-57-5163	40	14-57-5403	16	14-57-2163	40	14-57-2403
18	14-57-3188	42	14-57-3428	18	14-57-5183	42	14-57-5423	18	14-57-2183	42	14-57-2423
20	14-57-3208	44	14-57-3448	20	14-57-5203	44	14-57-5443	20	14-57-2203	44	14-57-2443
22	14-57-3228	46	14-57-3468	22	14-57-5223	46	14-57-5463	22	14-57-2223	46	14-57-2463
24	14-57-3248	48	14-57-3488	24	14-57-5243	48	14-57-5483	24	14-57-2243	48	14-57-2483
26	14-57-3268	50	14-57-3508	26	14-57-5263	50	14-57-5503	26	14-57-2263	50	14-57-2503

Wire Accommodation 26 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	14-57-3045	28	14-57-3285	4	14-57-5040	28	14-57-5280	4	14-57-1049	28	14-57-1289
6	14-57-3065	30	14-57-3305	6	14-57-5060	30	14-57-5300	6	14-57-1069	30	14-57-1309
8	14-57-3085	32	14-57-3325	8	14-57-5080	32	14-57-5320	8	14-57-1089	32	14-57-1329
10	14-57-3105	34	14-57-3345	10	14-57-5100	34	14-57-5340	10	14-57-1109	34	14-57-1349
12	14-57-3125	36	14-57-3365	12	14-57-5120	36	14-57-5360	12	14-57-1129	36	14-57-1369
14	14-57-3145	38	14-57-3385	14	14-57-5140	38	14-57-5380	14	14-57-1149	38	14-57-1389
16	14-57-3165	40	14-57-3405	16	14-57-5160	40	14-57-5400	16	14-57-1169	40	14-57-1409
18	14-57-3185	42	14-57-3425	18	14-57-5180	42	14-57-5420	18	14-57-1189	42	14-57-1429
20	14-57-3205	44	14-57-3445	20	14-57-5200	44	14-57-5440	20	14-57-1209	44	14-57-1449
22	14-57-3225	46	14-57-3465	22	14-57-5220	46	14-57-5460	22	14-57-1229	46	14-57-1469
24	14-57-3245	48	14-57-3485	24	14-57-5240	48	14-57-5480	24	14-57-1249	48	14-57-1489
26	14-57-3265	50	14-57-3505	26	14-57-5260	50	14-57-5500	26	14-57-1269	50	14-57-1509

Wire Accommodation 24 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	14-57-3042	28	14-57-3282	4	14-57-4047	28	14-57-4287	4	14-57-1046	28	14-57-1286
6	14-57-3062	30	14-57-3302	6	14-57-4067	30	14-57-4307	6	14-57-1066	30	14-57-1306
8	14-57-3082	32	14-57-3322	8	14-57-4087	32	14-57-4327	8	14-57-1086	32	14-57-1326
10	14-57-3102	34	14-57-3342	10	14-57-4107	34	14-57-4347	10	14-57-1106	34	14-57-1346
12	14-57-3122	36	14-57-3362	12	14-57-4127	36	14-57-4367	12	14-57-1126	36	14-57-1366
14	14-57-3142	38	14-57-3382	14	14-57-4147	38	14-57-4387	14	14-57-1146	38	14-57-1386
16	14-57-3162	40	14-57-3402	16	14-57-4167	40	14-57-4407	16	14-57-1166	40	14-57-1406
18	14-57-3182	42	14-57-3422	18	14-57-4187	42	14-57-4427	18	14-57-1186	42	14-57-1426
20	14-57-3202	44	14-57-3442	20	14-57-4207	44	14-57-4447	20	14-57-1206	44	14-57-1446
22	14-57-3222	46	14-57-3462	22	14-57-4227	46	14-57-4467	22	14-57-1226	46	14-57-1466
24	14-57-3242	48	14-57-3482	24	14-57-4247	48	14-57-4487	24	14-57-1246	48	14-57-1486
26	14-57-3262	50	14-57-3502	26	14-57-4267	50	14-57-4507	26	14-57-1266	50	14-57-1506

Wire Accommodation 22 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	14-57-2049	28	14-57-2289	4	14-57-4044	28	14-57-4284	4	14-57-1043	28	14-57-1283
6	14-57-2069	30	14-57-2309	6	14-57-4064	30	14-57-4304	6	14-57-1063	30	14-57-1303
8	14-57-2089	32	14-57-2329	8	14-57-4084	32	14-57-4324	8	14-57-1083	32	14-57-1323
10	14-57-2109	34	14-57-2349	10	14-57-4104	34	14-57-4344	10	14-57-1103	34	14-57-1343
12	14-57-2129	36	14-57-2369	12	14-57-4124	36	14-57-4364	12	14-57-1123	36	14-57-1363
14	14-57-2149	38	14-57-2389	14	14-57-4144	38	14-57-4384	14	14-57-1143	38	14-57-1383
16	14-57-2169	40	14-57-2409	16	14-57-4164	40	14-57-4404	16	14-57-1163	40	14-57-1403
18	14-57-2189	42	14-57-2429	18	14-57-4184	42	14-57-4424	18	14-57-1183	42	14-57-1423
20	14-57-2209	44	14-57-2449	20	14-57-4204	44	14-57-4444	20	14-57-1203	44	14-57-1443
22	14-57-2229	46	14-57-2469	22	14-57-4224	46	14-57-4464	22	14-57-1223	46	14-57-1463
24	14-57-2249	48	14-57-2489	24	14-57-4244	48	14-57-4484	24	14-57-1243	48	14-57-1483
26	14-57-2269	50	14-57-2509	26	14-57-4264	50	14-57-4504	26	14-57-1263	50	14-57-1503

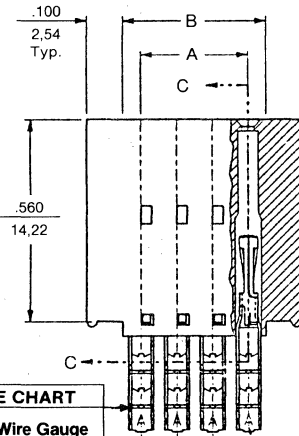
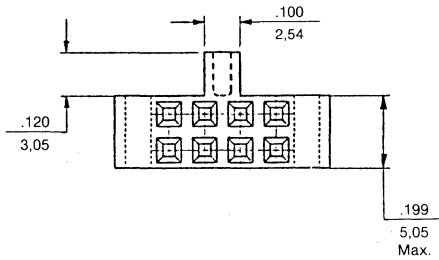
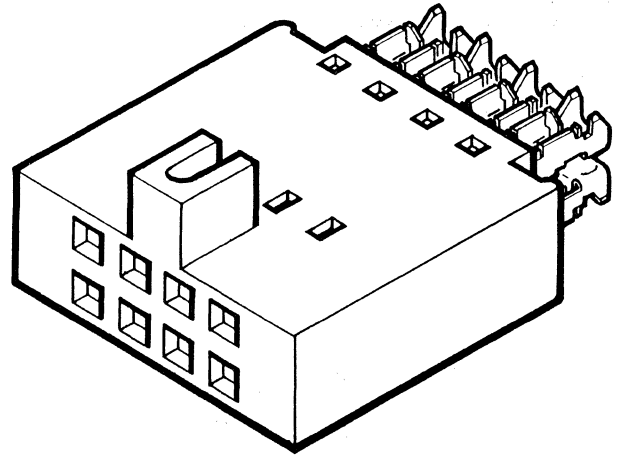
Dual Row Female Insulation Displacement Connector



A

70451 Series "E" Version

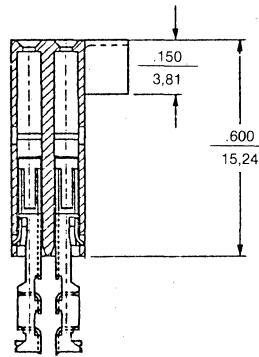
- Polarized
- Mates with Molex dual row headers MX50 with latch/eject levers
- Circuit sizes 4-50



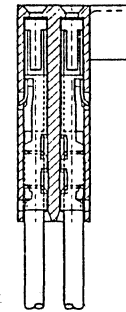
Pre-Loaded Assembly

WIRE GAUGE CHART	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

SECTION C-C



Final Assembled Position



Universal Polarizing Pin
Order No. 15-04-0292

Dimensions

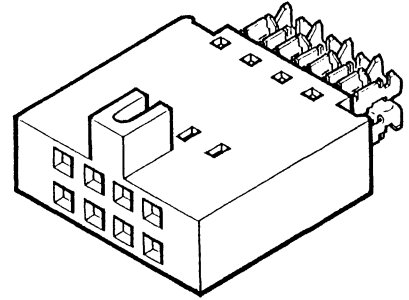
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	14	.600 15,24	.699 17,75	24	1,100 27,94	1,199 30,45	34	1,600 40,64	1,699 43,15	44	2,100 53,34	2,199 55,85
6	.200 5,08	.299 7,59	16	.700 17,78	.799 20,29	26	1,200 30,48	1,299 32,99	36	1,700 43,18	1,799 45,69	46	2,200 55,88	2,299 58,39
8	.300 7,62	.399 10,13	18	.800 20,32	.899 22,83	28	1,300 33,02	1,399 35,53	38	1,800 45,72	1,899 48,23	48	2,300 58,42	2,399 60,93
10	.400 10,16	.499 12,67	20	.900 22,86	.999 25,37	30	1,400 35,56	1,499 38,07	40	1,900 48,26	1,999 50,77	50	2,400 60,96	2,499 63,47
12	.500 12,70	.599 15,21	22	1,000 25,40	1,099 27,91	32	1,500 38,10	1,599 40,61	42	2,000 50,80	2,099 53,31			

Dual Row Female Insulation Displacement Connector Assembly



A

70451 Series "E" Version



Ordering Information

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 200 MICROINCHES TIN
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Wire Accommodation 28 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	14-57-3049	28	14-57-3289	4	14-57-5044	28	14-57-5284	4	14-57-2044	28	14-57-2284
6	14-57-3069	30	14-57-3309	6	14-57-5064	30	14-57-5304	6	14-57-2064	30	14-57-2304
8	14-57-3089	32	14-57-3329	8	14-57-5084	32	14-57-5324	8	14-57-2084	32	14-57-2324
10	14-57-3109	34	14-57-3349	10	14-57-5104	34	14-57-5344	10	14-57-2104	34	14-57-2344
12	14-57-3129	36	14-57-3369	12	14-57-5124	36	14-57-5364	12	14-57-2124	36	14-57-2364
14	14-57-3149	38	14-57-3389	14	14-57-5144	38	14-57-5384	14	14-57-2144	38	14-57-2384
16	14-57-3169	40	14-57-3409	16	14-57-5164	40	14-57-5404	16	14-57-2164	40	14-57-2404
18	14-57-3189	42	14-57-3429	18	14-57-5184	42	14-57-5424	18	14-57-2184	42	14-57-2424
20	14-57-3209	44	14-57-3449	20	14-57-5204	44	14-57-5444	20	14-57-2204	44	14-57-2444
22	14-57-3229	46	14-57-3469	22	14-57-5224	46	14-57-5464	22	14-57-2224	46	14-57-2464
24	14-57-3249	48	14-57-3489	24	14-57-5244	48	14-57-5484	24	14-57-2244	48	14-57-2484
26	14-57-3269	50	14-57-3509	26	14-57-5264	50	14-57-5504	26	14-57-2264	50	14-57-2504

Wire Accommodation 26 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	14-57-3046	28	14-57-3286	4	14-57-5041	28	14-57-5281	4	14-57-2041	28	14-57-2281
6	14-57-3066	30	14-57-3306	6	14-57-5061	30	14-57-5301	6	14-57-2061	30	14-57-2301
8	14-57-3086	32	14-57-3326	8	14-57-5081	32	14-57-5321	8	14-57-2081	32	14-57-2321
10	14-57-3106	34	14-57-3346	10	14-57-5101	34	14-57-5341	10	14-57-2101	34	14-57-2341
12	14-57-3126	36	14-57-3366	12	14-57-5121	36	14-57-5361	12	14-57-2121	36	14-57-2361
14	14-57-3146	38	14-57-3386	14	14-57-5141	38	14-57-5381	14	14-57-2141	38	14-57-2381
16	14-57-3166	40	14-57-3406	16	14-57-5161	40	14-57-5401	16	14-57-2161	40	14-57-2401
18	14-57-3186	42	14-57-3426	18	14-57-5181	42	14-57-5421	18	14-57-2181	42	14-57-2421
20	14-57-3206	44	14-57-3446	20	14-57-5201	44	14-57-5441	20	14-57-2201	44	14-57-2441
22	14-57-3226	46	14-57-3466	22	14-57-5221	46	14-57-5461	22	14-57-2221	46	14-57-2461
24	14-57-3246	48	14-57-3486	24	14-57-5241	48	14-57-5481	24	14-57-2241	48	14-57-2481
26	14-57-3266	50	14-57-3506	26	14-57-5261	50	14-57-5501	26	14-57-2261	50	14-57-2501

Wire Accommodation 24 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	14-57-3043	28	14-57-3283	4	14-57-4048	28	14-57-4288	4	14-57-1047	28	14-57-1287
6	14-57-3063	30	14-57-3303	6	14-57-4068	30	14-57-4308	6	14-57-1067	30	14-57-1307
8	14-57-3083	32	14-57-3323	8	14-57-4088	32	14-57-4328	8	14-57-1087	32	14-57-1327
10	14-57-3103	34	14-57-3343	10	14-57-4108	34	14-57-4348	10	14-57-1107	34	14-57-1347
12	14-57-3123	36	14-57-3363	12	14-57-4128	36	14-57-4368	12	14-57-1127	36	14-57-1367
14	14-57-3143	38	14-57-3383	14	14-57-4148	38	14-57-4388	14	14-57-1147	38	14-57-1387
16	14-57-3163	40	14-57-3403	16	14-57-4168	40	14-57-4408	16	14-57-1167	40	14-57-1407
18	14-57-3183	42	14-57-3423	18	14-57-4188	42	14-57-4428	18	14-57-1187	42	14-57-1427
20	14-57-3203	44	14-57-3443	20	14-57-4208	44	14-57-4448	20	14-57-1207	44	14-57-1447
22	14-57-3223	46	14-57-3463	22	14-57-4228	46	14-57-4468	22	14-57-1227	46	14-57-1467
24	14-57-3243	48	14-57-3483	24	14-57-4248	48	14-57-4488	24	14-57-1247	48	14-57-1487
26	14-57-3263	50	14-57-3503	26	14-57-4268	50	14-57-4508	26	14-57-1267	50	14-57-1507

Wire Accommodation 22 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	14-57-3040	28	14-57-3280	4	14-57-4045	28	14-57-4285	4	14-57-1044	28	14-57-1284
6	14-57-3060	30	14-57-3300	6	14-57-4065	30	14-57-4305	6	14-57-1064	30	14-57-1304
8	14-57-3080	32	14-57-3320	8	14-57-4085	32	14-57-4325	8	14-57-1084	32	14-57-1324
10	14-57-3100	34	14-57-3340	10	14-57-4105	34	14-57-4345	10	14-57-1104	34	14-57-1344
12	14-57-3120	36	14-57-3360	12	14-57-4125	36	14-57-4365	12	14-57-1124	36	14-57-1364
14	14-57-3140	38	14-57-3380	14	14-57-4145	38	14-57-4385	14	14-57-1144	38	14-57-1384
16	14-57-3160	40	14-57-3400	16	14-57-4165	40	14-57-4405	16	14-57-1164	40	14-57-1404
18	14-57-3180	42	14-57-3420	18	14-57-4185	42	14-57-4425	18	14-57-1184	42	14-57-1424
20	14-57-3200	44	14-57-3440	20	14-57-4205	44	14-57-4445	20	14-57-1204	44	14-57-1444
22	14-57-3220	46	14-57-3460	22	14-57-4225	46	14-57-4465	22	14-57-1224	46	14-57-1464
24	14-57-3240	48	14-57-3480	24	14-57-4245	48	14-57-4485	24	14-57-1244	48	14-57-1484
26	14-57-3260	50	14-57-3500	26	14-57-4265	50	14-57-4505	26	14-57-1264	50	14-57-1504

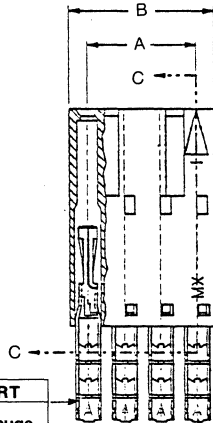
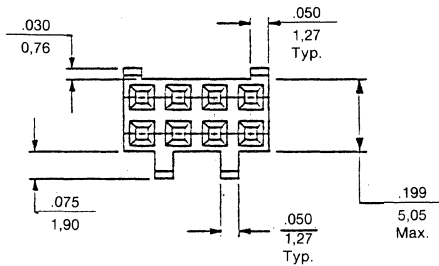
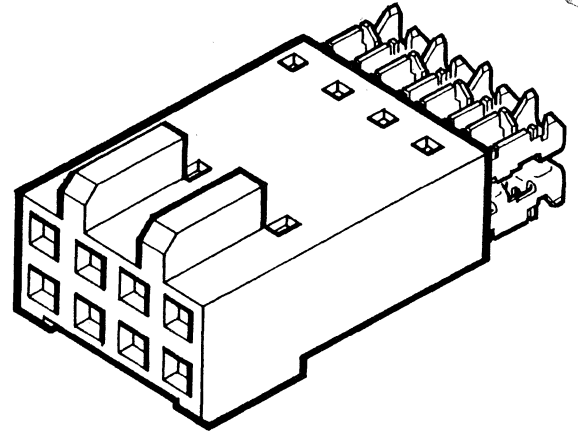
A

Dual Row Female Insulation Displacement Connector

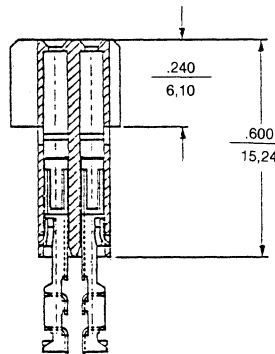


70451 Series "F" Version

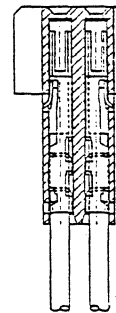
- Polarized
- End-to-end stackable
- Mates with Molex dual row headers 8723, 8724, 70227, 70229
- Circuit sizes 4-54



SECTION C-C



Final Assembled Position



WIRE GAUGE CHART	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

Universal Polarizing Pin
Order No. 15-04-0292

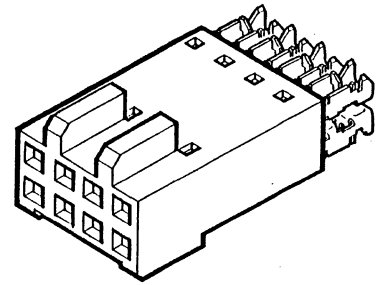
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.100 2,54	.199 5,05	16	.700 17,78	.799 20,29	26	1.200 30,48	1.299 32,99	36	1.700 43,18	1.799 45,69	46	2.200 55,88	2.299 58,39
6	.200 5,08	.299 7,59	18	.800 20,32	.899 22,83	28	1.300 33,02	1.399 35,53	38	1.800 45,72	1.899 48,23	48	2.300 58,42	2.399 60,93
8	.300 7,62	.399 10,13	20	.900 22,86	.999 25,37	30	1.400 35,56	1.499 38,07	40	1.900 48,26	1.999 50,77	50	2.400 60,96	2.499 63,47
10	.400 10,16	.499 12,67	22	1.000 25,40	1.099 27,91	32	1.500 38,10	1.599 40,61	42	2.000 50,80	2.099 53,31	52	2.500 63,50	2.599 66,01
12	.500 12,70	.599 15,21	24	1.100 27,94	1.199 30,45	34	1.600 40,64	1.699 43,15	44	2.100 53,34	2.199 55,85	54	2.600 66,04	2.699 68,55
14	.600 15,24	.699 17,75												

Dual Row Female Insulation Displacement Connector Assembly



70451 Series "F" Version



Ordering Information

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 200 MICROINCHES TIN
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Wire Accommodation 28 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	N.T.	30	14-57-4300	4	N.T.	30	14-57-5305	4	N.T.	30	14-57-2305
6	N.T.	32	14-57-4320	6	N.T.	32	14-57-5325	6	N.T.	32	14-57-2325
8	14-57-4080	34	14-57-4340	8	14-57-5085	34	14-57-5345	8	14-57-2085	34	14-57-2345
10	14-57-4100	36	14-57-4360	10	14-57-5105	36	14-57-5365	10	14-57-2105	36	14-57-2365
12	14-57-4120	38	14-57-4380	12	14-57-5125	38	14-57-5385	12	14-57-2125	38	14-57-2385
14	14-57-4140	40	14-57-4400	14	14-57-5145	40	14-57-5405	14	14-57-2145	40	14-57-2405
16	14-57-4160	42	14-57-4420	16	14-57-5165	42	14-57-5425	16	14-57-2165	42	14-57-2425
18	14-57-4180	44	14-57-4440	18	14-57-5185	44	14-57-5445	18	14-57-2185	44	14-57-2445
20	14-57-4200	46	14-57-4460	20	14-57-5205	46	14-57-5465	20	14-57-2205	46	14-57-2465
22	14-57-4220	48	14-57-4480	22	14-57-5225	48	14-57-5485	22	14-57-2225	48	14-57-2485
24	14-57-4240	50	14-57-4500	24	14-57-5245	50	14-57-5505	24	14-57-2245	50	14-57-2505
26	14-57-4260	52	14-57-4520	26	14-57-5265	52	14-57-5525	26	14-57-2265	52	14-57-2525
28	14-57-4280	54	14-57-4540	28	14-57-5285	54	14-57-5545	28	14-57-2285	54	14-57-2545

Wire Accommodation 26 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	N.T.	30	14-57-3307	4	N.T.	30	14-57-5302	4	N.T.	30	14-57-2302
6	N.T.	32	14-57-3327	6	N.T.	32	14-57-5322	6	N.T.	32	14-57-2322
8	14-57-3087	34	14-57-3347	8	14-57-5082	34	14-57-5342	8	14-57-2082	34	14-57-2342
10	14-57-3107	36	14-57-3367	10	14-57-5102	36	14-57-5362	10	14-57-2102	36	14-57-2362
12	14-57-3127	38	14-57-3387	12	14-57-5122	38	14-57-5382	12	14-57-2122	38	14-57-2382
14	14-57-3147	40	14-57-3407	14	14-57-5142	40	14-57-5402	14	14-57-2142	40	14-57-2402
16	14-57-3167	42	14-57-3427	16	14-57-5162	42	14-57-5422	16	14-57-2162	42	14-57-2422
18	14-57-3187	44	14-57-3447	18	14-57-5182	44	14-57-5442	18	14-57-2182	44	14-57-2442
20	14-57-3207	46	14-57-3467	20	14-57-5202	46	14-57-5462	20	14-57-2202	46	14-57-2462
22	14-57-3227	48	14-57-3487	22	14-57-5222	48	14-57-5482	22	14-57-2222	48	14-57-2482
24	14-57-3247	50	14-57-3507	24	14-57-5242	50	14-57-5502	24	14-57-2242	50	14-57-2502
26	14-57-3267	52	14-57-3527	26	14-57-5262	52	14-57-5522	26	14-57-2262	52	14-57-2522
28	14-57-3287	54	14-57-3547	28	14-57-5282	54	14-57-5542	28	14-57-2282	54	14-57-2542

Wire Accommodation 24 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	N.T.	30	14-57-3304	4	N.T.	30	14-57-4309	4	14-57-1048	30	14-57-1308
6	N.T.	32	14-57-3324	6	N.T.	32	14-57-4329	6	14-57-1068	32	14-57-1328
8	14-57-3084	34	14-57-3344	8	14-57-4089	34	14-57-4349	8	14-57-1088	34	14-57-1348
10	14-57-3104	36	14-57-3364	10	14-57-4109	36	14-57-4369	10	14-57-1108	36	14-57-1368
12	14-57-3124	38	14-57-3384	12	14-57-4129	38	14-57-4389	12	14-57-1128	38	14-57-1388
14	14-57-3144	40	14-57-3404	14	14-57-4149	40	14-57-4409	14	14-57-1148	40	14-57-1408
16	14-57-3164	42	14-57-3424	16	14-57-4169	42	14-57-4429	16	14-57-1168	42	14-57-1428
18	14-57-3184	44	14-57-3444	18	14-57-4189	44	14-57-4449	18	14-57-1188	44	14-57-1448
20	14-57-3204	46	14-57-3464	20	14-57-4209	46	14-57-4469	20	14-57-1208	46	14-57-1468
22	14-57-3224	48	14-57-3484	22	14-57-4229	48	14-57-4489	22	14-57-1228	48	14-57-1488
24	14-57-3244	50	14-57-3504	24	14-57-4249	50	14-57-4509	24	14-57-1248	50	14-57-1508
26	14-57-3264	52	14-57-3524	26	14-57-4269	52	14-57-4529	26	14-57-1268	52	14-57-1528
28	14-57-3284	54	14-57-3544	28	14-57-4289	54	14-57-4549	28	14-57-1288	54	14-57-1548

Wire Accommodation 22 AWG

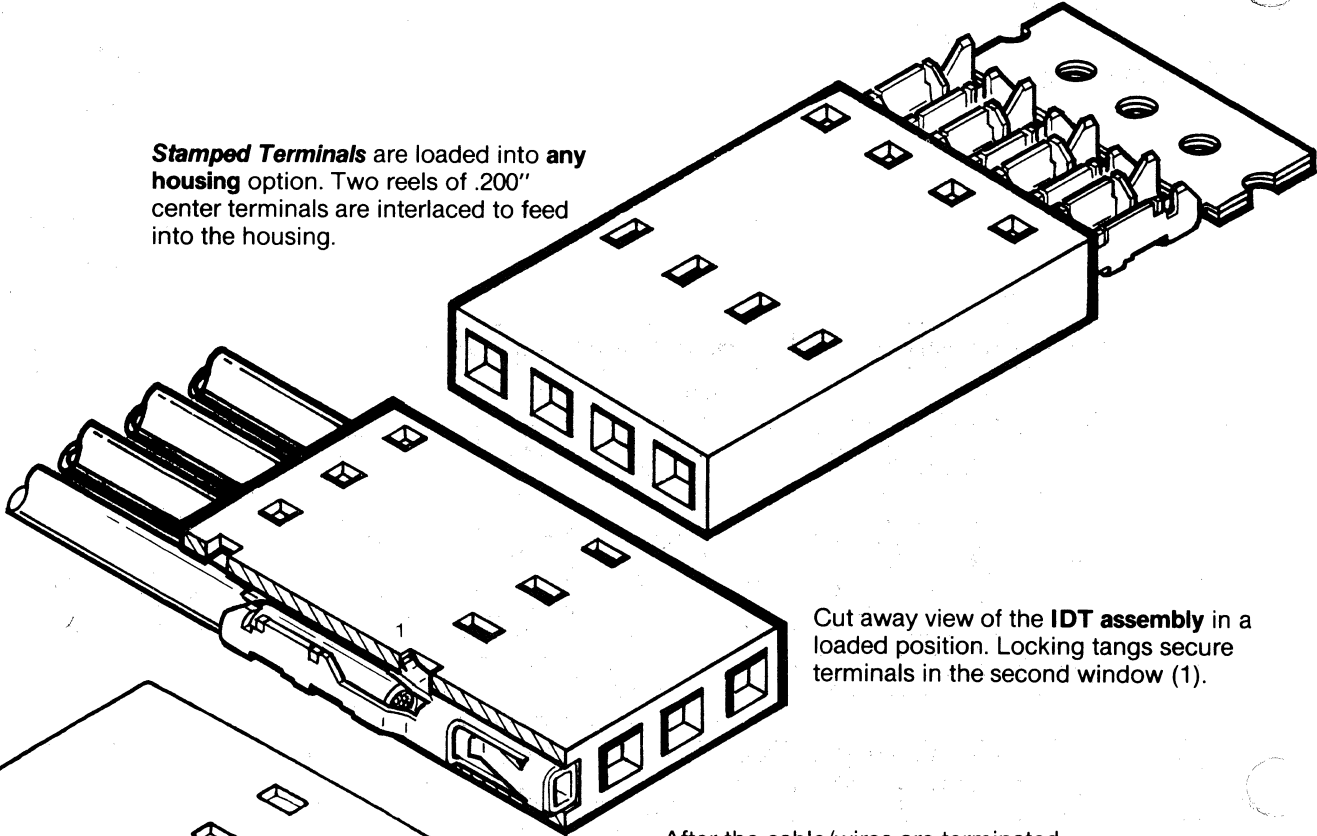
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	N.T.	30	14-57-3301	4	N.T.	30	14-57-4306	4	N.T.	30	14-57-1305
6	N.T.	32	14-57-3321	6	N.T.	32	14-57-4326	6	N.T.	32	14-57-1325
8	14-57-3081	34	14-57-3341	8	14-57-4086	34	14-57-4346	8	14-57-1085	34	14-57-1345
10	14-57-3101	36	14-57-3361	10	14-57-4106	36	14-57-4366	10	14-57-1105	36	14-57-1365
12	14-57-3121	38	14-57-3381	12	14-57-4126	38	14-57-4386	12	14-57-1125	38	14-57-1385
14	14-57-3141	40	14-57-3401	14	14-57-4146	40	14-57-4406	14	14-57-1145	40	14-57-1405
16	14-57-3161	42	14-57-3421	16	14-57-4166	42	14-57-4426	16	14-57-1165	42	14-57-1425
18	14-57-3181	44	14-57-3441	18	14-57-4186	44	14-57-4446	18	14-57-1185	44	14-57-1445
20	14-57-3201	46	14-57-3461	20	14-57-4206	46	14-57-4466	20	14-57-1205	46	14-57-1465
22	14-57-3221	48	14-57-3481	22	14-57-4226	48	14-57-4486	22	14-57-1225	48	14-57-1485
24	14-57-3241	50	14-57-3501	24	14-57-4246	50	14-57-4506	24	14-57-1245	50	14-57-1505
26	14-57-3261	52	14-57-3521	26	14-57-4266	52	14-57-4526	26	14-57-1265	52	14-57-1525
28	14-57-3281	54	14-57-3541	28	14-57-4286	54	14-57-4546	28	14-57-1285	54	14-57-1545

Single Row Female Insulation Displacement Connector Assembly



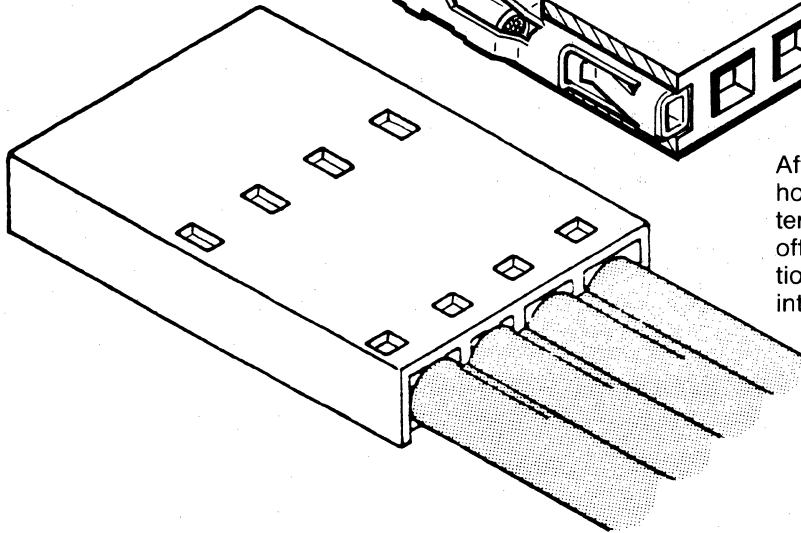
A

Stamped Terminals are loaded into any housing option. Two reels of .200" center terminals are interlaced to feed into the housing.

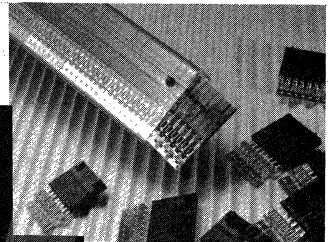


Cut away view of the **IDT assembly** in a loaded position. Locking tangs secure terminals in the second window (1).

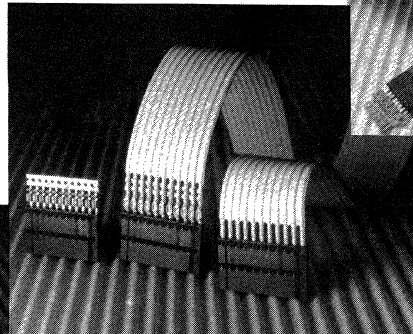
After the cable/wires are terminated, housings are positioned over the terminals, and the carrier tabs are broken off. As a result of this automated termination², the terminals are consistently locked into the home position without damage.



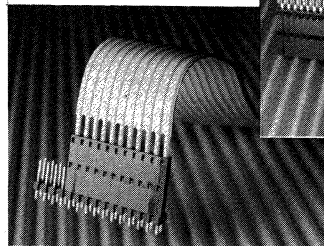
Delivered pre-loaded in plastic tube.



Shown from left: product pre-loaded, mass terminated by ID method, fully inserted into housing.



Assembled connector mated with header.



²Application equipment described in Section M.

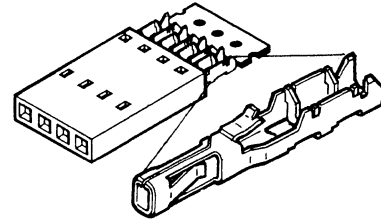
Specifications for Single Row Female IDT Connectors



A

Female Insulation Displacement Connector Assembly

This specification covers ID terminal, engineering series 70028, preassembled into housing 70066, becoming assembly 70400.



Material:

Housing - 94V-0 glass filled polyester, black
Terminal - Phosphor bronze

Electrical:

Contact Resistance - Less than 15 milliohms
Insulation Resistance - 10,000 megohms
Dielectric Strength - 600 VAC r.m.s. for 1 minute at sea level to 5,000 ft.
Current Ratings -
 28 AWG 1.2A
 26 AWG 1.8A
 24 AWG 3.0A
 22 AWG 3.0A
Capacitance - <1.2 picofarads

Environmental:

Operating Temperature Range - -40°C to 105°C

Mechanical:

Pin Height - Max: .320"; Min: .200" (measured from top of housing or P.C. board to top of pin)
Wire Range - Accepts wire range from 28 to 22 AWG stranded, with .053" max. outside insulation diameter
Terminal Pullout Force from housing - Will withstand gradual applied force of 4 lbs. for 15 seconds
Insertion/Withdrawal Forces -
 6.0 oz. max. (standard contact)
 2.5 oz. min. (standard contact)

Platings:

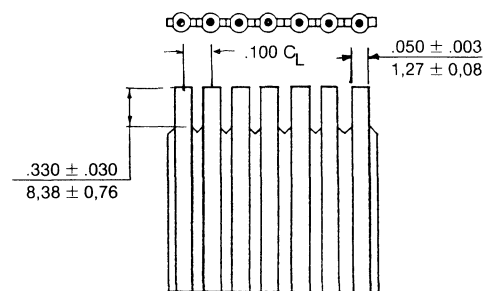
No. 1 - .000015 min. gold plate in selected area over .000050 min. nickel plate overall, with .000075 min. electro-tin/lead (60/40 to 80/20) in selected area
No. 2 - .000030 min. gold in selected area over .000050 min. nickel plate overall, with .000075 min. electro-tin/lead (60/40 to 80/20) in selected area
No. 3 - .000200 min. electro-tin plate over .000015 min. copper plate overall

UL listed, CSA certified

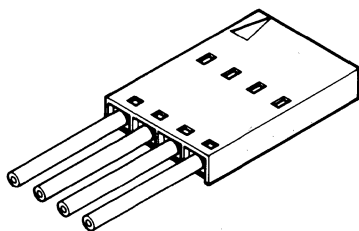
Recommended Molex Cable Eng. Nos. to use with 70400 Series connectors:

7307	8996
24241	8997
24226	24369
7767	24389

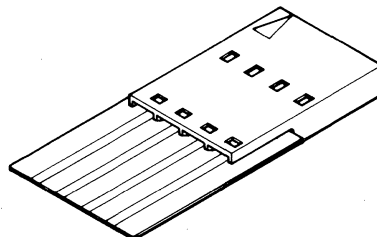
Notch Specification for Ribbon Cable



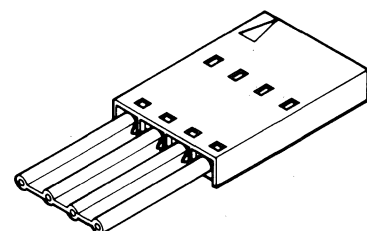
Wire and Cable Options



Discrete Wire
Section A, this catalog



Flat Flex Cable
Section G, this catalog



Ribbon Cable
Section G, this catalog

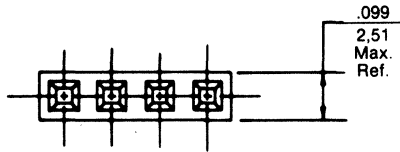
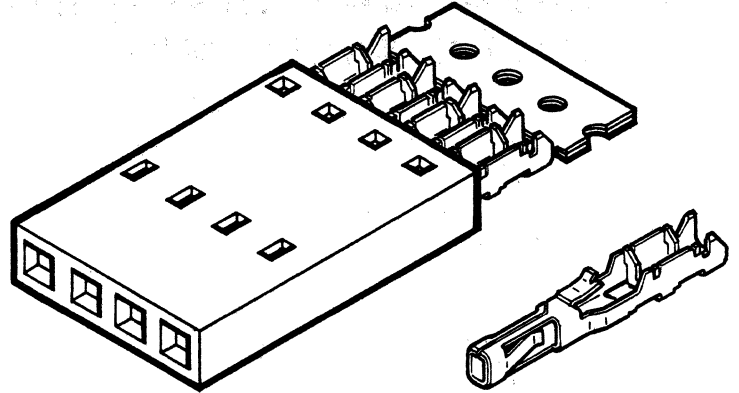
Single Row Female Insulation Displacement Connector Assembly



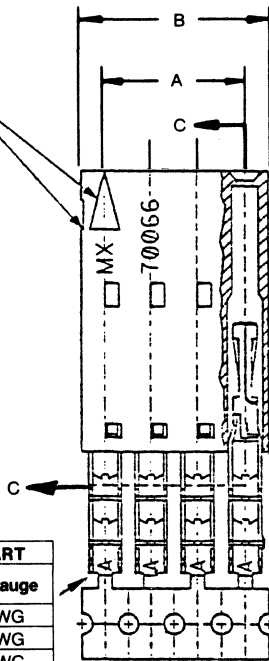
A

70400 Series "A" Version Non-Polarized

- Pre-loaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Stackable end-to-end and side-by-side



Circuit No. 1 Identification Slot or Arrow

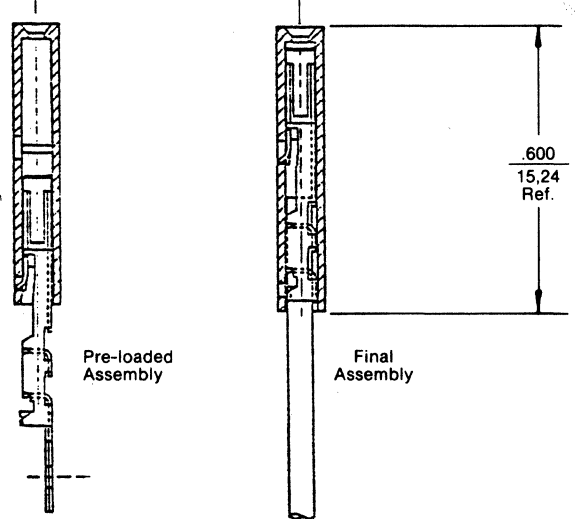


WIRE GAUGE CHART	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

PLATING CODE (Stripe on Carrier Strip)	
Plating	Color
Tin	None
15μ" Gold	Yellow
30μ" Gold	Red

NOTE: 2 circuit housings are pre-loaded in pairs.

Section C-C



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

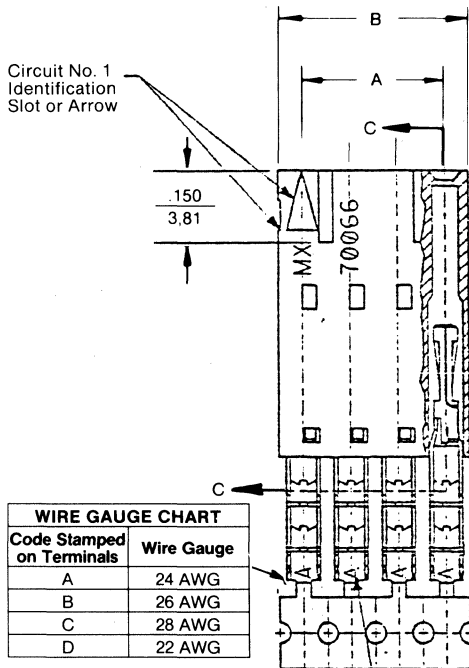
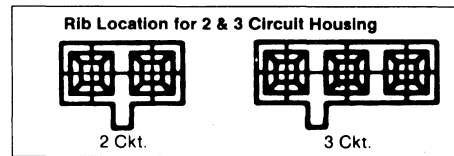
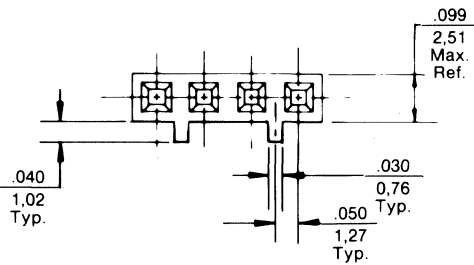
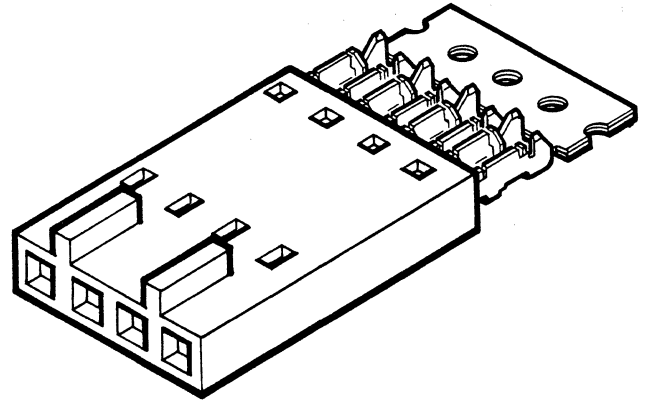
Single Row Female Insulation Displacement Connector Assembly



A

70400 Series "C" Version

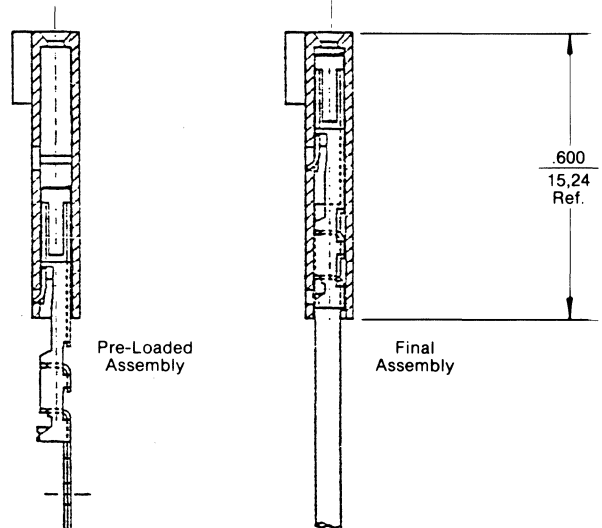
- Pre-loaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Stackable side-by-side
- Front polarizing ribs prevent pin damage during disconnect. Housing cannot be twisted off pins



WIRE GAUGE CHART	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

PLATING CODE (Stripe on Carrier Strip)	
Plating	Color
Tin	None
15μ" Gold	Yellow
30μ" Gold	Red

Section C-C



NOTE: Two circuit housings are pre-loaded in pairs

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

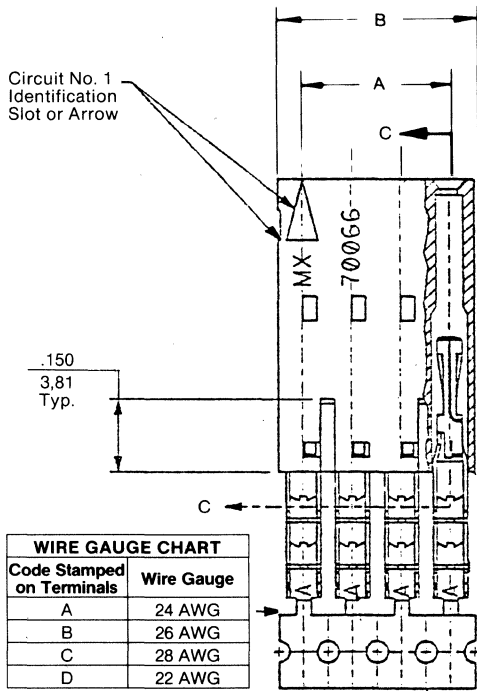
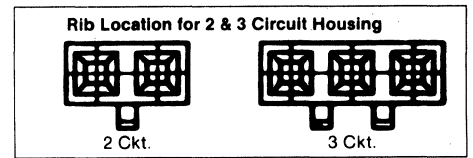
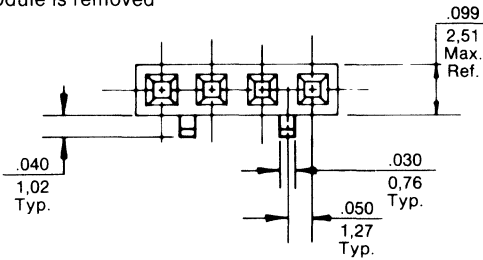
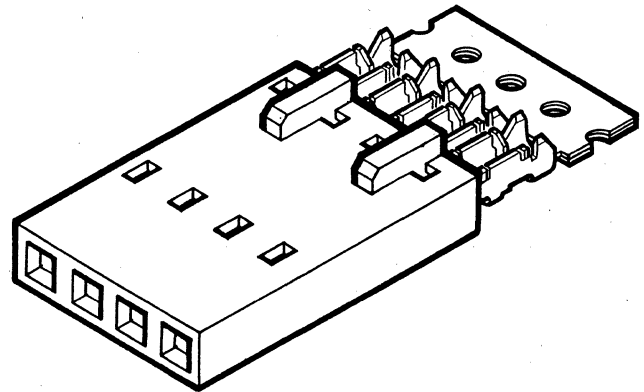
Single Row Female Insulation Displacement Connector Assembly



A

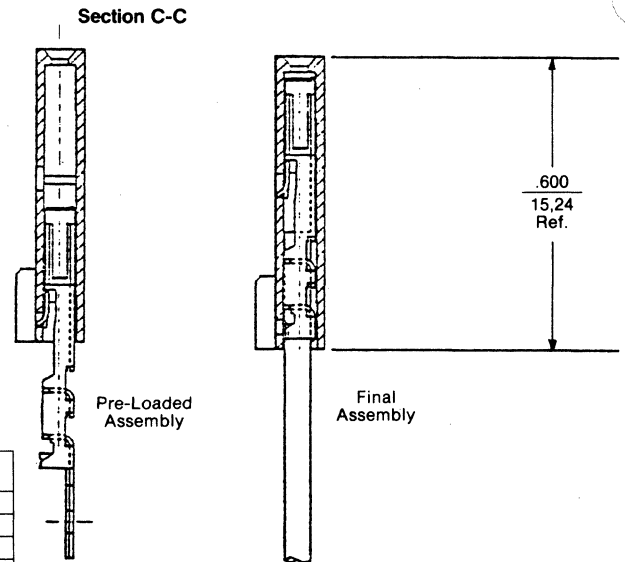
70400 Series "D" Version

- Pre-loaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Stackable side-by-side
- Back polarizing ribs prevent the assembly from drifting within the interim clip when another module is removed



WIRE GAUGE CHART	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

PLATING CODE (Stripe on Carrier Strip)	
Plating	Color
Tin	None
15μ" Gold	Yellow
30μ" Gold	Red



NOTE: 2 circuit housings are pre-loaded in pairs.

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

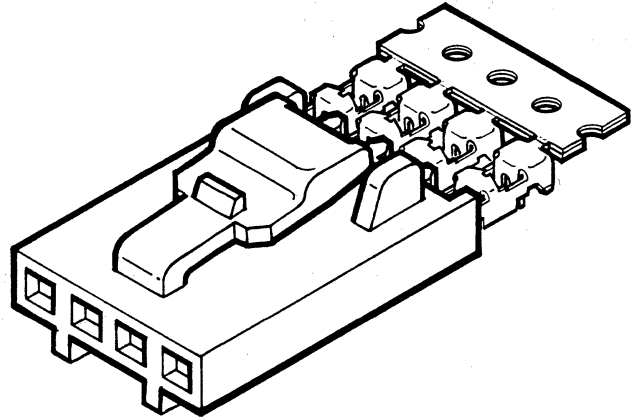
Single Row Female Insulation Displacement Connector Assembly



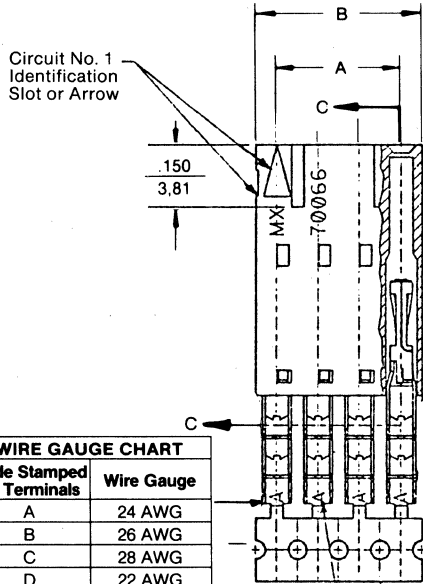
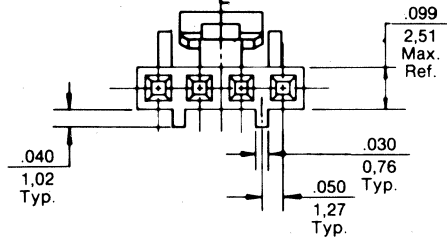
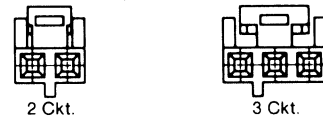
A

70400 Series "G" Version

- Pre-loaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Stackable side-by-side
- Stackable end-to-end
- Positive latch secures connector to mating part
- Anti-entanglement ribs prevent discrete wires from catching under latch during harness manufacturing and storage
- Front ribs prevent housing from being twisted off pins



Rib Location for 2 & 3 Circuit Housing

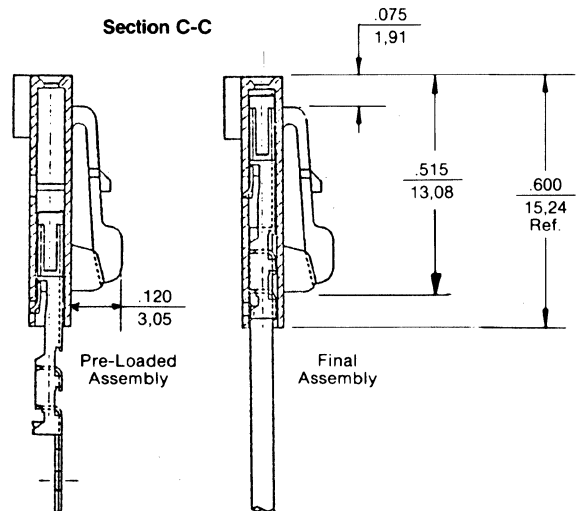


WIRE GAUGE CHART	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

PLATING CODE (Stripe on Carrier Strip)	
Plating	Color
Tin	None
15μ" Gold	Yellow
30μ" Gold	Red

NOTE: 2 circuit housings are pre-loaded in pairs.

Section C-C



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

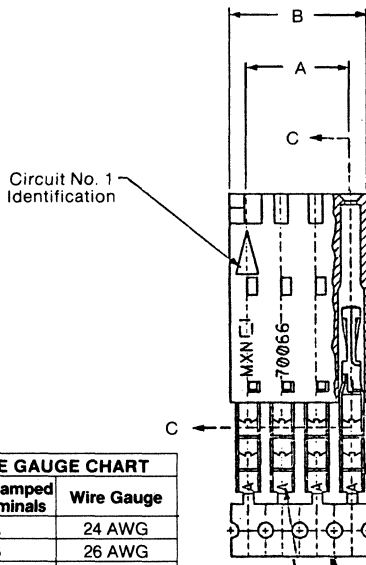
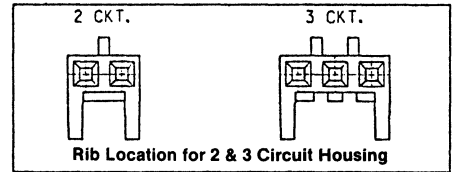
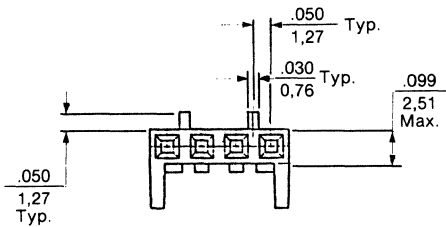
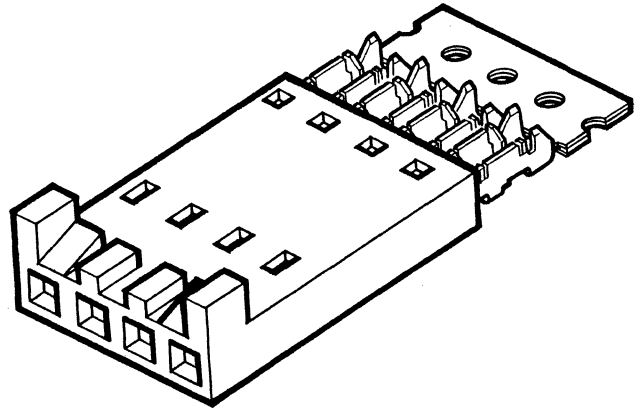
Single Row Female Insulation Displacement Connector Assembly



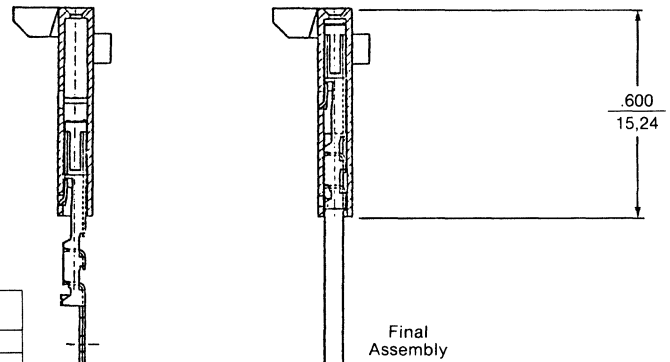
A

70400 Series "H" Version

- Pre-loaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Stackable end-to-end
- Mates with Molex KK Series PCB headers with friction lock, e.g. 6373 & 7478



SECTION C-C



WIRE GAUGE CHART	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

PLATING CODE (Stripe on Carrier Strip)	
Plating	Color
Tin	None
15µ" Gold	Yellow
30µ" Gold	Red

NOTE: 2 circuit housings are pre-loaded in pairs.

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

Specifications for Single Row Male IDT Connectors

A

Male Insulation Displacement Connector Assembly

This specification covers the ID terminal, engineering series 70110 preassembled into housing 70066, becoming assembly 70475.

Material:

Housing - 94V-0 glass filled polyester, black
Terminal - Phosphor bronze

Electrical:

Contact Resistance at Rated Current - 5 milliohms
Insulation Resistance - 10,000 megohms
Dielectric Strength - 600 VAC r.m.s. for 1 minute at sea level to 5,000 ft.
Current Ratings -
 28 AWG 1.2A
 26 AWG 1.8A
 24 AWG 3.0A
 22 AWG 3.0A

Platings:

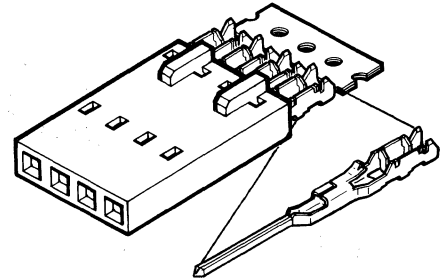
No. 1 - .000015 min. gold plate in selected area over .000050 min. nickel plate overall (pre-plated stock), with .000075 min. tin/lead (post-plate) in selected area
No. 2 - .000030 min. gold in selected area over .000050 min. nickel plate overall (pre-plated stock), with .000075 min. tin/lead (post-plated) in selected area
No. 3 - .000200 min. electro-tin plate over .000015 min. copper plate overall

Environmental:

Operating Temperature Range - -40°C to 105°C

Mechanical:

Pin Height - Max: .300"
 Min: .280" (from top of housing to top of pin)
Wire Range - Accepts wire range from 28 to 22 AWG stranded, with .053" max. outside diameter
Terminal Pullout Force from housing - Will withstand gradual applied force of 4 lbs. for 15 seconds



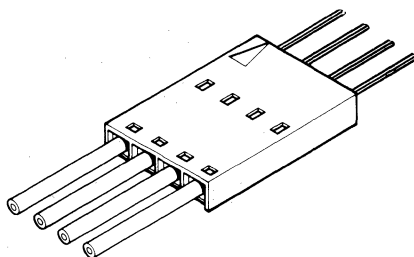
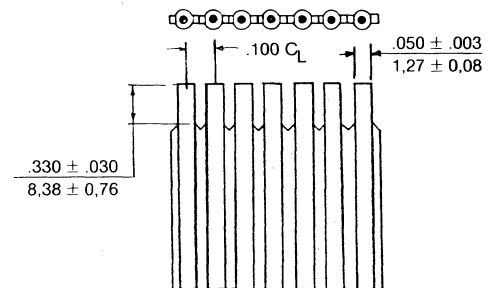
Shown: 70475 "D" Version Connector

UL listed, CSA certified

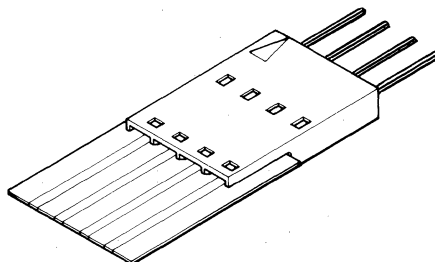
Recommended Molex Cable Eng. Nos. to use with 70400 Series connectors:

7307	8996
24241	8997
24226	24369
7767	24389

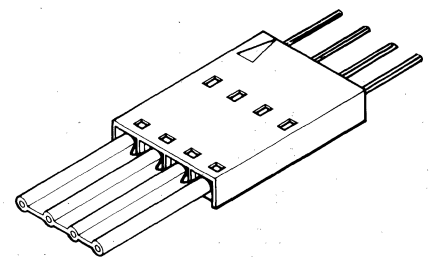
Notching Specification for Ribbon Cable



Discrete Wire
Section A, this catalog



Flat Flex Cable
Section G, this catalog

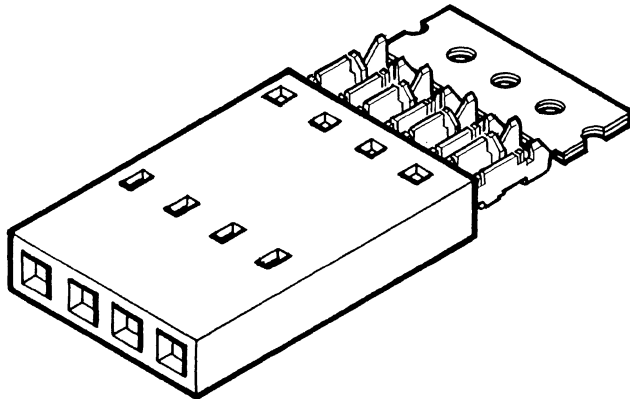


Ribbon Cable
Section G, this catalog

Single Row Male Insulation Displacement Connector Assembly

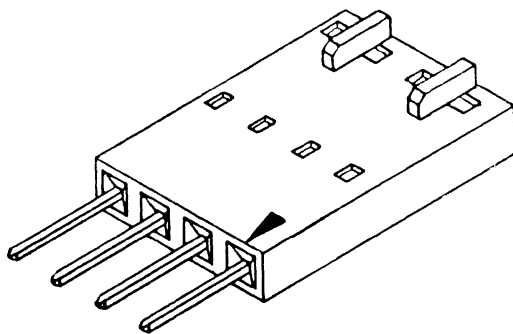
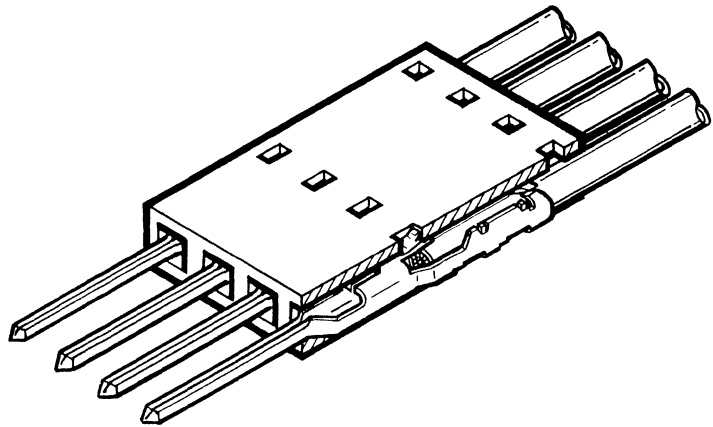


A



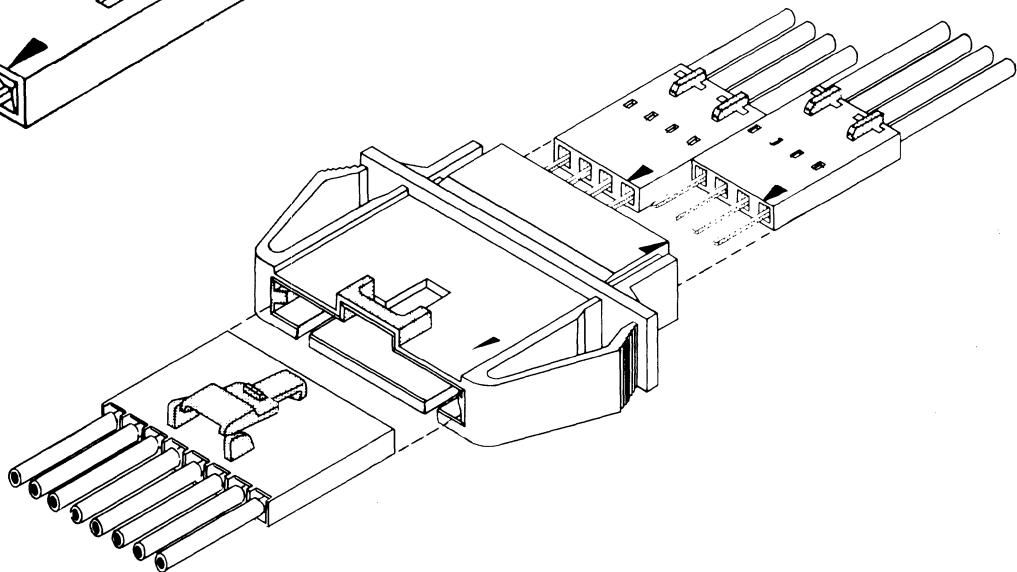
The windows in the housing are offset to prevent a locking tang from one housing from shorting contacts terminated in another housing, when stacked side-by-side.

In preloaded form, the male and female IDT assemblies are identical. The carrier is color coded to identify the plating and is stamped with a letter to distinguish male from female. Ultimately, the tube will be coded for product identification.



"D"
Version

Application equipment is described in Section M.



Modularity permits gang loading of subassemblies. In this case, two "D" option male assemblies are connected to a "G" option female assembly.

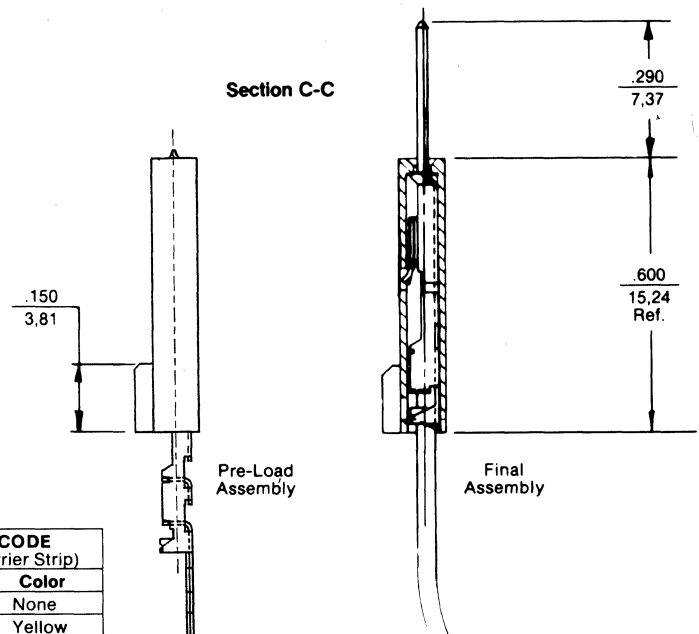
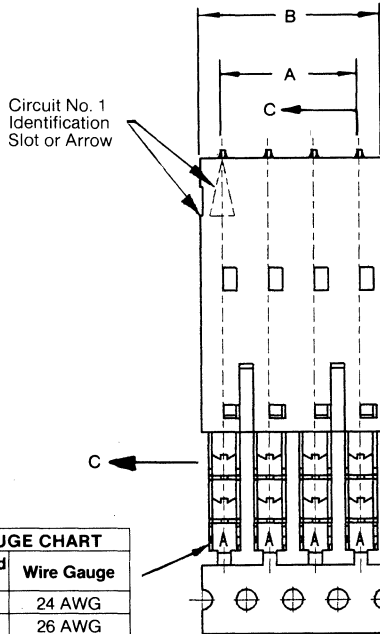
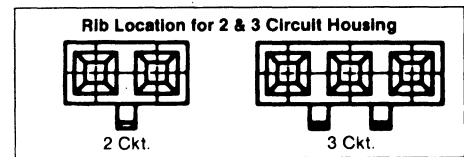
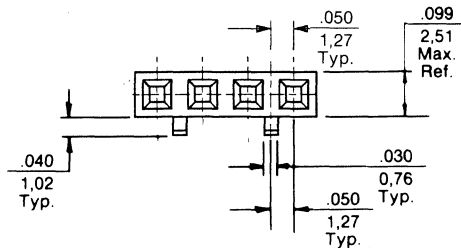
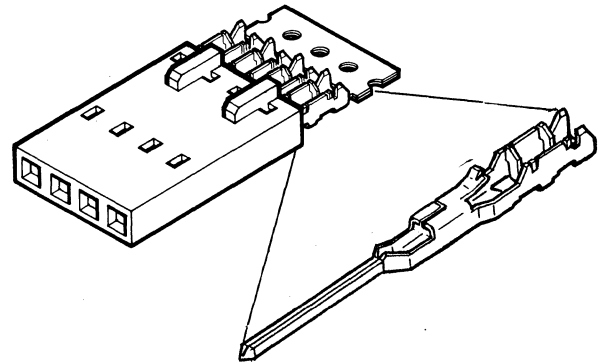
Male Insulation Displacement Connector Assembly

A

70475 Series

"D" Version

- Pre-loaded, single piece construction allows for fully automated termination
- Packaged in plastic tubes to allow for automated manufacturing and to minimize product handling
- Stackable end-to-end
- Back ribs prevent movement when used within interim clip or panel mount housings



WIRE GAUGE CHART	
Code Stamped on Terminals	Wire Gauge
A	24 AWG
B	26 AWG
C	28 AWG
D	22 AWG

PLATING CODE (Stripe on Carrier Strip)	
Plating	Color
Tin	None
15μ" Gold	Yellow
30μ" Gold	Red

NOTE: 2 circuit housings are pre-loaded in pairs.

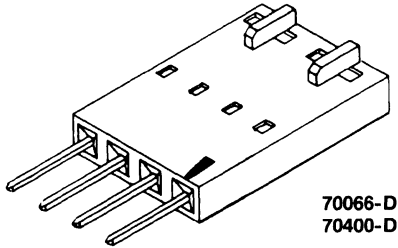
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1,100 27,94	1,199 30,45	17	1,600 40,64	1,699 43,15	22	2,100 53,34	2,199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1,200 30,48	1,299 32,99	18	1,700 43,18	1,799 45,69	23	2,200 55,88	2,299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1,300 33,02	1,399 35,53	19	1,800 45,72	1,899 48,23	24	2,300 58,42	2,399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1,400 35,56	1,499 38,07	20	1,900 48,26	1,999 50,77	25	2,400 60,96	2,499 63,47
6	.500 12,70	.599 15,21	11	1,000 25,40	1,099 27,91	16	1,500 38,10	1,599 40,61	21	2,000 50,80	2,099 53,31			

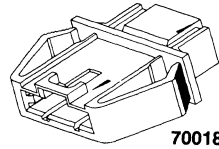
Male Insulation Displacement Connector Assembly



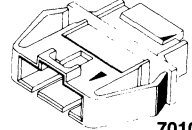
70475 Series "D" Version



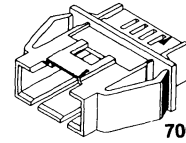
70066-D
70400-D



70018



70104



70022

Ordering Information

Housing "D" Version mates with female connectors in interim clips or panel mounts

PLATING: 15 MICROINCHES GOLD	PLATING: 30 MICROINCHES GOLD	PLATING: 200 MICROINCHES TIN
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Wire Accommodation 28 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 14-44-2102	14	• 14-44-2114	2	• 14-44-4902	14	• 14-44-4914	2	• 14-45-1802	14	• 14-45-1814
3	• 14-44-2103	15	• 14-44-2115	3	• 14-44-4903	15	• 14-44-4915	3	• 14-45-1803	15	• 14-45-1815
4	• 14-44-2104	16	• 14-44-2116	4	• 14-44-4904	16	• 14-44-4916	4	• 14-45-1804	16	• 14-45-1816
5	• 14-44-2105	17	• 14-44-2117	5	• 14-44-4905	17	• 14-44-4917	5	• 14-45-1805	17	• 14-45-1817
6	• 14-44-2106	18	• 14-44-2118	6	• 14-44-4906	18	• 14-44-4918	6	• 14-45-1806	18	• 14-45-1818
7	• 14-44-2107	19	• 14-44-2119	7	• 14-44-4907	19	• 14-44-4919	7	• 14-45-1807	19	• 14-45-1819
8	• 14-44-2108	20	• 14-44-2120	8	• 14-44-4908	20	• 14-44-4920	8	• 14-45-1808	20	• 14-45-1820
9	• 14-44-2109	21	• 14-44-2121	9	• 14-44-4909	21	• 14-44-4921	9	• 14-45-1809	21	• 14-45-1821
10	• 14-44-2110	22	• 14-44-2122	10	• 14-44-4910	22	• 14-44-4922	10	• 14-45-1810	22	• 14-45-1822
11	• 14-44-2111	23	• 14-44-2123	11	• 14-44-4911	23	• 14-44-4923	11	• 14-45-1811	23	• 14-45-1823
12	• 14-44-2112	24	• 14-44-2124	12	• 14-44-4912	24	• 14-44-4924	12	• 14-45-1812	24	• 14-45-1824
13	• 14-44-2113	25	• 14-44-2125	13	• 14-44-4913	25	• 14-44-4925	13	• 14-45-1813	25	• 14-45-1825

Wire Accommodation 26 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 14-44-1602	14	• 14-44-1614	2	• 14-44-2902	14	• 14-44-2914	2	• 14-45-0602	14	• 14-45-0614
3	• 14-44-1603	15	• 14-44-1615	3	• 14-44-2903	15	• 14-44-2915	3	• 14-45-0603	15	• 14-45-0615
4	• 14-44-1604	16	• 14-44-1616	4	• 14-44-2904	16	• 14-44-2916	4	• 14-45-0604	16	• 14-45-0616
5	• 14-44-1605	17	• 14-44-1617	5	• 14-44-2905	17	• 14-44-2917	5	• 14-45-0605	17	• 14-45-0617
6	• 14-44-1606	18	• 14-44-1618	6	• 14-44-2906	18	• 14-44-2918	6	• 14-45-0606	18	• 14-45-0618
7	• 14-44-1607	19	• 14-44-1619	7	• 14-44-2907	19	• 14-44-2919	7	• 14-45-0607	19	• 14-45-0619
8	• 14-44-1608	20	• 14-44-1620	8	• 14-44-2908	20	• 14-44-2920	8	• 14-45-0608	20	• 14-45-0620
9	• 14-44-1609	21	• 14-44-1621	9	• 14-44-2909	21	• 14-44-2921	9	• 14-45-0609	21	• 14-45-0621
10	• 14-44-1610	22	• 14-44-1622	10	• 14-44-2910	22	• 14-44-2922	10	• 14-45-0610	22	• 14-45-0622
11	• 14-44-1611	23	• 14-44-1623	11	• 14-44-2911	23	• 14-44-2923	11	• 14-45-0611	23	• 14-45-0623
12	• 14-44-1612	24	• 14-44-1624	12	• 14-44-2912	24	• 14-44-2924	12	• 14-45-0612	24	• 14-45-0624
13	• 14-44-1613	25	• 14-44-1625	13	• 14-44-2913	25	• 14-44-2925	13	• 14-45-0613	25	• 14-45-0625

Wire Accommodation 24 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 14-44-1202	14	• 14-44-1214	2	• 14-44-2502	14	• 14-44-2514	2	• 14-45-0202	14	• 14-45-0214
3	• 14-44-1203	15	• 14-44-1215	3	• 14-44-2503	15	• 14-44-2515	3	• 14-45-0203	15	• 14-45-0215
4	• 14-44-1204	16	• 14-44-1216	4	• 14-44-2504	16	• 14-44-2516	4	• 14-45-0204	16	• 14-45-0216
5	• 14-44-1205	17	• 14-44-1217	5	• 14-44-2505	17	• 14-44-2517	5	• 14-45-0205	17	• 14-45-0217
6	• 14-44-1206	18	• 14-44-1218	6	• 14-44-2506	18	• 14-44-2518	6	• 14-45-0206	18	• 14-45-0218
7	• 14-44-1207	19	• 14-44-1219	7	• 14-44-2507	19	• 14-44-2519	7	• 14-45-0207	19	• 14-45-0219
8	• 14-44-1208	20	• 14-44-1220	8	• 14-44-2508	20	• 14-44-2520	8	• 14-45-0208	20	• 14-45-0220
9	• 14-44-1209	21	• 14-44-1221	9	• 14-44-2509	21	• 14-44-2521	9	• 14-45-0209	21	• 14-45-0221
10	• 14-44-1210	22	• 14-44-1222	10	• 14-44-2510	22	• 14-44-2522	10	• 14-45-0210	22	• 14-45-0222
11	• 14-44-1211	23	• 14-44-1223	11	• 14-44-2511	23	• 14-44-2523	11	• 14-45-0211	23	• 14-45-0223
12	• 14-44-1212	24	• 14-44-1224	12	• 14-44-2512	24	• 14-44-2524	12	• 14-45-0212	24	• 14-45-0224
13	• 14-44-1213	25	• 14-44-1225	13	• 14-44-2513	25	• 14-44-2525	13	• 14-45-0213	25	• 14-45-0225

Wire Accommodation 22 AWG

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	14-44-5302	14	14-44-5314	2	14-44-5402	14	14-44-5414	2	14-44-5202	14	14-44-5214
3	14-44-5303	15	14-44-5315	3	14-44-5403	15	14-44-5415	3	14-44-5203	15	14-44-5215
4	14-44-5304	16	14-44-5316	4	14-44-5404	16	14-44-5416	4	14-44-5204	16	14-44-5216
5	14-44-5305	17	14-44-5317	5	14-44-5405	17	14-44-5417	5	14-44-5205	17	14-44-5217
6	14-44-5306	18	14-44-5318	6	14-44-5406	18	14-44-5418	6	14-44-5206	18	14-44-5218
7	14-44-5307	19	14-44-5319	7	14-44-5407	19	14-44-5419	7	14-44-5207	19	14-44-5219
8	14-44-5308	20	14-44-5320	8	14-44-5408	20	14-44-5420	8	14-44-5208	20	14-44-5220
9	14-44-5309	21	14-44-5321	9	14-44-5409	21	14-44-5421	9	14-44-5209	21	14-44-5221
10	14-44-5310	22	14-44-5322	10	14-44-5410	22	14-44-5422	10	14-44-5210	22	14-44-5222
11	14-44-5311	23	14-44-5323	11	14-44-5411	23	14-44-5423	11	14-44-5211	23	14-44-5223
12	14-44-5312	24	14-44-5324	12	14-44-5412	24	14-44-5424	12	14-44-5212	24	14-44-5224
13	14-44-5313	25	14-44-5325	13	14-44-5413	25	14-44-5425	13	14-44-5213	25	14-44-5225

• U.S. Standard Product, available through Molex franchised distributors.

Specifications for Single Row Shrouded Headers

A

□ For use with .062", .093"/.125" thick printed circuit boards

Material:

Pins - .025" square, phosphor bronze
Insulator - UL 94V-0 glass filled LCP, black; Vapor phase and infrared process compatible

Electrical:

Current rating - 3 amps
Insulation Resistance - 1,000 megohms
Dielectric Strength - 600 VAC r.m.s. for 1 minute

Environmental:

Operating Temperature - -40°C - +105°C continuous, +215°C intermittent (Vapor Phase)

Mechanical:

Min. Pushout Force - 4 lbs.

Platings:

No. 1 - 15 microinches min. gold plate in selected area, over 50 microinches min. nickel plate overall, with 75 microinches min. electro-tin/ lead in selected area.

No. 2 - 30 microinches min. gold in selected area, over 50 microinches min. nickel plate overall, with 75 microinches min. electro-tin/lead in selected area.

No. 3 - 200 microinches min. electro-tin plate over 100 microinches min. copper plate.

Automation:

Headers loaded in plastic tubes can be robotically inserted into the printed circuit board

PCB Locks:

Hold headers in place until they are permanently secured at the wave solder station

Standoffs (.015"/.020")⁽¹⁾

Keep headers off the board to aid in cleaning flux from the board through solder wash.

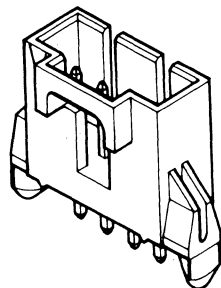
Positive Latch Mechanism⁽²⁾

Retains connector in the header housing

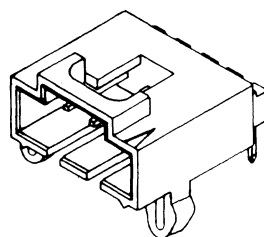
Polarization Slots⁽³⁾

Prevent pin/contact damage and polarize the post/receptacle mating.

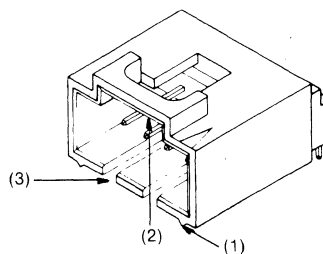
UL listed, CSA certified



Standard Tri-peg



Optional Bubble-Lock



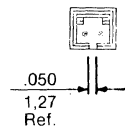
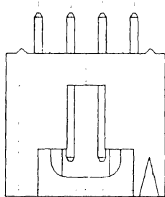
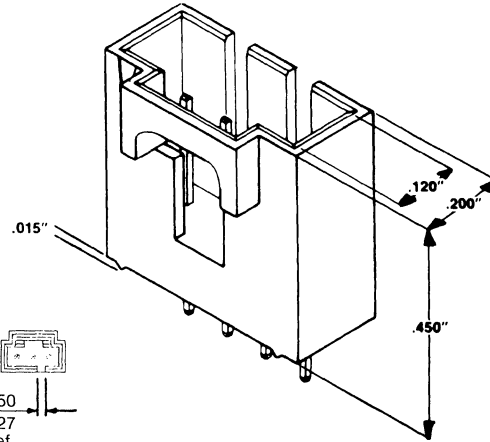
Single Row .120" Pocket Straight Header



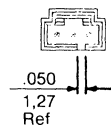
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70543

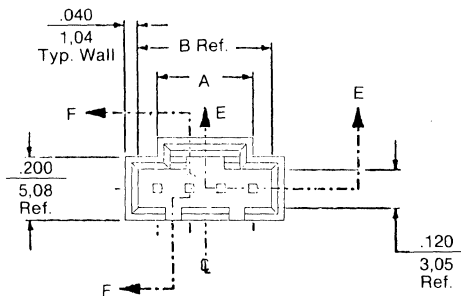
- Headers loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Positive latch retains connector after mating
- Standoffs minimize flux retention
- Circuit sizes 2-25



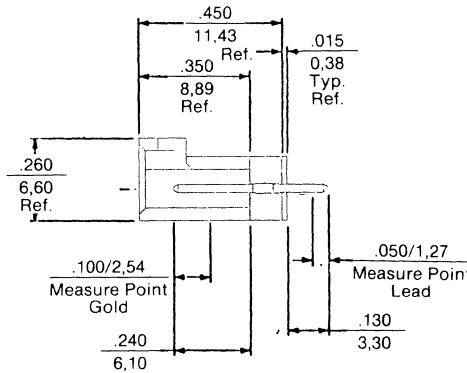
2 Circuit



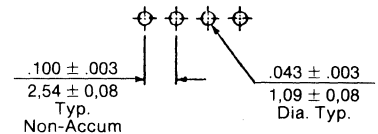
3 Circuit



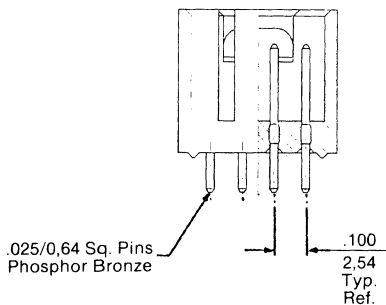
SECTION E-E



SECTION F-F



Recommended P.C. Board Layout
(For use with .062/1.57 Thick Board)



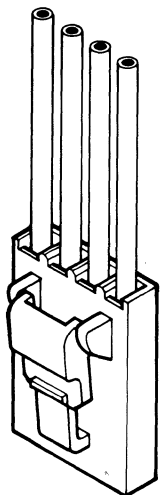
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.210 5,33	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 35,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,75	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

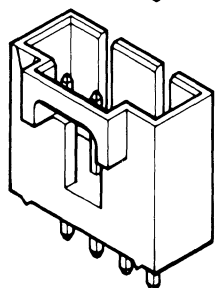
Single Row .120" Pocket Straight Header

A

70543



70400-G
70066-G



70543

70543 Header mates with connector "G" Version

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 705-43-0001	14	• 705-43-0013	2	• 705-43-0106	14	• 705-43-0118	2	• 705-43-0036	14	• 705-43-0048
3	• 705-43-0002	15	• 705-43-0014	3	• 705-43-0107	15	• 705-43-0119	3	• 705-43-0037	15	• 705-43-0049
4	• 705-43-0003	16	• 705-43-0015	4	• 705-43-0108	16	• 705-43-0120	4	• 705-43-0038	16	• 705-43-0050
5	• 705-43-0004	17	• 705-43-0016	5	• 705-43-0109	17	• 705-43-0121	5	• 705-43-0039	17	• 705-43-0051
6	• 705-43-0005	18	• 705-43-0017	6	• 705-43-0110	18	• 705-43-0122	6	• 705-43-0040	18	• 705-43-0052
7	• 705-43-0006	19	• 705-43-0018	7	• 705-43-0111	19	• 705-43-0123	7	• 705-43-0041	19	• 705-43-0053
8	• 705-43-0007	20	• 705-43-0019	8	• 705-43-0112	20	• 705-43-0124	8	• 705-43-0042	20	• 705-43-0054
9	• 705-43-0008	21	• 705-43-0020	9	• 705-43-0113	21	• 705-43-0125	9	• 705-43-0043	21	• 705-43-0055
10	• 705-43-0009	22	• 705-43-0021	10	• 705-43-0114	22	• 705-43-0126	10	• 705-43-0044	22	• 705-43-0056
11	• 705-43-0010	23	• 705-43-0022	11	• 705-43-0115	23	• 705-43-0127	11	• 705-43-0045	23	• 705-43-0057
12	• 705-43-0011	24	• 705-43-0023	12	• 705-43-0116	24	• 705-43-0128	12	• 705-43-0046	24	• 705-43-0058
13	• 705-43-0012	25	• 705-43-0024	13	• 705-43-0117	25	• 705-43-0129	13	• 705-43-0047	25	• 705-43-0059

• U.S. Standard Product, available through Molex franchised distributors.

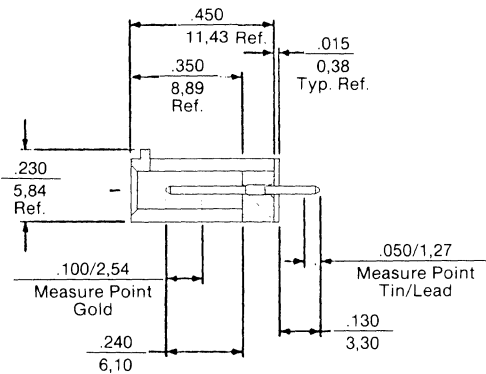
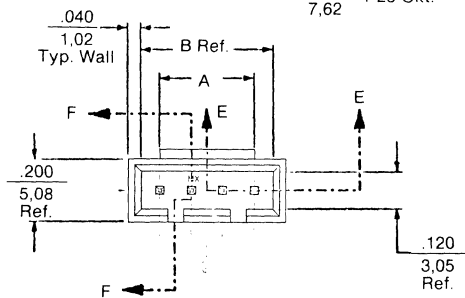
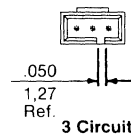
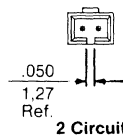
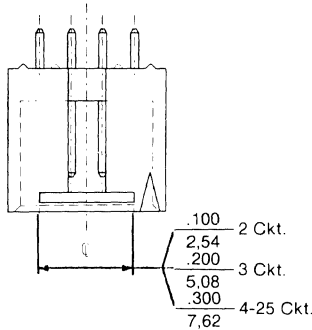
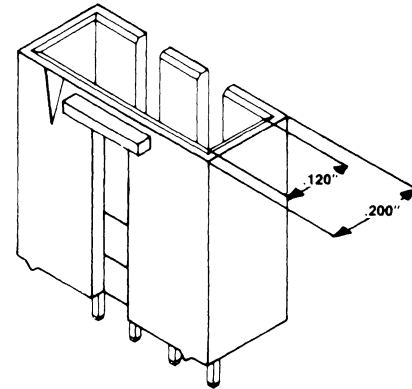
Single Row .120" Pocket Straight Header



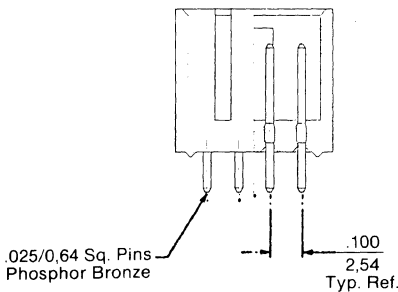
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70544

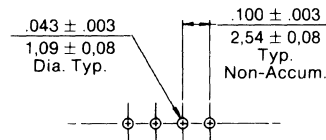
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarized
- Standoffs minimize flux retention
- Circuit sizes 2-25



SECTION F-F



SECTION E-E



Recommended P.C. Board Hole Layout

Dimensions

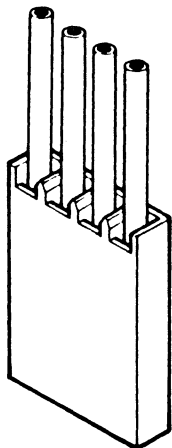
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.210 5,33	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 35,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,75	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

Single Row .120" Pocket Straight Header

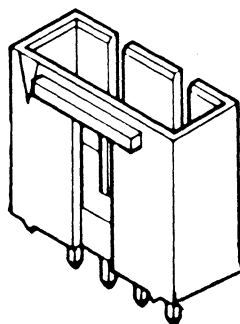


A

70544



70400-C
70066-C



70544

70544 Header mates with connector "C" Version

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	705-44-0001	14	705-44-0013	2	705-44-0106	14	705-44-0118	2	705-44-0036	14	705-44-0048
3	705-44-0002	15	705-44-0014	3	705-44-0107	15	705-44-0119	3	705-44-0037	15	705-44-0049
4	705-44-0003	16	705-44-0015	4	705-44-0108	16	705-44-0120	4	705-44-0038	16	705-44-0050
5	705-44-0004	17	705-44-0016	5	705-44-0109	17	705-44-0121	5	705-44-0039	17	705-44-0051
6	705-44-0005	18	705-44-0017	6	705-44-0110	18	705-44-0122	6	705-44-0040	18	705-44-0052
7	705-44-0006	19	705-44-0018	7	705-44-0111	19	705-44-0123	7	705-44-0041	19	705-44-0053
8	705-44-0007	20	705-44-0019	8	705-44-0112	20	705-44-0124	8	705-44-0042	20	705-44-0054
9	705-44-0008	21	705-44-0020	9	705-44-0113	21	705-44-0125	9	705-44-0043	21	705-44-0055
10	705-44-0009	22	705-44-0021	10	705-44-0114	22	705-44-0126	10	705-44-0044	22	705-44-0056
11	705-44-0010	23	705-44-0022	11	705-44-0115	23	705-44-0127	11	705-44-0045	23	705-44-0057
12	705-44-0011	24	705-44-0023	12	705-44-0116	24	705-44-0128	12	705-44-0046	24	705-44-0058
13	705-44-0012	25	705-44-0024	13	705-44-0117	25	705-44-0129	13	705-44-0047	25	705-44-0059

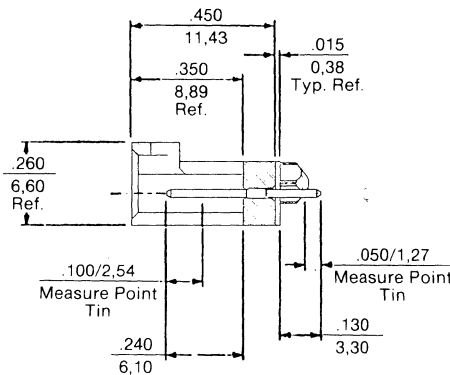
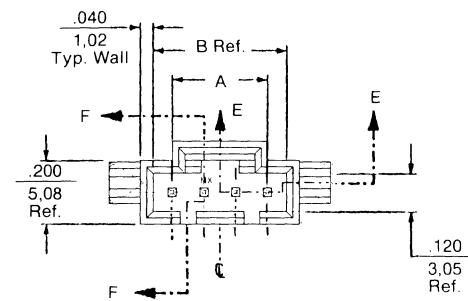
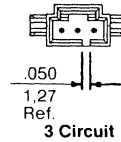
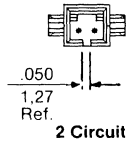
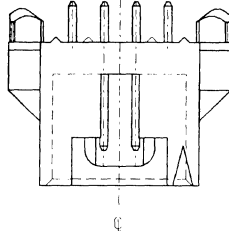
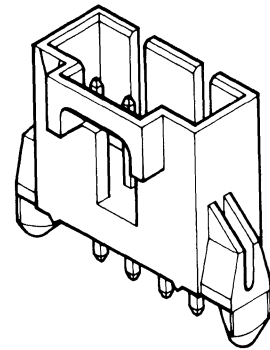
Single Row .120" Pocket Straight Header, TRI-PEG



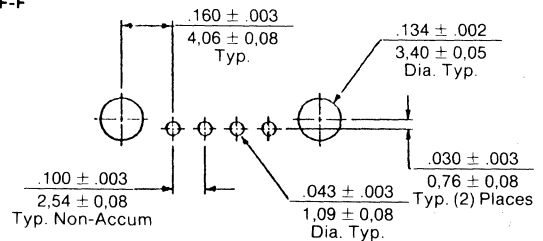
A

70545

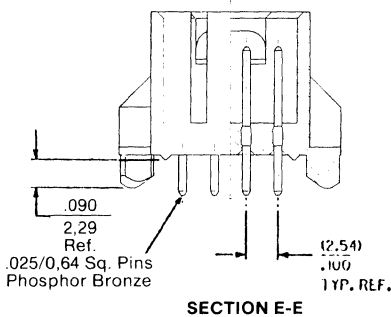
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Positive latch retains connector after mating
- Standoffs minimize flux retention
- Circuits sizes 2-25
- Mates with "G" Version connectors 70400 and 70430



SECTION F-F



Recommended P.C. Board Layout
(For Use with .062/1.57 Thick Board)



SECTION E-E

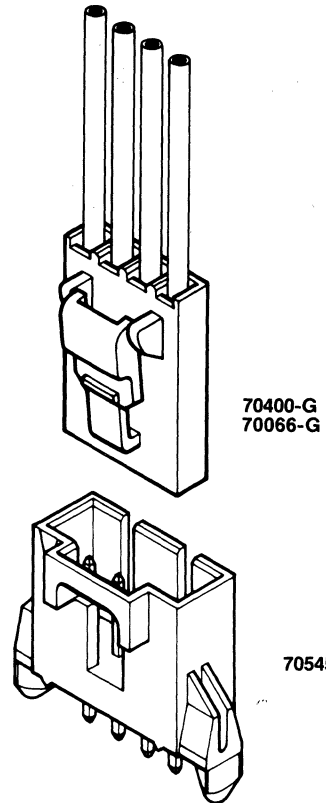
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.210 5,33	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 35,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,75	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

Single Row .120" Pocket Straight Header, TRI-PEG

A

70545



70545 Header mates with connector "G" Version

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 705-45-0036	14	• 705-45-0048	2	• 705-45-0071	14	• 705-45-0083	2	• 705-45-0001	14	• 705-45-0013
3	• 705-45-0037	15	• 705-45-0049	3	• 705-45-0072	15	• 705-45-0084	3	• 705-45-0002	15	• 705-45-0014
4	• 705-45-0038	16	• 705-45-0050	4	• 705-45-0073	16	• 705-45-0085	4	• 705-45-0003	16	• 705-45-0015
5	• 705-45-0039	17	• 705-45-0051	5	• 705-45-0074	17	• 705-45-0086	5	• 705-45-0004	17	• 705-45-0016
6	• 705-45-0040	18	• 705-45-0052	6	• 705-45-0075	18	• 705-45-0087	6	• 705-45-0005	18	• 705-45-0017
7	• 705-45-0041	19	• 705-45-0053	7	• 705-45-0076	19	• 705-45-0088	7	• 705-45-0006	19	• 705-45-0018
8	• 705-45-0042	20	• 705-45-0054	8	• 705-45-0077	20	• 705-45-0089	8	• 705-45-0007	20	• 705-45-0019
9	• 705-45-0043	21	• 705-45-0055	9	• 705-45-0078	21	• 705-45-0090	9	• 705-45-0008	21	• 705-45-0020
10	• 705-45-0044	22	• 705-45-0056	10	• 705-45-0079	22	• 705-45-0091	10	• 705-45-0009	22	• 705-45-0021
11	• 705-45-0045	23	• 705-45-0057	11	• 705-45-0080	23	• 705-45-0092	11	• 705-45-0010	23	• 705-45-0022
12	• 705-45-0046	24	• 705-45-0058	12	• 705-45-0081	24	• 705-45-0093	12	• 705-45-0011	24	• 705-45-0023
13	• 705-45-0047	25	• 705-45-0059	13	• 705-45-0082	25	• 705-45-0094	13	• 705-45-0012	25	• 705-45-0024

• U.S. Standard Product, available through Molex franchised distributors.

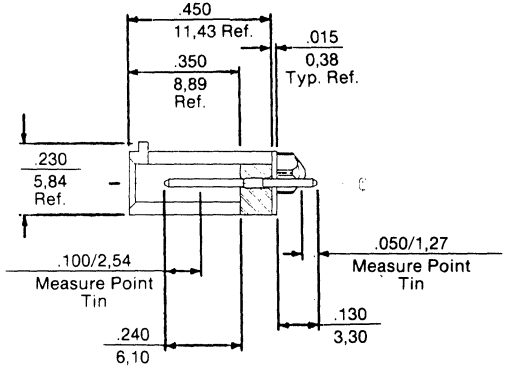
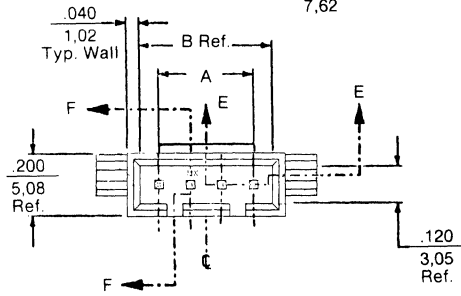
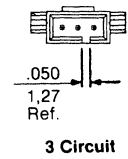
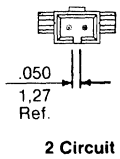
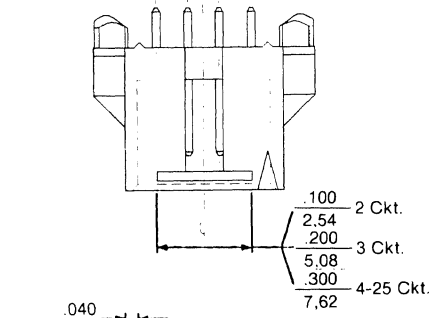
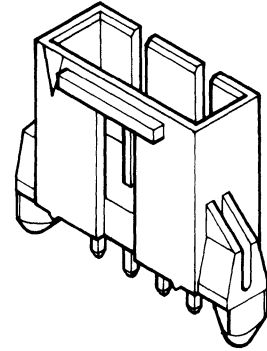
Single Row .120" Pocket Straight Header, TRI-PEG



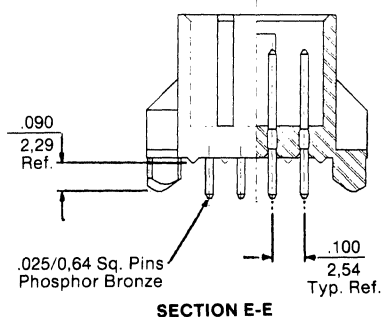
A

70546

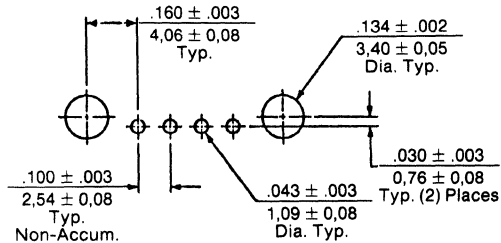
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarized
- Standoffs minimize flux retention
- Circuit sizes 2-25
- Mates with "G" Version connectors 70400 and 70430



SECTION F-F



SECTION E-E



Recommended P.C. Board Layout
(For Use with .062/1.57 Thick Board)

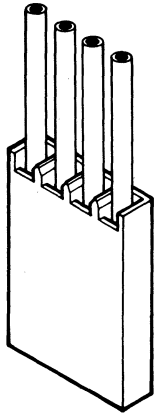
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.210 5,33	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 35,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,75	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

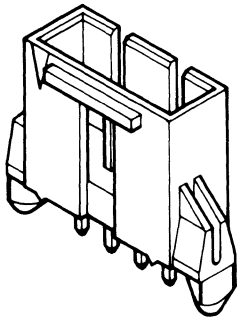
Single Row .120" Pocket Straight Header, TRI-PEG

A

70546



70400-C
70066-C



70546

70546 Header mates with connector "C" Version

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	705-46-0036	14	705-46-0048	2	705-46-0071	14	705-46-0083	2	705-46-0001	14	705-46-0013
3	705-46-0037	15	705-46-0049	3	705-46-0072	15	705-46-0084	3	705-46-0002	15	705-46-0014
4	705-46-0038	16	705-46-0050	4	705-46-0073	16	705-46-0085	4	705-46-0003	16	705-46-0015
5	705-46-0039	17	705-46-0051	5	705-46-0074	17	705-46-0086	5	705-46-0004	17	705-46-0016
6	705-46-0040	18	705-46-0052	6	705-46-0075	18	705-46-0087	6	705-46-0005	18	705-46-0017
7	705-46-0041	19	705-46-0053	7	705-46-0076	19	705-46-0088	7	705-46-0006	19	705-46-0018
8	705-46-0042	20	705-46-0054	8	705-46-0077	20	705-46-0089	8	705-46-0007	20	705-46-0019
9	705-46-0043	21	705-46-0055	9	705-46-0078	21	705-46-0090	9	705-46-0008	21	705-46-0020
10	705-46-0044	22	705-46-0056	10	705-46-0079	22	705-46-0091	10	705-46-0009	22	705-46-0021
11	705-46-0045	23	705-46-0057	11	705-46-0080	23	705-46-0092	11	705-46-0010	23	705-46-0022
12	705-46-0046	24	705-46-0058	12	705-46-0081	24	705-46-0093	12	705-46-0011	24	705-46-0023
13	705-46-0047	25	705-46-0059	13	705-46-0082	25	705-46-0094	13	705-46-0012	25	705-46-0024

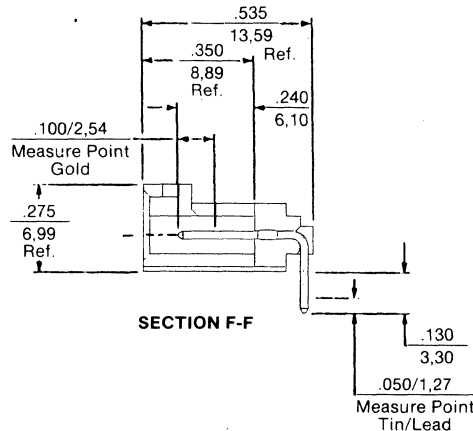
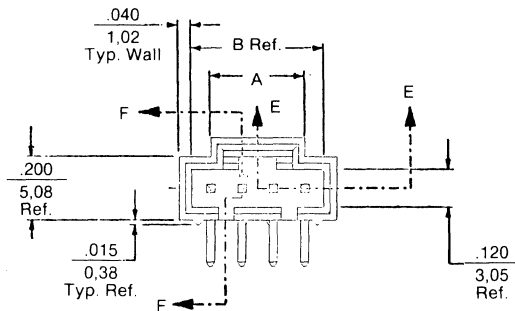
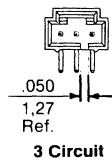
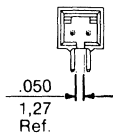
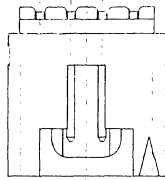
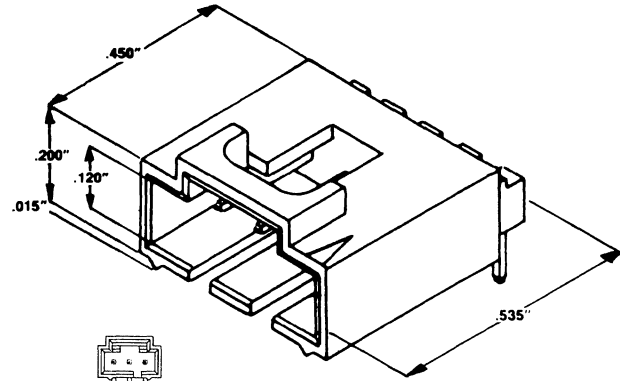
Single Row .120" Pocket Low Profile Right Angle Header



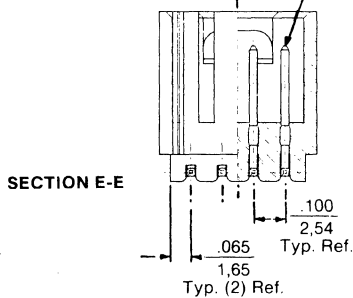
A

70553

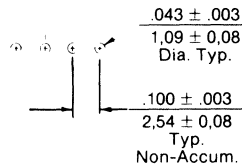
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Positive latch retains connector after mating
- Standoffs minimize flux retention
- Circuit sizes 2-25



.025/0.64 Sq. Pins
Phosphor Bronze



Recommended P.C. Board Hole Layout



Dimensions

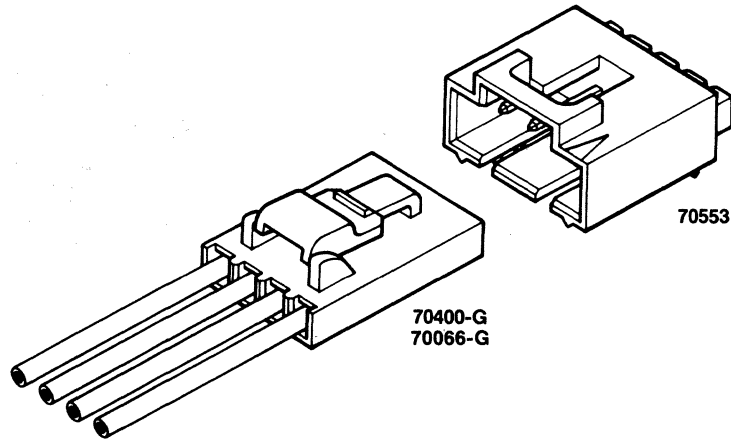
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.210 5,33	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 35,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,75	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

Single Row .120" Pocket Low Profile Right Angle Header



A

70553



70553 Header mates with connector "G" Version

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 705-53-0001	14	• 705-53-0013	2	• 705-53-0106	14	• 705-53-0118	2	• 705-53-0036	14	• 705-53-0048
3	• 705-53-0002	15	• 705-53-0014	3	• 705-53-0107	15	• 705-53-0119	3	• 705-53-0037	15	• 705-53-0049
4	• 705-53-0003	16	• 705-53-0015	4	• 705-53-0108	16	• 705-53-0120	4	• 705-53-0038	16	• 705-53-0050
5	• 705-53-0004	17	• 705-53-0016	5	• 705-53-0109	17	• 705-53-0121	5	• 705-53-0039	17	• 705-53-0051
6	• 705-53-0005	18	• 705-53-0017	6	• 705-53-0110	18	• 705-53-0122	6	• 705-53-0040	18	• 705-53-0052
7	• 705-53-0006	19	• 705-53-0018	7	• 705-53-0111	19	• 705-53-0123	7	• 705-53-0041	19	• 705-53-0053
8	• 705-53-0007	20	• 705-53-0019	8	• 705-53-0112	20	• 705-53-0124	8	• 705-53-0042	20	• 705-53-0054
9	• 705-53-0008	21	• 705-53-0020	9	• 705-53-0113	21	• 705-53-0125	9	• 705-53-0043	21	• 705-53-0055
10	• 705-53-0009	22	• 705-53-0021	10	• 705-53-0114	22	• 705-53-0126	10	• 705-53-0044	22	• 705-53-0056
11	• 705-53-0010	23	• 705-53-0022	11	• 705-53-0115	23	• 705-53-0127	11	• 705-53-0045	23	• 705-53-0057
12	• 705-53-0011	24	• 705-53-0023	12	• 705-53-0116	24	• 705-53-0128	12	• 705-53-0046	24	• 705-53-0058
13	• 705-53-0012	25	• 705-53-0024	13	• 705-53-0117	25	• 705-53-0129	13	• 705-53-0047	25	• 705-53-0059

• U.S. Standard Product, available through Molex franchised distributors.

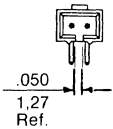
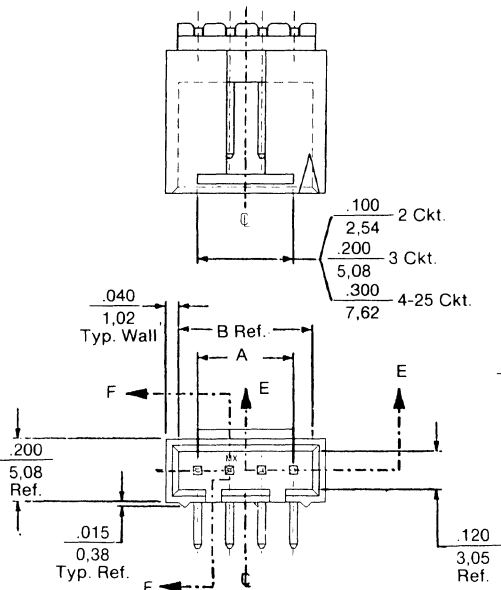
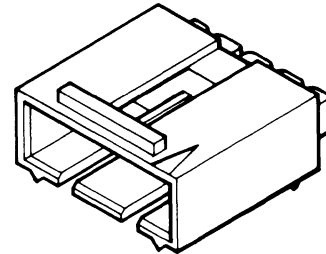
Single Row .120" Pocket Low Profile Right Angle Header



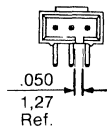
A

70554

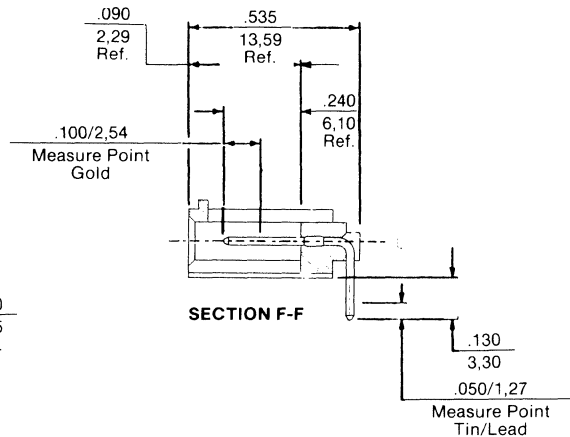
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarized
- Standoffs minimize flux retention
- Circuit sizes 2-25



2 Circuit

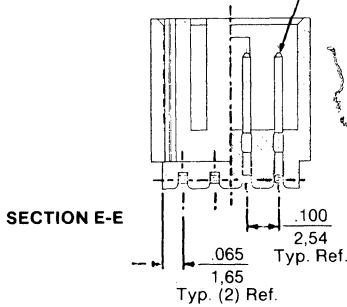


3 Circuit

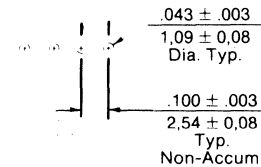


SECTION F-F

.025/0.64 Sq. Pins
Phosphor Bronze



SECTION E-E



Recommended P.C. Board
Hole Layout

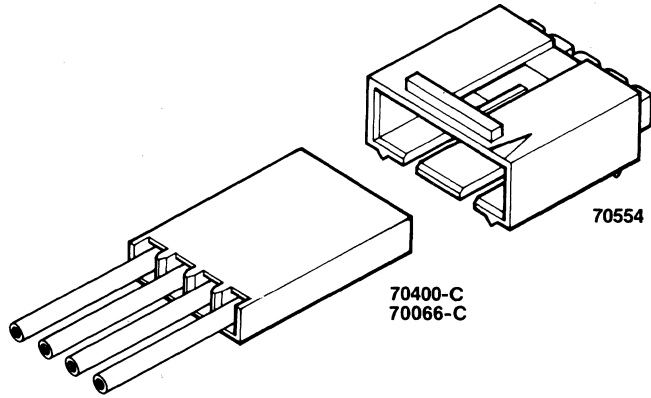
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.210 5,33	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 35,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,75	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

Single Row .120" Pocket Low Profile Right Angle Header

A

70554



70554 Header mates with connector "C" Version

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	705-54-0001	14	705-54-0013	2	705-54-0106	14	705-54-0118	2	705-54-0036	14	705-54-0048
3	705-54-0002	15	705-54-0014	3	705-54-0107	15	705-54-0119	3	705-54-0037	15	705-54-0049
4	705-54-0003	16	705-54-0015	4	705-54-0108	16	705-54-0120	4	705-54-0038	16	705-54-0050
5	705-54-0004	17	705-54-0016	5	705-54-0109	17	705-54-0121	5	705-54-0039	17	705-54-0051
6	705-54-0005	18	705-54-0017	6	705-54-0110	18	705-54-0122	6	705-54-0040	18	705-54-0052
7	705-54-0006	19	705-54-0018	7	705-54-0111	19	705-54-0123	7	705-54-0041	19	705-54-0053
8	705-54-0007	20	705-54-0019	8	705-54-0112	20	705-54-0124	8	705-54-0042	20	705-54-0054
9	705-54-0008	21	705-54-0020	9	705-54-0113	21	705-54-0125	9	705-54-0043	21	705-54-0055
10	705-54-0009	22	705-54-0021	10	705-54-0114	22	705-54-0126	10	705-54-0044	22	705-54-0056
11	705-54-0010	23	705-54-0022	11	705-54-0115	23	705-54-0127	11	705-54-0045	23	705-54-0057
12	705-54-0011	24	705-54-0023	12	705-54-0116	24	705-54-0128	12	705-54-0046	24	705-54-0058
13	705-54-0012	25	705-54-0024	13	705-54-0117	25	705-54-0129	13	705-54-0047	25	705-54-0059

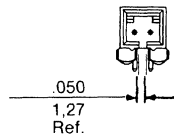
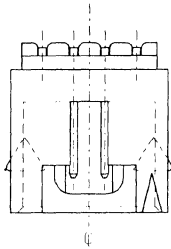
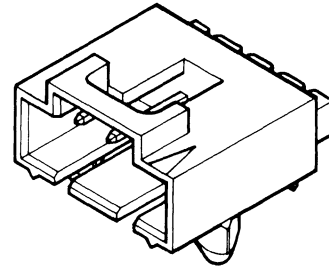
Single Row .120" Pocket Right Angle Header, TRI-PEG



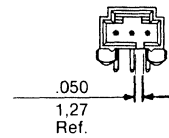
A

70555

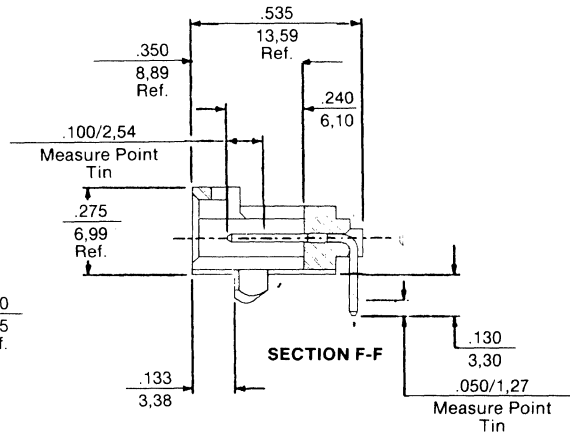
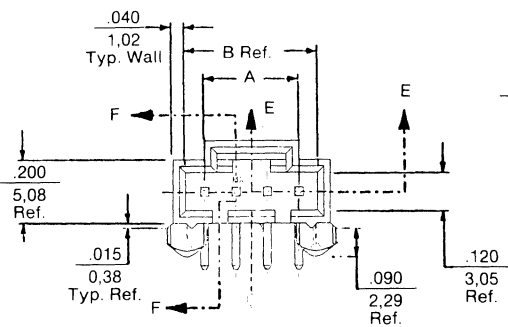
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Standoffs minimize flux retention
- Circuit sizes 2-25
- Mates with 70400-G and 70066-G



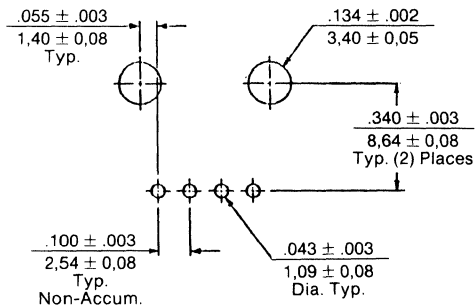
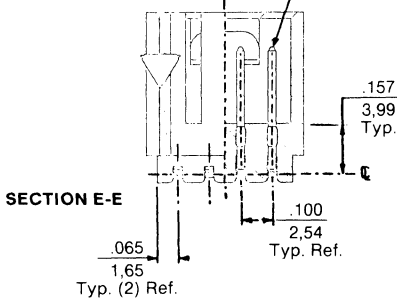
2 Circuit



3 Circuit



.025/0.64 Sq. Pins Phosphor Bronze



Recommended P.C. Board Layout
(For Use with .062/1.57 Thick Board)

Dimensions

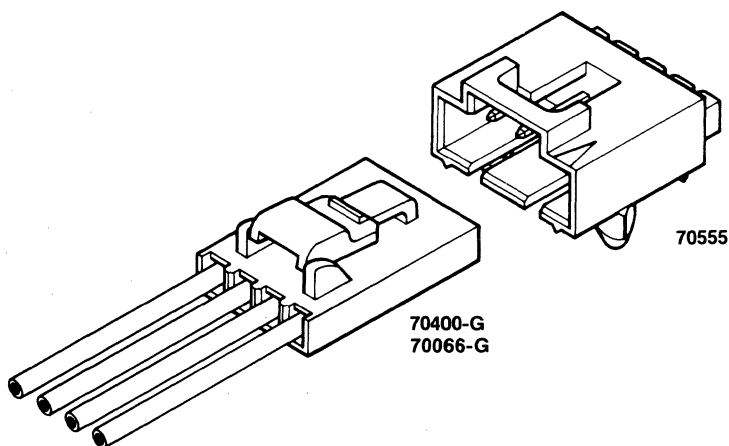
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.210 5,33	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 35,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,75	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

Single Row .120" Pocket Right Angle Header, TRI-PEG



A

70555



70555 Header mates with connector "G" Version

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	● 705-55-0036	14	● 705-55-0048	2	● 705-55-0071	14	● 705-55-0083	2	● 705-55-0001	14	● 705-55-0013
3	● 705-55-0037	15	● 705-55-0049	3	● 705-55-0072	15	● 705-55-0084	3	● 705-55-0002	15	● 705-55-0014
4	● 705-55-0038	16	● 705-55-0050	4	● 705-55-0073	16	● 705-55-0085	4	● 705-55-0003	16	● 705-55-0015
5	● 705-55-0039	17	● 705-55-0051	5	● 705-55-0074	17	● 705-55-0086	5	● 705-55-0004	17	● 705-55-0016
6	● 705-55-0040	18	● 705-55-0052	6	● 705-55-0075	18	● 705-55-0087	6	● 705-55-0005	18	● 705-55-0017
7	● 705-55-0041	19	● 705-55-0053	7	● 705-55-0076	19	● 705-55-0088	7	● 705-55-0006	19	● 705-55-0018
8	● 705-55-0042	20	● 705-55-0054	8	● 705-55-0077	20	● 705-55-0089	8	● 705-55-0007	20	● 705-55-0019
9	● 705-55-0043	21	● 705-55-0055	9	● 705-55-0078	21	● 705-55-0090	9	● 705-55-0008	21	● 705-55-0020
10	● 705-55-0044	22	● 705-55-0056	10	● 705-55-0079	22	● 705-55-0091	10	● 705-55-0009	22	● 705-55-0021
11	● 705-55-0045	23	● 705-55-0057	11	● 705-55-0080	23	● 705-55-0092	11	● 705-55-0010	23	● 705-55-0022
12	● 705-55-0046	24	● 705-55-0058	12	● 705-55-0081	24	● 705-55-0093	12	● 705-55-0011	24	● 705-55-0023
13	● 705-55-0047	25	● 705-55-0059	13	● 705-55-0082	25	● 705-55-0094	13	● 705-55-0012	25	● 705-55-0024

● U.S. Standard Product, available through Molex franchised distributors.

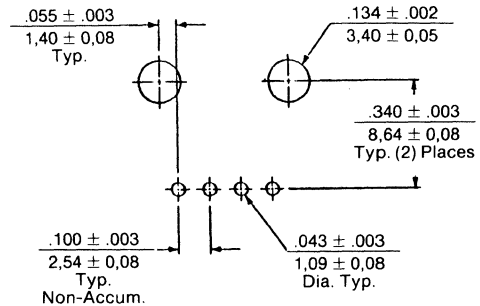
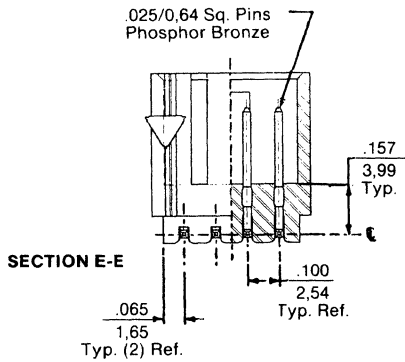
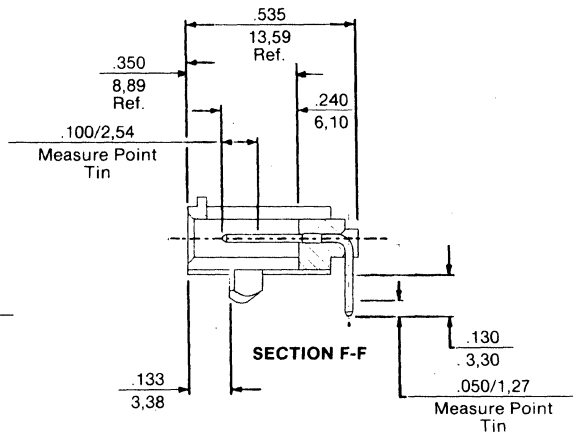
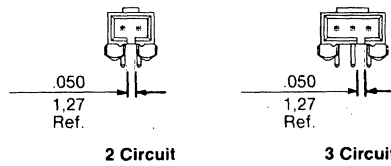
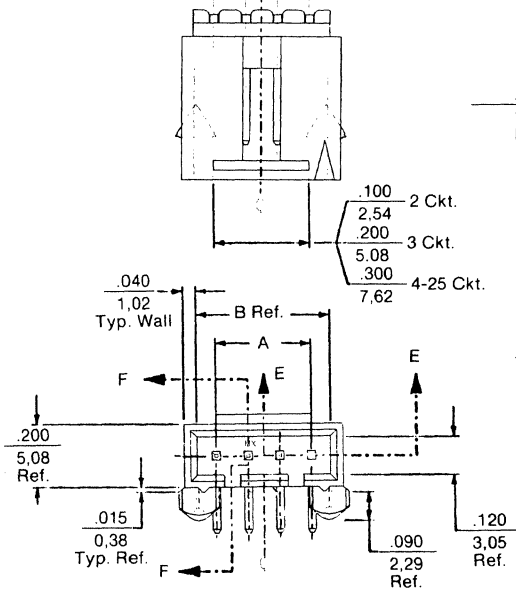
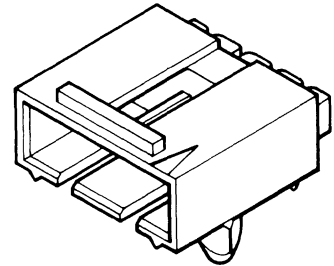
Single Row .120" Pocket Right Angle Header, TRI-PEG



A

70556

- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Standoffs minimize flux retention
- Circuit sizes 2-25
- Mates with 70400-C and 70066-C



Recommended P.C. Board Layout
 (For Use with .062/1.57 Thick Board)

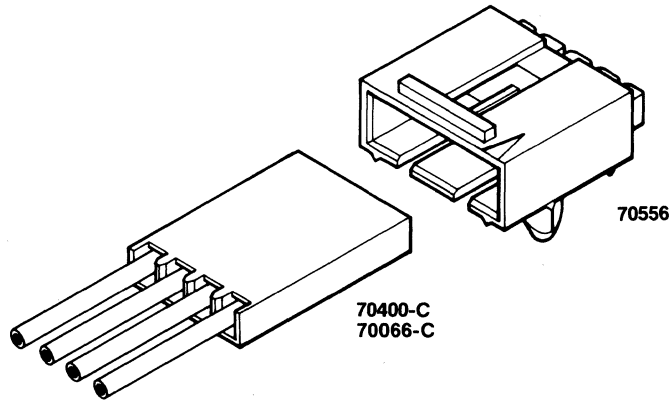
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2.54	.210 5.33	8	.700 17.78	.820 20.83	14	1.300 33.02	1.420 36.07	20	1.900 48.26	2.020 51.31
3	.200 5.08	.320 8.13	9	.800 20.32	.920 23.37	15	1.400 35.56	1.520 38.61	21	2.000 50.80	2.120 53.85
4	.300 7.62	.420 10.67	10	.900 22.86	1.020 25.91	16	1.500 38.10	1.620 41.15	22	2.100 53.34	2.220 56.39
5	.400 10.16	.520 13.21	11	1.000 25.40	1.120 28.45	17	1.600 40.64	1.720 43.69	23	2.200 55.88	2.320 58.93
6	.500 12.70	.620 15.75	12	1.100 27.94	1.220 30.99	18	1.700 43.18	1.820 46.23	24	2.300 58.42	2.420 61.47
7	.600 15.24	.720 18.29	13	1.200 30.48	1.320 33.53	19	1.800 45.72	1.920 48.77	25	2.400 60.96	2.520 64.01

Single Row .120" Pocket Right Angle Header, TRI-PEG

A

70556



70556 Header mates with connector "C" Version

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 705-56-0036	14	• 705-56-0048	2	• 705-56-0071	14	• 705-56-0083	2	• 705-56-0001	14	• 705-56-0013
3	• 705-56-0037	15	• 705-56-0049	3	• 705-56-0072	15	• 705-56-0084	3	• 705-56-0002	15	• 705-56-0014
4	• 705-56-0038	16	• 705-56-0050	4	• 705-56-0073	16	• 705-56-0085	4	• 705-56-0003	16	• 705-56-0015
5	• 705-56-0039	17	• 705-56-0051	5	• 705-56-0074	17	• 705-56-0086	5	• 705-56-0004	17	• 705-56-0016
6	• 705-56-0040	18	• 705-56-0052	6	• 705-56-0075	18	• 705-56-0087	6	• 705-56-0005	18	• 705-56-0017
7	• 705-56-0041	19	• 705-56-0053	7	• 705-56-0076	19	• 705-56-0088	7	• 705-56-0006	19	• 705-56-0018
8	• 705-56-0042	20	• 705-56-0054	8	• 705-56-0077	20	• 705-56-0089	8	• 705-56-0007	20	• 705-56-0019
9	• 705-56-0043	21	• 705-56-0055	9	• 705-56-0078	21	• 705-56-0090	9	• 705-56-0008	21	• 705-56-0020
10	• 705-56-0044	22	• 705-56-0056	10	• 705-56-0079	22	• 705-56-0091	10	• 705-56-0009	22	• 705-56-0021
11	• 705-56-0045	23	• 705-56-0057	11	• 705-56-0080	23	• 705-56-0092	11	• 705-56-0010	23	• 705-56-0022
12	• 705-56-0046	24	• 705-56-0058	12	• 705-56-0081	24	• 705-56-0093	12	• 705-56-0011	24	• 705-56-0023
13	• 705-56-0047	25	• 705-56-0059	13	• 705-56-0082	25	• 705-56-0094	13	• 705-56-0012	25	• 705-56-0024

• U.S. Standard Product, available through Molex franchised distributors.

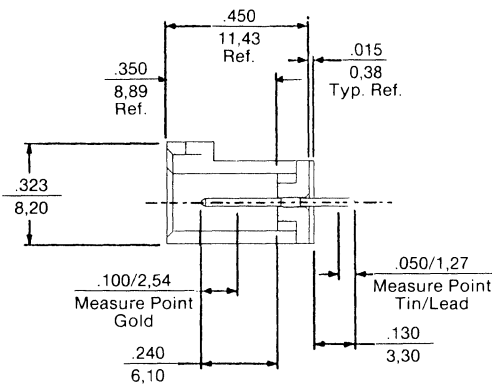
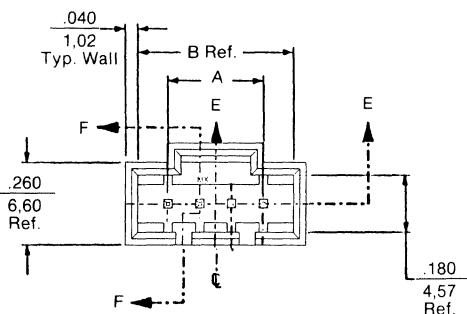
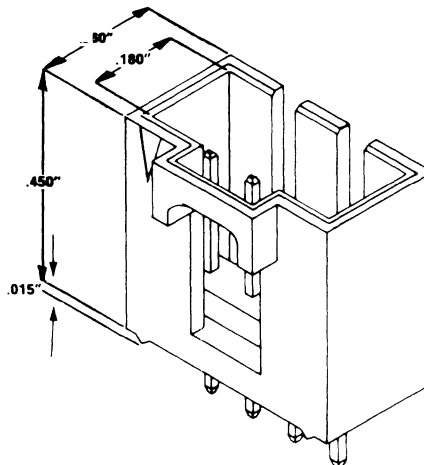
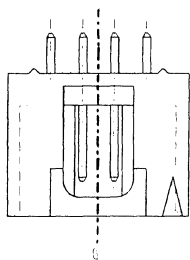
Single Row .180" Pocket Straight Header



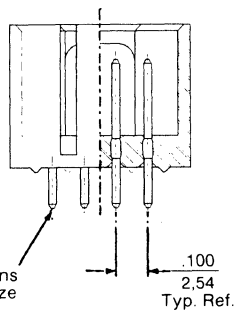
A

70563

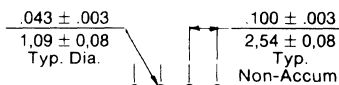
- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Circuit sizes 4-25
- Mates with 70004 Interim Clip



SECTION F-F



SECTION E-E



Recommended P.C. Board Hole Layout

Dimensions

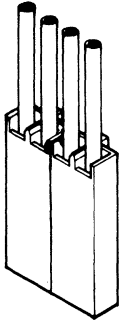
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.300 7.62	.490 12.45	10	.900 22.86	1.090 27.69	16	1.500 38.10	1.690 42.93	21	2.000 50.80	2.190 55.63
5	.400 10.16	.590 14.99	11	1.000 25.40	1.190 30.23	17	1.600 40.64	1.790 45.47	22	2.100 53.34	2.290 58.17
6	.500 12.70	.690 17.53	12	1.100 27.94	1.290 32.77	18	1.700 43.18	1.890 48.01	23	2.200 55.88	2.390 60.71
7	.600 15.24	.790 20.07	13	1.200 30.48	1.390 35.31	19	1.800 45.72	1.990 50.55	24	2.300 58.42	2.490 63.25
8	.700 17.78	.890 22.61	14	1.300 33.02	1.490 37.85	20	1.900 48.26	2.090 53.09	25	2.400 60.96	2.590 65.79
9	.800 20.32	.990 25.15	15	1.400 35.56	1.590 40.39						

Single Row .180" Pocket Straight Header

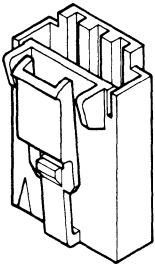


A

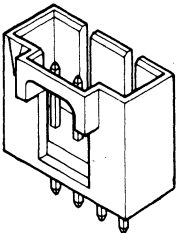
70563



70400-D
70066-D



70004



70563

70563 Header mates with 70004 Interim Clip

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	• 705-63-0003	15	• 705-63-0014	4	• 705-63-0108	15	• 705-63-0119	4	• 705-63-0038	15	• 705-63-0049
5	• 705-63-0004	16	• 705-63-0015	5	• 705-63-0109	16	• 705-63-0120	5	• 705-63-0039	16	• 705-63-0050
6	• 705-63-0005	17	• 705-63-0016	6	• 705-63-0110	17	• 705-63-0121	6	• 705-63-0040	17	• 705-63-0051
7	• 705-63-0006	18	• 705-63-0017	7	• 705-63-0111	18	• 705-63-0122	7	• 705-63-0041	18	• 705-63-0052
8	• 705-63-0007	19	• 705-63-0018	8	• 705-63-0112	19	• 705-63-0123	8	• 705-63-0042	19	• 705-63-0053
9	• 705-63-0008	20	• 705-63-0019	9	• 705-63-0113	20	• 705-63-0124	9	• 705-63-0043	20	• 705-63-0054
10	• 705-63-0009	21	• 705-63-0020	10	• 705-63-0114	21	• 705-63-0125	10	• 705-63-0044	21	• 705-63-0055
11	• 705-63-0010	22	• 705-63-0021	11	• 705-63-0115	22	• 705-63-0126	11	• 705-63-0045	22	• 705-63-0056
12	• 705-63-0011	23	• 705-63-0022	12	• 705-63-0116	23	• 705-63-0127	12	• 705-63-0046	23	• 705-63-0057
13	• 705-63-0012	24	• 705-63-0023	13	• 705-63-0117	24	• 705-63-0128	13	• 705-63-0047	24	• 705-63-0058
14	• 705-63-0013	25	• 705-63-0024	14	• 705-63-0118	25	• 705-63-0129	14	• 705-63-0048	25	• 705-63-0059

• U.S. Standard Product, available through Molex franchised distributors.

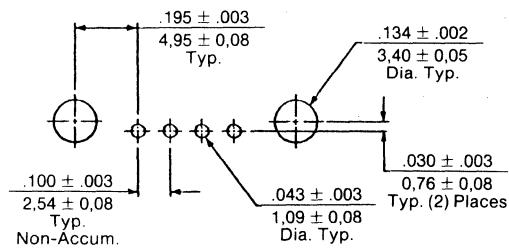
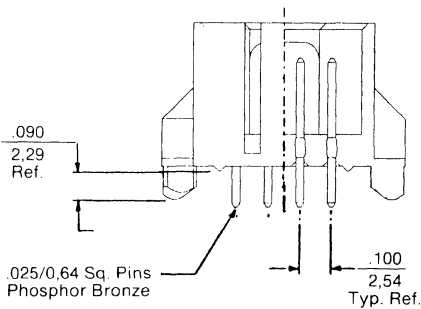
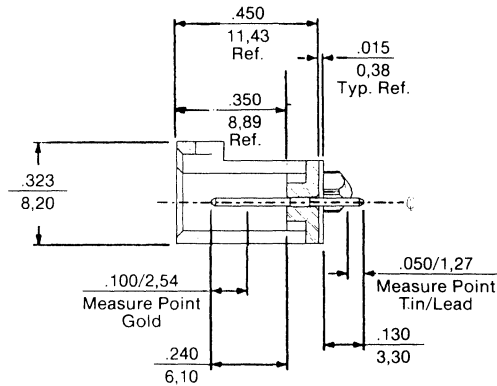
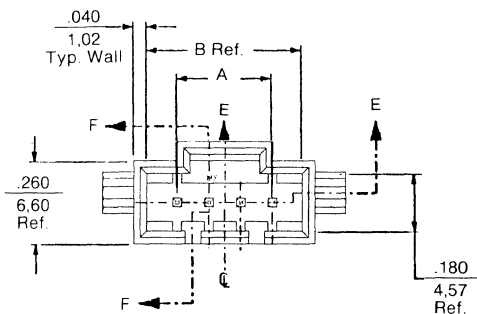
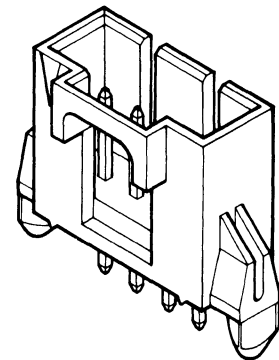
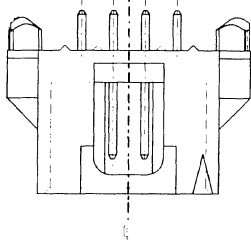
Single Row .180" Pocket Straight Header, TRI-PEG



A

70565

- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Circuit sizes 4-25
- Mates with 70004 Interim Clip



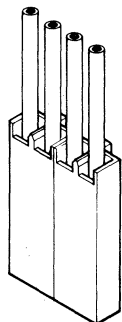
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.300 7.62	.490 12.45	10	.900 22.86	1.090 27.69	16	1.500 38.10	1.690 42.93	21	2.000 50.80	2.190 55.63
5	.400 10.16	.590 14.99	11	1.000 25.40	1.190 30.23	17	1.600 40.64	1.790 45.47	22	2.100 53.34	2.290 58.17
6	.500 12.70	.690 17.53	12	1.100 27.94	1.290 32.77	18	1.700 43.18	1.890 48.01	23	2.200 55.88	2.390 60.71
7	.600 15.24	.790 20.07	13	1.200 30.48	1.390 35.31	19	1.800 45.72	1.990 50.55	24	2.300 58.42	2.490 63.25
8	.700 17.78	.890 22.61	14	1.300 33.02	1.490 37.85	20	1.900 48.26	2.090 53.09	25	2.400 60.96	2.590 65.79
9	.800 20.32	.990 25.15	15	1.400 35.56	1.590 40.39						

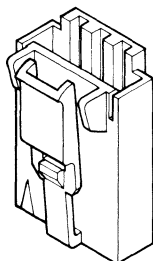
Single Row .180" Pocket Straight Header, TRI-PEG

A

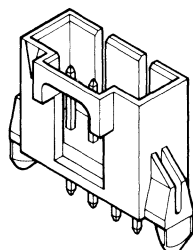
70565



70400-D
70066-D



70004



70565

70565 Header mates with 70004 Interim Clip with 70400-"D" Version Connector inserted

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	• 705-65-0038	15	• 705-65-0049	4	• 705-65-0073	15	• 705-65-0084	4	• 705-65-0003	15	• 705-65-0014
5	• 705-65-0039	16	• 705-65-0050	5	• 705-65-0074	16	• 705-65-0085	5	• 705-65-0004	16	• 705-65-0015
6	• 705-65-0040	17	• 705-65-0051	6	• 705-65-0075	17	• 705-65-0086	6	• 705-65-0005	17	• 705-65-0016
7	• 705-65-0041	18	• 705-65-0052	7	• 705-65-0076	18	• 705-65-0087	7	• 705-65-0006	18	• 705-65-0017
8	• 705-65-0042	19	• 705-65-0053	8	• 705-65-0077	19	• 705-65-0088	8	• 705-65-0007	19	• 705-65-0018
9	• 705-65-0043	20	• 705-65-0054	9	• 705-65-0078	20	• 705-65-0089	9	• 705-65-0008	20	• 705-65-0019
10	• 705-65-0044	21	• 705-65-0055	10	• 705-65-0079	21	• 705-65-0090	10	• 705-65-0009	21	• 705-65-0020
11	• 705-65-0045	22	• 705-65-0056	11	• 705-65-0080	22	• 705-65-0091	11	• 705-65-0010	22	• 705-65-0021
12	• 705-65-0046	23	• 705-65-0057	12	• 705-65-0081	23	• 705-65-0092	12	• 705-65-0011	23	• 705-65-0022
13	• 705-65-0047	24	• 705-65-0058	13	• 705-65-0082	24	• 705-65-0093	13	• 705-65-0012	24	• 705-65-0023
14	• 705-65-0048	25	• 705-65-0059	14	• 705-65-0083	25	• 705-65-0094	14	• 705-65-0013	25	• 705-65-0024

• U.S. Standard Product, available through Molex franchised distributors.

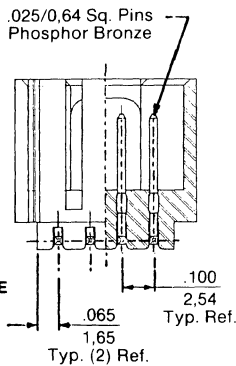
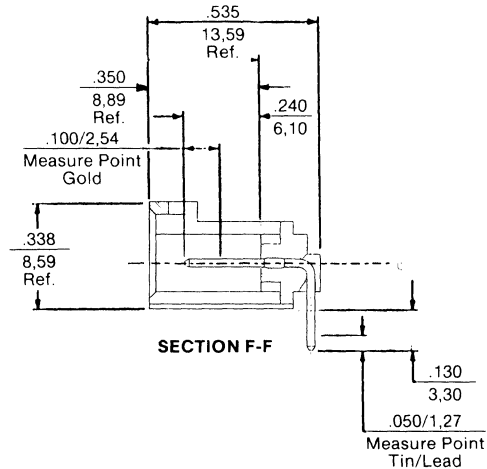
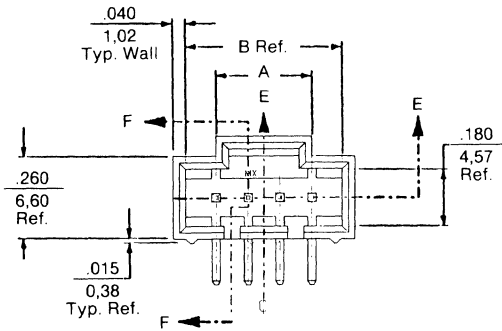
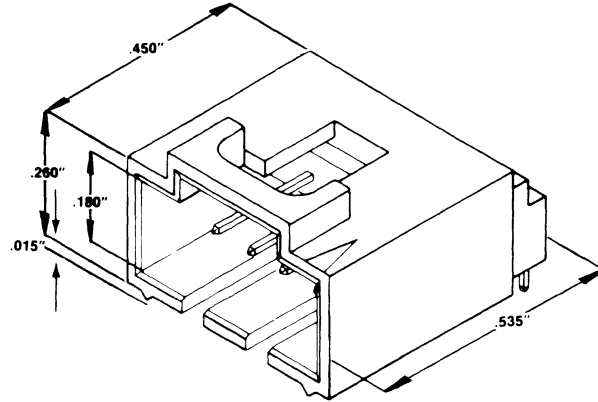
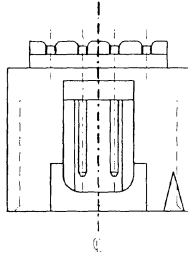
Single Row .180" Pocket Right Angle Header



A

70573

- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Standoffs minimize flux retention
- Mates with 70004 single row interim clip
- Positive latch retains interim clip after mating
- Circuit sizes 4-25



Recommended P.C. Board Hole Layout

Dimensions

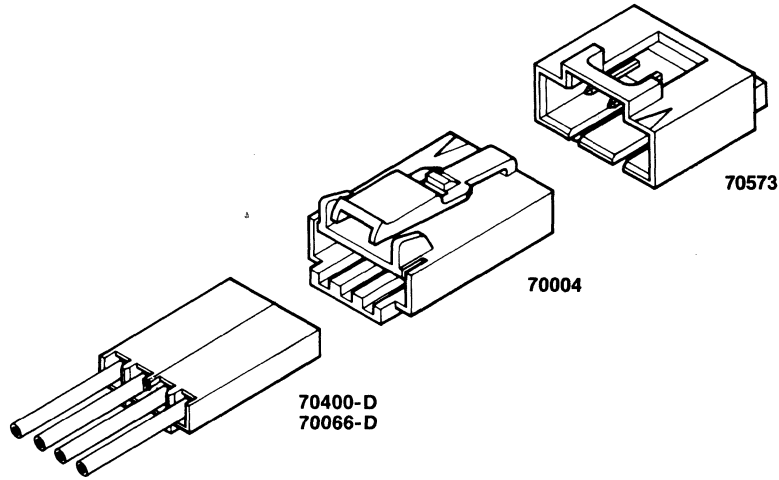
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.300 7,62	.490 12,45	10	.900 22,86	1.090 27,69	16	1.500 38,10	1.690 42,93	21	2.000 50,80	2.190 55,63
5	.400 10,16	.590 14,99	11	1.000 25,40	1.190 30,23	17	1.600 40,64	1.790 45,47	22	2.100 53,34	2.290 58,17
6	.500 12,70	.690 17,53	12	1.100 27,94	1.290 32,77	18	1.700 43,18	1.890 48,01	23	2.200 55,88	2.390 60,71
7	.600 15,24	.790 20,07	13	1.200 30,48	1.390 35,31	19	1.800 45,72	1.990 50,55	24	2.300 58,42	2.490 63,25
8	.700 17,78	.890 22,61	14	1.300 33,02	1.490 37,85	20	1.900 48,26	2.090 53,09	25	2.400 60,96	2.590 65,79
9	.800 20,32	.990 25,15	15	1.400 35,56	1.590 40,39						

Single Row .180" Pocket Right Angle Header



A

70573



70573 Header mates with 70004 Interim Clip

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	● 705-73-0003	15	● 705-73-0014	4	● 705-73-0108	15	● 705-73-0119	4	● 705-73-0038	15	● 705-73-0049
5	● 705-73-0004	16	● 705-73-0015	5	● 705-73-0109	16	● 705-73-0120	5	● 705-73-0039	16	● 705-73-0050
6	● 705-73-0005	17	● 705-73-0016	6	● 705-73-0110	17	● 705-73-0121	6	● 705-73-0040	17	● 705-73-0051
7	● 705-73-0006	18	● 705-73-0017	7	● 705-73-0111	18	● 705-73-0122	7	● 705-73-0041	18	● 705-73-0052
8	● 705-73-0007	19	● 705-73-0018	8	● 705-73-0112	19	● 705-73-0123	8	● 705-73-0042	19	● 705-73-0053
9	● 705-73-0008	20	● 705-73-0019	9	● 705-73-0113	20	● 705-73-0124	9	● 705-73-0043	20	● 705-73-0054
10	● 705-73-0009	21	● 705-73-0020	10	● 705-73-0114	21	● 705-73-0125	10	● 705-73-0044	21	● 705-73-0055
11	● 705-73-0010	22	● 705-73-0021	11	● 705-73-0115	22	● 705-73-0126	11	● 705-73-0045	22	● 705-73-0056
12	● 705-73-0011	23	● 705-73-0022	12	● 705-73-0116	23	● 705-73-0127	12	● 705-73-0046	23	● 705-73-0057
13	● 705-73-0012	24	● 705-73-0023	13	● 705-73-0117	24	● 705-73-0128	13	● 705-73-0047	24	● 705-73-0058
14	● 705-73-0013	25	● 705-73-0024	14	● 705-73-0118	25	● 705-73-0129	14	● 705-73-0048	25	● 705-73-0059

● U.S. Standard Product, available through Molex franchised distributors.

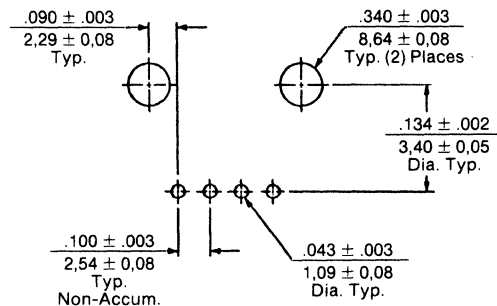
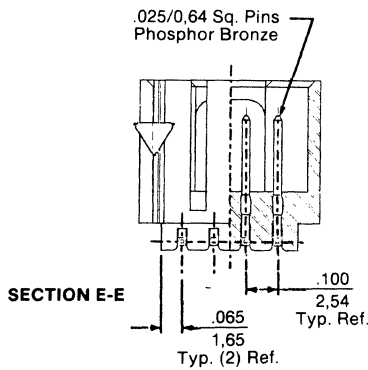
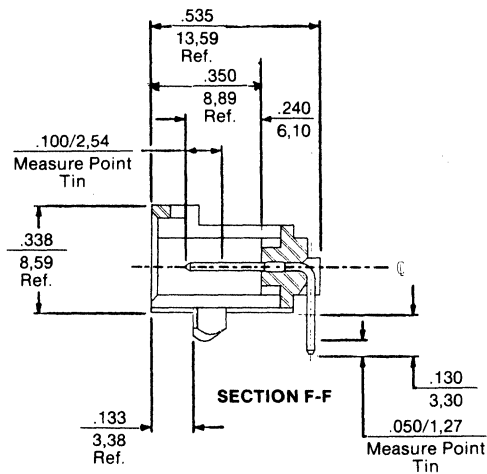
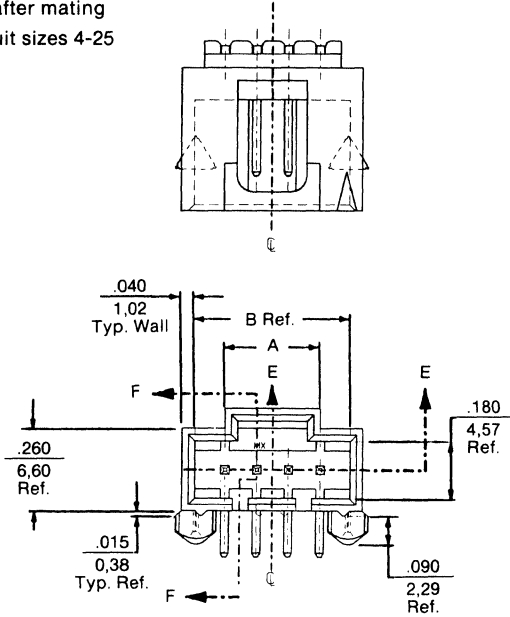
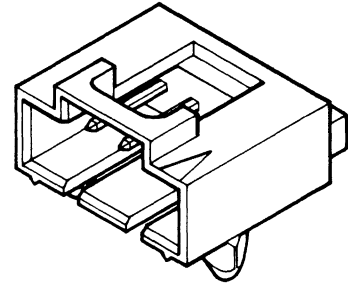
Single Row .180" Pocket Right Angle Header, TRI-PEG



A

70575

- Loaded in plastic tubes to allow for robotic insertion into P.C. boards
- Polarization slots
- Standoffs minimize flux retention
- Mates with 70004 single row interim clip
- Positive latch retains interim clip after mating
- Circuit sizes 4-25



Recommended P.C. Board Layout
(For Use with .062/1.57 Thick Board)

Dimensions

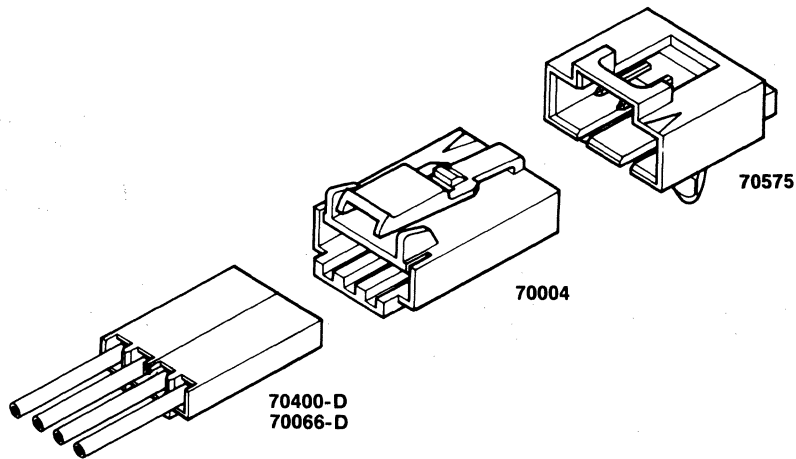
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.300 7,62	.490 12,45	10	.900 22,86	1.090 27,69	16	1.500 38,10	1.690 42,93	21	2.000 50,80	2.190 55,63
5	.400 10,16	.590 14,99	11	1.000 25,40	1.190 30,23	17	1.600 40,64	1.790 45,47	22	2.100 53,34	2.290 58,17
6	.500 12,70	.690 17,53	12	1.100 27,94	1.290 32,77	18	1.700 43,18	1.890 48,01	23	2.200 55,88	2.390 60,71
7	.600 15,24	.790 20,07	13	1.200 30,48	1.390 35,31	19	1.800 45,72	1.990 50,55	24	2.300 58,42	2.490 63,25
8	.700 17,78	.890 22,61	14	1.300 33,02	1.490 37,85	20	1.900 48,26	2.090 53,09	25	2.400 60,96	2.590 65,79
9	.800 20,32	.990 25,15	15	1.400 35,56	1.590 40,39						

Single Row .180" Pocket Right Angle Header, TRI-PEG



A

70575



70575 Header mates with 70004 Interim Clip with 70400 "D" Version inserted

Ordering Information

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	● 705-75-0038	15	● 705-75-0049	4	● 705-75-0073	15	● 705-75-0084	4	● 705-75-0003	15	● 705-75-0014
5	● 705-75-0039	16	● 705-75-0050	5	● 705-75-0074	16	● 705-75-0085	5	● 705-75-0004	16	● 705-75-0015
6	● 705-75-0040	17	● 705-75-0051	6	● 705-75-0075	17	● 705-75-0086	6	● 705-75-0005	17	● 705-75-0016
7	● 705-75-0041	18	● 705-75-0052	7	● 705-75-0076	18	● 705-75-0087	7	● 705-75-0006	18	● 705-75-0017
8	● 705-75-0042	19	● 705-75-0053	8	● 705-75-0077	19	● 705-75-0088	8	● 705-75-0007	19	● 705-75-0018
9	● 705-75-0043	20	● 705-75-0054	9	● 705-75-0078	20	● 705-75-0089	9	● 705-75-0008	20	● 705-75-0019
10	● 705-75-0044	21	● 705-75-0055	10	● 705-75-0079	21	● 705-75-0090	10	● 705-75-0009	21	● 705-75-0020
11	● 705-75-0045	22	● 705-75-0056	11	● 705-75-0080	22	● 705-75-0091	11	● 705-75-0010	22	● 705-75-0021
12	● 705-75-0046	23	● 705-75-0057	12	● 705-75-0081	23	● 705-75-0092	12	● 705-75-0011	23	● 705-75-0022
13	● 705-75-0047	24	● 705-75-0058	13	● 705-75-0082	24	● 705-75-0093	13	● 705-75-0012	24	● 705-75-0023
14	● 705-75-0048	25	● 705-75-0059	14	● 705-75-0083	25	● 705-75-0094	14	● 705-75-0013	25	● 705-75-0024

● U.S. Standard Product, available through Molex franchised distributors.

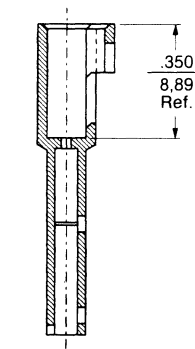
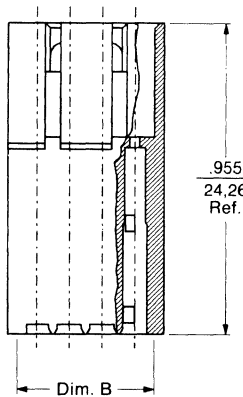
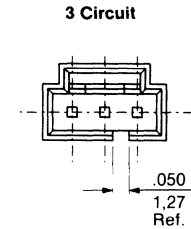
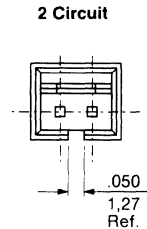
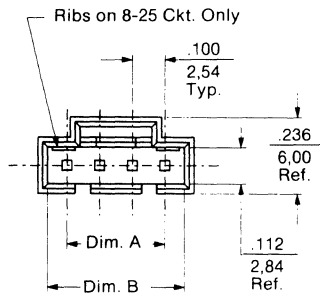
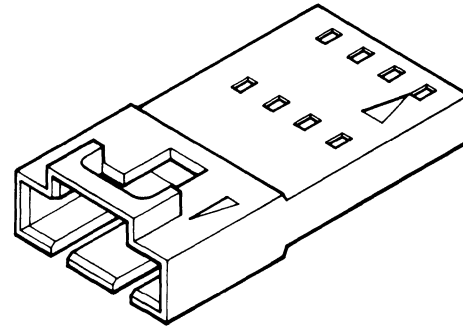
Single Row Wire-To-Wire Connector



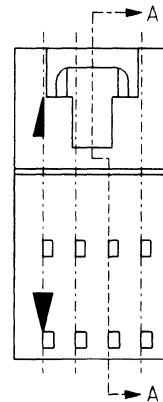
A

70107 "A" Version

- Used primarily for remote interconnections
- Positive latch assures retention of receptacle connector
- Windows retain the male terminal's locking tangs
- Polarization slots prevent mating with male terminals at oblique angles
- Material, glass filled 94V-0 polyester
- Circuit sizes 2-25
- Version A - No mounting ears, wire-to-wire connection



SECTION A-A



Dimensions

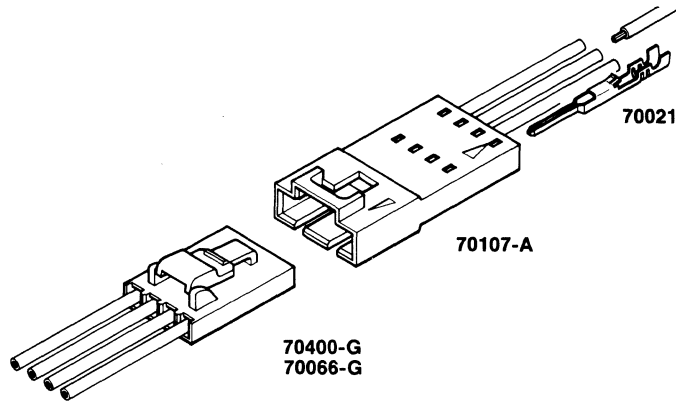
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.220 5,59	8	.700 17,78	.820 20,83	14	1.300 33,02	1.420 36,07	20	1.900 48,26	2.020 51,31
3	.200 5,08	.320 8,13	9	.800 20,32	.920 23,37	15	1.400 33,56	1.520 38,61	21	2.000 50,80	2.120 53,85
4	.300 7,62	.420 10,67	10	.900 22,86	1.020 25,91	16	1.500 38,10	1.620 41,15	22	2.100 53,34	2.220 56,39
5	.400 10,16	.520 13,21	11	1.000 25,40	1.120 28,45	17	1.600 40,64	1.720 43,69	23	2.200 55,88	2.320 58,93
6	.500 12,70	.620 15,74	12	1.100 27,94	1.220 30,99	18	1.700 43,18	1.820 46,23	24	2.300 58,42	2.420 61,47
7	.600 15,24	.720 18,29	13	1.200 30,48	1.320 33,53	19	1.800 45,72	1.920 48,77	25	2.400 60,96	2.520 64,01

Single Row Wire-To-Wire Connector



A

70107 "A" Version



Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	• 701-07-0001	7	• 701-07-0006	12	• 701-07-0011	17	• 701-07-0016	22	• 701-07-0021
3	• 701-07-0002	8	• 701-07-0007	13	• 701-07-0012	18	• 701-07-0017	23	• 701-07-0022
4	• 701-07-0003	9	• 701-07-0008	14	• 701-07-0013	19	• 701-07-0018	24	• 701-07-0023
5	• 701-07-0004	10	• 701-07-0009	15	• 701-07-0014	20	• 701-07-0019	25	• 701-07-0024
6	• 701-07-0005	11	• 701-07-0010	16	• 701-07-0015	21	• 701-07-0020		

• U.S. Standard Product, available through Molex franchised distributors.

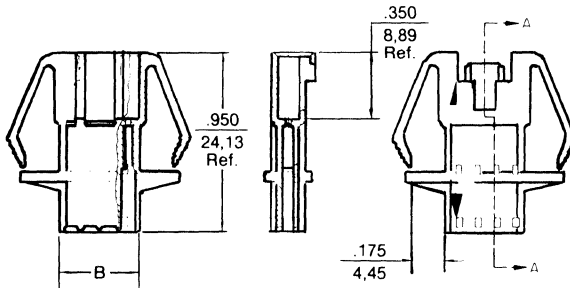
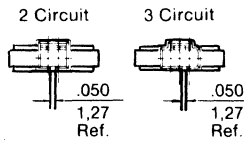
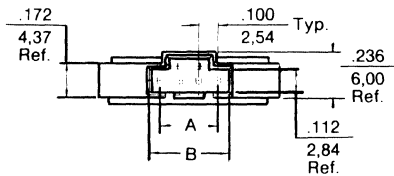
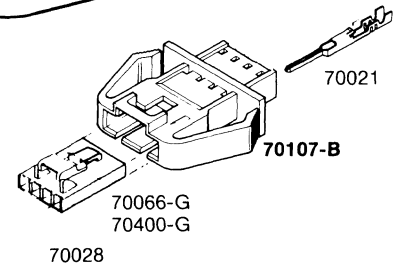
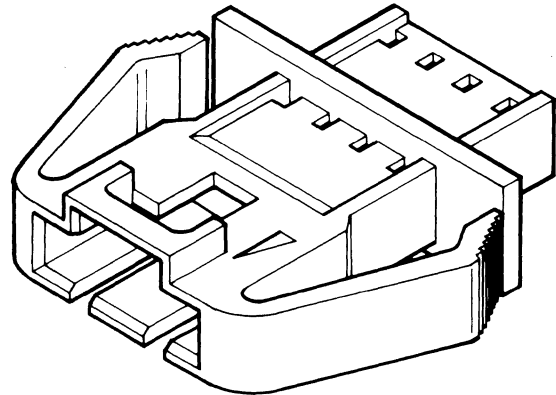
Single Row Discrete Wire Panel Mount



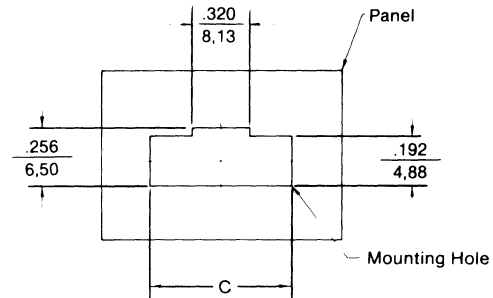
A

70107 "B" Version

- Used in dense electronic packaging where wiring is indirect and not along an optical path
- Material, glass filled 94V-0 polyester
- Circuit sizes 2-25
- Version B - With mounting ears, insertable in panels
- Serrated edges on ears self adjust to secure panel mounts in .030" to .090" thick panels
- Stabilizing skirt prevents panel mount from rocking in the opening
- Mating - "G" housing 70066/70400 on the front end; discrete male crimp terminals in the back end



Section A-A



Recommended Mounting Hole Layout

Dimensions

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.100 2,54	.220 5,59	.515 13,08	10	.900 22,86	1.020 25,91	1.315 33,40	18	1.700 43,18	1.820 46,23	2.115 53,72
3	.200 5,08	.320 8,13	.615 15,62	11	1.000 25,40	1.120 28,45	1.415 35,94	19	1.800 45,72	1.920 48,77	2.215 56,26
4	.300 7,62	.420 10,67	.715 18,61	12	1.100 27,94	1.220 30,99	1.515 38,48	20	1.900 48,26	2.020 51,31	2.315 58,80
5	.400 10,16	.520 13,21	.815 20,70	13	1.200 30,48	1.320 33,53	1.615 41,02	21	2.000 50,80	2.120 53,85	2.415 61,34
6	.500 12,70	.620 15,74	.915 23,24	14	1.300 33,02	1.420 36,07	1.715 43,56	22	2.100 53,34	2.220 56,39	2.515 63,88
7	.600 15,24	.720 18,29	1.015 25,78	15	1.400 33,56	1.520 38,61	1.815 46,10	23	2.200 55,88	2.320 58,93	2.615 66,42
8	.700 17,78	.820 20,83	1.115 28,32	16	1.500 38,10	1.620 41,15	1.915 48,64	24	2.300 58,42	2.420 61,47	2.715 68,96
9	.800 20,32	.920 23,37	1.215 30,86	17	1.600 40,64	1.720 43,69	2.015 51,18	25	2.400 60,96	2.520 64,01	2.815 71,50

Ordering Information

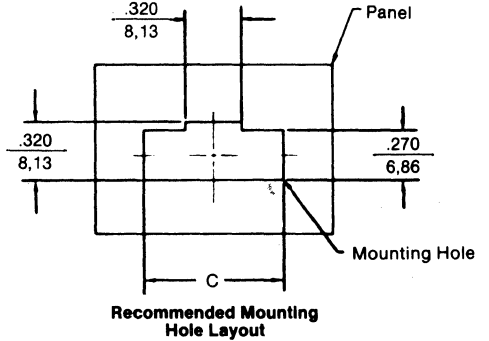
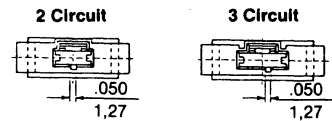
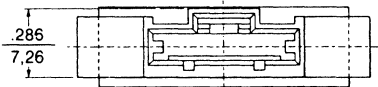
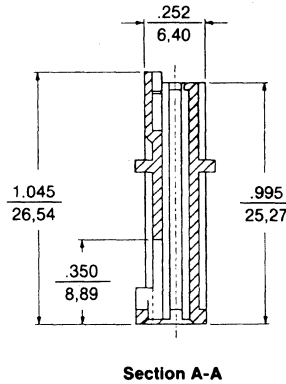
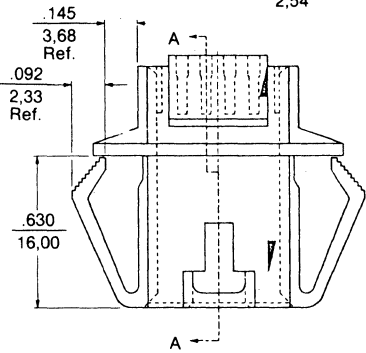
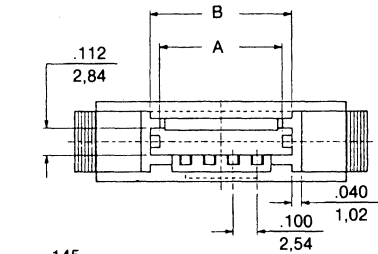
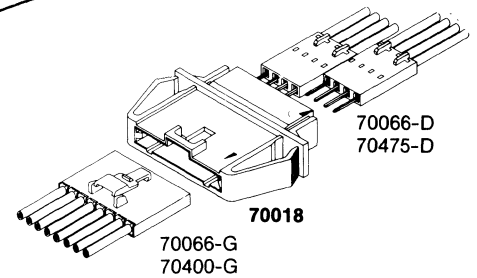
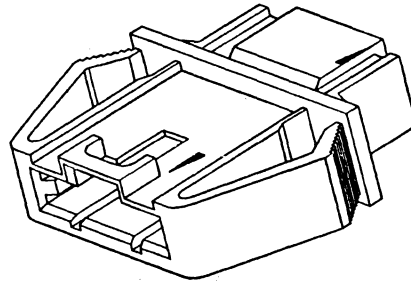
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	701-07-0036	7	701-07-0041	12	701-07-0046	17	701-07-0051	22	701-07-0056
3	701-07-0037	8	701-07-0042	13	701-07-0047	18	701-07-0052	23	701-07-0057
4	701-07-0038	9	701-07-0043	14	701-07-0048	19	701-07-0053	24	701-07-0058
5	701-07-0039	10	701-07-0044	15	701-07-0049	20	701-07-0054	25	701-07-0059
6	701-07-0040	11	701-07-0045	16	701-07-0050	21	701-07-0055		

Single Row Panel Mount Connector Assemblies

A

70018

- Primarily used for connecting wires from one discrete unit to another within a system
- Material, glass filled 94V-0 polyester
- Circuit sizes 2-25
- Mating - "G" Version
70066/70400 front end; "D"
Version back end 70066/70475
- Panel thickness .030" - .090"



Dimensions

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.210 5.33	.290 7.37	.625 15.87	10	1.010 25.65	1.090 27.69	1.425 36.19	18	1.810 45.97	1.890 48.01	2.225 56.51
3	.310 7.87	.390 9.91	.725 18.41	11	1.110 28.19	1.190 30.23	1.525 38.73	19	1.910 48.51	1.990 50.55	2.325 59.05
4	.410 10.41	.490 12.45	.825 20.95	12	1.210 30.73	1.290 32.77	1.625 41.27	20	2.010 51.05	2.090 53.09	2.425 61.59
5	.510 12.95	.590 14.99	.925 23.49	13	1.310 33.27	1.390 35.31	1.725 43.81	21	2.110 53.59	2.190 55.63	2.525 64.13
6	.610 15.49	.690 17.53	1.025 26.03	14	1.410 35.81	1.490 37.89	1.825 46.35	22	2.210 56.13	2.290 58.17	2.625 66.67
7	.710 18.03	.790 20.07	1.125 28.57	15	1.510 38.35	1.590 40.39	1.925 48.89	23	2.310 58.67	2.390 60.71	2.725 69.21
8	.810 20.57	.890 22.61	1.225 31.11	16	1.610 40.89	1.690 42.93	2.025 51.43	24	2.410 61.21	2.490 63.25	2.825 71.75
9	.910 23.11	.990 25.15	1.325 33.65	17	1.710 43.43	1.790 45.47	2.125 53.97	25	2.510 63.75	2.590 65.79	2.925 74.29

Ordering Information 70018

Order No. 50-65-02XX
Replace XX with number of circuits, 02-25

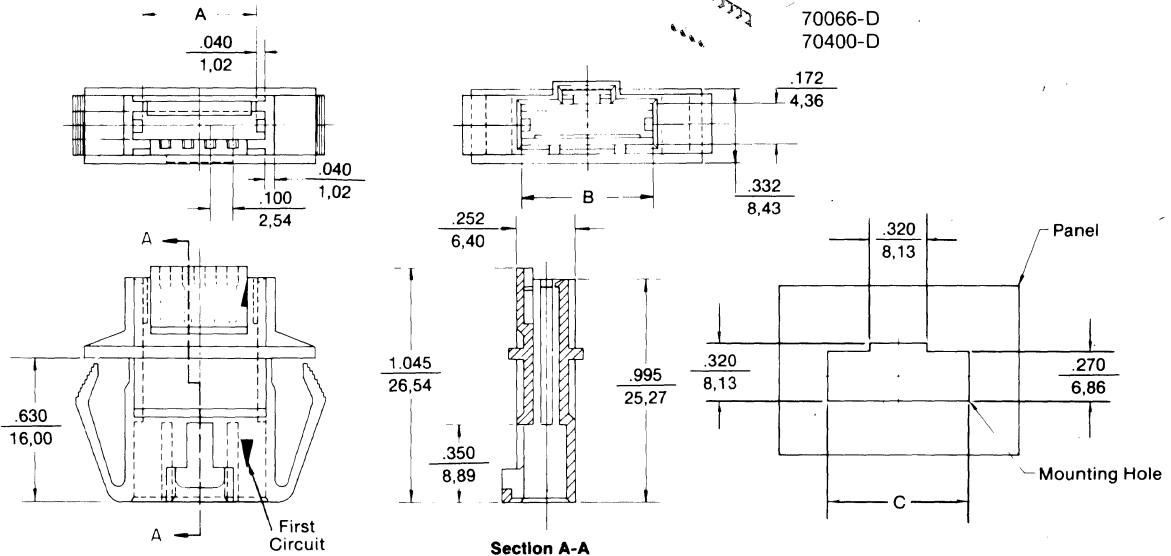
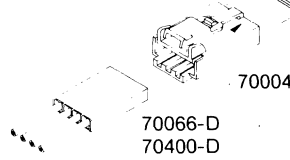
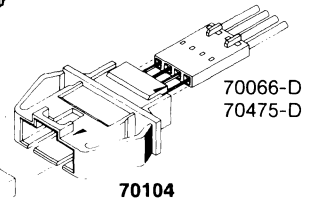
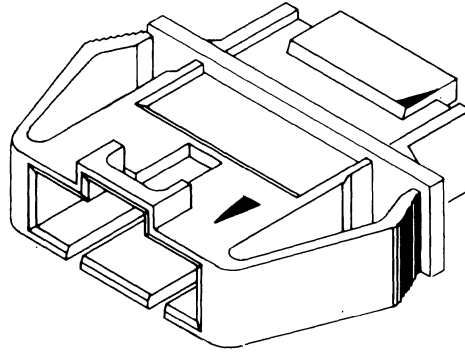
Single Row, Modular Branch Panel Mount



A

70104

- Serrations on ears self adjust to secure in panel
- The absence of test windows prevents easy access to hot lead
- Stabilizing skirt prevents rocking in the panel opening
- Insulator material glass filled 94V-0 polyester
- Circuit sizes 4-25
- Panel thickness .030" - .090"
- Mating: Front end - 70004 interim clip with 70066-D/70400-D connectors; Back end - 70066-D/70475-D connectors



Dimensions

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
4	.410 10,41	.490 12,45	.825 20,95	12	1.210 30,73	1.290 32,77	1.625 41,27	19	1.910 48,51	1.990 50,55	2.325 59,05
5	.510 12,95	.590 14,99	.925 23,49	13	1.310 33,27	1.390 35,31	1.725 43,81	20	2.010 51,05	2.090 53,09	2.425 61,59
6	.610 15,49	.690 17,53	1.025 26,03	14	1.410 35,81	1.490 37,89	1.825 46,35	21	2.110 53,59	2.190 55,63	2.525 64,13
7	.710 18,03	.790 20,07	1.125 28,57	15	1.510 38,35	1.590 40,39	1.925 48,89	22	2.210 56,13	2.290 58,17	2.625 66,67
8	.810 20,57	.890 22,61	1.225 31,11	16	1.610 40,89	1.690 42,93	2.025 51,43	23	2.310 58,67	2.390 60,71	2.725 69,21
9	.910 23,11	.990 25,15	1.325 33,65	17	1.710 43,43	1.790 45,47	2.125 53,97	24	2.410 61,21	2.490 63,25	2.825 71,75
10	1.010 25,65	1.090 27,69	1.425 36,19	18	1.810 45,97	1.890 48,01	2.225 56,51	25	2.510 63,75	2.590 65,79	2.925 74,79
11	1.110 28,19	1.190 30,23	1.575 38,73								

Ordering Information 70104

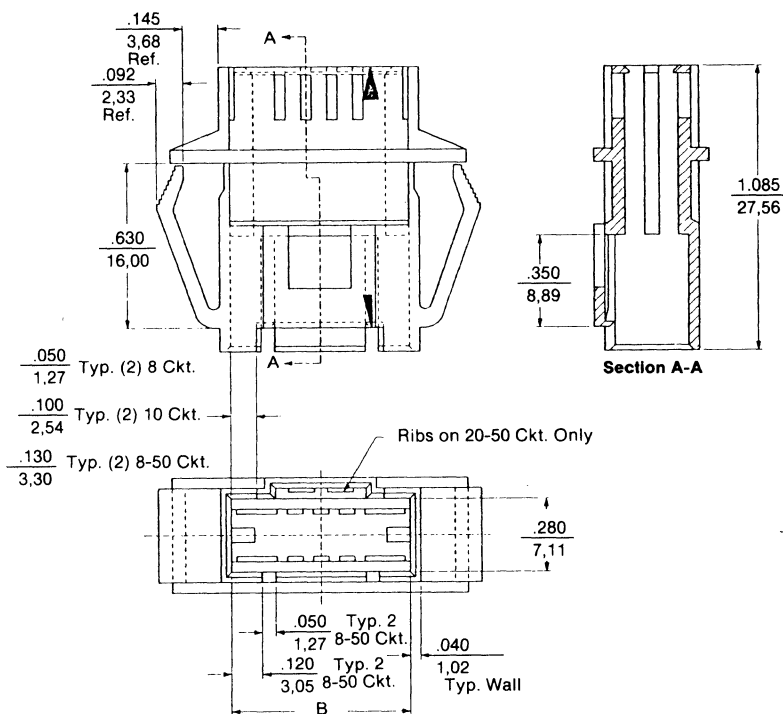
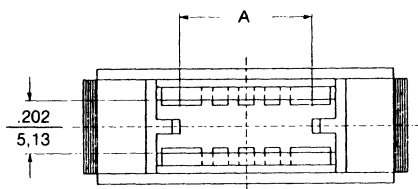
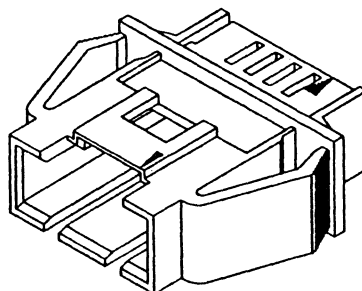
Order No. 50-65-01XX
Replace XX with number of circuits, 04-25

Dual Row, Modular Branch Panel Mount

A

70022

- Used for high density gang loading of assemblies
- Serrations on ears self adjust to secure in panel
- Insulator material, glass filled 94V-0 polyester
- Circuit sizes 6-50 (even numbers)
- Panel thickness .030" - .090"
- Mating: Accepts 70013 front end; "D" Version housing 70066 loaded side-to-side, end-to-end in dual row
- Available with optional keying slots - contact factory



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
6	.305 7.75	.490 12.45	16	.805 20.45	.990 25.15	26	1.305 33.15	1.490 37.85	36	1.805 45.85	1.990 50.55	44	2.205 56.00	2.390 60.71
8	.405 10.29	.590 14.99	18	.905 22.99	1.090 27.69	28	1.405 35.69	1.590 40.39	38	1.904 48.39	2.090 53.09	46	2.305 58.55	2.490 63.25
10	.505 12.83	.690 17.53	20	1.005 25.53	1.190 30.23	30	1.505 38.23	1.690 42.93	40	2.005 50.93	2.190 55.63	48	2.405 61.09	2.590 65.79
12	.605 15.37	.790 20.07	22	1.105 28.07	1.290 32.77	32	1.605 40.77	1.790 45.47	42	2.105 53.47	2.290 58.17	50	2.505 63.63	2.690 68.33
14	.705 17.91	.890 22.61	24	1.205 30.61	1.390 35.31	34	1.705 43.31	1.890 48.01						

Ordering Information 70022

Order No. 50-65-00XX
Replace XX with number of circuits, 06-50 (even numbers)

Exception: 44 circuit part order number is 50-65-0051

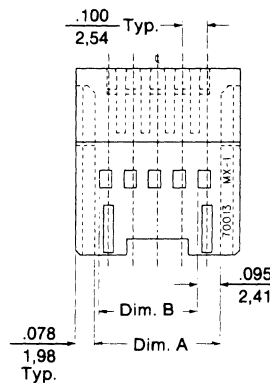
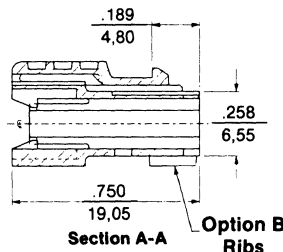
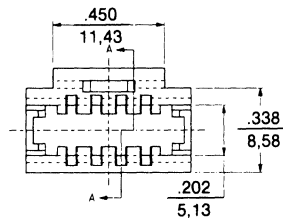
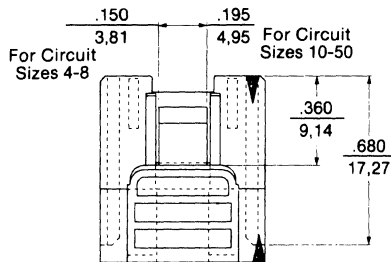
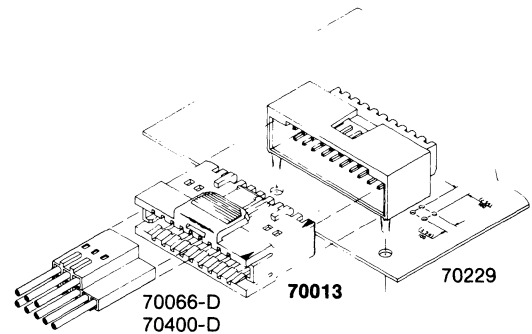
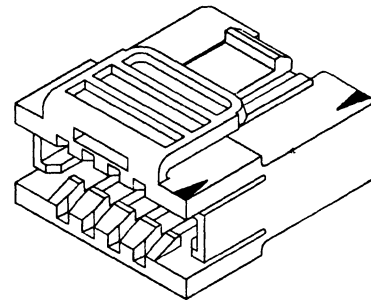
Dual Row Interim Clip



A

70013

- Positive latch retains clip to panel mount
- Polarizing ribs (Polarization varies with circuit size)
- Material — Glass filled 94V-0 polyester
- Circuit Sizes 6 thru 50
- Mates With 70022, 8723/24, 70227 and 70229
- Mating: Accepts "D" Version housing 70066/70400 loaded side-to-side or end-to-end ribs up on the top row; ribs down on the lower row



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
6	.310 7.87	.200 5.08	14	.710 18.03	.600 15.24	22	1.110 28.19	1.000 25.40	30	1.510 38.35	1.400 35.56	38	1.910 48.51	1.800 45.72	46	2.310 58.67	2.200 55.88
8	.410 10.41	.300 7.62	16	.810 20.57	.700 17.78	24	1.210 30.73	1.100 27.94	32	1.610 40.89	1.500 38.10	40	2.010 51.05	1.900 48.26	48	2.410 61.21	2.300 58.42
10	.510 12.95	.400 10.16	18	.910 23.11	.800 20.32	26	1.310 33.27	1.200 30.48	34	1.710 43.43	1.600 40.64	42	2.110 53.59	2.000 50.80	50	2.510 63.75	2.400 60.96
12	.610 15.49	.500 12.70	20	1.010 25.65	.900 22.86	28	1.410 35.81	1.300 33.02	36	1.810 45.97	1.700 43.18	44	2.210 56.13	2.100 53.34			

Ordering Information

Version A (without ribs) Order No. • 15-04-5XX1
Version B (with ribs) Order No. • 15-04-5XX4
Replace XX with number of circuits, 06-50 (even numbers only)

J.S. Standard Product, available through Molex franchised distributors.

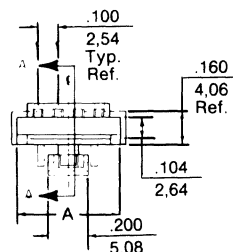
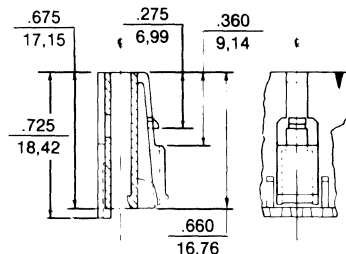
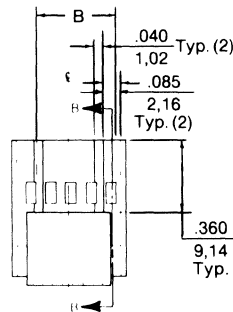
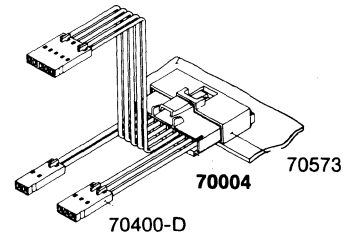
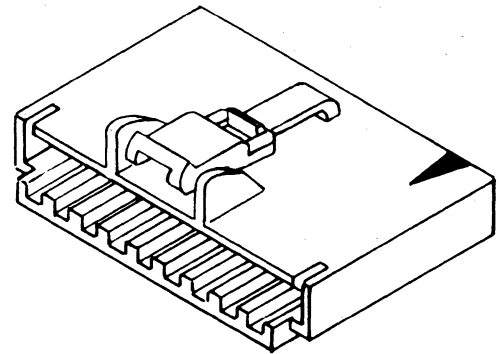
Single Row Interim Clip



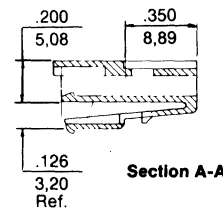
A

70004

- Insulator material, glass filled 94V-0 polyester
- Circuit sizes 4-25
- Mates with panel mount: 70104 and .180" pocket headers: 70563, 70565, 70573, 70575
- Accepts "D" Version 70066/70400 housings
- Anti-entanglement ribs prevent discrete wires from catching under latch during harness manufacturing and storage
- Positive latch retains clip to panel mount 70104



Section B-B



Section A-A

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.410 10,41	.300 7,62	10	1.010 25,65	.900 22,86	16	1.610 40,89	1.500 38,10	21	2.110 53,59	2.000 50,80
5	.510 12,95	.400 10,16	11	1.110 28,19	1.000 25,40	17	1.710 43,43	1.600 40,64	22	2.210 56,13	2.100 53,34
6	.610 15,49	.500 12,70	12	1.210 30,73	1.100 27,94	18	1.810 45,97	1.700 43,18	23	2.310 58,67	2.200 55,88
7	.710 18,03	.600 15,24	13	1.310 33,27	1.200 30,48	19	1.910 48,51	1.800 45,72	24	2.410 61,21	2.300 58,42
8	.810 20,57	.700 17,78	14	1.410 35,81	1.300 33,02	20	2.010 51,05	1.900 48,26	25	2.510 63,75	2.400 60,96
9	.910 23,11	.800 20,32	15	1.510 38,35	1.400 35,56						

Ordering Information

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	• 15-04-5042	8	• 15-04-5082	12	• 15-04-5122	16	• 15-04-5162	20	• 15-04-5202	23	• 15-04-5232
5	• 15-04-5052	9	• 15-04-5092	13	• 15-04-5132	17	• 15-04-5172	21	• 15-04-5212	24	• 15-04-5242
6	• 15-04-5062	10	• 15-04-5102	14	• 15-04-5142	18	• 15-04-5182	22	• 15-04-5222	25	• 15-04-5252
7	• 15-04-5072	11	• 15-04-5112	15	• 15-04-5152	19	• 15-04-5192				

• U.S. Standard Product, available through Molex franchised distributors.

Specifications for Unshrouded and Dual Row Shrouded Headers



A

□ For use with .062", .093"/.125" thick printed circuit boards

Electrical:

- Current rating - 3 amps
- Insulation Resistance - 1,000 megohms
- Dielectric Strength - 600 VAC r.m.s. for 1 minute

Environmental:

Operating Temperature - -40°C - +105°C

Mechanical:

Min. Pushout Force - 4 lbs.

Platings:

- No. 1 - 15 microinches min. gold plate in selected area, over 50 microinches min. nickel plate overall, with 75 microinches min. electro-tin/ lead in selected area.
- No. 2 - 30 microinches min. gold in selected area, over 50 microinches min. nickel plate overall, with 75 microinches min. electro-tin/lead in selected area.
- No. 3 - 200 microinches min. electro-tin plate over 100 microinches min. copper plate.
- No. 4 - Select gold flash in mating area over 15 microinches palladium/nickel in mating area, with 75 microinches min. tin/lead on P.C. tail over 50 microinches min. nickel overall

UL listed, CSA certified

Material:

Product Eng. No.	INSULATOR		PIN	
	G. F. Nylon	G. F. Polyester	Brass	Phosphor Bronze
70343	✓			✓
70344	✓			✓
70345	✓			✓
8624		✓	✓	
70260		✓		✓
70203		✓		✓
70216		✓		✓
70268		✓		✓
7723		✓	✓	
8723	✓			✓
8724	✓			✓
70227	✓			✓
70229	✓			✓
70204	✓			✓
5547		✓	✓	
5548		✓	✓	
70287		✓	✓	
70524		✓	✓	
70364	✓		✓	
70365	✓		✓	
70299	✓	✓		✓

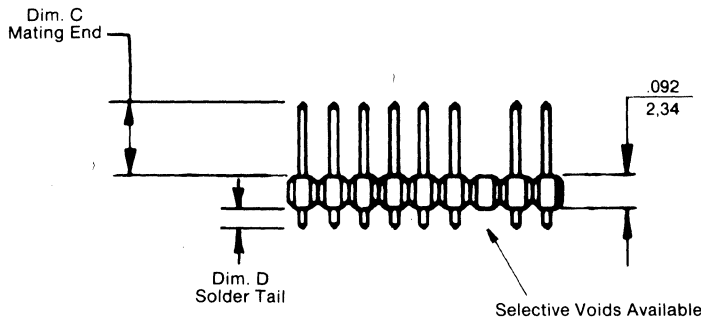
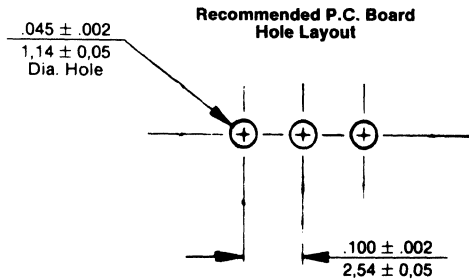
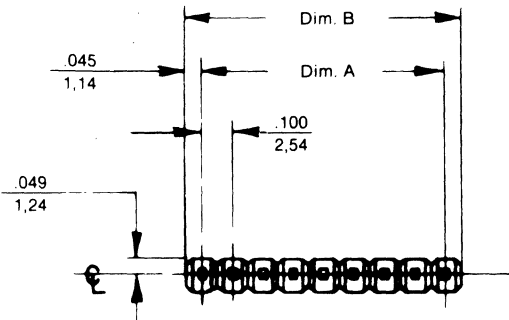
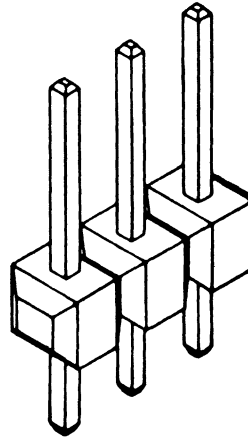
Single Row Straight Pin Breakaway Header



A

70343

- **Mates** with single and dual row female connectors on .100" centers:
 - PCB connectors; e.g. 90147, 90148
 - Single row insulation displacement connectors; e.g. 70400-A
 - Single row crimp connectors; e.g. 70066-A
 - Flat flex cable connectors; e.g. 70430-A, 40556
 - Insulation displacement wire harnesses; 7720, 7690
 - Shunt: 7859, 90059
- **Stackable** side-by-side and end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- Circuit sizes 2-40
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" (0,64mm) square wire** provides 4-sided smooth surface for quality interface



Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
2	.100 2,54	.190 4,83	3	.200 5,08	.290 7,37

*For circuit sizes 4 through 40 add .100" or 2,54mm for each additional pin

Ordering Information 70343 NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Plating Option	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .175" (4,45) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .175" (4,45) Order No.
15 microinches min. select gold	• 22-54-14XX	22-54-13XX	• 22-54-12XX	22-54-10XX
30 microinches min. select gold	• 22-61-10XX	22-61-11XX	• 22-61-12XX	22-61-13XX
200 microinches overall tin	• 22-58-15XX	22-58-14XX	• 22-58-13XX	22-58-10XX
Select gold flash over 15 microinches palladium/nickel	Contact Factory	Contact Factory	Contact Factory	Contact Factory

To order required part: Insert number of circuits in place of XX, 02 through 40.

• U.S. Standard Product, available through Molex franchised distributors

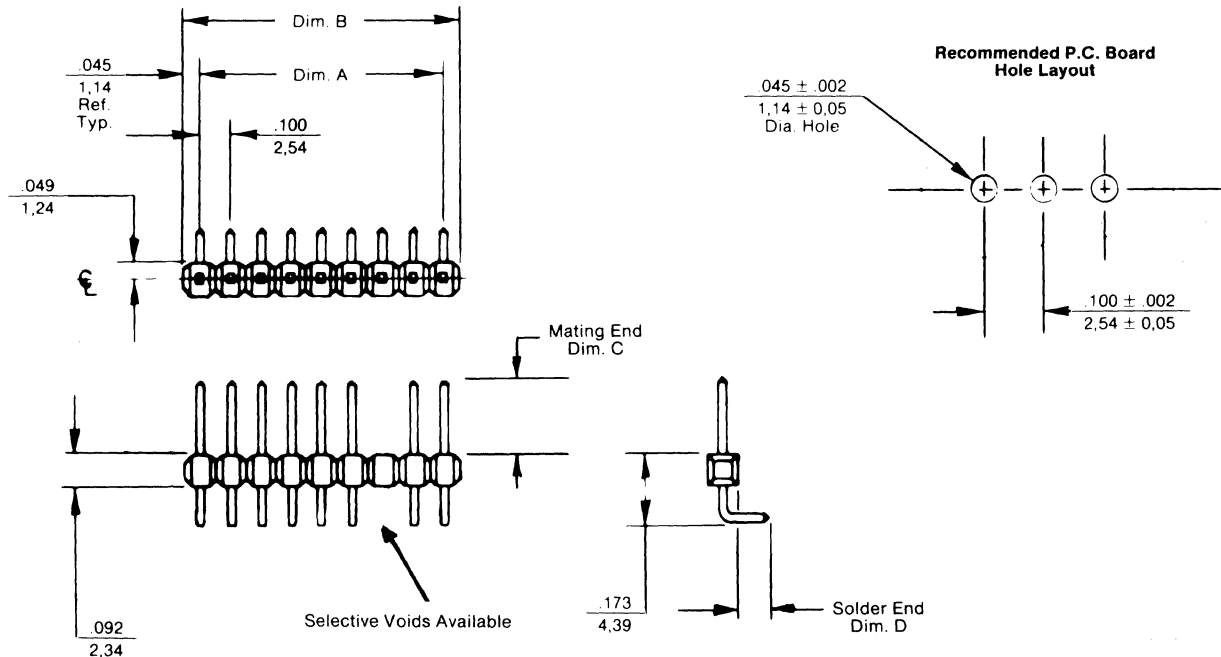
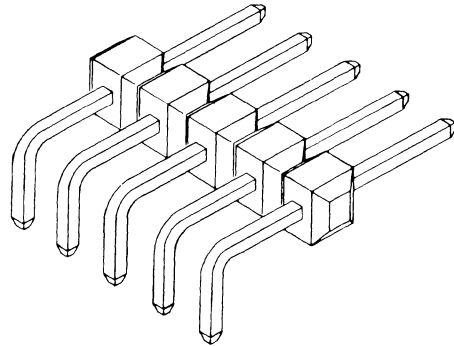
Single Row Right Angle Breakaway Header



A

70344

- **Mates with .100" (2,54mm) center female connectors.**
 - Single row PCB connectors: 90147
 - Single row insulation displacement connectors: 70400-A
 - Single row crimp connectors: 70066-A
 - Flat flex cable connectors: e.g. 70430-A, 40556
 - Insulation displacement wire harnesses: 7720, 7690
 - Shunts: 7859, 90059
- **Stackable** side-by-side and end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- Circuit sizes 2-40
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" (0,64mm) square wire** provides 4-sided smooth surface for quality interface



Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
2	.100 2,54	.190 4,83	3	.200 5,08	.290 7,37

*For circuit sizes 4 through 40 add .100" or 2,54mm for each additional pin

Ordering Information 70344 NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Plating Option	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .175" (4,45) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .175" (4,45) Order No.
15 microinches min. select gold	• 22-12-53XX	22-12-52XX	• 22-12-51XX	22-12-50XX
30 microinches min. select gold	• 22-61-14XX	22-61-15XX	• 22-61-16XX	22-61-17XX
70 microinches overall tin	• 22-59-13XX	22-59-12XX	• 22-59-11XX	22-59-10XX
Select gold flash over 15 microinches palladium/nickel	Contact Factory	Contact Factory	Contact Factory	Contact Factory

Replace XX with number of circuits, 02-40

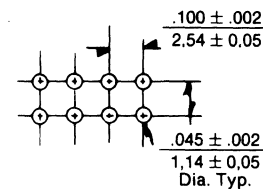
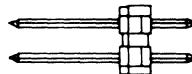
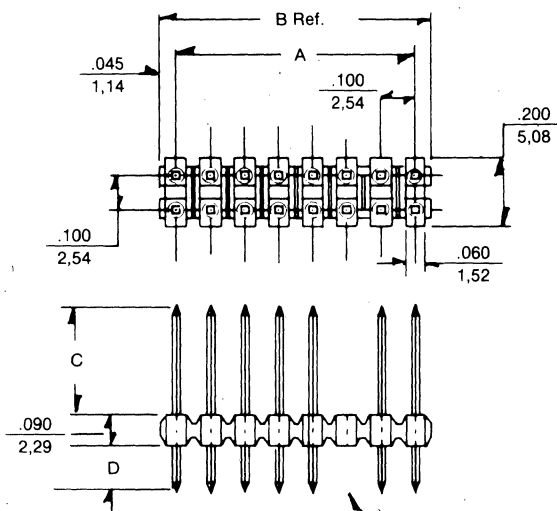
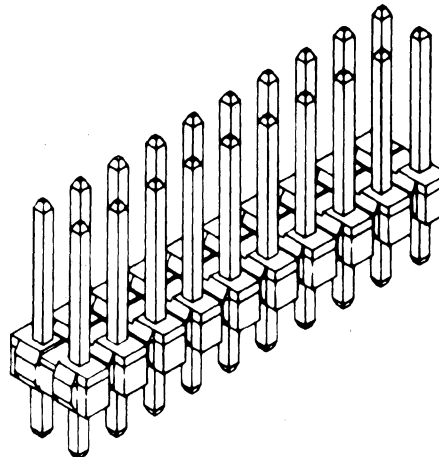
• U.S. Standard Product, available through Molex franchised distributors.

Dual Row Breakaway Header

A

8624

- **Mates** with female connectors on .100" grid:
 - Single & dual row PCB connectors: e.g. 70192, 7990
 - Single row insulation displacement connectors: e.g. 70400-A
 - Single & dual row crimp connectors: e.g. 70066-A, 70450-A
 - Ribbon cable connectors: e.g. 40312
 - Flat flexible cable connectors: e.g. 70430-A, 40556
 - Shunts: e.g. 7859, 90059
- **Stackable** side-to-side and end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- **Circuit sizes** 4-80
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface



Recommended P.C. Board Hole Layout

Selective Voids Available

Dimensions 8624

In the Far East, this product has different Eng. Nos. and Order Nos. Contact factory for sales drawings on 70221-XXXX.

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37

*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position

Ordering Information 8624 NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Plating Option	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .175" (4,45) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .175" (4,45) Order No.
15 microinches min. select gold	• 10-89-1XX1	10-89-1XX2	• 10-89-1XX3	10-89-1XX4
30 microinches min. select gold	• 10-89-2XX1	10-89-2XX2	• 10-89-2XX3	10-89-2XX4
200 microinches min. overall tin	• 10-88-1XX1	10-88-1XX2	• 10-88-1XX3	10-88-1XX4
Select gold flash over 15 microinches palladium/nickel	10-89-7XX4	—	10-89-7XX6	—

To order required part: Insert desired circuit numbers in place of XX (04 through 80, even numbers available only). For 2-circuit, order Molex 70343

• U.S. Standard Product, available through Molex franchised distributors

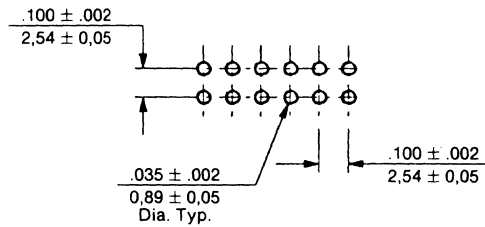
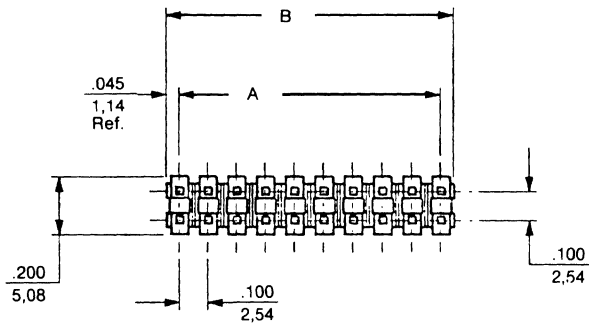
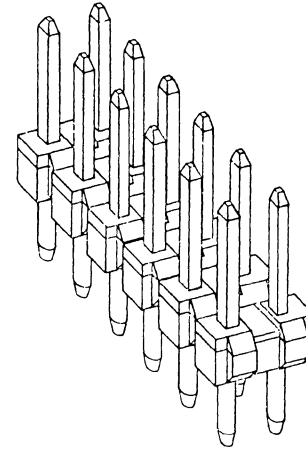
Dual Row Straight Pin Breakaway Header



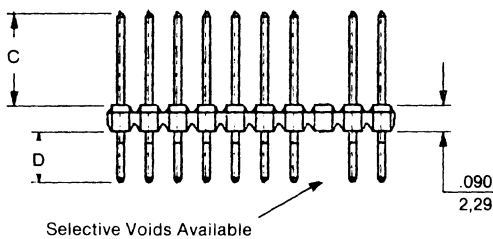
A

70260 Square/Round Pin

- **Insertable into .035" P.C. hole: aids robotic insertion**
- **Mates with .100" grid female connectors**
 - PCB connectors: e.g. 70192 & 7990
 - Single row IDT connectors: e.g. 70400-A
 - Dual & single row crimp connectors: e.g. 70450-A, 70066-A
 - Ribbon cable connectors: e.g. 40312
 - Flat flexible cable connectors: e.g. 70430-A & 40556
 - Shunts: e.g. 7859 & 90059
- **Stackable side-to-side and end-to-end (on unbroken edges)**
- **Easy breakaway** to smaller sizes
- **Circuit sizes 4-80**
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square/round wire** provides 4-sided smooth surface for quality interface



Recommended P.C. Board Hole Layout



Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37

*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position

Ordering Information NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Plating Option	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .175" (4,45) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .175" (4,45) Order No.
15 microinches min. select gold	• 10-89-6XX4	Contact Factory	• 10-89-6XX5	Contact Factory
30 microinches min. select gold	• 10-89-6XX8		• 10-89-6XX9	
200 microinches min. overall tin	• 10-89-6XX0		• 10-89-6XX1	
elect gold flash over 15 microinches palladium/nickel	Contact Factory		Contact Factory	

To order required part: Insert desired circuit numbers in place of XX (04 through 80, even numbers available only)

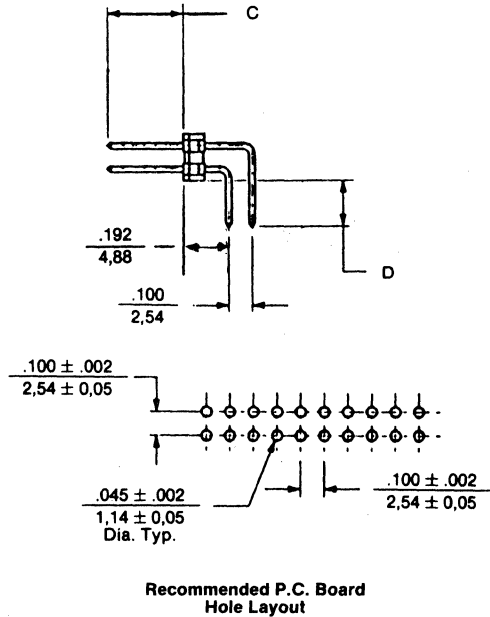
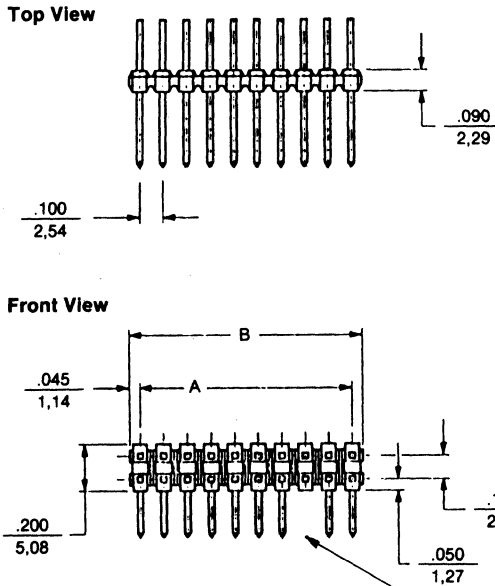
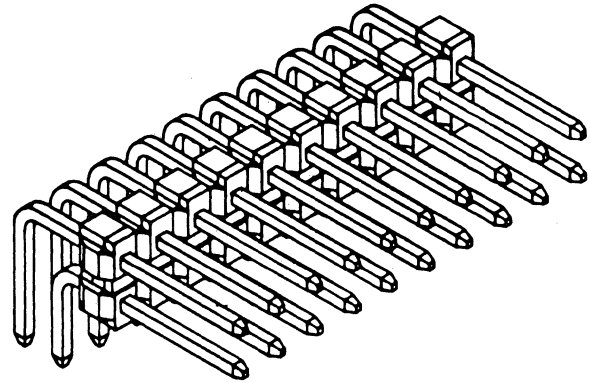
• U.S. Standard Product, available through Molex franchised distributors.

Low Profile Dual Row Right Angle Breakaway Header

A

70203

- **Low profile:** .200" high
- **Mates with .100" grid female connectors:**
 - PCB connectors: e.g. 70192
 - Single row IDT connectors: e.g. 70400-A
 - Dual & single row crimp connectors: e.g. 70450-A, 70066-A
 - Ribbon cable connectors: e.g. 70121
 - Flat flexible cable connectors: e.g. 70430-A & 40556
 - Shunts: e.g. 7859 & 90059
- **Stackable** end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- **Circuit sizes** 4-80
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface



Selective Voids Available

Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37

*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position

Ordering Information NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Plating Option	Mating End Dim. C - .240" (6,10)	Mating End Dim. C - .240" (6,10)	Mating End Dim. C - .320" (8,13)	Mating End Dim. C - .320" (8,13)
	P.C. Tail Dim. D - .110" (2,80)	P.C. Tail Dim. D - .175" (4,45)	P.C. Tail Dim. D - .110" (2,80)	P.C. Tail Dim. D - .175" (4,45)
	Order No.	Order No.	Order No.	Order No.
15 microinches min. select gold	• 10-89-1XX6	10-89-1XX8	• 10-89-1XX7	10-89-1XX9
30 microinches min. select gold	• 10-89-2XX6	10-89-2XX8	• 10-89-2XX7	10-89-2XX9
200 microinches min. overall tin	• 10-88-1XX5	10-88-1XX7	• 10-88-1XX6	10-88-1XX8
Select gold flash over 15 microinches palladium/nickel	Contact Factory	Contact Factory	Contact Factory	Contact Factory

To order required part: Insert desired circuit numbers in place of **XX** (04 through 80, even numbers available only). For 2-circuit, order Molex 70344

• U.S. Standard Product, available through Molex franchised distributors

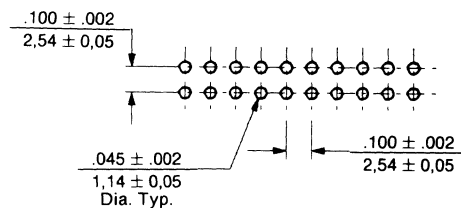
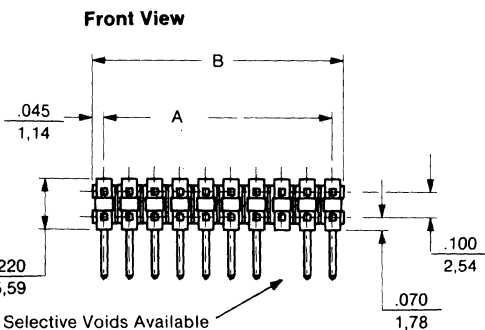
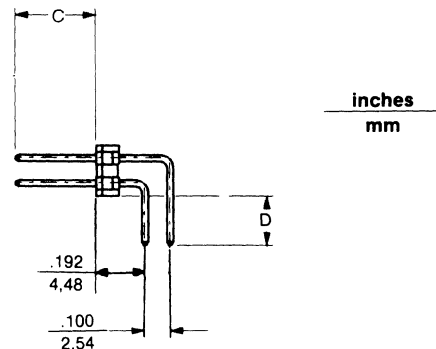
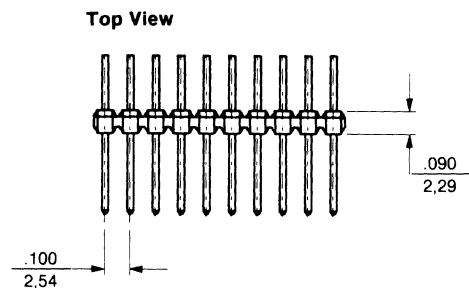
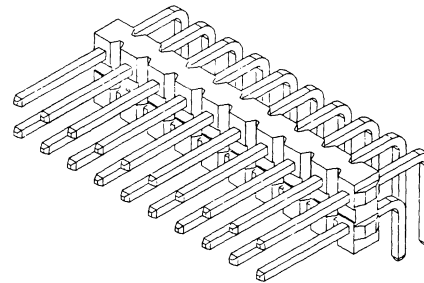
Dual Row Breakaway Right Angle Header - High Profile



A

70216

- **High profile:** .220" high
- **Mates with .100" grid female connectors:**
 - PCB connectors: e.g. 70192
 - Single row IDT connectors: e.g. 70400-A
 - Dual & single row crimp connectors: e.g. 70450-A, 70066-A
 - Ribbon cable connectors: e.g. 40312
 - Flat flexible cable connectors: e.g. 70430 & 40556
 - Shunts: e.g. 7859 & 90059
- **Stackable** end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- **Circuit sizes** 4-80
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface



Recommended P.C. Board Hole Layout

Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37

*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position

Ordering Information NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Board retention tails, contact factory

Plating Option	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .175" (4,45) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .175" (4,45) Order No.
15 microinches min. select gold	• 10-89-4XX2	10-89-4XX4	• 10-89-4XX3	10-89-4XX5
30 microinches min. select gold	• 10-89-4XX6	10-89-4XX8	• 10-89-4XX7	10-89-4XX9
200 microinches min. overall tin	• 10-88-3XX1	10-88-3XX3	• 10-88-3XX2	10-88-3XX4
Select gold flash over 15 microinches palladium/nickel	Contact Factory	Contact Factory	Contact Factory	Contact Factory

To order required part: Insert desired circuit numbers in place of XX (04 through 80, even numbers available only)

• U.S. Standard Product, available through Molex franchised distributors.

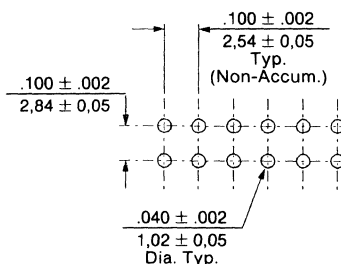
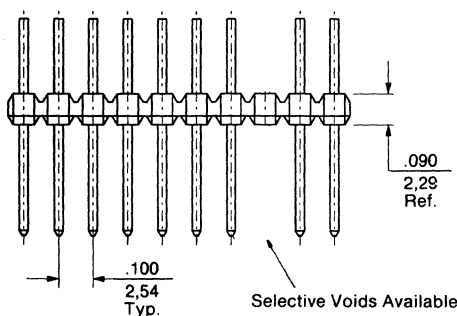
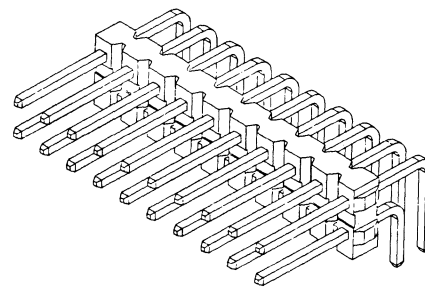
Dual Row Breakaway Retention Pin Header



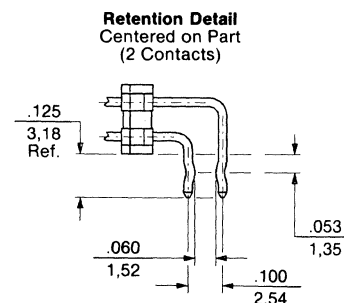
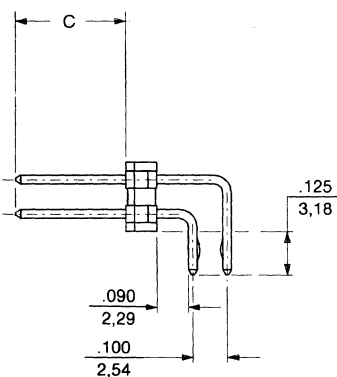
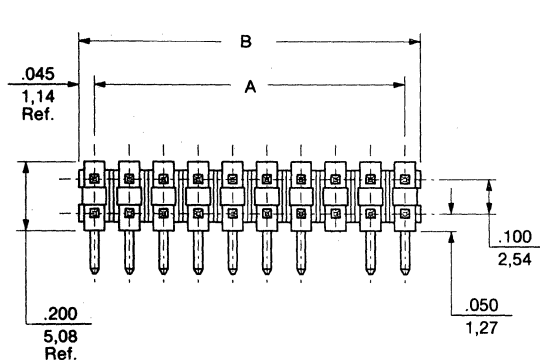
A

70524 Right Angle Pin Version

- **Mates with .100" (2,54mm) grid female connectors:**
 - PCB connectors, e.g. 70192
 - Single row insulation displacement connectors, e.g. 70400-A
 - Single and dual row crimp connectors, e.g. 70450-A, 70066-A
 - Ribbon cable connectors, e.g. 40312, 70121
 - Flat flexible cable connectors, e.g. 70430-A, 40556
 - Shunts, e.g. 7859, 90059
- **Stackable** end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" (0,64mm) square wire** provides 4-sided smooth surface for quality interface
- **Kinked p.c. tail for retention to the board**



Recommended P.C. Board Hole Layout



Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37

*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position

Ordering Information NOTE: Dim. C = Mating End

Plating Option	Mating End Dim. C - .240" (6,10)	Mating End Dim. C - .320" (8,13)
	Order No.	Order No.
15 microinches min. select gold	10-88-9XX7	10-88-9XX8
30 microinches min. select gold	10-88-9XX9	10-88-4XX7
200 microinches overall tin	10-88-9XX5	10-88-9XX6
Select gold flash over 15 microinches palladium/nickel	Contact Factory	Contact Factory

To order required part: Insert number of circuits in place of XX.

Dual Row Non-Breakaway Right Angle Header



A

7723

□ **Mates with .100" grid female connectors:**

PCB connectors: e.g. 70192

Single row IDT connectors: e.g. 70400-A

Dual & single row crimp connectors: e.g. 70450-A, 70066-A

Ribbon cable connectors: e.g. 40312

Flat flexible cable connectors: e.g. 70430-A & 40556

Shunts: e.g. 7859 & 90059

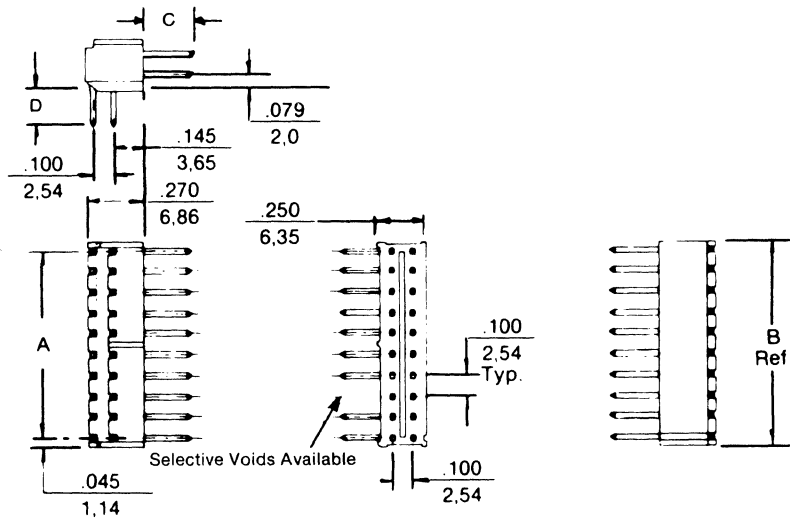
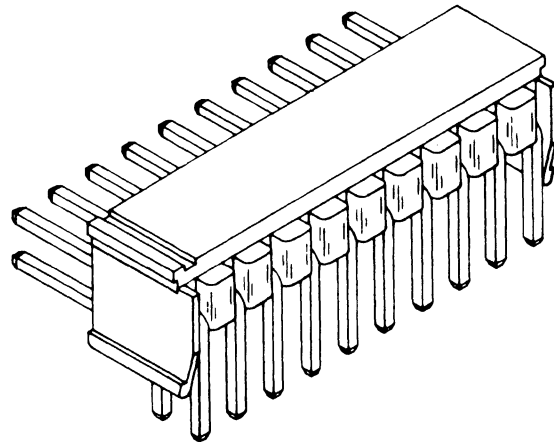
□ **Stackable end-to-end**

□ **Circuit sizes 4-80**

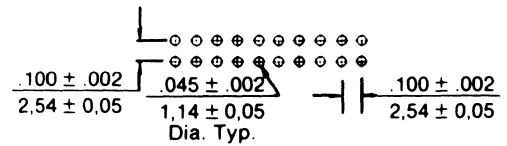
□ **Extremely stable on board during wave soldering**

□ **Standoffs facilitate post solder cleaning**

□ **Drawn .025" square wire provides 4-sided smooth surface for quality interface**



Recommended P.C. Board Hole Layout



Bottom View

Front View

Top View

Dimensions 7723

In the Far East this product has different Eng. Nos. and Order Numbers. Contact factory for sales drawings on 70224-XXX.

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37

*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position

Ordering Information 7723 NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Plating Option	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .240" (6,10) P.C. Tail Dim. D - .175" (4,45) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .110" (2,80) Order No.	Mating End Dim. C - .320" (8,13) P.C. Tail Dim. D - .175" (4,45) Order No.
15 microinches min. select gold	• 10-91-1XX1	10-91-1XX2	• 10-91-1XX3	10-91-1XX4
30 microinches min. select gold	• 10-91-2XX1	10-91-2XX2	• 10-91-2XX3	10-91-2XX4
200 microinches min. overall tin	• 10-90-1XX1	10-90-1XX2	• 10-90-1XX3	10-90-1XX4

To order required part: Insert desired circuit numbers in place of XX (04 through 80, even numbers available only)

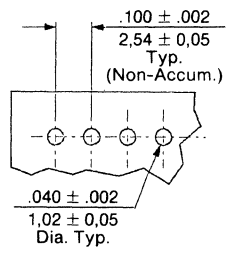
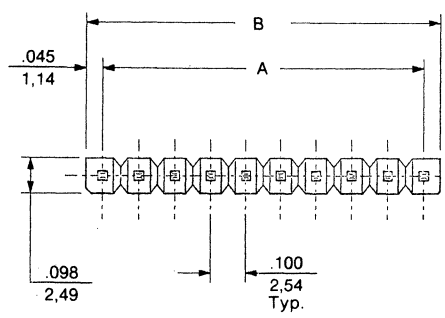
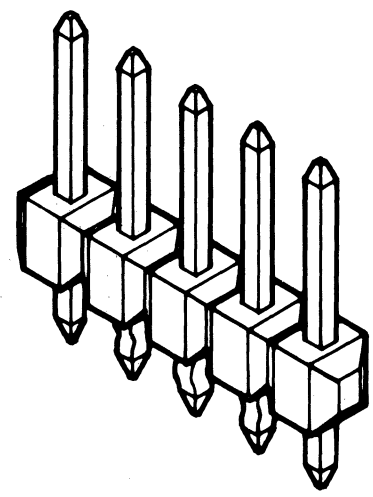
• U.S. Standard Product, available through Molex franchised distributors.

Single Row Breakaway Retention Pin Header

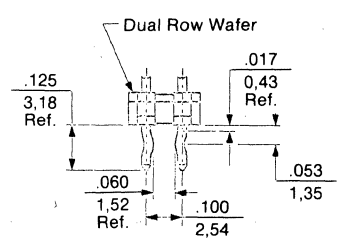
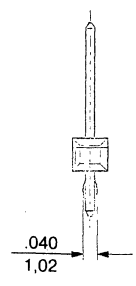
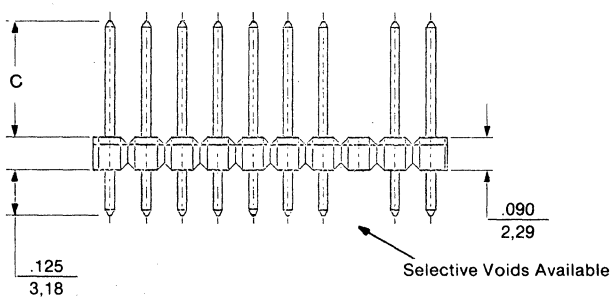


70364

- **Mates** with single and dual row female connectors on .100" centers:
 - PCB connectors; e.g. 90147, 90148
 - Single row insulation displacement connectors; e.g. 70400-A
 - Single row crimp connectors; e.g. 70066-A
 - Flat flex cable connectors; e.g. 70430-A, 40556
 - Insulation displacement wire harnesses; 7720, 7690
 - Shunt: 7859, 90059
- **Stackable** side-by-side and end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- Circuit sizes 2-40
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" (0,64mm) square wire** provides 4-sided smooth surface for quality interface
- **Kinked P.C. tail for retention to the board**



Recommended P.C. Board Hole Layout



Retention Detail (2 Ckt. Size Only)

Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
2	.100 2,54	.190 4,83	3	.200 5,08	.290 7,37

*For circuit sizes 4 through 40 add .100" or 2,54mm for each additional pin

Single Row Breakaway Retention Pin Header



70364

Ordering Information Note: Dim. C = Mating End

PLATING OPTION - 15 MICROINCHES GOLD											
Mating End Dim. C = .240" (6,10)						Mating End Dim. C = .320" (8,13)					
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	10-88-8043	15	10-88-8303	28	10-88-8563	2	10-88-8044	15	10-88-8304	28	10-88-8564
3	10-88-8063	16	10-88-8323	29	10-88-8583	3	10-88-8064	16	10-88-8324	29	10-88-8584
4	10-88-8083	17	10-88-8343	30	10-88-8603	4	10-88-8084	17	10-88-8344	30	10-88-8604
5	10-88-8103	18	10-88-8363	31	10-88-8623	5	10-88-8104	18	10-88-8364	31	10-88-8624
6	10-88-8123	19	10-88-8383	32	10-88-8643	6	10-88-8124	19	10-88-8384	32	10-88-8644
7	10-88-8143	20	10-88-8403	33	10-88-8663	7	10-88-8144	20	10-88-8404	33	10-88-8664
8	10-88-8163	21	10-88-8423	34	10-88-8683	8	10-88-8164	21	10-88-8424	34	10-88-8684
9	10-88-8183	22	10-88-8443	35	10-88-8703	9	10-88-8184	22	10-88-8444	35	10-88-8704
10	10-88-8203	23	10-88-8463	36	10-88-8723	10	10-88-8204	23	10-88-8464	36	10-88-8724
11	10-88-8223	24	10-88-8483	37	10-88-8743	11	10-88-8224	24	10-88-8484	37	10-88-8744
12	10-88-8243	25	10-88-8503	38	10-88-8763	12	10-88-8244	25	10-88-8504	38	10-88-8764
13	10-88-8263	26	10-88-8523	39	10-88-8783	13	10-88-8264	26	10-88-8524	39	10-88-8784
14	10-88-8283	27	10-88-8543	40	10-88-8803	14	10-88-8284	27	10-88-8544	40	10-88-8804

PLATING OPTION - 30 MICROINCHES GOLD											
Mating End Dim. C = .240" (6,10)						Mating End Dim. C = .320" (8,13)					
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	10-88-8045	15	10-88-8305	28	10-88-8565	2	10-88-8046	15	10-88-8306	28	10-88-8566
3	10-88-8065	16	10-88-8325	29	10-88-8585	3	10-88-8066	16	10-88-8326	29	10-88-8586
4	10-88-8085	17	10-88-8345	30	10-88-8605	4	10-88-8086	17	10-88-8346	30	10-88-8606
5	10-88-8105	18	10-88-8365	31	10-88-8625	5	10-88-8106	18	10-88-8366	31	10-88-8626
6	10-88-8125	19	10-88-8385	32	10-88-8645	6	10-88-8126	19	10-88-8386	32	10-88-8646
7	10-88-8145	20	10-88-8405	33	10-88-8665	7	10-88-8146	20	10-88-8406	33	10-88-8666
8	10-88-8165	21	10-88-8425	34	10-88-8685	8	10-88-8166	21	10-88-8426	34	10-88-8686
9	10-88-8185	22	10-88-8445	35	10-88-8705	9	10-88-8186	22	10-88-8446	35	10-88-8706
10	10-88-8205	23	10-88-8465	36	10-88-8725	10	10-88-8206	23	10-88-8466	36	10-88-8726
11	10-88-8225	24	10-88-8485	37	10-88-8745	11	10-88-8226	24	10-88-8486	37	10-88-8746
12	10-88-8245	25	10-88-8505	38	10-88-8765	12	10-88-8246	25	10-88-8506	38	10-88-8766
13	10-88-8265	26	10-88-8525	39	10-88-8785	13	10-88-8266	26	10-88-8526	39	10-88-8786
14	10-88-8285	27	10-88-8545	40	10-88-8805	14	10-88-8286	27	10-88-8546	40	10-88-8806

PLATING OPTION - 200 MICROINCHES TIN											
Mating End Dim. C = .240" (6,10)						Mating End Dim. C = .320" (8,13)					
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	10-88-7049	15	10-88-7309	28	10-88-7569	2	10-88-8040	15	10-88-8300	28	10-88-8560
3	10-88-7069	16	10-88-7329	29	10-88-7589	3	10-88-8060	16	10-88-8320	29	10-88-8580
4	10-88-7089	17	10-88-7349	30	10-88-7609	4	10-88-8080	17	10-88-8340	30	10-88-8600
5	10-88-7109	18	10-88-7369	31	10-88-7629	5	10-88-8100	18	10-88-8360	31	10-88-8620
6	10-88-7129	19	10-88-7389	32	10-88-7649	6	10-88-8120	19	10-88-8380	32	10-88-8640
7	10-88-7149	20	10-88-7409	33	10-88-7669	7	10-88-8140	20	10-88-8400	33	10-88-8660
8	10-88-7169	21	10-88-7429	34	10-88-7689	8	10-88-8160	21	10-88-8420	34	10-88-8680
9	10-88-7189	22	10-88-7449	35	10-88-7709	9	10-88-8180	22	10-88-8440	35	10-88-8700
10	10-88-7209	23	10-88-7469	36	10-88-7729	10	10-88-8200	23	10-88-8460	36	10-88-8720
11	10-88-7229	24	10-88-7489	37	10-88-7749	11	10-88-8220	24	10-88-8480	37	10-88-8740
12	10-88-7249	25	10-88-7509	38	10-88-7769	12	10-88-8240	25	10-88-8500	38	10-88-8760
13	10-88-7269	26	10-88-7529	39	10-88-7789	13	10-88-8260	26	10-88-8520	39	10-88-8780
14	10-88-7289	27	10-88-7549	40	10-88-7809	14	10-88-8280	27	10-88-8540	40	10-88-8800

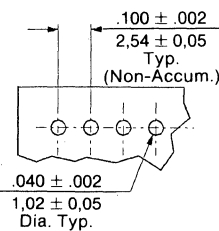
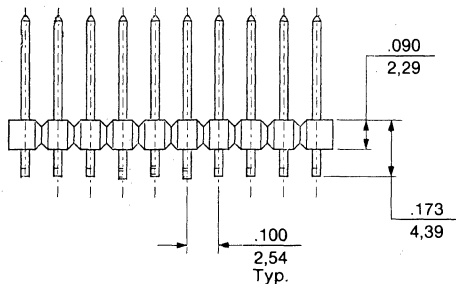
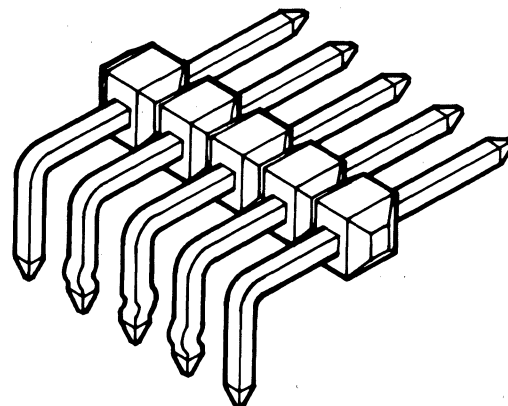
PLATING OPTION - PALLADIUM/NICKEL WITH GOLD FLASH											
Contact Factory											

Single Row Breakaway Retention Pin Headers

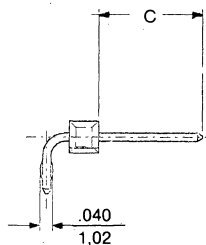
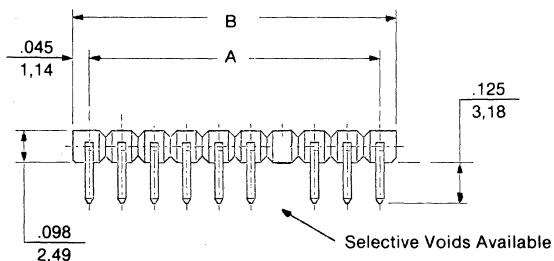
A

70365 Right Angle Pin Version

- **Mates with .100" (2,54mm) center female connectors:**
 - Single row PCB connectors, e.g. 90147
 - Single row insulation displacement connectors, e.g. 70400-A
 - Single row crimp connectors, e.g. 70066-A
 - Flat flex cable connectors, e.g. 70430-A, 40556
 - Insulation displacement wire harnesses, e.g. 7720, 7690
 - Shunts, e.g. 7859, 90059
- **Stackable** side-by-side and end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- Circuit sizes 2-40
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" (0,64mm) square wire** provides 4-sided smooth surface for quality interface
- **Kinked p.c. tail for retention to the board**



Recommended P.C. Board Hole Layout



Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
2	.100 2,54	.190 4,83	3	.200 5,08	.290 7,37

*For circuit sizes 4 through 40 add .100" or 2,54mm for each additional pin

Single Row Breakaway Retention Pin Header



70365

Ordering Information Note: Dim. C = Mating End

PLATING OPTION - 15 MICROINCHES GOLD											
Mating End Dim. C = .240" (6,10)						Mating End Dim. C = .320" (8,13)					
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
3	10-88-8069	16	10-88-8329	29	10-88-8589	3	10-88-9060	16	10-88-9320	29	10-88-9580
4	10-88-8089	17	10-88-8349	30	10-88-8609	4	10-88-9080	17	10-88-9340	30	10-88-9600
5	10-88-8109	18	10-88-8369	31	10-88-8629	5	10-88-9100	18	10-88-9360	31	10-88-9620
6	10-88-8129	19	10-88-8389	32	10-88-8649	6	10-88-9120	19	10-88-9380	32	10-88-9640
7	10-88-8149	20	10-88-8409	33	10-88-8669	7	10-88-9140	20	10-88-9400	33	10-88-9660
8	10-88-8169	21	10-88-8429	34	10-88-8689	8	10-88-9160	21	10-88-9420	34	10-88-9680
9	10-88-8189	22	10-88-8449	35	10-88-8709	9	10-88-9180	22	10-88-9440	35	10-88-9700
10	10-88-8209	23	10-88-8469	36	10-88-8729	10	10-88-9200	23	10-88-9460	36	10-88-9720
11	10-88-8229	24	10-88-8489	37	10-88-8749	11	10-88-9220	24	10-88-9480	37	10-88-9740
12	10-88-8249	25	10-88-8509	38	10-88-8769	12	10-88-9240	25	10-88-9500	38	10-88-9760
13	10-88-8269	26	10-88-8529	39	10-88-8789	13	10-88-9260	26	10-88-9520	39	10-88-9780
14	10-88-8289	27	10-88-8549	40	10-88-8809	14	10-88-9280	27	10-88-9540	40	10-88-9800
15	10-88-8309	28	10-88-8569			15	10-88-9300	28	10-88-9560		

PLATING OPTION - 30 MICROINCHES GOLD											
Mating End Dim. C = .240" (6,10)						Mating End Dim. C = .320" (8,13)					
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
3	10-88-9063	16	10-88-9323	29	10-88-9583	3	10-88-9064	16	10-88-9324	29	10-88-9584
4	10-88-9083	17	10-88-9343	30	10-88-9603	4	10-88-9084	17	10-88-9344	30	10-88-9604
5	10-88-9103	18	10-88-9363	31	10-88-9623	5	10-88-9104	18	10-88-9364	31	10-88-9624
6	10-88-9123	19	10-88-9383	32	10-88-9643	6	10-88-9124	19	10-88-9384	32	10-88-9644
7	10-88-9143	20	10-88-9403	33	10-88-9663	7	10-88-9144	20	10-88-9404	33	10-88-9664
8	10-88-9163	21	10-88-9423	34	10-88-9683	8	10-88-9164	21	10-88-9424	34	10-88-9684
9	10-88-9183	22	10-88-9443	35	10-88-9703	9	10-88-9184	22	10-88-9444	35	10-88-9704
10	10-88-9203	23	10-88-9463	36	10-88-9723	10	10-88-9204	23	10-88-9464	36	10-88-9724
11	10-88-9223	24	10-88-9483	37	10-88-9743	11	10-88-9224	24	10-88-9484	37	10-88-9744
12	10-88-9243	25	10-88-9503	38	10-88-9763	12	10-88-9244	25	10-88-9504	38	10-88-9764
13	10-88-9263	26	10-88-9523	39	10-88-9783	13	10-88-9264	26	10-88-9524	39	10-88-9784
14	10-88-9283	27	10-88-9543	40	10-88-9803	14	10-88-9284	27	10-88-9544	40	10-88-9804
15	10-88-9303	28	10-88-9563			15	10-88-9304	28	10-88-9564		

PLATING OPTION - 200 MICROINCHES TIN											
Mating End Dim. C = .240" (6,10)						Mating End Dim. C = .320" (8,13)					
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
3	10-88-8067	16	10-88-8327	29	10-88-8587	3	10-88-8068	16	10-88-8328	29	10-88-8588
4	10-88-8087	17	10-88-8347	30	10-88-8607	4	10-88-8088	17	10-88-8348	30	10-88-8608
5	10-88-8107	18	10-88-8367	31	10-88-8627	5	10-88-8108	18	10-88-8368	31	10-88-8628
6	10-88-8127	19	10-88-8387	32	10-88-8647	6	10-88-8128	19	10-88-8388	32	10-88-8648
7	10-88-8147	20	10-88-8407	33	10-88-8667	7	10-88-8148	20	10-88-8408	33	10-88-8668
8	10-88-8167	21	10-88-8427	34	10-88-8687	8	10-88-8168	21	10-88-8428	34	10-88-8688
9	10-88-8187	22	10-88-8447	35	10-88-8707	9	10-88-8188	22	10-88-8448	35	10-88-8708
10	10-88-8207	23	10-88-8467	36	10-88-8727	10	10-88-8208	23	10-88-8468	36	10-88-8728
11	10-88-8227	24	10-88-8487	37	10-88-8747	11	10-88-8228	24	10-88-8488	37	10-88-8748
12	10-88-8247	25	10-88-8507	38	10-88-8767	12	10-88-8248	25	10-88-8508	38	10-88-8768
13	10-88-8267	26	10-88-8527	39	10-88-8787	13	10-88-8268	26	10-88-8528	39	10-88-8788
14	10-88-8287	27	10-88-8547	40	10-88-8807	14	10-88-8288	27	10-88-8548	40	10-88-8808
15	10-88-8307	28	10-88-8567			15	10-88-8308	28	10-88-8568		

PLATING OPTION - PALLADIUM/NICKEL WITH GOLD FLASH											
Contact Factory											

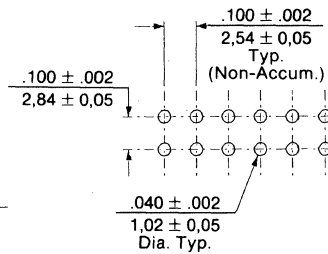
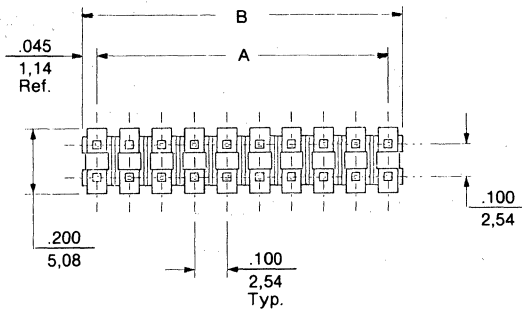
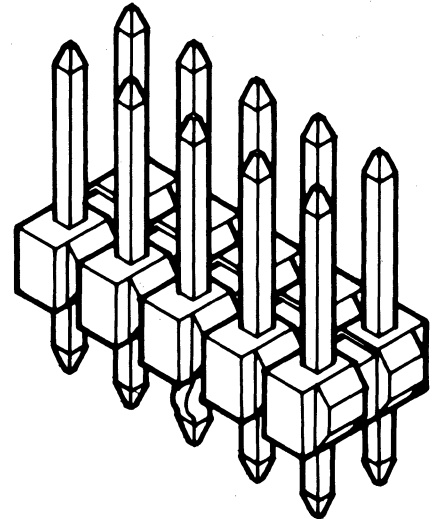
A

Dual Row Breakaway Retention Pin Header

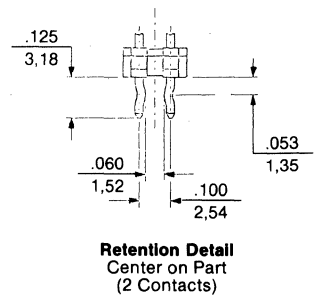
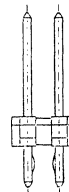
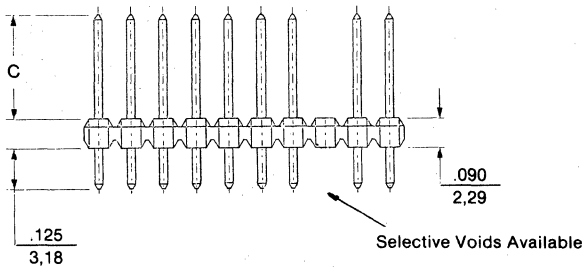


70287 Straight Pin Version

- **Mates** with female connectors on .100" (2,54mm) grid:
 - Single and dual row PCB connectors, e.g. 70192, 7990
 - Single row insulation displacement connectors, e.g. 70400-A
 - Single and dual row crimp connectors, e.g. 70066-A, 70450-A
 - Ribbon cable connectors, e.g. 40312
 - Flat flexible cable connectors, e.g. 70430-A, 40556
 - Shunts, e.g. 7859, 90059
- **Stackable** side-by-side and end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- Circuit sizes 2-80
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" (0,64mm) square wire** provides 4-sided smooth surface for quality interface
- **Kinked p.c. tail** for retention to the board



Recommended P.C. Board Hole Layout



Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37

*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position

Ordering Information NOTE: Dim. C = Mating End

Plating Option	Mating End Dim. C - .240" (6,10) Order No.	Mating End Dim. C - .320" (8,13) Order No.
15 microinches min. select gold	10-88-7XX5	10-88-7XX6
30 microinches min. select gold	10-88-7XX7	10-88-7XX8
200 microinches overall tin	10-88-7XX3	10-88-7XX4
Select gold flash over 15 microinches palladium/nickel	Contact Factory	Contact Factory

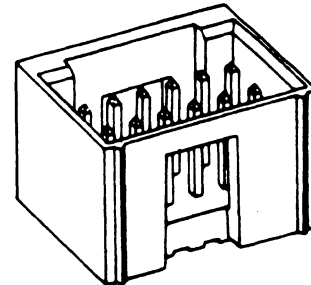
To order required part: Insert number of circuits in place of XX, 02 through 80.

Dual Row Shrouded Headers

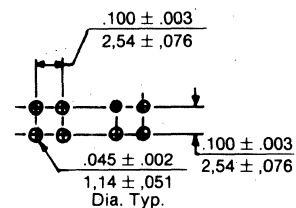
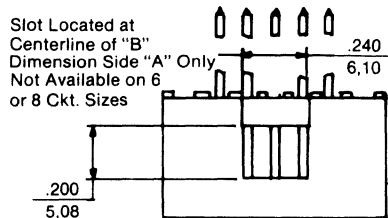
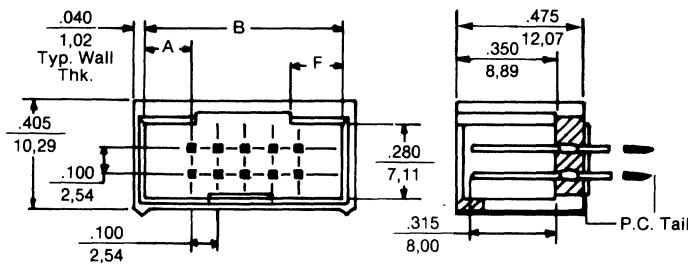


A

8723 Straight Pin



- **Mates** with .100" grid female connectors:
 - PCB connectors: e.g. 70192
 - Single row IDT connectors: e.g. 70400
 - Interim clip: 70013A
 - Dual & single row crimp connectors: e.g. 70450, 70066
 - Ribbon cable connectors: e.g. 40312
- **Polarized**
- **Latch window** retains modular connector assemblies after mating
- **Four wall shielding** provides unmated pin protection
- **Circuit sizes** 6-72
- **Drawn .025" square wire**



Recommended P.C. Board Hole Layout

Dimensions

Circuits	MATES WITH 70181, 70450 & 70400			MATES WITH 70013, 40312		
	Dim. A	Dim. B*	Dim. F	Dim. A	Dim. B*	Dim. F
6	.066 1.68	.332 8.43	.090 2.29	.150 3.81	.500 12.70	.174 4.42

*Other circuit sizes: For Dim. B only, add .100" for each additional pin position

Ordering Information (NOTE: 2 P.C. Tail Lengths Available)

Plating Options	.066" (1.68mm) End Wall - Mates with 70181, 70450, 70400		.150" (3.81mm) End Wall - Mates with Molex 70013, 40312	
	.130" (3.30) P.C. Tail Order No.	.200" (5.08mm) P.C. Tail Order No.	.130" (3.30mm) P.C. Tail Order No.	.200" (5.08mm) P.C. Tail Order No.
15 Microinches Gold	• 15-29-60XX	15-29-61XX	• 15-29-62XX	15-29-63XX
30 Microinches Gold	• 15-41-70XX	15-41-71XX	• 15-41-72XX	15-41-73XX
Overall Tin	• 15-42-60XX	15-42-61XX	• 15-42-62XX	15-42-63XX

To order: Replace XX with number of circuits (06 through 72, even numbers)

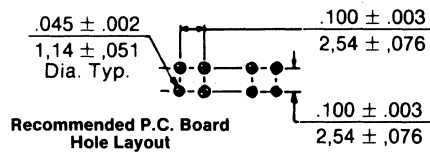
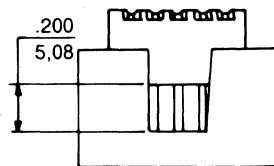
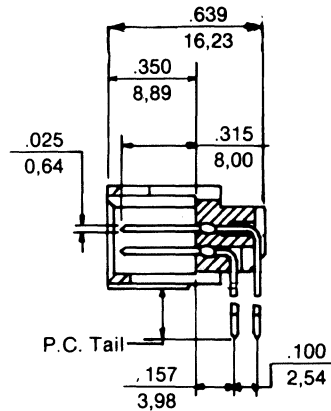
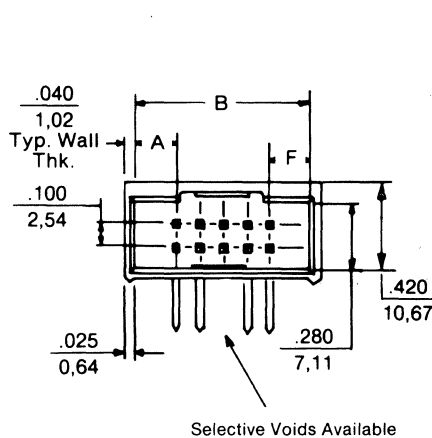
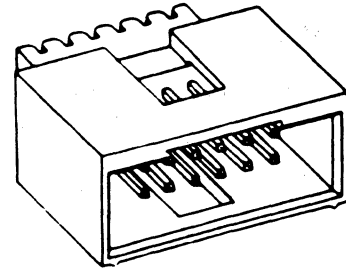
• U.S. Standard Product, available through Molex franchised distributors.

Dual Row Shrouded Headers

A

8724 Right Angle Pin

- **Mates with .100" grid female connectors:**
 - PCB connectors: e.g. 70192
 - Dual and single row IDT connectors: e.g. 70400
 - Interim clip: 70013A
 - Dual & single row crimp connectors: e.g. 70450
 - Ribbon cable connectors: e.g. 40312
- **Polarized**
- **Latch window** retains modular connector assemblies after mating
- **Four wall shielding** provides unmated pin protection
- **Circuit sizes** 6-72
- **Standoffs** (functional for 8724)
- **Drawn .025" square wire**



Dimensions

Circuits	MATES WITH 70181, 70450 & 70400			MATES WITH 70013, 40312		
	Dim. A	Dim. B*	Dim. F	Dim. A	Dim. B*	Dim. F
6	.066 1,68	.332 8,43	.090 2,29	.150 3,81	.500 12,70	.174 4,42

*Other circuit sizes: For Dim. B only, add .100" for each additional pin position

Ordering Information (NOTE: 2 P.C. Tail Lengths Available)

Plating Options	.066" (1,68mm) End Wall - Mates with 70181, 70450, 70400		.150" (3,81mm) End Wall - Mates with Molex 70013, 40312	
	.130 (3,30) P.C. Tail Order No.	.200" (5,08mm) P.C. Tail Order No.	.130" (3,30mm) P.C. Tail Order No.	.200" (5,08mm) P.C. Tail Order No.
15 Microinches Gold	• 15-29-70XX	15-29-71XX	• 15-29-72XX	15-29-73XX
30 Microinches Gold	• 15-41-80XX	15-41-81XX	• 15-41-82XX	15-41-83XX
Overall Tin	• 15-42-70XX	15-42-71XX	• 15-42-72XX	15-42-73XX

To order: Replace XX with number of circuits (06 through 72, even numbers)

• U.S. Standard Product, available through Molex franchised distributors.

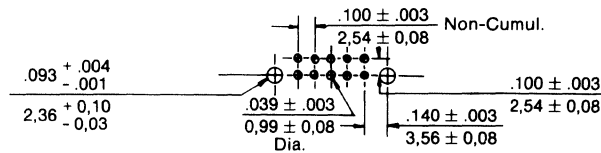
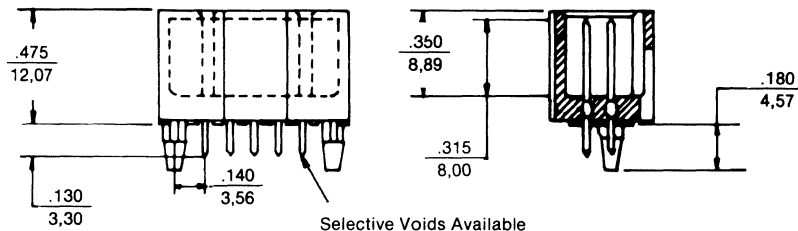
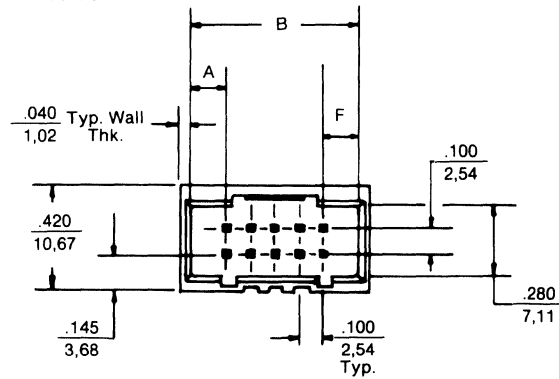
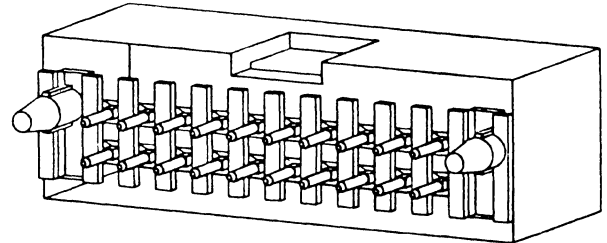
Dual Row Shrouded Headers With P.C. Board Retention Pegs



A

70227 Straight Pin

- **Mates with .100" grid female connectors:**
 - PCB connectors: e.g. 70192
 - Single row IDT connectors: e.g. 70400
 - Interim clip: 70013B
 - Dual & single row crimp connectors: e.g. 70450 & 70066
 - Ribbon cable connectors: e.g. 40312
- **ROBOTICALLY INSERTABLE AND COMPATIBLE**
- **Board retention pegs** for stability
- **Dual polarization slots** for error free mating (functional with 70013B only)
- **Latch window** retains modular connector assemblies after mating
- **Circuit sizes 6-72**
- **Standoffs**
- **Round P.C. tails** allow smaller PCB holes and aid robotic insertion.



Recommended P.C. Board Hole Pattern

Dimensions

MATES WITH 70013, 40312			
Circuits	Dim. A	Dim. B*	Dim. F
6	.150 3,81	.500 12,70	.174 4,42
*Other circuit sizes: For Dim. B only, add .100" for each additional pin position			

Ordering Information

NOTE: Dim. C = Mating End Dim. D = P.C. Tail

PLATING OPTION	Order No.
15 microinches min. select gold	15-47-8XX3
Overall tin	15-47-8XX4
To order required part: Replace XX with number of circuits (06 through 72, even numbers)	

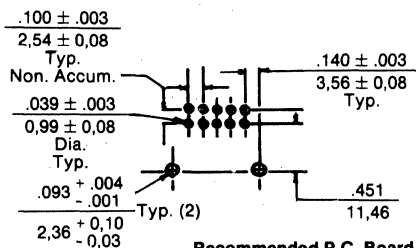
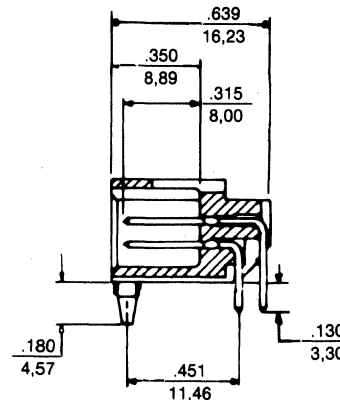
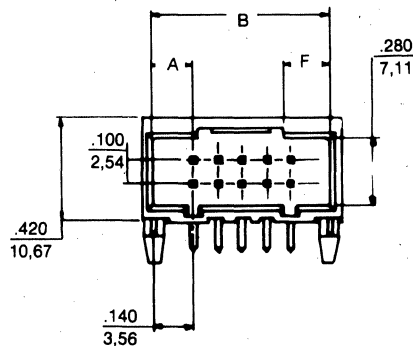
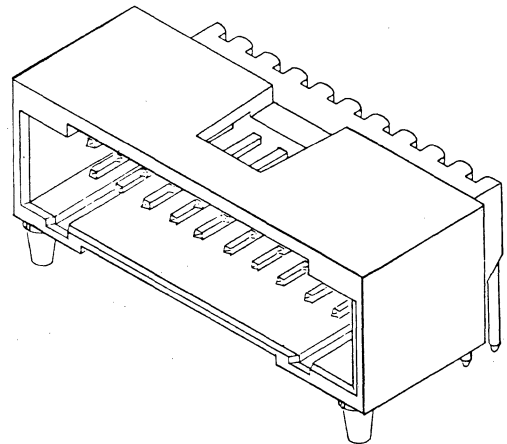
Available with polarization ribs, no pegs (8723C and 8724C)

Dual Row Shrouded Headers With P.C. Board Retention Pegs

A

70229 Right Angle Pin

- **Mates with .100" grid female connectors:**
 - PCB connectors: e.g. 70192
 - Dual & single row IDT connectors: e.g. 70400
 - Interim clip: 70013B
 - Dual & single row crimp connectors: e.g. 70450 & 70066
 - Ribbon cable connectors: e.g. 40312
- **ROBOTICALLY INSERTABLE AND COMPATIBLE**
- **Board retention pegs** for stability
- **Dual polarization slots** for error free mating (functional with 70013B only)
- **Latch window** retains modular connector assemblies after mating
- **Circuit sizes 6-72**
- **Standoffs (functional for 70229)**
- **Round P.C. tails** allow smaller PCB holes and aid robotic insertion.



Recommended P.C. Board Hole Layout

Dimensions

Circuits	MATES WITH 70013, 40312		
	Dim. A	Dim. B*	Dim. F
6	.150 3.81	.500 12.70	.174 4.42

*Other circuit sizes: For Dim. B only, add .100" for each additional pin position

Ordering Information

NOTE: Dim. C = Mating End Dim. D = P.C. Tail

PLATING OPTION	Order No.
15 microinches min. select gold	15-47-6XX1
Overall tin	15-47-1XX1

To order required part: Replace XX with number of circuits (06 through 72, even numbers)

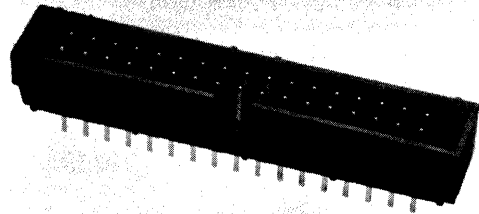
Available with polarization ribs, no pegs (8723C and 8724C)

Shrouded Low Profile Dual Row Headers



A

70246 Series Straight Pin Headers



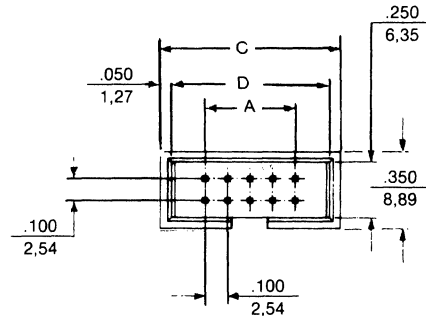
- Polarized slot
- Low profile
- Mates with .050" center ribbon cable connectors

Specifications

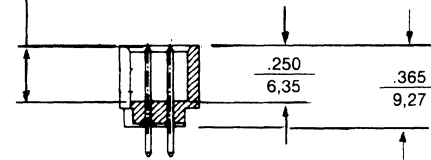
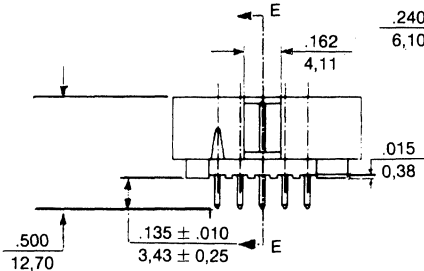
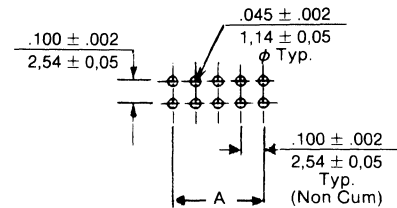
Terminal Material - Brass alloy 260

Plating - 3 options gold thicknesses for contact area; See below for details. 0.000075 min. tin lead in tail area. Both over 0.000050 min. nickel overall

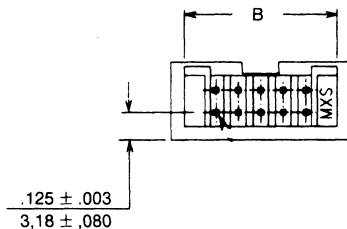
Insulator Material - 15% glass filled polyester, 94V-0



Recommended P.C. Board Hole Layout



SECTION E-E



Dimensions 70246

Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D
8	.300 7,62	.580 14,73	.700 17,78	.600 15,25	26	.200 30,48	1.480 37,59	1.600 40,64	1.500 38,10	50	2.400 60,96	2.680 68,07	2.800 71,12	2.700 68,58
10	.400 10,16	.680 17,27	.800 20,32	.700 17,78	34	1.600 40,64	1.880 47,75	2.000 50,80	1.900 48,26	56	2.700 68,58	2.980 75,69	3.100 78,74	3.000 76,20
14	.600 15,24	.880 22,35	1.000 25,40	.900 22,86	40	1.900 48,26	2.180 55,37	2.300 58,42	2.200 55,88	60	2.900 73,66	3.180 80,77	3.300 83,82	3.200 81,28
16	.700 17,78	.980 24,89	1.100 27,94	1.000 25,40	44	2.100 53,34	2.380 60,45	2.500 63,50	2.400 60,96	64	3.100 78,74	3.380 85,85	3.500 88,90	3.400 86,36
20	.900 22,86	1.180 29,97	1.300 33,02	1.200 30,28										

Ordering Information 70246

Contact Area Plating		
15 Microinches Gold Order No.	20 Microinches Gold Order No.	30 Microinches Gold Order No.
70246-XX21	70246-XX20	70246-XX22
Replace "XX" in order number with circuit size desired, 08, 10, 14, 16, 20, 26, 34, 40, 44, 50, 56, 60 or 64		

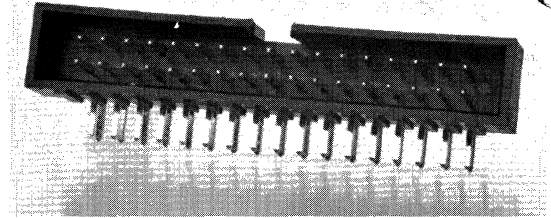
Shrouded Low Profile Dual Row Headers



A

70247 Series Right Angle Pin Headers

- Polarized slot
- Low profile
- Mates with .050" center ribbon cable connectors

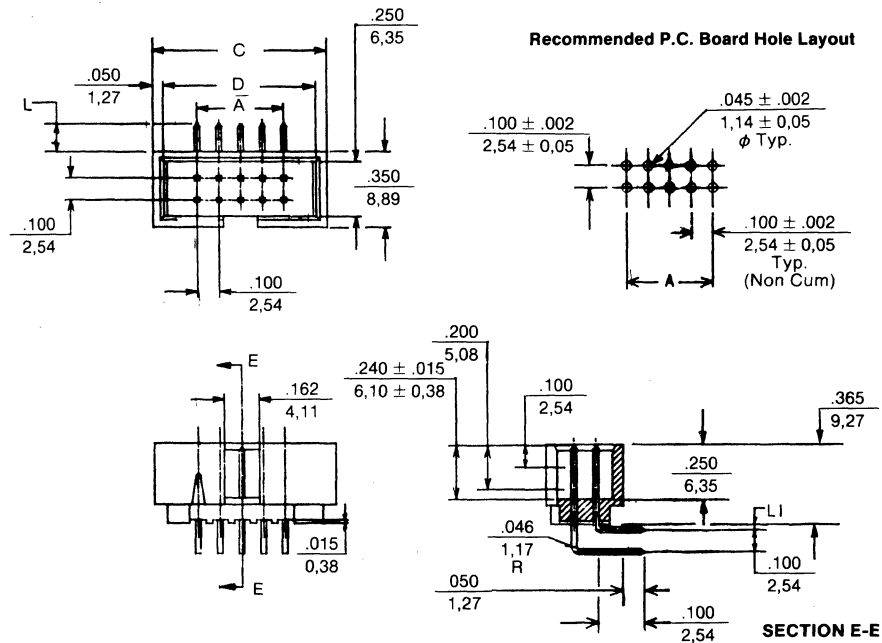


Specifications

Terminal Material - Brass alloy 260

Plating - 3 options gold thicknesses for contact area; See below for details.
0.000075 min. tin lead in tail area. Both over 0.000050 min. nickel overall

Insulator Material - 15% glass filled polyester, 94V-0



Dimensions 70247

Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D
8	.300 7,62	.580 14,73	.700 17,78	.600 15,25	26	.200 30,48	1.480 37,59	1.600 40,64	1.500 38,10	50	2.400 60,96	2.680 68,07	2.800 71,12	2.700 68,58
10	.400 10,16	.680 17,27	.800 20,32	.700 17,78	34	1.600 40,64	1.880 47,75	2.000 50,80	1.900 48,26	56	2.700 68,58	2.980 75,69	3.100 78,74	3.000 76,20
14	.600 15,24	.880 22,35	1.000 25,40	.900 22,86	40	1.900 48,26	2.180 55,37	2.300 58,42	2.200 55,88	60	2.900 73,66	3.180 80,77	3.300 83,82	3.200 81,28
16	.700 17,78	.980 24,89	1.100 27,94	1.000 25,40	44	2.100 53,34	2.380 60,45	2.500 63,50	2.400 60,96	64	3.100 78,74	3.380 85,85	3.500 88,90	3.400 86,36
20	.900 22,86	1.180 29,97	1.300 33,02	1.200 30,28										

Ordering Information 70247

Slotted Version	Contact Area Plating		
	15 Microinches Gold Order No.	20 Microinches Gold Order No.	30 Microinches Gold Order No.
	70247-XX01	70247-XX00	70247-XX02

Replace "XX" in order number with circuit size desired, 08, 10, 14, 16, 20, 26, 34, 40, 44, 50, 56, 60 or 64

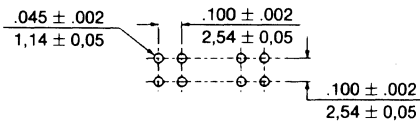
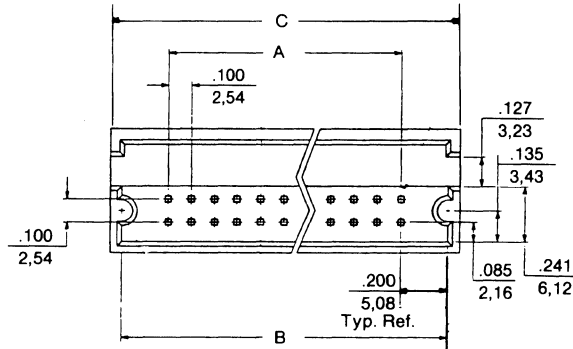
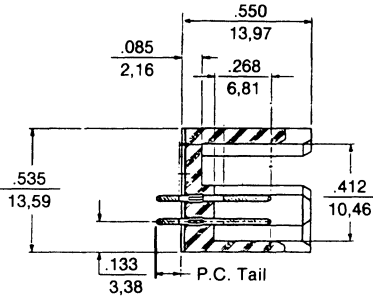
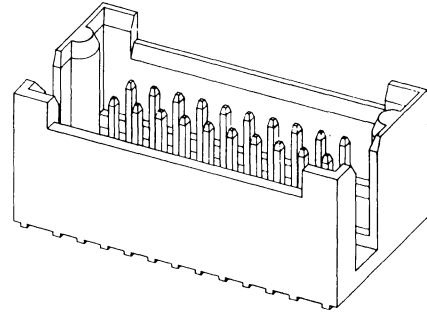
Shrouded Dual Row Header



A

70204 With P.C. Slot & Guide Ears for Blind Applications

- **Mates** with .100" grid female PCB connectors with guide ears:
 PCB connector: 7990NA
 Industry standard PCB connectors with similar guide ears
- **Polarization slots and guide ears** assure error free mating
- **Circuit sizes** 8-130
- **Automatable placement on PCB**



Recommended P.C. Board Hole Layout

Dimensions

Circuits	Dim. A*	Dim. B*	Dim. C*
8	.300 7,62	.700 17,78	.800 20,32

*For circuit sizes 10 through 130 add .100" or 2,54mm for each additional pin position

Ordering Information

PLATING OPTIONS	Mating End - .268" (6,81mm) P.C. Tail - .110" (2,80mm) Order No.	Mating End - .268" (6,81mm) P.C. Tail - .175" (4,45mm) Order No.
30 microinches min. select gold	• 25-02-1XXX	25-02-4XXX
200 microinches min. overall tin	• 25-02-2XXX	25-02-5XXX

To order: Replace XXX with number of circuits (008 through 130)

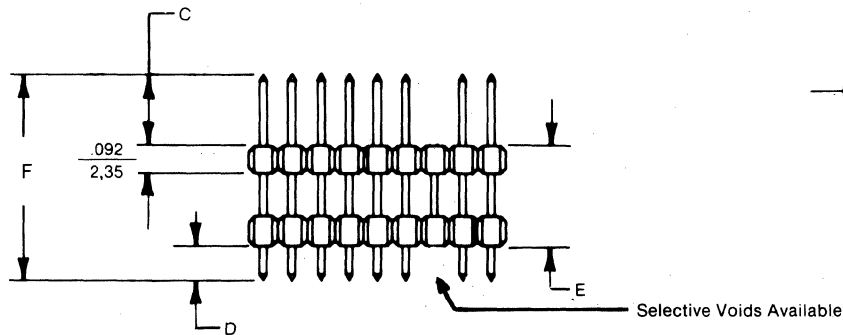
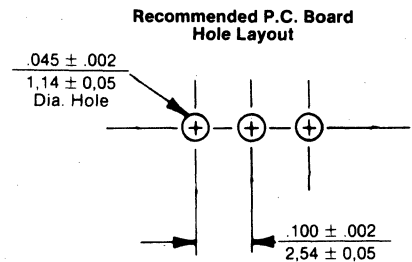
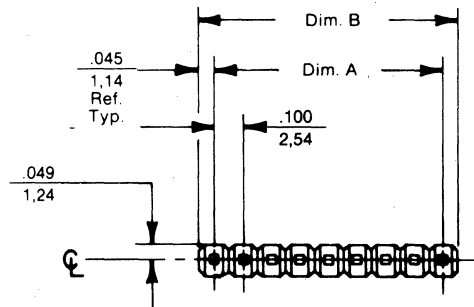
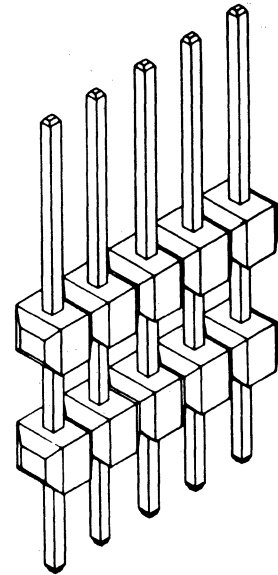
• U.S. Standard Product, available through Molex franchised distributors.

Single Row Straight Pin Breakaway Dual Body Header

A

70345 P.C. Board Spacer

- **Mates** with .100" (2,54mm) center single row PCB connectors: e.g. 90147, 4455
- **Maintains** the dimension between two boards
- **Provides a means of electrically connecting two discrete boards** (eliminates the need for nylon or aluminum spacers)
- **Stackable** side-by-side and end-to-end (on unbroken edges)
- **Easy breakaway** to smaller sizes
- **Circuit sizes 2-40** single row
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" (0,64mm) square wire** provides 4-sided smooth surface for quality interface



Dimensions 70345

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
2	.100 2,54	.190 4,83	3	.200 5,08	.290 7,37

*For circuit sizes 4 through 40 add .100" or 2,54mm for each additional pin position

Dim. F. (Standard Pin Lengths)				
.515 13,08	.545 13,84	.590 14,99	.655 16,64	.715 18,16
.750 19,05	.800 20,32	.857 21,77	.900 22,86	.950 24,13
1.024 26,0	1.052 26,72	1.075 27,31	1.15 29,21	1.20 30,48

Ordering Information 70345

NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Contact factory to order.
Dimensions C, D and E are customer specified.

Also available in dual row version. See Eng. Series 70268

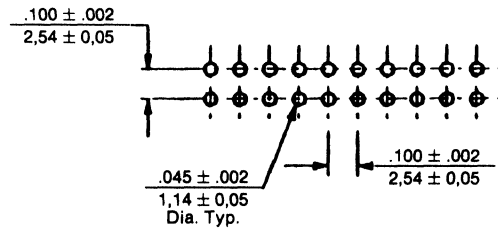
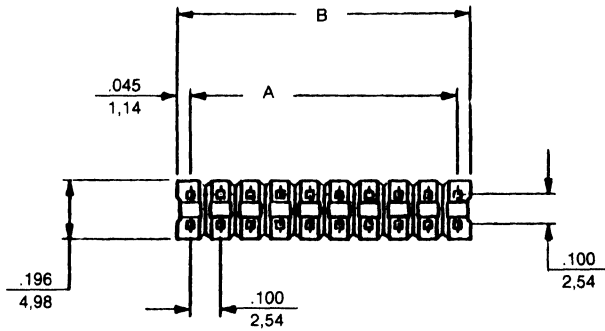
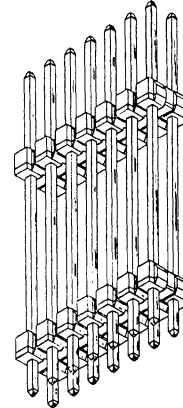
Dual Row Dual Body Breakaway Header, Straight Pin



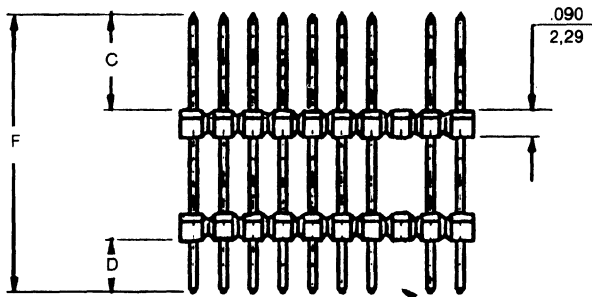
A

70268

- **Mates** with .100" grid dual row PCB connectors: e.g. 70192, 70182
- **Maintains the dimension between two boards**
- **Provides electrical connection** between two discrete boards and eliminates the need for nylon or aluminum spacers
- **Stackable** side-to-side and end-to-end on unbroken edges
- **Easy breakaway** to smaller sizes
- **Circuit sizes 4-80**
- **Standoffs** facilitate post solder cleaning
- **Drawn .025" square wire** provides 4-sided smooth surface for quality interface



Recommended P.C. Board Hole Layout



Selective Voids Available

Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.190 4,83	6	.200 5,08	.290 7,37

*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position

Dim. F. (Standard Pin Lengths)				
.515 13,08	.545 13,84	.590 14,99	.655 16,64	.715 18,16
.750 19,05	.800 20,32	.857 21,77	.900 22,86	.950 24,13
1.024 26,0	1.052 26,72	1.075 27,31	1.15 29,21	1.20 30,48

Ordering Information

NOTE: Dim. C = Mating End Dim. D = P.C. Tail

Contact factory to order.
Dimensions C, D and E are customer-specified

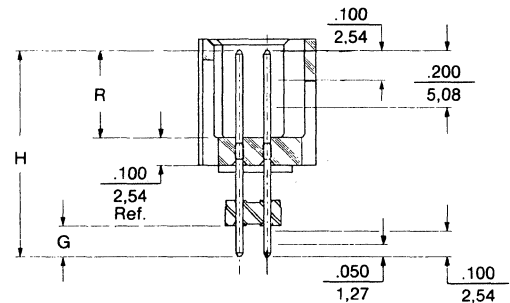
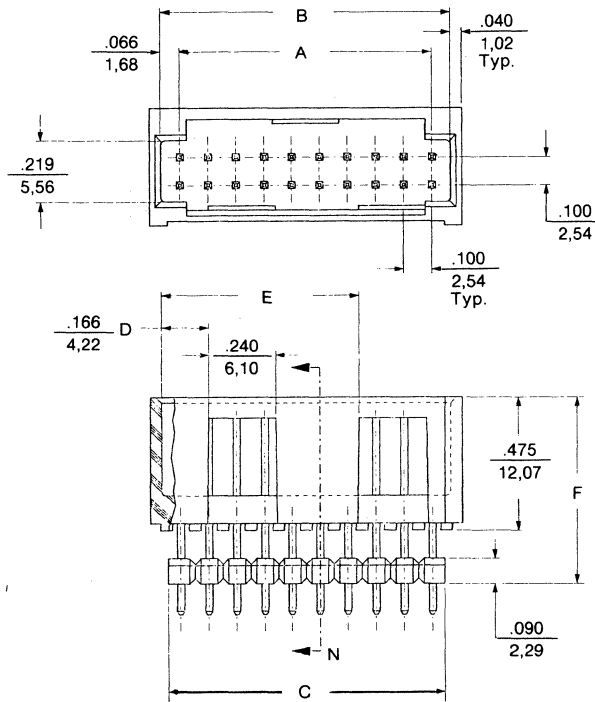
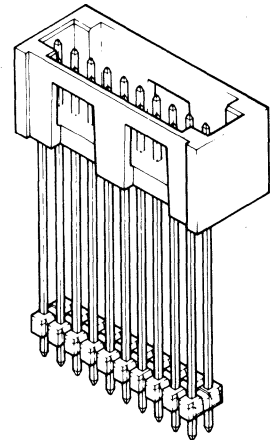
For 2-circuit, order Molex 70345

Shrouded Dual Body Header

A

70299

- **Mates with .100" grid female connectors:**
 - PCB connectors, e.g. 70192
 - Dual row crimp connectors, e.g. 70450
 - Ribbon cable connectors, e.g. 40312
 - Interim clip 70012-B
- **Four wall shielding** provides unmated pin protection
- **Circuit sizes 6-72**
- **Maintains the dimension** between two boards
- **Provides a means** of electrically connecting two discrete boards, eliminating the need for nylon or aluminum spacers
- **Polarized**
- **Latch window** retains modular connector assemblies after mating
- **Standoffs facilitate post solder cleaning**



SECTION N-N

Dimensions

Circuits	Dim. A*	Dim. B*	Dim. C*	Dim. D	Dim. E
6	.200 5,08	.332 8,43	.290 7,37		
8	.300 7,62	.432 10,97	.390 9,91		

*For circuit sizes 10 through 72 add .100" or 2,54 mm for each additional pin position.

Dim. G (Standard)	Dim. H	Dim. R	Dim. F (Standard Pin Lengths)						
.110 2,79	is customer specified	.320 8,13	.515 13,08	.560 14,22	.625 15,88	.640 16,26	.687 17,45	.750 19,05	.830 21,08
			.842 21,39	.930 23,62	.960 24,38	1.0 25,4			
		.240 6,10	.500 12,7	.550 13,97	.600 15,24	.650 16,51	.715 18,16	.750 19,05	.800 20,32
			.862 21,89	.875 22,22	.950 24,13	1.008 25,60	1.063 27,0	1.10 27,94	1.16 29,46

Ordering Information NOTE: Dim. R = Mating End Dim. G = P.C. Tail

Contact Factory to Order

Two Circuit Shunt or Jumper



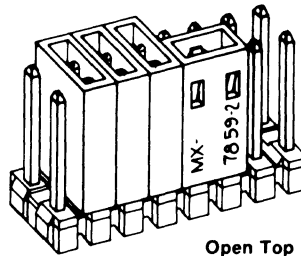
A

7859

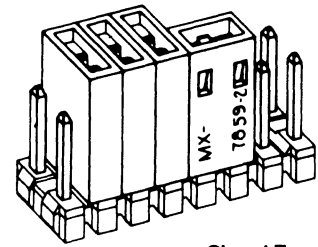
- **Mates with .100" grid male connectors:**
 - Dual or single row headers: e.g. 8624 & 70343
 - .025" square and round wire pins: e.g. 4166
- **Easily applied** — no soldering
- **Reliable** — no accidental disconnects
- **Low cost alternative to DIP switches**
- Increases current flow & decreases resistance vs. DIP switches
- **Dual beam terminals:** 2 points of contact per pin
- **Open and closed top** versions
- Closed top prevents upside down mating
- **Stackable** end-to-end and side-to-side

Dimensions and Specifications

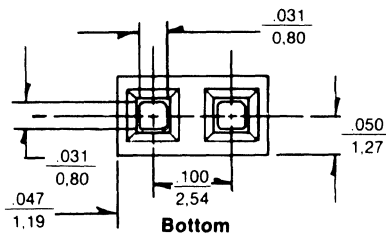
- Terminal Material:** Phosphor Bronze
- Plating:** .000030" (0,00076) or .000015" (0,00063) min. gold in critical area with .000050 nickel underplate. Or minimum .000200" bright acid tin
- Housing:** Glass filled polyester. U.L. recognized 94V-0
- Contact Resistance:** 15 milliohms maximum (gold)
- Current Rating:** 2 amps at 30°C rise over ambient



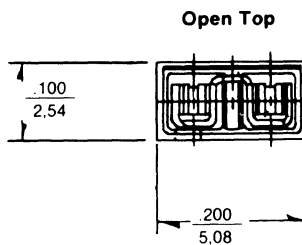
Open Top



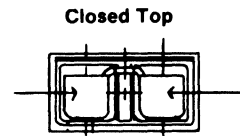
Closed Top



Bottom

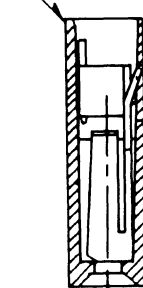


Open Top



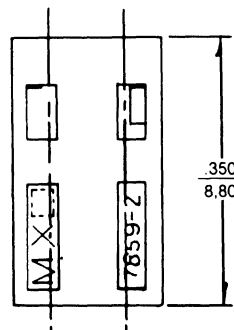
Closed Top

Housing



7859-2
Open Top

.025/0.64 round or square wire pin



7859-2A
Closed Top
Same as open top except as shown

.270" (6.86mm) max. insertion on closed top version

Ordering Information

Open Top		Closed Top	
Order No.	Plating	Order No.	Plating
• 15-29-1024	15 Microinches Gold	• 15-29-1025	15 Microinches Gold
• 15-29-1026	30 Microinches Gold	• 15-29-1027	30 Microinches Gold
• 15-38-1024	200 Microinches Tin	• 15-38-1026	200 Microinches Tin

• U.S. Standard Product, available through Molex franchised distributors.

.100" (2,54mm) Center Micro Shunt

A

90059 Series Low Profile Shunt

- .195" (4,95mm) max. high
 - **Mates with .025" (0,64mm) pins, min. length .177" (4,50mm) and .100" (2,54mm) center dual and triple row headers: e.g. 90120, 90131, 5547, 5548, 8624**
 - Fully stackable
 - **Center probe hole** - For continuity testing and easy pull off
 - Color-coded housings for plating identification
 - Delivered on **break-off carrier strips** for easy handling (10 per strip)
 - Recommended to be applied after mating header is soldered
- 2) 200 microinches (5,0 μ m) minimum tin over 8 microinches (0,2 μ m) min. copper
 - 3) Pre-tinned 35 microinches (0,9 μ m) min.
 - 4) Gold 4 microinches (0,1 μ m) min. over 40 microinches (1,0 μ m) nickel min. overall

Electrical:

Current Rating - 3 amps (gold) at 30° rise over ambient; 1.5 amps (tin) at 30° rise over ambient

Test Voltage - 2000 V between adjacent terminals

Insulation Resistance - >2 x 10⁸ megohms

Contact Resistance - < 12 milliohms (gold); < 15 milliohms (tin)

Specifications

Material:

Housing - Glass filled polyester 94V-0

Terminal - Phosphor bronze

Plating:

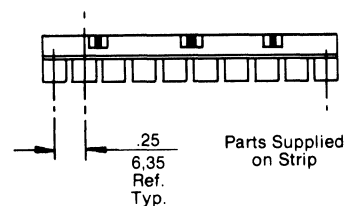
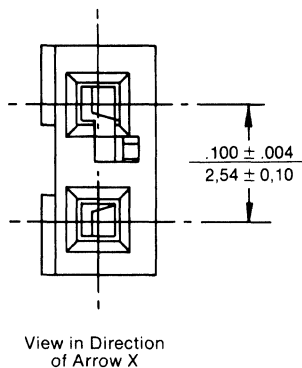
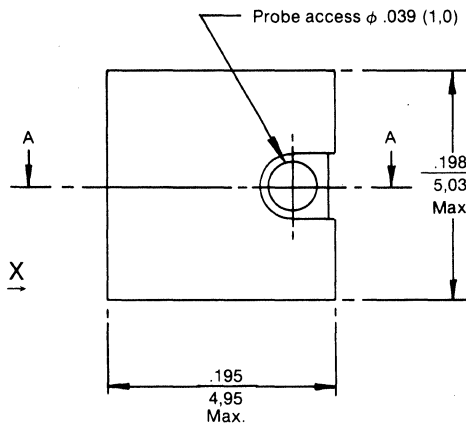
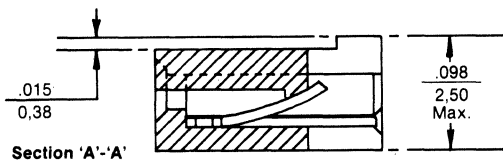
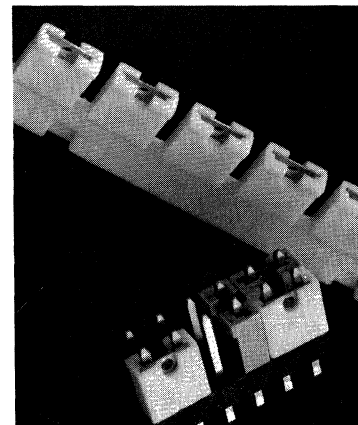
- 1) 15 microinches (0,38 μ m) gold in contact area over 30 microinches (0,76 μ m) nickel with gold flash overall

Mechanical:

Durability - 50 cycles gold; 20 cycles tin

Engagement Force - 7 N max.

Disengagement Force - 0.3N (gold) min.; 0.5N (tin) min.



Ordering Information 90059

Plating No.	Order No.	Color
1	● 90059-0009*	White
2	● 90059-0007*	Black
3	90059-0013	Black
4	90059-0014	White

● U.S. Standard Product, available through Molex franchised distributors
*Preferred version in Europe/Americas

Header for Micro Shunt, .100" (2,54 mm) Grid



A

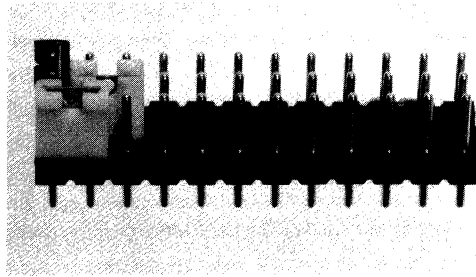
5547 Dual Row 5548 Triple Row

- Mates with 90059 micro shunt
- Low profile
- Mating pin length .177" (4,5mm)
- Tin or gold plated round wire pins
- Breakaway to smaller circuit sizes

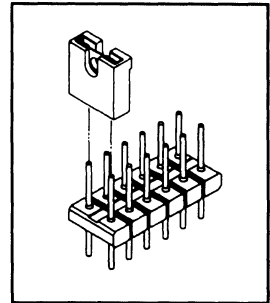
Specifications

Posts -

1. 4.0 microinches min. gold over 40 microinches min. nickel
2. 120 microinches min. tin over 80 microinches min. copper

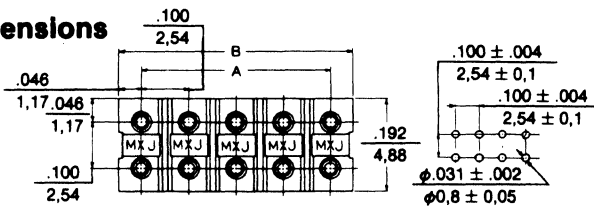


Triple Row 5548

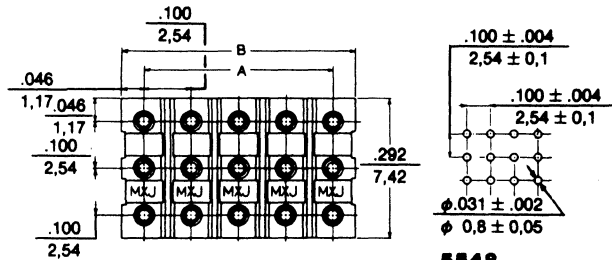
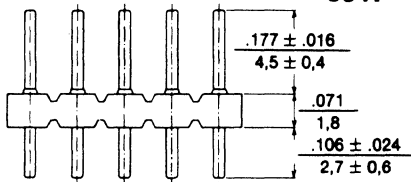


Dual Row 5547

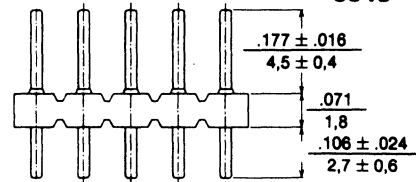
Dimensions



5547



5548



Dimensions

5547 - Dual Row						5548 - Triple Row														
Ckts.	Dim. A	Dim. B	Ckts.	Dim. A	Dim. B	Ckts.	Dim. A	Dim. B	Ckts.	Dim. A	Dim. B	Ckts.	Dim. A	Dim. B	Ckts.	Dim. A	Dim. B			
4	.100 2,54	.192 4,88	12	.500 12,70	.592 15,04	20	.900 22,86	.982 25,20	28	1.300 33,02	1.392 35,36	9	.200 5,08	.292 7,42	21	.600 15,24	.692 17,58	30	.900 22,86	.992 25,20
6	.200 5,08	.292 7,42	14	.600 15,24	.692 17,58	22	1.000 25,40	1.092 27,74	30	1.400 35,56	1.492 37,90	12	.300 7,62	.392 9,96	24	.700 17,78	.792 20,12	33	1.000 25,40	1.092 27,74
8	.300 7,62	.392 9,96	16	.700 17,78	.792 20,12	24	1.100 27,94	1.192 30,28	32	1.500 38,10	1.592 40,44	15	.400 10,16	.492 12,50	27	.800 20,32	.892 22,66	36	1.100 27,94	1.192 30,28
10	.400 10,16	.492 12,50	18	.800 20,32	.892 22,66	26	1.200 30,48	1.292 32,82	34	1.600 40,64	1.692 42,98	18	.500 12,70	.592 15,04						

Ordering Information

5547 - Dual Row						5548 - Triple Row					
Circuits	Gold Order No.	Tin Order No.	Circuits	Gold Order No.	Tin Order No.	Circuits	Gold Order No.	Tin Order No.	Circuits	Gold Order No.	Tin Order No.
4	5547-04AG1	5547-04A	20	5547-20AG1	5547-20A	9	5548-09AG1	5548-09A			
6	5547-06AG1	5547-06A	22	5547-22AG1	5547-22A	12	5548-12AG1	5548-12A			
8	5547-08AG1	5547-08A	24	5547-24AG1	5547-24A	15	5548-15AG1	5548-15A			
10	5547-10AG1	5547-10A	26	5547-26AG1	5547-26A	18	5548-18AG1	5548-18A			
12	5547-12AG1	5547-12A	28	5547-28AG1	5547-28A	21	5548-21AG1	5548-21A			
14	5547-14AG1	5547-14A	30	5547-30AG1	5547-30A	24	5548-24AG1	5548-24A			
16	5547-16AG1	5547-16A	32	5547-32AG1	5547-32A	27	5548-27AG1	5548-27A			
18	5547-18AG1	5547-18A	34	5547-34AG1	5547-34A	30	5548-30AG1	5548-30A			
						33	5548-33AG1	5548-33A			
						36	5548-36AG1	5548-36A			

Board Mount Receptacle Specifications



A

Single Row

Specifications

Terminal Material:

Copper alloy

Insulation Material:

Glass filled polyester, UL 94V-0, black

Plating:

.000015" min. select gold over .000050" min. nickel with .000160" min. tin/lead (60/40) on P.C. tail area.

.000030" min. select gold over .000050" min. nickel with .000060" min. tin/lead (60/40) on P.C. tail area.

.000160" min. pre-plated hot dip tin/lead (60/40).

UL Listed, CSA Certified

Current Rating:

2.5 Amps (DC) at 30°C rise over ambient (3 Amps, limited circuits)

Operating Temperature:

-55°C to +125°C

Recommended Pin Length:

.222" (5,65 mm) min.; .275" (7,0 mm) max.

Dual Row

Specifications

Mating Pin Length (Insertion Depth):

Minimum .200"; Maximum .240"

Terminal Material:

Phosphor bronze

Plating:

.000015" min. gold over .000050" min. nickel with .000075" min. electro-tin plate on P.C. tail area.

.000030" min. gold plate over .000050" min. nickel with .000075" min. electro-tin plate on P.C. tail area.

.000200" min. electro-tin plate over .000100" min. copper plate

UL Listed, CSA Certified

Housing:

Glass filled polyester 94V-0 UL rated

Contact Resistance:

15 milliohms max.

Temperature Range:

-40°C to +105°C

Current Rating:

2.5 amperes max. full connectors @ 30°C temperature rise. (3.0 amperes limited circuits)

Single and Dual Row Board Mount Receptacle specifications apply to Molex Eng. Series

90147	70191
90148	70192
70181	70853
70182	70854
70851	7990
70852	7990-A

Single Row Straight Tail P.C. Board Connector



A

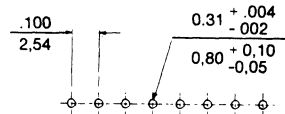
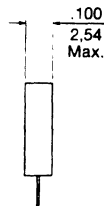
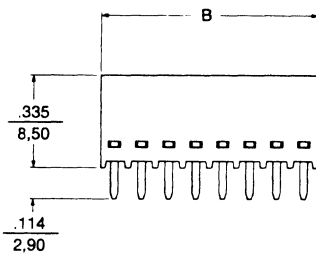
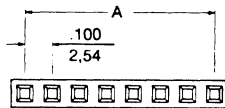
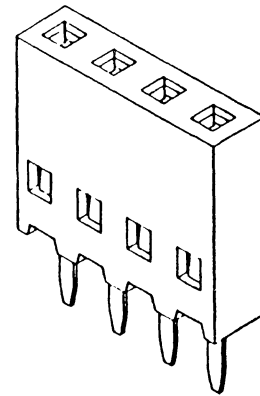
90147 Series Vertical Board-to-Board Connector

- Designed for parallel board stacking; also for PCB-to-harness and PCB-to-chassis connections
- 2 to 32 circuits
- **Mates** with .100" (2,54mm) grid male headers:
 - **Stackable** end-to-end and side-to-side
 - For .062" (1,57mm) thick P.C.B.
 - **Standoffs** facilitate post solder cleaning
 - **Contact orientation** to benefit consistent insertion/withdrawal forces

Dual & single row right angle & straight headers: e.g. 70343, 70344

Shrouded headers: e.g. 70374, 70376

.025" (0,64mm) square wire pins: e.g. 4166



Recommended P.C. Board Hole Layout



Universal Polarizing Pin

Order No. 15-04-0292

Can be used with or without terminal on housing

Dimensions 90147

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
2	.100 2,54	.200 5,08	3	.200 5,08	.300 7,62

*For circuit sizes 4 through 32 add .100" or 2,54mm for each additional pin position

Ordering Information 90147

PLATING OPTION	Order No.
15 microinches min. select gold	90147-12XX
30 microinches min. select gold	90147-13XX
160 microinches min. tin	90147-11XX

To order: Replace XX with number of circuits, 02-32

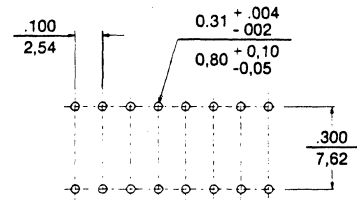
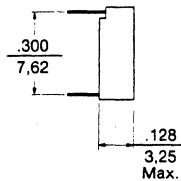
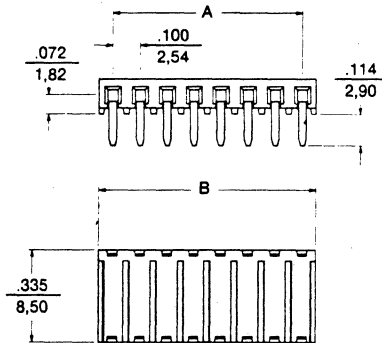
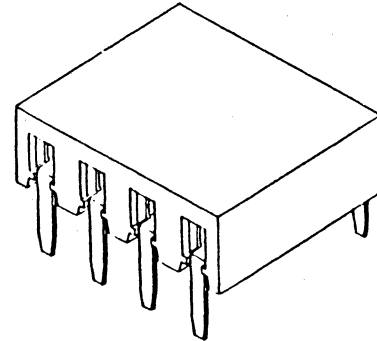
Single Row Right Angle P.C. Board Connector



A

90148 Series Horizontal Board-to-Board Connector

- Designed for perpendicular board stacking
- 2 to 32 circuits
- **Mates** with .100" grid male headers:
 - Single row right angle & straight headers: e.g. 70343, 70344
 - .025" square wire pins: e.g. 4166
- **Stackable** end-to-end
- **For .062" (1,57mm) thick P.C.B.**
- **One row of P.C. tails slightly longer to aid board insertion**
- **Standoffs** facilitate post solder cleaning
- **Contact orientation** benefits consistent insertion/withdrawal forces



Recommended P.C. Board Hole Pattern



Universal Polarizing Pin

Order No. 15-04-0292

Can be used with or without terminal in housing

Dimensions 90148

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
2	.100 2,54	.200 5,08	3	.200 5,08	.300 7,62
*For circuit sizes 4 through 32 add .100" or 2,54mm for each additional pin position					

Ordering Information 90148

PLATING OPTION	Order No.
15 microinches min. select gold	90148-12XX
30 microinches min. select gold	90148-13XX
160 microinches min. tin	90148-11XX
To order: Replace XX with number of circuits, 02-32	

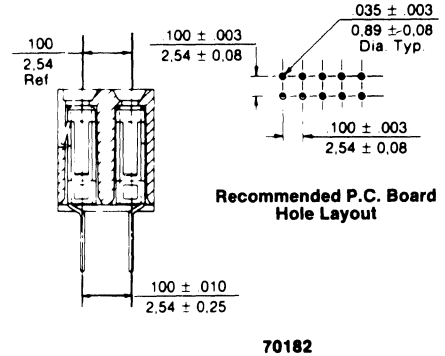
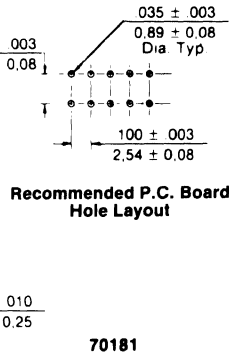
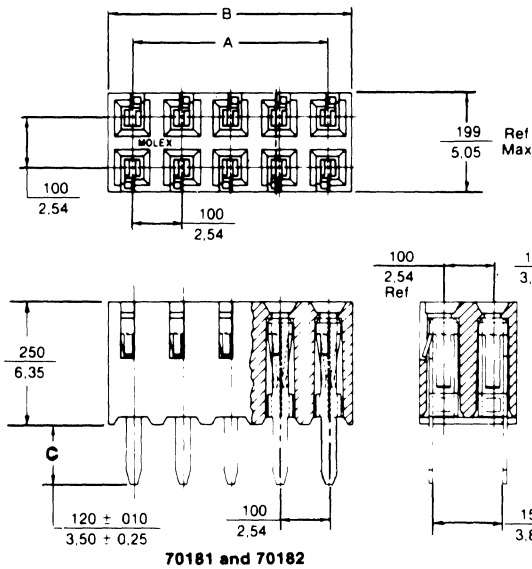
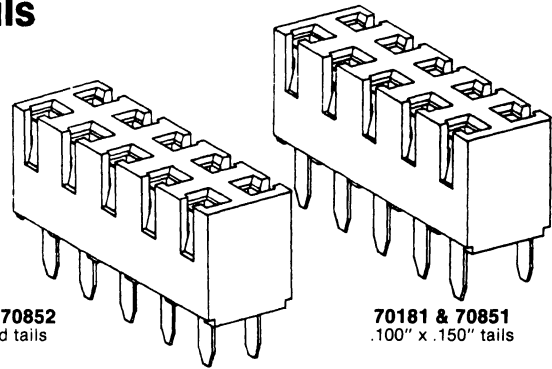
Dual Row Vertical Mount PCB Connectors (Low Profile)



A

70181 & 70851 .100" x .150" P.C. Tail Grid 70182 & 70852 .100" Grid P.C. Tails .100" Grid Mating End

- **Low profile: .250" high**
- Designed for parallel and perpendicular board stacking; also for PCB-to-harness and PCB-to-chassis connections
- **.050" solder tail** (70851 & 70852) ideal for thinner substrates: membrane switch and flex circuitry
- **Mates with .100" grid male headers:**
 - **Stackable end-to-end and side-to-side on .100" grid**
 - **Double-wipe box contact**
 - **Circuit sizes 4-80**
 - **Standoffs** facilitate post solder cleaning
- **Dual row, right angle and straight headers:** e.g. 70203 & 8624
- **Shrouded headers:** e.g. 8723, 70299
- **.025" square and round wire pins:** e.g. 4166



Universal Polarizing Pin
Order No. 15-04-0292
Can be used with or without terminal in housing

Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.199 5,05	6	.200 5,08	.299 7,59

*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position

Ordering Information

	70181	70182	70851	70852
P.C. Tail Grid	.100" x .150" (2,54 x 3,81)	.100" x .100" (2,54 x 2,54)	.100" x .150" (2,54 x 3,81)	.100" x .100" (2,54 x 2,54)
P.C. Tail Length Dim. C	.120" (3,50)	.120" (3,50)	.050" (1,27)	.050" (1,27)
PLATING OPTIONS	Order No.	Order No.	Order No.	Order No.
15 microinches min. select gold	• 15-44-37XX	• 15-44-36XX	15-47-60XX	15-47-61XX
30 microinches min. select gold	• 15-44-40XX	• 15-44-41XX	15-47-67XX	15-47-68XX
200 microinches overall tin	• 15-45-08XX	• 15-45-09XX	15-45-40XX	15-45-41XX
	To order: Replace XX with number of circuits per row (02-40) Example: 20 circuit = 15-44-3710.		To order: Replace XX with total number of circuits, (04-80). Example: 20 circuit = 15-47-6020.	

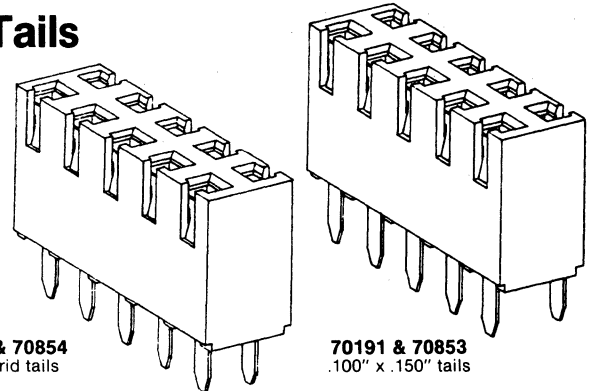
• U.S. Standard Product, available through Molex franchised distributors.

Dual Row Vertical Mount PCB Connectors

A

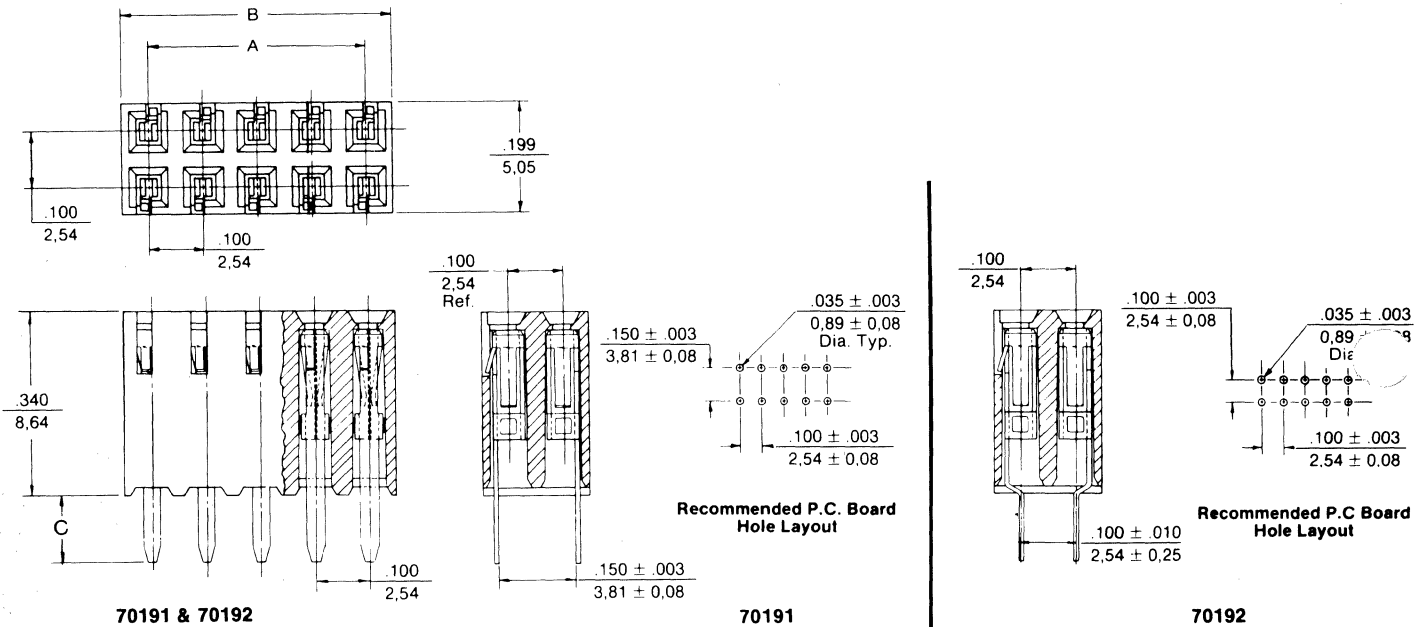
70191 & 70853 .100" x .150" P.C. Tail Grid 70192 & 70854 .100" Grid P.C. Tails .100" Grid Mating End

- High profile; .340" high
- Other features same as 70181, 70182, 70851 & 70852, page 00A



70192 & 70854
.100" grid tails

70191 & 70853
.100" x .150" tails



Universal Polarizing Pin
Order No. 15-04-0292
Can be used with or without terminal in housing

Dimensions

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
4	.100 2,54	.199 5,05	6	.200 5,08	.299 7,59

*For circuit sizes 8 through 80 add .100" or 2,54mm for each additional pin position

Ordering Information

	70191	70192	70853	70854
P.C. Tail Grid	.100" x .150" (2,54 x 3,81)	.100" x .100" (2,54 x 2,54)	.100" x .150" (2,54 x 3,81)	.100" x .100" (2,54 x 2,54)
P.C. Tail Length Dim. C	.120" (3,50)	.120" (3,50)	.050" (1,27)	.050" (1,27)
PLATING OPTIONS	Order No.	Order No.	Order No.	Order No.
15 microinches min. select gold	• 15-44-33XX	• 15-44-32XX	15-47-65XX	15-47-66XX
30 microinches min. select gold	• 15-44-44XX	• 15-44-45XX	15-47-69XX	15-47-70XX
200 microinches overall tin	• 15-45-12XX	• 15-45-13XX	15-45-42XX	15-45-43XX
	To order: Replace XX with number of circuits per row (02-40) Example: 20 circuit = 15-44-3310.		To order: Replace XX with total number of circuits, (04-80). Example: 20 circuit = 15-47-6520.	

• U.S. Standard Product, available through Molex franchised distributors.

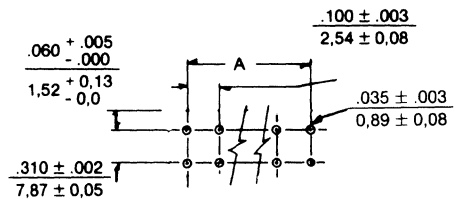
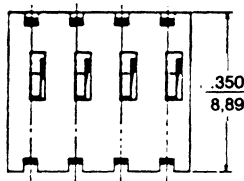
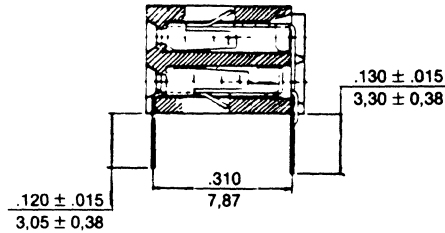
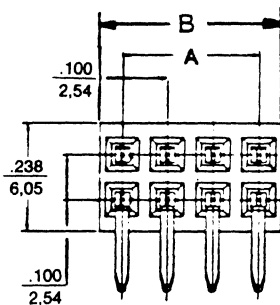
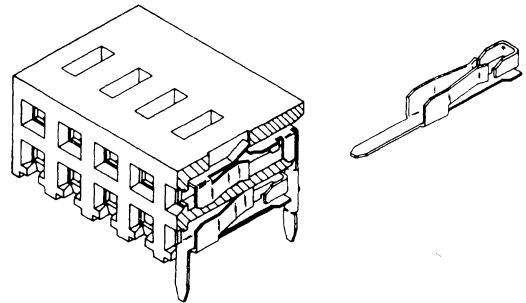
Dual Row Horizontal Board-to-Board Connector



A

7990

- Designed for perpendicular board stacking
- **Mates with .100" grid male headers:**
 - Dual and single row straight and right angle headers: e.g. 70203 & 8624
 - .025" square and round wire pins: e.g. 4166
- **Stackable** end-to-end
- **Staggered mating depth** to lower initial insertion force
- **Back row of P.C. tails slightly longer** to ease board loading
- **Positive pin stop** to prevent shorting between rows
- P.C. tails locked into housing
- **Circuit sizes 8-130**



Recommended P.C. Board Hole Layout

Universal Polarizing Pin
Order No. 15-04-0292
Can be used with or without terminal in housing

In the Far East this product has different Eng. Nos. and Order Nos. Contact factory for sales drawings on 70057-XXXX.

Dimensions 7990

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
8	.300 7,62	.399 10,13	10	.400 10,16	.499 12,67

*For circuit sizes 12 through 130 add .100" or 2,54mm for each additional pin position

Ordering Information 7990

PLATING OPTION	Order No.
30 microinches min. select gold	• 15-29-5XXX
200 microinches min. overall tin	• 15-38-2XXX

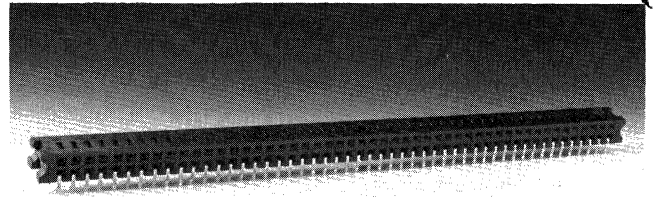
To order: Replace XXX with number of circuits, 008-130

• U.S. Standard Product, available through Molex franchised distributors.

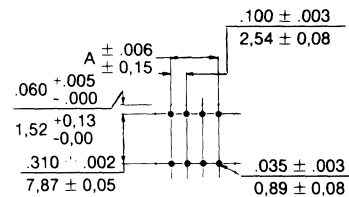
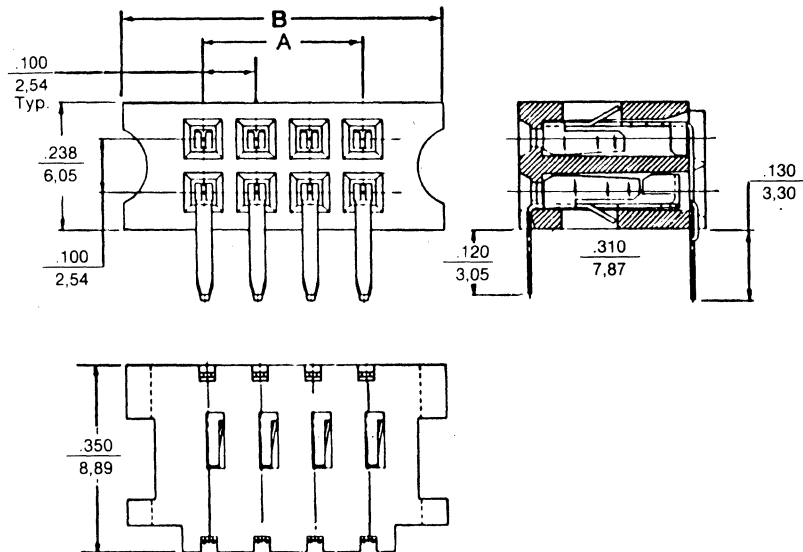
Dual Row Horizontal Board-to-Board Connector

A

7990-NA



- **Mates** with .100" grid male headers with guide ears: 70204
 - Industry standard shrouded headers with ribs that correspond to the polarization slots
- **Polarization slots** guide connector over mating pins
- **Back row of PC tails slightly longer** to ease board loading
- **Staggered mating depth** of contact lowers initial mating force
- **Pin stop** prevents shorting between rows
- **Circuit sizes** 4-130*
- **Automatable** placement on PC board



Recommended P.C. Board Hole Layout

Universal Polarizing Pin
Order No. 15-04-0292
Can be used with or without terminal in housing

Dimensions 7990-NA

Circuits	Dim. A*	Dim. B*	Circuits	Dim. A*	Dim. B*
8	.300 7,62	.600 15,24	10	.400 10,16	.700 17,78

*For circuit sizes 12 through 130 add .100" or 2,54mm for each additional pin position

Ordering Information 7990-NA

PLATING OPTION	Order No.
30 microinches min. select gold	• 15-44-6XXX
200 microinches min. overall tin	• 15-38-3XXX

To order: Replace XXX with number of circuits, 004-128

*Note: For 130 circuit part see Eng. Series 70057
• U.S. Standard Product, available through Molex franchised distributors.

Dual Row Surface Mount Straight Pin Header



A

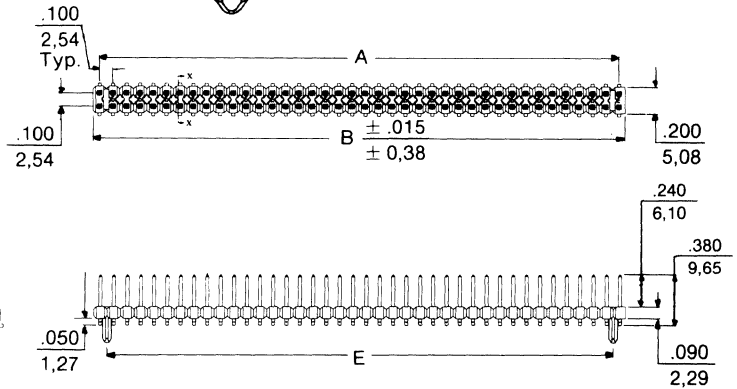
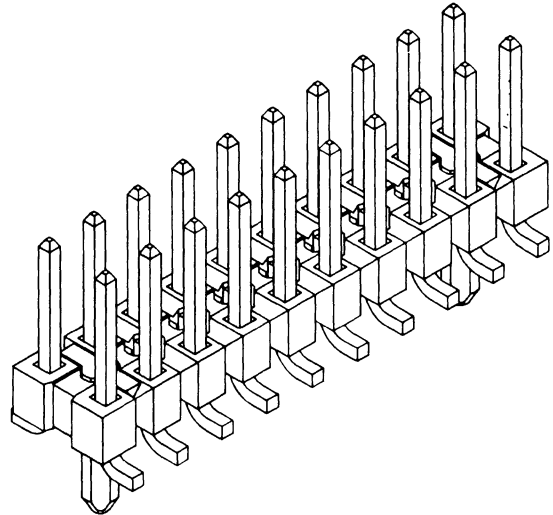
71308 Series

- Available with or without retention pegs
 - Gull wing surface mount tails
 - Vapor phase / IR reflow process compatible
 - Breakaway style housing
 - Stackable side-to-side and end-to-end (on unbroken edges)
 - Standoffs facilitate post-solder cleaning
 - Drawn .025 square wire provides 4-sided smooth interface
 - Mates with female connectors on .100" grid
- Single and dual row PCB connectors: e.g. 70192, 7990, 71395
- Single row insulation displacement connectors: e.g. 70400-A
- Ribbon cable connectors: e.g. 40312
- Flat flexible cable connectors: e.g. 70430-A, 40556
- Shunts: e.g. 7859, 90059

Current Rating: 2.5 amps (DC)
max. full connectors at 30°C temperature rise

Contact Resistance: 15 milliohms max.

Soldering Recommendations:
Solder Paste - 62 Sn/36 Pb/2 Ag
Screened Paste Thickness - .010" to .015"
Primary Vapor Zone Time (Vapor Phase 215°C) - 20 to 30 sec.
Secondary Zone Time - 45 sec.
Cleaning Solvent - Freon TMC or TMS (ultrasonic)



Specifications

Insulator Material: Glass filled LCP, UL 94V-0 black

Terminal Material: Brass Alloy

Plating:

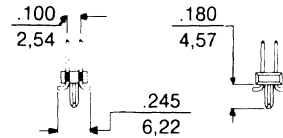
Plating 1) .000200 min. electro-tin over .000100 copper

Plating 2) .000015 min. gold in selective area over .000050 min. nickel overall

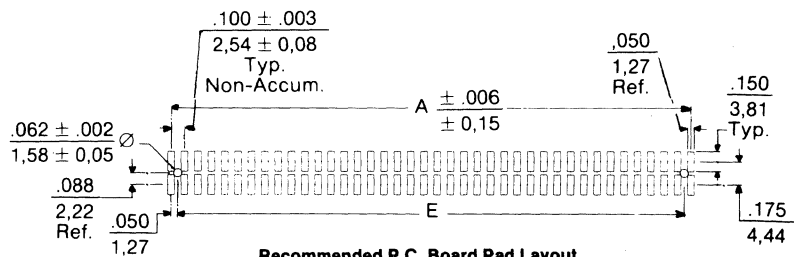
Plating 3) .000030 min. gold in selective area over .000050 min. nickel overall

Operating Temperature Range:

-40°C to +105; +215°C intermittent (vapor phase)



SECTION X-X



Recommended P.C. Board Pad Layout

Dimensions

Circuits	Dim. A*	Dim. B*	Dim. E*	Circuits	Dim. A*	Dim. B*	Dim. E*
4	.100 2,54	.190 4,83	—	6	.200 5,08	.290 7,37	.100 2,54

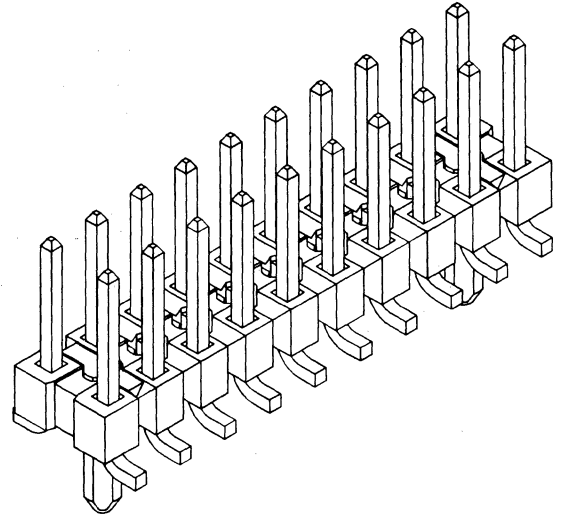
* For circuit sizes 8 through 80 add .100" or 2,54 for each additional pin position

Dual Row Surface Mount Straight Pin Header



A

71308 Series



Version with Pegs Shown

Ordering Information — Version with PCB Retention Pegs

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
22	15-91-1222	52	15-91-1522	22	15-91-1223	52	15-91-1523	22	15-91-1221	52	15-91-1521
24	15-91-1242	54	15-91-1542	24	15-91-1243	54	15-91-1543	24	15-91-1241	54	15-91-1541
26	15-91-1262	56	15-91-1562	26	15-91-1263	56	15-91-1563	26	15-91-1261	56	15-91-1561
28	15-91-1282	58	15-91-1582	28	15-91-1283	58	15-91-1583	28	15-91-1281	58	15-91-1581
30	15-91-1302	60	15-91-1602	30	15-91-1303	60	15-91-1603	30	15-91-1301	60	15-91-1601
32	15-91-1322	62	15-91-1622	32	15-91-1323	62	15-91-1623	32	15-91-1321	62	15-91-1621
34	15-91-1342	64	15-91-1642	34	15-91-1343	64	15-91-1643	34	15-91-1341	64	15-91-1641
36	15-91-1362	66	15-91-1662	36	15-91-1363	66	15-91-1663	36	15-91-1361	66	15-91-1661
38	15-91-1382	68	15-91-1682	38	15-91-1383	68	15-91-1683	38	15-91-1381	68	15-91-1681
40	15-91-1402	70	15-91-1702	40	15-91-1403	70	15-91-1703	40	15-91-1401	70	15-91-1701
42	15-91-1422	72	15-91-1722	42	15-91-1423	72	15-91-1723	42	15-91-1421	72	15-91-1721
44	15-91-1442	74	15-91-1742	44	15-91-1443	74	15-91-1743	44	15-91-1441	74	15-91-1741
46	15-91-1462	76	15-91-1762	46	15-91-1463	76	15-91-1763	46	15-91-1461	76	15-91-1761
48	15-91-1482	78	15-91-1782	48	15-91-1483	78	15-91-1783	48	15-91-1481	78	15-91-1781
50	15-91-1502	80	15-91-1802	50	15-91-1503	80	15-91-1803	50	15-91-1501	80	15-91-1801

Contact factory or order circuits sizes 4 through 20.

Ordering Information — Version without Pegs

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	15-91-0040	44	15-91-0440	4	15-91-3040	44	15-91-3440	4	15-91-2040	44	15-91-2440
6	15-91-0060	46	15-91-0460	6	15-91-3060	46	15-91-3460	6	15-91-2060	46	15-91-2460
8	15-91-0080	48	15-91-0480	8	15-91-3080	48	15-91-3480	8	15-91-2080	48	15-91-2480
10	15-91-0100	50	15-91-0500	10	15-91-3100	50	15-91-3500	10	15-91-2100	50	15-91-2500
12	15-91-0120	52	15-91-0520	12	15-91-3120	52	15-91-3520	12	15-91-2120	52	15-91-2520
14	15-91-0140	54	15-91-0540	14	15-91-3140	54	15-91-3540	14	15-91-2140	54	15-91-2540
16	15-91-0160	56	15-91-0560	16	15-91-3160	56	15-91-3560	16	15-91-2160	56	15-91-2560
18	15-91-0180	58	15-91-0580	18	15-91-3180	58	15-91-3580	18	15-91-2180	58	15-91-2580
20	15-91-0200	60	15-91-0600	20	15-91-3200	60	15-91-3600	20	15-91-2200	60	15-91-2600
22	15-91-0220	62	15-91-0620	22	15-91-3220	62	15-91-3620	22	15-91-2220	62	15-91-2620
24	15-91-0240	64	15-91-0640	24	15-91-3240	64	15-91-3640	24	15-91-2240	64	15-91-2640
26	15-91-0260	66	15-91-0660	26	15-91-3260	66	15-91-3660	26	15-91-2260	66	15-91-2660
28	15-91-0280	68	15-91-0680	28	15-91-3280	68	15-91-3680	28	15-91-2280	68	15-91-2680
30	15-91-0300	70	15-91-0700	30	15-91-3300	70	15-91-3700	30	15-91-2300	70	15-91-2700
32	15-91-0320	72	15-91-0720	32	15-91-3320	72	15-91-3720	32	15-91-2320	72	15-91-2720
34	15-91-0340	74	15-91-0740	34	15-91-3340	74	15-91-3740	34	15-91-2340	74	15-91-2740
36	15-91-0360	76	15-91-0760	36	15-91-3360	76	15-91-3760	36	15-91-2360	76	15-91-2760
38	15-91-0380	78	15-91-0780	38	15-91-3380	78	15-91-3780	38	15-91-2380	78	15-91-2780
40	15-91-0400	80	15-91-0800	40	15-91-3400	80	15-91-3800	40	15-91-2400	80	15-91-2800
42	15-91-0420			42	15-91-3420			42	15-91-2420		

Surface Mount Vertical Dual Row PCB Connectors



A

71395 Series

- Available with or without retention pegs
- Gull wing surface mount tails
- Vapor phase/IR reflow process compatible
- High profile; .340" high
- Designed for parallel and perpendicular board stacking; also for PCB-to-harness and PCB-to-chassis connections
- Mates with .100" grid male headers:
 - Dual row right angle and straight headers: e.g. 70203, 8624 & 71308
 - Shrouded headers: e.g. 8723, 70299
 - .025" square and round wire pins: e.g. 4166
- Stackable end-to-end and side-to-side on .100" grid
- Double wipe box contact
- Standoffs facilitate post-solder cleaning

Contact Resistance: 15 milliohms max.

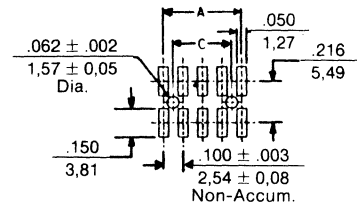
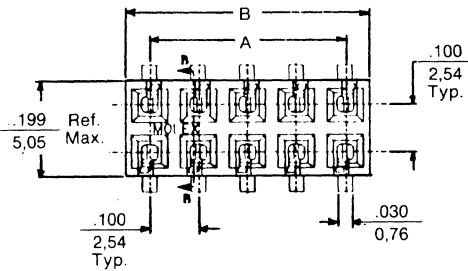
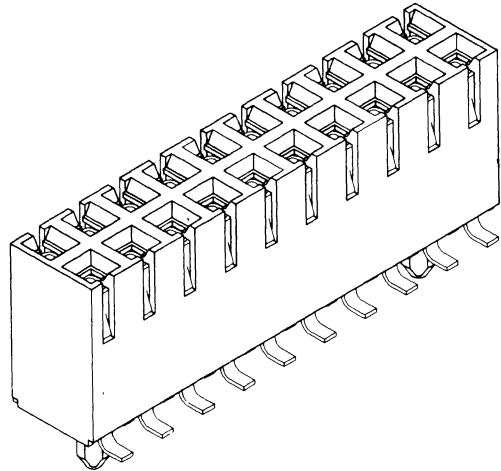
Soldering Recommendations:

Solder Paste - 62 Sn/36 Pb/2 Ag
Screened Paste Thickness -.010" to .015"

Primary Vapor Zone Dwell (Vapor Phase 215°C) 20 to 30 sec.

Secondary Vapor Zone Dwell - 45 sec.

Cleaning Solvent - Freon TMC or TMS (Ultrasonic)



Recommended P.C. Board Layout

Specifications

Housing Material: Glass filled LCP, UL 94V-0 Black

Terminal Material: Phosphor bronze

Plating:

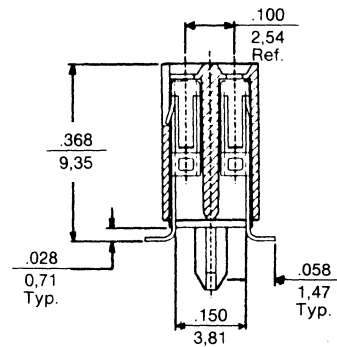
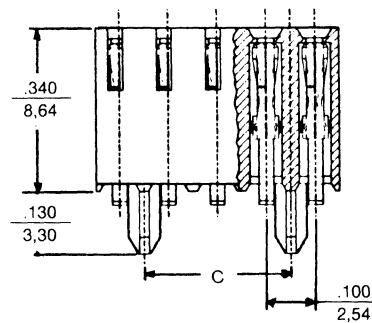
Plating 1) .000200 min. electro-tin over .000100 min. copper

Plating 2) .000015 min. gold in selective area over .000050 min. nickel overall

Plating 3) .000030 min. gold in selective area over .000050 min. nickel overall

Operating Temperature Range: -40°C to 105°C; +215°C intermittent (vapor phase)

Current Rating: 2.5 amps (DC) max. full connectors at 30°C rise



SECTION B-B

Dimensions

Circuits	Dim. A*	Dim. B*	Dim. C*	Circuits	Dim. A*	Dim. B*	Dim. C*
8	.300 7,62	.399 10,13	.200 5,08	10	.400 10,16	.499 12,67	.300 7,62

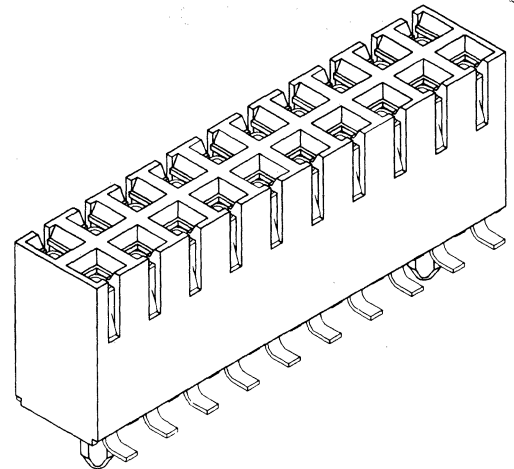
* For circuit sizes 12 through 80 add .100" or 2,54 for each additional pin position

Surface Mount Vertical Dual Row PCB Connectors



A

71395 Series



Version with Pegs Shown

Ordering Information — Version with PCB Retention Pegs

PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
8	15-45-3508	46	15-45-3546	8	15-45-3608	46	15-45-3646	8	15-45-3408	46	15-45-3446
10	15-45-3510	48	15-45-3548	10	15-45-3610	48	15-45-3648	10	15-45-3410	48	15-45-3448
12	15-45-3512	50	15-45-3550	12	15-45-3612	50	15-45-3650	12	15-45-3412	50	15-45-3450
14	15-45-3514	52	15-45-3552	14	15-45-3614	52	15-45-3652	14	15-45-3414	52	15-45-3452
16	15-45-3516	54	15-45-3554	16	15-45-3616	54	15-45-3654	16	15-45-3416	54	15-45-3454
18	15-45-3518	56	15-45-3556	18	15-45-3618	56	15-45-3656	18	15-45-3418	56	15-45-3456
20	15-45-3520	58	15-45-3558	20	15-45-3620	58	15-45-3658	20	15-45-3420	58	15-45-3458
22	15-45-3522	60	15-45-3560	22	15-45-3622	60	15-45-3660	22	15-45-3422	60	15-45-3460
24	15-45-3524	62	15-45-3562	24	15-45-3624	62	15-45-3662	24	15-45-3424	62	15-45-3462
26	15-45-3526	64	15-45-3564	26	15-45-3626	64	15-45-3664	26	15-45-3426	64	15-45-3464
28	15-45-3528	66	15-45-3566	28	15-45-3628	66	15-45-3666	28	15-45-3428	66	15-45-3466
30	15-45-3530	68	15-45-3568	30	15-45-3630	68	15-45-3668	30	15-45-3430	68	15-45-3468
32	15-45-3532	70	15-45-3570	32	15-45-3632	70	15-45-3670	32	15-45-3432	70	15-45-3470
34	15-45-3534	72	15-45-3572	34	15-45-3634	72	15-45-3672	34	15-45-3434	72	15-45-3472
36	15-45-3536	74	15-45-3574	36	15-45-3636	74	15-45-3674	36	15-45-3436	74	15-45-3474
38	15-45-3538	76	15-45-3576	38	15-45-3638	76	15-45-3676	38	15-45-3438	76	15-45-3476
40	15-45-3540	78	15-45-3578	40	15-45-3640	78	15-45-3678	40	15-45-3440	78	15-45-3478
42	15-45-3542	80	15-45-3580	42	15-45-3642	80	15-45-3680	42	15-45-3442	80	15-45-3480
44	15-45-3544			44	15-45-3644			44	15-45-3444		

Ordering Information — Version without Pegs

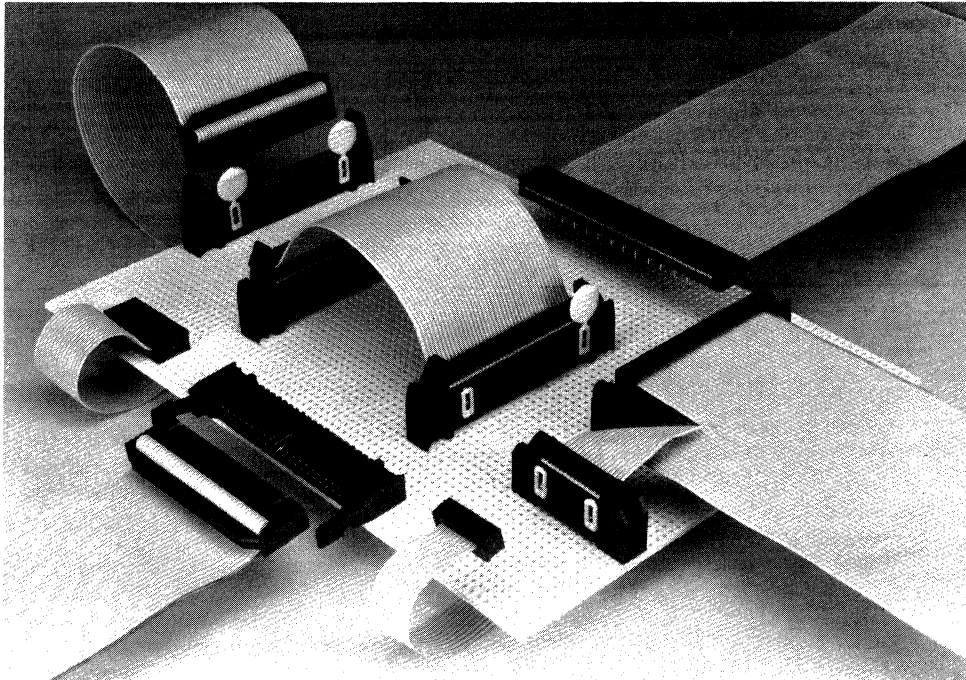
PLATING: 15 MICROINCHES MIN. GOLD				PLATING: 30 MICROINCHES MIN. GOLD				PLATING: 200 MICROINCHES ELECTRO-TIN			
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
8	15-45-3108	46	15-45-3146	8	15-45-3308	46	15-45-3346	8	15-45-3208	46	15-45-3246
10	15-45-3110	48	15-45-3148	10	15-45-3310	48	15-45-3348	10	15-45-3210	48	15-45-3248
12	15-45-3112	50	15-45-3150	12	15-45-3312	50	15-45-3350	12	15-45-3212	50	15-45-3250
14	15-45-3114	52	15-45-3152	14	15-45-3314	52	15-45-3352	14	15-45-3214	52	15-45-3252
16	15-45-3116	54	15-45-3154	16	15-45-3316	54	15-45-3354	16	15-45-3216	54	15-45-3254
18	15-45-3118	56	15-45-3156	18	15-45-3318	56	15-45-3356	18	15-45-3218	56	15-45-3256
20	15-45-3120	58	15-45-3158	20	15-45-3320	58	15-45-3358	20	15-45-3220	58	15-45-3258
22	15-45-3122	60	15-45-3160	22	15-45-3322	60	15-45-3360	22	15-45-3222	60	15-45-3260
24	15-45-3124	62	15-45-3162	24	15-45-3324	62	15-45-3362	24	15-45-3224	62	15-45-3262
26	15-45-3126	64	15-45-3164	26	15-45-3326	64	15-45-3364	26	15-45-3226	64	15-45-3264
28	15-45-3128	66	15-45-3166	28	15-45-3328	66	15-45-3366	28	15-45-3228	66	15-45-3266
30	15-45-3130	68	15-45-3168	30	15-45-3330	68	15-45-3368	30	15-45-3230	68	15-45-3268
32	15-45-3132	70	15-45-3170	32	15-45-3332	70	15-45-3370	32	15-45-3232	70	15-45-3270
34	15-45-3134	72	15-45-3172	34	15-45-3334	72	15-45-3372	34	15-45-3234	72	15-45-3272
36	15-45-3136	74	15-45-3174	36	15-45-3336	74	15-45-3374	36	15-45-3236	74	15-45-3274
38	15-45-3138	76	15-45-3176	38	15-45-3338	76	15-45-3376	38	15-45-3238	76	15-45-3276
40	15-45-3140	78	15-45-3178	40	15-45-3340	78	15-45-3378	40	15-45-3240	78	15-45-3278
42	15-45-3142	80	15-45-3180	42	15-45-3342	80	15-45-3380	42	15-45-3242	80	15-45-3280
44	15-45-3144			44	15-45-3344			44	15-45-3244		

.050" (1,27 mm) Center Ribbon Cable Connectors



Contents

B



Section I - MX 50 (MIL-SPEC)

*Designed specifically to meet MIL-SPEC polarization standards.
Low-cost single beam terminals; duplex plated.*

Introduction, Connector & Header	2B-3B
Connectors	4B-7B
Headers	8B-11B
Edge Card Connectors for .050" Center Cable	12B-15B

Section II - Qik-Flecs System

International design. Independent Japanese and Danish studies have proven this design to be far superior to any other of its type. Dual beam contact with four pierce points for insulation displacement termination; selectively gold or overall tin plated.

Contents	16B
Introduction	17B
Headers and Specifications	18B
Ribbon Cable Connectors, single polarization	19B
Strain Relief	20B
Printed Circuit Board Headers	21B-26B
Transition Type Connectors	27B-30B

Section III - DL 50™ System

Ribbon connector system conforming to CENTRONICS standard.

Contents	31B
Introduction	32B
Right Angle P.C.B. Mount Receptacle	33B
Straight P.C.B. Mount Receptacle	33B
I.D.T. Receptacle	34B
I.D.T. Plug	34B
Cover	34B

Section IV - DS50™ System

D-Sub connectors for IDT mass termination

Introduction	35B
Plug, Metal Shell	36B
Receptacle, Metal Shell	37B
Plug, Plastic Shell	38B
Receptacle, Plastic Shell	39B

MX 50 Ribbon Cable Connector System



B

Introduction

The Molex family of .050" ribbon cable insulation displacement connectors, mating connectors, accessories, and application equipment is used worldwide in all types of applications from large computers and PBX's to peripherals and process monitoring systems. Molex connectors combined with options in packaging and application equipment team up to provide the lowest applied cost possible. But we

haven't stopped innovating! If you don't see what you need in these catalog pages, call us. We may already have a new product to do just what you need. If not, we will be glad to discuss tooling up your request.

And let's not forget Molex product quality. SPC is used in all phases of production to provide our customers with product quality second to none.

Specifications

Housing:

94V-0 glass filled polyester, black color

Terminal:

Beryllium copper alloy

Plating Options:

- 1 - 15 microinches (0,38 microns) min. gold in contact area, 75 microinches (1,91 microns) min. 60/40 tin/lead in termination area, both over 50 microinches (1,27 microns) min. nickel underplate
2. 30 microinches (0,76 microns) min. gold in contact area, 75 microinches (1,91 microns) min. 60/40 tin/lead in termination area, both over 50 microinches (1,27 microns) min. nickel underplate
3. 200 microinches (3,08 microns) tin over 100 microinches (2,54 microns) copper underplate.

Cable Retention:

Per Mil Std 83503: Axial force of 25 lbs. min. per inch of cable width

Wire:

For use with 26 and 28 AWG stranded wire .045" (1,14 mm) max. insulation dia. ribbon cable. Molex 6800 Series ribbon cable recommended

Contact Resistance:

30 milliohms max.

Current Rating:

1 amp max. at 30°C rise

Dielectric Strength:

1000 V rms for 60 seconds min.

Insulation Resistance:

>5,000 megohms

Durability:

500 cycles

Insertion Force:

8 oz. per circuit max.

Withdrawal Force:

1.5 oz. per circuit min.

Mating Pin Length:

.220" (5,58) min.
.310 (7,87) max.

Header Pin Retention:

7 lbs. (3,18 kg) min.

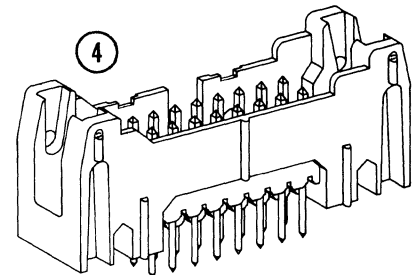
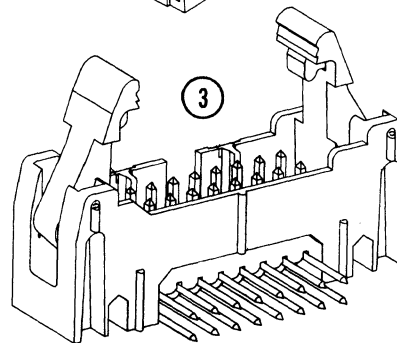
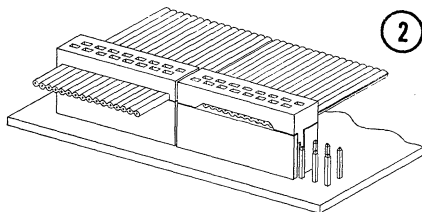
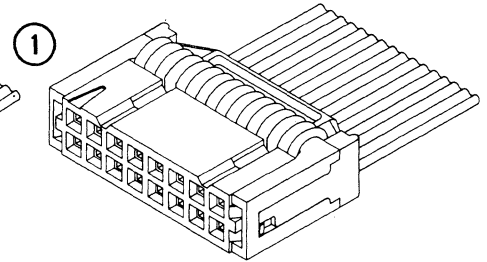
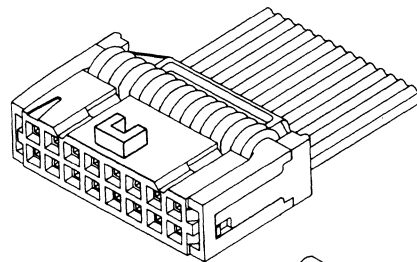
Operating Temperature:

-40°C - 105°C

UL Listed; CSA Certified

① Connector mates with:

1. .025 (0,64mm) square or round pins assembled directly into P.C. board
2. Unshrouded dual row header
3. Molex shrouded dual row header with molded in polarizing rib (straight or right angle)
4. Molex shrouded dual row header with optional polarizing key



② Connector mates with:

1. .025 (0,64mm) square or round pins assembled directly into P.C. board
2. Unshrouded dual row header

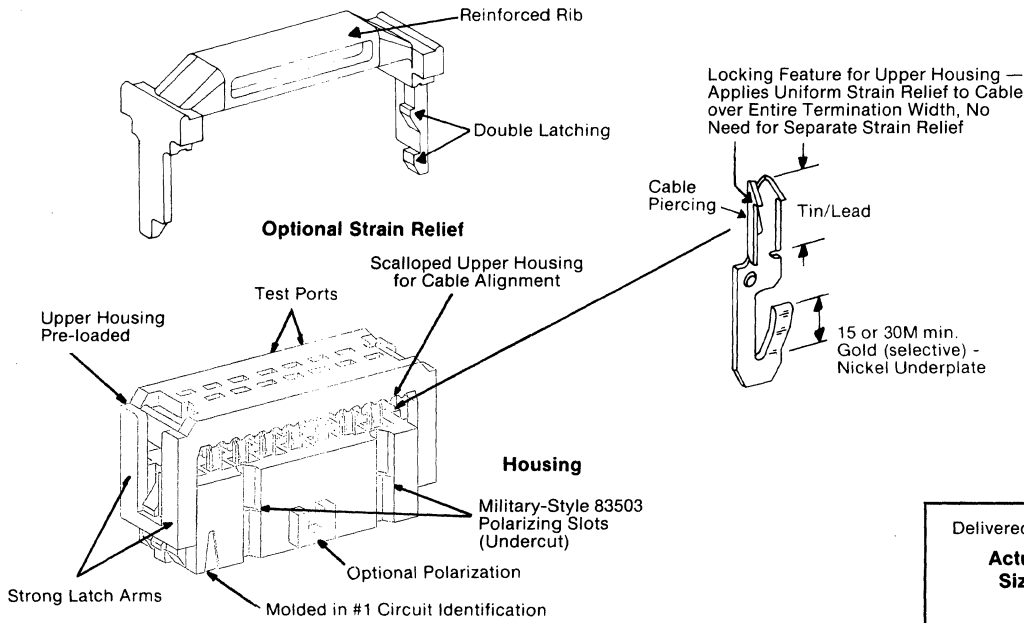
Application Tooling - See Section M, this catalog, for Ribbon Cable Terminator Handgun, Arbor Press and Semi-Automatic Terminator and full automatic cable maker.

Standard MX 50 Interconnection System



B

MX 50 Connector Features



Delivered on a carrier with 20 pieces per strip.

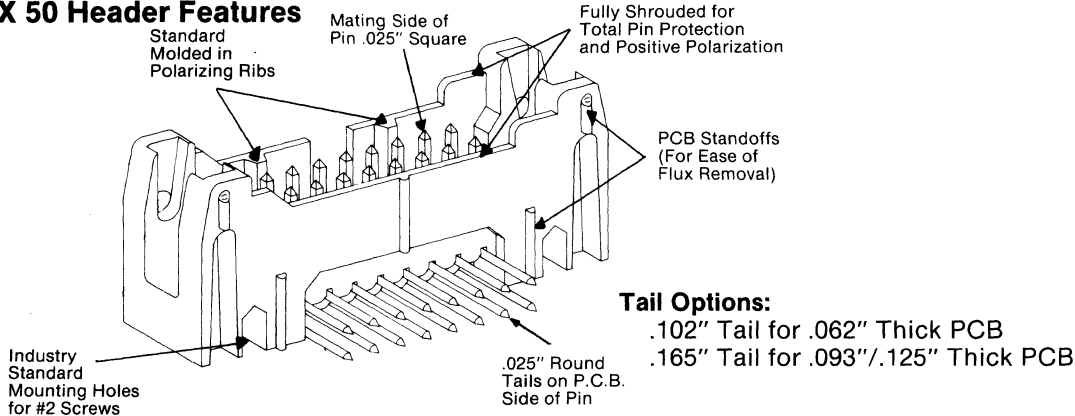
Actual Size



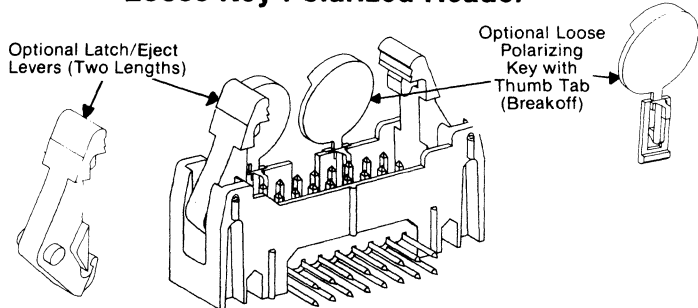
Universal Polarizing Pin 40713-1

Order No. 15-04-0292

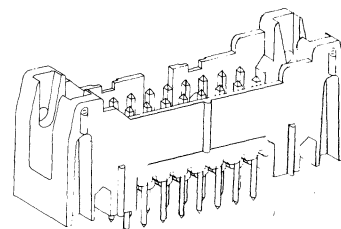
MX 50 Header Features



Loose Key Polarized Header



Non-Polarized, Straight Tail Version



MX 50 Ribbon Cable Connector System



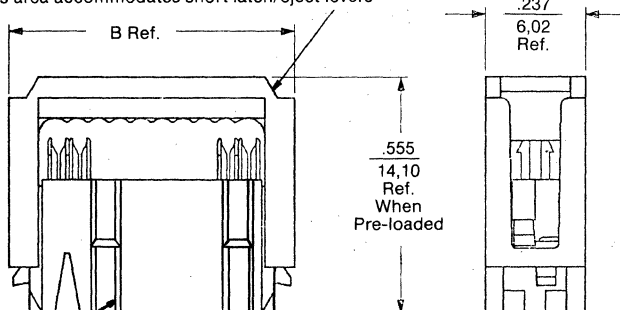
B

40312 Series Connector IDT Terminal .050" (1,27 mm) Centers for Dual Row .100" (2,54 mm) Grid

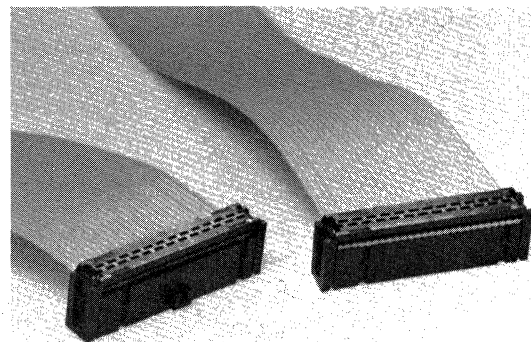
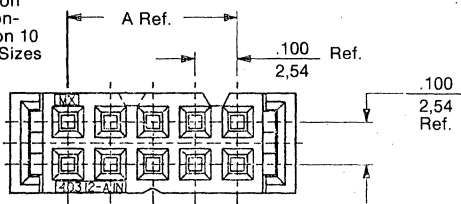
- Designed to mate with industry standard headers utilizing short latch/eject levers
- Shipped with upper housing preloaded in convenient plastic tubes for ease of termination and handling
- Circuit sizes 10, 14, 16, 20, 24, 26, 28, 30, 34, 36, 40, 44, 50, 60 and 64
- Accepts AWG 26 or 28 stranded tinned and 28 AWG topcoated wire
- Chamfered pin lead ins
- Various packaging options for ease of termination and handling. Packaging also available for Molex AM63200 Shields® 921 and Shields 805
- Duplex plated
- Optional strain relief
- Terminates .050" (1,27mm) center ribbon cable
- Optional center polarization; see version F next page
- Locking IDT section for upper housing

Refer to pages 17M through 20M for application tooling.

This area accommodates short latch/eject levers

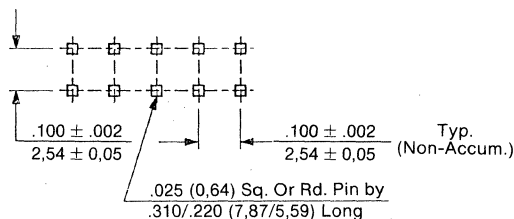
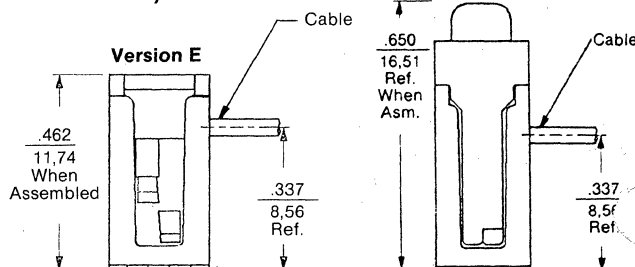


Second Polarization Slot is Non-Existent on 10 & 14 Ckt. Sizes



Left, Version F; Right, Version E

MIL-C-83503-Type Polarization
VERSION E Shown
(VERSION G is the same as E except strain relief is included)



Recommended P.C.B. Pin Layout

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
10	.400 10,16	.673 17,09	24	1.100 27,94	1.378 34,87	34	1.600 40,64	1.873 47,57	50	2.400 60,96	2.673 67,89
14	.600 15,24	.873 22,17	26	1.200 30,48	1.473 37,41	36	1.700 43,18	1.973 50,11	60	2.900 73,66	3.173 80,59
16	.700 17,78	.973 24,74	28	1.300 33,02	1.573 39,95	40	1.900 48,26	2.173 55,19	64	3.100 78,74	3.373 85,67
20	.900 22,86	1.173 29,79	30	1.400 35,56	1.673 42,49	44	2.100 53,34	2.373 60,27			

Ordering Information - Tube Packaged for AM60556

Plating Options	MIL-C-83503 Polarization	
	VERSION E Connector w/o Strain Relief	VERSION G Connector With Strain Relief
15 Microinches Min. Selective Gold	• 15-29-77XX	• 15-29-93XX
30 Microinches Min. Selective Gold	• 15-29-78XX	• 15-29-95XX
200 Microinches Min. Overall Tin	• 15-38-8XX5	• 15-29-96XX

Replace XX with number of circuits desired (10, 14, 16, 20, 24, 26, 28, 30, 34, 36, 40, 44, 50, 60, 64)
 • U.S. Standard Product, available through Molex franchised distributors.
 Optional Loose Strain Relief: 15-05-6XX2
 Optional Polarizing Insert - 20 Pieces per Strip: 15-04-0292



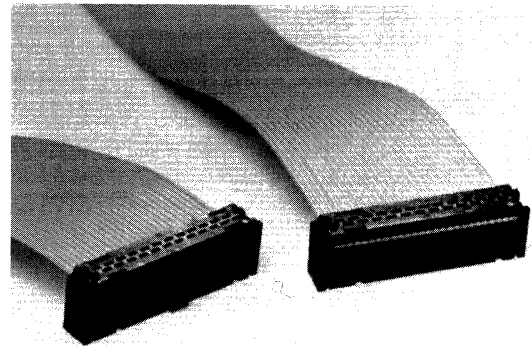
Recommended Molex Ribbon Cable for use with 40312 Series: Eng. Nos. 6800, 8863, 40158, 24107, 24108

MX 50 Ribbon Cable Connector System



B

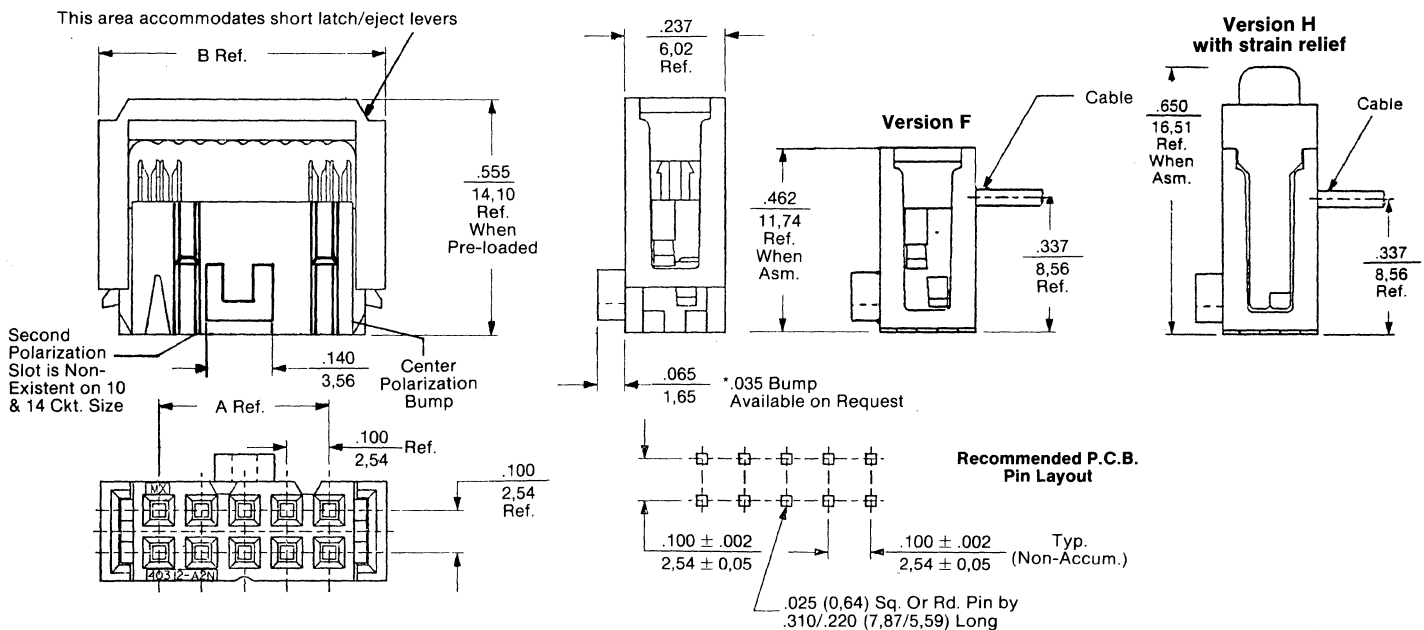
40312 Series Connector IDT Terminal .050" (1,27 mm) Centers for Dual Row .100" (2,54 mm) Grid



Left, Version F; Right, Version E

- Designed to mate with industry standard headers utilizing short latch/eject levers
- Shipped with upper housing preloaded in convenient plastic tubes for ease of termination and handling
- Circuit sizes 10, 14, 16, 20, 24, 26, 28, 30, 34, 36, 40, 44, 50, 60 and 64
- Accepts AWG 26 or 28 stranded tinned and 28 AWG topcoated wire
- Chamfered pin lead ins
- Various packaging options for ease of termination and handling. Packaging also available for Molex AM63200 Shields® 921 and Shields 805
- Duplex plated
- Optional strain relief
- Terminates .050" (1,27mm) center ribbon cable
- Center polarization
- Locking IDT section for upper housing

Refer to pages 17M through 20M for application tooling.



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
10	.400 10,16	.673 17,09	24	1.100 27,94	1.378 34,87	34	1.600 40,64	1.873 47,57	50	2.400 60,96	2.673 67,89
14	.600 15,24	.873 22,17	26	1.200 30,48	1.473 37,41	36	1.700 43,18	1.973 50,11	60	2.900 73,66	3.173 80,59
16	.700 17,78	.973 24,74	28	1.300 33,02	1.573 39,95	40	1.900 48,26	2.173 55,19	64	3.100 78,74	3.373 85,67
20	.900 22,86	1.173 29,79	30	1.400 35,56	1.673 42,49	44	2.100 53,34	2.373 60,27			

Ordering Information - Tube Packaged for AM60556

Plating Options	Center Polarization	
	VERSION F Connector w/o Strain Relief	VERSION H Connector With Strain Relief
15 Microinches Min. Selective Gold	• 15-29-79XX	• 15-29-97XX
30 Microinches Min. Selective Gold	• 15-29-80XX	• 15-29-98XX
200 Microinches Min. Overall Tin	• 15-38-8XX6	• 15-29-99XX

Replace **XX** with number of circuits desired (10, 14, 16, 20, 24, 26, 28, 30, 34, 36, 40, 44, 50, 60, 64)
 • U.S. Standard Product, available through Molex franchised distributors.
 Optional Loose Strain Relief: 15-05-6XX2
 Optional Polarizing Insert - 20 Pcs. Per Strip: 15-04-0292



Recommended Molex Ribbon Cable for use with 40312 Series: Eng. Nos. 6800, 8863, 40158, 24107, 24108

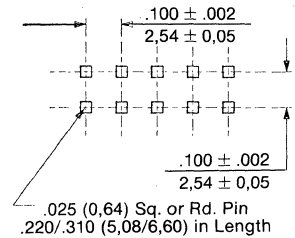
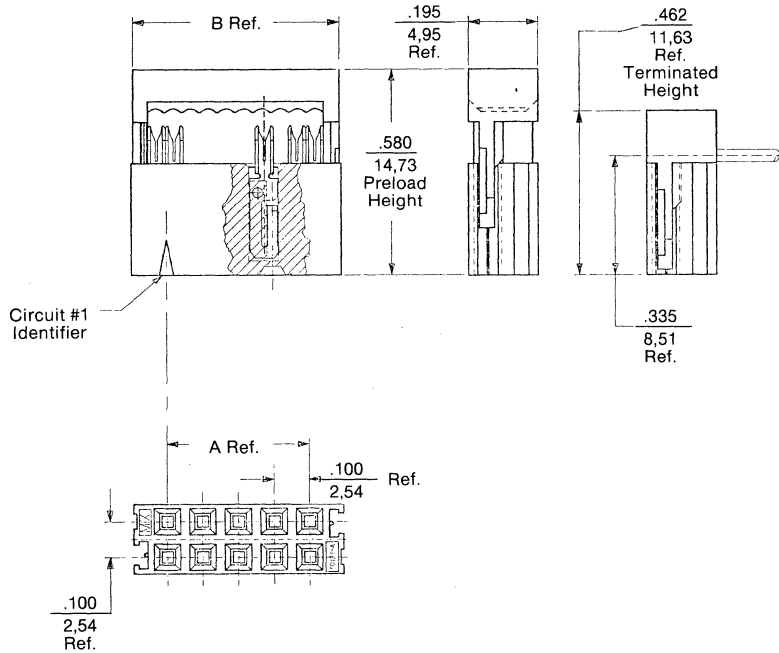
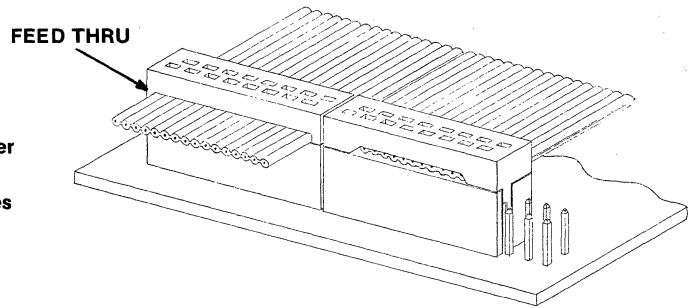
MX 50 Slimline .050" (1,27 mm) Center Ribbon Cable Connector



B

70121 Series Feed-Through Version

- Scalloped upper housing for positive cable registration
 - Chamfered, closed entry pin windows provide lead-in for mating pin
 - Upper housing pre-loaded
 - Feed-through upper housing for conventional daisy chaining
 - Circuit sizes 10, 14, 16, 20, 24, 26, 30, 34, 36, 40, 50, 60 and 64
 - Mates with .025" square pins
 - Various packaging options for ease of termination and handling — Packaging also available for Molex AM63200 Shields® 921 or Shields® 805
 - Accepts AWG 26 or 28 stranded tinned and 28 AWG topcoated wire
 - Duplex plated
 - Ideal for cable connection to back panel pin fields
 - Locking IDT section for upper housing
- MX 50 Slimline offers advantages over conventional ribbon cable connectors:**
- When stacking end-to-end only two pin circuits are lost, not four. And, though lost, they are not removed, but are enveloped by molded pockets in the housing.
 - Due to its slim .195" (4,95mm) housing it can mate with low profile AND right angle header 70203.
- Refer to pages 17M through 20M for application tooling.



Recommended P.C.B. Pin-Out

Delivered on a carrier with 20 pieces per strip.

Actual Size **Universal Polarizing Pin 40713-1**

Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
10	.400 10,16	.590 14,99	24	1.100 27,94	1.290 32,77	34	1.600 40,64	1.790 45,47	50	2.400 60,96	2.590 65,79
14	.600 15,24	.790 20,07	26	1.200 30,48	1.390 35,31	36	1.700 43,18	1.890 48,01	60	2.900 73,66	3.090 78,49
16	.700 17,78	.890 22,61	30	1.400 35,56	1.590 40,39	40	1.900 48,26	2.090 53,09	64	3.100 76,74	3.290 83,57
20	.900 22,86	1.090 27,69									

Ordering Information - Tube Packaged for AM60556

15 Microinches Gold Plating Order No.	30 Microinches Gold Plating Order No.	200 Microinches Tin Plating Order No.
• 15-47-3XX1	• 15-47-3XX2	• 15-47-3XX5
To order, replace XX in Order No. with circuit size desired: 10, 14, 16, 20, 24, 26, 30, 34, 36, 40, 50, 60, 64		

• U.S. Standard Product, available through Molex franchised distributors.



Recommended Molex Ribbon for use with 70121 Series:
Eng. Nos. 6800, 8863, 40158, 24107, 24108

MX 50 Slimline .050" (1,27 mm) Center Ribbon Cable Connector

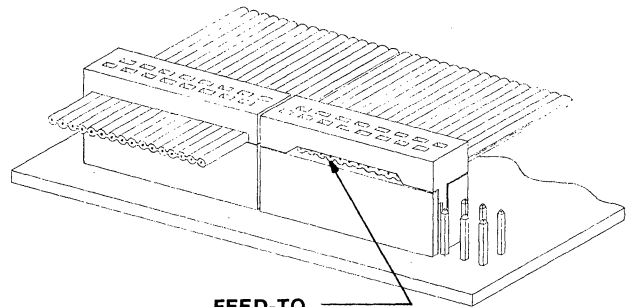


70121 Series Feed-To Version

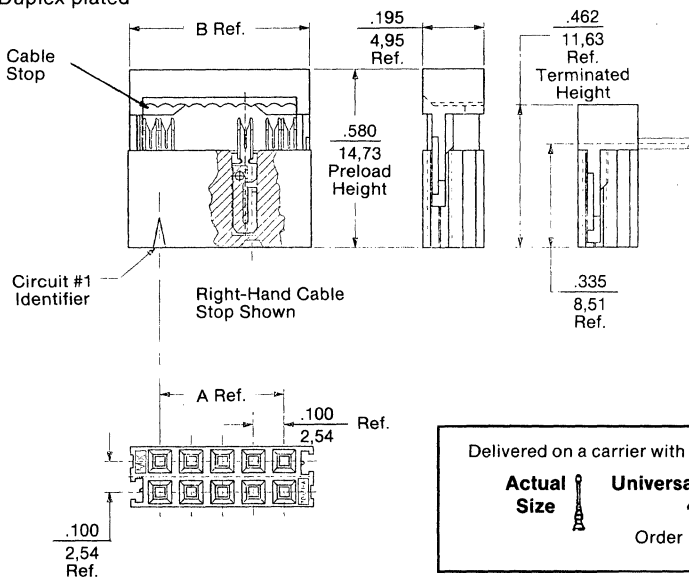
- Scalloped upper housing for positive cable registration
- Chamfered, closed entry pin windows provide lead-in for mating pin
- Upper housing pre-loaded
- Feed-to upper housing for dense packaging designs
- Circuit sizes 10, 14, 16, 20, 24, 26, 30, 34, 36, 40, 50, 60 and 64
- Mates with .025" square pins
- Various packaging options for ease of termination and handling — tubes, trays, tape. Packaging also available for Molex AM63200 Shields® 805 or Shields® 921
- Ideal for cable connection to back panel pin fields
- Accepts AWG 26 or 28 stranded tinned and 28 AWG topcoated wire
- Duplex plated
- Available with right or left-hand cable stop
- Center polarizing feature available. Contact factory
- **Locking IDT section for upper housing**

MX 50 Slimline offers advantages over conventional ribbon cable connectors:

- When stacking end-to-end only two pin circuits are lost, not four. And, though lost, they are not removed, but are enveloped by molded pockets in the housing.
- MX 50 Slimline provides a feed-to option for side-to-side stackability, and protection from shorting
- Due to its slim .195" (4,95mm) housing it can mate with low profile AND right angle header 70203.



**FEED-TO
(Right-hand)**

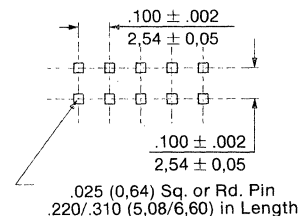


RIGHT-HAND:

Upper housing cable stop feature located on side of connector opposite from Circuit #1 identifier

LEFT-HAND:

Upper housing cable stop feature located on side of connector with Circuit #1 identifier



Recommended P.C.B. Pin-Out

Delivered on a carrier with 20 pieces per strip.



Actual Size Universal Polarizing Pin 40713-1

Order No. 15-04-0292

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
10	.400 10,16	.590 14,99	24	1.100 27,94	1.290 32,77	34	1.600 40,64	1.790 45,47	50	2.400 60,96	2.590 65,79
14	.600 20,07	.790 15,24	26	1.200 30,48	1.390 35,31	36	1.700 43,18	1.890 48,01	60	2.900 73,66	3.090 78,49
16	.700 17,78	.890 22,61	30	1.400 35,56	1.590 40,39	40	1.900 48,26	2.090 53,09	64	3.100 76,74	3.290 83,57
20	.900 22,86	1.090 27,69									

Ordering Information Tube Packaged for AM60556

Plating Options	FEED TO	
	Right-Hand Cable Stop	Left-Hand Cable Stop
15 Microinches Min. Selective Gold	15-47-3XX3	15-99-5XX0
30 Microinches Min. Selective Gold	15-47-3XX4	15-99-5XX1
200 Microinches Min. Overall Tin	15-47-3XX6	15-99-5XX2

Replace XX with number of circuits desired (10, 14, 16, 20, 24, 26, 30, 34, 36, 40, 50, 64)

• U.S. Standard Product, available through Molex franchised distributors.



Recommended Molex Ribbon Cable for use with 70121 Series: Eng. Nos. 6800, 8863, 40158, 24107, 24108

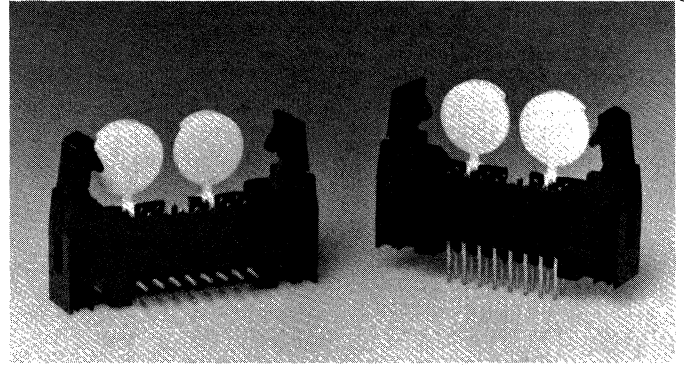
MX 50 Header .100" x .100" (2,54 x 2,54 mm)



B

40501 Series Fully Shrouded Dual Row Header Versions "A", "B" and "C"

- Optional insertable polarization or molded-in (MIL-C-83503-style)
- Polarization slot provided to accommodate connector with optional center polarization (No slot on 10 circuit header)
- Two lengths of printed circuit board solder tails available
- No. 1 circuit identification molded-in
- Circuit sizes 10, 14, 16, 20, 24, 26, 30, 34, 36, 40, 50, 60 and 64
- Audible "click" when mated
- Duplex plated
- Minimal latch/eject lever movement saves board space. Can be mounted side-by-side
- Pins: .025" (0,64mm) square mating end; .025"/.030" round p.c. tail

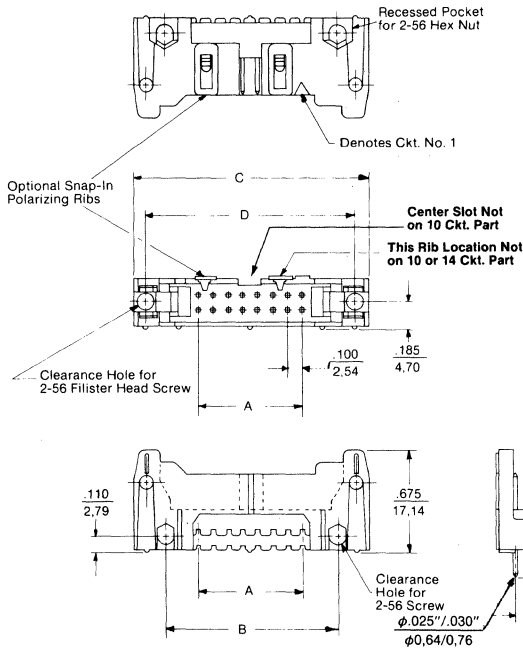


40501 Series

"A" Version No Latch/Eject Lever

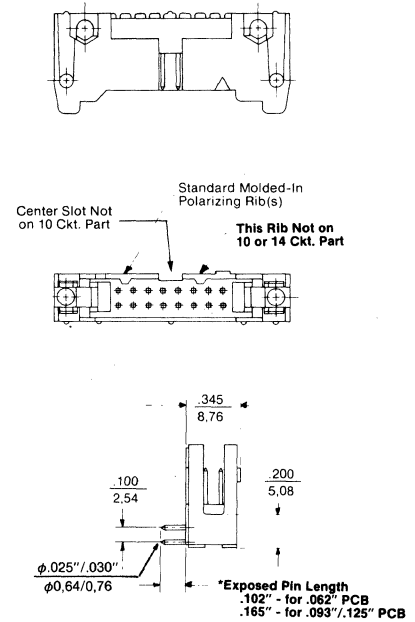
- Available with straight or right angle pins

With Optional Insertable Polarization

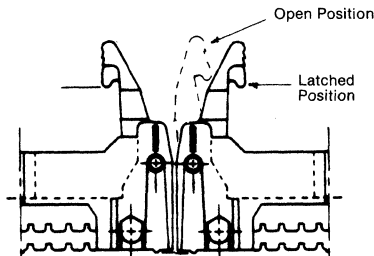


Straight Pin Version

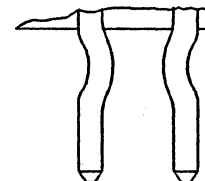
With Standard Molded-In Polarizing Ribs (MIL-C-83503 Style)



Right Angle Pin Version



Unique latch design allows end-to-end stacking. Latch movement does not extend beyond edge of connector.



Optional Kink Tails
Consult factory
for Part Numbers

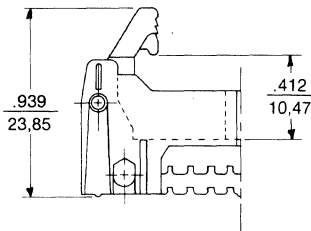
MX 50 Header .100" x .100" (2,54 mm x 2,54 mm)



40501 Series Fully Shrouded Dual Row Header

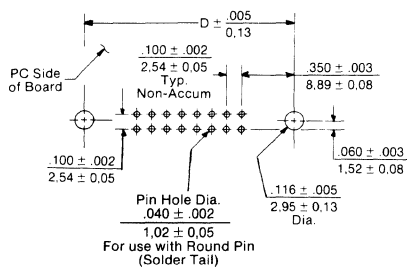
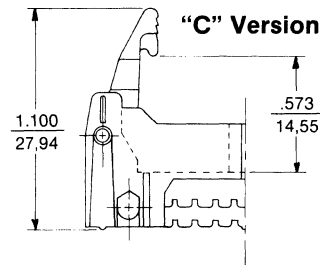
"B" Version with Short Latch/Eject Lever, No Strain Relief

- Available with straight or right angle pins
- Mates with Molex 40312 Series connectors "E" and "F" versions and other similarly styled industry standard connectors

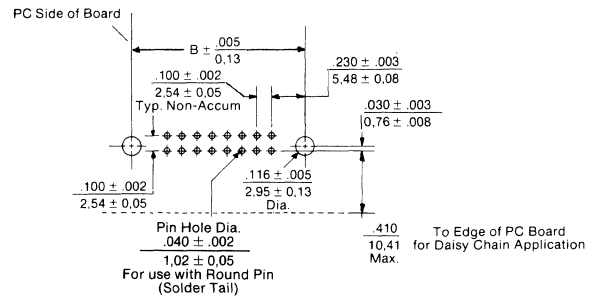


"C" Version with Long Latch/Eject Levers; For Use with Strain Relief

- Available with straight or right angle pins
- Mates with Molex 40312 Series connectors "G" and "H" versions



Recommended PC Board Pattern Straight Version



Recommended PC Board Pattern Right Angle Version

Dimensions "A", "B", & "C" Versions

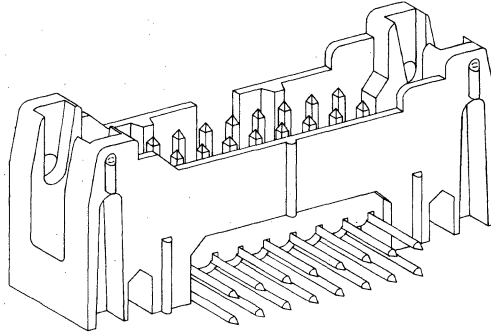
Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D
10	.400 ± .007 10,16 ± 0,18	.860 ± .008 21,84 ± 0,20	1.260 ± .009 32,00 ± 0,23	1.100 ± .009 27,94 ± 0,23	34	1.600 ± .010 40,64 ± 0,25	2.060 ± .011 52,32 ± 0,28	2.460 ± .012 62,48 ± 0,30	2.300 ± .012 58,42 ± 0,30
14	.600 ± .008 15,24 ± 0,20	1.060 ± .009 26,92 ± 0,23	1.460 ± .009 37,08 ± 0,23	1.300 ± .009 33,02 ± 0,23	36	1.700 ± .011 43,18 ± 0,15	2.160 ± .011 54,86 ± 0,18	2.560 ± .012 65,02 ± 0,20	2.400 ± .012 60,96 ± 0,30
16	.700 ± .008 17,78 ± 0,20	1.160 ± .009 29,46 ± 0,23	1.560 ± .010 39,62 ± 0,25	1.400 ± .009 35,56 ± 0,23	40	1.900 ± .011 48,26 ± 0,28	2.360 ± .012 59,94 ± 0,30	2.760 ± .012 70,10 ± 0,30	2.600 ± .012 66,04 ± 0,30
20	.900 ± .009 22,86 ± 0,23	1.360 ± .009 34,54 ± 0,23	1.760 ± .010 44,70 ± 0,25	1.600 ± .010 40,64 ± 0,25	50	2.400 ± .012 60,96 ± 0,30	2.860 ± .012 72,64 ± 0,30	3.260 ± .014 82,80 ± 0,36	3.100 ± .014 78,74 ± 0,36
24	1.100 ± .009 27,94 ± 0,23	1.560 ± .010 39,62 ± 0,25	1.960 ± .011 49,78 ± 0,28	1.800 ± .010 45,72 ± 0,25	60	2.900 ± .012 73,66 ± 0,30	3.360 ± .014 85,34 ± 0,36	3.760 ± .014 95,50 ± 0,36	3.600 ± .014 91,44 ± 0,36
26	1.200 ± .009 30,48 ± 0,23	1.660 ± .010 42,16 ± 0,25	2.060 ± .011 52,32 ± 0,28	1.900 ± .011 48,26 ± 0,28	64	3.100 ± .013 78,74 ± 0,33	3.560 ± .015 90,42 ± 0,38	3.960 ± .015 100,58 ± 0,38	3.800 ± .015 96,52 ± 0,38
30	1.400 ± .010 25,56 ± 0,25	1.860 ± .010 47,24 ± 0,25	2.260 ± .011 57,40 ± 0,28	2.100 ± .011 53,34 ± 0,28					

MX 50 Header



B

40501 Series Molded-in MIL-C-83503 Style Polarization



Ordering Information

"A" Version - Without Latch/Eject Levers, Mates with 40312 with or without Strain Relief

STRAIGHT TAIL				RIGHT ANGLE TAIL			
Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	200 Microinches Min. Overall Tin Order No.	Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	200 Microinches Min. Overall Tin Order No.
40501A Solder Tail For .062" (1,57mm) PC Board	• 10-86-1XX1	• 10-86-1XX4	• 10-92-1XX1	40504A Solder Tail For .062" (1,57mm) PC Board	• 10-87-1XX1	• 10-87-1XX4	• 10-93-1XX1
40502A Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-86-2XX1	• 10-86-2XX4	• 10-92-2XX1	40505A Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-87-2XX1	• 10-87-2XX4	• 10-93-2XX1

"B" Version - With Short Latch/Eject Levers, Mates with 40312 without Strain Relief Version E and F

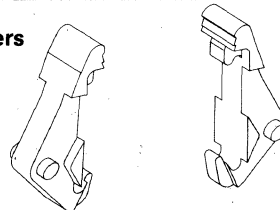
STRAIGHT TAIL				RIGHT ANGLE TAIL			
Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	200 Microinches Min. Overall Tin Order No.	Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	200 Microinches Min. Overall Tin Order No.
40501B Solder Tail For .062" (1,57mm) PC Board	• 10-86-1XX2	• 10-86-1XX5	• 10-92-1XX2	40504B Solder Tail For .062" (1,57mm) PC Board	• 10-87-1XX2	• 10-87-1XX5	• 10-93-1XX2
40502B Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-86-2XX2	• 10-86-2XX5	• 10-92-2XX2	40505B Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-87-2XX2	• 10-87-2XX5	• 10-93-2XX2

"C" Version - With Long Latch/Eject Levers, Mates with 40312 with Strain Relief Versions G and H

STRAIGHT TAIL				RIGHT ANGLE TAIL			
Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	200 Microinches Min. Overall Tin Order No.	Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	200 Microinches Min. Overall Tin Order No.
40501C Solder Tail For .062" (1,57mm) PC Board	• 10-86-1XX3	• 10-86-1XX6	• 10-92-1XX3	40504C Solder Tail For .062" (1,57mm) PC Board	• 10-87-1XX3	• 10-87-1XX6	• 10-93-1XX3
40502C Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-86-2XX3	• 10-86-2XX6	• 10-92-2XX3	40505C Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-87-2XX3	• 10-87-2XX6	• 10-93-2XX3

Latch/Eject Levers (Loose) - Assembles to "A" Version Series Headers

Eng. No.	Order No.	Description
40315-01	• 15-25-0105	Use when mating with 40312 Connector without Strain Relief - Versions E & F
40315-02	• 15-25-0106	Use when mating with 40312 Connector with Strain Relief - Versions G & H



• U.S. Standard Product, available through Molex franchised distributors.

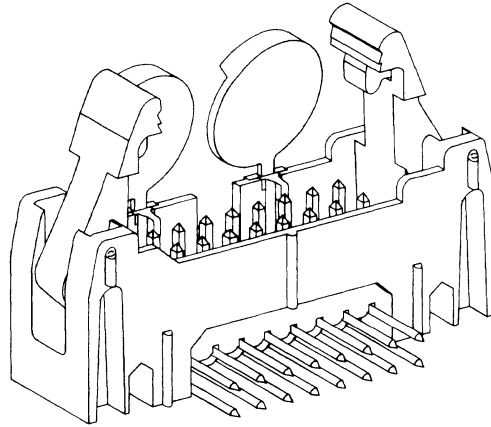
MX 50 Header



40501 Series

With Optional Insertable MIL-C-83503 Type Polarization

B



Ordering Information

"A" Version - Without Latch/Eject Levers, Mates with 40312 with or without Strain Relief

STRAIGHT TAIL				RIGHT ANGLE TAIL			
Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	200 Microinches Min. Overall Tin Order No.	Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	200 Microinches Min. Overall Tin Order No.
40507A Solder Tail For .062" (1,57mm) PC Board	• 10-86-4XX1	• 10-86-4XX4	• 10-92-4XX1	40510A Solder Tail For .062" (1,57mm) PC Board	• 10-87-4XX1	• 10-87-4XX4	• 10-93-4XX1
40508A Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-86-5XX1	• 10-86-5XX4	• 10-92-5XX1	40511A Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-87-5XX1	• 10-87-5XX4	• 10-93-5XX2

"B" Version - With Short Latch/Eject Levers, Mates with 40312 without Strain Relief Versions E and F

STRAIGHT TAIL				RIGHT ANGLE TAIL			
Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	200 Microinches Min. Overall Tin Order No.	Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	200 Microinches Min. Overall Tin Order No.
40507B Solder Tail For .062" (1,57mm) PC Board	• 10-86-4XX2	• 10-86-4XX5	• 10-92-4XX2	40510B Solder Tail For .062" (1,57mm) PC Board	• 10-87-4XX2	• 10-87-4XX5	• 10-93-4XX2
40508B Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-86-5XX2	• 10-86-5XX5	• 10-92-5XX2	40511B Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-87-5XX2	• 10-87-5XX5	• 10-93-5XX2

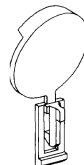
"C" Version - With Long Latch/Eject Levers, Mates with 40312 with Strain Relief Versions G and H

STRAIGHT TAIL				RIGHT ANGLE TAIL			
Eng. No./Description	15 Microinches Min. Selective Gold Order No.	30 Microinches Min. Selective Gold Order No.	200 Microinches Min. Overall Tin Order No.	Eng. No./Description	15 Microinches Min. Selective Tin Order No.	30 Microinches Min. Selective Order No.	200 Microinches Min. Overall Order No.
40507C Solder Tail For .062" (1,57mm) PC Board	• 10-86-4XX3	• 10-86-4XX6	• 10-92-4XX3	40510C Solder Tail For .062" (1,57mm) PC Board	• 10-87-4XX3	• 10-87-4XX6	• 10-93-4XX3
40508C Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-86-5XX3	• 10-86-5XX6	• 10-92-5XX3	40511C Solder Tail For .093"-.125" (2,36mm-3,17mm) PC Board	• 10-87-5XX3	• 10-87-5XX6	• 10-93-5XX3

Optional Insertable Polarization for 40501 Series Headers

Eng. No.	Order No.	Description
40471	• 15-05-1005	Loose Polarizing Insert with break-off thumb tab

• U.S. Standard Product, available through Molex franchised distributors.



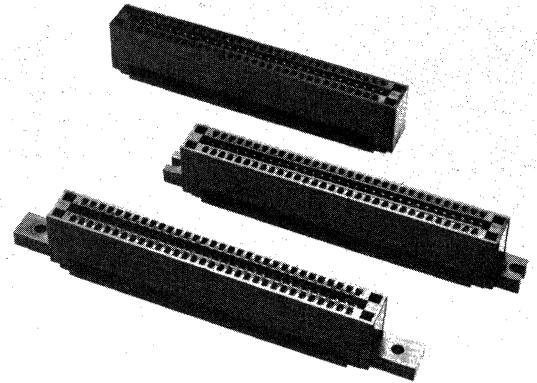
Edge Card Connectors for .050" (1,27 mm) Center Ribbon Cable



B

71007

- Mates with PC boards with .100" center contacts
- Insulation displacement termination for .050" (1,27mm) center ribbon cable
- Two thicknesses of select gold plating available
- Phosphor bronze terminals or optional beryllium copper
- Available with slotted or full flange mounting ears or without mounting ears
- Optional closed end cover
- Shipped with upper housing preloaded, and in convenient plastic tubes for ease of termination and handling
- Meets edge board industry standards
- Locking IDT section for upper housing



Specifications

Insulator - 94V-0 glass filled polyester, black color

Terminals - .010" (0,25mm) thick phosphor bronze

Plating Options - 15 microinches min. gold plate in contact area, 75 microinches min. tin/lead (60/40) in termination area, over 50 microinches min. nickel underplate

30 microinches min. gold plate in contact area, 75 microinches min. tin/lead (60/40) in termination area, over 50 microinches min. nickel underplate

Wire Accommodation - 26 and 28 AWG stranded wire ribbon cable with .045" (1,14mm max.) ins. dia. on .050" (1,27mm) centerlines.

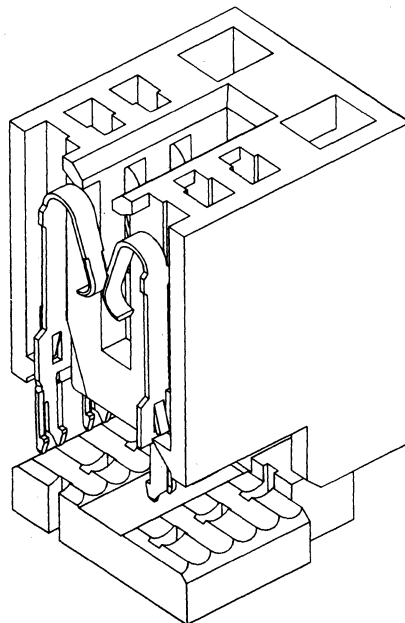
PCB Insertion Force - 16 oz. max. per contact pair using .070 blade

PCB Withdrawal Force - 1 oz. min. per contact pair using .054 blade

Insulation Resistance - 5K megohm min.

Dielectric Withstanding Voltage - 1,000 V rms

For use with .062" (1,57mm) thick PC board

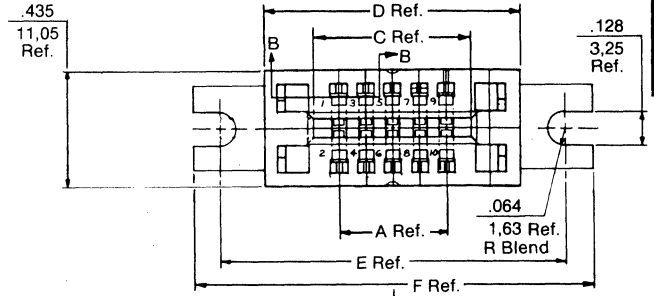
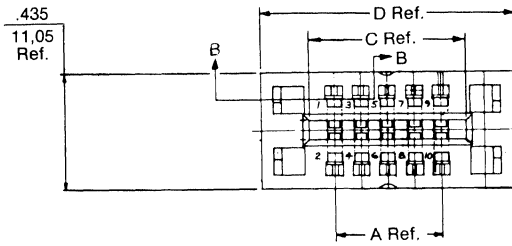


This cutaway drawing was generated on a CAD system.

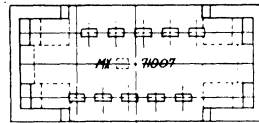
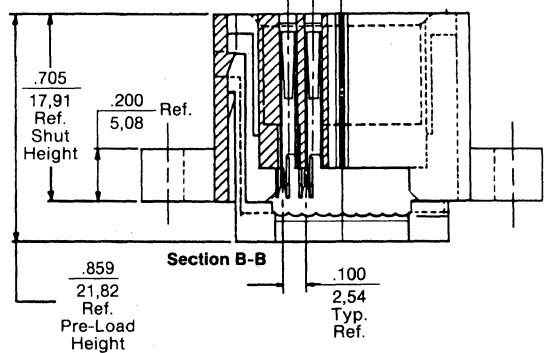
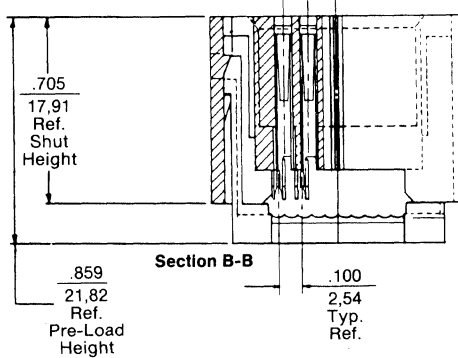
Edge Card Connectors for .050" (1,27 mm) Center Ribbon Cable



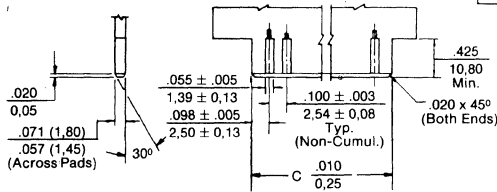
71007



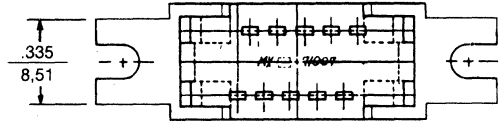
B



Recommended P.C. Board Dimensions



No Mounting Ears



Slotted Mounting Ears

NOTE: Part shown is non-polarized. Parts with molded-in polarizing ribs are also available.

Dimensions — No Mounting Ears and Slotted Mounting Ears

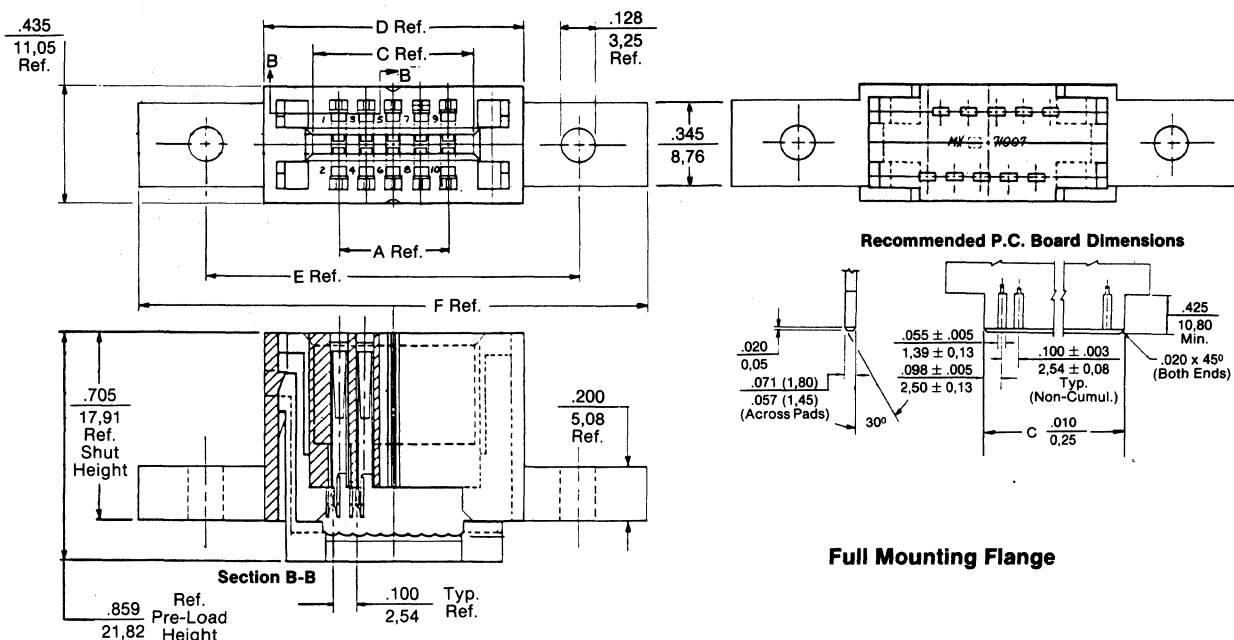
Ckt. Size	Dim. A Ref.	Dim. C Ref.	Dim. D Ref.	Dim. E Ref.	Dim. F Ref.	Ckt. Size	Dim. A Ref.	Dim. C Ref.	Dim. D Ref.	Dim. E Ref.	Dim. F Ref.
10	.400 10,16	.605 15,37	.960 24,38	1.300 33,02	1.500 38,10	36	1.700 43,18	1.905 48,39	2.260 57,40	2.600 66,04	2.800 71,12
14	.600 15,24	.805 20,45	1.160 29,46	1.500 38,10	1.700 43,18	38	1.800 45,72	2.005 50,93	2.360 59,94	2.700 68,58	2.900 73,66
16	.700 17,78	.905 22,99	1.260 32,00	1.600 40,64	1.800 45,72	40	1.900 48,26	2.105 53,47	2.460 62,48	2.800 71,12	3.000 76,20
20	.900 22,86	1.105 28,07	1.460 37,08	1.800 45,72	2.000 50,80	44	2.100 53,34	2.305 58,55	2.660 67,56	3.000 76,20	3.200 81,28
24	1.100 27,94	1.305 33,15	1.660 42,16	2.000 50,80	2.200 55,88	50	2.400 60,96	2.605 66,17	2.960 75,18	3.300 83,82	3.500 88,90
26	1.200 30,48	1.405 35,69	1.760 44,70	2.100 53,34	2.300 58,42	60	2.900 73,66	3.105 78,87	3.460 87,88	3.800 96,52	4.000 101,60
30	1.400 35,36	1.605 40,77	1.960 49,78	2.300 58,42	2.500 63,50	62	3.000 76,20	3.205 81,41	3.560 90,42	3.900 99,06	4.000 104,14
34	1.600 40,64	1.805 45,85	2.160 54,86	2.500 63,50	2.700 68,58	64	3.100 78,74	3.305 83,95	3.660 92,96	3.100 101,60	4.200 106,68

Edge Card Connectors



B

71007



NOTE: Part shown is non-polarized. Parts with molded-in polarizing ribs are also available.

Dimensions — Full Mounting Flange

Ckt. Size	Dim. A Ref.	Dim. C Ref.	Dim. D Ref.	Dim. E Ref.	Dim. F Ref.	Ckt. Size	Dim. A Ref.	Dim. C Ref.	Dim. D Ref.	Dim. E Ref.	Dim. F Ref.
10	.400 10,16	.605 15,37	.960 24,38	1.400 35,56	1.900 48,26	36	1.700 43,18	1.905 48,39	2.260 57,40	2.700 68,58	3.200 81,28
14	.600 15,24	.805 20,45	1.160 29,46	1.600 40,64	2.100 53,34	38	1.800 45,72	2.005 50,93	2.360 59,94	2.800 71,12	3.300 83,82
16	.700 17,78	.905 22,99	1.260 32,00	1.700 43,18	2.200 55,88	40	1.900 48,26	2.105 53,47	2.460 62,48	2.900 73,66	3.400 86,36
20	.900 22,86	1.105 28,07	1.460 37,08	1.900 48,26	2.400 60,96	44	2.100 53,34	2.305 58,55	2.660 67,56	3.100 78,74	3.600 91,44
24	1.100 27,94	1.305 33,15	1.660 42,16	2.100 53,34	2.600 66,04	50	2.400 60,96	2.605 66,17	2.960 75,18	3.400 86,36	3.900 99,06
26	1.200 30,48	1.405 35,69	1.760 44,70	2.200 55,88	2.700 68,58	60	2.900 73,66	3.105 78,87	3.460 87,88	3.900 99,06	4.400 111,76
30	1.400 35,36	1.605 40,77	1.960 49,78	2.400 60,96	2.900 73,66	62	3.000 76,20	3.205 81,41	3.560 90,42	4.000 101,60	4.500 114,60
34	1.600 40,64	1.805 45,85	2.160 54,86	2.600 66,04	3.100 78,74	64	3.100 78,74	3.305 83,95	3.660 92,96	4.100 104,14	4.600 116,84

Ordering Information — Tube Packaged for AM60556

TERMINAL PLATING — 15 MICROINCHES SELECT GOLD			TERMINAL PLATING — 30 MICROINCHES SELECT GOLD		
Order No.	Polarized Housing*	Mounting Ears	Order No.	Polarized Housing*	Mounting Ears
• 15-48-2XX2	No	None	• 15-48-2XX1	No	None
• 15-48-2XX4	No	Slotted	• 15-48-2XX3	No	Slotted
• 15-48-2XX6	No	Full Flange	• 15-48-2XX5	No	Full Flange
• 15-48-2XX8	Yes	None	• 15-48-2XX7	Yes	None
• 15-48-3XX0	Yes	Slotted	• 15-48-2XX9	Yes	Slotted
• 15-48-3XX2	Yes	Full Flange	• 15-48-3XX1	Yes	Full Flange

To order, replace XX in Order No. with circuit size desired.
10, 14, 16, 20, 24, 26, 30, 34, 36, 38, 40, 44, 50, 60, 62 or 64.

• U.S. Standard Product, available through Molex franchised distributors.
For beryllium copper versions or closed end cover versions contact factory for part number.

* Polarization between positions 3-4 and 5-6.

Edge Card Connector for .050" (1,27mm) Center Ribbon Cable



6874 Series .100" (2,54mm) Center

- Insulation Displacement of .050" (1,27mm) flat cable
- 10, 14, 16, 20, 26, 34, 40, 50 and 64 circuits
- Terminates to either side of cable
- Error free wiring
- Pre-assembled upper and lower housing
- Optional molded-in polarization
- Meets edge board industry standards

Wire Accommodation - 26 and 28 AWG stranded
PCB Insertion Force - 7.2 oz. per contact pair max.
PCB Withdrawal Force - 4 oz. per contact pair min.

Electrical:

Current Rating - 1 ampere
Insulation Resistance - Greater than 200K megohms
Dielectric Withstand Voltage - Greater than 1.0K volts rms at sea level

Environmental:

Temperature Range - -40°C to 105°C

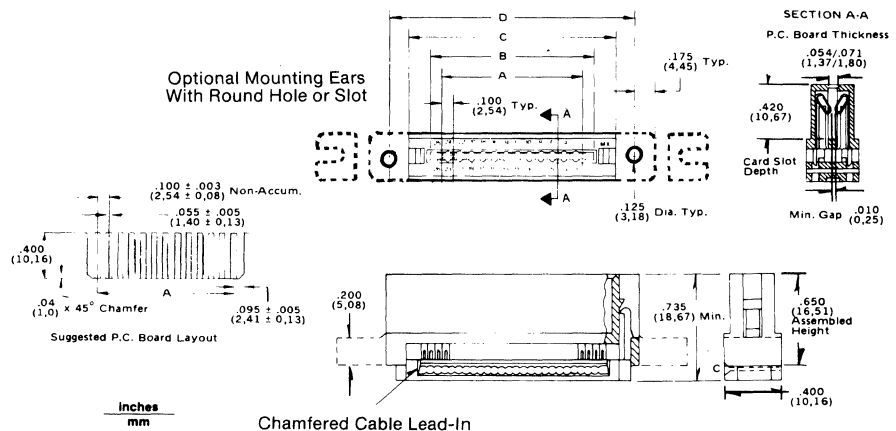
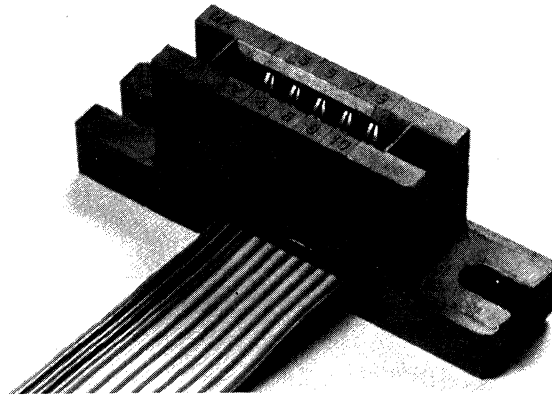
Specifications

Insulator Material - Glass reinforced polyester 94V-0, black

Contact Plating - .000030 min. selective gold in contact area, .00010 min. selective tin/lead in tail area; both over .000050 min. nickel overall

or

Overall tin plating .0002/.0003 thick



Dimensions 6874

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D
10	.400 10,16	.600 15,24	1.00 25,40	1.300 33,02	26	1.200 30,42	1.400 35,56	1.800 45,70	2.100 53,30	50	2.400 61,0	2.600 66,04	3.000 76,2	3.300 83,82
14	.600 15,24	.800 20,32	1.200 30,42	1.500 38,10	34	1.600 40,6	1.800 45,7	2.200 55,9	2.500 63,50	60	2.900 73,7	3.100 78,74	3.500 88,9	3.800 96,52
16	.700 17,78	.900 22,86	1.300 33,02	1.600 40,64	40	1.900 48,3	2.100 53,3	2.500 63,50	2.800 71,12	64	3.100 78,7	3.300 83,82	3.700 94,0	4.000 101,6
20	.900 22,86	1.100 27,94	1.500 38,1	1.800 45,72										

Ordering Information



Recommended Molex ribbon cable for use with 6874 Series:
 Eng. Nos. 8863, 6800, 40158, 24107, 24108

GOLD/TIN LEAD ORDER NO. FORMULA		OVERALL TIN ORDER NO. FORMULA	
• 15-29 - 0 XX X No. of Circuits (10, 14, 16, 20, 26, 34, 40, 50, 60, 64)		15-25 - X XX X No. of Circuits (10, 14, 16, 20, 26, 34, 40, 50, 60, 64)	
No Mounting Ears - 1 Round Hole Mounting Ears - 2 Slotted Mounting Ears - 3		No Mounting Ears 8 XX 5 Round Hole Mounting Ears 9 XX 0 Slotted Mounting Ears 9 XX 8	

• U.S. Standard Product, available through Molex franchised distributors.

Available but not shown. Contact factory for:

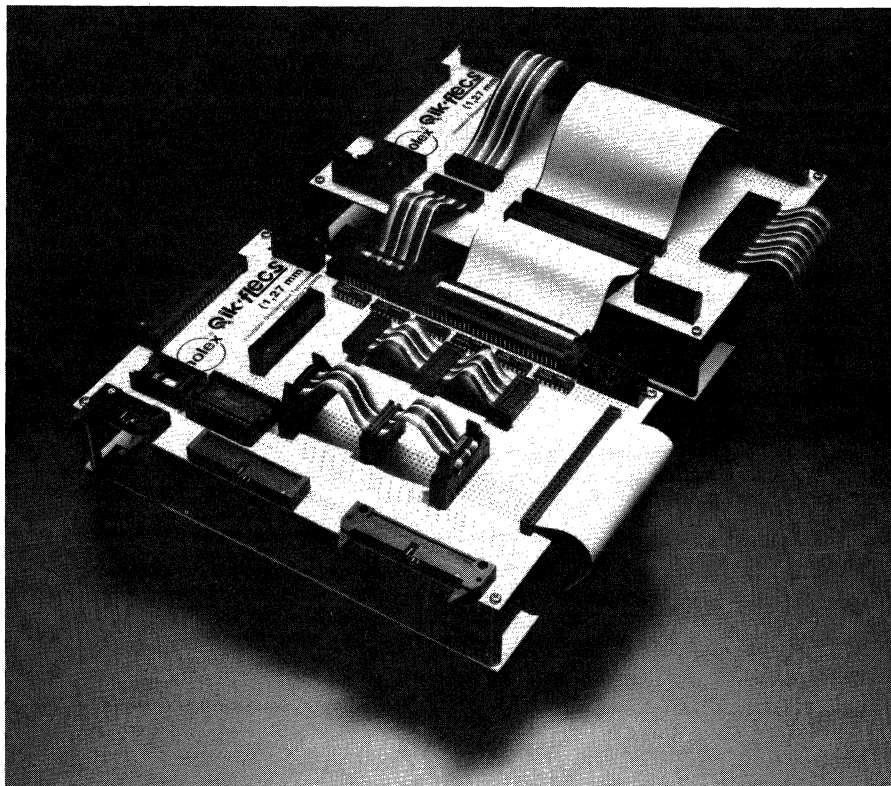
- Molded in P.C.B. polarization. Designated as 8173 product.
- Short ear [.115" (2,92mm)] for slotted version. Designated as 8621 Series product.
- Wider mounting center 'D' + .100" (2,54mm). Designated 6874-N-A Series product.

	Order No.
Optional Polarizing Key 7515K	89-00-7001

Qik-fleCS .050" (1,27 mm) Center Insulation Displacement Ribbon Cable Connector System



B Contents



Qik-Flecs System

International design. Independent Japanese and Danish studies have proven this design to be far superior to any other of its type. Dual beam contact with four pierce points for insulation displacement termination; selectively gold or overall tin plated.

Qik Flecs Insulation Displacement Connector System Introduction . . .	17B
Headers and Specifications	18B
Ribbon Cable Connectors, Single Polarization	19B
Strain Relief	20B
Printed Circuit Board Headers	21B-26B
Transition Type Connector, Staggered Style	27B
Transition Type Connector .100" x .100" (2,54 mm x 2,54 mm)	28B
Transition Type Connector .100" x .300" (2,54 mm x 7,62 mm)	29B
Transition Type Connector .100" x .600" (2,54 mm x 15,24 mm)	30B

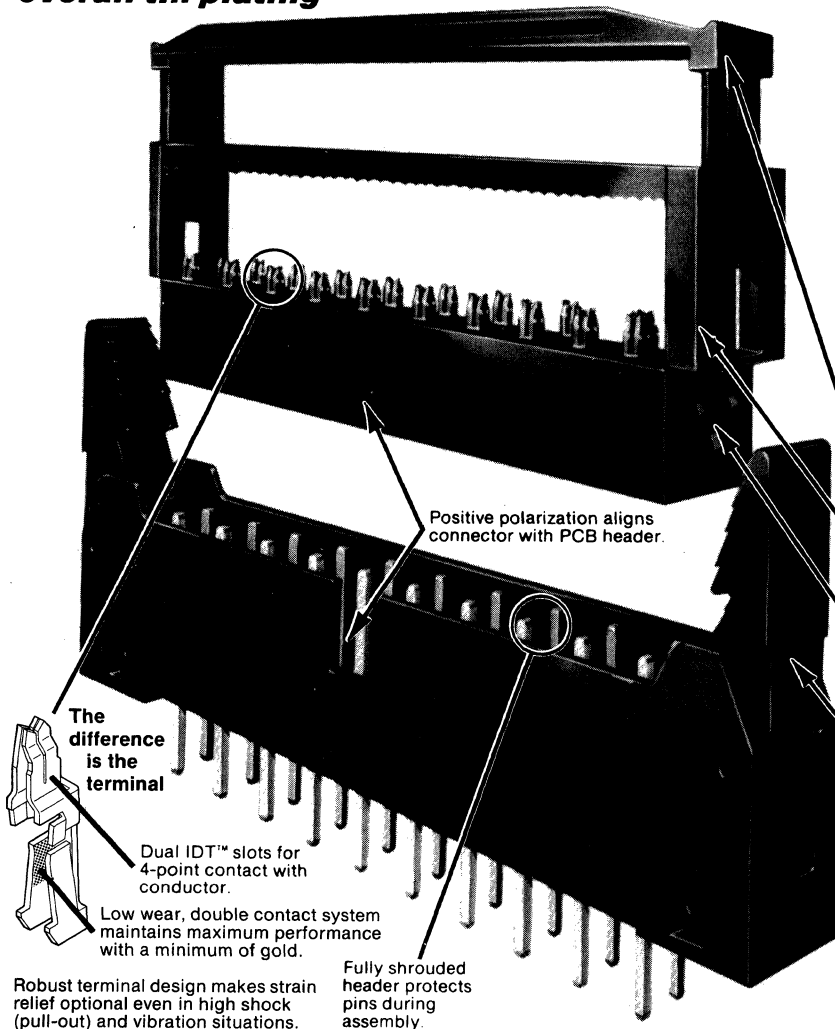
Qik-flecs .050" (1,27 mm) Center Insulation Displacement Ribbon Cable Connector System



QF 50™ IDT Connector System

Quick and easy mass termination for .050" (1,27mm) ribbon cable; highly reliable, top quality ... The Qik Flecs System

Now available - DIN 41651 - adapted versions and overall tin plating



Connectors

The Qik Flecs connectors are built to the highest standards of quality. They are available with upper housings pre-loaded to facilitate assembly in single cable-end terminations, or in unloaded form for daisy chain assemblies.

Headers

The Qik Flecs headers are available in a range of styles ... in straight or right angle versions, with or without latching levers, in various sizes from 10 through 60 circuits. The header will mate and latch with the QF50 connector **with** or **without** strain relief. The fully shrouded dual row header utilizes durable .025" (0,64mm) square posts.

High-strength strain relief and upper housing both flex safely without snapping or warping.

Dovetail grooves channel strain relief through upper housing to lock positively with lower housing.

Flush-mount latch/eject levers allow end-to-end stacking, with or without strain relief.

DIN 41651 Standard

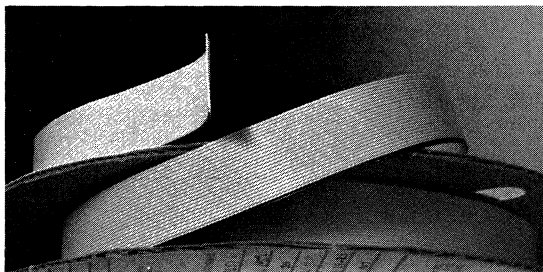
The DIN 41651 standard specifies the critical dimensions to ensure intermateability throughout the industry. Molex has designed the 90170 low profile strain relief and the 5576/5578 headers to be used with our 5320 ribbon cable connector. The Molex standard and latching headers are intermateable with most center slot polarized connector bodies.

Tooling

Molex application tooling for .050" (1,27mm) cable assembly includes a lightweight, portable, modular arbor press; manual or pneumatic.

Cable

Compatible .050" (1,27mm) ribbon cable is available from Molex in circuit sizes 10 through 68. Offered in 28 and 26 AWG stranded tin, this cable is zippable to provide design flexibility.



Qik-flecs IDT Connector System



B

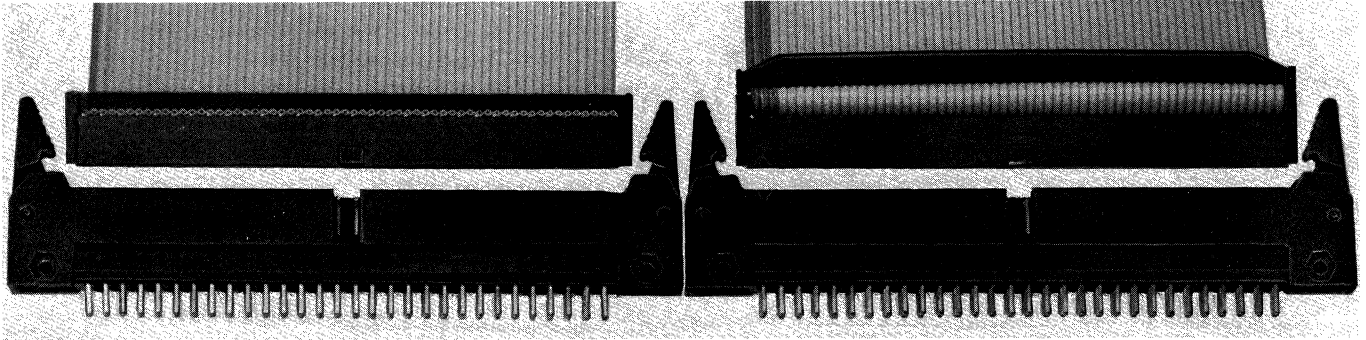
The header will mate and latch with the QF50 connector **with** Strain Relief or **without** Strain Relief.

The eject lever, after ejecting the connector assembly, is flush with the edge of the header. This allows for the stacking of headers side by side while saving space on your printed circuit board.

Without Strain Relief

Ejected

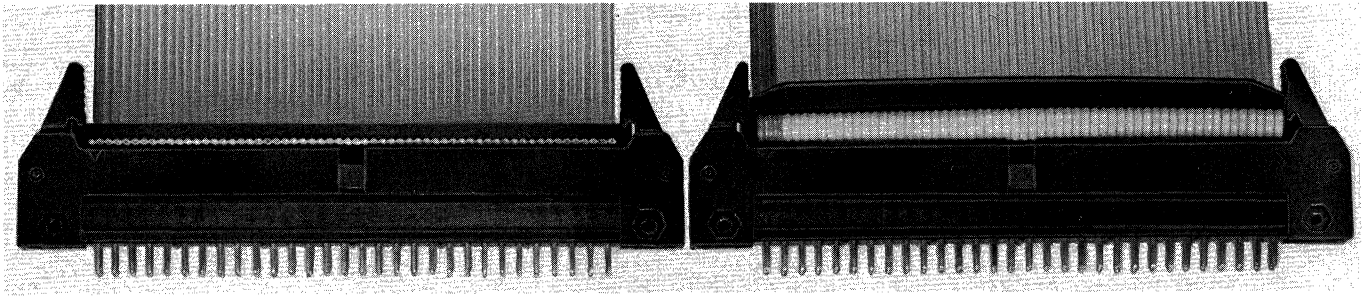
With Strain Relief



Without Strain Relief

Latched

With Strain Relief



QF 50 Technical Data Reference*

QF 50 IDT Ribbon Cable Connector	QF 50 Transition-Type Connector
<p><i>Current Rating</i> - 1 amp maximum</p> <p><i>Contact Resistance</i> - 20mΩ maximum initial Less than twice initial after conditioning</p> <p><i>Dielectric With- standing Voltage</i> - 500 VAC (r.m.s.) for 60 seconds</p> <p><i>Insulation Resistance</i> - 1,000mΩ minimum initial 100mΩ minimum after conditioning at 500 volts D.C.</p>	<p><i>Current Rating</i> - 1 amp maximum</p> <p><i>Contact Resistance</i> - 10mΩ minimum initial Less than twice initial after conditioning</p> <p><i>Dielectric With- standing Voltage</i> - 500 VAC (r.m.s.) for 60 seconds</p> <p><i>Insulation Resistance</i> - 1,000mΩ minimum initial 100mΩ minimum after conditioning at 500 volts D.C.</p>
<p><i>Engagement Force</i> - .66 lbs (300 grams) max. per circuit</p> <p><i>Disengagement Force</i> - .044 lbs. (20 grams) min. per circuit</p>	<p><i>Housing Cover Retention Force</i> - 11.02 lbs. (5 Kg) minimum</p>
<p><i>Housing Retention Force to Header</i> - 11.02 lbs. (5 Kg) min.</p> <p><i>Pin Push Out Force</i> - 3.3 lbs. (1.5 Kg) min.</p>	

*Detailed product specifications should be requested for approval testing.

Ribbon Cable Connector

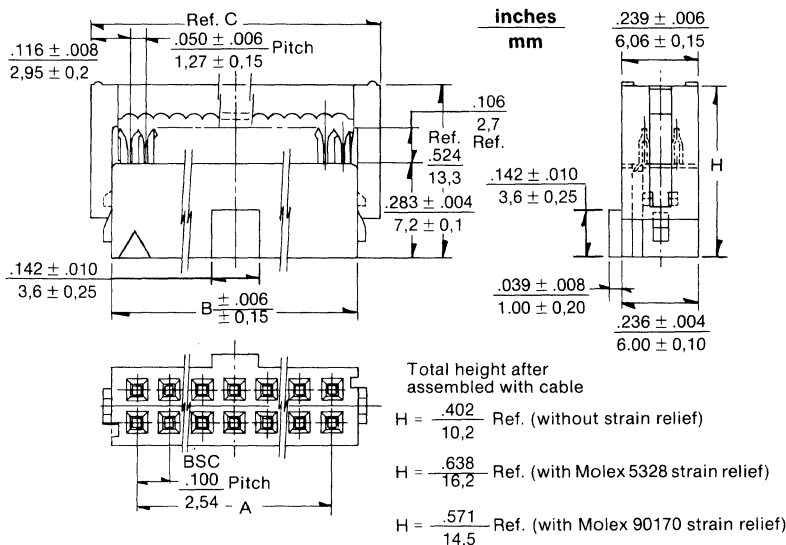
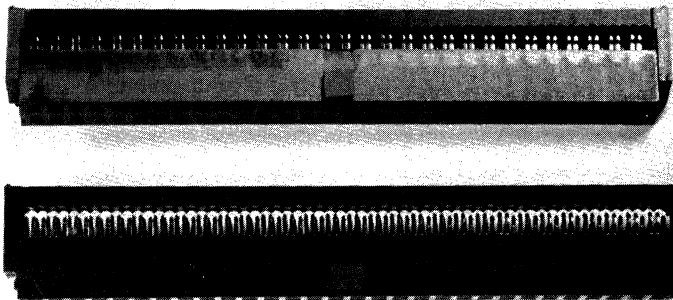
Qik-fLECS .050" (1,27 mm) Center



5320 Series NBGS1 / NBGS2 / NBT2 Single Polarization Preloaded Upper Housing

- 10-60 Circuits
- Polarized
- 94V-0 Glass filled polyester
- Color - black
- Contact material: phosphor bronze
- Two selective gold, and overall tin plated versions
- Mates with Molex 5328 and 90170 DIN-41651 adapted strain reliefs
- Mates with Molex 5330, 5340, 5332, 5342, 5576, 70246 and 5578 headers
- Cable accommodation: .050" (1,27mm) center
AWG #26, stranded
AWG #28, stranded and solid with .045" (1,14mm) dia. max. insulation

Refer to pages 17M through 20M or application tooling.



Dimensions 5320 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.550 13,96	.682 17,33	26	1.200 30,48	1.350 34,28	1.482 37,65	40	1.900 48,26	2.050 52,06	2.182 55,43
14	.600 15,24	.750 19,04	.882 22,41	30	1.500 38,10	1.550 39,36	1.682 42,73	50	2.400 60,96	2.550 64,76	2.682 68,13
16	.700 17,78	.850 21,58	.982 24,95	34	1.600 40,64	1.750 44,44	1.882 47,81	60	2.900 73,66	3.050 77,46	3.182 80,83
20	.900 22,86	1.050 26,66	1.182 30,03								

5320-NBGS1 / -NBGS2 / -NBT2 Series (Pre-loaded)

Ordering Information Replace XX in Order No. with number of circuits required

PLATING SPECIFICATION	NBGS1	NBGS2	NBT2
Order No.	39-51-2XX3	39-51-2XX4	39-52-1XX5

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Also Available:

5320-NAGS1 / -NAGS2 / -NAT2 Series (Unloaded, Detached Upper Housing)

Ordering Information Replace XX in Order No. with number of circuits required

PLATING SPECIFICATION	NABS1	NABS2	NAT2
Order No.	39-51-2XX0	39-51-2XX1	39-52-1XX4

Plating Specifications

NBGS1 Pre-loaded Upper Housing
NAGS1 Detached Upper Housing

39 microinches (1 micron) min. nickel underplate. Contact Area: 4 microinches (0,1 micron) min. gold. ID Area: 1 micron min. tin.

NBGS2 Pre-loaded Upper Housing
NAGS2 Detached Upper Housing

39 microinches (1 micron) min. nickel underplate. Contact Area: 30 microinches (0,76 microns) min. gold. ID Area: 1 micron min. tin.

NBT2 Pre-loaded Upper Housing
NAT2 Detached Upper Housing

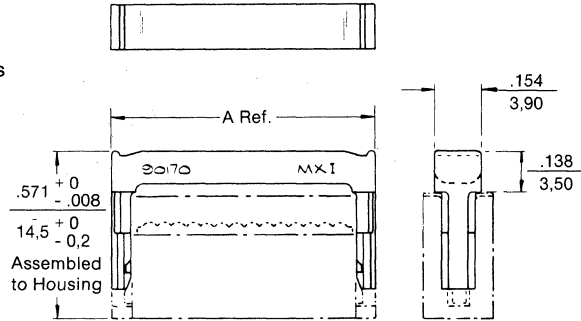
35 microinches (.9 micron) min. tin overall, over nickel underplate.

Strain Relief

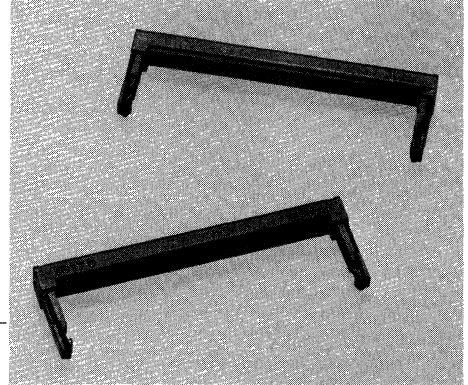
B

90170 Series DIN 41651 Standard and Low Profile Strain Relief

- 94V-0 Glass filled polyester, black
- Mates with Molex 5320 Series housings to latch DIN 41651 dual function latch/eject levers



Preferred Version in Europe



Dimensions 90170

Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A
10	.682 17,33	16	.982 24,92	26	1.482 37,65	34	1.882 47,81	50	2.682 68,13
14	.882 22,41	20	1.182 30,03	30	1.682 42,73	40	2.182 55,43	60	3.182 80,83

*Number of circuits on mating connector.

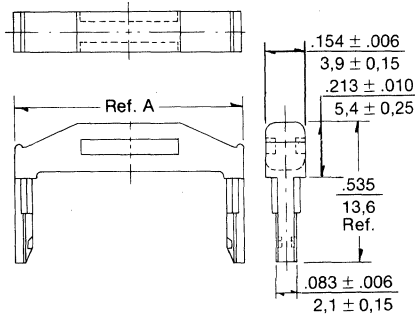
Ordering Information 90170 (Preferred version in Europe)

Replace **XX** in Order No. with number of circuits on mating connector: 10, 14, 16, 20, 26, 30, 34, 40, 50 or 60.

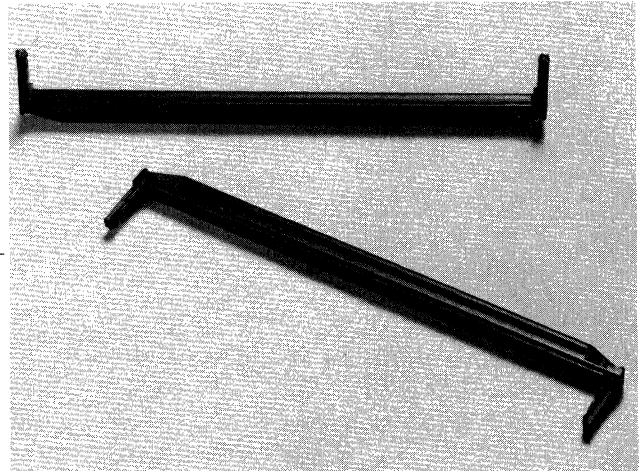
Order No.
90170-00XX

5328 Series Qik-Flecs Strain Relief

- 94V-0 Polyester, black
- Symmetrical
- Used with Molex 5320 series connectors



Primarily Available in Japan



Dimensions 5328

Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A	Circuits*	Dim. A
10	.682 17,33	16	.982 24,95	26	1.482 37,65	34	1.882 47,81	50	2.682 68,13	60	3.182 80,83
14	.882 22,41	20	1.782 30,03	30	1.682 42,73	40	2.182 55,43				

*Number of circuits on mating connector.

Ordering Information 5328 (Preferred version in Japan)

Replace **XX** in Order No. with number of circuits on mating connector: 10, 14, 16, 20, 26, 30, 34, 40, 50, or 60.

Order No.
15-25-1XX3

PCB Header Assembly, DIN 41651-Adapted Qik-fleCS .050" (1,27mm) Center

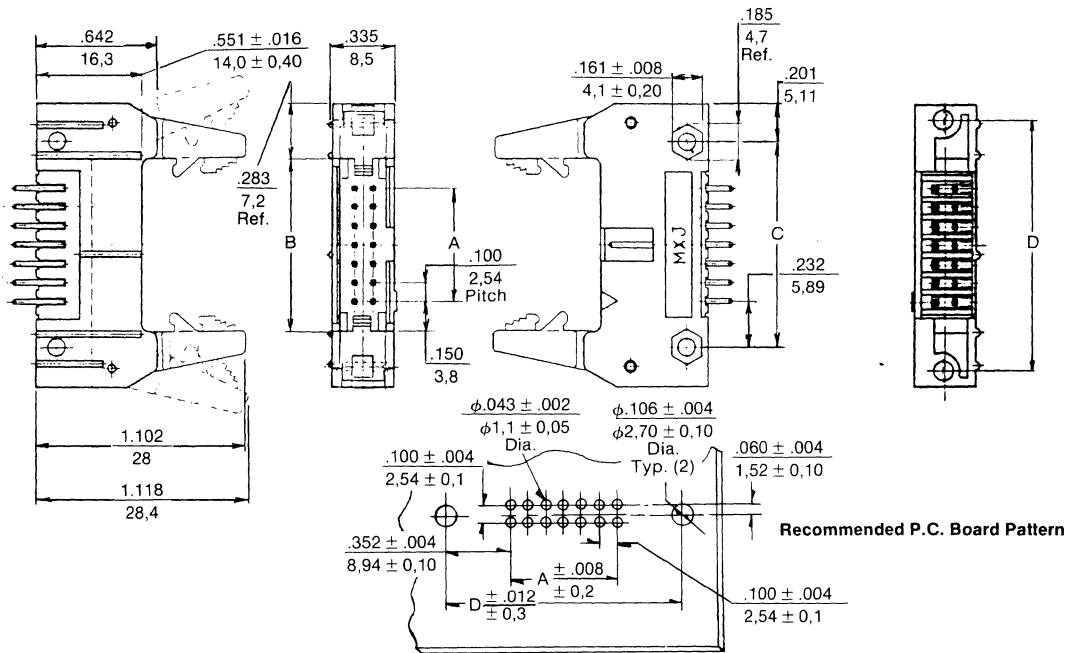
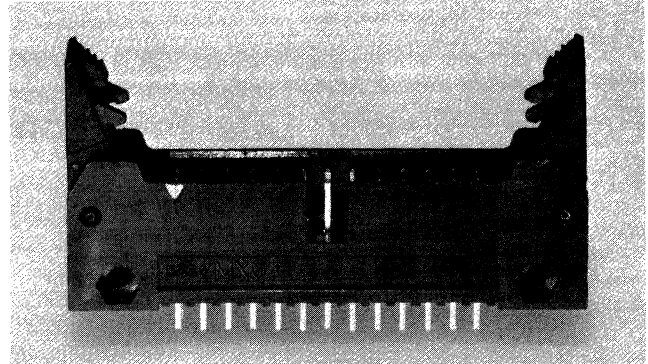


Preferred Version In Europe

B

5576 Series NBGS1 / NBGS2 / NBT2 Straight Pin with Dual Function Latch/Eject Levers

- 10-60 Circuits
- Polarized
- 94V-0 Glass filled polyester, black
- Fully shrouded
- Mates with Molex 5320 series connector and also is industry compatible
- Contact pin: .025" (0,635mm) square, brass
- Lever spring pin - stainless steel
- Two selective gold, and overall tin plated versions



Dimensions 5576 Series

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
10	.400 10,16	.700 17,76	.864 21,94	1.104 28,04	1.266 32,16	26	1.200 30,48	1.500 38,08	1.664 42,26	1.904 48,36	2.066 52,48	40	1.900 48,26	2.200 55,86	2.364 60,04	2.604 66,14	2.766 70,26
14	.600 15,24	.900 22,84	1.064 27,02	1.304 33,12	1.466 37,24	30	1.400 35,56	1.700 43,16	1.864 47,34	2.104 53,44	2.266 57,56	50	2.400 60,96	2.700 68,56	2.864 72,74	3.104 78,84	3.266 82,96
16	.700 17,78	1.000 25,38	1.164 29,56	1.404 35,66	1.566 39,78	34	1.600 40,64	1.900 48,24	2.064 52,42	1.304 58,52	2.466 62,64	60	2.900 73,66	3.200 81,26	3.364 85,44	3.604 91,54	2.766 95,66
20	.900 22,86	1.200 30,46	1.364 34,64	1.604 40,74	1.766 44,86												

5576-NBGS1 / -NBGS2 / -NBT2

Ordering Information Replace XX in Order No. with number of circuits required.

PLATING SPECIFICATIONS:	NBGS1	NBGS2	NBT2
Order No.	39-27-1XX3	39-27-1XX4	39-28-5XX5

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Plating Specifications

NBGS1

39 microinches (1 micron) min. nickel underplate. Contact area: 4 microinches (0,1 micron) min. gold. Solder area: 3 microns min. tin.

NBGS2

39 microinches (1 micron) min. nickel underplate. Contact area: 30 microinches (0,76 micron) min. gold. Solder area: 3 microns min. tin.

NBT2

35 microinches (.9 micron) min. tin overall, over nickel underplate.

PCB Header Assembly, DIN 41651-Adapted Qik-fleCS .050" (1,27mm) Center

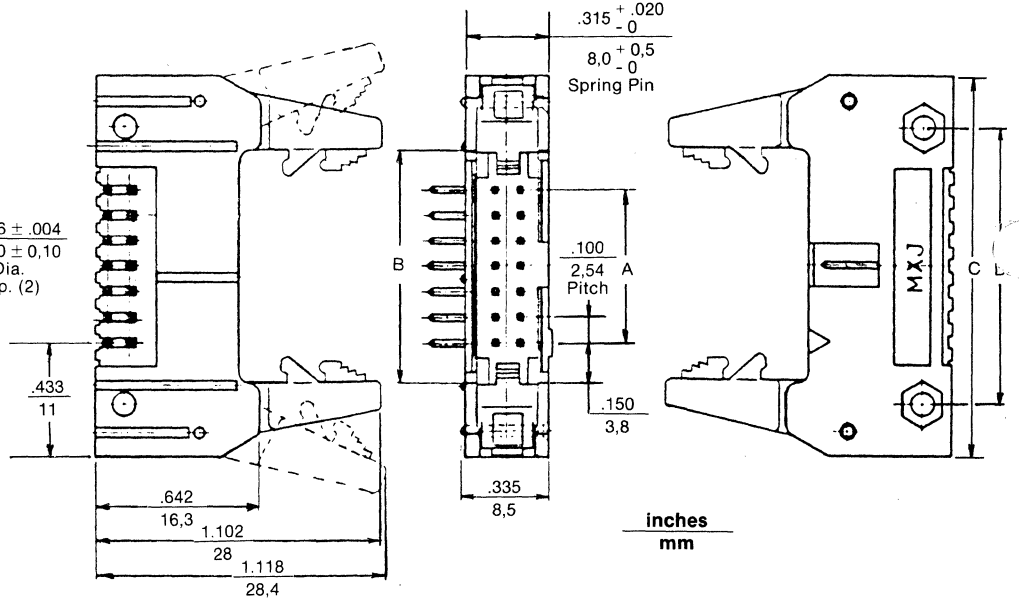
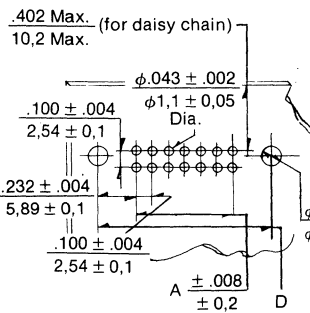
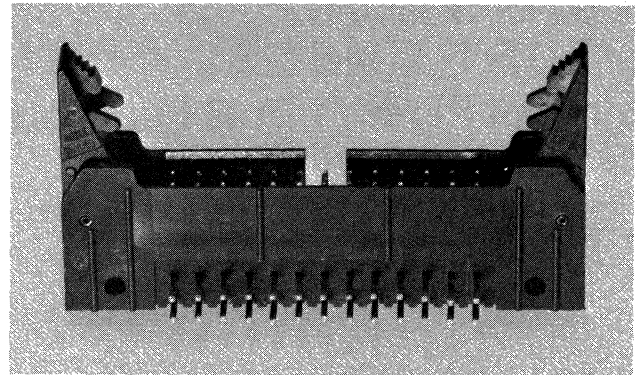


Preferred Version in Europe

B

5578 Series NBGS1 / NBGS2 / NBT2 Right Angle with Dual Function Eject Levers

- 10-60 Circuits
- Polarized
- 94V-0 Glass filled polyester, black
- Fully shrouded
- Mates with Molex 5320 series and also is industry compatible
- Contact pin: .025" (0,635mm) square, brass
- Lever spring pin - stainless steel
- Two selective gold, and overall tin plated versions



Dimensions 5578 Series

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D
10	.400 10,16	.700 17,76	1.266 32,16	.864 21,94	26	1.200 30,48	1.500 38,08	2.066 52,48	1.664 42,26	40	1.900 48,26	2.200 55,86	2.766 70,26	2.364 60,04
14	.600 15,24	.900 22,84	1.466 37,24	1.064 27,02	30	1.400 35,56	1.700 43,16	2.266 57,56	1.864 47,34	50	2.400 60,96	2.700 68,56	3.266 82,96	2.864 72,74
16	.700 17,78	1.000 25,38	1.566 39,78	1.164 29,56	34	1.600 40,64	1.900 48,24	2.466 62,64	2.064 52,42	60	2.900 73,66	3.200 81,26	3.766 95,66	3.364 85,44
20	.900 22,86	1.200 30,46	1.766 44,86	1.364 34,64										

5578-NBGS1 / -NBGS2 / NBT2

Ordering Information Replace XX in Order No. with number of circuits required.

PLATING SPECIFICATIONS:	NBGS1	NBGS2	NBT2
Order No.	39-27-1XX6	39-27-1XX7	39-28-5XX6

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Plating Specifications

NBGS1

39 microinches (1 micron) min. nickel underplate. Contact area: 4 microinches (0,1 micron) min. gold. Solder area: 3 microns min. tin.

NBGS2

39 microinches (1 micron) min. nickel underplate. Contact area: 30 microinches (0,76 micron) min. gold. Solder area: 3 microns min. tin.

NBT2

35 microinches (.9 micron) min. tin overall, over nickel underplate.

PCB Header Assembly

Qik-fLECS .050" (1,27mm) Center



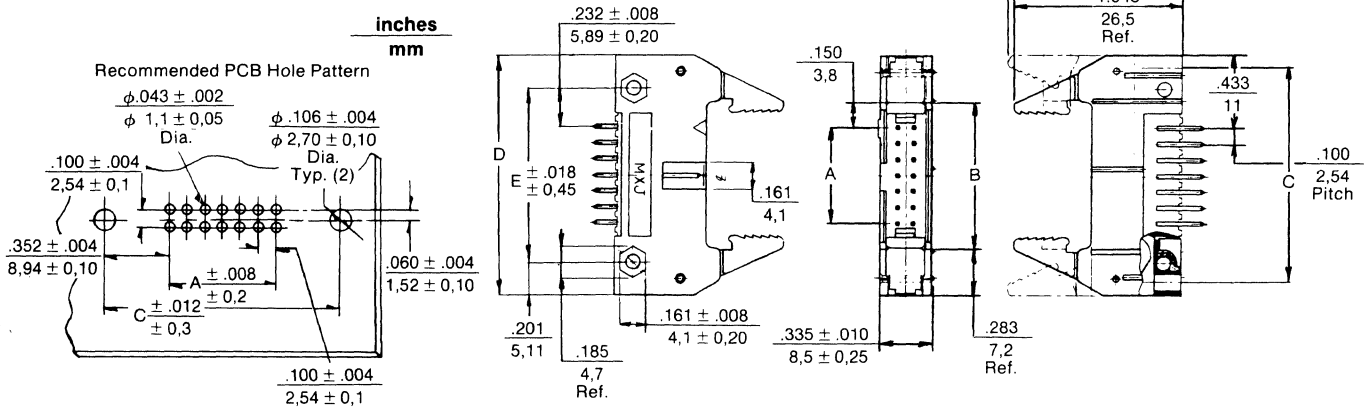
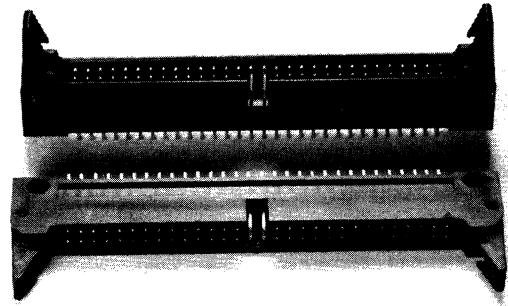
B

5330 Series

NBGS1 / NBGS2 / NBT2

Straight Pin with Latch/Eject Lever

- 10-60 Circuits
- Polarized
- 94V-0 Glass filled polyester, black
- Fully shrouded
- Stackable side by side
- Latches connector with or without strain relief
- Mates with Molex 5320 series connector
- Contact pin: .025" (0,635mm) square, brass
- Two selective gold, and overall tin plated versions
- Lever spring pins - stainless steel



Dimensions 5330 Series

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
10	.400 10,16	.700 17,76	1.104 28,04	1.266 32,16	.864 21,94	26	1.200 30,48	1.500 38,08	1.904 48,36	2.066 52,48	1.664 42,26	40	1.900 48,26	2.200 55,86	2.604 66,14	2.766 70,26	2.364 60,04
14	.600 15,24	.900 22,84	1.304 33,12	1.466 37,24	1.064 27,02	30	1.400 35,56	1.700 43,16	2.104 53,44	2.266 57,56	1.864 47,34	50	2.400 60,96	2.700 68,56	3.104 78,84	3.266 82,96	2.864 72,74
16	.700 17,78	1.000 25,38	1.404 35,66	1.566 39,78	1.164 29,56	34	1.600 40,64	1.900 48,24	2.304 58,52	2.466 62,64	2.064 52,42	60	2.900 73,66	3.200 81,26	3.604 91,54	3.766 95,66	3.364 85,44
20	.900 22,86	1.200 30,46	1.604 40,74	1.766 44,86	1.364 34,64												

5330-NBGS1 / -NBGS2 / -NBT2 (with Latch/Eject Lever)

Ordering Information Replace **XX** in Order No. with number of circuits required.

PLATING SPECIFICATIONS	NBGS1	NBGS2	NBT2
Order No.	39-26-6XX6	39-26-6XX7	39-28-5XX0

Also Available:

5330-NAGS1 / -NAGS2 / -NAT2 Series

(with Straight Pin - No Latch/Eject Lever)

Ordering Information Replace **XX** in Order No. with number of circuits required.

PLATING SPECIFICATIONS	NAGS1	NAGS2	NAT2
Order No.	39-26-6XX3	39-26-6XX4	39-28-4XX9

Plating Specifications

NBGS1 (with latch/eject levers)

NAGS1 (without latch/eject levers)

39 microinches (1 micron) min. nickel underplate. Contact Area: 4 microinches (0,1 micron) min. gold. Solder Area: 3 microns min. tin.

NBGS2 (with latch/eject levers)

NAGS2 (without latch/eject levers)

39 microinches (1 micron) min. nickel underplate. Contact Area: 30 microinches (0,76 microns) min. gold. Solder Area: 3 microns min. tin.

NBT2 (with latch/eject levers)

NAT2 (without latch/eject levers)

35 microinches (.9 microns) min. tin overall, over nickel underplate.

PCB Header Assembly

Qik-fLECS .050" (1,27mm) Center



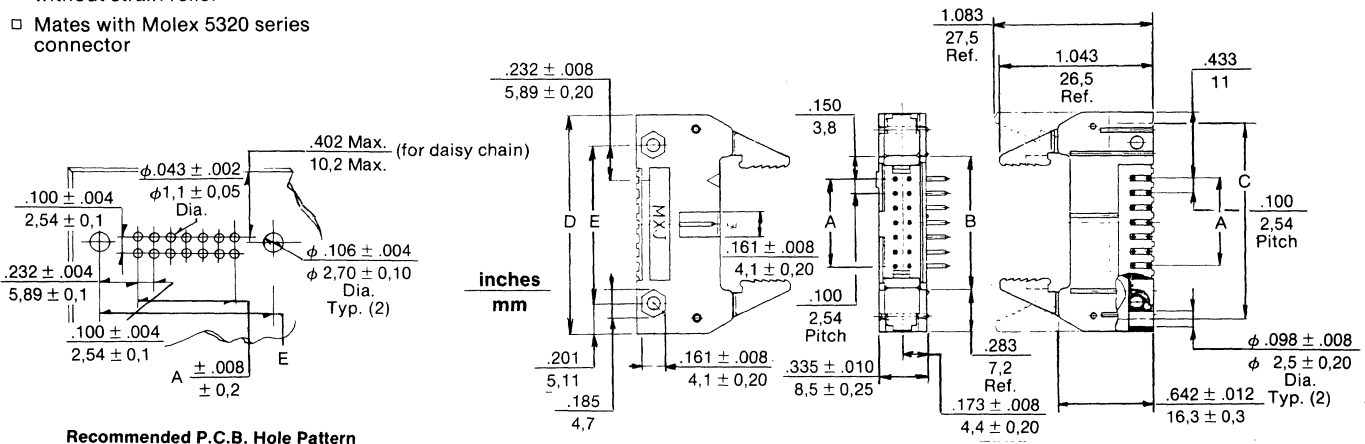
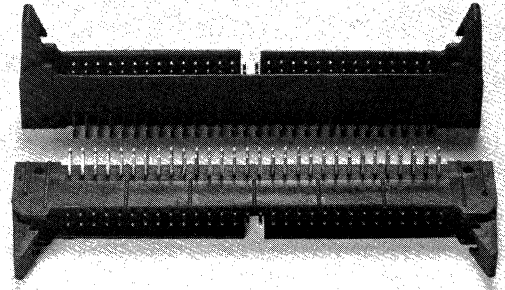
B

5340 Series

NBGS1 / NBGS2 / NBT2

Right Angle with Latch/Eject Lever

- 10-60 Circuits
- Polarized
- 94V-0 Glass filled polyester
- Color - black
- Fully shrouded
- Stackable side by side
- Latches connector with or without strain relief
- Mates with Molex 5320 series connector
- Contact pin: .025" (0,635mm) square, brass
- Two selective gold, and overall tin plated versions
- Lever spring pins - stainless steel
- Machine screw M2X (10 mm) and hexagon nut M2 used for mounting



Dimensions 5340 Series

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
10	.400 10,16	.700 17,76	1.104 28,04	1.266 32,16	.864 21,94	26	1.200 30,48	1.500 38,08	1.904 48,36	2.066 52,48	1.664 42,26	40	1.900 48,26	2.200 55,86	2.604 66,14	2.766 70,26	2.364 60,04
14	.600 15,24	.900 22,84	1.304 33,12	1.466 37,24	1.064 27,02	30	1.400 35,56	1.700 43,16	2.104 53,44	2.266 57,56	1.864 47,34	50	2.400 60,96	2.700 68,56	3.104 78,84	3.266 82,96	2.864 72,74
16	.700 17,78	1.000 25,38	1.404 35,66	1.566 39,78	1.164 29,56	34	1.600 40,64	1.900 48,24	2.304 58,52	2.466 62,64	2.064 52,42	60	2.900 73,66	3.200 81,26	3.604 91,54	3.766 95,66	3.364 85,44
20	.900 22,86	1.200 30,46	1.604 40,74	1.766 44,86	1.364 34,64												

5340-NBGS1 / -NBGS2 / -NBT2 (with Latch/Eject Levers)

Ordering Information Replace XX in Order No. with number of circuits required.

PLATING SPECIFICATIONS:	NBGS1	NBGS2	NBT2
Order No.	39-26-7XX2	39-26-7XX3	39-28-5XX3

Also Available:

5340-NAGS1 / -NAGS2 / -NAT2

(with Right Angle Pins - No Latch/Eject Lever)

Ordering Information Replace XX in Order No. with number of circuits required.

PLATING SPECIFICATIONS:	NAGS1	NAGS2	NAT2
Order No.	39-26-6XX9	39-26-7XX0	39-28-5XX2

Plating Specifications

NBGS1 (with latch/eject levers)
NAGS1 (without latch/eject levers)
 39 microinches (1 micron) min. nickel underplate. Contact Area: 4 microinches (0,1 micron) min. gold. Solder Area: 3 microns min. tin.

NBGS2 (with latch/eject levers)
NAGS2 (without latch/eject levers)
 39 microinches (1 micron) min. nickel underplate. Contact Area: 30 microinches (0,76 microns) min. gold. Solder Area: 3 microns min. tin.

NBT2 (with latch/eject levers)
NAT2 (without latch/eject levers)
 35 microinches (.9 micron) min. tin overall, over nickel underplate.

PCB Header Assembly

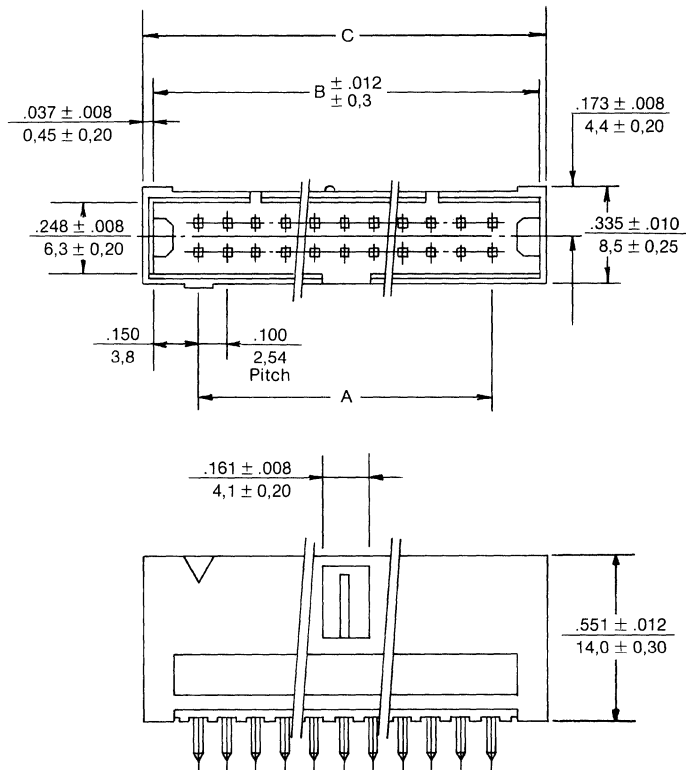
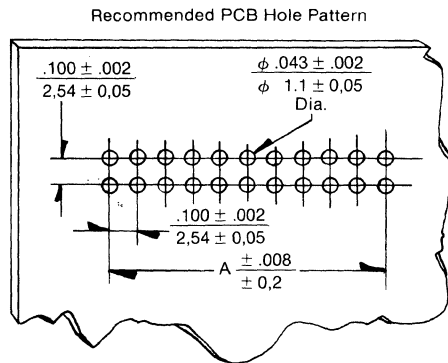
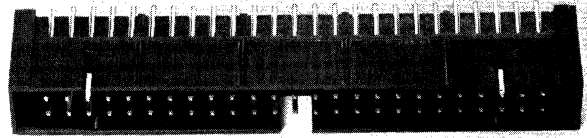
Qik-fleCS .050" (1,27 mm) Center



5332 Series NGS1 / NGS2 / NGS3 / NT2

Single Polarization, Straight Pin

- 10-50 Circuits
- 94V-0 Glass filled polyester
- Color - black
- Mates with Molex 5320 series connector
- Fully shrouded
- Contact pin: .025" (0,635mm) square, brass
- Selective gold and tin plated versions



Dimensions 5332 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.700 17,76	.774 19,66	20	.900 22,86	1.200 30,46	1.274 32,36	30	1.400 35,56	1.700 43,16	1.774 45,06	40	1.900 48,26	2.200 55,86	2.274 57,76
14	.600 15,24	.900 22,84	.974 24,74	26	1.200 30,48	1.500 38,08	1.574 39,98	34	1.600 40,64	1.900 48,24	1.974 50,14	50	2.400 60,96	2.700 68,56	2.774 70,46
16	.700 17,78	1.000 25,38	1.074 27,28												

5332-NGS1 / -NGS2 / -NGS3 / -NT2

Ordering Information Replace XX in Order No. with number of circuits required.

PLATING SPECIFICATIONS:	NGS1	NGS2	NGS3	NT2
Order No.	39-26-7XX5	39-26-7XX6	39-26-7XX7	39-28-5XX1

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Plating Specifications

NGS1

39 microinches (1 micron) min. nickel underplate.
Contact area: 4 microinches (0,1 micron) min. gold. Solder area: 3 microns min. tin.

NGS2

39 microinches (1 micron) min. nickel underplate.
Contact area: 30 microinches (0,76 micron) min. gold. Solder area: 3 microns min. tin.

NGS3

39 microinches (1 micron) min. nickel underplate.
Contact area: 10 microinches (0,25 micron) min. gold. Solder area: 3 microns min. tin.

NT2

35 microinches (0.9 microns) min. tin overall, over nickel underplate.

PCB Header Assembly

Qik-fleCS .050" (1,27 mm) Center

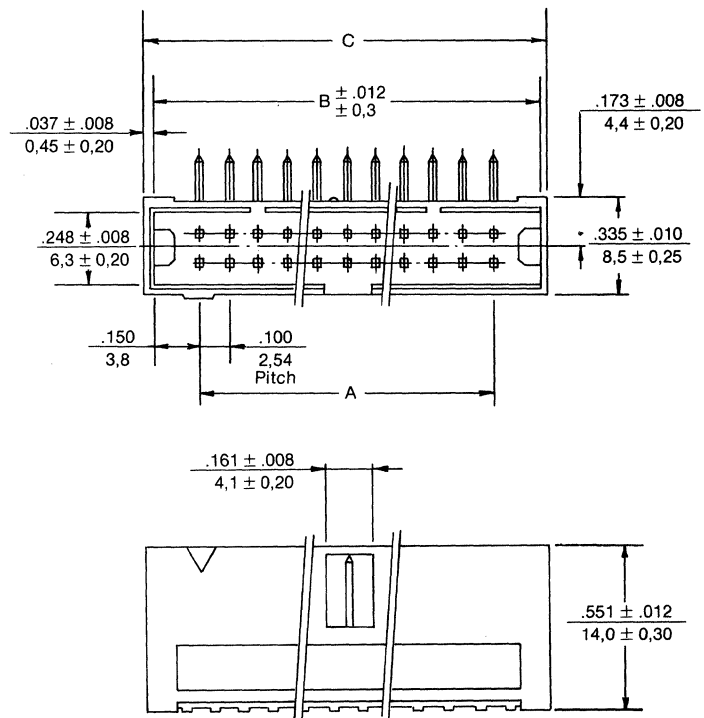
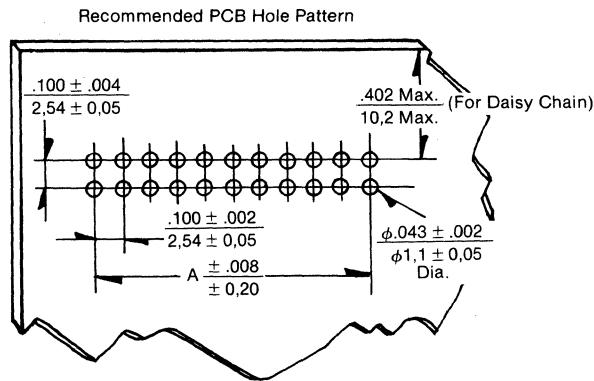
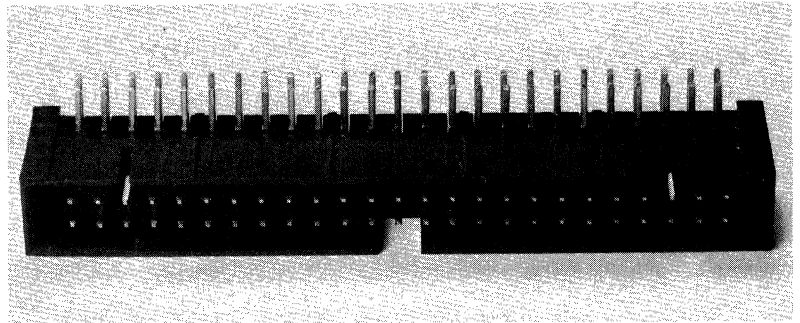


B 5342 Series

NGS1 / NGS2 / NGS3 / NT2

Single Polarization, Right Angle

- 10-50 Circuits
- 94V-0 Glass filled polyester
- Color - black
- Mates with Molex 5320 series connector
- Fully shrouded
- Contact pin: .025" (0,635mm) square, brass
- Selective gold, and tin plated versions



Dimensions 5342 Series

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
10	.400 10,16	.700 17,76	.774 19,66	20	.900 22,86	1.200 30,46	1.274 32,36	30	1.400 35,56	1.700 43,16	1.774 45,06	40	1.900 48,26	2.200 55,86	2.274 57,76
14	.600 15,24	.900 22,84	.974 24,74	26	1.200 30,48	1.500 38,08	1.574 39,98	34	1.600 40,64	1.900 48,24	1.974 50,14	50	2.400 60,96	2.700 68,56	2.774 70,46
16	.700 17,78	1.000 25,38	1.074 27,28												

5342-NGS1 / -NGS2 / -NGS3 / -NT2

Ordering Information Replace XX in Order No. with number of circuits required.

PLATING SPECIFICATIONS:	NGS1	NGS2	NGS3	NT2
Order No.	39-26-7XX8	39-26-7XX9	39-26-8XX0	39-28-5XX4

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Plating Specifications

NGS1

39 microinches (1 micron) min. nickel underplate. Contact area: 4 microinches (0,1 micron) min. gold. Solder area: 3 microns min. tin.

26B

NGS2

39 microinches (1 micron) min. nickel underplate. Contact area: 30 microinches (0,76 micron) min. gold. Solder area: 3 microns min. tin.

NGS3

39 microinches (1 micron) min. nickel underplate. Contact area: 10 microinches (0,25 micron) min. gold. Solder area: 3 microns min. tin.

NT2

35 microinches (0.9 microns) min. tin overall, over nickel underplate.

Ribbon Cable Connector

Qik-fLECS .050" (1,27 mm) Center



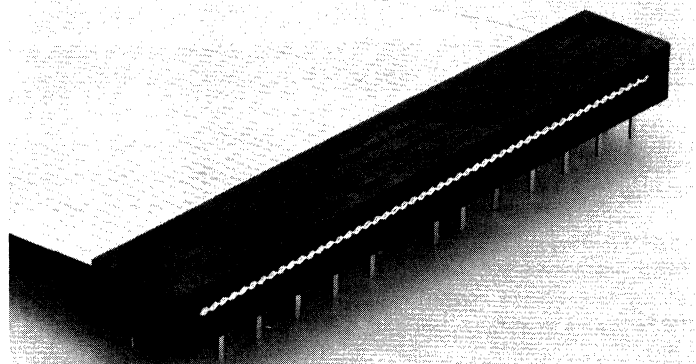
5350 Series

Transition Type

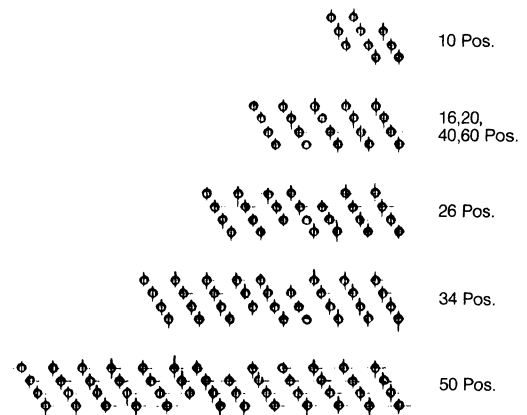
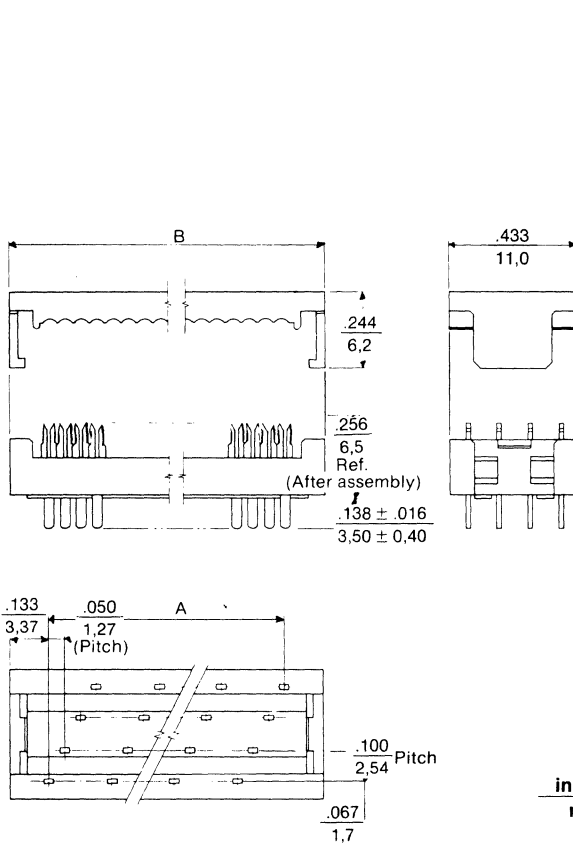
Staggered Terminal

- 10-60 Circuits
- 94V-0 Polyester
- Color - black
- Symmetrical upper housing
- U-contact terminal design
- Contact material: phosphor bronze
- Plating - tin
- Cable accommodation:
Stranded wire: AWG 28
- Housings available in preloaded and unloaded form
- Rated 1 amp
- Rib-idents for positive cable alignment

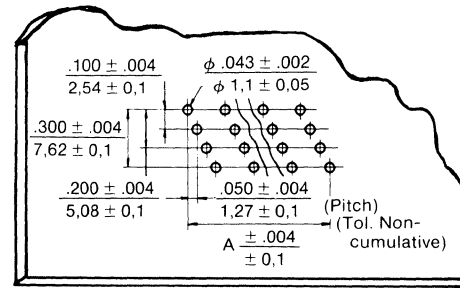
Refer to pages 17M-20M at the end of this catalog for application tooling



B



Aligned P.C. Board Hole Detail



Recommended P.C. Board Hole Dim.

Dimensions 5350 Series

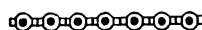
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
10	.450 11.43	.715 18.17	20	.950 24.13	1.215 30.87	34	1.650 41.91	1.915 48.65	50	2.450 62.23	2.715 68.97
16	.750 19.05	1.015 25.79	26	1.250 31.75	1.515 38.49	40	1.950 49.53	2.215 56.27	60	2.950 74.93	3.215 81.67

Ordering Information 5350

Circuit sizes available: 10, 16, 20, 26, 34, 40, 50 and 60. Replace **XX** in Order No. with number of circuits desired.

Unloaded	Preloaded
• Order No. - 15-38-0XX1	• Order No. 15-38-0XX2

• U.S. Standard Product, available through Molex franchised distributors



Recommended Molex Ribbon Cable for use with 5350 Series:
Eng. Nos. 6800, 40158, 24107, 24108

Ribbon Cable Connector

Qik-fleCS .050" (1,27 mm) Center



B

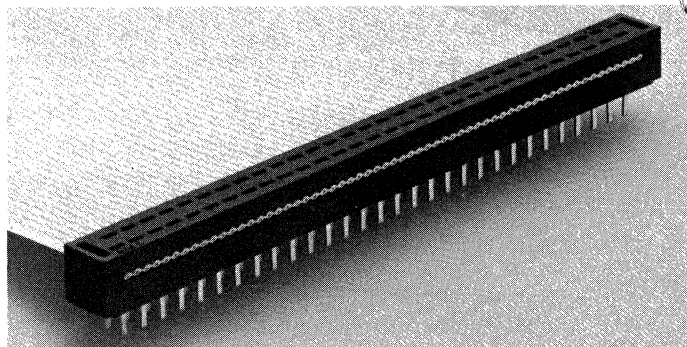
5360 Grid Series

Transition S.H.E.* Type

.100" x .100"

(2,54mm x 2,54mm)

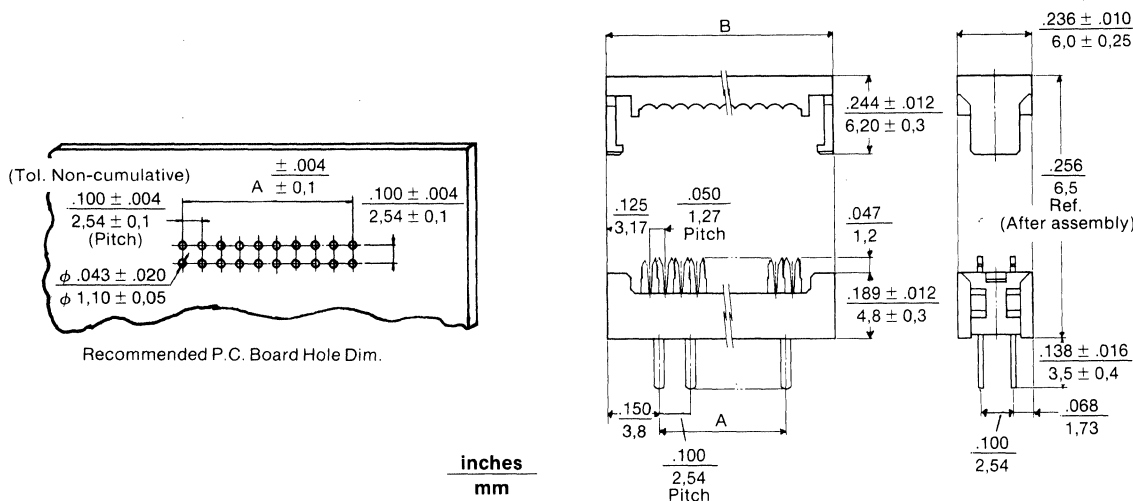
- 10-60 Circuits
- .236" (6,0mm) wide; uses minimal board space
- 94V-0 Polyester
- Color - black
- Symmetrical upper housing
- U-contact terminal design
- Contact material: phosphor bronze
- Plating - tin
- Cable accommodation: Stranded wire: AWG 28
- Insulation range ϕ .045" (1,14mm) max.
- Housings available with covers pre-assembled or loose
- Rated 1 amp
- Available in tubes for use on AM60556 machine; also available on tape for use on AM63200 machine



*S.H.E. - Shrouded Header Eliminator

Refer to pages 17M-20M for application tooling

(Unloaded Version Shown)



Dimensions 5360 Series — Tray Packaged

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
10	.400 10,16	.699 17,76	20	.900 22,86	1.199 30,46	34	1.600 40,64	1.899 48,24	50	2.400 60,96	2.699 68,56
14	.600 15,24	.899 22,84	26	1.200 30,48	1.499 38,08	40	1.900 48,26	2.199 55,86	60	2.900 73,66	3.199 81,26
16	.700 17,78	.999 25,38	30	1.399 35,56	1.699 43,16						

Ordering Information 5360 Series

Circuit sizes available: 10, 14, 16, 20, 26, 30, 34, 40, 50 and 60. Replace **XX** in Order No. with number of circuits desired.

Unloaded - Cover and housing separate	Preloaded - Cover and housing pre-assembled
• Order No - 15-38-0XX3	• Order No. 15-38-0XX4

• U.S. Standard Product, available through Molex franchised distributors.

Recommended Molex Ribbon Cable for use with 5360 Series: Eng. Nos. 6800, 40158, 24107, 24108

Ribbon Cable Connector

Qik-FLECS .050" (1,27 mm) Center



5370 Dip Series

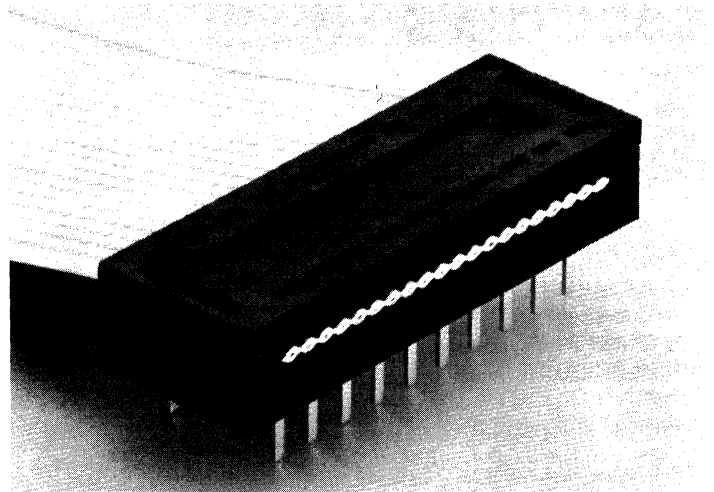
Transition Type

.100" x .300"

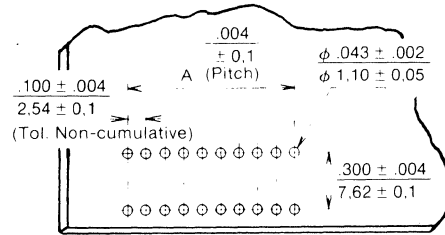
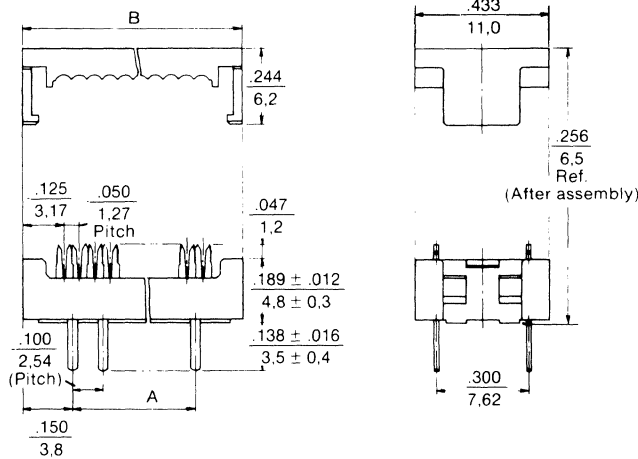
(2,54 mm x 7,62 mm)

- 14-20 Circuits
- 94V-0 Polyester
- Color - black
- Symmetrical upper housing
- U-contact terminal design
- Contact material: phosphor bronze
- Plating - tin
- Cable accommodation:
Stranded wire: AWG 28
- Insulation range ϕ .045" (1,14 max)
- Housings available in preloaded and unloaded form
- Rated 1 amp
- Rib-idents for positive cable alignment
- Can be soldered to PC board or plugged directly into a dip socket

Refer to pages 17M-20M at the end of this catalog for application tooling



(Unloaded Version Shown)



Recommended P.C. Board Hole Dim.

inches
mm

Dimensions 5370 Series

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
14	.600 15,24	.899 22,84	18	.800 20,32	1.099 27,92
16	.700 17,78	.999 25,38	20	.900 22,86	1.199 30,46

Recommended Molex Ribbon Cable for use with 5370 Series:
Eng. Nos. 6800, 40158, 24107, 24108

Ordering Information 5370

Circuit sizes available: 14, 16, 18 and 20. Replace XX in Order No. with number of circuits desired.

Unloaded	Preloaded
• Order No. - 15-38-0XX5	• Order No. 15-38-0XX6

• U.S. Standard Product, available through Molex franchised distributors.

Ribbon Cable Connector

Qik-fleCS .050" (1,27 mm) Center



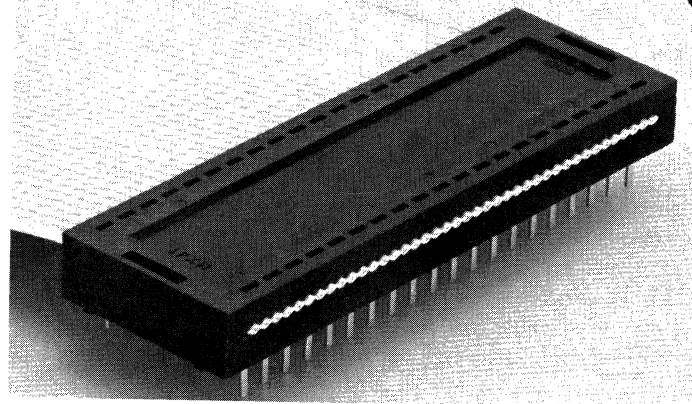
B 5380 Dip Series

Transition Type

.100" x .600"

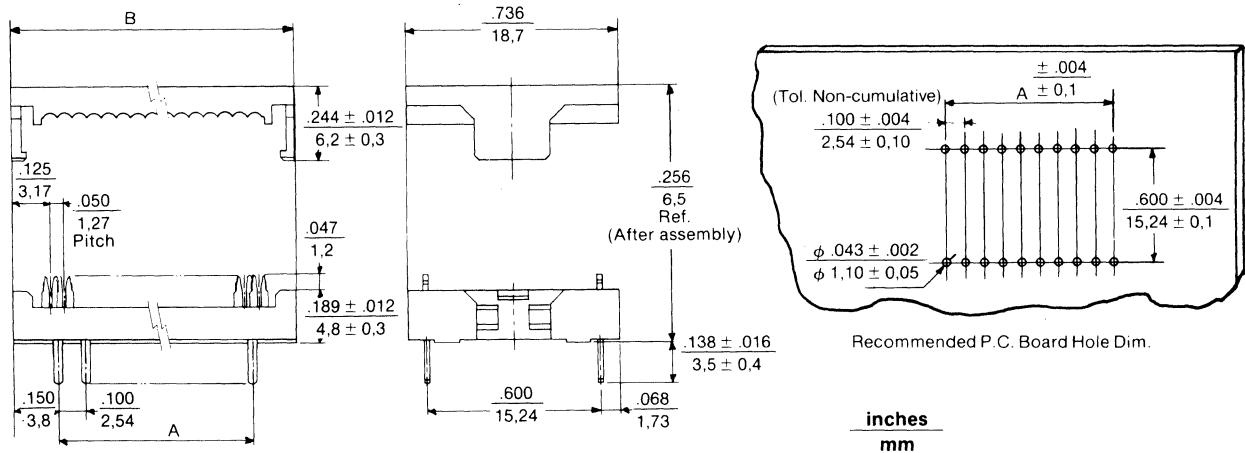
(2,54 mm x 15,24 mm)

- 24 and 40 Circuits
- 94V-0 Polyester
- Color - black
- Symmetrical upper housing
- U-contact terminal design
- Contact material: phosphor bronze
- Plating - tin
- Cable accommodation:
Stranded wire: AWG 28
- Insulation range ϕ .045" (1,14 max.)
- Housings available in preloaded and unloaded form
- Rib-idents for positive cable alignment
- Can be soldered to PC board or plugged directly into a dip socket



Refer to pages 17M-20M at the end of this catalog for application tooling

(Unloaded Version Shown)



Dimensions 5380 Series

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
24	1,100 27,94	1,399 35,54	40	1,900 48,26	2,199 55,86

Ordering Information 5380

Circuits	Unloaded	Preloaded	Circuits	Unloaded	Preloaded
24	• 15-38-0247	• 15-38-0248	40	• 15-38-0407	• 15-38-0408

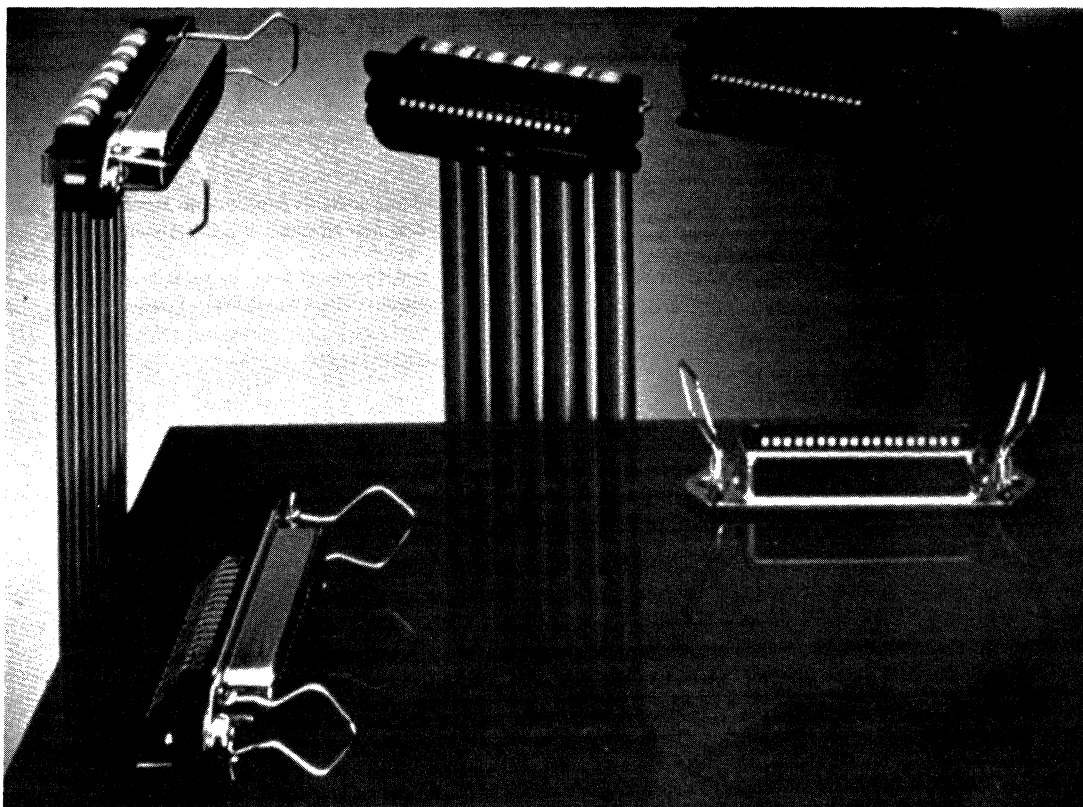
• U.S. Standard Product, available through Molex franchised distributors.

Recommended Molex Ribbon Cable for use with 5380 Series:
Eng. Nos. 6800, 40158, 24107, 24108

Ribbon Connector System Centronics Standard

Contents

B



DL 50™ System

Introduction	32B
Right Angle P.C.B. Mount Receptacle	33B
Straight P.C.B. Mount Receptacle	33B
I.D.T. Receptacle	34B
I.D.T. Plug	34B
Cover	34B

DL50™ Ribbon Connector System



B

Introduction

The DL50 Data Latch ribbon connector system utilizes cost-saving mass termination insulation displacement technology for harness production. The system eliminates time consuming soldering and other costly wire preparations. The connectors accept standard AWG #28 ribbon cable with .050" (1,27mm) center spacing. This means that other Molex IDT ribbon cable connectors such as the QF50 or MX50 product lines can also be used in harnesses. The Molex DL50 ribbon connector system is also fully intermateable with existing connectors of similar design and conforms to the CENTRONICS standard.

This system is ideally suited for printer interface applications as well as applications for modems, computers, peripherals, medical equipment, instrumentation, business machines and a wide range

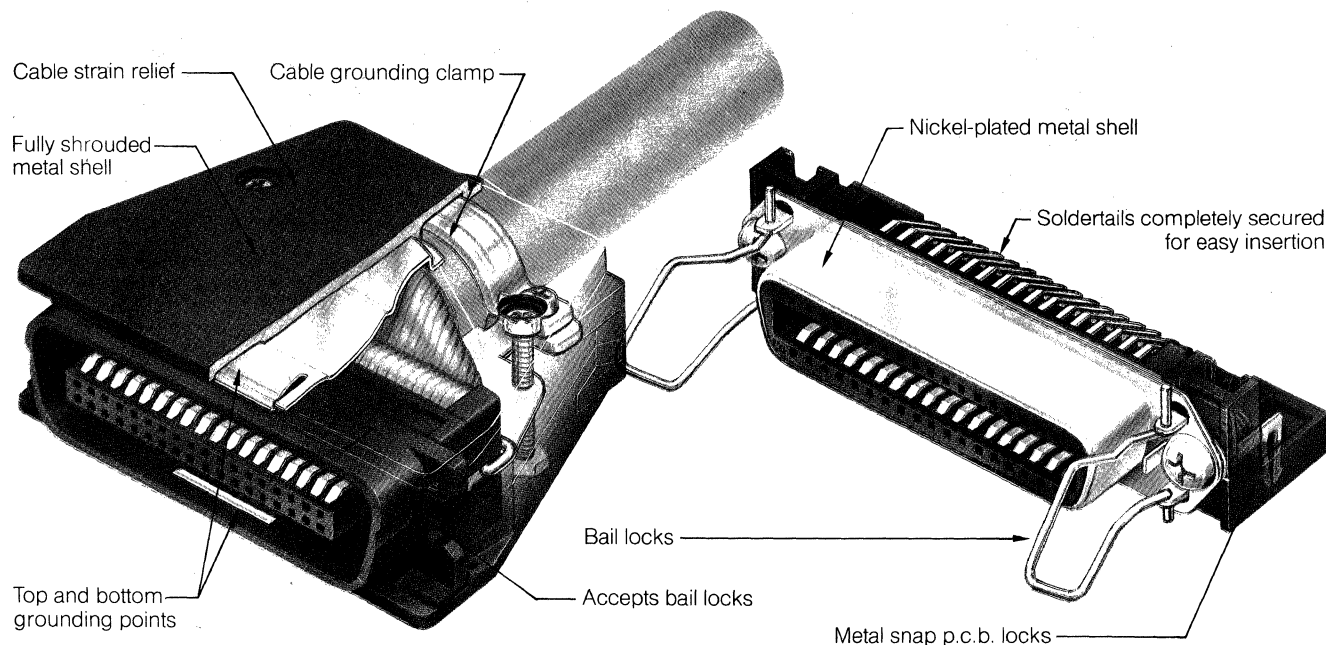
of telecommunications equipment where .050" (1,27mm) ribbon cable is used.

Electro-static discharge (ESD) protected contact tips are featured.

The DL50 system offers both straight and right angle p.c.b. mount, metal shelled receptacles and mating plug and receptacle IDT cable connectors. They are available in 24, 36 and 50 circuit versions.

The metal shelled p.c.b. mount and IDT receptacles provide required grounding. The IDT plug, in combination with an optional grounding cover, meets FCC requirements.

The DL50 system provides a reliable and economical input/output interconnect with minimal assembly and easy operator installation.



Product Specifications

P.C.B. MOUNT RECEPTACLES

Current Rating:

3A

Voltage Rating:

500V AC

Insulation Resistance:

1000 Megohms min. @ 500V DC

Contact Resistance:

Straight Mount - 35 milliohms max.

@ 100mA DC

Right Angle Mount - 15 milliohms

max. @ 100mA DC

Withstanding Voltage:

1200V AC rms/1 min.

IDT PLUG AND RECEPTACLE

Current Rating:

1A

Voltage Rating:

250V AC

Insulation Resistance:

1000 Megohms min. @ 500V DC

Contact Resistance:

25 milliohms max. @ 100mA DC

Withstanding Voltage:

650V AC rms/1 min.

GOLD PLATING OPTIONS:

1. 8 μ " (0,2 μ) min. gold in the contact area, 79 μ " (2,0 μ) min. nickel overall underplate and 118 μ " (3,0 μ) min. tin/lead in the soldertail section
2. 15 μ " (0,38 μ) min. gold in the contact area, 50 μ " (1,27 μ) min. nickel overall underplate and 75 μ " (1,9 μ) min. tin/lead in the soldertail section
3. 30 μ " (0,76 μ) min. gold in the contact area, 50 μ " (1,27 μ) min. nickel overall underplate and 75 μ " (1,9 μ) min. tin/lead in the soldertail section

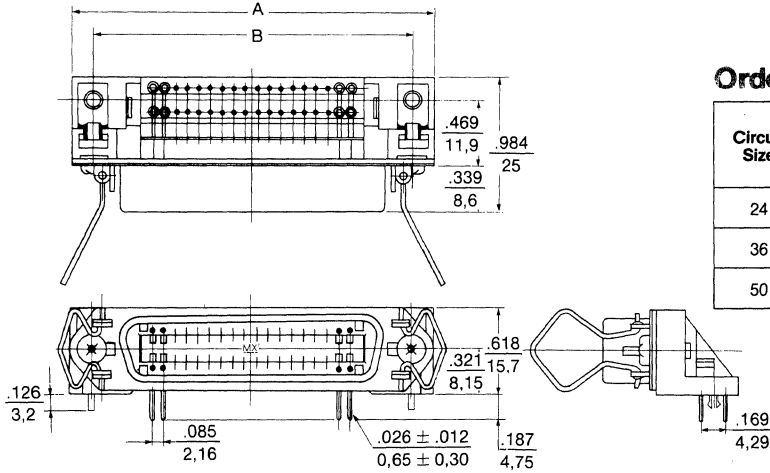
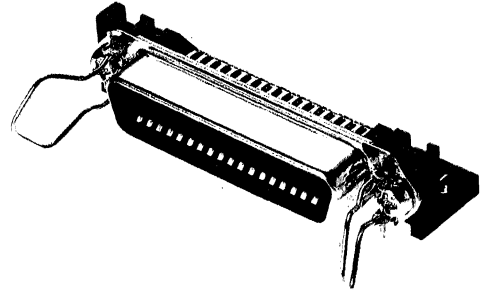
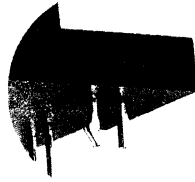
DL50™ Ribbon Connector System



B

71519 Series Right Angle P.C.B. Mount Receptacle

- Bail locks
- Nickel-plated metal shell
- Solderetails securely positioned
- Front shell grounded thru P.C.B. retaining locks

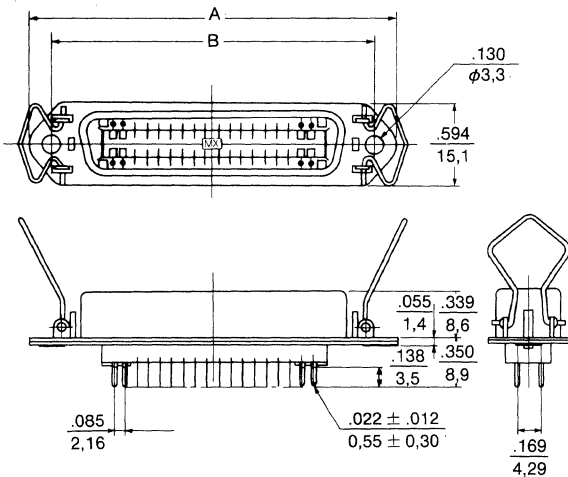
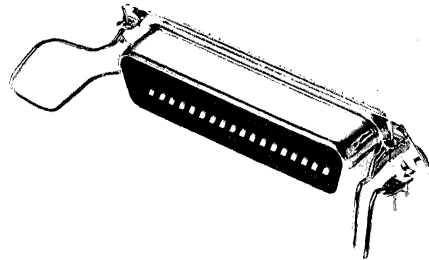


Ordering Information

Circuit Size	CONTACT GOLD PLATING OPTION			Dimensions	
	8 microinch (0.2 micron) Order No.	15 microinch (0.38 micron) Order No.	30 microinch (0.76 micron) Order No.	A	B
24	71519-1024	71519-2024	71519-3024	2.157 54,78	1.842 46,78
36	71519-1036	71519-2034	71519-3036	2.667 67,74	2.352 59,74
50	71519-1050	71519-2050	71519-3050	3.262 82,85	2.947 74,85

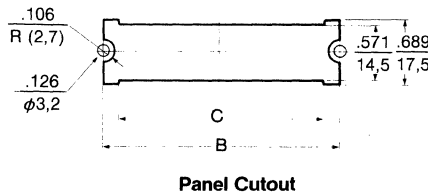
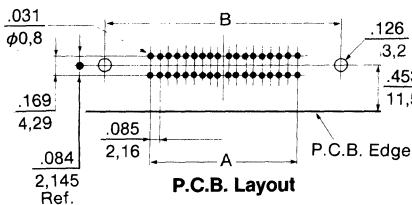
71520 Series Straight P.C.B. Mount Receptacle

- Bail locks
- Nickel-plated metal shell
- Solderetails securely positioned



Ordering Information

Circuit Size	CONTACT GOLD PLATING OPTION			Dimensions	
	8 microinch (0.2 micron) Order No.	15 microinch (0.38 micron) Order No.	30 microinch (0.76 micron) Order No.	A	B
24	71520-1024	71520-2024	71520-3024	2.157 54,78	1.842 46,78
36	71520-1036	71520-2036	71520-3036	2.667 67,74	2.352 59,74
50	71520-3050	71520-2050	71520-3050	3.262 82,85	2.947 74,85



Circuit Size	Dimensions		
	A	B	C
24	.935 23,75	1.842 46,78	1.535 39
36	1.445 36,75	2.352 59,74	2.047 52
50	2.040 51,82	2.947 74,85	2.602 66,10

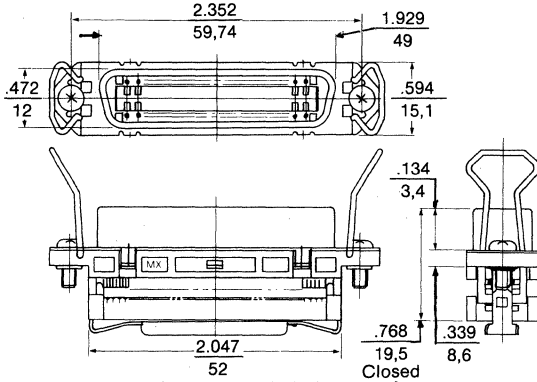
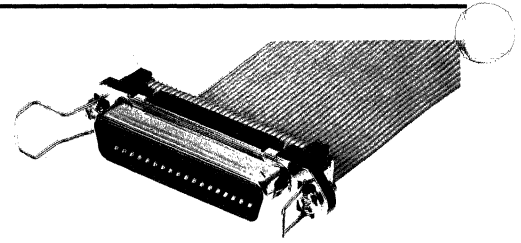
DL50™ Ribbon Connector System



B

71521 Series IDT Receptacle

- Bail locks
- Nickel-plated metal shell
- Cable strain relief

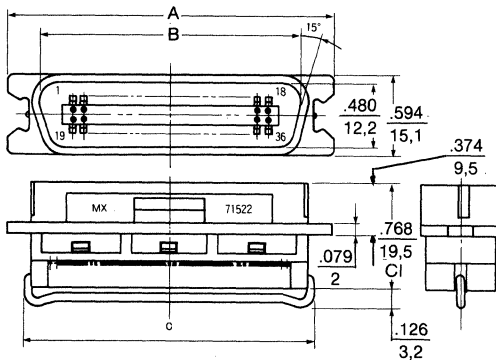
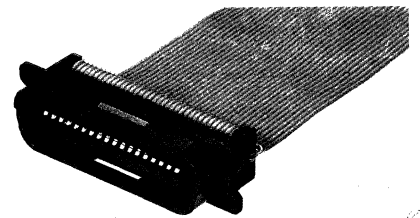


Ordering Information

Circuit Size	CONTACT GOLD PLATING OPTION		
	8 microinch (0.2 micron)	15 microinch (0.38 micron)	30 microinch (0.75 micron)
	Order No	Order No.	Order No.
36	71521-1036	71521-2036	71521-3036

71522 Series IDT Plug

- Accepts bail locks
- Cable strain relief
- Use with 71523 series cover

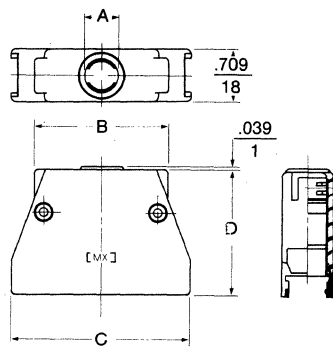
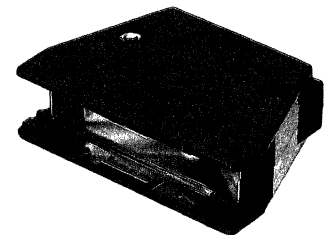


Ordering Information

Circuit Size	CONTACT GOLD PLATING OPTION			Dimensions		
	8 microinch (0.2 micron)	15 microinch (0.38 micron)	30 microinch (0.76 micron)	A	B	C
	Order No.	Order No.	Order No.			
24	71522-1024	71522-2024	71522-3024	1.911 48,54	1.427 36,24	1.581 40,15
36	71522-1036	71522-2036	71522-3036	2.421 61,50	1.937 49,20	2.146 54,50
50	71522-1050	71522-2050	71522-3050	3.017 76,62	2.532 64,31	2.778 70,55

71523 Series Cover

- Nickel-plated metal shell
- Cable strain relief
- For use with round shielded cable
- Cable grounding clamp
- Cover accepts 71522 series plug



Ordering Information

Circuit Size	Order Number	Dimensions			
		A	B	C	D
24	71523-0024	.394 10	1.457 37	1.911 48,54	1.567 39,80
36	71523-0036	.472 12	1.856 47	2.421 61,50	1.685 42,80
50	71523-0050	.551 14	2.362 60	3.017 76,62	1.823 46,30

DS50™ D-Subminiature For .050" (1,27 mm) Center Ribbon Cable



Introduction

Molex DS50 D-Subminiature ribbon connector system utilizes cost-saving mass termination of insulation displacement technology, for harness production.

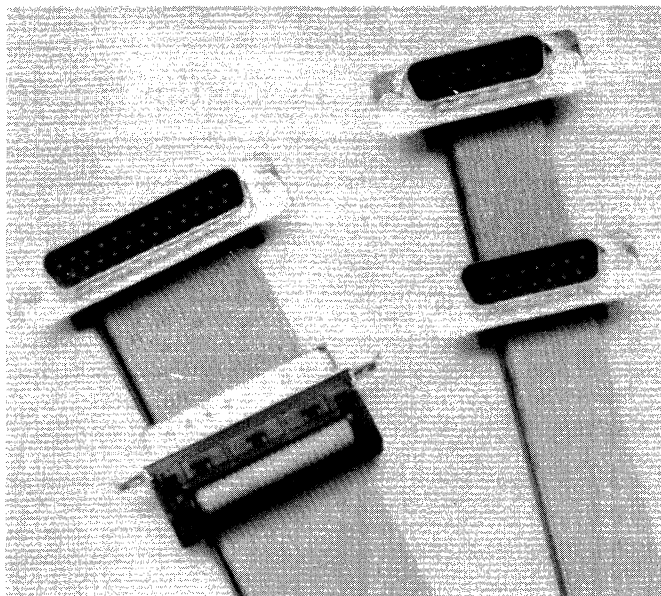
Available in 9-37 circuits, DS50 connectors accept standard AWG #28 stranded .050" (1,27mm) ribbon cables. The connectors are ideally suited for computer, peripherals, business machines and other applications. The DS50 system is designed to be intermateable with industry standard D-Subminiatures for input/output interconnect with minimal assembly and easy operator installation.

The DS50 connector system offers full plastic and metal shells for both plug and receptacle. The metal shell plug is optionally available with grounding indents to aid in EMI/RFI suppression.

The terminals are offered with various selective gold plating in the contact area and with the IDT area tin plated.

A strain relief is optionally included with the connector. Connectors without strain relief can also be ordered when the strain relief is not required.

Application Tooling available. See pages 17M and 27M, this catalog.



B

D-Subminiature Plug Metal Shell



B

71527 Series For .050" (1,27mm) Center Ribbon Cable

- Integral termination cap
- Selective gold plating on contacts
- 9, 15, 25 and 37 contact positions
- Plated steel shell
- Optional strain relief
- Mass termination via the insulation displacement method

Shell: Steel, tin-plated or zinc plated with yellow chromate finish

Contacts: Phosphor bronze selectively plated with gold in contact area and tin in insulation displacement area over nickel overall

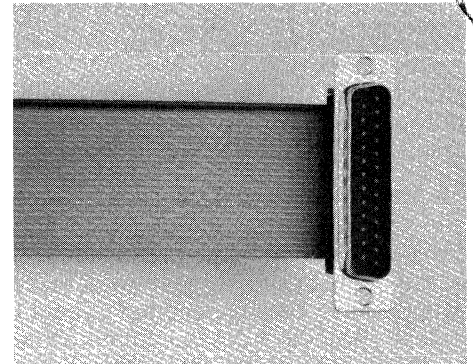
Electrical

Current Rating: 1 Amp (28 AWG stranded)

Voltage Rating: 750 V ac

Insulation Resistance: > 1000 megohms

Contact Resistance: 15 milliohms max.



71527 Series Plug

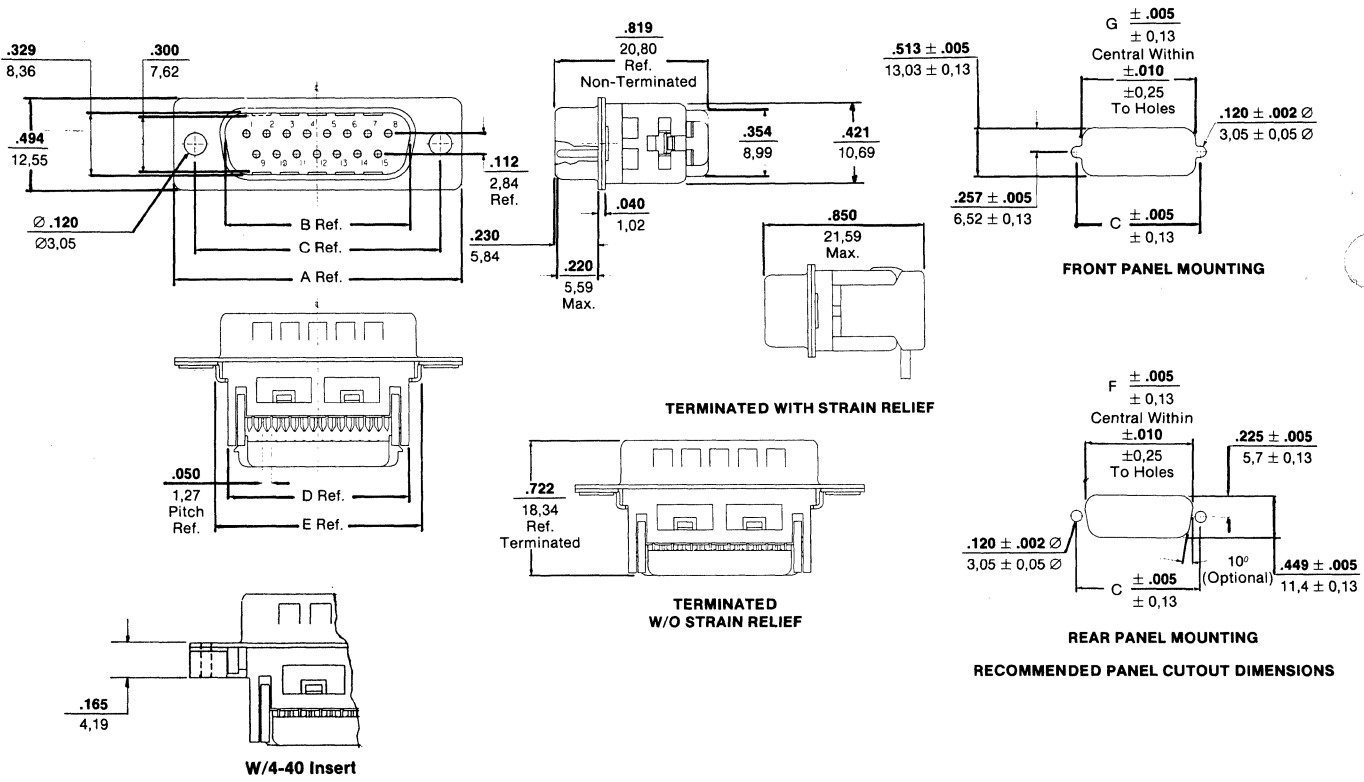
SPECIFICATIONS

Material

Housing: Glass reinforced PBT, UL 94V-0, black color

BENEFITS

- No splicing or separation of ribbon cable necessary
- Available with grounding indents to aid in EMI/RFI suppression
- Designed for #28 AWG stranded wire
- Intermateable with industry standard D-Subminiatures
- Front or rear panel mounting for design flexibility
- Application tooling available. See pages 17M and 27M



Dimensions inches/mm

CIRCUITS	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E	DIM. F	DIM. G
9	1.212/30,80	.663/16,84	.984/24,99	.634/16,10	.758/19,25	.806/20,47	.874/22,20
15	1.539/39,10	.991/25,17	1.312/33,32	.945/24,00	1.093/27,76	1.134/28,80	1.202/30,53
25	2.090/53,09	1.534/38,96	1.852/47,04	1.502/38,14	1.624/41,24	1.674/42,52	1.743/44,27
37	2.732/69,40	2.183/55,45	2.500/63,50	2.150/54,60	2.278/57,86	2.326/59,08	2.391/60,73

STRAIN RELIEF ORDER NOS.	
CIRCUITS	ORDER NO.
9	71529-09
15	71529-15
25	71529-25
37	71529-37

Ordering Information

ORDER NUMBER FORMULA

71527- X X X X

Shell Plating Face Mtg. Hole

- 0 = Tin Plated Through Hole
- 1 = Tin Plated 4-40 Threaded Insert
- 2 = Zinc Yellow Chromate Finish
- 3 = Zinc Yellow Chromate Through Hole

Contact Plating

- 0 = Gold Finish
- 1 = 15µin./76µm Au min.
- 2 = 30µin./76µm Au min.

Strain Relief

- 0 = Without
- 1 = With

Circuit Size

- 1 = 9 Ckts.
- 2 = 15 Ckts.
- 3 = 25 Ckts.
- 4 = 37 Ckts.

DS50™ D-Subminiature Receptacle Metal Shell



71528 Series Receptacle For .050" (1,27mm) Center Ribbon Cable

- Integral termination cap
- Selective gold plating on contacts
- 9, 15, 25 and 37 contact positions
- Plated steel shell
- Optional strain relief
- Mass termination via the insulation displacement method

Shell: Steel, tin-plated or zinc plated with yellow chromate finish

Contacts: Phosphor bronze selectively plated with gold in contact area and tin in insulation displacement area over nickel overall

— Electrical

Current Rating: 1 Amp (28 AWG stranded)

Voltage Rating: 750 V ac

Insulation Resistance: > 1000 megohms

Contact Resistance: 15 milliohms max.

SPECIFICATIONS

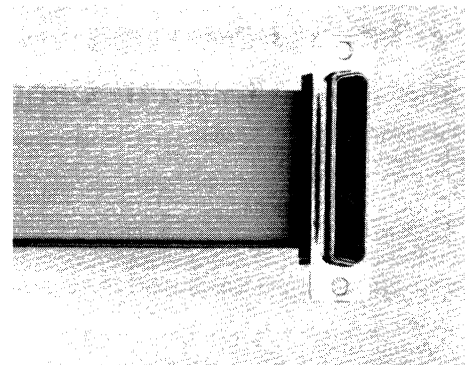
— Material

Housing: Glass reinforced PBT, UL 94V-0, black color

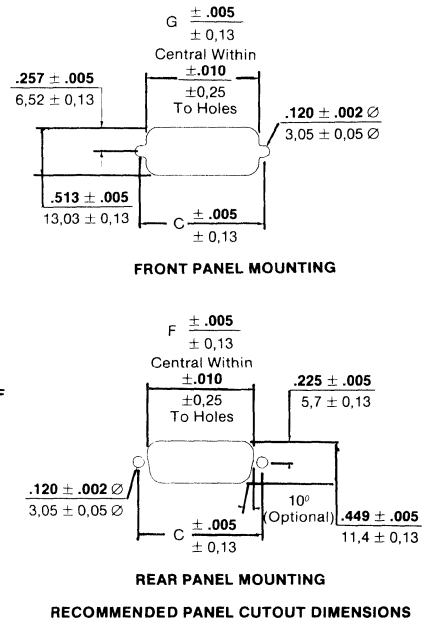
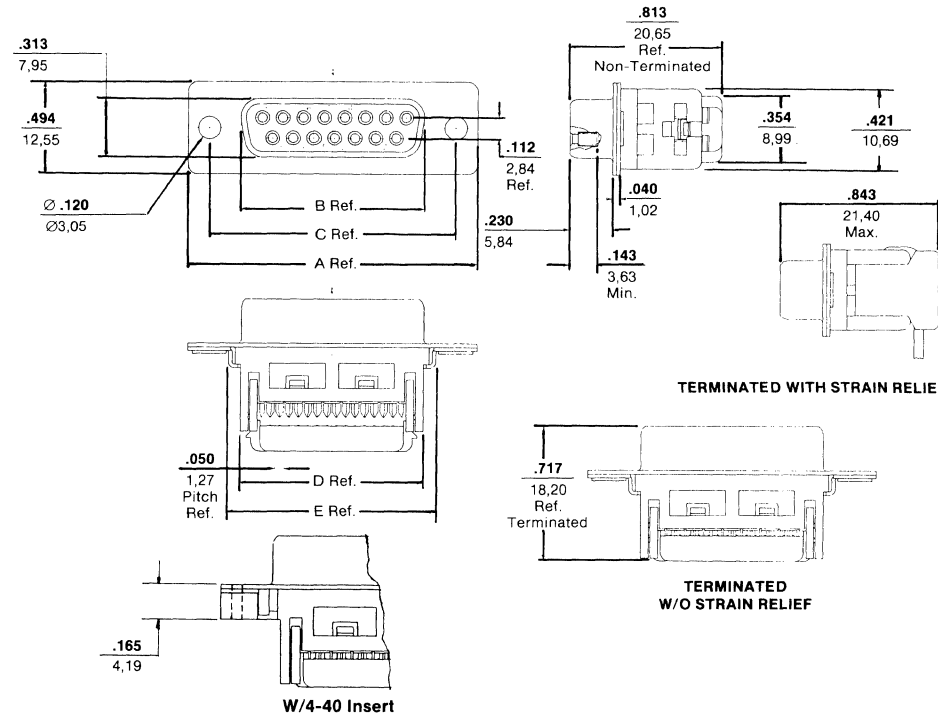
BENEFITS

- No splicing or separation of ribbon cable necessary
- Designed for #28 AWG wires
- Application tooling available. See pages 17M and 27M

- Intermateable with industry standard D-Subminiatures
- Front or rear panel mounting for design flexibility



71528 Series Receptacle



Dimensions inches/mm

CIRCUITS	DIM. A	DIM. B.	DIM. C	DIM. D	DIM. E	DIM. F	DIM. G
9	1.212/30,80	.642/16,31	.984/24,99	.634/16,10	.758/19,25	.806/20,47	.874/22,20
15	1.539/39,10	.970/24,64	1.312/33,32	.945/24,00	1.093/27,76	1.134/28,80	1.202/30,53
25	2.090/53,09	1.511/38,38	1.852/47,04	1.502/38,14	1.624/41,24	1.674/42,52	1.743/44,27
37	2.732/69,40	2.159/54,84	2.500/63,50	2.150/54,60	2.278/57,86	2.326/59,08	2.391/60,73

STRAIN RELIEF ORDER NOS.	
CIRCUITS	ORDER NO.
9	71529-09
15	71529-15
25	71529-25
37	71529-37

Ordering Information

ORDER NUMBER FORMULA

71528- X X X X

<p>Shell Plating Face Mtg. Hole</p> <p>0 = Tin Plated Through Hole 1 = Tin Plated 4-40 Threaded Insert 2 = Zinc Yellow Chromate Finish 4-40 Threaded Insert 3 = Zinc Yellow Chromate Through Hole</p>	<p>Contact Plating</p> <p>0 = Gold Flash 1 = 15µin./,76µm Au min. 2 = 30µin./,38µm Au min.</p>	<p>Strain Relief</p> <p>0 = Without 1 = With</p>	<p>Circuit Size</p> <p>1 = 9 Ckts. 2 = 15 Ckts. 3 = 25 Ckts. 4 = 37 Ckts.</p>
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DS50™ D-Subminiature Plug Plastic Shell



B

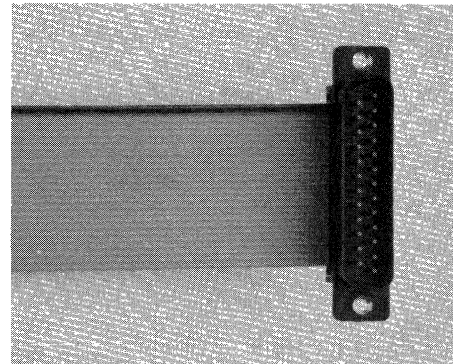
71530 Series Plug For .050" (1,27mm) Center Ribbon Cable

- Integral termination cap
- Selective gold plating on contacts
- 9, 15, 25 and 37 contact positions
- Optional strain relief
- Mass termination via the insulation displacement method

Contacts: Phosphor bronze selectively plated with gold in contact area and tin in insulation displacement area over nickel overall

— **Electrical**

Current Rating: 1 Amp (28 AWG stranded)
Voltage Rating: 750 V ac
Insulation Resistance: > 1000 megohms
Contact Resistance: 15 milliohms max.



71530 Series Plug

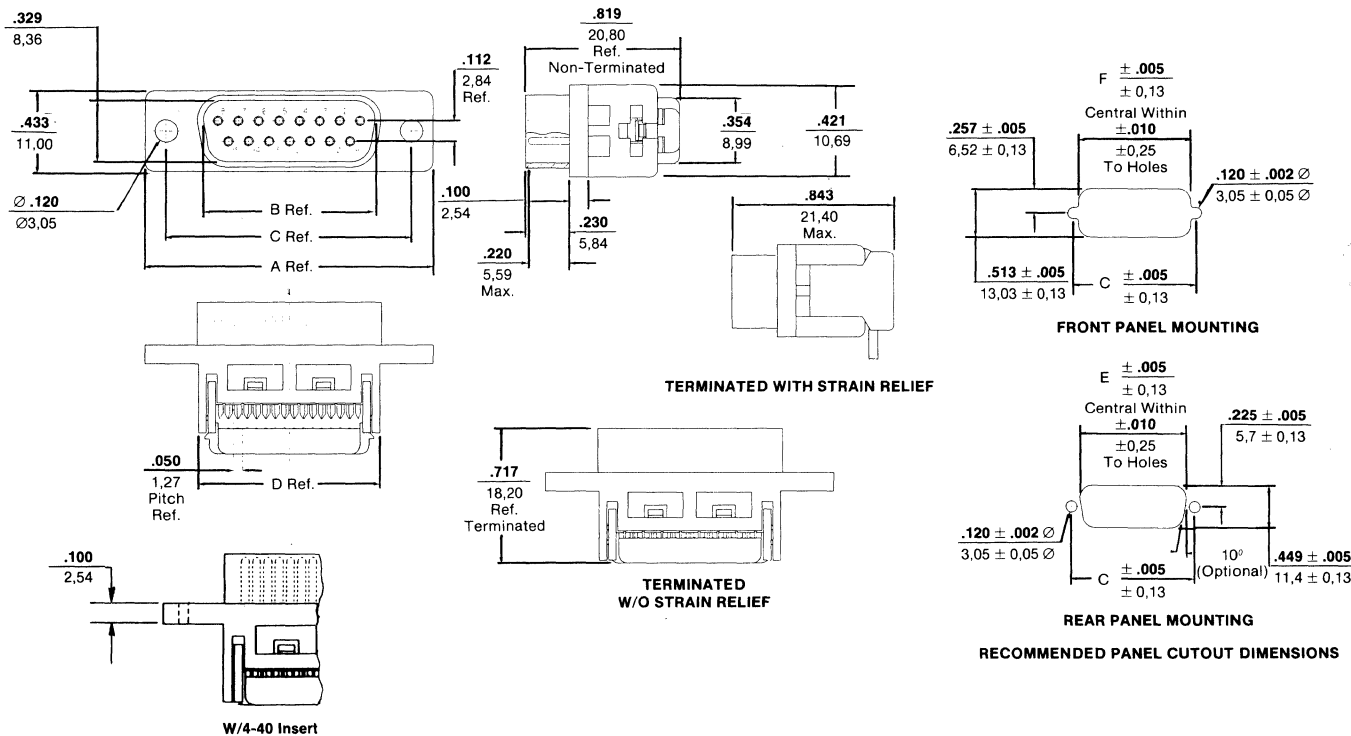
SPECIFICATIONS

— **Material**

Housing: Glass reinforced PBT, UL 94V-0, black color

BENEFITS

- No splicing or separation of ribbon cable necessary
- Available with grounding indents to aid in EMI/RFI suppression
- Designed for #28 AWG stranded wire
- Intermateable with industry standard D-Subminiatures
- Front or rear panel mounting for design flexibility
- Application tooling available. See pages 17M and 27M



Dimensions inches/mm

CIRCUITS	DIM. A	DIM. B.	DIM. C	DIM. D	DIM. E	DIM. F
9	1.212/30,80	.666/16,92	.984/24,99	.634/16,10	.806/20,47	.874/22,20
15	1.539/39,10	.994/25,25	1.312/33,32	.945/24,00	1.134/28,80	1.202/30,53
25	2.090/53,09	1.534/38,96	1.852/47,04	1.502/38,14	1.674/42,52	1.743/44,27
37	2.732/69,40	2.183/55,45	2.500/63,50	2.150/54,60	2.326/59,08	2.391/60,73

STRAIN RELIEF ORDER NOS.	
CIRCUITS	ORDER NO.
9	71529-09
15	71529-15
25	71529-25
37	71529-37

Ordering Information

ORDER NUMBER FORMULA

71530- X X X X

<p>Face Mtg. Hole</p> <p>0 = Through Hole</p> <p>1 = 4-40 Threaded Insert</p>	<p>Contact Plating</p> <p>0 = Gold Flash</p> <p>1 = 15µin/.76µm Au min.</p> <p>2 = 30µin./,38µm Au min.</p>	<p>Strain Relief</p> <p>0 = Without</p> <p>1 = With</p>	<p>Circuit Size</p> <p>1 = 9 Ckts.</p> <p>2 = 15 Ckts.</p> <p>3 = 25 Ckts.</p> <p>4 = 37 Ckts.</p>
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DS50™ D-Subminiature Receptacle Plastic Shell



71531 Series Receptacle For .050" (1,27mm) Center Ribbon Cable

- Integral termination cap
- Selective gold plating on contacts
- 9, 15, 25 and 37 contact positions
- Optional strain relief
- Mass termination via the insulation displacement method

Contacts: Phosphor bronze selectively plated with gold in contact area and tin in insulation displacement area over nickel overall

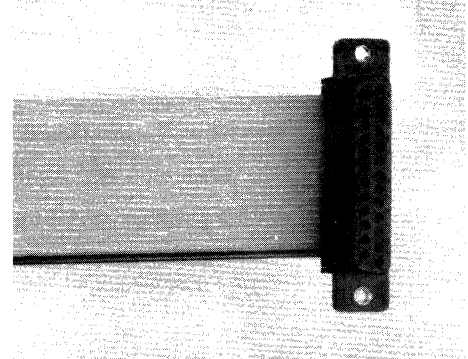
— Electrical

Current Rating: 1 Amp (28 AWG stranded)

Voltage Rating: 750 V ac

Insulation Resistance: > 1000 megohms

Contact Resistance: 15 milliohms max.



71531 Series Receptacle

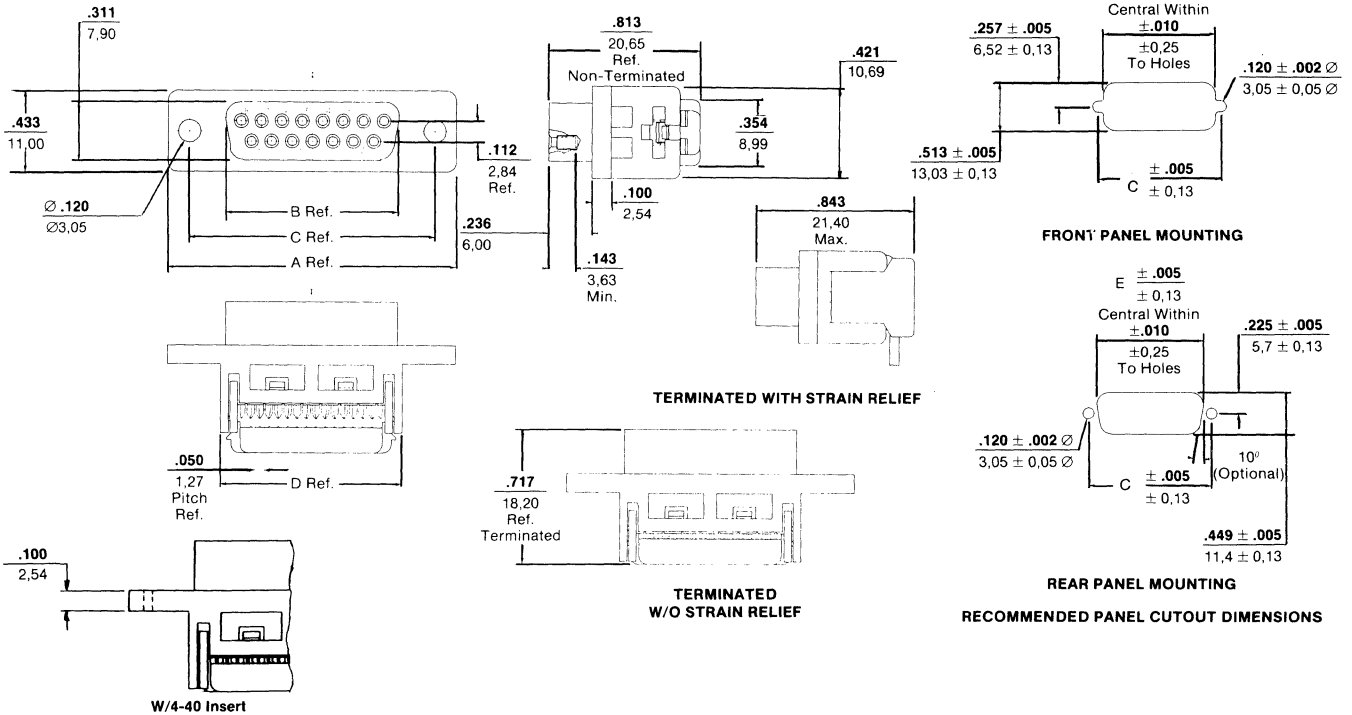
SPECIFICATIONS

— Material

Housing: Glass reinforced PBT, UL 94V-0, black color

BENEFITS

- No splicing or separation of ribbon cable necessary
- Available with grounding indents to aid in EMI/RFI suppression
- Designed for #28 AWG stranded wire
- Intermateable with industry standard D-Subminiatures
- Front or rear panel mounting for design flexibility
- Application tooling available. See pages 17M and 27M



Dimensions inches/mm

CIRCUITS	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E	DIM. F
9	1.212/30,80	.643/16,33	.984/24,99	.634/16,10	.806/20,47	.874/22,20
15	1.539/39,10	.971/24,66	1.312/33,32	.945/24,00	1.134/28,80	1.202/30,53
25	2.090/53,09	1.511/38,38	1.852/47,04	1.502/38,14	1.674/42,52	1.743/44,27
37	2.732/69,40	2.159/54,84	2.500/63,50	2.150/54,60	2.326/59,08	2.391/60,73

STRAIN RELIEF ORDER NOS.	
CIRCUITS	ORDER NO.
9	71529-09
15	71529-15
25	71529-25
37	71529-37

Ordering Information

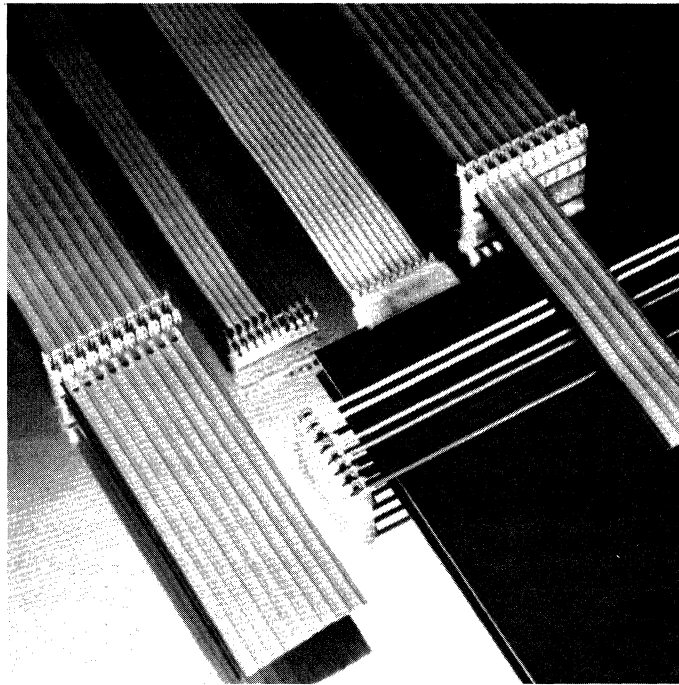
ORDER NUMBER FORMULA

71531- X X X X

<p>Face Mtg. Hole</p> <p>0 = Through Hole 1 = 4-40 Threaded Insert</p> <p>Contact Plating</p> <p>0 = Gold Flash 1 = 15µin./,76µm Au min. 2 = 30µin./,38µm Au min.</p>	<p>Strain Relief</p> <p>0 = Without 1 = With</p>	<p>Circuit Size</p> <p>1 = 9 Ckts. 2 = 15 Ckts. 3 = 25 Ckts. 4 = 37 Ckts.</p>
---	---	--

B

Contents



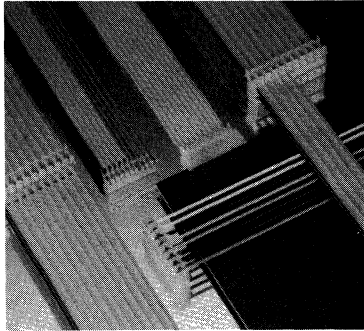
IDT Introduction	2C-3C
Technical Data Reference	4C
.079" (2,0mm) Center Spacing	
Wire-to-board Connectors	5C
Headers	6C
.098" (2,5mm) Center Spacing	
Standard Connectors	7C-8C
Headers	9C-10C
.100" (2,54mm) Center Spacing	
Standard IDT Connectors	11C-12C
Harness Board Connector	13C-14C
.156" (3,96mm) Center Spacing	
Standard IDT Connector	15C-16C
Harness Board Connectors	17C-18C
.200" (5,08mm) Center Spacing	
Standard IDT Connector	19C
Shrouded Headers	20C
Polarizing Keys and Pegs	21C
Covers for .098" (2,5mm) and .100" (2,54mm) Center Connectors	22C
Covers for .156" (3,96mm) and .200" (5,08mm) Center Connectors	23C

Insulation Displacement Technology



Introduction

Molex offers you a complete line of insulation displacement systems for discrete wire and flat cable applications.



Our insulation displacement technology (IDT™) connectors offer you a dramatic applied cost savings over equivalent crimp connectors. The reason: With IDT™ all contacts are terminated in a single step, the insulation being displaced from the conductor as the wire is pushed into the connector body. The labor intensive steps of wire stripping and terminal crimping are eliminated from the process. And, when our IDT™ connectors are terminated in mass, your cost savings multiply by the number of circuits used.

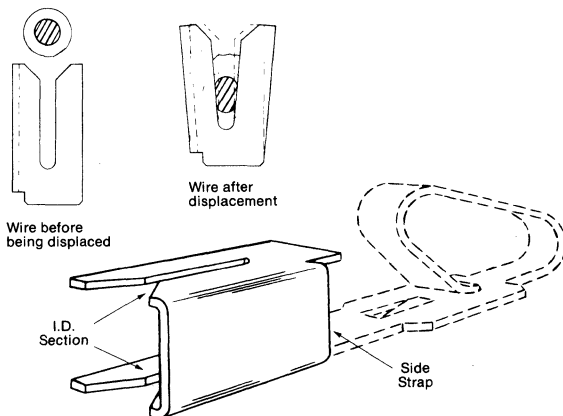
Our broad range of available connector styles and center spacings means that Molex IDT™ products can be used as drop-in replacements for other less cost effective systems. Locking ramps, polarizing voids and dust covers are available for almost all of our connectors.

To terminate our IDT™ products Molex offers a full line of application tooling from hand tools to completely automated harness assembly machines. Refer to the Application Tooling section of this catalog for details.

IDT Concept

The Molex design features two parallel plates with chamfered lead-in slots. These slots displace wire insulation and reshape the conductors by pressure. The result: 4 high pressure points of contact.

To provide a wide conductor path and both horizontal and lateral strength, the insulation displacement section is connected by a large side strap which runs almost the entire length of the plate.

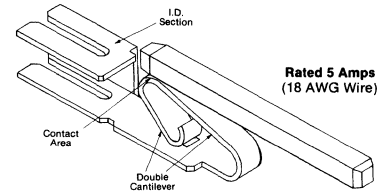


Terminal Designs

Double Cantilever Contact

.156" (3,96 mm) and .200" (5,08 mm) Center Connectors

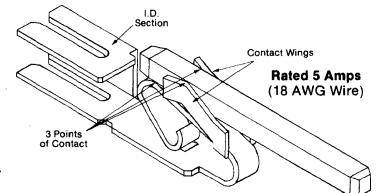
The double cantilever contact provides a high pressure contact area with a square or round post. The two cantilevers act in unison to provide a linear force increase as the pin is pushed in the housing.



Trifurcon Contact Design

.156" (3,96 mm) and .200" (5,08 mm) Center Connectors

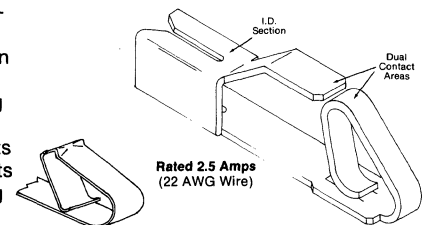
An ideal choice for situations where flux contamination, shock, or vibration exists, this terminal incorporates the double cantilever design with contact wings in the vertical plane. Contact is achieved at three points on the mating pin. While insertion force of this combination is slightly increased, the extraction force is greatly increased and maintained through disconnect cycling.



Dual Contact / with Cat Ears Option

.098" (2,5 mm) and .100" (2,54 mm) Center Connectors

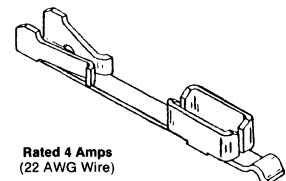
The dual contact utilizes the double cantilever approach and expands upon the design by extending a beam off the insulation displacing sections. The second stationary contact results in two independent points of contact on the mating pin.



In-Line Contact

.098" (2,5 mm), Center Connectors

This contact is ideal for in-line wire feed applications, as the dual cantilever and formed slot design provide both a low profile and a reliable interconnection.



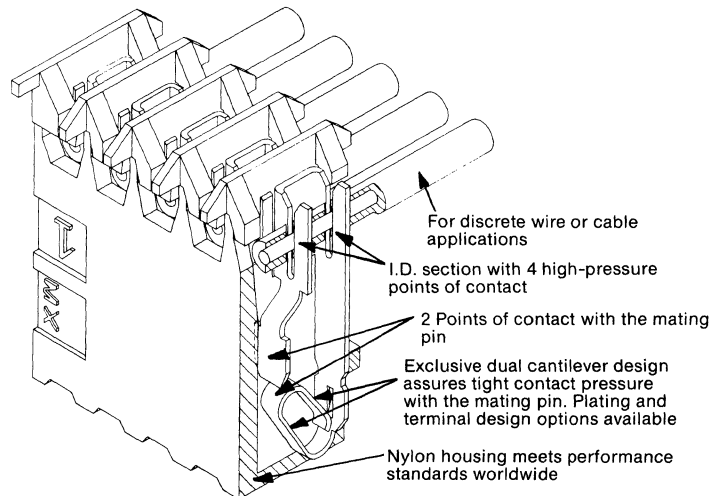
Insulation Displacement Connectors



Standard I.D.T.™ Connectors on .098" (2,5mm) and .100" (2,54mm) Centers

Designed for use with discrete wire or round conductor flat cable, the Molex standard connectors lend themselves to a variety of applications.

- Single-ended discrete wire harnesses
- Double-ended discrete wire harnesses
- Round conductor flat cable daisy chains
- Termination of both flat cable and discrete wires in a single housing

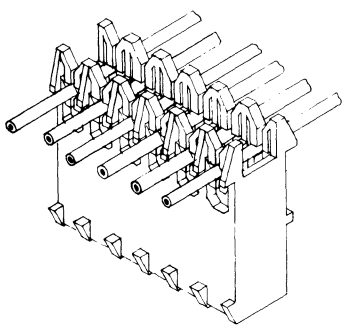


Harness Board Connectors

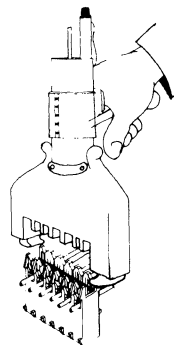
This series of connectors has an added row of molded-in wire retainers. It is designed for use with discrete wire where multiple connector breakouts or daisy chain configurations are required.

The connectors are placed into fixtures which are mounted on the harness board. These fixtures are located in the final harness configuration and positively align the connector to the termination tool.

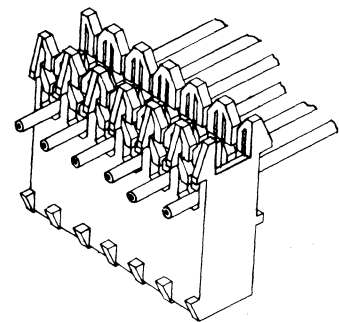
Discrete wires are then routed over the molded-in wire retainers on the connectors and snapped into position. The retainers positively position the wire over the proper insulation displacement terminal.



Wire held in place by wire retainers



Termination with hand held air tool



Wires seated, insulation displaced and held by strain relief

Upon completion of the harness wiring operation the wires are terminated with a hand-held pneumatic tool. The result is a completed harness assembly fitted exactly to the dimensions of your particular application. For more information on our harness board gun and fixtures see the Application Tooling section of this catalog.

Insulation Displacement Connectors Technical Data Reference*



Standard Single Row IDT .100" (2,54mm) Center Connector Specifications for Eng. Series 7720, 7690

UL Recognized (File #29179)
CSA Recognized (File #19980)

Minimum Pin Insertion — .240" (6,10mm)

Recommended Mating Life — 25 cycles

Voltage Rating — 250 VAC maximum
Current Rating — 4 amps maximum (with #22 AWG wire). See Product Specifications
Resistance — 20 milliohms maximum (after Mil Std 202E test)
Dielectric Withstanding — 1500 VAC for 60 seconds
Insulation Resistance — Greater than 500K megohms (75°F and 50% R.H.)

UL Material Rating — 94V-2 Nylon
Operating Range — -40°C to 105°C

Engagement Force — 9 oz. (255 g) maximum (tin-plated .025"/0,64mm square pin)
Disengagement Force — 3 oz. (85 g) minimum first cycle (tin-plated .025"/0,64mm square pin)
Terminal Retention to Housing — 8 lbs. (3,63 kg) minimum

	Vertical	Horizontal
<i>Average Wire Pullout Forces</i> — 22 AWG Stranded -	6.2 lbs (2,81 kg)	13.3 lbs (6,03 kg)
<i>(without cap)</i> 24 AWG Stranded -	6.9 lbs (3,13 kg)	10.7 lbs (4,85 kg)
26 AWG Stranded -	2.8 lbs (1,27 kg)	7.0 lbs (3,17 kg)
28 AWG Stranded -	1.3 lbs (0,59 kg)	4.7 lbs (2,13 kg)

*Request current product specifications for approval testing and inspection.

Standard Single Row IDT .156" (3,96mm) Center Connector Specifications for Eng. Series 7675, 7674, 7660, 7664

UL Recognized (File #29179)
CSA Recognized (File #19980)

Minimum Pin Insertion — .450" (11,43mm)

Recommended Mating Life — 25 cycles

Voltage Rating — 250 VAC maximum
Current Rating — 5 amps maximum (with #22 AWG wire). See Product Specifications
Resistance — 20 milliohms maximum (after Mil Std 202E test)
Dielectric Withstanding — 2000 VAC for 60 seconds
Insulation Resistance — Greater than 500K megohms (75°F and 50% R.H.)

UL Material Rating — 94V-2 Nylon
Operating Range — -40°C to 105°C

Engagement Force — 2.0 lbs (0,91 kg) maximum (tin-plated .045"/1,14mm square pin)
Disengagement Force — .5 lbs (0,23 kg) minimum first cycle (tin-plated .045"/1,14mm square pin)
Terminal Retention to Housing — 8 lbs. (3,63 kg) minimum

	Vertical	Horizontal
<i>Average Wire Pullout Forces</i> — 18 AWG Stranded -	11.9 lbs (5,39 kg)	25.5 lbs (11,56 kg)
<i>(without cap)</i> 20 AWG Stranded -	12.7 lbs (5,76 kg)	22.2 lbs (10,07 kg)
22 AWG Stranded -	8.5 lbs (3,86 kg)	17.4 lbs (7,89 kg)
24 AWG Stranded -	8.1 lbs (3,67 kg)	13.2 lbs (5,99 kg)
26 AWG Stranded -	2.4 lbs (1,09 kg)	6.9 lbs (3,13 kg)

*Request current product specifications for approval testing and inspection.

C

.079" (2,0 mm) Center IDT™ Wire-to-Board System

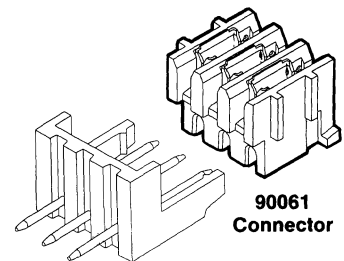
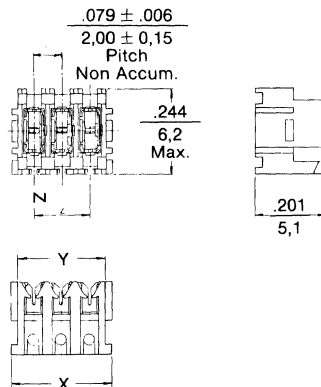


90061 Series Insulation Displacement-Type Connector

- 2-12 circuits
- Four contact points
- Mates with 90063 and 90082 headers
- Accepts ribbon cable or discrete wire
- No pre-notching required with ribbon cable
- Strip molded in sticks
- Sticks supplied on tape

Specifications

Voltage - 250 V Max.
Current - 1 ampere max.
Material Housing - Polyester 94V-0. Color: white
Terminal - Phosphor bronze, pre-plated hot tin/lead dip (60/40) .0002"-.00035" (0,005-0,009mm) thick
Wire Accommodation - 28 AWG discrete wire, 7 strands x (0,1) topcoated tin, insulation diameter .031" (0,8)-.039" (1,0)



Ordering Information 90061

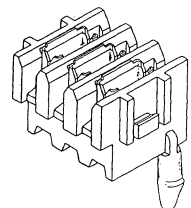
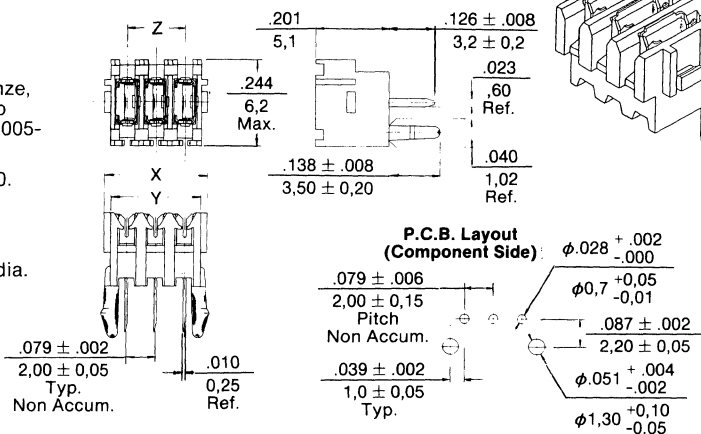
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	90061-0013	5	90061-0016	7	90061-0018	9	90061-0020	11	90061-0022
3	90061-0014	6	90061-0017	8	90061-0019	10	90061-0021	12	90061-0023
4	90061-0015								

90062 Board-In Connector

- 2-12 circuits
- Four contact points; insulation displacement terminal
- Polarizing peg
- Accepts ribbon cable or discrete wire
- No pre-notching required with ribbon cable
- Strip molded in sticks
- Sticks supplied on tape

Specifications

Terminal - Phosphor bronze, pre-plated hot tin/lead dip (60/40) .0002"-.00035" (0,005-0,009mm) thick
Housing - Polyester 94V-0. Color: white
Wire Accommodation - 28 AWG, 7 strand x (0,1) topcoated tin, insulation dia. .031" (0,8)-.039" (1,0)



Dimensions 90061 and 90062

Circuits	Dim. X	Dim. Y	Dim. Z	Circuits	Dim. X	Dim. Y	Dim. Z	Circuits	Dim. X	Dim. Y	Dim. Z	Circuits	Dim. X	Dim. Y	Dim. Z
2	.220 5,60	.175 4,45	.079 2,00	5	.457 11,60	.411 10,45	.315 8,00	8	.693 17,60	.648 16,45	.551 14,00	11	.929 23,60	.584 22,45	.787 20,00
3	.299 7,60	.253 6,45	.157 4,00	6	.535 13,60	.490 12,45	.394 10,00	9	.772 19,60	.726 18,45	.630 16,00	12	1,008 25,60	.962 24,45	.866 22,00
4	.378 9,60	.333 8,45	.236 6,00	7	.614 15,60	.589 14,45	.472 12,00	10	.850 21,60	.805 20,45	.787 20,00				

Ordering Information 90062

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	90062-0013	5	90062-0016	8	90062-0019	11	90062-0022
3	90062-0014	6	90062-0017	9	90062-0020	12	90062-0023
4	90062-0015	7	90062-0018	10	90062-0021		

.079" (2,0 mm) Center IDT™ Wire-to-Board System

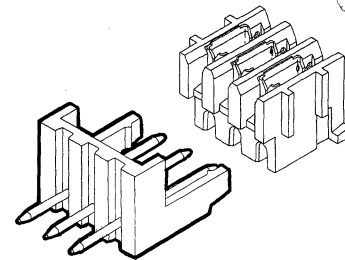
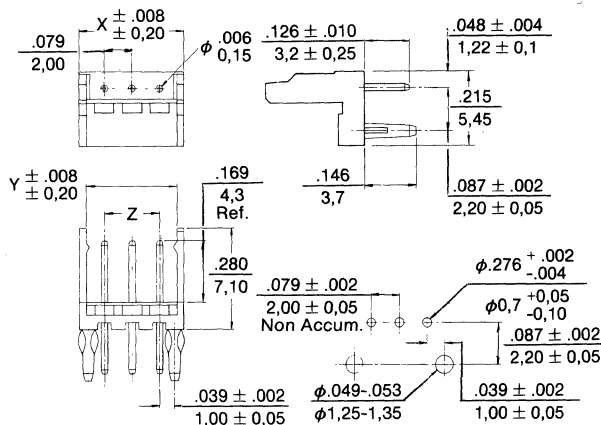


90063 Series Straight Pin Header

- 2-12 circuits
- Four contact points with mating connector (90061)
- Polarizing peg optional
- Stackable end-to-end losing one circuit
- Contact factory for staggered pin, shrouded version

Specifications

Voltage - 250 V max.
Current - 1 ampere max.
Housing - 94V-0 polyester.
 Color; white
Pins - .020" (0,5mm) dia. pre-tinned brass .320" (9,40mm) long



90063 Header

Ordering Information 90063

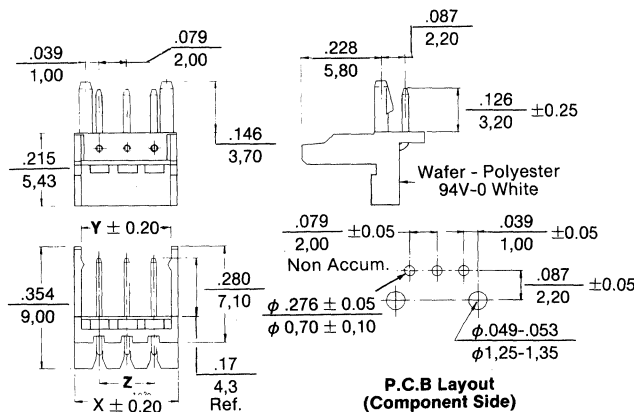
Circuits	W/O Pol. Peg	With Pol. Peg	Circuits	W/O Pol. Peg	With Pol. Peg	Circuits	W/O Pol. Peg	With Pol. Peg	Circuits	W/O Pol. Peg	With Pol. Peg
2	90063-0024	90063-0013	5	90063-0027	90063-0016	8	90063-0030	90063-0019	11	90063-0033	90063-0022
3	90063-0025	90063-0014	6	90063-0028	90063-0017	9	90063-0031	90063-0020	12	90063-0034	90063-0023
4	90063-0026	90063-0015	7	90063-0029	90063-0018	10	90063-0032	90063-0021			

90082 Series Right Angle Pin Header

- 2-12 circuits
- Four contact points with mating connector (90061)
- Polarizing peg optional
- Stackable end-to-end losing one circuit

Specifications

Voltage - 250 V max.
Current - 1 ampere max.
Housing - 94V-0 polyester.
 Color; white



P.C.B Layout (Component Side)

Dimensions 90063 and 90082

Circuits	Dim. X	Dim. Y	Dim. Z	Circuits	Dim. X	Dim. Y	Dim. Z	Circuits	Dim. X	Dim. Y	Dim. Z	Circuits	Dim. X	Dim. Y	Dim. Z
2	.236 6,00	.181 4,60	.079 2,00	5	.472 12,00	.417 10,60	.315 8,00	8	.709 18,00	.654 16,60	.551 14,00	11	.945 24,00	.890 22,60	.787 20,00
3	.315 8,00	.260 6,60	.157 4,00	6	.551 14,00	.496 12,60	.394 10,00	9	.787 20,00	.732 18,60	.630 16,00	12	1.024 26,00	.969 24,60	.866 22,00
4	.394 10,00	.339 8,60	.236 6,00	7	.630 16,00	.575 14,60	.472 12,00	10	.866 22,00	.811 20,60	.787 20,00				

Ordering Information 90082

Circuits	Order No. W/O Pol. Peg	Order No. With Pol. Peg	Circuits	Order No. W/O Pol. Peg	Order No. With Pol. Peg	Circuits	Order No. W/O Pol. Peg	Order No. With Pol. Peg	Circuits	Order No. W/O Pol. Peg	Order No. With Pol. Peg
2	90082-0024	90082-0013	5	90082-0027	90082-0016	8	90082-0030	90082-0019	11	90082-0033	90082-0022
3	90082-0025	90082-0014	6	90082-0028	90082-0017	9	90082-0031	90082-0020	12	90082-0034	90082-0023
4	90082-0026	90082-0015	7	90082-0029	90082-0018	10	90082-0032	90082-0021			

.098" (2,5 mm) Center Standard Insulation Displacement Connector



7795S Series Higher Pressure "Cat Ear" Contact System

- Two points of contact
- 2-17 Circuits
- Standard with locking ramp
- Polarizing key option
- Molded in strain reliefs
- Accepts wire O.D. from .030" (0,76mm) to .060" (1,52mm) max.
- Accepts solid and stranded and fused wire
- Mates with standard .098" (2,50mm) headers, see list below
- UL recognition applied for
- 5 Microns min. tin (preplate) on terminals

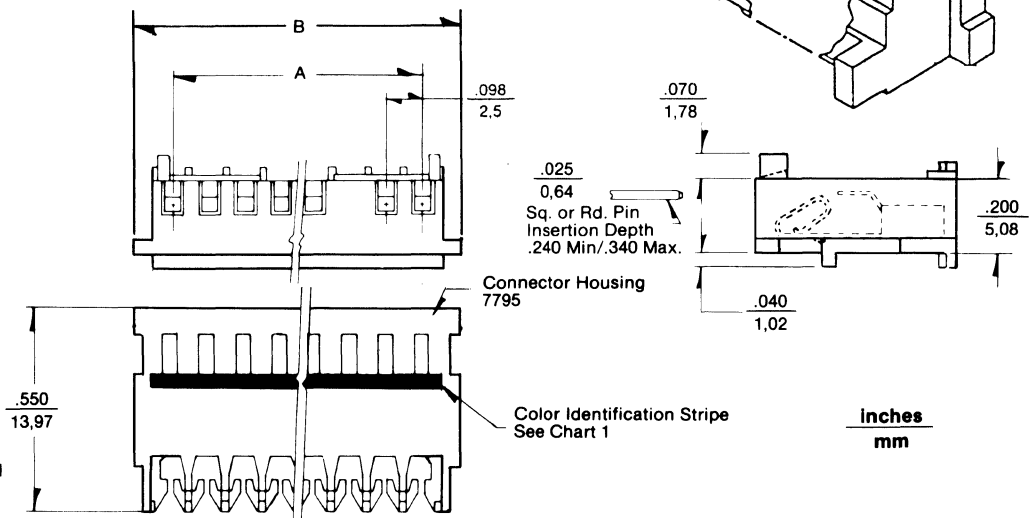
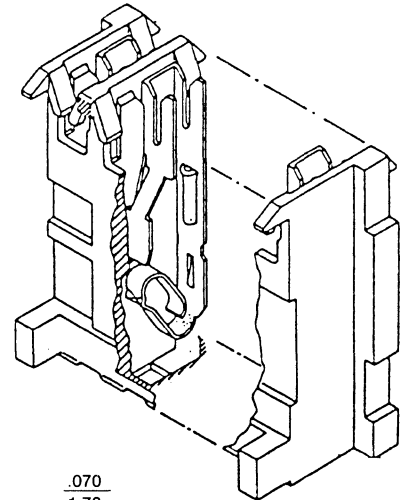


Headers
3022 5046
3094 6494
3202 5045
90298 90293

Covers



7841 Series
Feed-Thru
Feed-To



MATERIAL:
Housing: Nylon 94V-2, Color: Natural
Terminal: Brass, Tin-Plated

Dimensions 7795S (Preferred version in Europe and the Far East)

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.098 2,50	.290 7,36	6	.492 12,50	.683 17,36	10	.886 22,50	1,077 27,36	14	1,280 32,50	1,471 37,36
3	.197 5,00	.388 9,86	7	.591 15,00	.782 19,86	11	.984 25,00	1,176 29,86	15	1,378 35,00	1,568 39,86
4	.295 7,50	.487 12,36	8	.689 17,50	.880 22,36	12	1,083 27,50	1,274 32,36	16	1,476 37,50	1,668 42,36
5	.394 10,00	.585 14,86	9	.787 20,00	.979 24,86	13	1,181 30,00	1,372 34,86	17	1,575 40,00	1,766 44,86

Ordering Information 7795S

CHART 1 (Color Identification Stripe)			
I.D. Slot Version	Order Nos.	Color	Type of Wire Terminated [All wires have a Max. Insulation Diameter of .060" (1,5mm)]
H	38-00-3282 thru -3297	Yellow	#24 AWG Stranded, #26 Solid and #28 Fused
J	38-00-3102 thru -3117	Red	#26 and 28 AWG Stranded and #28 Solid

Circuits	Version H	Circuits	Version H	Circuits	Version H	Circuits	Version H	Circuits	Version H	Circuits	Version H
2	38-00-3282	5	38-00-3285	8	38-00-3288	11	38-00-3291	14	38-00-3294	16	38-00-3296
3	38-00-3283	6	38-00-3286	9	38-00-3289	12	38-00-3292	15	38-00-3295	17	38-00-3297
4	38-00-3284	7	38-00-3287	10	38-00-3290	13	38-00-3293				

Circuits	Version J	Circuits	Version J	Circuits	Version J	Circuits	Version J	Circuits	Version J	Circuits	Version J
2	38-00-3102	5	38-00-3105	8	38-00-3108	11	38-00-3111	14	38-00-3114	16	38-00-3116
3	38-00-3103	6	38-00-3106	9	38-00-3109	12	38-00-3112	15	38-00-3115	17	38-00-3117
4	38-00-3104	7	38-00-3107	10	38-00-3110	13	38-00-3113				

Recommended Molex ribbon cable for use with this connector:
Eng. Nos. 7234, 7307, 24241, 24226, 7767, 8996.
> 10 circuits wide, contact factory.



.098" (2,5 mm) Center Insulation Displacement Connector

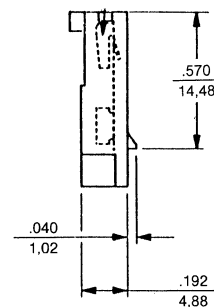
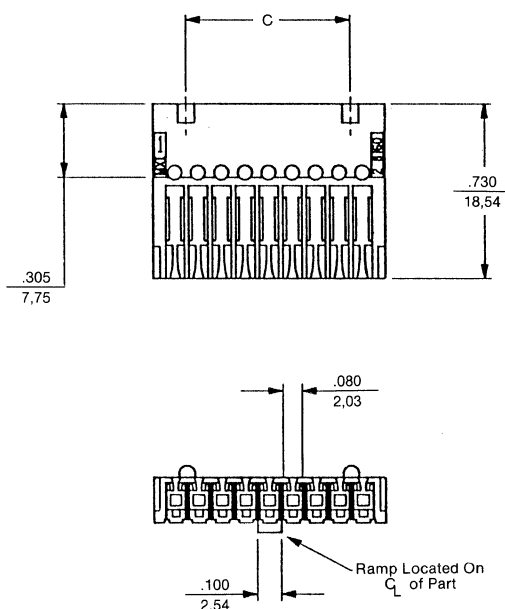
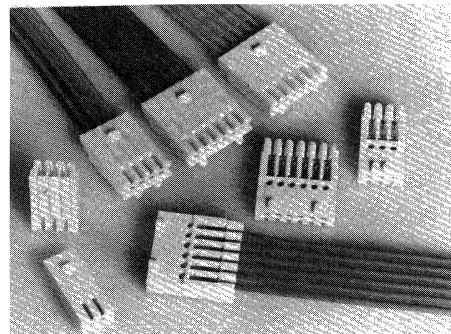
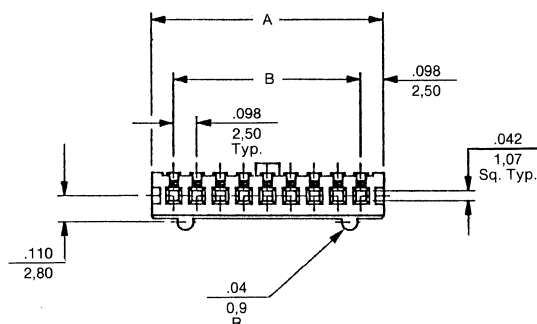


8160-NG Series

Euro 250 Series In-Line Wire Exit

C

- 4 point IDT contact
- 2 Point interface pin contact
- 4 Amp (Subject to application variables)
- 2-20 Circuits
- 24 AWG solid discrete wire and cable
- Housings for O.D. insulation .053" (1,35mm) to .060" (1,52mm) max.
- 94V-0 Polyester
- Mates with 93610, 3094, and 3022 headers
- Terminal: phosphor bronze
- Plating: tin over copper
- Crimp terminal 8177 available



Dimensions

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.295 ± .003 7,50 ± 0,08	.098 ± .004 2,50 ± 0,10	—	9	.984 ± .006 25,00 ± 0,15	.787 ± .007 20,00 ± 0,18	.689 ± .007 17,50 ± 0,18	15	1.575 ± .008 40,00 ± 0,20	1.378 ± .009 35,00 ± 0,23	1.280 ± .009 32,50 ± 0,23
3	.394 ± .003 10,00 ± 0,08	.197 ± .005 5,00 ± 0,13	.098 ± .004 2,50 ± 0,10	10	1.083 ± .006 27,50 ± 0,15	.886 ± .008 22,50 ± 0,20	.787 ± .007 20,00 ± 0,18	16	1.673 ± .009 42,50 ± 0,23	1.476 ± .010 37,50 ± 0,25	1.378 ± .009 35,00 ± 0,23
4	.492 ± .003 12,50 ± 0,08	.295 ± .005 7,50 ± 0,13	.197 ± .005 5,00 ± 0,13	11	1.181 ± .007 30,00 ± 0,18	.984 ± .008 25,00 ± 0,20	.886 ± .008 22,50 ± 0,20	17	1.772 ± .010 45,00 ± 0,25	1.575 ± .011 40,00 ± 0,28	1.476 ± .010 37,50 ± 0,25
5	.591 ± .004 15,00 ± 0,10	.394 ± .006 10,00 ± 0,15	.295 ± .005 7,50 ± 0,13	12	1.280 ± .007 32,50 ± 0,18	1.083 ± .008 27,50 ± 0,20	.984 ± .008 25,00 ± 0,20	18	1.870 ± .011 47,50 ± 0,28	1.673 ± .011 42,50 ± 0,28	1.575 ± .011 40,00 ± 0,28
6	.689 ± .004 17,50 ± 0,10	.492 ± .006 12,50 ± 0,15	.394 ± .006 10,00 ± 0,15	13	1.378 ± .008 35,00 ± 0,20	1.181 ± .008 30,00 ± 0,20	1.083 ± .008 27,50 ± 0,20	19	1.969 ± .011 50,00 ± 0,28	1.772 ± .011 45,00 ± 0,28	1.673 ± .011 42,50 ± 0,28
7	.787 ± .005 20,00 ± 0,13	.591 ± .007 15,00 ± 0,18	.492 ± .006 12,50 ± 0,15	14	1.476 ± .008 37,50 ± 0,20	1.280 ± .009 32,50 ± 0,23	1.181 ± .008 30,00 ± 0,20	20	2.067 ± .012 52,50 ± 0,30	1.870 ± .011 47,50 ± 0,28	1.772 ± .011 45,00 ± 0,28
8	.886 ± .005 22,50 ± 0,13	.689 ± .007 17,50 ± 0,18	.591 ± .007 15,00 ± 0,18								

Ordering Information

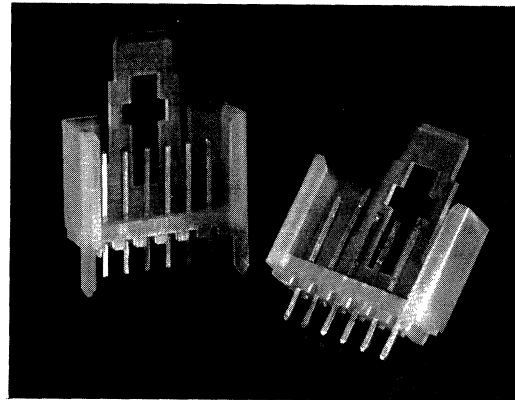
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	38-00-6132	7	38-00-6137	12	38-00-6142	17	38-00-6147
3	38-00-6133	8	38-00-6138	13	38-00-6143	18	38-00-6148
4	38-00-6134	9	38-00-6139	14	38-00-6144	19	38-00-6149
5	38-00-6135	10	38-00-6140	15	38-00-6145	20	38-00-6150
6	38-00-6136	11	38-00-6141	16	38-00-6146		

.098" (2,5 mm) Center Shrouded Header

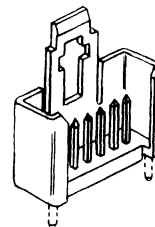
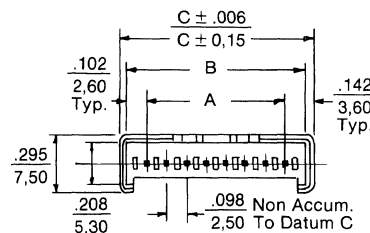


93610 Series Header Assembly Staggered Tail and Straight Tail

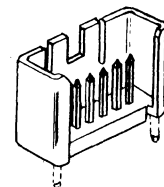
- 2-10 Circuits
- With "Multi-Lock" (or without lock - optional)
- Straight pin version available non-polarized (or with left polarizing peg only, right peg only, or with both pegs - optional)
- Staggered pin version available non-polarized (or with right polarizing peg only - optional)
- Colors: Natural or black
- UL 94V-0 polyester material
- .025" (0,64mm) square pins, electro tin plated
- Mates with 8160



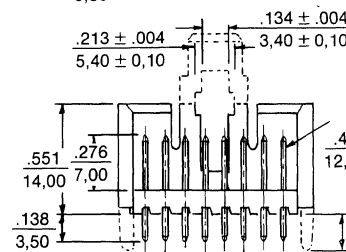
C



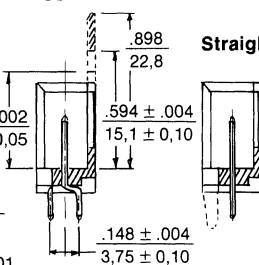
Multi-Lock



Without-Lock

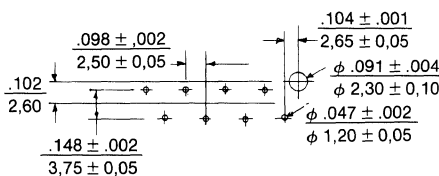


Staggered Pin

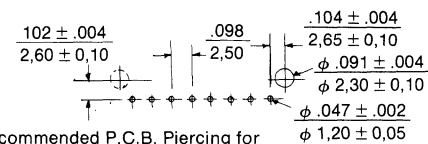


Straight Pin

Recommended P.C.B Piercing for Staggered Pin Version. Viewed from Copper Side.



Recommended P.C.B. Piercing for Straight Pin Version.



Dimensions 93610

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.098 2,50	.303 7,70	.382 9,70	5	.394 10,00	.589 15,20	.677 17,20	8	.689 17,50	.884 22,70	.972 24,70
3	.197 5,00	.402 10,20	.480 12,20	6	.497 12,50	.687 17,70	.776 19,70	9	.782 20,00	.992 25,20 AV	1.071 27,20
4	.295 7,50	.500 12,70	.579 14,70	7	.590 15,00	.795 20,00	.874 22,70	10	.886 22,50	1.091 27,70	1.169 29,70

Ordering Information 93610 (For standard 94V-0 nylon, multi-lock, no polarizing pegs, natural color*)

Circuits	Straight Tail	Staggered Tail	Circuits	Straight Tail	Staggered Tail	Circuits	Straight Tail	Staggered Tail
2	93610-0020	—	5	93610-0032	93610-0062	8	93610-0044	93610-0068
3	93610-0024	—	6	93610-0036	93610-0064	9	93610-0048	93610-0070
4	93610-0028	93610-0060	7	93610-0040	93610-0066	10	93610-0052	93610-0072

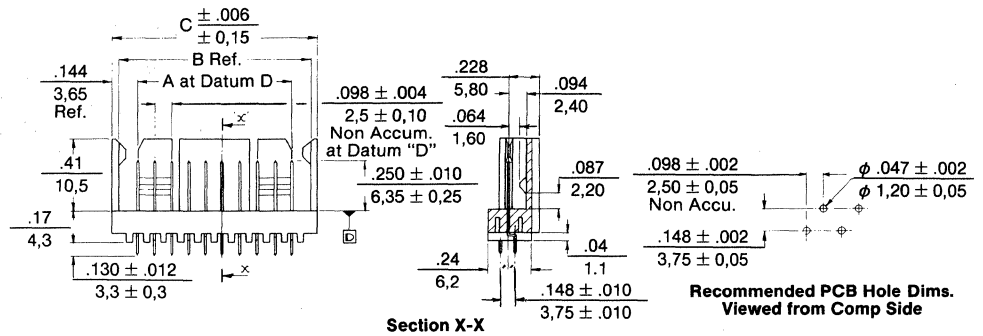
*Also available in 94V-2 material. To order, replace 93610-XXXX with 90087-XXXX. Contact factory to order optional versions and for circuit sizes 11 through 20.

.098" (2,5 mm) Center Headers



90293 Series Staggered Tail, Shrouded Header

- 2-20 circuits
- Mates with Molex 7534, 5102 and 7795 Series connectors
- Insulator material 94V-0 polyester; color, white
- Pin push-out force 2 lbs. (0,907 kg)
- Recommended PC board thickness .060 (1,5mm)
- Pins: .025" square brass, pre-plated electro-tin over copper
- Current rating: 5 amps D.C. at 30° rise over ambient

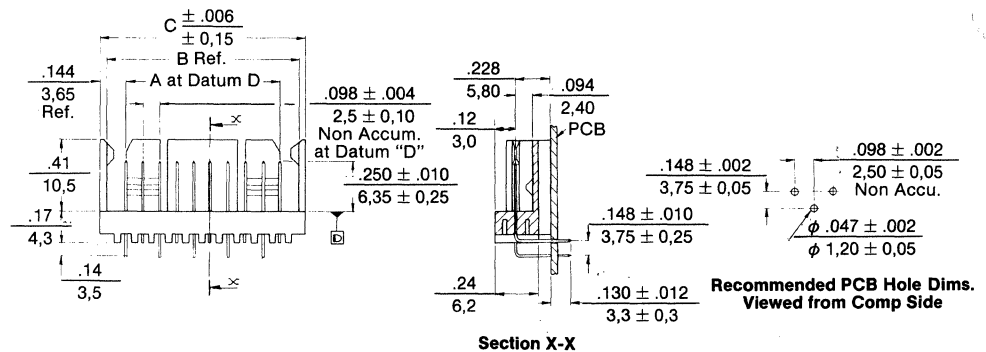


Ordering Information 90293

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	90293-0022	6	90293-0026	9	90293-0029	12	90293-0032	15	90293-0035	18	90293-0038
3	90293-0023	7	90293-0027	10	90293-0030	13	90293-0033	16	90293-0036	19	90293-0039
4	90293-0023	8	90293-0028	11	90293-0031	14	90293-0034	17	90293-0037	20	90293-0040
5	90293-0024										

90298 Series Right Angle, Staggered Tail Shrouded Headers

- Specifications and dimensions same as 90293



Dimensions 90293 and 90298

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.098 2,50	.307 7,80	.386 9,80	9	.787 20,00	.996 25,30	1.075 27,30	15	1.378 35,00	1.587 40,30	1.665 42,30
3	.187 5,00	.406 10,30	.484 12,30	10	.886 22,50	1.094 27,80	1.173 29,80	16	37,50 1.476	42,80 1.685	44,80 1.764
4	.295 7,50	.504 12,80	.583 14,80	11	.984 25,00	1.193 30,30	1.272 32,30	17	1.575 40,00	1.783 45,30	1.862 47,30
5	.394 10,00	.602 15,30	.681 17,30	12	1.083 27,50	1.291 32,80	1.370 34,80	18	1.673 42,50	1.882 47,80	1.961 49,80
6	.492 12,60	.701 17,80	.780 19,80	13	1.181 30,00	1.390 35,30	1.469 37,30	19	1.772 45,00	1.980 50,30	2.059 52,30
7	.591 15,00	.799 20,30	.878 22,30	14	1.280 32,50	1.488 37,80	1.567 39,80	20	1.870 47,50	2.079 52,80	2.157 54,80
8	.689 17,50	.898 22,80	.976 24,80								

Ordering Information 90298

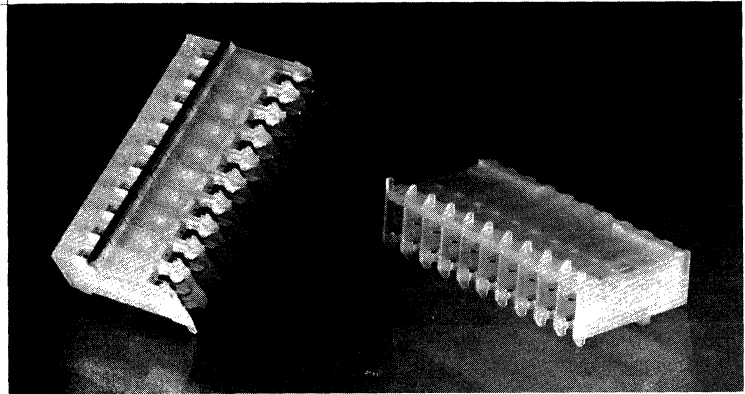
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	90298-0002	6	90298-0006	9	90298-0009	12	90298-0012	15	90298-0015	18	90298-0018
3	90298-0003	7	90298-0007	10	90298-0010	13	90298-0013	16	90298-0016	19	90298-0019
4	90298-0004	8	90298-0008	11	90298-0011	14	90298-0014	17	90298-0017	20	90298-0020
5	90298-0005										

.100" (2,54 mm) Center Insulation Displacement Standard Connector



7720 Series Dual Contact

- 2-28 Circuits
- 2 Points of contact
- Feed to and feed thru versions available
- Standard with locking ramp
- End-to-end polarization
- Molded in strain reliefs
- Accepts wire O.D. from .030" (0,76mm) to .060" (1,52mm) max.
- Accepts solid and stranded wire
- Mates with standard .100" center (2,54mm) headers
- UL recognized (File #E29179)



Universal Polarizing Key
Order No. 15-04-0292

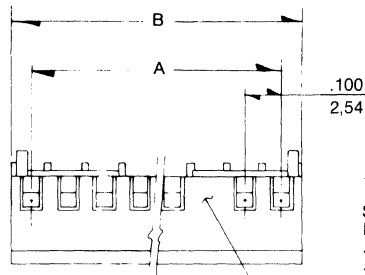


Headers

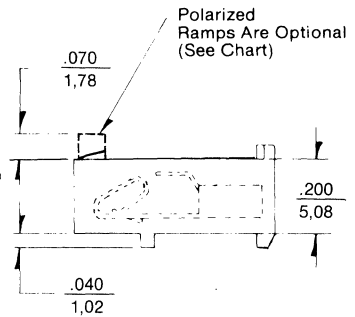
4030	4094	7478
4180	6410	7832
4380	6373	7395
		70327

Covers

7841-A Feed Thru
7841-B Feed To

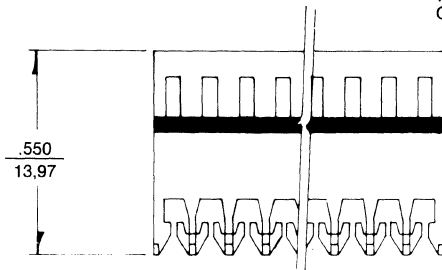


.025
0,64
Sq. or Rd. Pin
Insertion Depth
.260 (6,60) Min./
.310 (7,87) Max.



Polarized Ramps Are Optional (See Chart)

For Connectors With Void Locations Contact Molex



Color Identification Stripe (See Chart 1)

inches
mm

MATERIAL:
Housing: Nylon 94V-2 Color: Natural
Terminal: Brass, Tin Plated

Dimensions 7720

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.214 5,44	8	.700 17,78	.814 20,68	14	1.300 33,02	1.414 35,92	19	1.800 45,72	1.914 48,62	24	2.300 58,42	2.414 61,32
3	.200 5,08	.314 7,98	9	.800 20,32	.914 23,22	15	1.400 35,56	1.514 38,46	20	1.900 48,26	2.014 51,16	25	2.400 60,92	2.514 63,86
4	.300 7,62	.414 10,52	10	.900 22,86	1.014 25,76	16	1.500 38,10	1.614 41,00	21	2.000 50,80	2.114 53,70	26	2.500 63,50	2.614 66,40
5	.400 10,16	.514 13,06	11	1.000 25,40	1.114 28,30	17	1.600 40,64	1.714 43,54	22	2.100 53,34	2.214 56,24	27	2.600 66,04	2.714 68,94
6	.500 12,70	.614 15,60	12	1.100 27,94	1.214 30,84	18	1.700 43,18	1.814 46,08	23	2.200 55,88	2.314 58,78	28	2.700 68,58	2.814 71,48
7	.600 15,24	.714 18,14	13	1.200 30,48	1.314 33,38									

Ordering Information (Preferred version in the Americas)

ORDERING NUMBER FORMULA

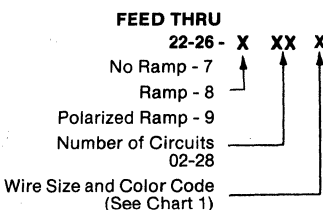
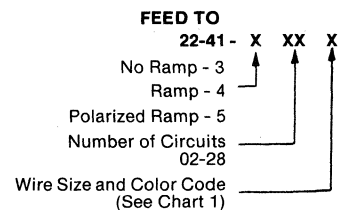


CHART 1 (General Reference*)

Ordering Suffix No.		Color	Type of Wire Terminated [All wires have a maximum insulation diameter of .060" (1,52mm)]
Feed Thru	Feed To		
22-26-XXX1	22-41-XXX1	Brown	#26 AWG Stranded and Solid and #28 AWG Solid, Stranded and Fused
22-26-XXX2	22-41-XXX2	Green	#24 AWG Solid and Fused, #26 AWG Fused

*Some wires require deviation from chart.

ORDERING NUMBER FORMULA



Recommended Molex ribbon cable for use with 7720 Series:
Eng. Nos. 7234, 7307, 7560, 24241, 24226, 7767, 8996, 8997, 24214.

.100" (2,54 mm) Center Insulation Displacement Standard Connector



7720S Series High Pressure "Cat Ear" Contact System



- Two points of contact
- 2-17 Circuits
- Standard with locking ramp
- Feed-to and feed-thru versions available
- Molded in strain reliefs
- Accepts wire O.D. from .030" (0,76mm) to .056" (1,42mm) max.
- Accepts solid and stranded wire
- Mates with standard .100" center (2,54mm) headers
- UL recognized
- 5 microns tin (preplate) on terminals



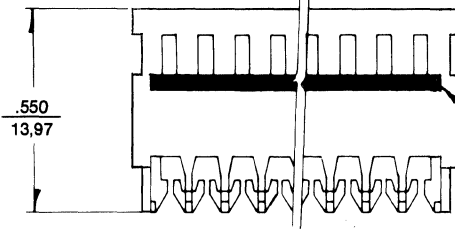
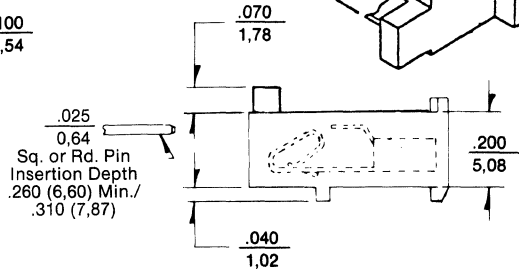
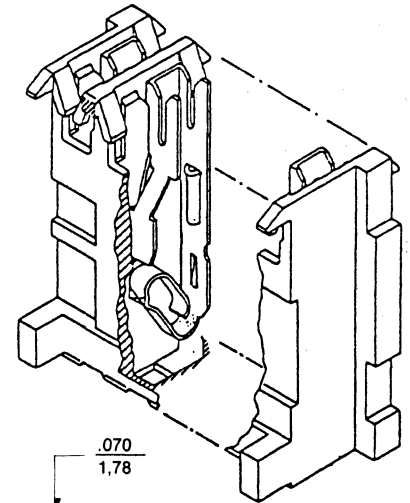
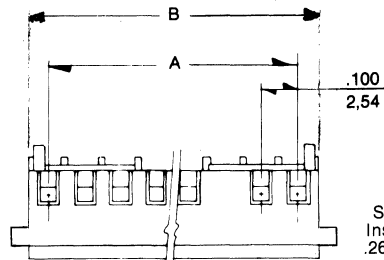
Headers

4030	4094	7478
4180	6410	7832
4380	6373	7395
		70327



Covers

7841-A Feed Thru
7841-B Feed To



Color Identification Stripe (See Chart 1)

inches
mm



Universal Polarizing Key
Order No. 15-04-0292

MATERIAL:
Housing: Nylon 94V-2 Color: Natural
Terminal: Brass, Tin Plated

Dimensions 7720S

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.214 5,44	6	.500 12,70	.614 15,60	9	.800 20,32	.914 23,22	12	1.100 27,94	1.214 30,84	15	1.400 35,56	1.514 38,46
3	.200 5,08	.314 7,98	7	.600 15,24	.714 18,14	10	.900 22,86	1.014 25,76	13	1.200 30,48	1.314 33,38	16	1.500 38,10	1.614 41,00
4	.300 7,62	.414 10,52	8	.700 17,78	.814 20,68	11	1.000 25,40	1.114 28,30	14	1.300 33,02	1.414 35,92	17	1.600 40,64	1.714 43,54
5	.400 10,16	.514 13,06												

Ordering Information 7720S (Preferred version in Europe and the Far East)

CHART 1 (Color Identification Stripe)			
I.D. Slot Version	Order Nos.	Color	Type of Wire Terminated [All wires have a Max. Insulation Diameter of .056" (1,42mm)]
H	22-50-3025 thru -3175	Green	#24 AWG Stranded, #26 Solid and Fused and #28 Fused
J	38-00-2092 thru -2107	Brown	#26 AWG Stranded and #28 Solid and Stranded

Circuits	Version H	Circuits	Version H	Circuits	Version H	Circuits	Version H	Circuits	Version H	Circuits	Version H
2	22-50-3025	5	22-50-3055	8	22-50-3085	11	22-50-3115	14	22-50-3145	16	22-50-3165
3	22-50-3035	6	22-50-3065	9	22-50-3095	12	22-50-3125	15	22-50-3155	17	22-50-3175
4	22-50-3045	7	22-50-3075	10	22-50-3105	13	22-50-3135				

Circuits	Version J	Circuits	Version J	Circuits	Version J	Circuits	Version J	Circuits	Version J	Circuits	Version J
2	38-00-2092	5	38-00-2095	8	38-00-2098	11	38-00-2101	14	38-00-2104	16	38-00-2106
3	38-00-2093	6	38-00-2096	9	38-00-2099	12	38-00-2102	15	38-00-2105	17	38-00-2107
4	38-00-2094	7	38-00-2097	10	38-00-2100	13	38-00-2103				

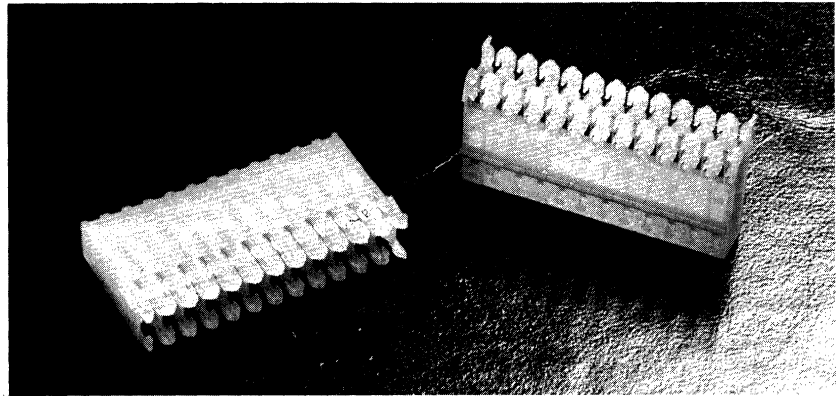
Recommended Molex ribbon cable for use with 7720S Series:
Eng. Nos. 7234, 7307, 7560, 24241, 24226, 7767, 8996, 8997, 24214.

.100" (2,54 mm) Center Harness Board Connector

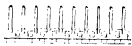


7690 Series Dual Contact

- 2-28 Circuits
- 2 Points of contact
- Standard with locking ramp
- End-to-end polarization
- Molded in strain reliefs
- Accepts wire O.D. from .030" (0,76mm) to .060" (1,52mm) max.
- Accepts solid and stranded wire
- Mates with standard .100" center (2,54mm) headers
- UL recognized (File #E29179)



C

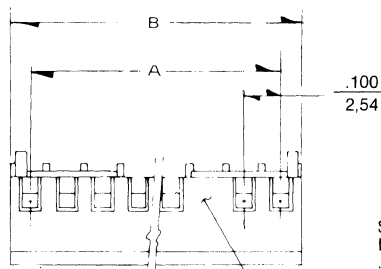


Headers

4030	4094	7478
4180	6410	7832
4380	6373	

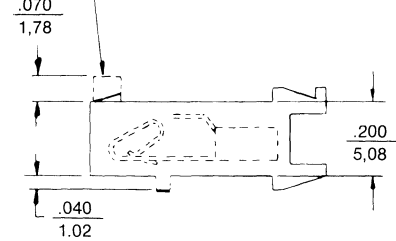
Covers

7840 Feed Thru
7840 Feed To

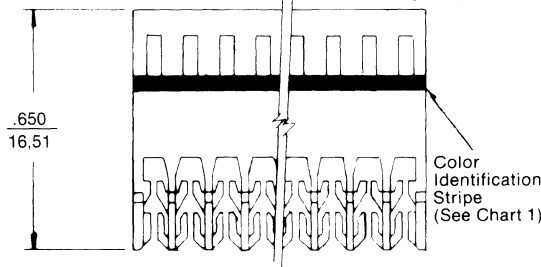


Polarized Ramps Are Optional
(See Ordering Number Formula)

.025
0,64
Sq. or Rd. Pin
Insertion Depth
.260 (6,60) Min./
.310 (7,87) Max.



For Connectors
With Void Locations
Contact Molex



Polarizing Key
Order No. 89-00-3003

MATERIAL:
Housing: Nylon 6/6 94V-2 Color: Natural
Terminal: Brass, Tin Plated

inches
mm

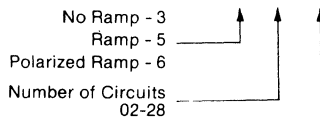
Dimensions 7690

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.214 5,44	8	.700 17,78	.814 20,68	14	1.300 33,02	1.414 35,92	19	1.800 45,72	1.914 48,62	24	2.300 58,42	2.414 61,32
3	.200 5,08	.314 7,98	9	.800 20,32	.914 23,22	15	1.400 35,56	1.514 38,46	20	1.900 48,26	2.014 51,16	25	2.400 60,92	2.514 63,86
4	.300 7,62	.414 10,52	10	.900 22,86	1.014 25,76	16	1.500 38,10	1.614 41,00	21	2.000 50,80	2.114 53,70	26	2.500 63,50	2.614 66,40
5	.400 10,16	.514 13,06	11	1.000 25,40	1.114 28,30	17	1.600 40,64	1.714 43,54	22	2.100 53,34	2.214 56,24	27	2.600 66,04	2.714 68,94
6	.500 12,70	.614 15,60	12	1.100 27,94	1.214 30,84	18	1.700 43,18	1.814 46,08	23	2.200 55,88	2.314 58,78	28	2.700 68,58	2.814 71,48
7	.600 15,24	.714 18,14	13	1.200 30,48	1.314 33,38									

Ordering Information (Preferred version in the Americas)

ORDERING NUMBER FORMULA

22-26 - X XX X



Wire Size and Color Code
(See Chart 1)

CHART 1 (General Reference*)

Ordering Suffix No.	Color	Type of Wire Terminated [All wires have a maximum Insulation Diameter of .060" (1,52mm)]
22-26-XXX1	Brown	#26 AWG Stranded, #26 AWG Solid, and #28 AWG Solid, Stranded and Fused
22-26-XXX2	Green	#24 AWG Solid, Stranded and Fused and #26 AWG Fused

*Some wires require deviation from chart.

.100" (2,54 mm) Center Harness Board Connector



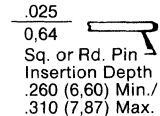
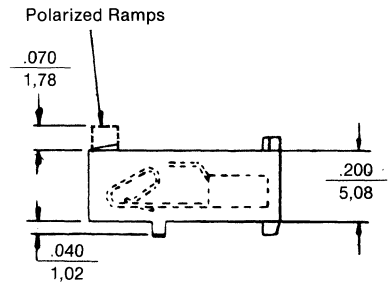
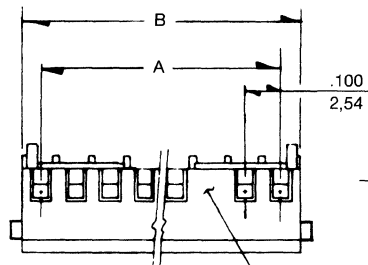
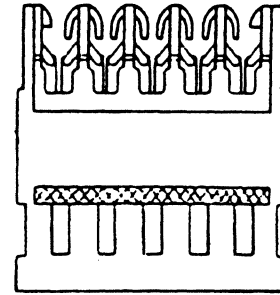
7690S Series Higher Pressure "Cat Ear" Contact System



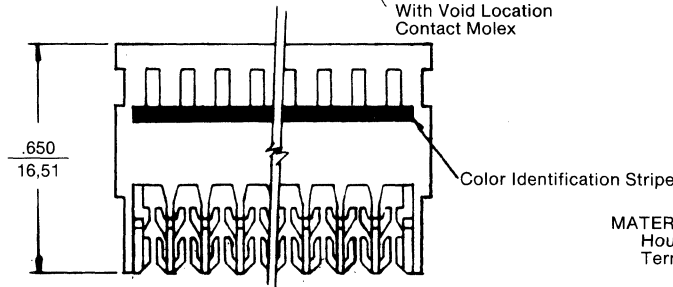
- 2-28 Circuits
- Standard with locking ramp
- Molded in strain reliefs
- Accepts wire O.D. from .030" (0,76mm) to .056" (1,42mm) max.
- Accepts solid and stranded wire
- Mates with standard .100" (2,54mm) headers, see list below
- UL recognized
- 5 microns tin (preplate) on terminals

Mating Headers

4030	4094	7476
4180	6410	7832
4380	6373	



For Connectors With Void Location Contact Molex



inches
mm

MATERIAL:
Housing: Nylon 6/6 94V-2 Color: Natural
Terminal: Brass, Tin Plated

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.214 5,44	8	.700 17,78	.814 20,68	14	1,300 33,02	1,414 35,92	19	1,800 45,72	1,914 48,62	24	2,300 58,42	2,414 61,32
3	.200 5,08	.314 7,98	9	.800 20,32	.914 23,22	15	1,400 35,56	1,514 38,46	20	1,900 48,26	2,014 51,16	25	2,400 60,92	2,514 63,86
4	.300 7,62	.414 10,52	10	.900 22,86	1,014 25,76	16	1,500 38,10	1,614 41,00	21	2,000 50,80	2,114 53,70	26	2,500 63,50	2,614 66,40
5	.400 10,16	.514 13,06	11	1,000 25,40	1,114 28,30	17	1,600 40,64	1,714 43,54	22	2,100 53,34	2,214 56,24	27	2,600 66,04	2,714 68,94
6	.500 12,70	.614 15,60	12	1,100 27,94	1,214 30,84	18	1,700 43,18	1,814 46,08	23	2,200 55,88	2,314 58,78	28	2,700 68,58	2,814 71,48
7	.600 15,24	.714 18,14	13	1,200 30,48	1,314 33,38									

Ordering Information (Preferred version in Europe and the Far East)

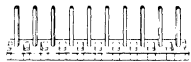
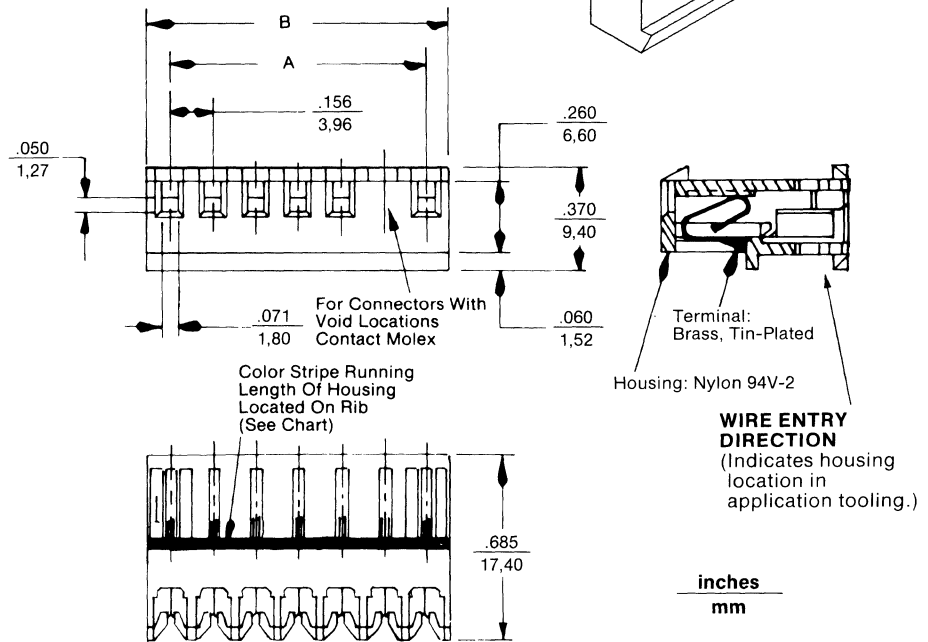
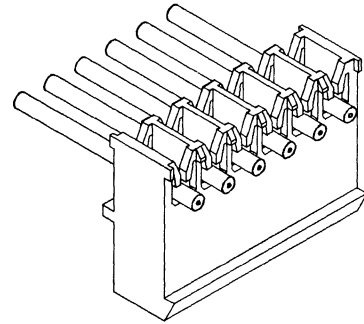
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	38-00-2392	9	38-00-2399	16	38-00-2406	23	38-00-2413
3	38-00-2393	10	38-00-2400	17	38-00-2407	24	38-00-2414
4	38-00-2394	11	38-00-2401	18	38-00-2408	25	38-00-2415
5	38-00-2395	12	38-00-2402	19	38-00-2409	26	38-00-2416
6	38-00-2396	13	38-00-2403	20	38-00-2410	27	38-00-2417
7	38-00-2397	14	38-00-2404	21	38-00-2411	28	38-00-2418
8	38-00-2398	15	38-00-2405	22	38-00-2412		

.156" (3,96 mm) Center Standard Insulation Displacement Connector



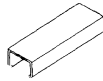
7675 Series Double Cantilever Contact

- 2-24 Circuits
- Standard with locking ramp
- Feed-to and feed-thru versions
- Molded in strain reliefs
- Accepts wire O.D. from .045" (1,14mm) to .095" (2,41mm) max.
- Optional covers
- Optional polarizing keys and pegs
- Accepts solid and stranded wire
- Mates with standard .156" (3,96mm) center headers
- Also accepts crimp terminals 2478, 2578
- UL recognized (File #29179)



Headers

- 41661 41761
- 41662 41771
- 41681 41772
- 41682 41791
- 41741 41792



Covers

7894 Feed Thru

Polarizing Key
Order No. 15-04-0288

Polarizing Peg
Order No. 15-04-0291

Dimensions 7675

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 ± .006 3,96 ± 0,15	.330 ± .007 8,38 ± 0,18	8	1,092 ± .008 27,74 ± 0,20	1,266 ± .009 32,16 ± 0,23	14	2,028 ± .011 51,51 ± 0,28	2,202 ± .011 55,93 ± 0,28	20	2,964 ± .013 75,29 ± 0,33	3,138 ± .013 79,70 ± 0,33
3	.312 ± .006 7,92 ± 0,15	.486 ± .007 12,34 ± 0,18	9	1,248 ± .008 31,70 ± 0,20	1,422 ± .009 36,12 ± 0,23	15	2,184 ± .011 55,47 ± 0,28	2,358 ± .011 59,89 ± 0,28	21	3,120 ± .014 79,25 ± 0,36	3,294 ± .014 83,67 ± 0,36
4	.468 ± .006 11,89 ± 0,15	.642 ± .007 16,31 ± 0,18	10	1,404 ± .010 35,66 ± 0,25	1,578 ± .010 40,08 ± 0,25	16	2,340 ± .011 59,44 ± 0,28	2,514 ± .011 63,86 ± 0,28	22	3,276 ± .014 83,21 ± 0,36	3,450 ± .014 87,63 ± 0,36
5	.624 ± .007 15,85 ± 0,18	.798 ± .008 20,27 ± 0,20	11	1,560 ± .010 39,62 ± 0,25	1,734 ± .010 44,04 ± 0,25	17	2,496 ± .012 63,40 ± 0,30	2,670 ± .012 67,82 ± 0,30	23	3,432 ± .014 87,17 ± 0,36	3,606 ± .014 91,59 ± 0,36
6	.780 ± .007 19,81 ± 0,18	.954 ± .008 24,23 ± 0,20	12	1,716 ± .010 43,59 ± 0,25	1,890 ± .010 48,00 ± 0,25	18	2,652 ± .013 67,36 ± 0,33	2,826 ± .013 71,78 ± 0,33	24	3,588 ± .016 91,14 ± 0,41	3,762 ± .016 95,55 ± 0,41
7	.932 ± .007 23,77 ± 0,18	1,110 ± .009 28,19 ± 0,23	13	1,872 ± .010 47,55 ± 0,25	2,046 ± .011 51,97 ± 0,28	19	2,808 ± .013 71,32 ± 0,33	2,982 ± .013 75,74 ± 0,33			

Ordering Information

ORDERING NUMBER FORMULA

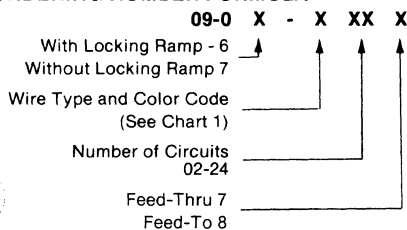


CHART 1 (General Reference*)		
Ordering Suffix No.	Color	Type of Wire Terminated [All wires have a maximum Insulation Diameter of .095" (4,41mm)]
09-0X-0XXX	Yellow	#18 GA Solid or Fused Stranded
09-0X-1XXX	Red	#20 GA Solid or Fused Stranded and #18 GA Stranded Wire
09-0X-2XXX	Blue	#20 GA Stranded Wire
09-0X-3XXX	Green	#26 and #27 GA Stranded, Fused Stranded and Solid Wire or #24 GA Stranded Wire
09-0X-5XXX	Black	#24 and #22 GA Solid or Fused Stranded and #22 GA Stranded Wire

*Some wires require deviation from chart.



Recommended Molex ribbon cable for use with 7675 Series:
Eng. Nos. 7382, 7517, 40174, 8868.

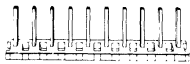
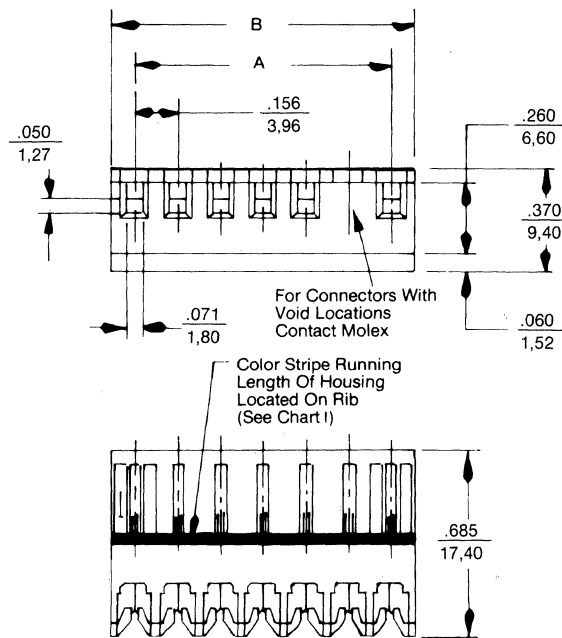
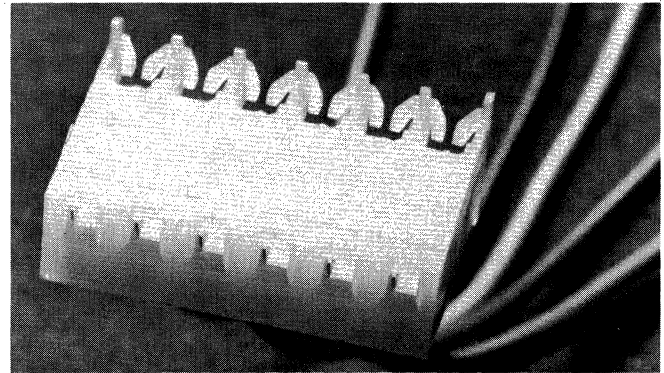
.156" (3,96 mm) Center Standard Insulation Displacement Connector



7674 Series 3 Point Trifurcon Contact

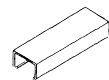
C

- 2-16 Circuits
- 3 Points of contact
- Standard with locking ramp
- Feed-to and feed-thru versions
- Molded in strain reliefs
- Accepts wire O.D. from .045" (1,14mm) to .095" (2,41mm) max.
- Optional polarizing keys and pegs
- Accepts solid and stranded wire
- Mates with standard .156" (3,96mm) center headers
- Also accepts crimp terminals 6838, 7258
- UL recognized (File #E29179)



Headers

41661	41761
41662	41771
41681	41772
41682	41791
41741	41792



Covers

7894 Feed Thru

WIRE ENTRY DIRECTION
(Indicates housing location in application tooling.)

inches
mm

Polarizing Key
Order No. 15-04-0288

Polarizing Peg
Order No. 15-04-0291

Dimensions 7674

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 ± .006 3,96 ± 0,15	.330 ± .007 8,38 ± 0,18	6	.780 ± .007 19,81 ± 0,18	.954 ± .008 24,23 ± 0,20	10	1,404 ± .010 35,66 ± 0,25	1,578 ± .010 40,08 ± 0,25	14	2,028 ± .011 51,51 ± 0,28	2,202 ± .011 55,93 ± 0,28
3	.312 ± .006 7,92 ± 0,15	.486 ± .007 12,34 ± 0,18	7	.932 ± .007 23,77 ± 0,18	1,110 ± .009 28,19 ± 0,23	11	1,560 ± .010 39,62 ± 0,25	1,734 ± .010 44,04 ± 0,25	15	2,184 ± .011 55,47 ± 0,28	2,358 ± .011 59,89 ± 0,28
4	.468 ± .006 11,89 ± 0,15	.642 ± .007 16,31 ± 0,18	8	1,092 ± .008 27,74 ± 0,20	1,266 ± .009 32,16 ± 0,23	12	1,716 ± .010 43,59 ± 0,25	1,890 ± .010 48,00 ± 0,25	16	2,340 ± .011 59,44 ± 0,28	2,514 ± .011 63,86 ± 0,28
5	.624 ± .007 15,85 ± 0,18	.798 ± .008 20,27 ± 0,20	9	1,248 ± .008 31,70 ± 0,20	1,422 ± .009 36,12 ± 0,23	13	1,872 ± .010 47,55 ± 0,25	2,046 ± .011 51,97 ± 0,28			

Ordering Information

ORDERING NUMBER FORMULA

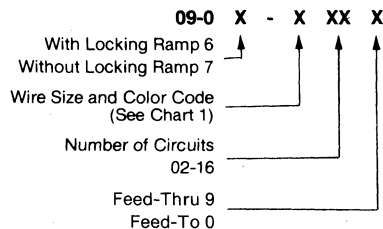
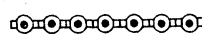


CHART 1 (General Reference*)		
Ordering Suffix No.	Color	Type of Wire Terminated [All wires have a maximum insulation diameter of .095" (2,41mm)]
09-0X-0XXX	Yellow	#18 GA Solid or Fused Stranded
09-0X-1XXX	Red	#20 GA Solid or Fused Stranded and #18 GA Stranded Wire
09-0X-2XXX	Blue	#20 GA Stranded Wire
09-0X-3XXX	Green	#26 and #27 GA Stranded, Fused Stranded and Solid Wire or #24 GA Stranded Wire
09-0X-5XXX	Black	#24 and #22 GA Solid or Fused Stranded and #22 GA Stranded Wire

*Some wires require deviation from chart.



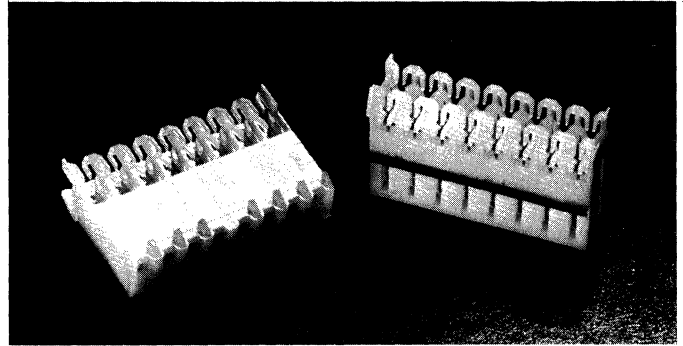
Recommended Molex ribbon cable for use with 7674 Series:
Eng. Nos. 7382, 7517, 40174, 8868.

.156" (3,96 mm) Center Harness Board Connector

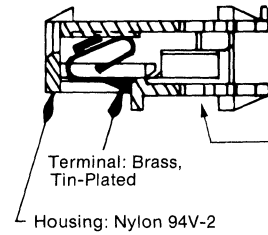
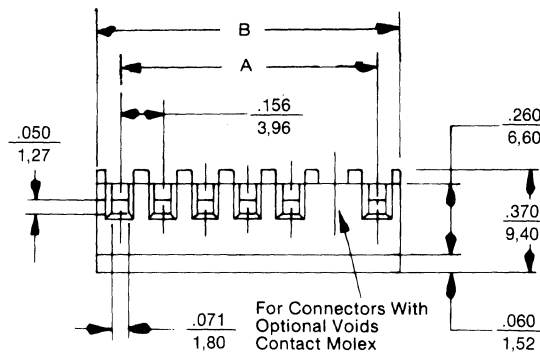


7660 Series 3 Point Trifurcon Contact

- 2-16 Circuits
- 3 Points of contact
- Standard with locking ramp
- Mates with standard .156" (3,96mm) center headers
- Molded in strain reliefs
- Accepts wire O.D. from .045" (1,14mm) to .095" (2,41mm) max.
- Feed-thru version available with or without covers
- Feed-to version available with cover
- Optional polarizing keys and pegs
- Accepts solid and stranded wire
- Also accepts crimp terminals 6838, 7258
- UL recognized (File #E29179)

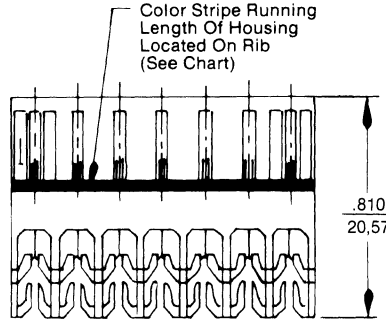


C



Terminal: Brass, Tin-Plated
Housing: Nylon 94V-2

WIRE ENTRY DIRECTION
(Indicates housing location in application tooling.)

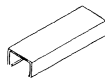


inches
mm



Headers

- 41661 41761
- 41662 41771
- 41681 41772
- 41682 41791
- 41741 41792



Covers

- 7895 Feed Thru
- 7896 Feed To

Polarizing Key
Order No. 15-04-0288

Polarizing Peg
Order No. 15-04-0291

Dimensions 7660

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 ± .006 3,96 ± 0,15	.330 ± .007 8,38 ± 0,18	6	.780 ± .007 19,81 ± 0,18	.954 ± .008 24,23 ± 0,20	10	1.404 ± .010 35,66 ± 0,25	1.578 ± .010 40,08 ± 0,25	14	2.028 ± .011 51,51 ± 0,28	2.202 ± .011 55,93 ± 0,28
3	.312 ± .006 7,92 ± 0,15	.486 ± .007 12,34 ± 0,18	7	.932 ± .007 23,77 ± 0,18	1.110 ± .009 28,19 ± 0,23	11	1.560 ± .010 39,62 ± 0,25	1.734 ± .010 44,04 ± 0,25	15	2.184 ± .011 55,47 ± 0,28	2.358 ± .011 59,89 ± 0,28
4	.468 ± .006 11,89 ± 0,15	.642 ± .007 16,31 ± 0,18	8	1.092 ± .008 27,74 ± 0,20	1.266 ± .009 32,16 ± 0,23	12	1.716 ± .010 43,59 ± 0,25	1.890 ± .010 48,00 ± 0,25	16	2.340 ± .011 59,44 ± 0,28	2.514 ± .011 63,86 ± 0,28
5	.624 ± .007 15,85 ± 0,18	.798 ± .008 20,27 ± 0,20	9	1.248 ± .008 31,70 ± 0,20	1.422 ± .009 36,12 ± 0,23	13	1.872 ± .010 47,55 ± 0,25	2.046 ± .011 51,97 ± 0,28			

Ordering Information

ORDERING NUMBER FORMULA

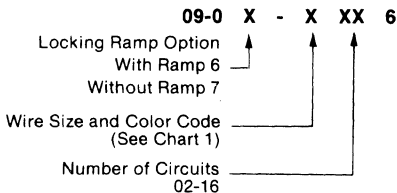


CHART 1 (General Reference*)

Ordering Suffix No.	Color	Type of Wire Terminated [All wires have a maximum Insulation Diameter of .095" (2,41mm)]
09-0X-0XX6	Yellow	#18 GA Solid or Fused Stranded
09-0X-1XX6	Red	#20 GA Solid or Fused Stranded and #18 GA Stranded Wire
09-0X-2XX6	Blue	#20 GA Stranded Wire
09-0X-3XX6	Green	#26 and #27 GA Stranded, Fused Stranded and Solid Wire or #24 GA Stranded Wire
09-0X-4XX6	Brown	#28 GA Solid Wire
09-0X-5XX6	Black	#24 and #22 GA Solid or Fused Stranded and #22 GA Stranded Wire

*Some wires require deviation from chart.

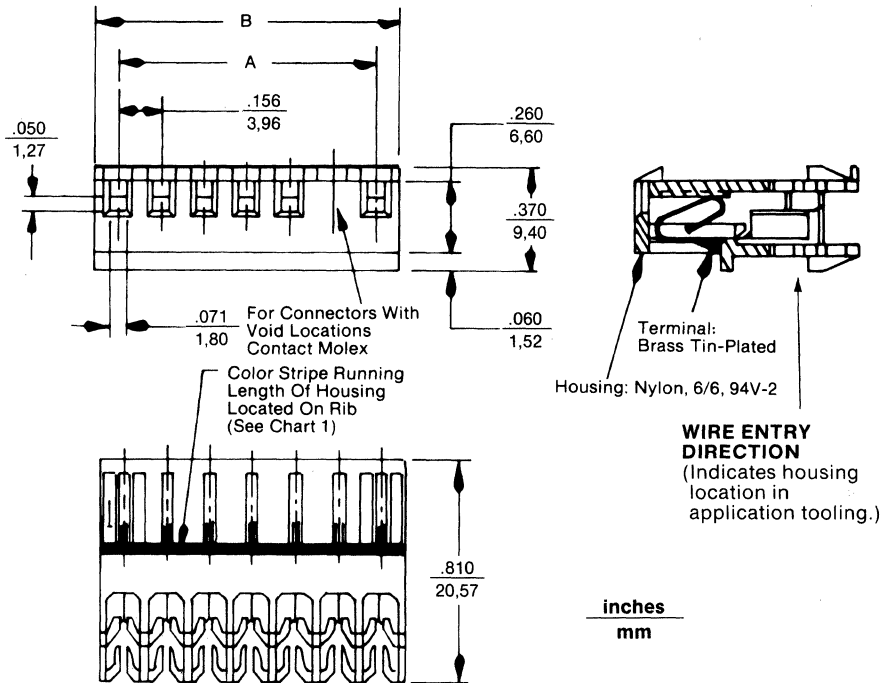
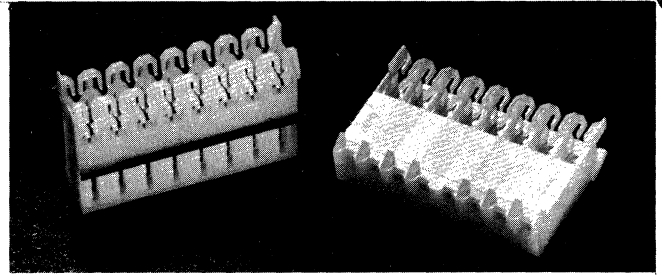
.156" (3,96 mm) Center Harness Board Connector



7664 Series Double Cantilever Contact



- 2-24 Circuits
- Standard with locking ramp
- Mates with standard .156" (3,96mm) center headers
- Molded in wire retainers
- Molded in strain relief
- Accepts wire O.D. from .045" (1,14mm) to .095" (2,41mm) max.
- Feed-thru version available with or without cover
- Feed-to version available with cover
- Optional polarizing keys and pegs
- Accepts solid and stranded wire
- Also accepts crimp terminals 2478, 2578
- UL recognized (File #E29179)



Headers

41661	41761
41662	41771
41681	41772
41682	41791
41741	41792



Covers

7895 Feed Thru
7896 Feed To

Polarizing Key
Order No. 15-04-0288

Polarizing Peg
Order No. 15-04-0291

Dimensions 7664

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 ± .006 3,96 ± 0,15	.330 ± .007 8,38 ± 0,18	8	1,092 ± .008 27,74 ± 0,20	1,266 ± .009 32,16 ± 0,23	14	2,028 ± .011 51,51 ± 0,28	2,202 ± .011 55,93 ± 0,28	20	2,964 ± .013 75,29 ± 0,33	3,138 ± .013 79,70 ± 0,33
3	.312 ± .006 7,92 ± 0,15	.486 ± .007 12,34 ± 0,18	9	1,248 ± .008 31,70 ± 0,20	1,422 ± .009 36,12 ± 0,23	15	2,184 ± .011 55,47 ± 0,28	2,358 ± .011 59,89 ± 0,28	21	3,120 ± .014 79,25 ± 0,36	3,294 ± .014 83,67 ± 0,36
4	.468 ± .006 11,89 ± 0,15	.642 ± .007 16,31 ± 0,18	10	1,404 ± .010 35,66 ± 0,25	1,578 ± .010 40,08 ± 0,25	16	2,340 ± .011 59,44 ± 0,28	2,514 ± .011 63,86 ± 0,28	22	3,276 ± .014 83,21 ± 0,36	3,450 ± .014 87,63 ± 0,36
5	.624 ± .007 15,85 ± 0,18	.798 ± .008 20,27 ± 0,20	11	1,560 ± .010 39,62 ± 0,25	1,734 ± .010 44,04 ± 0,25	17	2,496 ± .012 63,40 ± 0,30	2,670 ± .012 67,82 ± 0,30	23	3,432 ± .014 87,17 ± 0,36	3,606 ± .014 91,59 ± 0,36
6	.780 ± .007 19,81 ± 0,18	.954 ± .008 24,23 ± 0,20	12	1,716 ± .010 43,59 ± 0,25	1,890 ± .010 48,00 ± 0,25	18	2,652 ± .013 67,36 ± 0,33	2,826 ± .013 71,78 ± 0,33	24	3,588 ± .016 91,14 ± 0,41	3,762 ± .016 95,55 ± 0,41
7	.932 ± .007 23,77 ± 0,18	1,110 ± .009 28,19 ± 0,23	13	1,872 ± .010 47,55 ± 0,25	2,046 ± .011 51,97 ± 0,28	19	2,808 ± .013 71,32 ± 0,33	2,982 ± .013 75,74 ± 0,33			

Ordering Information ORDERING NUMBER FORMULA

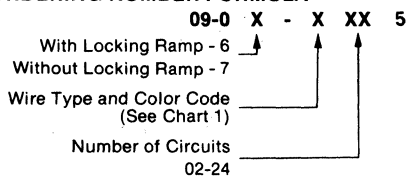


CHART 1 (General Reference*)		
Ordering Suffix No.	Color	Type of Wire Terminated [All wires have a maximum insulation diameter of .095" (2,41mm)]
09-0X-0XX5	Yellow	#18 GA Solid or Fused Stranded
09-0X-1XX5	Red	#20 GA Solid or Fused Stranded and #18 GA Stranded Wire
09-0X-2XX5	Blue	#20 GA Stranded Wire
09-0X-3XX5	Green	#26 and #27 GA-Stranded, Fused Stranded and Solid Wire or #24 GA Stranded Wire
09-0X-5XX5	Black	#24 and #22 GA Solid or Fused Stranded and #22 GA Stranded Wire

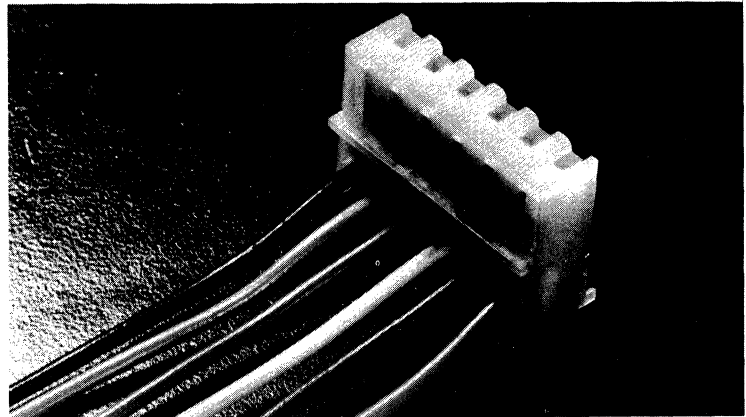
*Some wires require deviation from chart.

.200" (5,08 mm) Center Insulation Displacement Connector

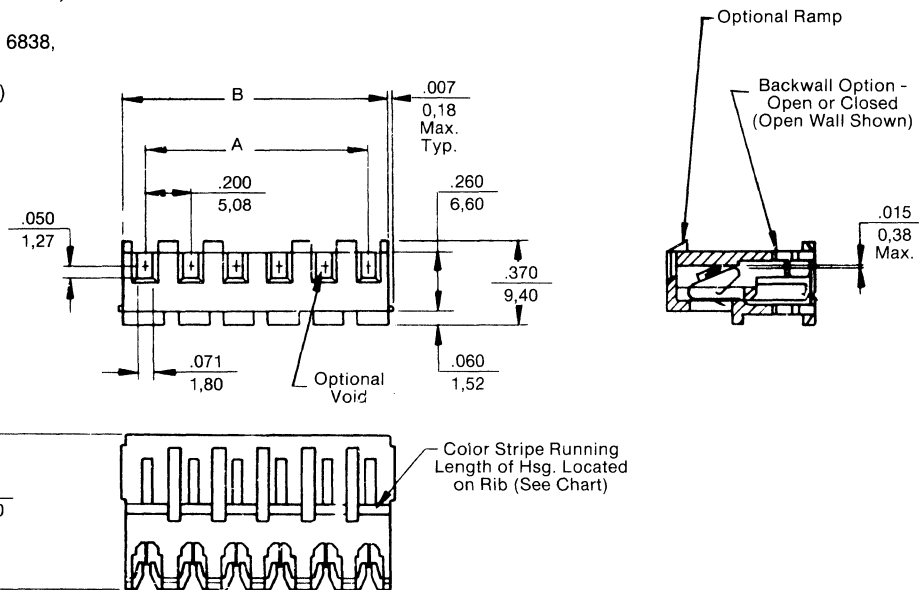


6952 Series 3 Point Trifurcon Contact

- 2-16 Circuits
- With or without locking ramp
- Feed-to or feed-thru versions
- Molded in strain reliefs
- Accepts wire O.D. from .045" (1,14mm) to .095" (2,41mm) max.
- Optional covers
- Optional polarizing keys and pegs
- Mates with standard .200" (5,06mm) center headers
- Also accepts crimp terminals 6838, 7258
- UL recognized (File #E29179)



C



Dimensional Information 6952

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.200 ± .006 5,08 ± 0,15	.392 ± .006 9,95 ± 0,15	6	1,000 ± .008 25,40 ± 0,20	1,192 ± .008 30,27 ± 0,20	10	1,800 ± .010 45,72 ± 0,25	1,992 ± .010 50,59 ± 0,25	14	2,600 ± .012 66,04 ± 0,30	2,792 ± .012 70,91 ± 0,30
3	.400 ± .006 10,16 ± 0,15	.592 ± .007 15,03 ± 0,18	7	1,200 ± .008 30,48 ± 0,20	1,392 ± .007 35,35 ± 0,20	11	2,000 ± .011 50,80 ± 0,28	2,192 ± .011 55,67 ± 0,28	15	2,800 ± .013 71,12 ± 0,33	2,992 ± .013 75,99 ± 0,33
4	.600 ± .007 15,24 ± 0,18	.792 ± .007 20,11 ± 0,18	8	1,400 ± .010 35,56 ± 0,25	1,592 ± .010 40,43 ± 0,25	12	2,200 ± .011 55,88 ± 0,28	2,392 ± .011 60,75 ± 0,28	16	3,000 ± .013 76,20 ± 0,35	3,192 ± .014 81,07 ± 0,35
5	.800 ± .007 20,32 ± 0,18	.992 ± .007 25,19 ± 0,18	9	1,600 ± .010 40,64 ± 0,25	1,792 ± .010 45,51 ± 0,15	13	2,400 ± .011 60,96 ± 0,28	2,592 ± .012 65,83 ± 0,30			

Ordering Information

ORDERING NUMBER FORMULA

10-77 - X XX X
 Wire Type and Color Code (See Chart 1)
 Number of Circuits 02-16

- Without Locking Ramp Feed-thru 1
- With Locking Ramp Feed-thru 2
- Without Locking Ramp Feed-to 3
- With Locking Ramp Feed-to 4

CHART 1 (General Reference)		
Ordering Suffix No.	Color	Type of Wire Terminated [All wires have a maximum Insulation Diameter of .095" (2,41mm)]
10-77-2XXX	Red	#20 GA Solid or Fused Stranded and #18 GA Stranded Wire
10-77-4XXX	Green	#26 and #27 GA Stranded, Fused Stranded and Solid Wire or #24 GA Stranded Wire

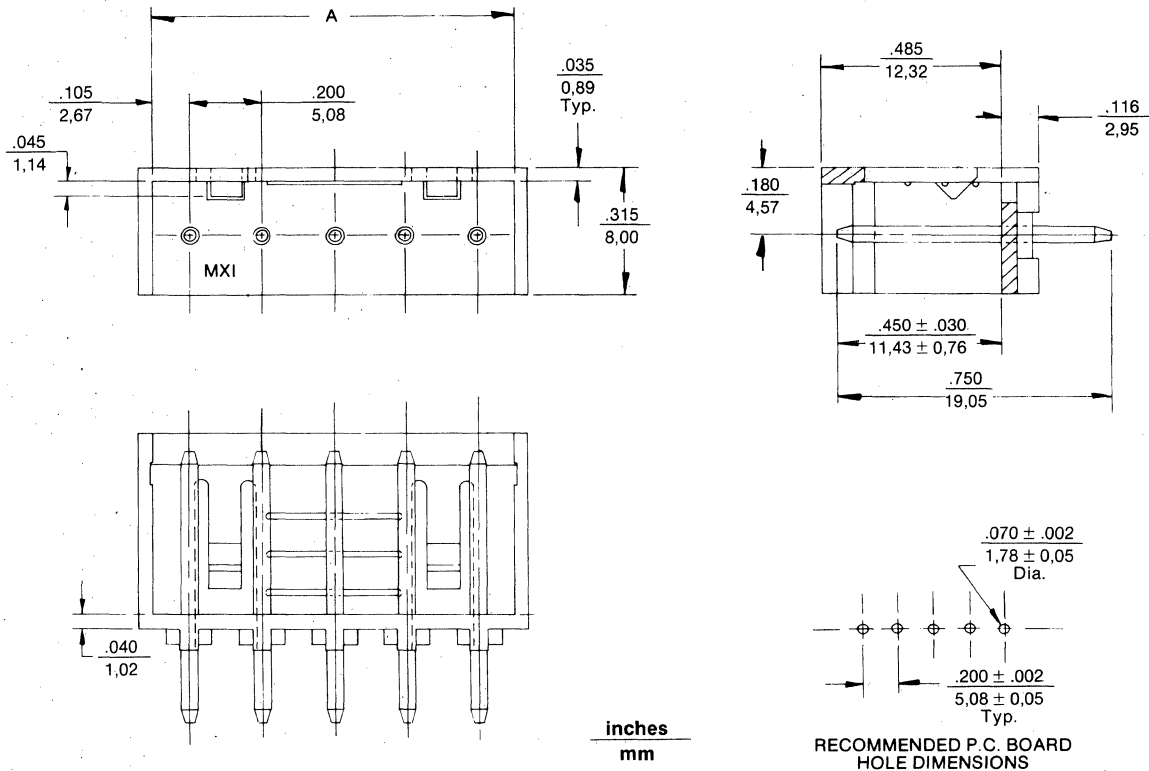
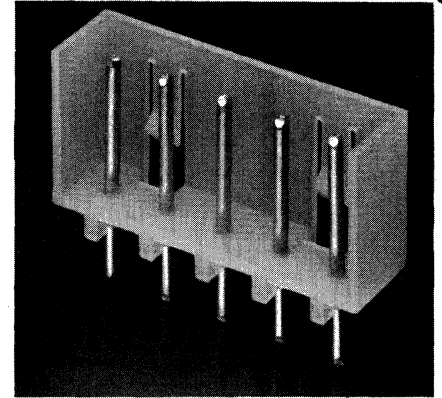
.200" (5,08 mm) Center Shrouded Header



C

8023 Series Round Wire Shrouded Header with Housing

- 3, 4, 5, 6, 7 and 16 circuits with various void options
- .030" (0,76mm) Round wire
- Nylon 94V-2
- Mates with Molex .200" (5,08 mm) center I.D.T. connectors
- Also mates with crimp connector 3001



Dimensions 8023

Circuits	Dim. A	Void Pin	Circuits	Dim. A	Void Pin	Circuits	Dim. A	Void Pin	Circuits	Dim. A	Void Pin
3	.610 15,49	None	5	1.010 25,65	2	6	1.210 30,73	5	7	1.410 35,81	None
4	.810 20,57	None	5	1.010 25,65	4	6	1.210 30,73	2	16	3.210 81,53	None
5	1.010 25,65	None	6	1.210 30,73	None						

Ordering Information 8023

Circuits	Order No.	Void Pin	Circuits	Order No.	Void Pin	Circuits	Order No.	Void Pin	Circuits	Order No.	Void Pin
3	10-07-1033	None	5	10-07-1055	2	6	10-07-1064	5	7	10-07-1073	None
4	10-07-1043	None	5	10-07-1056	4	6	10-07-1065	2	16	10-07-1163	None
5	10-07-1053	None	6	10-07-1063	None						

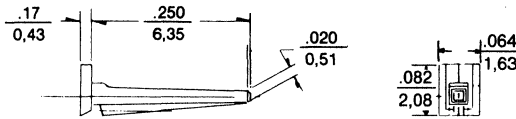
Polarizing Keys and Pegs



.098" (2,5 mm) Center Spacing

Polarizing Key 7842-1

Nylon, 94V-2



7842-1 and -2
Used With Connectors:
7790
7795

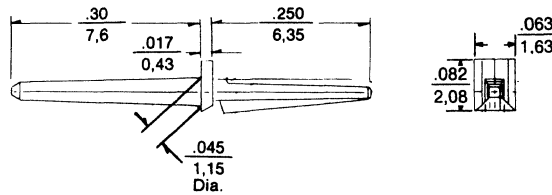


Order Number	89-00-3003
--------------	------------

Delivered on carrier with 20 pcs. to a strip.

Polarizing Peg 7842-2

Nylon, 94V-2



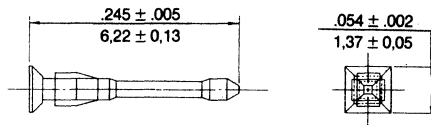
Order Number	89-00-3004
--------------	------------

Delivered on carrier with 20 pcs. to a strip.

.100" (2,54 mm) Center Polarizing Key 40713-1

Glass Filled Polyester, Black

Can be used in a housing with or without a contact.



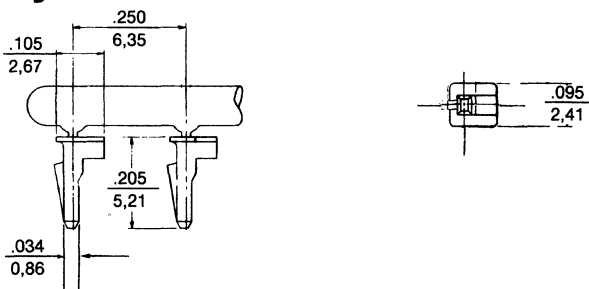
40713-1
Used with IDT Connectors
7720 **7690**
7720S

Order Number	• 15-04-0292
--------------	--------------

Delivered on carrier with 20 pieces to a strip.
• U.S. Standard Product, available through Molex franchised distributors.

.156" (3,96 mm) and .200" (5,08 mm) Center Polarizing Key 7580-3

Nylon, 94V-2



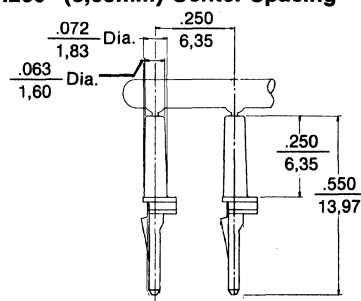
7580-3 and -4
Used With Connectors
7793 **7664**
7935 **7674**
7660 **7675**

Order Number	15-04-0288
--------------	------------

Delivered on carrier with 7 pieces to a strip.

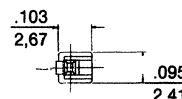
Polarizing Peg 7580-4

.156" (3,96mm), .197" (5,00mm), .200" (5,08mm) Center Spacing



Order Number	15-04-0291
--------------	------------

Delivered on carrier with 7 pieces to a strip.

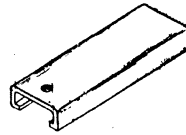


.098" and .100" Center (2,5 mm and 2,54 mm) Covers

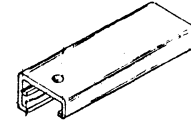


C

7841 Series Feed Thru and Feed To Standard Version

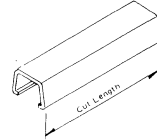


7841
Feed-Thru
Standard Version

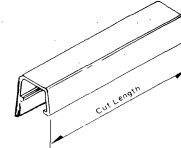


7841
Feed-To
Standard Version

7840 Series Feed Thru and Feed To Harness Board Versions



7840
Feed Thru Harness
Board Version



7840
Feed To Harness
Board Version

inches
mm

Dimensions .098" (2,5mm)

Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length
4	.413 10,49	9	.906 23,01	13	1.299 32,99	17	1.693 43,00	21	2.087 53,00	25	2.480 62,99
5	.512 13,00	10	1.004 25,50	14	1.398 35,50	18	1.791 45,49	22	2.185 55,49	26	2.579 65,50
6	.611 15,51	11	1.102 27,99	15	1.496 37,99	19	1.890 48,00	23	2.283 57,98	27	2.678 68,02
7	.709 18,00	12	1.201 30,50	16	1.595 40,51	20	1.988 50,49	24	2.382 60,50	28	2.776 70,51
8	.807 20,49										

Ordering Information .098" (2,5 mm)

	7841 STANDARD COVER	7840 HARNESS BOARD COVER
Feed Thru	15-05-8XX6	15-05-8XX2
Feed To	15-05-8XX8	15-05-8XX4

Replace XX with number of circuits required, 04-28

Dimensions .100" (2,54mm)

Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length
4	.414 10,51	9	.914 23,21	13	1.314 33,37	17	1.714 43,53	21	2.014 51,39	25	2.514 63,85
5	.514 13,05	10	1.014 25,75	14	1.414 35,91	18	1.814 46,07	22	2.214 56,23	26	2.614 66,39
6	.614 15,59	11	1.114 28,29	15	1.514 38,45	19	1.914 48,61	23	2.314 58,77	27	2.714 68,93
7	.714 18,13	12	1.214 30,83	16	1.614 40,99	20	2.014 51,15	24	2.414 61,31	28	2.814 71,47
8	.814 20,67										

Ordering Information .100" (2,54 mm)

	7841 STANDARD COVER	7840 HARNESS BOARD COVER
Feed Thru	15-05-8XX5	15-05-8XX1
Feed To	15-05-8XX7	15-05-8XX3

Replace XX with number of circuits required, 04-28

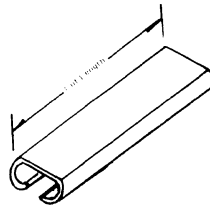
.156", and .200" (3,96 mm, and 5,08 mm) Covers



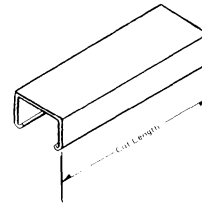
7894 Series Feed Thru Standard Connector Version

7895 Series Feed Thru Harness

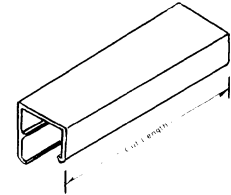
7896 Series Feed to Harness



7894 NA



7895 NA



7896 NA

Dimensions .156" (3,96mm)

Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length
4	.598 15,19	8	1,222 31,04	12	1,846 46,89	16	2,470 62,74	19	2,938 74,62	22	3,406 86,51
5	.754 19,15	9	1,378 35,00	13	2,002 50,85	17	2,626 66,70	20	3,094 78,59	23	3,562 90,47
6	.910 23,11	10	1,534 38,96	14	2,158 54,81	18	2,782 70,66	21	3,250 82,55	24	3,718 94,44
7	1,066 27,07	11	1,690 42,93	15	2,314 58,78						

Ordering Information .156" (3,96 mm)

Circuits	Standard			Harness			Circuits	Standard			Harness		
	7894 Feed Thru	7895 Feed Thru	7896 Feed To	7894 Feed Thru	7895 Feed Thru	7896 Feed To		7894 Feed Thru	7895 Feed Thru	7896 Feed To	7894 Feed Thru	7895 Feed Thru	7896 Feed To
4	15-05-7044	15-05-7042	15-05-7043	11	15-05-7114	15-05-7112	15-05-7113	18	15-05-7184	15-05-7182	15-05-7183		
5	15-05-7054	15-05-7052	15-05-7053	12	15-05-7124	15-05-7122	15-05-7123	19	15-05-7194	15-05-7192	15-05-7193		
6	15-05-7064	15-05-7062	15-05-7063	13	15-05-7134	15-05-7132	15-05-7133	20	15-05-7204	15-05-7202	15-05-7203		
7	15-05-7074	15-05-7072	15-05-7073	14	15-05-7144	15-05-7142	15-05-7143	21	15-05-7214	15-05-7212	15-05-7213		
8	15-05-7084	15-05-7082	15-05-7083	15	15-05-7154	15-05-7152	15-05-7153	22	15-05-7224	15-05-7222	15-05-7223		
9	15-05-7094	15-05-7092	15-05-7093	16	15-05-7164	15-05-7162	15-05-7163	23	15-05-7234	15-05-7232	15-05-7233		
10	15-05-7104	15-05-7102	15-05-7103	17	15-05-7174	15-05-7172	15-05-7173	24	15-05-7244	15-05-7242	15-05-7243		

Dimensions .200" (5,08mm)

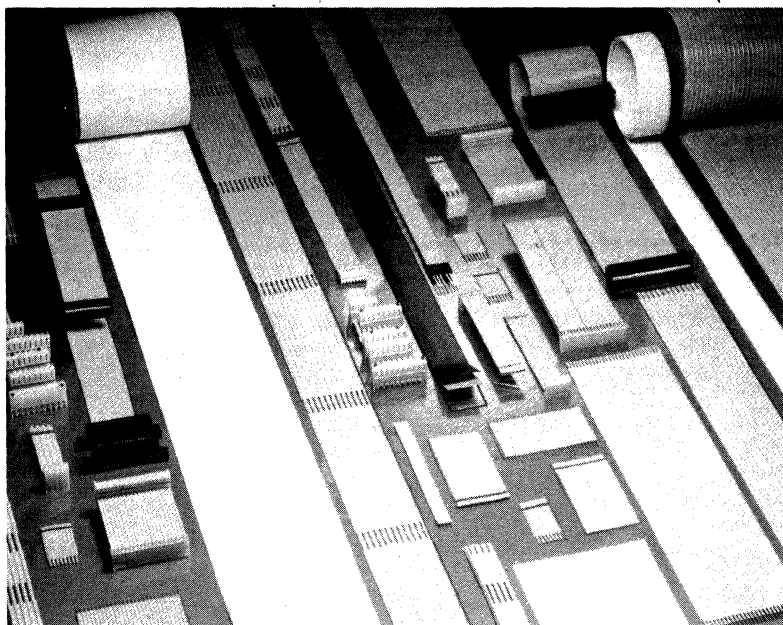
Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length	Circuits	Dim. Cut Length
4	.730 18,54	7	1,330 33,78	9	1,730 43,94	11	2,130 54,10	13	2,530 64,26	15	2,930 74,41
5	.930 23,62	8	1,530 38,86	10	1,930 49,02	12	2,330 59,18	14	2,730 69,34	16	3,130 79,50
6	1,130 28,70										

Ordering Information .200" (5,08 mm)

Circuits	Standard			Harness			Circuits	Standard			Harness		
	7894 Feed Thru	7895 Feed Thru	7896 Feed To	7894 Feed Thru	7895 Feed Thru	7896 Feed To		7894 Feed Thru	7895 Feed Thru	7896 Feed To	7894 Feed Thru	7895 Feed Thru	7896 Feed To
4	15-05-7045			9	15-05-7095		13	15-05-7135					
5	15-05-7055			10	15-05-7105		14	15-05-7145					
6	15-05-7065	*Contact Factory for Ordering Number	*Contact Factory for Ordering Number	11	15-05-7115		15	15-05-7155			*Contact Factory for Ordering Number	*Contact Factory for Ordering Number	
7	15-05-7075			12	15-05-7125		16	15-05-7165					
8	15-05-7085												

C

Contents



.050" Round Conductor Flat Cable
6800, 8863, 40158 2D

- Gray PVC insulation
- Sizes up to 68 circuits
- U.L. Style 2851 (300V, 105°C., VW-1)

.050" Foil Shielded Cable 24107 3D

- Reduces EMI/RFI - helps w/F.C.C. compliance
- Gray PVC insulation/black PVC jacket
- Sizes up to 60 circuits
- U.L. Style 2651 (300V., 105°C., VW-1)

.100" Round Conductor Flat Cable 7234,
7307, 7560, 7767, 8996, 8997, 8867,
24241, 24226 4D-5D

- Gray PVC insulation
- Sizes up to 36 circuits
- U.L. Style 2651 (300V., 105°C., VW-1)

.100" Flextran™ High Flex Life Cable,
24369, 24389 6D

- Twenty times the flex life of standard 8997/8996 cable
- Sizes up to 36 circuits
- Special high performance conductors

.100" Heavy Duty Composite
Cable 24214 7D

- Tough insulation resists cut/melt-through
- Natural irradiated PVC/tan PVC insulation
- Sizes up to 24 circuits

.156" Round Conductor Flat Cable
7382, 7517, 8868, 40174 8D

- Gray PVC insulation
- Sizes up to 24 circuits
- U.L. Style 2651 (300V., 105°C., VW-1)

Flat Cable Jumpers 9D

Notched Cable 9D

.049" Flat Flex Jumpers 20782, 20783 10D

Cable Assembly Capabilities 11D

Electrical Specs 12D

.050" (1,27 mm) Round Conductor Flat Cable



6800

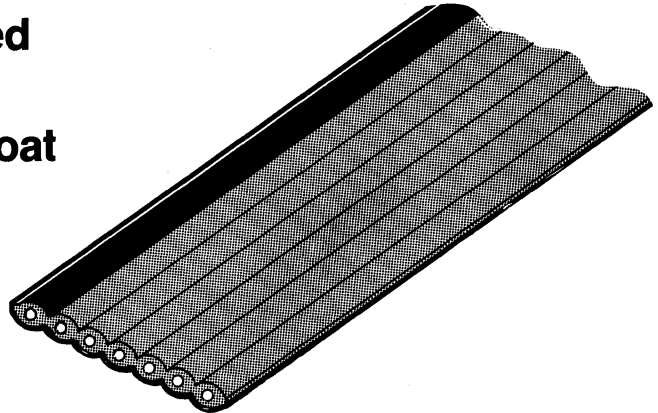
28 AWG (7 x 36) Stranded, Tinned

8863

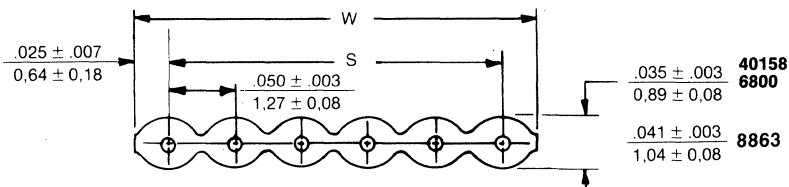
26 AWG (7 x 34) Stranded, Tinned

40158

28 AWG (7 x 36) Stranded, Topcoat



- Gray PVC insulation
- Sizes up to 68 circuits
- U.L. temperature rating -20°C to 105°C
- U.L. voltage rating 300 V max.
- U.L. flammability rating VW-1
- U.L. style no. 2651
- U.L. recognized (File #E61522)
- CSA certification upon request



Dimensions

Circuits	Dim. S	Dim. W (Ref.)	Circuits	Dim. S	Dim. W (Ref.)	Circuits	Dim. S	Dim. W (Ref.)
10	.450 ± .007 11,43 ± 0,18	.500 12,70	25	1.200 ± .009 30,48 ± 0,23	1.250 31,75	50	2.450 ± .011 62,23 ± 0,28	2.500 63,50
14	.650 ± .007 16,51 ± 0,18	.700 17,78	26	1.250 ± .009 31,74 ± 0,23	1.300 33,02	60	2.950 ± .011 74,93 ± 0,28	3.000 76,20
16	.750 ± .009 19,05 ± 0,23	.800 20,32	34	1.650 ± .009 41,91 ± 0,23	1.700 43,18	64	3.150 ± .011 80,01 ± 0,28	3.200 81,28
20	.950 ± .009 24,13 ± 0,23	1.000 25,40	40	1.950 ± .011 49,53 ± 0,28	2.000 50,80	68	3.350 ± .011 85,09 ± 0,28	3.400 86,36

See Page 12D for Electrical Specifications.

Ordering Information

For Cable Series Number	Reel Size	Use Order Number
6800-XX	100 ft. reel	• 82-28-57XX
6800-XX	300 ft. reel	• 82-28-59XX
8863-XX	100 ft. reel	• 82-26-68XX
8863-XX	300 ft. reel	• 82-26-72XX
40158-XX	100 ft. reel	• 82-28-55XX
40158-XX	300 ft. reel	• 82-28-53XX

In place of "XX", indicate circuit size desired

• U.S. Standard Product, available through Molex franchised distributors.

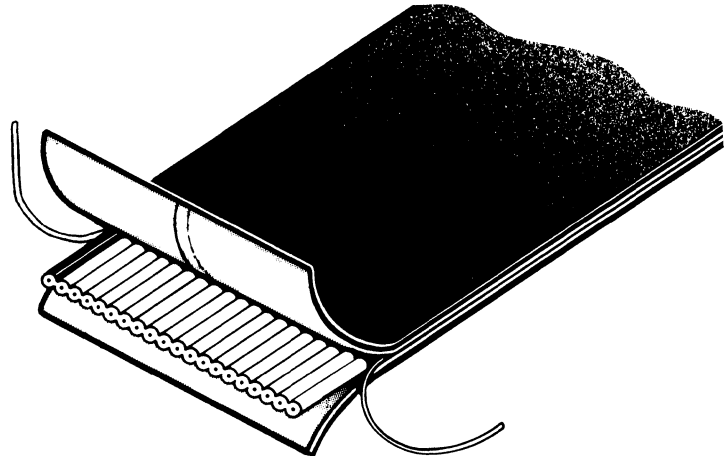
Other reel sizes available — Contact factory

.050" (1,27 mm) Foil Shielded Cable

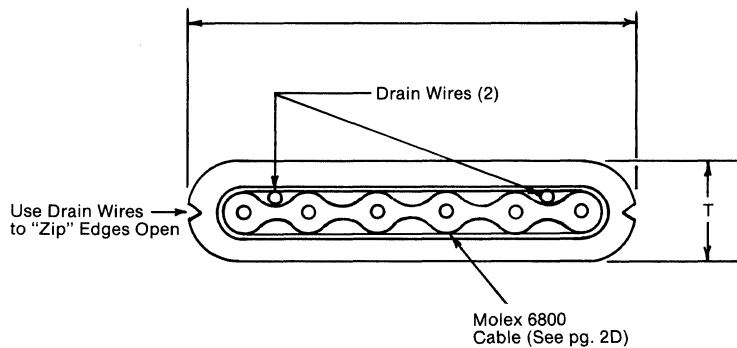


24107 28 AWG (7 x 36) Stranded, Tinned

- Black PVC jacket
- 360° foil shield
- Molex 6800 core cable
- Sizes up to 50 circuits
- Design permits easy removal of shield/jacket
- Reduces EMI/RFI
- Reduces susceptibility to ESD
- Assists in complying with F.C.C. Docket 20780
- U.L. temperature rating -20°C to 105°C
- U.L. voltage rating 300 V max.
- U.L. flammability rating VW-1
- U.L. Style No. 2651
- U.L. recognized (File #E61522)



D



Dimensions

Circuits	Dim. W	Dim. T	Circuits	Dim. W	Dim. T	Circuits	Dim. W	Dim. T
6	.356 ± .025 9,05 ± 0,64	.090 ± .015 2,29 ± 0,38	16	.876 ± .030 22,25 ± 0,76	.110 ± .015 2,79 ± 0,38	34	1.806 ± .050 45,87 ± 1,27	.140 ± .015 3,56 ± 0,38
7	.406 ± .025 10,31 ± 0,64	.090 ± .015 2,29 ± 0,38	20	1.076 ± .040 27,33 ± 1,02	.110 ± .015 2,79 ± 0,38	37	1.956 ± .060 49,68 ± 1,52	.140 ± .015 3,56 ± 0,38
8	.456 ± .025 11,60 ± 0,64	.090 ± .015 2,29 ± 0,38	24	1.276 ± .045 32,41 ± 1,14	.110 ± .015 2,79 ± 0,38	40	2.106 ± .060 53,49 ± 1,52	.140 ± .015 3,56 ± 0,38
10	.576 ± .025 14,63 ± 0,64	.110 ± .015 2,79 ± 0,38	25	1.326 ± .045 33,68 ± 1,14	.110 ± .015 2,79 ± 0,38	50	2.606 ± .060 66,19 ± 1,52	.140 ± .015 3,56 ± 0,38
14	.776 ± .025 19,71 ± 0,64	.110 ± .015 2,79 ± 0,38	26	1.376 ± .050 34,95 ± 1,27	.110 ± .015 2,79 ± 0,38			

See Page 12D for Electrical Specifications

Ordering Information

For Cable Series Number	Reel Size	Use Order Number
24107-XX	100 ft. reel	• 82-28-7XX1
In place of "XX", indicate circuit size desired		

• U.S. Standard Product, available through Molex franchised distributors.

Other reels sizes available — Contact factory

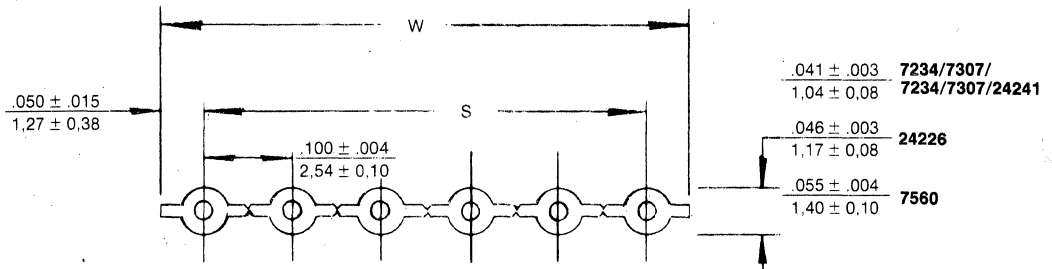
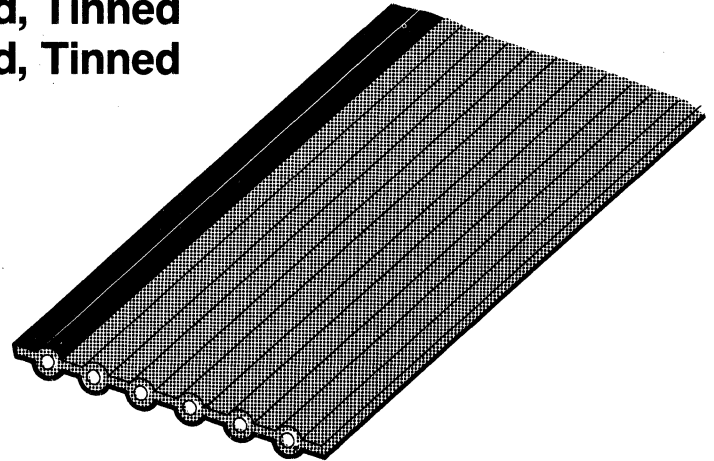
.100" (2,54 mm) Round Conductor Flat Cable



- 7234** 26 AWG (1 x 26) Solid, Tinned
- 7307** 28 AWG (7 x 36) Stranded, Tinned
- 7560** 22 AWG (7 x 30) Stranded, Tinned
- 24241** 26 AWG (7 x 34) Stranded, Tinned
- 24226** 24 AWG (7 x 32) Stranded, Tinned

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- Gray PVC insulation
- Sizes up to 36 circuits
- U.L. temperature rating -20°C to 105°C
- U.L. voltage rating 300 V. max.
- U.L. flammability rating VW-1
- U.L. Style No. 2651
- U.L. recognized (File #E61522)
- CSA certification upon request



Dimensions

Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)
2	.100 ± .004 2,54 ± 0,10	.200 5,08	9	.800 ± .013 20,32 ± 0,33	.900 22,86	16	1.500 ± .013 38,10 ± 0,33	1.600 40,64	23	2.200 ± .013 55,88 ± 0,33	2.300 58,42	30	2.900 ± .013 73,66 ± 0,33	3.000 76,20
3	.200 ± .008 5,08 ± 0,20	.300 7,62	10	.900 ± .013 22,86 ± 0,33	1.000 25,40	17	1.600 ± .013 40,64 ± 0,33	1.700 43,18	24	2.300 ± .013 58,42 ± 0,33	2.400 60,96	31	3.000 ± .013 76,20 ± 0,33	3.100 78,74
4	.300 ± .012 7,62 ± 0,30	.400 10,16	11	1.000 ± .013 25,40 ± 0,33	1.100 27,94	18	1.700 ± .013 43,18 ± 0,33	1.800 45,72	25	2.400 ± .013 60,96 ± 0,33	2.500 63,50	32	3.100 ± .013 78,74 ± 0,33	3.200 81,28
5	.400 ± .013 10,16 ± 0,33	.500 12,70	12	1.100 ± .013 27,94 ± 0,33	1.200 30,48	19	1.800 ± .013 45,72 ± 0,33	1.900 48,26	26	2.500 ± .013 63,50 ± 0,33	2.600 66,04	33	3.200 ± .013 81,28 ± 0,33	3.300 83,82
6	.500 ± .013 12,70 ± 0,33	.600 15,24	13	1.200 ± .013 30,48 ± 0,33	1.300 33,02	20	1.900 ± .013 48,26 ± 0,33	2.000 50,80	27	2.600 ± .013 66,04 ± 0,33	2.700 68,58	34	3.300 ± .013 83,82 ± 0,33	3.400 86,36
7	.600 ± .013 15,24 ± 0,33	.700 17,78	14	1.300 ± .013 33,02 ± 0,33	1.400 35,56	21	2.000 ± .013 50,80 ± 0,33	2.100 53,34	28	2.700 ± .013 68,58 ± 0,33	2.800 71,12	35	3.400 ± .013 86,36 ± 0,33	3.500 88,90
8	.700 ± .013 17,78 ± 0,33	.800 20,32	15	1.400 ± .013 35,56 ± 0,33	1.500 38,10	22	2.100 ± .013 53,34 ± 0,33	2.200 55,88	29	2.800 ± .013 71,12 ± 0,33	2.900 73,66	36	3.500 ± .013 88,90 ± 0,33	3.600 91,44

See Page 12D for Electrical Specifications.

Ordering Information

For Cable Series Number	Reel Size	Use Order Number	For Cable Series Number	Reel Size	Use Order Number
7234-XX	100 ft. reel	• 82-26-57XX	7560-XX	300 ft. reel	• 82-22-62XX
7234-XX	300 ft. reel	• 82-26-59XX	24241-XX	100 ft. reel	• 82-26-56XX
7307-XX	100 ft. reel	• 82-28-58XX	24241-XX	300 ft. reel	• 82-26-53XX
7307-XX	300 ft. reel	• 82-28-60XX	24226-XX	100 ft. reel	• 82-24-77XX
7560-XX	100 ft. reel	• 82-22-61XX	24226-XX	300 ft. reel	• 82-24-73XX

In place of "XX", indicate circuit size desired

• U.S. Standard Product, available through Molex franchised distributors.

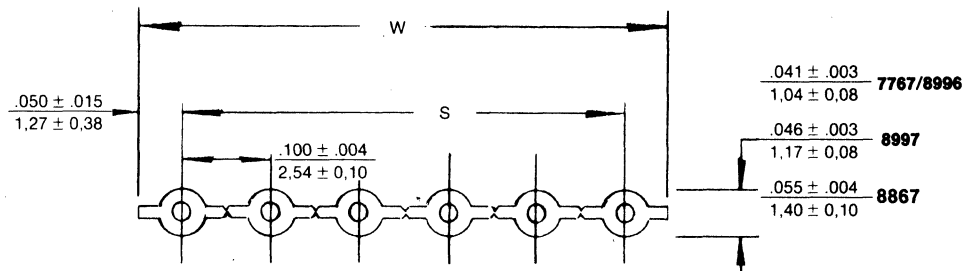
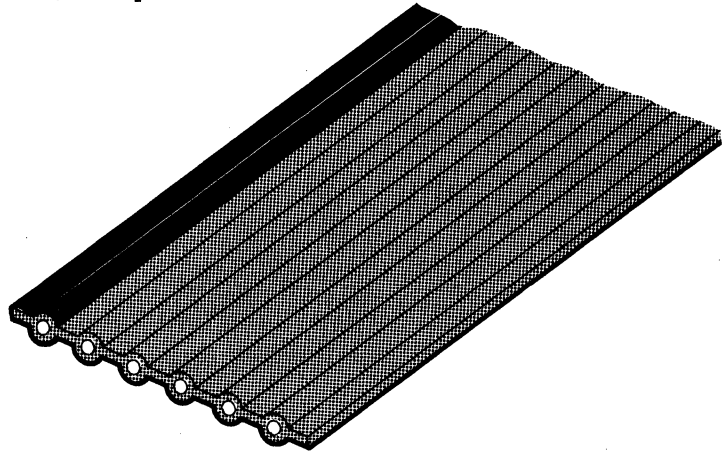
Other reel sizes available -- Contact factory

.100" (2,54 mm) Round Conductor Flat Cable



- 7767** 28 AWG (7 x 36) Stranded, Topcoat
- 8996** 26 AWG (7 x 34) Stranded, Topcoat
- 8997** 24 AWG (7 x 32) Stranded, Topcoat
- 8867** 22 AWG (7 x 30) Stranded, Topcoat

- Gray PVC insulation
- Sizes up to 36 circuits
- U.L. temperature rating -20°C to 105°C
- U.L. voltage rating 300 V. max.
- U.L. flammability rating VW-1
- U.L. Style No. 2651
- U.L. recognized (File #E61522)
- CSA certification upon request



Dimensions

Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)
2	.100 ± .004 2,54 ± 0,10	.200 5,08	9	.800 ± .013 20,32 ± 0,33	.900 22,86	16	1.500 ± .013 38,10 ± 0,33	1.600 40,64	23	2.200 ± .013 55,88 ± 0,33	2.300 58,42	30	2.900 ± .013 73,66 ± 0,33	3.000 76,20
3	.200 ± .008 5,08 ± 0,20	.300 7,62	10	.900 ± .013 22,86 ± 0,33	1.000 25,40	17	1.600 ± .013 40,64 ± 0,33	1.700 43,18	24	2.300 ± .013 58,42 ± 0,33	2.400 60,96	31	3.000 ± .013 76,20 ± 0,33	3.100 78,74
4	.300 ± .012 7,62 ± 0,30	.400 10,16	11	1.000 ± .013 25,40 ± 0,33	1.100 27,94	18	1.700 ± .013 43,18 ± 0,33	1.800 45,72	25	2.400 ± .013 60,96 ± 0,33	2.500 63,50	32	3.100 ± .013 78,74 ± 0,33	3.200 81,28
5	.400 ± .013 10,16 ± 0,33	.500 12,70	12	1.100 ± .013 27,94 ± 0,33	1.200 30,48	19	1.800 ± .013 45,72 ± 0,33	1.900 48,26	26	2.500 ± .013 63,50 ± 0,33	2.600 66,04	33	3.200 ± .013 81,28 ± 0,33	3.300 83,82
6	.500 ± .013 12,70 ± 0,33	.600 15,24	13	1.200 ± .013 30,48 ± 0,33	1.300 33,02	20	1.900 ± .013 48,26 ± 0,33	2.000 50,80	27	2.600 ± .013 66,04 ± 0,33	2.700 68,58	34	3.300 ± .013 83,82 ± 0,33	3.400 86,36
7	.600 ± .013 15,24 ± 0,33	.700 17,78	14	1.300 ± .013 33,02 ± 0,33	1.400 35,56	21	2.000 ± .013 50,80 ± 0,33	2.100 53,34	28	2.700 ± .013 68,58 ± 0,33	2.800 71,12	35	3.400 ± .013 86,36 ± 0,33	3.500 88,90
8	.700 ± .013 17,78 ± 0,33	.800 20,32	15	1.400 ± .013 35,56 ± 0,33	1.500 38,10	22	2.100 ± .013 53,34 ± 0,33	2.200 55,88	29	2.800 ± .013 71,12 ± 0,33	2.900 73,66	36	3.500 ± .013 88,90 ± 0,33	3.600 91,44

See Page 12D for Electrical Specifications.

Ordering Information

For Cable Series Number	Reel Size	Use Order Number	For Cable Series Number	Reel Size	Use Order Number
7767-XX	100 ft. reel	• 82-28-6XX1	8997-XX	100 ft. reel	• 82-24-59XX
7767-XX	300 ft. reel	• 82-28-6XX3	8997-XX	300 ft. reel	• 82-24-60XX
8996-XX	100 ft. reel	• 82-26-58XX	8867-XX	100 ft. reel	• 82-22-60XX
8996-XX	300 ft. reel	• 82-26-71XX	8867-XX	300 ft. reel	• 82-22-65XX

In place of "XX", indicate circuit size desired

• U.S. Standard Product, available through Molex franchised distributors.

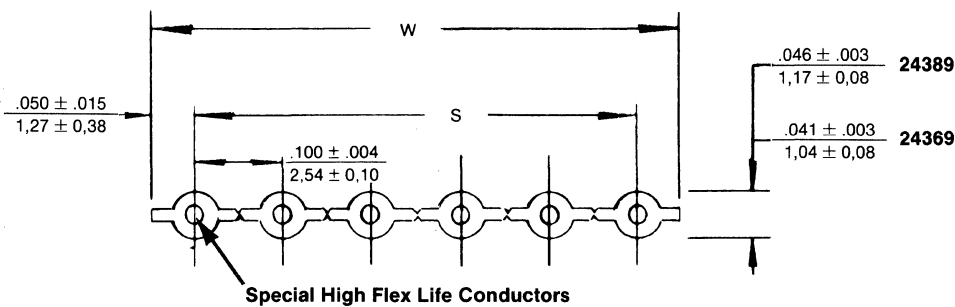
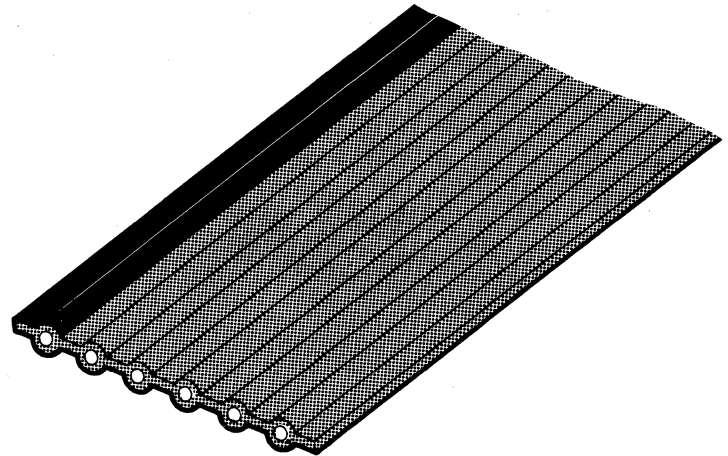
Other reel sizes available — Contact factory

.100" (2,54 mm) Flextran™ High Flex Life Cable



24369 26 AWG (19 x 38) Stranded, Topcoat 24389 24 AWG (19 x 36) Stranded, Topcoat

- 20 times the flex life of our standard 8997/8996 cable (per ASTM B470)
- Special high performance conductors
- Gray PVC insulation
- Sizes up to 36 circuits
- U.L. temperature rating -20°C to 105°C
- U.L. voltage rating 300 V. max.
- U.L. flammability rating VW-1
- U.L. Style No. 2651
- U.L. recognized (File #E61522)



Dimensions

Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)	Ckts.	Dim. S	Dim. W (Ref.)
2	.100 ± .004 2,54 ± 0,10	.200 5,08	9	.800 ± .013 20,32 ± 0,33	.900 22,86	16	1.500 ± .013 38,10 ± 0,33	1.600 40,64	23	2.200 ± .013 55,88 ± 0,33	2.300 58,42	30	2.900 ± .013 73,66 ± 0,33	3.000 76,20
3	.200 ± .008 5,08 ± 0,20	.300 7,62	10	.900 ± .013 22,86 ± 0,33	1.000 25,40	17	1.600 ± .013 40,64 ± 0,33	1.700 43,18	24	2.300 ± .013 58,42 ± 0,33	2.400 60,96	31	3.000 ± .013 76,20 ± 0,33	3.100 78,74
4	.300 ± .012 7,62 ± 0,30	.400 10,16	11	1.000 ± .013 25,40 ± 0,33	1.100 27,94	18	1.700 ± .013 43,18 ± 0,33	1.800 45,72	25	2.400 ± .013 60,96 ± 0,33	2.500 63,50	32	3.100 ± .013 78,74 ± 0,33	3.200 81,28
5	.400 ± .013 10,16 ± 0,33	.500 12,70	12	1.100 ± .013 27,94 ± 0,33	1.200 30,48	19	1.800 ± .013 45,72 ± 0,33	1.900 48,26	26	2.500 ± .013 63,50 ± 0,33	2.600 66,04	33	3.200 ± .013 81,28 ± 0,33	3.300 83,82
6	.500 ± .013 12,70 ± 0,33	.600 15,24	13	1.200 ± .013 30,48 ± 0,33	1.300 33,02	20	1.900 ± .013 48,26 ± 0,33	2.000 50,80	27	2.600 ± .013 66,04 ± 0,33	2.700 68,58	34	3.300 ± .013 83,82 ± 0,33	3.400 86,36
7	.600 ± .013 15,24 ± 0,33	.700 17,78	14	1.300 ± .013 33,02 ± 0,33	1.400 35,56	21	2.000 ± .013 50,80 ± 0,33	2.100 53,34	28	2.700 ± .013 68,58 ± 0,33	2.800 71,12	35	3.400 ± .013 86,36 ± 0,33	3.500 88,90
8	.700 ± .013 17,78 ± 0,33	.800 20,32	15	1.400 ± .013 35,56 ± 0,33	1.500 38,10	22	2.100 ± .013 53,34 ± 0,33	2.200 55,88	29	2.800 ± .013 71,12 ± 0,33	2.900 73,66	36	3.500 ± .013 88,90 ± 0,33	3.600 91,44

See Page 12D for Electrical Specifications.

Ordering Information

For Cable Series Number	Reel Size	Use Order Number
24369-XX	100 ft. reel	• 82-26-62XX
24369-XX	300 ft. reel	• 82-26-60XX
24389-XX	100 ft. reel	• 82-24-80XX
24389-XX	300 ft. reel	• 82-24-81XX

In place of "XX", indicate circuit size desired

• U.S. Standard Product, available through Molex franchised distributors.

Other reel sizes available — Contact factory

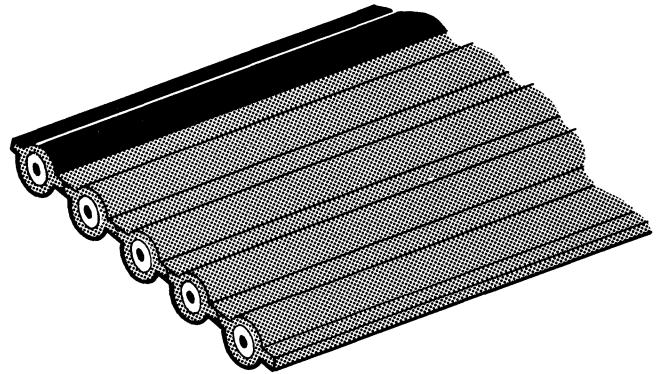
.100" (2,54 mm) Heavy Duty Composite Cable



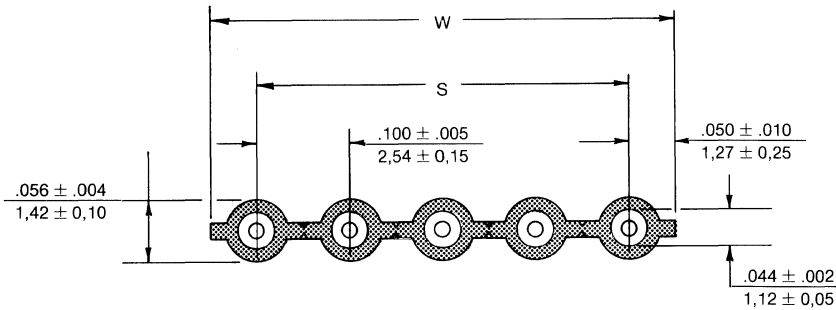
24214

24 AWG (7 x 32) Stranded, Topcoat Pre-Insulated

- Tough primary insulation resists cut/melt-through
- Natural irradiated PVC primary / tan PVC secondary insulation
- Sizes up to 24 circuits



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Dimensions

Circuits	Dim. S	Dim. W (Ref.)	Circuits	Dim. S	Dim. W (Ref.)	Circuits	Dim. S	Dim. W (Ref.)
2	.100 ± .004 2,54 ± 0,10	.200 5,08	10	.900 ± .013 22,86 ± 0,33	1.000 25,40	18	1.700 ± .013 43,18 ± 0,33	1.800 45,72
3	.200 ± .008 5,08 ± 0,20	.300 7,62	11	1.000 ± .013 25,40 ± 0,33	1.100 27,94	19	1.800 ± .013 45,72 ± 0,33	1.900 48,26
4	.300 ± .012 7,62 ± 0,30	.400 10,16	12	1.100 ± .013 27,94 ± 0,33	1.200 30,48	20	1.900 ± .013 48,26 ± 0,33	2.000 50,80
5	.400 ± .013 10,16 ± 0,33	.500 12,70	13	1.200 ± .013 30,48 ± 0,33	1.300 33,02	21	2.000 ± .013 50,80 ± 0,33	2.100 53,34
6	.500 ± .013 12,70 ± 0,33	.600 15,24	14	1.300 ± .013 33,02 ± 0,33	1.400 35,56	22	2.100 ± .013 53,34 ± 0,33	2.200 55,88
7	.600 ± .013 15,24 ± 0,33	.700 17,78	15	1.400 ± .013 35,56 ± 0,33	1.500 38,10	23	2.200 ± .013 55,88 ± 0,33	2.300 58,42
8	.700 ± .013 17,78 ± 0,33	.800 20,32	16	1.500 ± .013 38,10 ± 0,33	1.600 40,64	24	2.300 ± .013 58,42 ± 0,33	2.400 60,96
9	.800 ± .013 20,32 ± 0,33	.900 22,86	17	1.600 ± .013 40,64 ± 0,33	1.700 43,18			

See Page 12D for Electrical Specifications.

Ordering Information

For Cable Series Number	Reel Size	Use Order Number
24214-XX-100B	100 ft. reel	82-24-56XX
24214-XX-300B	300 ft. reel	82-24-71XX

In place of "XX", indicate circuit size desired

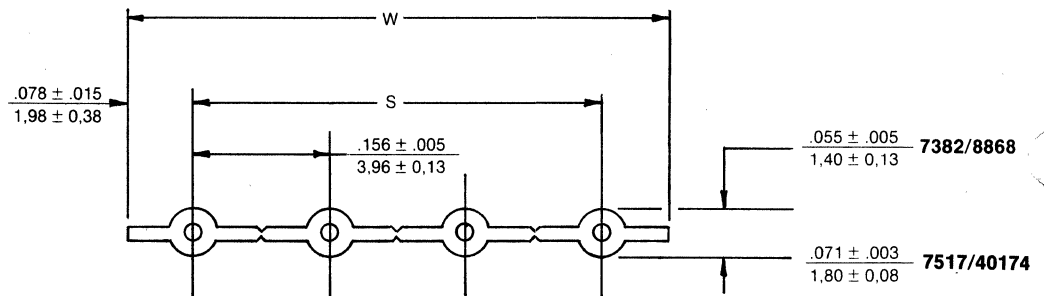
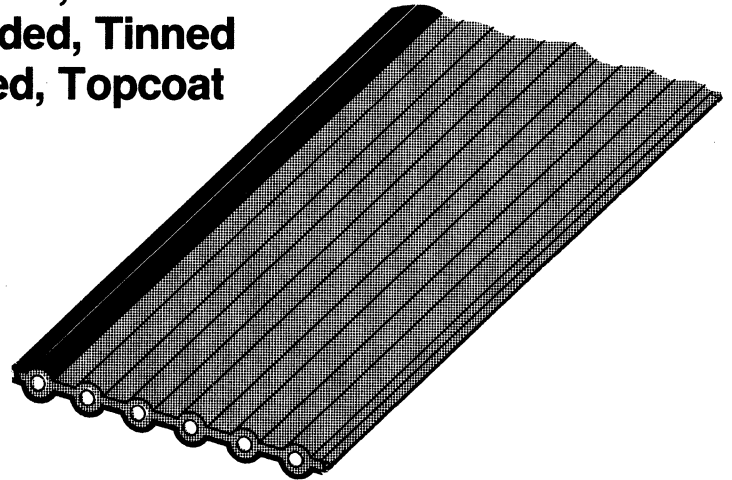
Other reel sizes available — Contact factory

.156" (3,96 mm) Round Conductor Flat Cable



7382 22 AWG (7 x 30) Stranded, Tinned
7517 18 AWG (19 x 30) Stranded, Tinned
40174 18 AWG (7 x 26) Stranded, Tinned
8868 22 AWG (7 x 30) Stranded, Topcoat

- Gray PVC insulation
- Sizes up to 24 circuits
- U.L. temperature rating -20°C to 105°C
- U.L. voltage rating 300 V. max.
- U.L. flammability rating VW-1
- U.L. Style No. 2651
- U.L. recognized (File #E61522)
- CSA certification upon request



Dimensions

Circuits	Dim. S	Dim. W (Ref.)	Circuits	Dim. S	Dim. W (Ref.)	Circuits	Dim. S	Dim. W (Ref.)
2	.156 ± .005 3,96 ± 0,13	.312 7,93	10	1,404 ± .015 35,66 ± 0,38	1,560 39,62	18	2,652 ± .015 67,36 ± 0,38	2,808 71,32
3	.312 ± .010 7,93 ± 0,25	.468 11,89	11	1,560 ± .015 39,62 ± 0,38	1,716 43,59	19	2,808 ± .015 71,32 ± 0,38	2,964 75,29
4	.468 ± .015 11,89 ± 0,38	.624 15,85	12	1,716 ± .015 43,59 ± 0,38	1,872 47,55	20	2,964 ± .015 75,29 ± 0,38	3,120 79,25
5	.624 ± .015 15,85 ± 0,38	.780 19,81	13	1,872 ± .015 47,55 ± 0,38	2,028 51,51	21	3,120 ± .015 79,25 ± 0,38	3,276 83,21
6	.780 ± .015 19,81 ± 0,38	.936 23,77	14	2,028 ± .015 51,51 ± 0,38	2,184 55,47	22	3,276 ± .015 83,21 ± 0,38	3,432 87,17
7	.936 ± .015 23,77 ± 0,38	1,092 27,74	15	2,184 ± .015 55,47 ± 0,38	2,340 59,44	23	3,432 ± .015 87,17 ± 0,38	3,588 91,14
8	1,092 ± .015 27,74 ± 0,38	1,248 31,70	16	2,340 ± .015 59,44 ± 0,38	2,496 63,40	24	3,588 ± .015 91,14 ± 0,38	3,744 95,10
9	1,248 ± .015 31,70 ± 0,38	1,404 35,66	17	2,496 ± .015 63,40 ± 0,38	2,652 67,36			

See Page 12D for Electrical Specifications.

Ordering Information

For Cable Series Number	Reel Size	Use Order Number	For Cable Series Number	Reel Size	Use Order Number
7382-XX	100 ft. reel	• 82-22-58XX	8868-XX	100 ft. reel	82-22-59XX
7382-XX	300 ft. reel	82-22-63XX	8868-XX	300 ft. reel	82-22-67XX
7517-XX	100 ft. reel	• 82-18-5XX1	40174-XX	100 ft. reel	82-18-60XX
7517-XX	300 ft. reel	82-18-5XX2	40174-XX	300 ft. reel	82-18-61XX

In place of "XX", indicate circuit size desired

• U.S. Standard Product, available through Molex franchised distributors.

Other reel sizes available — Contact factory

Cable Jumpers



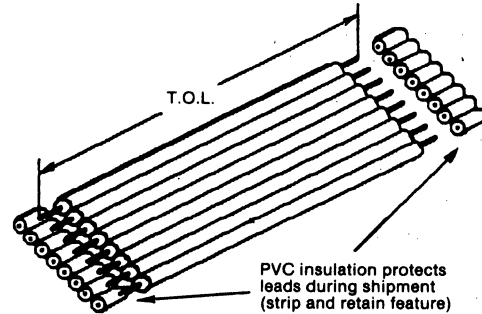
A practical and cost effective method of board-to-board or point-to-point interconnects not requiring a disconnect is the Molex PVC Cable Jumper System. Our jumpers utilize solid or topcoated tinned conductors in .050", .100" and .156" spacing and feature Molex strip and retain feature that protects the wire leads during shipment and handling.

Specifications:

Cable Spacing	Circuit Sizes
.050" (1,27mm)	10-50
.100" (2,54mm)	2-24
.156" (3,96mm)	2-15

Strip Lengths —

.177" (4,50mm) Standard
± .031" (0,8mm)

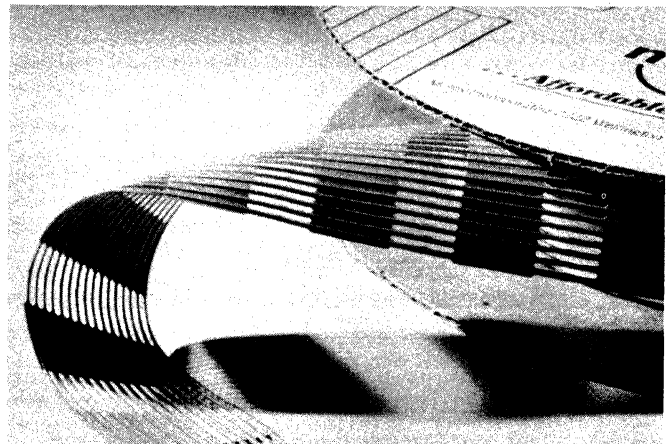


Contact factory for ordering information

- Cable jumpers are available through Molex franchised U.S. distributors.

Pre-Notched Cable

Molex offers cable pre-notched for connector termination. Pre-notched cable offers the benefits of jumpers or bulk cable without the expense of notching equipment. Molex pre-notched cable is available on 100 and 300 ft. reels.



- Notched cable is available through Molex franchised U.S. distributors.

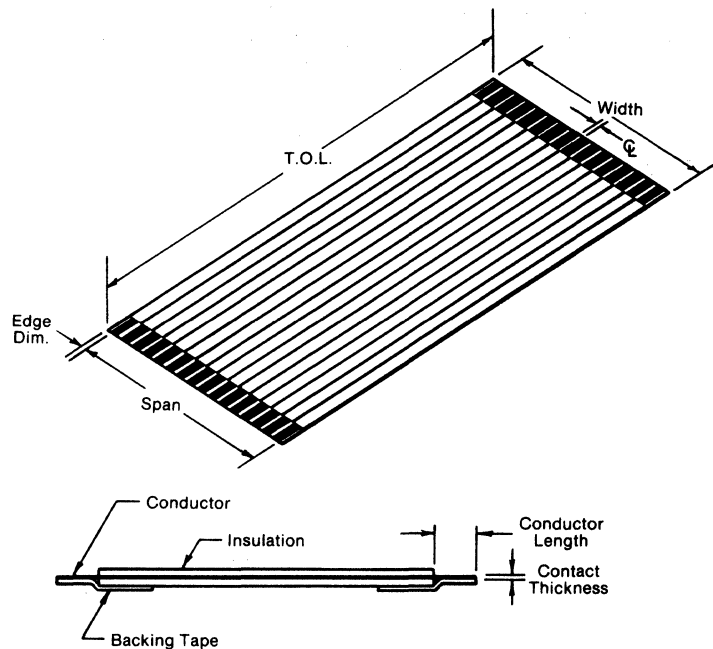
.049" (1,25mm) Flat Flex Jumpers



Standard and High Flex 20782 Standard 20783 High Flex

- High density packaging due to reduced centerline spacing
- Flexible and rugged for various wiring applications
- Mates with industry standard connectors without any preparation

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Specifications

	Cable Type	
	Standard	High Flex
Copper Thickness x Width	.004" (0,1mm) x .031" (0,8mm)	.002" (0,05mm) x .031" (0,8mm)
Material	Tinned flat copper tape	
Insulation Material	Flame retardant polyester	
Thickness (Insulator)	.003" (0,1mm)	
No. of Conductors (N)	2 to 40	
Center Line Spacing (C)	.049" (1,25mm) ± .004" (0,1mm)	
Total Overall Length (T.O.L.)	2.95" (75mm) to 35.9" (914mm)	
Span	.049" (1,25mm) x (N-1) ± .006" (0,15mm)	
Edge Dim.	.049" (1,25mm) ± .008" (0,2mm)	
Width (W)	.049" (1,25mm) x (N+1) ± .006" (0,15mm)	
Conductor Length	.157" (4,0mm) Std.	
Conductor Thickness (Total)	.012" (0,3mm) ± .002" (0,05mm)	
Reinforcing Tape Width	.394" (10,0mm) Typ.	

Electrical	Standard	High Flex
Conductor Resistance (Max.)	.08Ω/Ft. (.26Ω/M)	.15Ω/Ft. (.51Ω/M)
Insulation Resistance (Min.)	100 MΩ	
Dielectric Strength	AC 500 V/Min.	
UL Style No.	2896	
UL Rating	30 volts @ 80°C	
Flame Retardant	VW-1	
Flex Life @ .590" (15mm) Radius	1mm Min.	5mm Min.

Ordering Information

STANDARD 20782-XX-XXXX	
HIGH FLEX 20783-XX-XXXX	
No. of Circuits (02-40)	Total Overall Length (000 mm) (Enter digits in millimeters 075 to 914) See Total Overall Length above

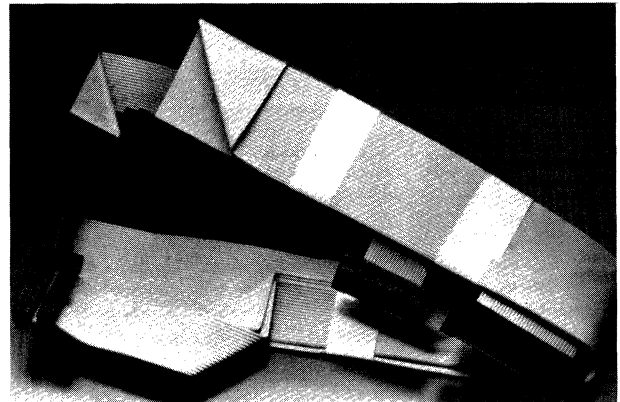
*Contact Factory for .100 C (2,54mm) Flat Flex Jumpers

Cable Assemblies



Molex offers a variety of standard and custom cable and discrete wire assemblies at industry-competitive prices.

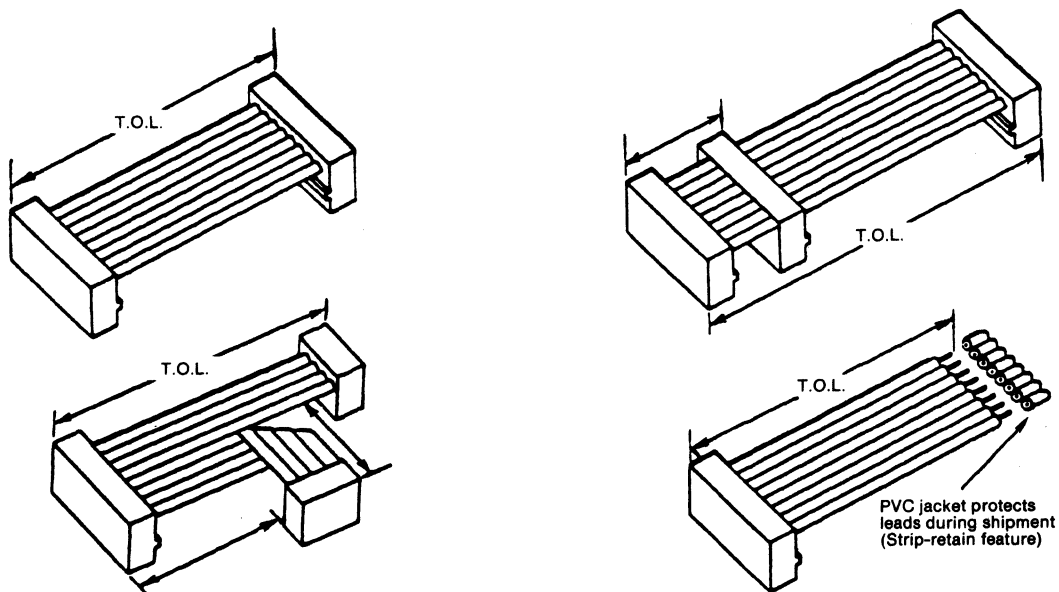
- Quality assurance guaranteed
- Prototypes in 24 hours
- Production quantities in 3-5 weeks
- We provide finished assemblies or components and equipment for you to complete your own assemblies.
- All assemblies 100% tested
- Zero defects program for all assemblies utilizing SPC and EDT



Standard Dimensions/Tolerances for flat cable-type assemblies

LENGTH		LENGTH INCREMENTS		LENGTH TOLERANCES	
Inches	Millimeters	Inches	Millimeters	Inches	Millimeters
1" - 12"	25,4 - 304,8	.100"	2,54	± .100"	± 2,54
12.1" - 24"	307,3 - 609,6	.100"	2,54	± .125"	± 3,18
24.1" - 36"	612,1 - 914,4	.100"	2,54	± .250"	± 6,35
36.1" - 48"	916,9 - 1219,2	.100"	2,54	± .500"	± 12,7
48.5" - 100"	1231,9 - 2540	.500"	12,7	± 1"	± 25,4
101" - 999"	2565,4 - 25374	1"	25,4	± 5% T.O.L.*	± 5% T.O.L.*

*T.O.L. + Total Overall Length



Electrical Specifications



Round Conductor Flat Cable

C _L Spacing	Cable Series	AWG	Copper Conductor Type	Max. Cond. Resistance (mΩ/ft.)	Nom. Characteristic Impedance (Ω)		Nom. Capacitance (pF/ft.)		Nom. Prop. Delay (ns./ft.)	Min. Dielectric Withstanding Voltage (VRMS)	Page No.
					GS	GSG	GS	GSG			
.050	6800	28	Stranded Tinned (7 x 36)	68	123	100	9.1	17.0	1.4	2000	2D
	8863	26	Stranded Tinned (7 x 34)	43	115	93	8.9	18.0	1.4	2000	
	40158	28	Stranded Topcoat (7 x 36)	68	123	100	9.1	17.0	1.4	2000	
.100	7234	26	Solid Tinned (1 x 26)	45	150	128	5.2	9.2	1.4	2000	4D & 5D
	7307	28	Stranded Tinned (7 x 36)	68	150	128	5.0	9.1	1.4	2000	
	7560	22	Stranded Tinned (7 x 30)	17	128	104	7.2	13.4	1.4	2000	
	7767	28	Stranded Topcoat (7 x 36)	68	150	128	5.0	9.1	1.4	2000	
	8996	26	Stranded Topcoat (7 x 34)	43	145	123	5.6	10.3	1.4	2000	
	8997	24	Stranded Topcoat (7 x 32)	27	134	114	6.6	12.0	1.4	2000	
	8867	22	Stranded Topcoat (7 x 30)	17	128	104	7.2	13.4	1.4	2000	
	24241	26	Stranded Tinned (7 x 34)	43	145	123	5.6	10.3	1.4	2000	
	24226	24	Stranded Tinned (7 x 32)	27	134	114	6.6	12.0	1.4	2000	
.156	7382	22	Stranded Tinned (7 x 30)	17	140	123	4.7	8.5	1.4	2000	8D
	7517	18	Stranded Tinned (19 x 30)	7	128	105	5.9	10.9	1.4	2000	
	8868	22	Stranded Topcoat (7 x 30)	17	140	123	4.7	8.5	1.4	2000	
	40174	18	Stranded Tinned (7 x 26)	7	128	105	5.9	10.9	1.4	2000	

Round Conductor Shielded Flat Cable

C _L Spacing	Cable Series	AWG	Copper Conductor Type	Max. Cond. Resistance (mΩ/ft.)	Nom. Characteristic Impedance (Ω)	Nom. Capacitance (pF/ft.)	Nom. Prop Delay (ns./ft.)	Min. Dielectric Withstanding Voltage (VRMS)	Page No.
.050	24107*	28	Stranded Tinned (7 x 36)	68	58	40.5	1.5	2000	3D

Flextran (High Flex Life Cable)

C _L Spacing	Cable Series	AWG	Copper Conductor Type	Max. Cond. Resistance (mΩ/ft.)	Nom. Characteristic Impedance (Ω)		Nom. Capacitance (pF/ft.)		Nom. Prop. Delay (ns./ft.)	Min. Dielectric Withstanding Voltage (VRMS)	Page No.
					GS	GSG	GS	GSG			
.100	24369	26	Stranded Topcoat (19 x 38)	54	158	131	5.3	9.2	1.4	2000	6D
	24389	24	Stranded Topcoat (19 x 36)	34	146	122	6.2	10.7	1.4	2000	

Heavy Duty Composite Cable

.100	24214	24	Stranded Topcoat (7 x 32)	27	113	109	8.8	13.0	1.4	2000	7D
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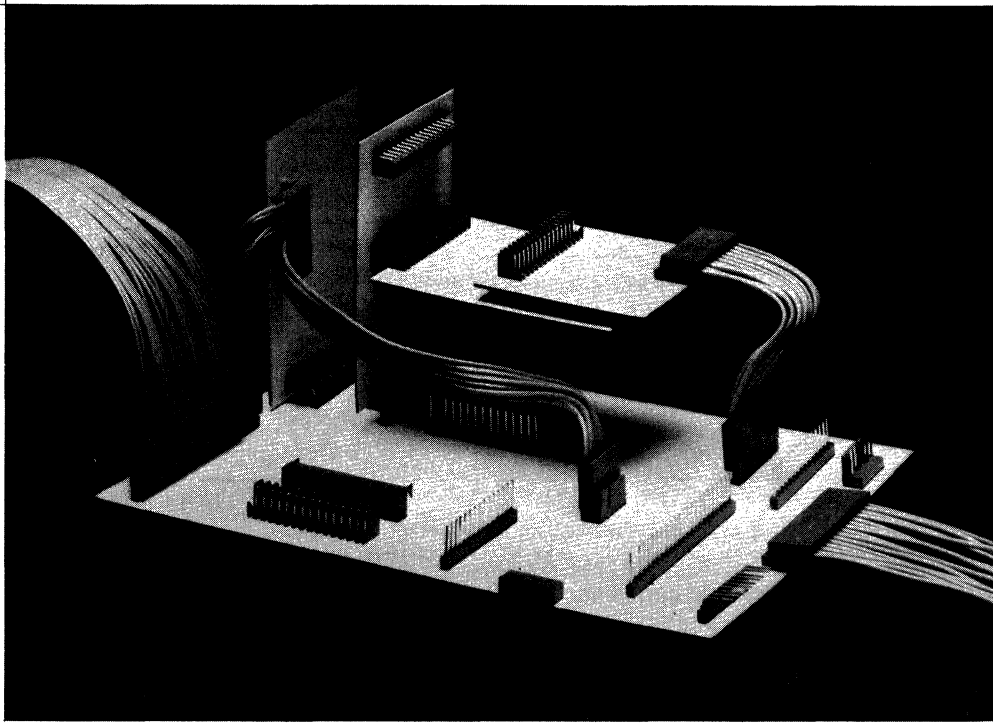
CENTER SPACING	AWG	CONDUCTOR TYPES		
		Solid Tinned One tinned copper wire conductor. 	Stranded Tinned Individual tinned copper wires, twisted together. 	Topcoated Bare copper wires twisted together, then coated with pure tin.

All information contained herein, including illustrations, specifications and dimensions, is believed to be reliable as of the date of publication, but is subject to change without notice. Current sales drawings and specifications are available upon request. Molex makes no claims or warranties as to the application of this product or its suitability or fitness for any particular purpose. Accordingly, it is recommended that each user independently test and evaluate the product for its intended use.

P.C. Board Interconnection Systems



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E

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KK[®] Modular Interconnection System



Introduction

The Molex KK[®] Interconnection System

The proven KK[®] system of "building block" connectors can be used to create thousands of different configurations, thereby allowing each user to build a system that is precisely suited to any application on .098" (2,5mm), .100" (2,54mm), .156" (3,96mm), and .200" (5,08mm) centers.

The system offers interconnection in a number of modes; cable-to-board, board-to-board, both parallel and perpendicular; and board- or cable-to-chassis. Features include a friction lock to secure connectors to wafer, polarizing wall or location pegs to assure correct assembly, and a chassis mount option for mounting to sheet metal panels. Various methods of securely holding the connectors to a P.C. board are available.

The Molex KK[®] interconnect system can provide all the options necessary to complement P.C. board interconnection design requirements. For this reason KK[®] has become known as a versatile interconnecting system developed to meet the challenge of modularization. **For specifications or design information please contact a Molex representative.**

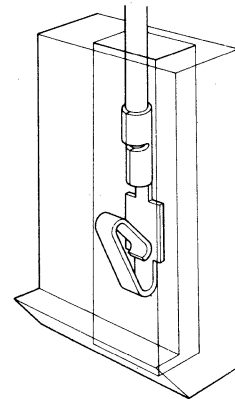
To complement the KK[®] System Molex has developed a full line of application tooling. This includes both manual and semi-automatic crimp tooling, and also some of the fastest and most economical pinsetting equipment in the industry. The Molex Vibrator Multi-Pinsetter[®] can set 12,000 pins in three minutes. See Application Tooling section of this catalog for details.

E

Molex KK[®] Concept

The Molex KK concept utilizes a **double cantilever contact design** in mating with P.C. board pins. The proven double cantilever design provides a high uniform contact pressure for a reliable connector interface. The high pressure creates many contact points at a microscopic level, thereby providing a lower contact resistance. The wiping action of the double cantilever design tends to clean oxides and film when the connector is mated.

The Molex KK concept provides a durable connector interface at an affordable price ... a totally engineered product.



Features

Crimp Terminal Housings

- Available on .098" (2,5mm), .100" (2,54mm), .156" (3,96mm), and .200" (5,08mm) center spacings
- Polarization via insertable keys and pegs, molded voids or pegs, polarizing ribs [.098" (2,5mm) and .100" (2,54mm) spacing only], or polarizing wall headers
- Locking ramp for improved mated retention with locking headers
- Many circuit sizes
- Accepts KK[®] gas tight crimp terminals
- Mates with headers or pins in the board

Solder Tail Connectors

- Versions to accept mating pins vertically, horizontally, or through the printed circuit board
- Available on .098" (2,5mm), .100" (2,54mm), .156" (3,96mm), and .200" (5,08mm) center spacings
- Mates with headers or pins in the board
- Strain relieving board hooks
- Polarization via insertable keys or pegs
- Locking ramps for improved retention when mated
- Stackable end-to-end
- Preassembled with KK[®] gas tight terminals

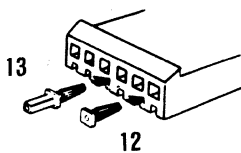
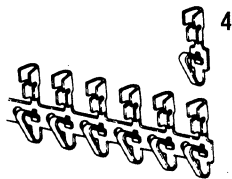
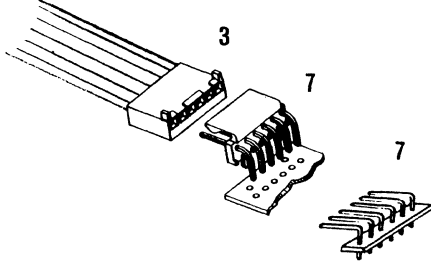
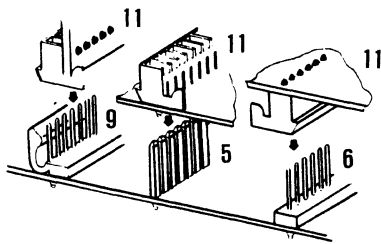
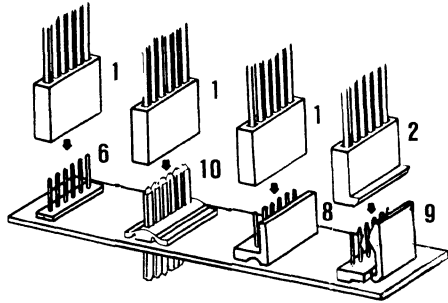
Headers

- Available on .098" (2,5mm), .100" (2,54mm), .156" (3,96mm), and .200" (5,08mm) center spacings
- Polarization via voided positions and polarizing walls, [except .098" (2,5mm) and .100" (2,54mm) spacing]
- Locking wall option for improved retention with mating connector
- .156" (3,96mm) chassis or board mount version for feed thru applications
- Stackable end-to-end
- Industry compatible

Male Pins

- .025" (0,64mm) square or .045" (1,14mm) square or round
- Press fit and solder to board
- Mates with crimp or solder connector
- Variety of standard platings and lengths
- Range of application tooling available

Molex KK[®] Modular Interconnection System



No.	Description	Center Spacing			
		.098 (2,50)	.100 (2,54)	.156 (3,96)	.200 (5,08)
1.	Connector housing for use with crimp terminals	5051	2695	2139	3001
		3180	6471 7880	6442 41695	
2.	Connector housing with locking ramp	5051	2695	2139	3001
			6471	3069 41695	
3.	Connector with polarizing rib and locking ramp	3072	2695	41695	3011
4.	Terminals for use with above housings	2759	2759	2478	2478
		4809	4809 7879	2578 6838 7258	2578
5.	Male pins	2766	2766	2173	2173
		4166	4166	2161	2161
6.	Straight headers	3022	4030	41661	3003
				41701 41741 41771 42441 42471 3192	
7.	Right Angle header	3094	4094	41662	2673
		6494		41672 41682 41772 41792+ 42472 42492+ 3246	3061
8.	Polarizing header	3202	6410	41681	
			6373 7478 7395	41682	
9.	Locking header	5045	6410	41671	
		5046	6373 7478 7395	41672 41761+ 41791+ 41792+ 42461+ 42491+ 42492+ 4042	
10.	Chassis mount header			2220	
11.	Board-to-Board interconnect for parallel and perpendicular PC boards	7534	4455	41815	3002
		5124		2145	
12.	Polarizing key without peg	4161-1	4161-1	2560-1 7580-1	2560-1
13.	Polarizing key with peg	4161-2	4161-2	2560-2 7580-2	2560-2

+Polarized when mated with 41695 Series .156" crimp housing with polarizing ribs and locking ramp.

E

KK[®] Technical Data Reference*



KK[®] .098" (2,5 mm) and .100" (2,54 mm)

UL Recognized (File #29179)
CSA Recognized (File 19980)

Voltage Rating - 250 VAC maximum
Current Rating - Up to 2.5 amps (with 22 AWG wire) per Product Specification
Resistance - 20 milliohms maximum (after testing per MIL STD 202E)
Dielectric Withstanding Voltage - 1500 VAC for 60 seconds
Insulation Resistance - Greater than 500K megohms (75°F and 50% R.H.)

Storage Temperature - -40°C to 105°C

Engagement Force - 7 oz. (199g) maximum with tin plated .025" (0,64 mm) square pin
Disengagement Force - 2 oz. (57g) minimum for first cycle with tin plated .025" (0,64mm) square pin

Terminal Retention to Housing - 8 lbs. (3,63kg) minimum
Wire Pullout Forces (Crimp) - 22 AWG - 10 lbs (4,54kg) 28 AWG - 4 lbs (1,81kg)
 24 AWG - 8 lbs (3,63kg) 30 AWG - 3 lbs. (1,36kg)
 26 AWG - 6 lbs (2,72kg)

*Detailed product specifications should be requested for approval testing and final specification.

KK[®] .156" (3,96 mm) and .200" (5,08 mm)

UL Recognized (File #29179)
CSA Recognized (File 19980)

Voltage Rating - 250 VAC maximum
Current Rating - Up to 7 amps (with 18 AWG wire) per Product Specification
Resistance - 20 milliohms maximum (after testing per MIL STD 202E)
Dielectric Withstanding Voltage - 1500 VAC for 60 seconds
Insulation Resistance - Greater than 500K megohms (75°F and 50% R.H.)

Storage Temperature - -40°C to 105°C

Engagement Force - 24 oz. (680g) maximum with tin plated .045" (1,14 mm) square pin or round pin;
27 oz. for Trifurcon[®] terminal
Disengagement Force - 4 oz. (113g) minimum with .045" (1,14mm) square or round pin.
Model 2145-B is 2 oz. (57g) minimum

Terminal Retention to Housing - 8 lbs. (3,63kg) minimum
Wire Pullout Forces (Crimp) - 18 AWG - 20 lbs (9,07kg) 24 AWG - 8 lbs (3,63kg)
 20 AWG - 15 lbs (6,81kg) 26 AWG - 5 lbs. (2,27kg)
 22 AWG - 12 lbs (5,45kg)

*Detailed product specifications should be requested for approval testing and final specification.

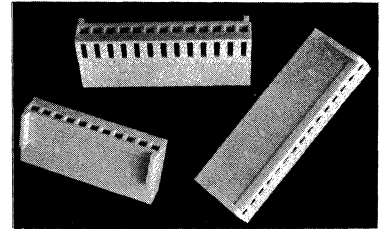
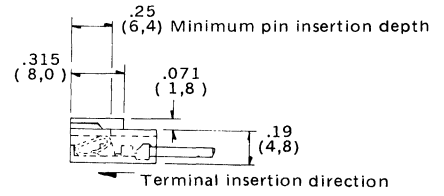
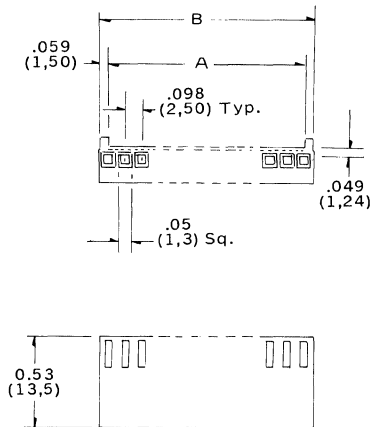
E

.098" (2,5 mm) Center Crimp Terminal Housings



5051 Series Polarizing Housings

- Accepts Molex double cantilever crimp terminals, 4809C and 40445. Order separately, page 12E
- 94V-0 Nylon
- Molded friction lock
- 3-15 Circuits available
- Optional polarization or locking ramp version
- Mates with Molex KK .098" (2,5mm) center headers or .025" (0,64mm) staked pins
- Stackable end-to-end



E

Dimensions 5051

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
3	.197 ± .004 5,00 ± 0,10	.315 ± .008 8,00 ± 0,20	8	.689 ± .005 17,5 ± 0,13	.807 ± .009 30,5 ± 0,23	12	1,083 ± .007 27,50 ± 0,18	1,201 ± .011 30,50 ± 0,28
4	.295 ± .004 7,50 ± 0,10	.413 ± .008 10,5 ± 0,20	9	.787 ± .005 20,0 ± 0,13	.906 ± .009 23,0 ± 0,23	13	1,181 ± .007 30,00 ± 0,18	1,299 ± .011 33,00 ± 0,28
5	.394 ± .004 10,0 ± 0,10	.512 ± .008 13,0 ± 0,20	10	.886 ± .006 22,5 ± 0,15	1,004 ± .010 25,50 ± 0,25	14	1,280 ± .007 32,50 ± 0,18	1,398 ± .011 35,50 ± 0,28
6	.492 ± .004 12,5 ± 0,10	.611 ± .009 15,5 ± 0,23	11	.984 ± .006 25,0 ± 0,25	1,102 ± .010 28,00 ± 0,25	15	1,378 ± .008 35,00 ± 0,20	1,496 ± .012 38,00 ± 0,30
7	.591 ± .005 15,0 ± 0,13	.709 ± .009 18,0 ± 0,23						

Ordering Information 5051

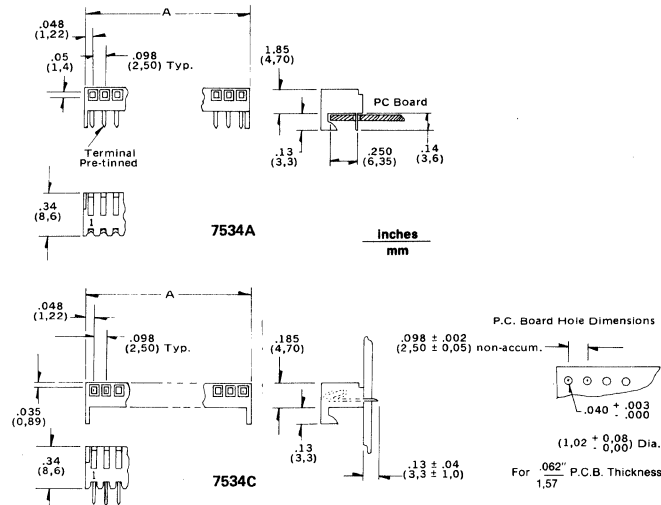
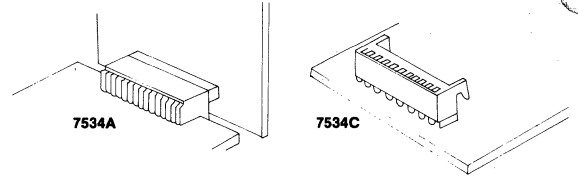
Order No. 22-01-1XX3
Replace XX with number of circuits, 03 to 15

.098" (2,5mm) Center P.C. Board Connector



7534A Series Right Angle P.C. Board Connector

7534C Series Top Entry P.C. Board Connector



- Mates with Molex 3022, 3202, 3094, 6494 headers or .025" (0,64mm) pins
- 94V-0 Nylon
- 2-20 Circuits available
- P.C. board locking hooks and standoffs
- Terminal platings: .000040 (1,0 microns) tin-lead/.000080 (2,0 microns) copper min. or .000020 (0,5 microns) gold/.000030 (0,75 microns) nickel min.

Ordering Information 7534A

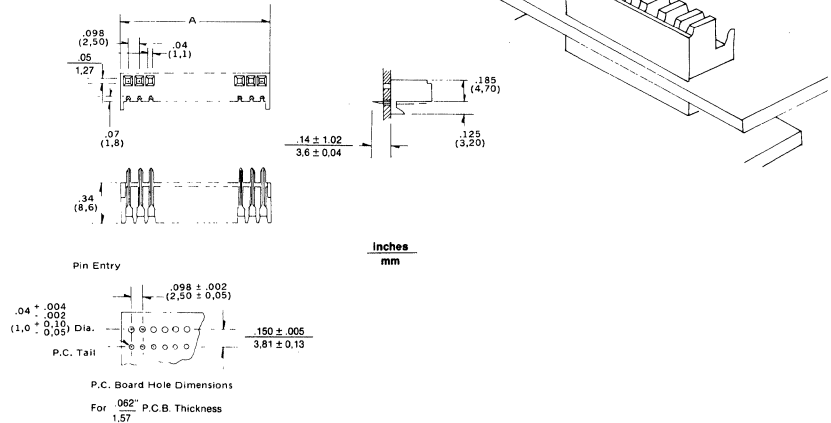
Tin Order No. 22-02-1XX4
Gold Order No. 22-16-1XX3
Replace XX with number of circuits, 02 to 20

Ordering Information 7534C

Tin Order No. 22-02-1XX5
Replace XX with number of circuits, 02 to 20

5124BHPB Bottom Entry P.C. Board Connector

- Mates with Molex 3022 headers and .025" (0,64mm) pins
- 94V-0 nylon housing
- 3-15 circuits available
- Housings are supplied with pre-inserted double cantilever terminals
- Gold or tin plated terminals
- Terminal material phosphor bronze



Ordering Information 5124

Order No. 10-07-2XX5
Replace XX with number of circuits, 03 to 15

Dimensions 7534A, 7534C and 5124BHPB

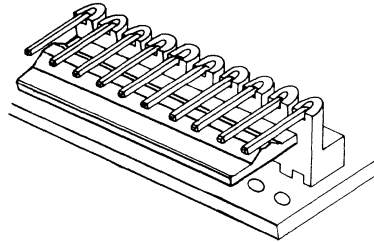
Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
3	.293 ± .008 7,44 ± 0,20	7	.687 ± .009 17,44 ± 0,23	10	.982 ± .010 24,94 ± 0,25	13	1.278 ± .011 32,44 ± 0,28
4	.392 ± .008 9,94 ± 0,20	8	.785 ± .009 19,94 ± 0,23	11	1.081 ± .010 27,44 ± 0,25	14	1.376 ± .011 34,94 ± 0,28
5	.490 ± .008 12,44 ± 0,20	9	.884 ± .009 22,44 ± 0,23	12	1.179 ± .011 29,94 ± 0,28	15	1.475 ± .012 37,44 ± 0,30

.098" (2,5 mm) Center Headers

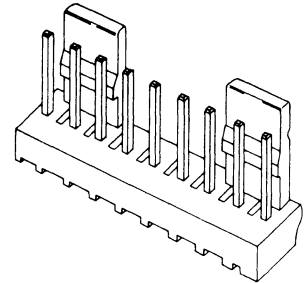


5046/5045 Series Square Pin Friction Lock

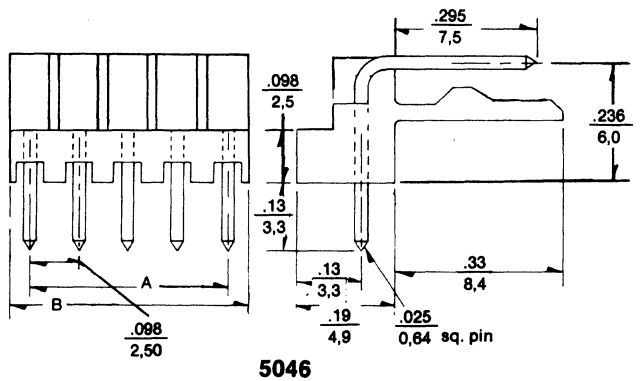
- 2-20 Circuits
- .025" (0,64mm) right angle square wire pins
- Friction lock
- 94V-0 Nylon
- Mates with 5051 housing
- Mates with KK .098" (2,5mm) insulation displacement connectors



5046 Series
Right Angle Friction-Lock
Header Assembly



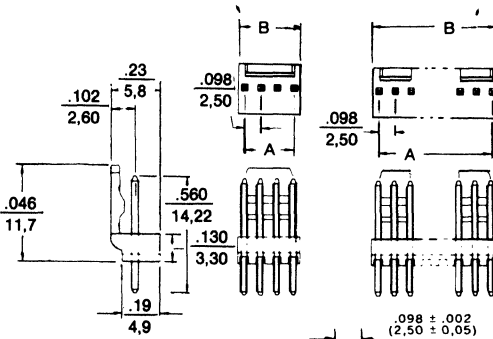
5045 Series
Polarizing Locking Header
Assembly



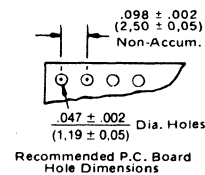
5046

Inches
mm

Typical 2 through 5 circuits Typical 6 through 17 circuits



5045



Recommended P.C. Board
Hole Dimensions

Dimensional Information 5046/5045

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.098 ± .010 2,50 ± 0,10	.177 4,50	7	.591 ± .012 15,0 ± 0,30	.669 ± .012 17,0 ± 0,30	12	1.083 ± .014 27,50 ± 0,35	1.161 ± .014 29,50 ± 0,35	17	1.574 ± .014 40,00 ± 0,35	1.653 ± .014 42,00 ± 0,35
3	.197 ± .006 5,00 ± 0,15	.276 7,00	8	.689 ± .012 17,5 ± 0,30	.768 ± .012 19,5 ± 0,30	13	1.181 ± .014 30,00 ± 0,35	1.260 ± .014 32,00 ± 0,35	18	1.673 ± .014 42,50 ± 0,35	1.752 ± .014 44,50 ± 0,35
4	.295 ± .006 7,50 ± 0,15	.374 9,50	9	.787 ± .012 20,0 ± 0,30	.866 ± .012 22,0 ± 0,30	14	1.279 ± .014 32,50 ± 0,35	1.358 ± .014 34,50 ± 0,35	19	1.772 ± .014 45,00 ± 0,35	1.850 ± .014 47,00 ± 0,35
5	.394 ± .010 10,0 ± 0,25	.472 12,0	10	.886 ± .014 22,5 ± 0,35	.964 ± .014 24,5 ± 0,35	15	1.378 ± .014 35,00 ± 0,35	1.457 ± .014 37,00 ± 0,35	20	1.870 ± .014 47,50 ± 0,35	1.949 ± .014 49,50 ± 0,35
6	.492 ± .010 12,5 ± 0,25	.571 14,5	11	.984 ± .014 25,0 ± 0,35	1.063 ± .014 27,0 ± 0,35	16	1.476 ± .014 37,50 ± 0,35	1.555 ± .014 39,50 ± 0,35			

Ordering Information 5046

Tin Order No. • 22-05-1XX2
Gold Order No. 22-12-1XX2
Replace XX with number of circuits, 02-20

•U.S. Standard Product, available through Molex franchised distributors

Ordering Information 5045

Tin Order No. • 22-04-1XX1
Gold Order No. 22-11-1XX1
Replace XX with number of circuits, 02-20

.098" (2,5 mm) Center Headers

3022/3202 Series Square Pin Straight Header

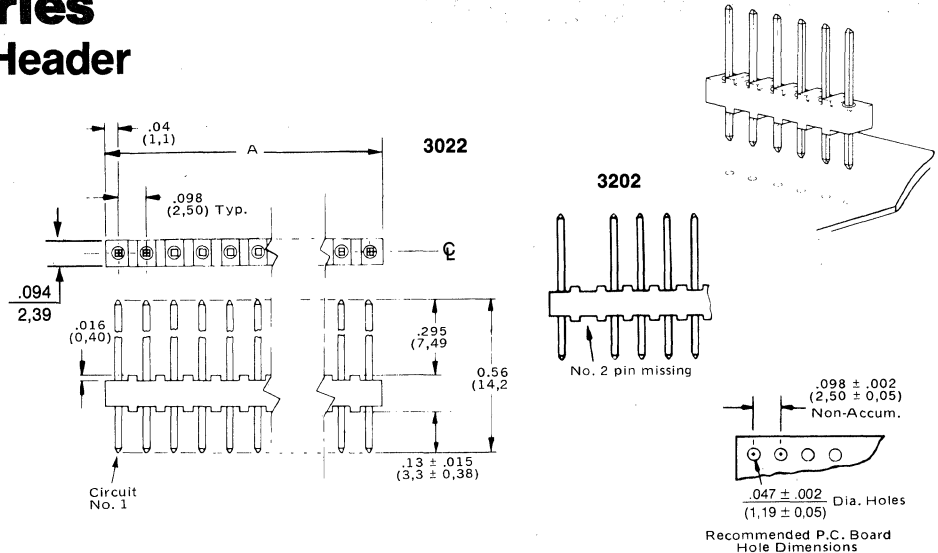
- 3022 available 3-15 circuits
- 3202 available 2-20 circuits
- .025" (0,64mm) square wire pins
- 94V-0 Nylon
- Stackable side-to-side and end-to-end

Mating connectors for **3022**:

3071 7534C
7534A 5124BHPB

Mating connectors for **3202**:

3071 7534C
3180 5124BHPB
7534A



Ordering Information 3022

Tin Order No: 22-03-1XX1
Gold Order No: 22-10-1XX1
Replace XX with number of circuits, 03-15

Ordering Information 3202

Order No: 22-03-1XX5
Replace XX with number of circuits, 02-20

3094/6494 Square Pin Right Angle Header

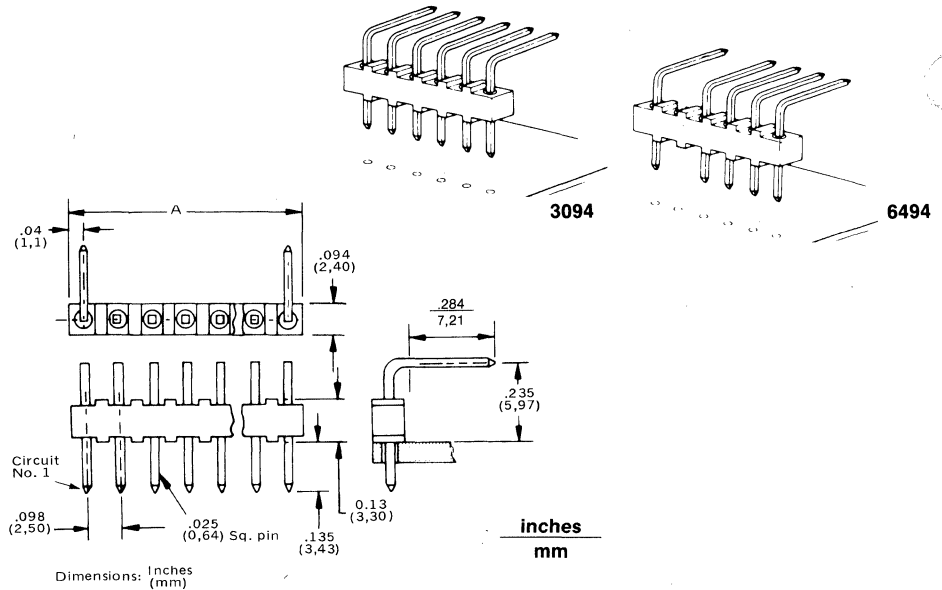
- 2-20 Circuits
- .025" (0,64mm) right anglesquare wire pins
- 94V-0 Nylon
- Stackable end-to-end

Mating connectors for **3094**:

3071 7534A
5051 7534C

Mating connectors for **6494**:

3071 7534A
3180 7534C
5051



Ordering Information 3094

Tin Order No: 22-05-1XX1
Gold Order No: 22-12-1XX1
Replace XX with number of circuits, 02-20

Ordering Information 6494

Standard Void 2nd Circuit. For Ordering Information Contact Factory
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Dimensional Information 3022/3202/3094/6494

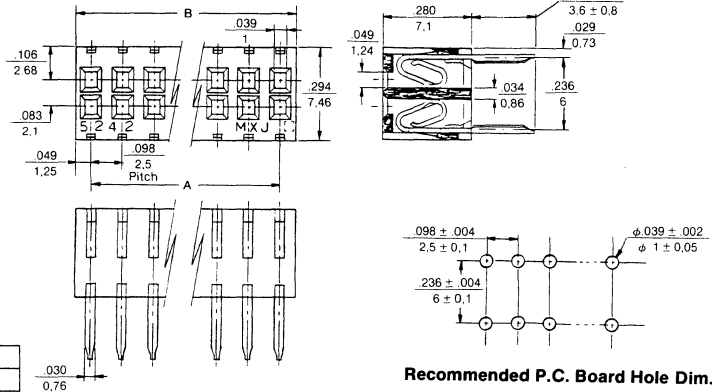
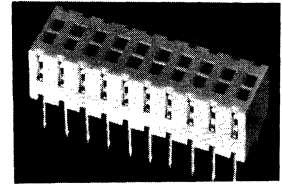
Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.185 ± .008 4,70 ± 0,20	6	.578 ± .009 14,70 ± 0,23	10	.972 ± .010 24,70 ± 0,25	14	1.367 ± .011 34,70 ± 0,28	18	1.760 ± .013 44,70 ± 0,33
3	.284 ± .008 7,20 ± 0,20	7	.677 ± .009 17,20 ± 0,23	11	1.071 ± .010 27,20 ± 0,25	15	1.462 ± .012 37,20 ± 0,30	19	1.858 ± .013 47,20 ± 0,32
4	.382 ± .008 9,70 ± 0,20	8	.776 ± .009 19,70 ± 0,23	12	1.169 ± .011 29,70 ± 0,28	16	1.563 ± .012 39,70 ± 0,30	20	1.957 ± .014 49,70 ± 0,36
5	.480 ± .008 12,20 ± 0,20	9	.874 ± .009 22,20 ± 0,23	13	1.268 ± .011 32,20 ± 0,28	17	1.662 ± .012 42,20 ± 0,30		

.098" (2,5 mm) Dual Row Board-to-Board System



5242-NCHPB Connector

- 10-24 circuits
- Low profile
- Tin-plated phos-bronze
- Cat-eared double cantilever terminal design
- Nylon 66 UL 94V-0 housing material
- Mates with 5243-NA header

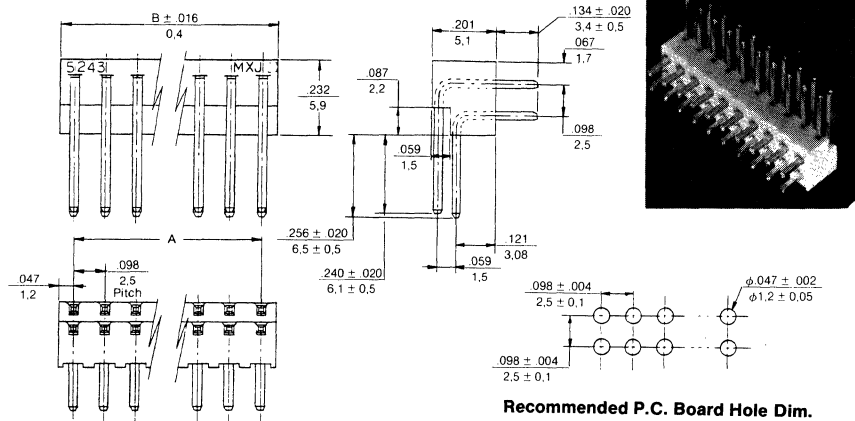
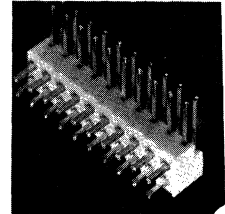


Ordering Information 5242-NCHPB (Preferred version in the Far East and Europe.)

Order No: 15-24-1XX6
Replace XX with number of circuits, 10-24 (even numbers only)

5243-NA Right Angle Header

- 10-24 circuits
- Low profile
- Tin-plated brass pins
- Nylon 6/6 UL 94V-0 housing material
- Staggered pin length for easy insertion
- Mates with 5242-NCHPB



Ordering Information 5243-NA (Preferred version in the Far East and Europe.)

Order No: 15-24-1XX7
Replace XX with number of circuits, 10-24 (even numbers only)

Specifications 5242-NCHPB/5243-NA

Electrical:

- Rated Voltage and Current* — AC/DC 125V 3 amp
- Contact Resistance* — 20mΩ max.
- Dielectric Strength* — AC 1000V 1 min.
- Insulation Resistance* — 1000MΩ min.

Mechanical:

Terminal Retention Force — 1 kg min.

Environmental:

- Temperature rise* — 30° C max.
- Temperature Range* — -40°C - 105°C

Dimensions 5242-NCHPB/5243-NA

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
10	.394	.488	14	.591	.685	18	.787	.882	22	.984	1.071	24	1.083	1.177
	10	12,4		15	17,4		20	22,4		25	27,2		27,5	29,9
12	.492	.587	16	.689	.783	20	.886	.980						
	12,5	14,9		17,5	19,9		22,5	24,9						

.100" (2,54 mm) Center Crimp Terminal Housing



2695/6471 Series Housing

- 2695 Series uses 2759 terminal only. Order terminals separately, page 12E
- 6471 Series uses 4809C anti-fishhooking terminal
- 6471 is end-to-end stackable (two housings only)
- 2695 version with or without locking ramp
- Dyed product (2695) is 6663. Contact factory
- 94V-0 Nylon
- 2-25 Circuits available - 6471
1-25 Circuits available - 2695
- Optional polarization or locking ramp version available on 2695 only

Mating headers for 2695:

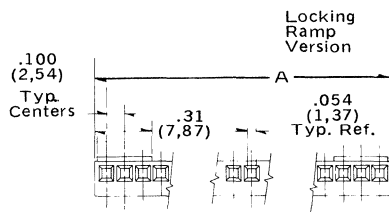
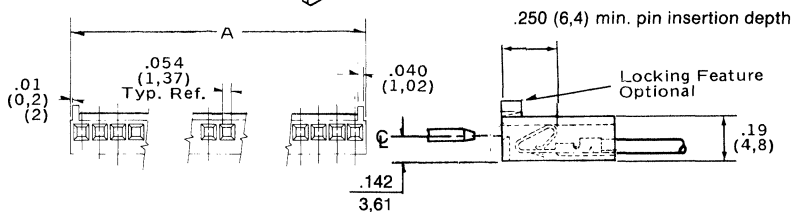
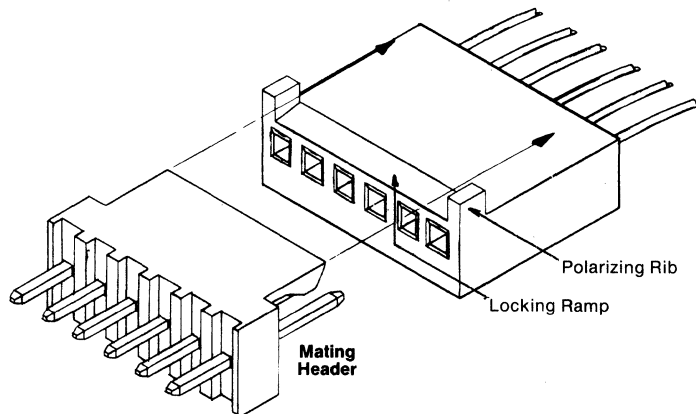
4030 6373 70343
4380 6410 70475
4094 70327 70021
7478 7395

Also mates with .025" (0,64mm) pins

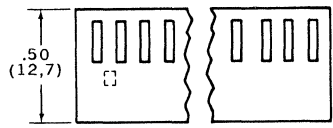
Mating headers for 6471:

4030 6373 70343
4380 6410 70475
4094 7478 70021
7395 70327

Also mates with .025" (0,64mm) pins



inches
mm



Polarizing Key

Order No. 15-04-9209

Polarizing Peg

Order No. 15-04-9210

Dimensions 2695/6471

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
1	.122 3,10	6	.62 15,8	10	1.02 25,9	14	1.42 36,1	18	1.82 46,2	22	2.22 56,4
2	.22 5,6	7	.72 18,3	11	1.12 28,5	15	1.52 38,6	19	1.92 48,8	23	2.32 59,9
3	.32 8,1	8	.82 20,9	12	1.22 31,0	16	1.62 41,2	20	2.02 51,3	24	2.42 61,5
4	.42 10,7	9	.92 23,4	13	1.32 33,5	17	1.72 43,7	21	2.12 53,9	25	2.52 64,0
5	.52 13,2										

Ordering Information 2695 (Preferred version in the Americas)

With Locking Ramp Order No. • 22-01-2XX7	Without Locking Ramp or Ribs Order No. • 22-01-2XX1
With Locking Ramp and Polarizing Ribs Order No. • 22-01-3XX7	Replace XX with number of circuits, 01-25
Replace XX with number of circuits, 02-25	

• U.S. Standard Product, available through Molex franchised distributors

Ordering Information 6471 (Preferred version in Europe and the Far East)

With Locking Ramp & Polarizing Ribs Order No. 22-01-2XX5
Replace XX with number of circuits, 02-18

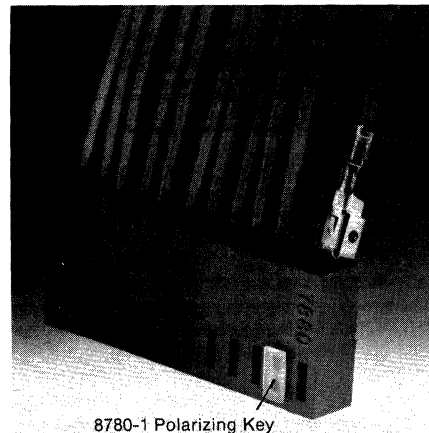
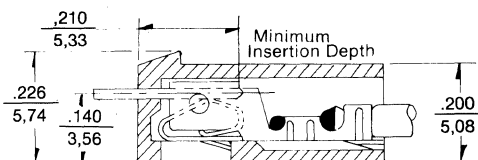
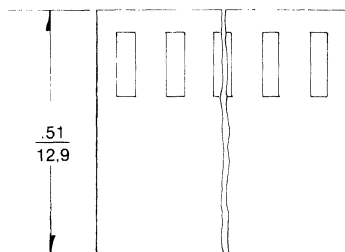
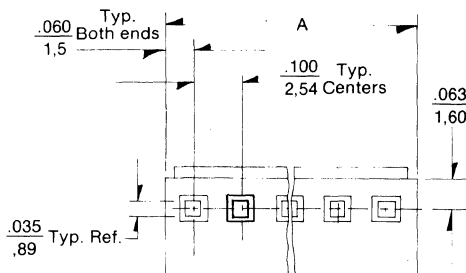
For Circuits 19 to 28, Contact Factory

.100" (2,54 mm) Center Crimp Terminal Housing



7880 Series High Pressure Terminal Housing

- Use with 7879 series terminal only. Order separately, see below
- 1-28 Circuits
- Standard with locking ramp
- 94V-0 material
- Side insertable polarizing key 8780-1. See Ordering Information below
- Mates with .025" (0,64mm) Pins
- End-to-end stackable version 40136 Contact factory



8780-1 Polarizing Key

Mates with
 Headers: Series 4030, 4180, 4380, 4094, 6373, 6410, 7478, 70021, 7395, 70343, 70344, 70327, 70475, 70345
 Pins*: Series 2231, 2766, 4166 and 6641
 *Pins require .100" spacing on printed board

inches
mm

Dimensions 7880

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
1	.12 3,0	6	.62 15,8	11	1.12 28,5	16	1.62 41,2	21	2.12 53,9	25	2.62 64,0
2	.22 5,6	7	.72 18,3	12	1.22 31,0	17	1.72 43,7	22	2.22 56,4	26	2.62 66,6
3	.32 8,1	8	.82 20,8	13	1.32 33,5	18	1.82 46,2	23	2.32 59,9	27	2.72 69,1
4	.42 10,7	9	.92 23,4	14	1.42 36,1	19	1.92 48,8	24	2.42 61,5	28	2.82 71,6
5	.52 13,2	10	1.02 25,9	15	1.52 38,6	20	2.02 51,3				

Ordering Information 7880

Order No. • 10-11-2XX3
Replace XX with number of circuits, 01-28

• U.S. Standard Product, available through Molex franchised distributors

Polarizing Key	
Eng. No.	Order No.
8780-1	89-00-0422

In the **Far East** this housing has a different Engineering Series No. and different order numbers.

Ask for sales drawings on the 40136 Series end-to-end stackable version.

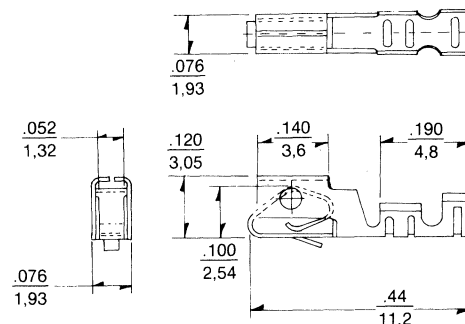
High Pressure Crimp Terminals

- Use with 7880 series housing
- Up to 425 grams normal force
- Multiple contacting points
- Patented double cantilever with box shroud
- Accepts #22 to 30 AWG wire, .062" (1,58) max. insulation dia.
- Crimping die or hand tool available

Ordering Information

Eng. Series	Wire Size	Insulation Diameter	Plating	Loose Order No.	Reel Order No.	Crimp Die Order No.	Hand Crimp Tool Order No.
7879	22-30	.062 1,57 Max.	Tin/Copper Select Gold	•08-50-0005 —	•08-50-0004 08-55-0124	11-07-0209	11-01-0037
40144	32-36	.025 0,64 Max.	Select Gold	—	08-55-0118	11-07-0226	11-01-0037

• U.S. Standard Product, available through Molex franchised distributors.



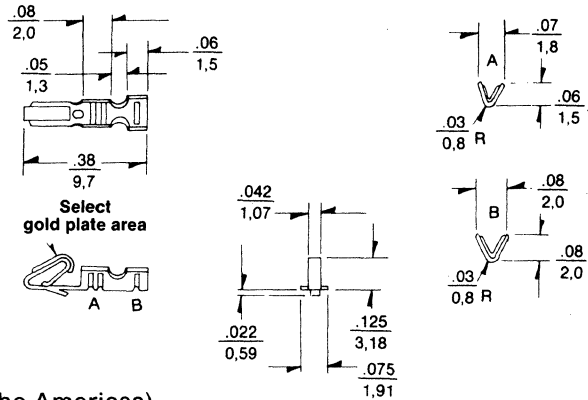
Recommended wire range assumes stranded wire.

Mini-KK Crimp Terminals for .098" (2,5 mm) and .100 (2,54 mm) Center Housings



2759 Series Crimp Terminals

- Use with 2695, 5051, 6471, 41895, 6663, 6745 series housings
- Patented double cantilever
- Accepts #22 to 30 AWG wire, .062" (1,58mm) max. insulation dia.
- Available in phos. bronze material. Contact factory for 6459 Series



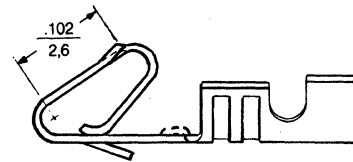
Ordering Information 2759 (Preferred version in the Americas)

Wire Size	Insulation O.D.	Eng. No.	Tin Plating		Gold Plating		Selective Gold Plating	
			Loose Order No.	Chain Order No.	Loose Order No.	Chain Order No.	Loose Order No.	Chain Order No.
22-30	.062 1,57 Max.	2759	• 08-50-0114	• 08-50-0113	• 08-56-0110	• 08-56-0109	• 08-55-0102	• 08-55-0101

• U.S. Standard Product, available through Molex franchised distributors.

40445 Series Cat Ear Terminals

- Similar to 2759 Series with cat ears
- Use with 5051, 6471, 3071, 3072, and 3180 series housings
- Accepts #22-30 AWG wire

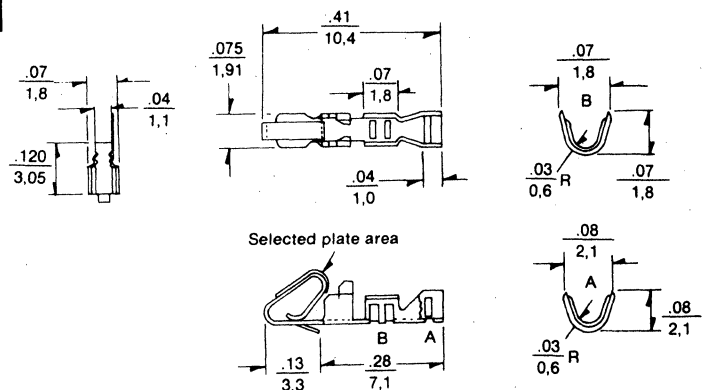


Ordering Information 40445 (Preferred version in Europe)

Hot Tin/Lead Dip Plating		Electro Tin Plating	
Loose Order No.	Chain Order No.	Loose Order No.	Chain Order No.
97-00-0445	97-00-0444	08-50-0322	08-50-0321

4809 Series Anti-Fishhooking Crimp Terminal

- Avoids tangling at preassembly
- Use with 5051 and 6471 series housings
- Patented double cantilever
- Accepts #22 to 30 AWG wire
- Available with cat ears



Ordering Information 4809

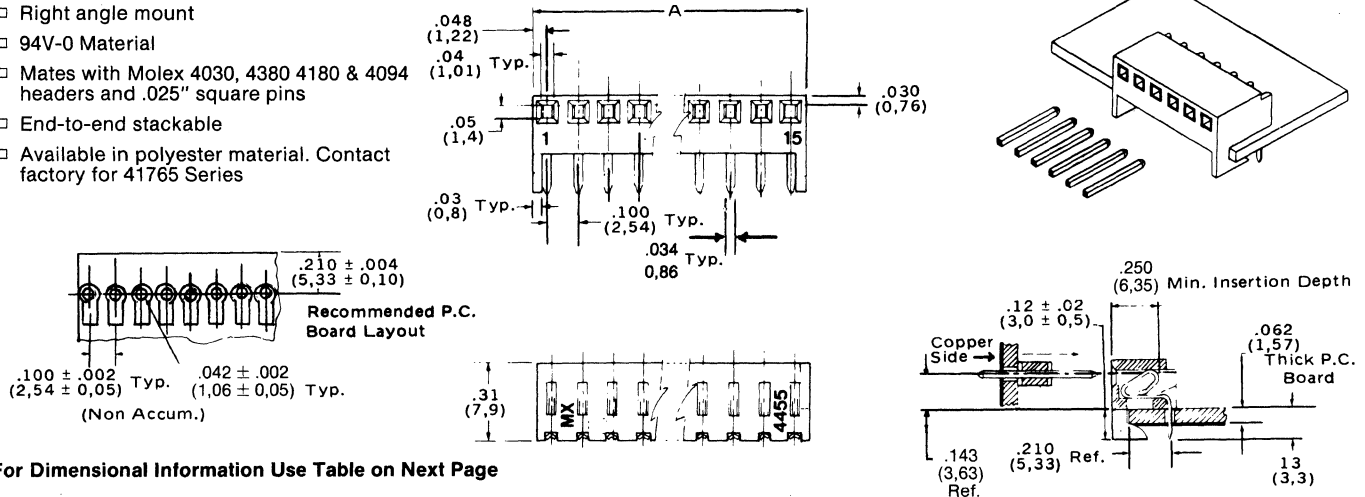
Crimp Wire Size	Insulation Diameter	Eng. No.	Tin/Lead (with cat ears)	
			Loose Order No.	Chain Order No.
22-30	.062 1,57 Max.	4809	08-50-0032	08-50-0031

.100" (2,54 mm) Center P.C. Board Connectors



4455-AC Series Side Entry Type A

- 2-25 Circuits
- Right angle mount
- 94V-0 Material
- Mates with Molex 4030, 4380 4180 & 4094 headers and .025" square pins
- End-to-end stackable
- Available in polyester material. Contact factory for 41765 Series



For Dimensional Information Use Table on Next Page

Ordering Information 4455-AC (Preferred version in the Americas)

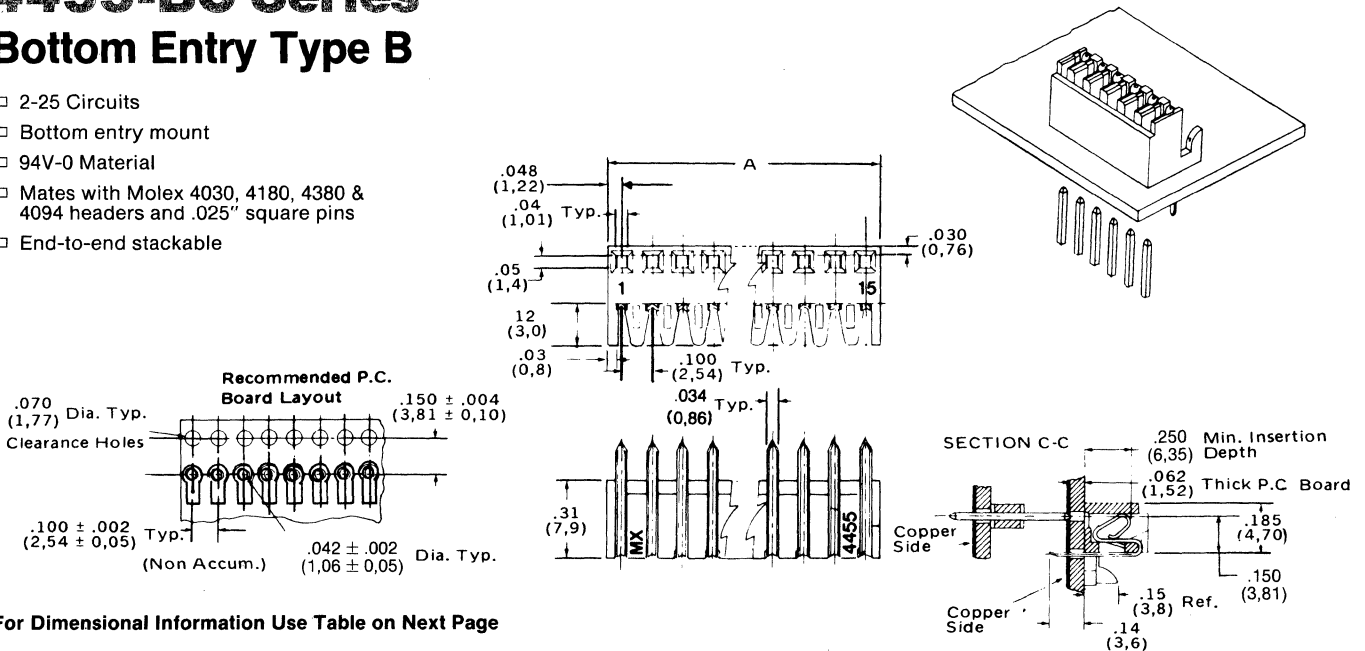
Tin Order No. • 22-15-2XX6
Gold Order No. • 22-16-2XX1
Select Gold Order No. • 22-16-2XX0
Replace XX with number of circuits, 02-25

• U.S. Standard Product, available through Molex franchised distributors

4161-1 Polarizing Key for 4455 AC, BC and CC	
Order No.	15-04-9202

4455-BC Series Bottom Entry Type B

- 2-25 Circuits
- Bottom entry mount
- 94V-0 Material
- Mates with Molex 4030, 4180, 4380 & 4094 headers and .025" square pins
- End-to-end stackable



For Dimensional Information Use Table on Next Page

Ordering Information 4455-BC (Preferred version in the Americas)

Tin Order No. • 22-14-2XX4
Gold Order No. • 22-17-2XX2
Select Gold Order No. • 22-17-3XX2
Replace XX with number of circuits, 02-25

• U.S. Standard Product, available through Molex franchised distributors

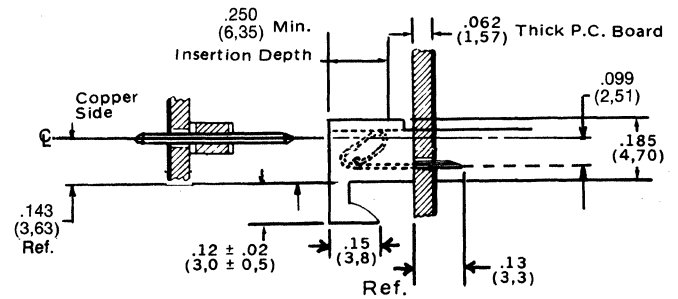
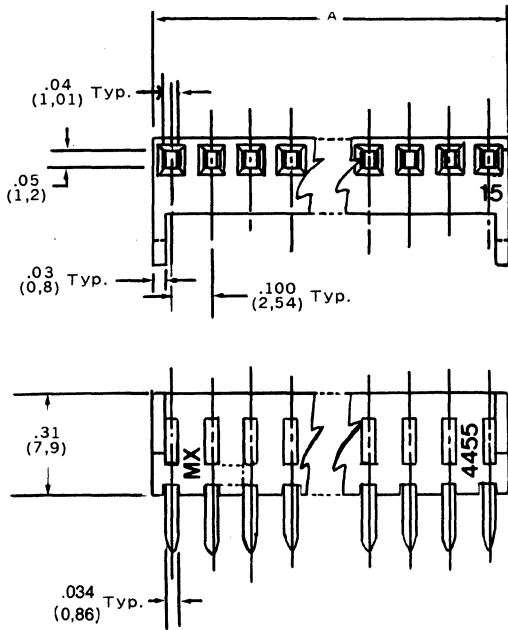
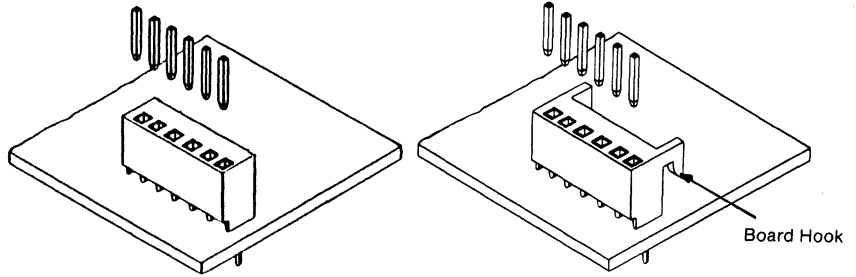
4161-1 Polarizing Key for 4455 AC, BC and CC	
Order No.	15-04-9202

.100" (2,54 mm) Center P.C. Board Connectors



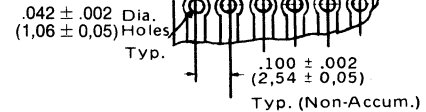
4455-CC Series Top Entry Type C

- 2-25 Circuits
- Top entry mount
- 94V-0 Material
- Mates with Molex 4030, 4094, 4380, 70475, 70021 headers and .025" square pins
- End-to-end stackable
- Available in polyester material. Contact factory for 41765 Series
- Also available without board hooks. See chart below



inches
mm

Recommended P.C. Board Layout



4161-1 Polarizing Key for 4455 AC, BC, and CC	
Order No.	15-04-9209

Dimensional Information 4455-AC, BC and CC Series

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.196 4,98	6	.596 15,14	10	.996 25,30	14	1.396 35,46	18	1.796 45,62	22	2.196 55,76
3	.296 7,52	7	.696 17,68	11	1.096 27,84	15	1.496 38,00	19	1.896 48,16	23	2.296 58,32
4	.396 10,06	8	.796 20,22	12	1.196 30,38	16	1.596 40,54	20	1.996 50,70	24	2.396 60,86
5	4.96 12,60	9	.896 22,76	13	1.296 32,92	17	1.696 43,08	21	2.096 53,24	25	2.496 63,40

Ordering Information 4455-CC (Preferred version in the Americas)

Tin Order No. • 22-02-2XX5 (With Hooks)
Gold Order No. • 22-18-2XX3 (With Hooks)
Select Gold Order No. • 22-18-2XX1 (With Hooks)
Replace XX with number of circuits, 02-25

Tin Order No. 22-15-4XX7 (Without Hooks)
--

• U.S. Standard Products, available through Molex franchised distributors

.100" (2,54 mm) Center P.C. Board Connectors with Cat Ear Terminals

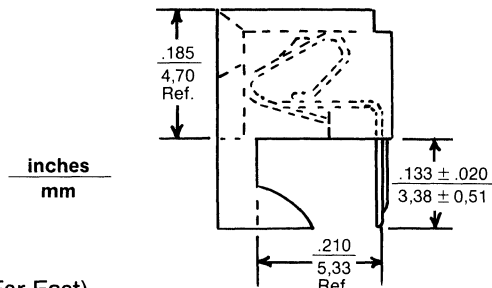


4455C-NAAA

Right Angle

These assemblies are the same as 4455A, B & C versions on pages 13A and 14E except these have higher pressure cat ear contacts on the bronze terminals.

- Plating - hot tin/lead dip 60/40 1,0 μm (.000040") to 2,5 μm (.000100")

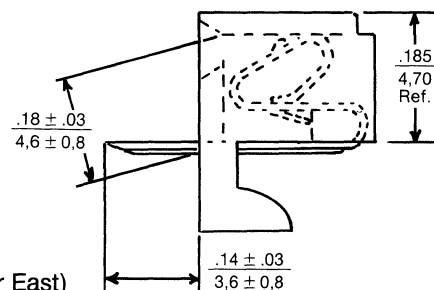


Ordering Information 4455C-NAAA (Preferred version in Europe and Far East)

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	38-00-1332	6	38-00-1336	10	38-00-1340	14	38-00-1344	18	38-00-1348	22	38-00-1352
3	38-00-1333	7	38-00-1337	11	38-00-1341	15	38-00-1345	19	38-00-1349	23	38-00-1353
4	38-00-1334	8	38-00-1338	12	38-00-1342	16	38-00-1346	20	38-00-1350	24	38-00-1354
5	38-00-1335	9	38-00-1339	13	38-00-1343	17	38-00-1347	21	38-00-1351	25	38-00-1355

4455C-NBAA

Bottom Entry

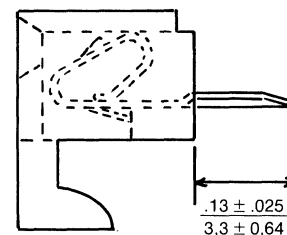


Ordering Information 4455C-NBAA (Preferred version in Europe and Far East)

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	38-00-1392	6	38-00-1396	10	38-00-1400	14	38-00-1404	18	38-00-1408	22	38-00-1412
3	38-00-1393	7	38-00-1397	11	38-00-1401	15	38-00-1405	19	38-00-1409	23	38-00-1413
4	38-00-1394	8	38-00-1398	12	38-00-1402	16	38-00-1406	20	38-00-1410	24	38-00-1414
5	38-00-1395	9	38-00-1399	13	38-00-1403	17	38-00-1407	21	38-00-1411	25	38-00-1415

4455C-NCAA

Straight



Ordering Information 4455C-NCAA (Preferred version in Europe and Far East)

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	38-00-1422	6	38-00-1426	10	38-00-1430	14	38-00-1434	18	38-00-1438	22	38-00-1442
3	38-00-1423	7	38-00-1427	11	38-00-1431	15	38-00-1435	19	38-00-1439	23	38-00-1443
4	38-00-1424	8	38-00-1428	12	38-00-1432	16	38-00-1436	20	38-00-1440	24	38-00-1444
5	38-00-1425	9	38-00-1429	13	38-00-1433	17	38-00-1437	21	38-00-1441	25	38-00-1445

Dimensional Information 4455C-NAAA/4455C-NBAA/4455C-NCAA

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.196 4,98	7	.600 15,24	.696 17,68	12	1.100 27,94	1.196 30,38	17	1.600 40,64	1.696 43,08	22	2.100 53,34	2.196 55,78
3	.200 5,08	.296 7,52	8	.700 17,78	.796 20,21	13	1.200 30,48	1.296 32,92	18	1.700 43,18	1.796 45,62	23	2.200 55,88	2.296 58,32
4	.300 7,62	.396 10,06	9	.800 20,30	.896 22,76	14	1.300 33,02	1.396 33,46	19	1.800 45,72	1.896 48,16	24	2.300 58,42	2.396 60,86
5	.400 10,16	.496 12,60	10	.900 22,86	.996 25,30	15	1.400 35,56	1.496 38,00	20	1.900 48,26	1.996 50,70	25	2.400 60,96	2.496 63,40
6	.500 12,70	.596 15,14	11	1.000 25,40	1.096 27,84	16	1.500 38,10	1.596 40,54	21	2.000 50,80	2.096 53,24			

.100" (2,54 mm) Center Headers

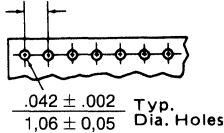


4030 Series Straight Square Pin Flat Header

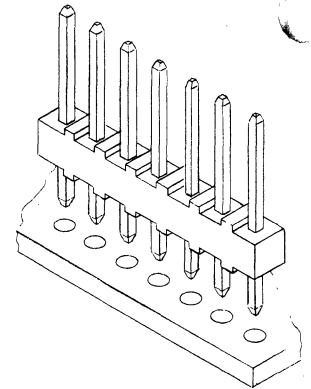
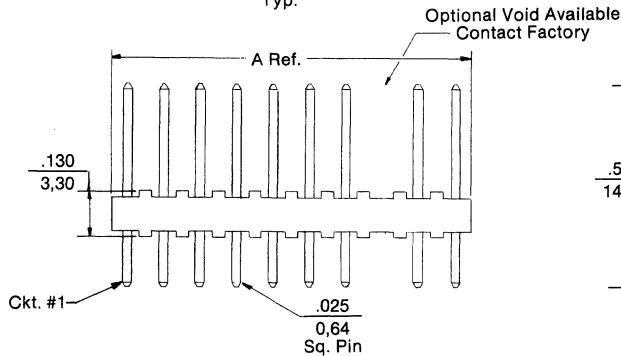
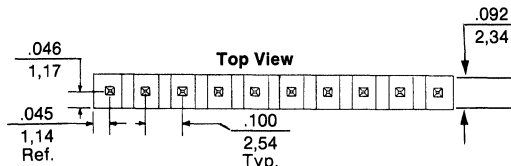
- 2-28 Circuits
- .025" (0,64mm) square brass pins
- 94V-0 nylon housing
- Mates with Molex .100" (2,54mm) centerline connectors (see list)
- Stackable end-to-end and side-to-side
- Available with glass-filled nylon housing. Contact factory for 42152 Series

Mating connectors

2695	4455		
6471	4455AC, CC		
7720	4455NAAA	.100 ± .002	Typ.
7880	4455NCAA	2,54 ± 0,05	Non-Accum.



Recommended P.C. Board Layout for .100" (2,54mm) Headers



Ordering Information 4030

Tin Order No. • 22-03-2XX1
Gold Order No. • 22-10-2XX1
Replace XX with number of circuits, 02-28

In the Far East the polyester product has different Eng. Nos. and Order Nos. Contact factory for sales drawings on 70309-XXXX.

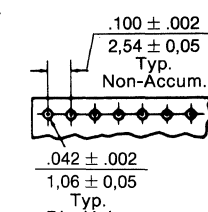
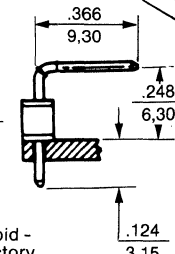
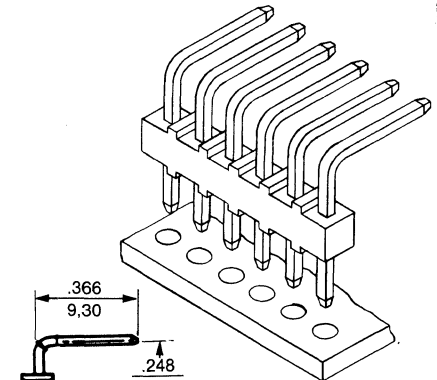
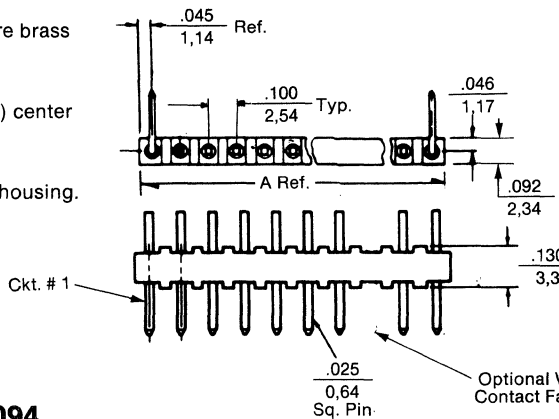
• U.S. Standard Product, available through Molex franchised distributors (2-25 Circuit Only)

4094 Series Right Angle Square Pin Flat Header

- 2-28 circuits
- .025" (0,64mm) right angle square brass pins
- 94V-0 nylon housing
- Mates with Molex .100" (2,54mm) center connectors (See list)
- Stackable end-to-end
- Available with glass-filled nylon housing. Contact factory for 42153 Series

Mating connectors

2695	4455AC, CC
6471	4455C-NAAA
7880	4455C-NCAA
7720	



Recommended P.C. Board Hole Layout for .100" (2,54mm) Headers

Ordering Information 4094

Tin Order No. • 22-05-2XX1
Gold Order No. • 22-12-2XX1
Replace XX with number of circuits, 02-28

inches
mm

• U.S. Standard Product, available through Molex franchised distributors (2-25 Circuit Only)

In the Far East the polyester product has different Eng. Nos. and Order Nos. Contact factory for sales drawings on 70319-XXXX.

Dimensions 4030/4094

Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A	Ckts.	Dim. A
2	.19 4,8	5	.49 12,5	8	.79 20,1	11	1.09 27,7	14	1.39 35,3	17	1.69 42,9	20	1.99 50,6	23	2.29 58,2	25	2.49 63,2
3	.29 7,4	6	.59 15,0	9	.89 22,6	12	1.19 30,2	15	1.49 37,9	18	1.79 45,5	21	2.09 53,1	24	2.39 60,1	28	2.79 70,9
4	.39 9,9	7	.69 17,5	10	.99 25,1	13	1.29 32,8	16	1.59 40,4	19	1.89 48,0	22	2.19 55,6				

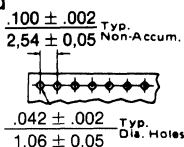
.100" (2,54 mm) Center Headers

6373 Series

Straight Square Pin Friction Lock Header

- 2-28 circuits
- .025" (0,64mm) square brass pins
- 94V-0 nylon housing
- Mates with KK .100" (2,54mm) centerline connectors (see list)
- Stackable end-to-end

Mating connectors
 2695 with locking ramp
 6471
 7880
 70400-H

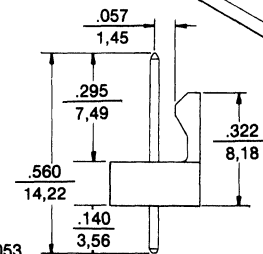
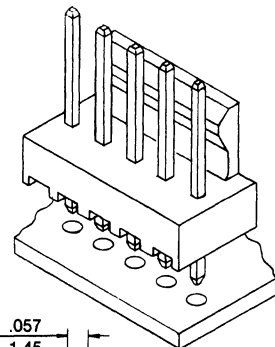
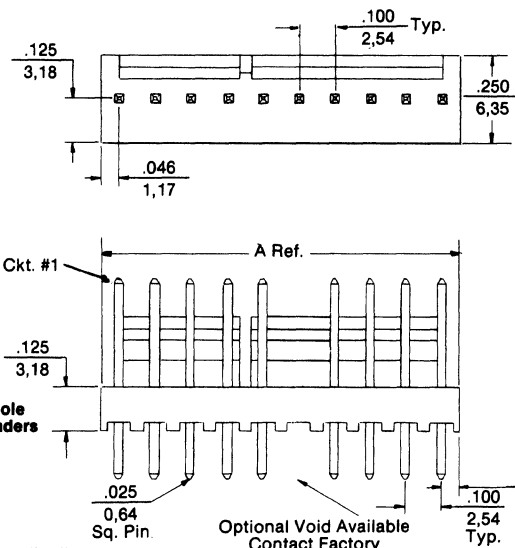


Recommended P.C. Board Hole Layout for .100" (2,54mm) Headers

Ordering Information 6373

Tin Order No. • 22-23-2XX1
Gold Order No. • 22-11-2XX2
Replace XX with number of circuits, 02-28

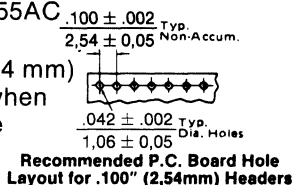
• U.S. Standard Product, available through Molex franchised distributors (2-25 circuits only)



7478 Series

Right Angle Square Pin Friction Lock Header

- 2-28 circuits
- .025" (0,64mm) right angle square brass pins
- 94V-0 nylon housing
- Mates with 2695 and 4455AC & CC
- Mates with all .100" (2,54 mm) centerline connectors when mounted on board edge and 70400-H



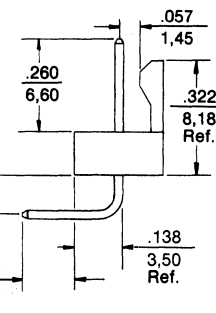
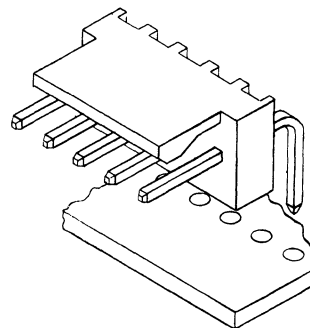
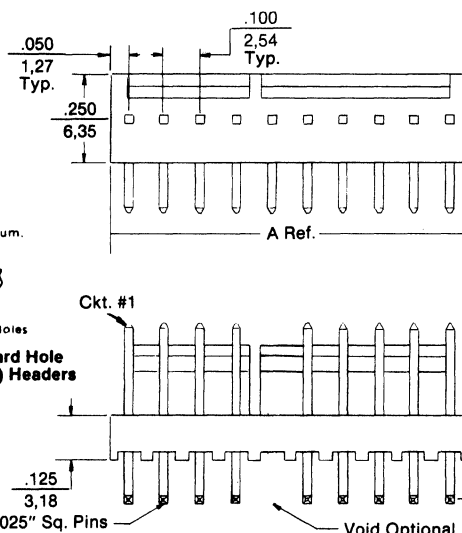
Recommended P.C. Board Hole Layout for .100" (2,54mm) Headers

Ordering Information 7478

(Preferred version in the Americas)

Tin Order No. • 22-05-3XX1
Gold Order No. • 22-12-2XX4
Replace XX with number of circuits, 02-28

• U.S. Standard Product, available through Molex franchised distributors (2-25 circuits only)



Dimensional Information 6373/7478

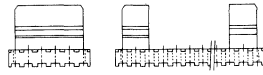
Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.200 5,08	7	.700 17,78	12	1.200 30,48	17	1.700 43,18	21	2.100 53,34	25	2.500 63,50
3	.300 7,62	8	.800 20,32	13	1.300 33,02	18	1.800 45,72	22	2.200 55,88	26	2.600 66,04
4	.400 10,16	9	.900 22,86	14	1.400 35,56	19	1.900 48,26	23	2.300 58,42	27	2.700 68,58
5	.500 12,70	10	1.000 25,40	15	1.500 38,10	20	2.000 50,80	24	2.400 60,96	28	2.800 71,12
6	.600 15,24	11	1.100 27,94	16	1.600 40,64						

.100" (2,54 mm) Center Headers

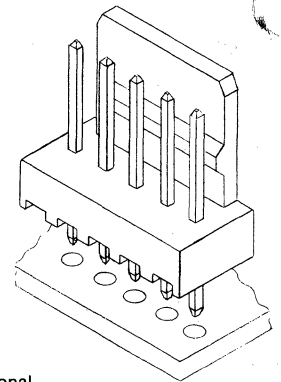
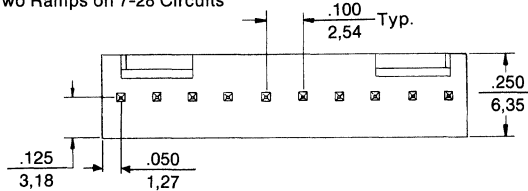


6410 Series Straight Square Pin Friction Lock Header

- 2-28 circuits
- .025" (0,64mm) square brass pins
- 94V-0 nylon housing
- Mates with KK .100" (2,54mm) centerline connectors (see list)
- Stackable end-to-end

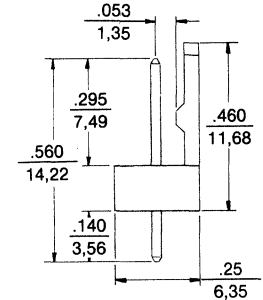
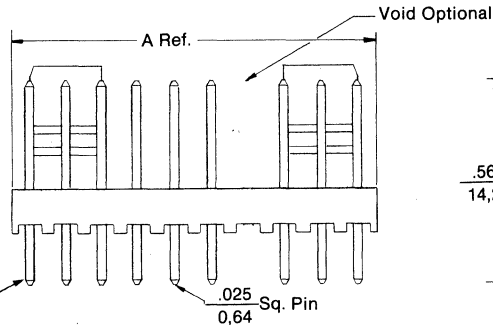
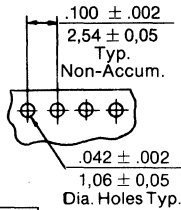


Single Ramp on 2-6 Circuits
Two Ramps on 7-28 Circuits



Mating connectors
2695 with locking ramp
6471
7880

Recommended P.C. Board Hole
Dimension Layout for .100" (2,54mm) Headers



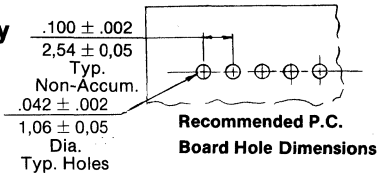
Ordering Information 6410

Tin Order No. • 22-27-2XX1
Gold Order No. • 22-29-2XX1
Replace XX with number of circuits, 02-28

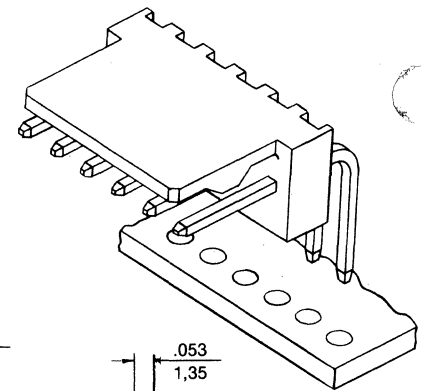
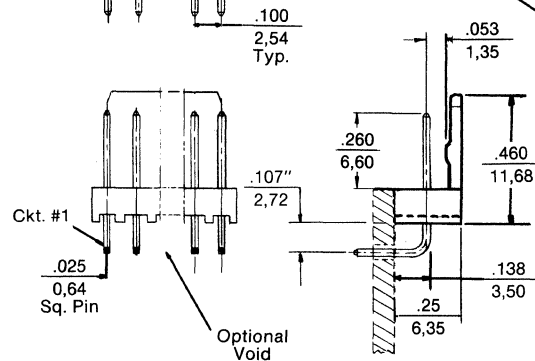
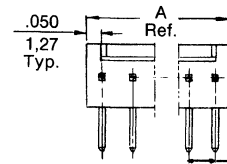
• U.S. Standard Product, available through Molex franchised distributors (2-25 circuits only)

7395 Series Right Angle Friction Lock

- 2-28 circuits
- .025" (0,64mm) right angle square brass pins
- 94V-0 nylon housing
- Pins .0002" (0,005mm) min. electro tin over .0001" (0,003mm) min. copper
- Mates with Molex 6471, 7720S, and 2695
- Edgemount only



Recommended P.C.
Board Hole Dimensions



Ordering Information 7395 (Preferred version in Europe and the Far East)

Order No. 22-05-7XX8
Replace XX with number of circuits, 02-28

Dimensional Information 6410/7395

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.200 5,08	7	.700 17,78	12	1,200 30,48	17	1,700 43,18	21	2,100 53,34	25	2,500 63,50
3	.300 7,62	8	.800 20,32	13	1,300 33,02	18	1,800 45,72	22	2,200 55,88	26	2,600 66,04
4	.400 10,16	9	.900 22,86	14	1,400 35,56	19	1,900 48,26	23	2,300 58,42	27	2,700 68,58
5	.500 12,70	10	1,000 25,40	15	1,500 38,10	20	2,000 50,80	24	2,400 60,96	28	2,800 71,12
6	.600 15,24	11	1,100 27,94	16	1,600 40,64						

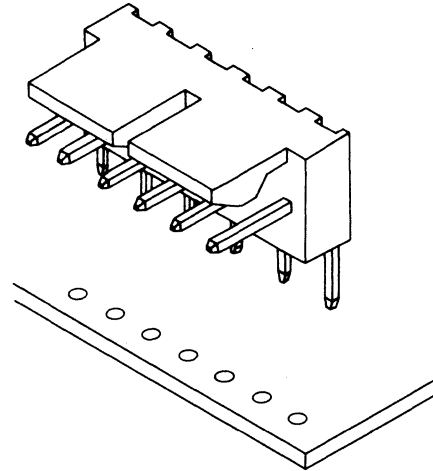
.100" (2,54 mm) Center Headers



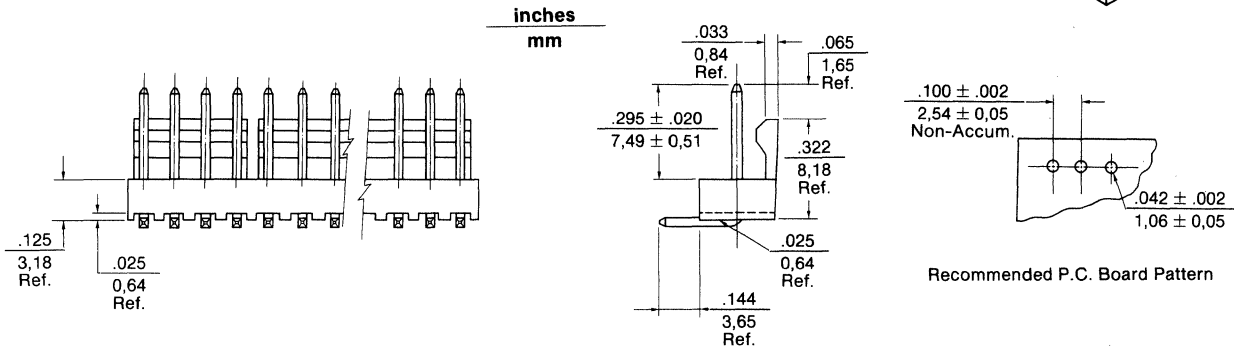
70327 Series

Square Pin Right Angle Friction Lock

- 2-28 circuits
- .025" (0,64mm) right angle square pins
- Friction lock
- 94V-0 nylon
- Mates with 2695, 6471 and 4455 AZNA and CZNA versions



E



Dimensional Information 70327

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.200 5,08	7	.700 17,78	12	1.200 30,48	17	1.700 43,18	21	2.100 53,34	25	2.500 63,50
3	.300 7,62	8	.800 20,32	13	1.300 33,02	18	1.800 45,72	22	2.200 55,88	26	2.600 66,04
4	.400 10,16	9	.900 22,86	14	1.400 35,56	19	1.900 48,26	23	2.300 58,42	27	2.700 68,58
5	.500 12,70	10	1.00 25,40	15	1.500 38,10	20	2.000 50,80	24	2.400 60,96	28	2.800 71,12
6	.600 15,24	11	1.100 27,94	16	1.600 40,64						

Ordering Information 70327 (Preferred version in The Far East)

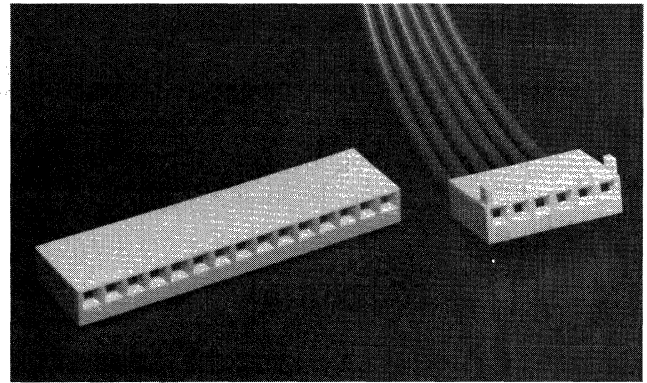
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	70327-0001	7	70327-0006	12	70327-0011	17	70327-0016	21	70327-0020	25	70327-0024
3	70327-0002	8	70327-0007	13	70327-0012	18	70327-0017	22	70327-0021	26	70327-0025
4	70327-0003	9	70327-0008	14	70327-0013	19	70327-0018	23	70327-0022	27	70327-0026
5	70327-0004	10	70327-0009	15	70327-0014	20	70327-0019	24	70327-0023	28	70327-0027
6	70327-0005	11	70327-0010	16	70327-0015						

.156" (3,96 mm) Center Crimp Terminal Housing



41695 Series

- 2-18 circuits
- Locking and polarizing features available
- **94V-0 polyester material**
- Accepts Molex double cantilever crimp terminals 2478, 2578, as well as Molex crimp Trifurcon™ terminals 6438, 6838, 7258. (Order separately)
- Polarizing key, 42324-A, polarizing peg 42324-B

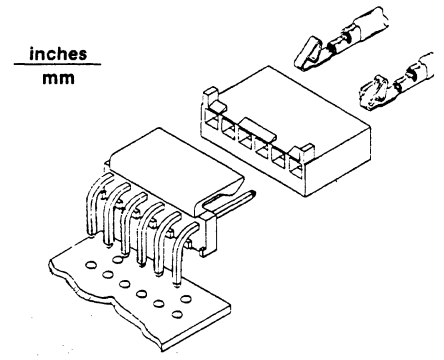
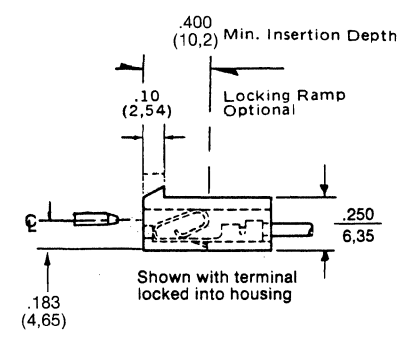
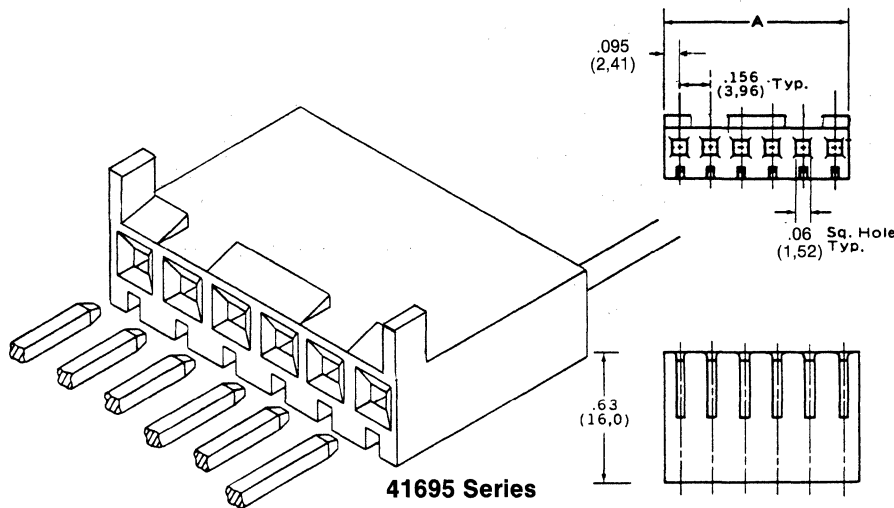


Without rib or ramp.

With rib and ramp.

Mating headers for 41695

41661	A4042	41771	42471
41662	41701	41772	42472
41671	41711	41791	42491
41672	41721	41792	42492
41681	41741	42441	
41682	41761	42461	



Note: 2 circuit parts have full ramp.

Dimensional Information 41695

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.34 8,7	6	.97 24,5	10	1.60 40,4	13	2.06 52,3	16	2.53 64,2
3	.50 12,7	7	1.12 28,5	11	1.75 44,4	14	2.21 56,2	17	2.68 68,1
4	.65 16,6	8	1.28 32,5	12	1.90 48,3	15	2.37 60,2	18	2.84 72,1
5	.81 20,8	9	1.43 36,4						

Ordering Information 41695 (Preferred version in the Americas)

With Locking Ramp and Polarizing Ribs Order No. • 09-50-8XX3
Without Locking Ramp or Polarizing Ribs Order No. • 09-50-8XX0
With Locking Ramp Only Order No. • 09-50-8XX1
Replace XX with number of circuits, 02-18

• U.S. Standard Product, available through Molex franchised distributors.

.156" (3,96 mm) Center Crimp Terminal Housing

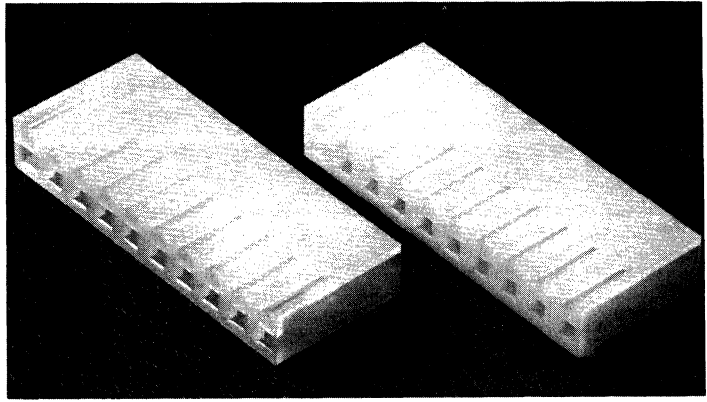


2139 Series

- 2-18 circuits
- Locking ramp available
- Accepts Molex double cantilever crimp terminals (Except 4018 terminal). Order separately, page 24E
- 94V-2 nylon; See 41695, page 20E, for 94V-0 housing
- Housing available with integrally molded polarizing keys and ribs
- Mates with Molex KK .156" (3,96mm) center headers or .045" (1,14mm) staked pins (See list)

Mating headers for 2139/3069

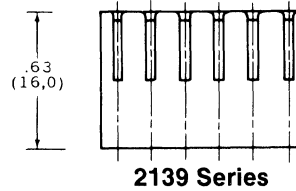
41661	A4042	41761	42441
41662	41701	41771	42461
41671	41711	41772	42471
41672	41721	41791	42491
41681	41741	41792	42492
41682			



Ordering Information 2139 (Preferred version in the Americas)

Without Locking Ramp Order No. • 09-50-7XX1
With Locking Ramp Order No. • 09-50-3XX1
Replace XX with number of circuits, 02-18

• U.S. Standard product, available through Molex franchised distributors



3069 Series

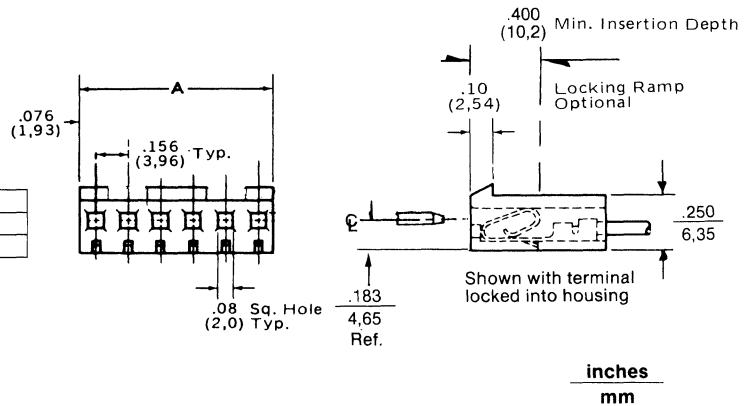
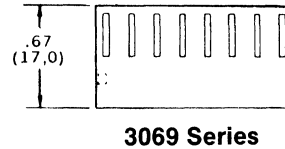
- Standard version without polarizing rib
- With or without locking ramp
- 2-20 circuits
- Accepts Molex double cantilever crimp terminals Order separately, page 24E
- 94V-2 nylon
- Housing available with integrally molded polarizing rib on position 1. Contact factory to order
- Mates with Molex KK .156" (3,96mm) center headers or .045" (1,14mm) staked pins

Mating headers for 3069 only

3192	2220
3246	3243
3190	

Ordering Information 3069 (Preferred version in the Europe and the Far East)

Without Locking Ramp Order No. 09-91-XX00
With Locking Ramp Order No. 09-92-XX00
Replace XX with number of circuits, 02-20



Dimensions 2139/3069

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.31 ± .007 7,92 ± 0,18	6	.93 ± .010 23,67 ± 0,25	10	1.56 ± .012 39,52 ± 0,30	14	2.18 ± .014 55,37 ± 0,36	18	2.804 ± .009 71,22 ± 0,23
3	.46 ± .010 11,79 ± 0,25	7	1.09 ± .012 27,64 ± 0,30	11	1.71 ± .012 43,48 ± 0,30	15	2.34 ± .014 59,33 ± 0,36	19	2.960 ± .014 75,18 ± 0,36
4	.62 ± .010 15,75 ± 0,25	8	1.24 ± .012 31,60 ± 0,30	12	1.87 ± .012 47,45 ± 0,30	16	2.492 ± .007 63,30 ± 0,18	20	3.116 ± .018 79,15 ± 0,46
5	.78 ± .010 19,71 ± 0,25	9	1.40 ± .012 35,56 ± 0,38	13	2.02 ± .014 51,41 ± 0,36	17	2.648 ± .008 67,26 ± 0,20		

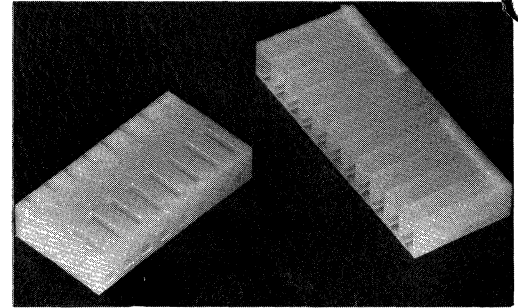
Highlighted area denotes 3069 Series only

.156" (3,96) Center Crimp Terminal Housing



6442

Housing for Trifurcon Terminals

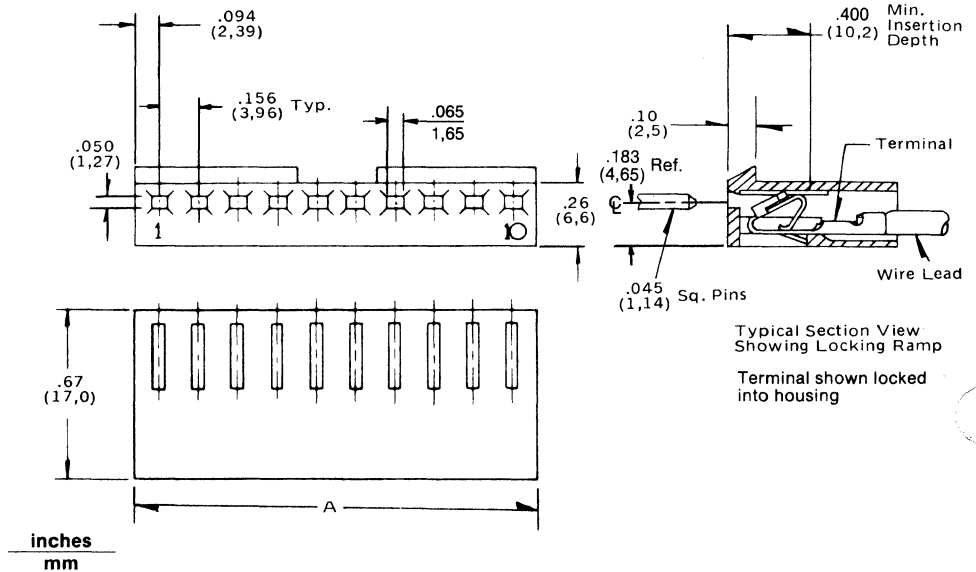


E

- 2-24 circuits
- Accepts crimp type 6438, 6838 and 7258 Trifurcon terminals. See page 23E
- Mates with .156" (3,96mm) center headers or .045" (1,14mm) square pins
- Available with voided circuits in various locations - Contact factory
- Optional continuous locking ramp on housings for up to 8 circuits. For housings with more than 8 circuits, ramp spans four circuits on each end
- 94V-0 nylon. See 41695, page 20E for 94V-0 polyester housing

Mating headers for 6442

3192	41661	41711	41792
3279	41662	41721	42441
3246	41671	41741	42461
3190	41672	41761	42471
3243	41681	41771	42472
A4042	41682	41772	42491
2220	41701	41791	42492



Dimensional Information 6442

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.344 ± .007 8,74 ± 0,18	6	.968 ± .007 24,59 ± 0,18	10	1.592 ± .012 40,44 ± 0,31	14	2.216 ± .016 56,29 ± 0,41	18	2.840 ± .016 72,14 ± 0,41	22	3.464 ± .020 87,99 ± 0,51
3	.500 ± .007 12,70 ± 0,18	7	1.124 ± .007 28,55 ± 0,18	11	1.748 ± .012 44,40 ± 0,31	15	2.372 ± .016 60,25 ± 0,41	19	2.996 ± .016 76,10 ± 0,41	23	3.620 ± .020 91,95 ± 0,51
4	.656 ± .007 16,66 ± 0,18	8	1.280 ± .012 32,51 ± 0,31	12	1.904 ± .012 48,36 ± 0,31	16	2.528 ± .016 64,21 ± 0,41	20	3.152 ± .020 80,06 ± 0,51	24	3.776 ± .020 95,91 ± 0,51
5	.812 ± .007 20,62 ± 0,18	9	1.436 ± .012 36,47 ± 0,31	13	2.060 ± .014 52,31 ± 0,36	17	2.684 ± .016 68,17 ± 0,41	21	3.308 ± .020 84,02 ± 0,51		

Ordering Information 6442

Circuits	With Ramp	W/O Ramp	Circuits	With Ramp	W/O Ramp	Circuits	With Ramp	W/O Ramp	Circuits	With Ramp	W/O Ramp
2	● 26-03-4020	26-03-3021	8	● 26-03-4081	26-03-3081	14	● 26-03-4141	● 26-03-3141	20	● 26-03-4201	26-03-3201
3	● 26-03-4030	26-03-3031	9	● 26-03-4090	26-03-3091	15	● 26-03-4151	● 26-03-3151	21	● 26-03-4211	26-03-3211
4	● 26-03-4041	26-03-3041	10	● 26-03-4101	26-03-3101	16	● 26-03-4161	● 26-03-3161	22	● 26-03-4221	26-03-3221
5	● 26-03-4050	26-03-3051	11	● 26-03-4111	26-03-3111	17	● 26-03-4171	● 26-03-3171	23	● 26-03-4231	26-03-3231
6	● 26-03-4061	26-03-3061	12	● 26-03-4121	26-03-3121	18	● 26-03-4181	● 26-03-3181	24	● 26-03-4241	26-03-3241
7	● 26-03-4070	26-03-3071	13	● 26-03-4131	26-03-3131	19	● 26-03-4191	26-03-3191			

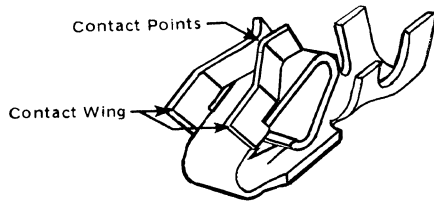
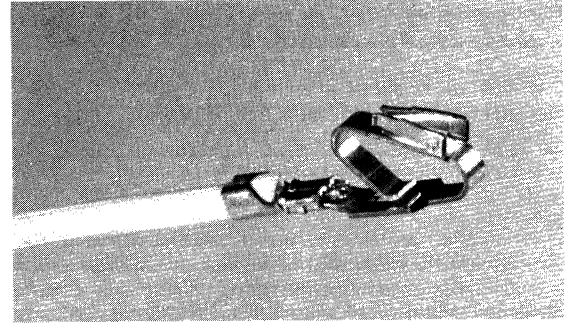
● U.S. Standard Product, available through Molex franchised distributors.

Polarizing Key	
Eng. No.	Order No.
7580-1	89-00-3001

Trifurcon Terminals for .156" (3,96 mm) Center Housing



An ideal choice for situations where flux contamination, high shock or vibration exists, this terminal incorporates the double cantilever design with contact wings in the vertical plane. Contact is achieved at three points on the mating pin. While insertion force of this combination is slightly increased, the extraction force is greatly increased and maintained through disconnect cycling.

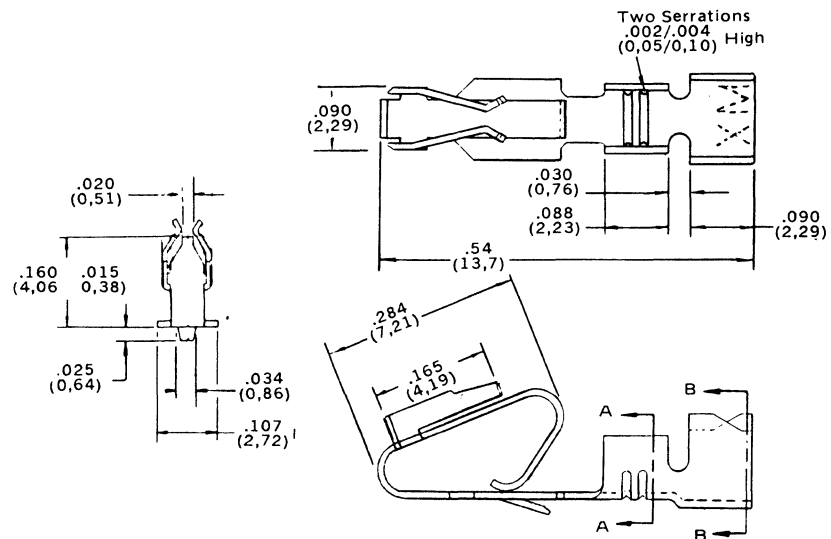


TRIFURCON TERMINAL

E

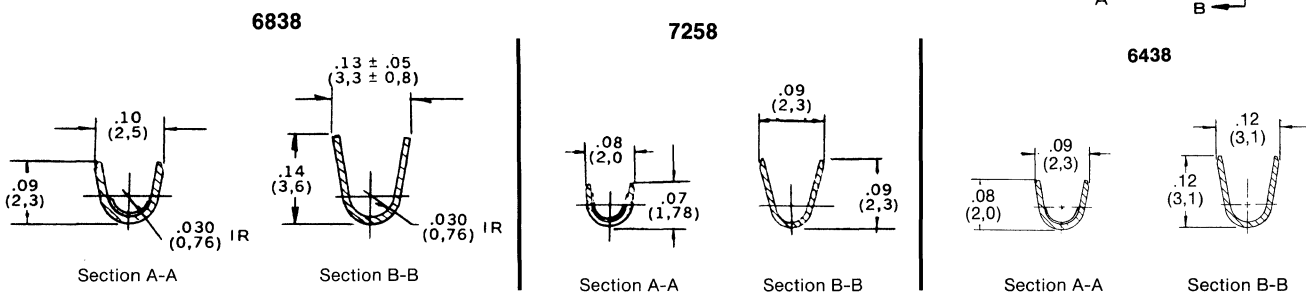
6838, 7258, 6438 Series

- 6838 terminal accepts #18 to 24 AWG wire leads (.110" max. O.D.)
- 6438 terminal accepts #18-24 AWG wire leads (.095" [2,41mm] Max. O.D.)
- 7258 terminal accepts #22 to 26 AWG wire leads
- For use with 41695 and 6442 crimp terminal housings, and 7674 and 7660 IDT housings
- Complete line of terminal crimping equipment available. See Section M, this catalog



inches
mm

Crimp Dimensions



Ordering Information

Eng. No.	Form	Tin Plating Order No.	Gold Plating Order No.	Select Gold Order No.
6838	Chain	● 08-50-0187	08-58-0187	● 08-58-0110
	Loose	● 08-50-0189	08-58-0189	● 08-58-0111
7258	Chain	● 08-50-0183	08-56-0123	● 08-65-0121
	Loose	● 08-50-0185	—	● 08-65-0122
6438	Chain	08-50-0164	08-56-0137	—
	Loose	08-50-0165	08-56-0139	—

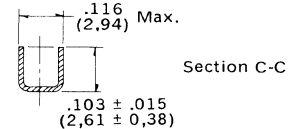
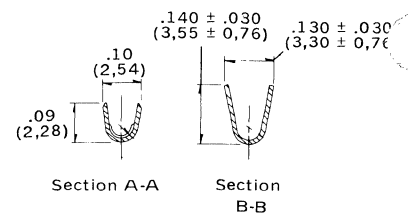
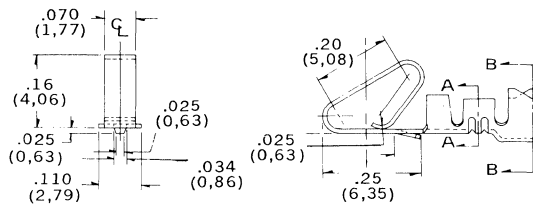
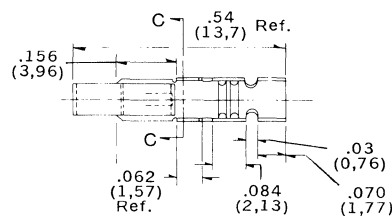
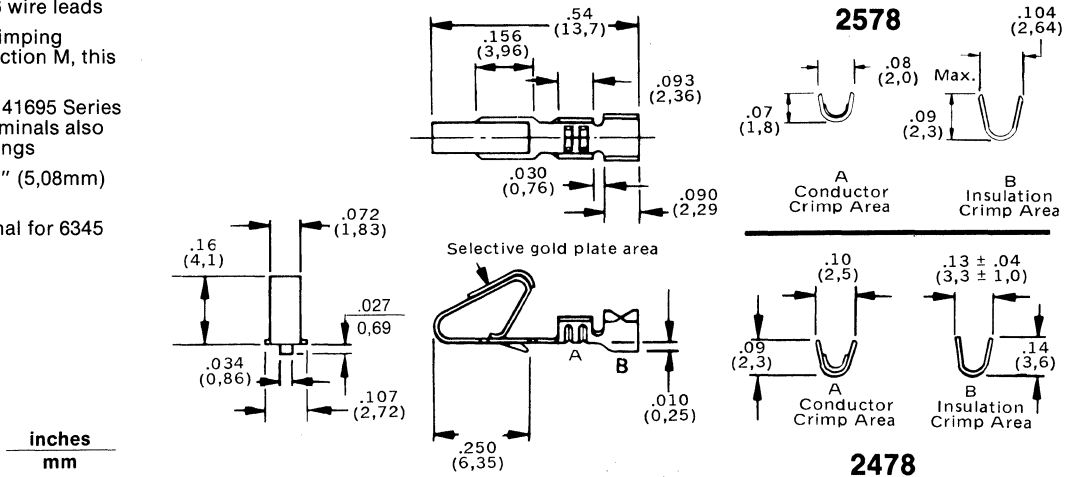
● U.S. Standard Product, available through Molex franchised distributors

Standard KK Crimp Terminals for .156" (3,96 mm) and .200" (5,08 mm) Center Housings



2478, 2578, 4018 Series

- Patented double cantilever design
- Accepts AWG 18 through 26 wire leads
- Complete line of terminal crimping equipment available. See Section M, this catalog
- For use with 2139, 3069 and 41695 Series housings; 2578 and 2478 terminals also used in 7664 and 7675 housings
- For .156" (3,96mm) and .200" (5,08mm) applications
- 4018 anti-fishhooking terminal for 6345 housing only



4018

Ordering Information 2478, 2578, 4018

Wire Size	Insulation O.D.	Series No.	Tin Plating		Gold Plating No. 1		Select Gold Plating No. 2	
			Loose	Chain	Loose	Chain	Loose	Chain
18-24	.110 2,79 Max.	2478	● 08-50-0106	● 08-50-0105	● 08-56-0106	● 08-56-0105	08-55-0104	08-55-0103
22-26	.065 1,65 Max.	2578	● 08-50-0108	● 08-50-0107	● 08-56-0108	● 08-56-0107	08-55-0106	08-55-0105
18-24	.110 2,79 Max.	4018	● 08-50-0118	● 08-50-0117	—	08-56-0150	—	—

Recommended wire range assumes stranded wire

Plating No. 1 — 20 millionths min. gold in contact area with a flash overall.
Plating No. 2 — 15 millionths min. gold in contact area only.

• U.S. Standard Product, available through Molex franchised distributors

.156" (3,96 mm) Center P.C. Board Connectors

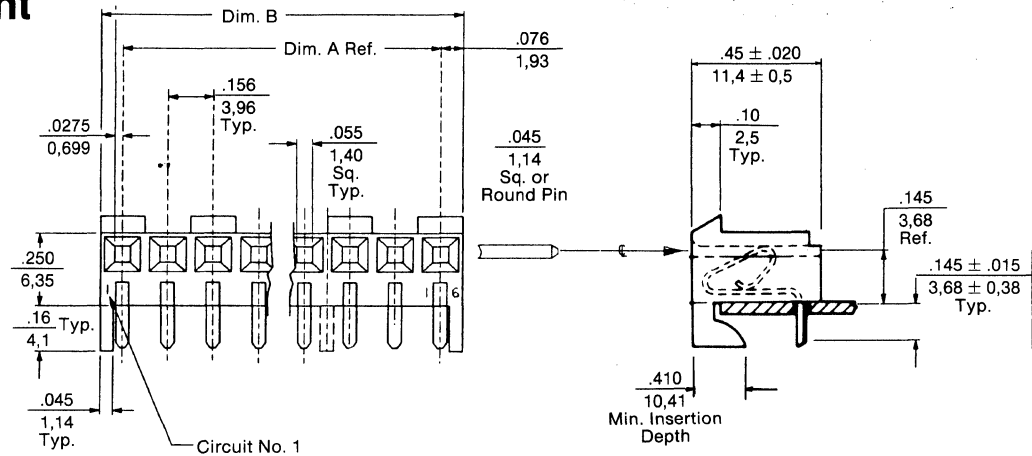


41815 Right Angle Mount Type A

- 2-16 circuits
- Large lead-in chamfers
- 94V-0 polyester housing
- Mates with Molex KK .156" (3,96mm) center headers or .045" (1,14mm) staked pins
- Tin plating or select gold

Mates with:

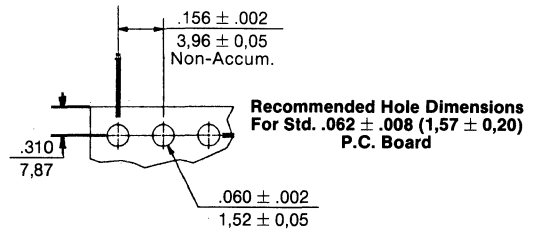
3192	41671
41661	41701
41662	41711



Ordering Information 41815 Type A

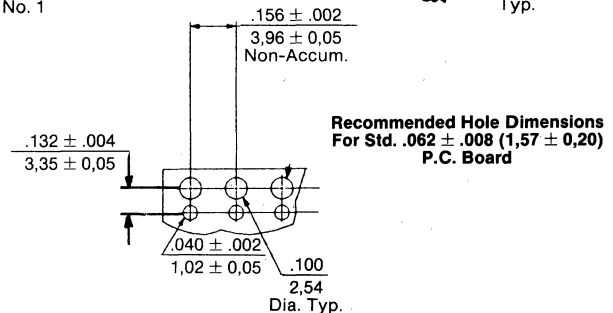
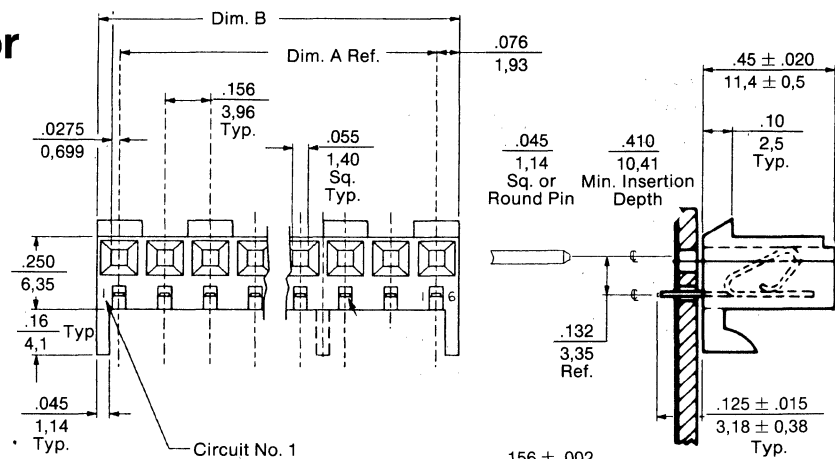
Tin Order No. • 09-48-2XX1
Select Gold Order No. • 09-48-3XX5
Replace XX with number of circuits, 02-16

• U.S. Standard Product, available through Molex franchised distributors.



41815 Bottom Entry Connector Type B

- 2-16 circuits
- Large lead-in chamfers
- 94V-0 polyester housing
- Mates with Molex KK .156" (3,96mm) center headers or 41661, 41662 or .045" (1,14mm) staked pins
- Tin plating or select gold



Ordering Information 41815 Type B

Tin Order No. • 09-48-2XX2
Select Gold Order No. • 09-48-3XX4
Replace XX with number of circuits, 02-16

• U.S. Standard Product, available through Molex franchised distributors.

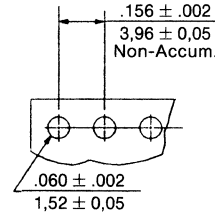
Dimensional Information 41815 Type A and Type B Use Table on Next Page

.156" (3,96 mm) Center P.C. Board Connectors

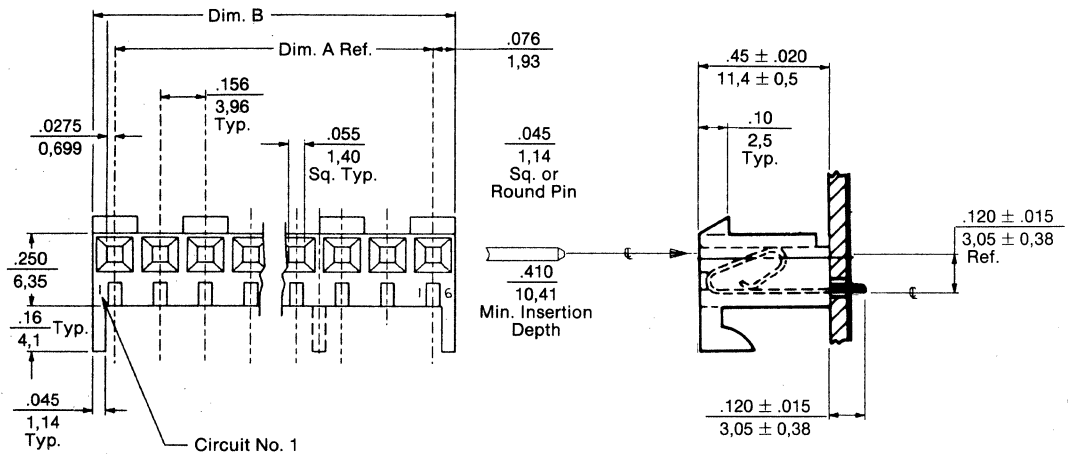


41815 Top Entry Connector Type C

- 2-16 circuits
- Large lead-in chamfers
- Top entry mount
- 94V-0 polyester housing
- Mates with Molex KK .156" (3,96mm) center headers or .045" (1,14mm) staked pins
- Tin plating or select gold



**Recommended Hole Dimensions
For Std. .062 ± .008 (1,57 ± 0,20)
P.C. Board**



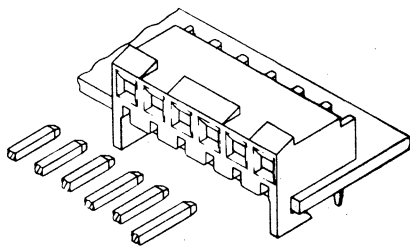
Ordering Information 41815 Type C

Tin Order No. • 09-48-2XX3
Select Gold Order No. • 09-48-3XX6
Replace XX with number of circuits, 02-16

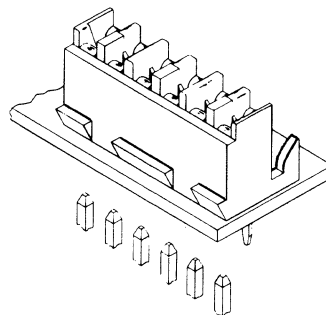
• U.S. Standard Product, available through Molex franchised distributors.

Dimensions 41815 Type A, B and C

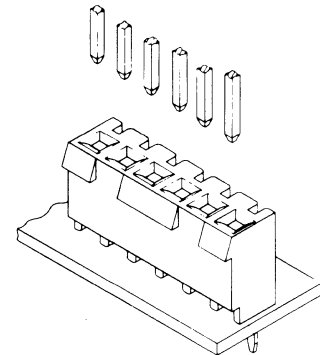
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 3,96	.308 ± .010 7,82 ± 0,25	6	.780 19,81	9.32 ± .010 23,67 ± 0,25	10	1.404 35,66	1.556 ± .012 39,52 ± 0,30	14	2.028 51,50	2.180 ± .014 55,37 ± 0,36
3	.312 7,92	.464 ± .010 11,79 ± 0,25	7	.936 23,77	1.088 ± .012 27,64 ± 0,30	11	1.560 39,62	1.712 ± .012 43,48 ± 0,30	15	2.184 55,47	2.336 ± .014 59,33 ± 0,36
4	.468 11,89	.620 ± .010 15,75 ± 0,25	8	1.092 27,74	1.244 ± .012 31,60 ± 0,25	12	1.716 43,59	1.868 ± .012 47,45 ± 0,30	16	2.340 59,44	2.492 ± .014 63,30 ± 0,36
5	.624 15,85	.776 ± .010 19,7 ± 0,25	9	1.248 31,70	1.400 ± .012 35,56 ± 0,30	13	1.872 47,55	2.024 ± .012 51,41 ± 0,30			



Side Entry



Bottom Entry



Top Entry

.156" (3,96 mm) Center P.C. Board Connectors

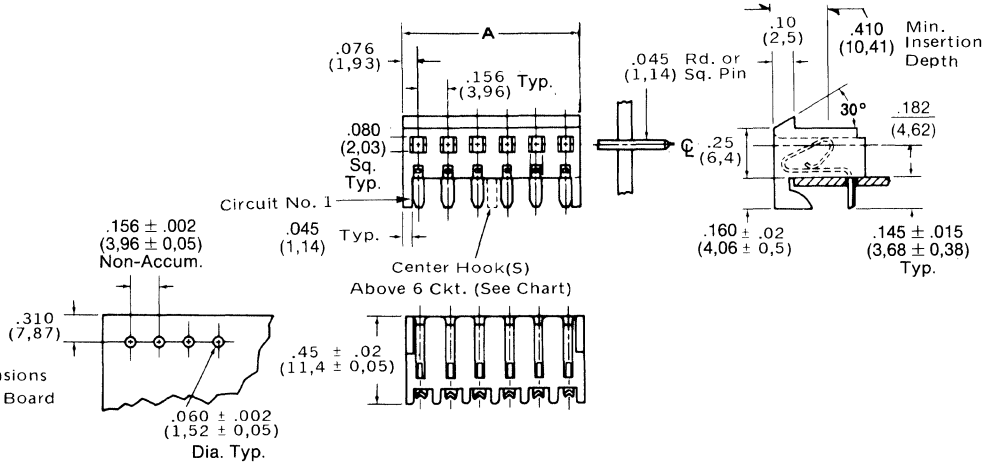


2145-A/3215-A Series Side Entry Type A

- 3-15 circuits
- 94V-2 nylon housing (94V-0 housing available. See 41815 Series, page 25E)
- Mates with Molex KK .156" (3,96mm) center headers and .045" (1,14mm) pins
- 3215-A available without locking ramp

Mating headers

3192	41671
41661	41662
	41672



Ordering Information 2145-A (Preferred version in the Americas)

Tin/Lead Order No. • 09-52-3XX1
Select Gold Order No. • 09-62-3XX1
Replace XX with number of circuits, 03-15

• U.S. Standard Product, available through Molex franchised distributors

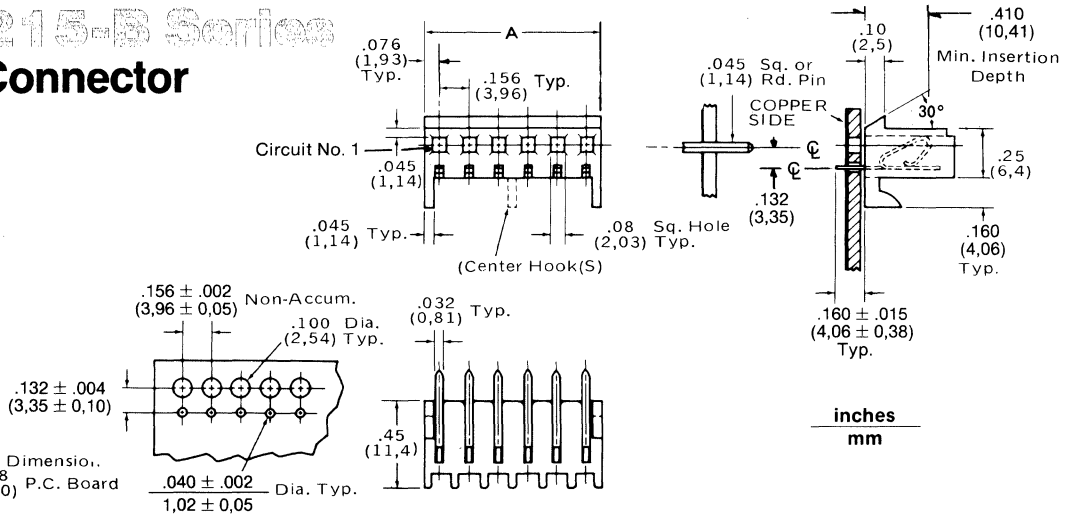
Ordering Information 3215-A (Preferred version in the Europe and the Far East)

Tin Order No. 26-11-6XX4
Replace XX with number of circuits, 03-15

*For Gold Plating Contact Factory Representative

2145-B/3215-B Series Bottom Entry Connector Type B

- 3-15 circuits
- 94V-2 nylon housing (94V-0 housing available. See 41815 Series, page 25E)
- Mates with Molex KK .156" (3,96mm) center headers



Ordering Information 2145-B (Preferred version in the Americas)

Tin/Lead Order No. • 09-52-3XX2
Select Gold Order No. • 09-62-3XX2
Replace XX with number of circuits, 03-15

• U.S. Standard Product, available through Molex franchised distributors

Ordering Information 3215-B (Preferred version in the Europe and the Far East)

Tin Order No. 26-11-6XX5
Replace XX with number of circuits, 03-15

*For Gold Plating Contact Factory Representative

Dimensional Information 2145-A/3215-A and 2145-B/3215-B Use Table on Next Page

.156" (3,96 mm) Center P.C. Board Connectors

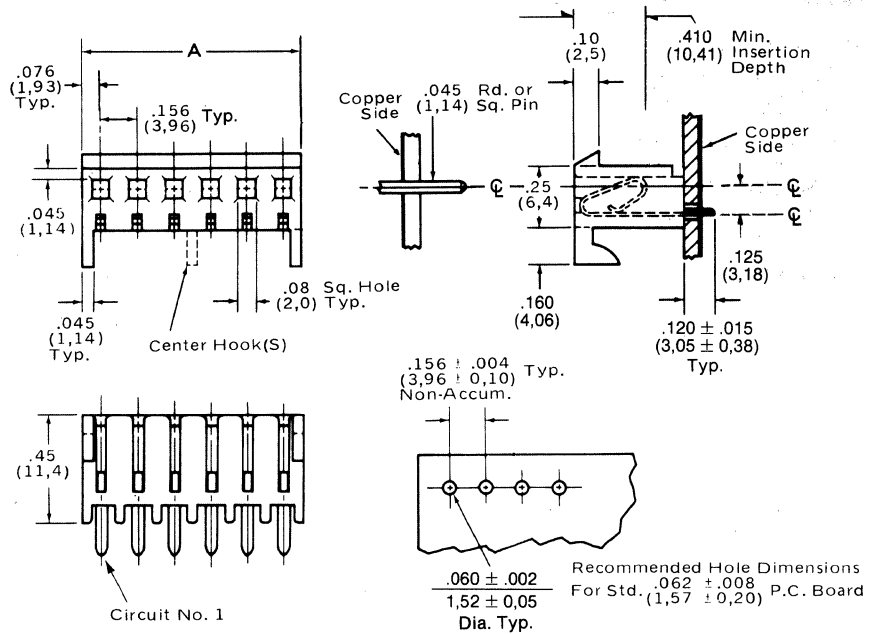


2145-C/3215-C Series Top Entry Connector Style C

- 3-15 circuits
- Top entry mount
- 94V-2 nylon housing (94V-0 housing available. See 41815 Series, page 26E)
- Mates with Molex KK .156" (3,96mm) center locking headers
- Available without locking ramp



inches
mm



Circuit No. 1

Ordering Information 2145-C (Preferred version in the Americas)

Tin Order No. • 09-52-3XX3
Select Gold Order No. • 09-62-3XX3
Replace XX with number of circuits, 03-15

• U.S. Standard Product, available through Molex franchised distributors

Polarizing Key for Top and Side Entry Connectors	
Eng. No.	Order No.
2560-1	• 15-04-0219

• U.S. Standard Product, available through Molex franchised distributors

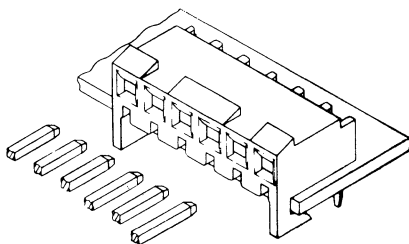
Ordering Information 3215-C (Preferred version in the Europe and the Far East)

Tin* Order No. 26-11-2XX3
Replace XX with number of circuits, 03-15

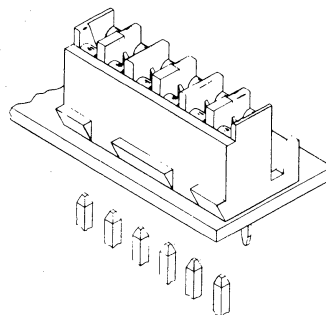
*For Gold Plating Contact Factory Representative

Dimensional Information 2145-A-B-C Versions and 3215-A-B-C Versions

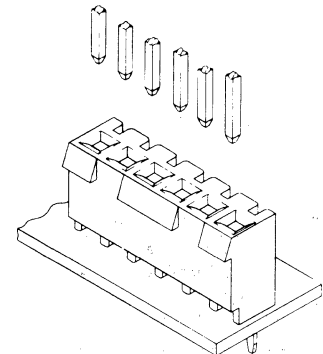
Circuits	Dim. A	Center Hook(s) Location	Circuits	Dim. A	Center Hook(s) Location	Circuits	Dim. A	Center Hook(s) Location
3	.46 ± .010 11,7 ± 0,25	—	7	1.09 ± .012 27,8 ± 0,30	—	10	1.56 ± .012 39,6 ± 0,30	(1) Between Ckts. 5-6
4	.62 ± .010 15,8 ± 0,25	—	8	1.24 ± .012 31,5 ± 0,30	(1) Between Ckts. 4-5	12	1.87 ± .012 47,5 ± 0,30	(2) Between Ckts. 4-5 & 8-9
5	.78 ± .010 19,8 ± 0,25	—	9	1.40 ± .012 35,6 ± 0,30	(1) Between Ckts. 4-5	15	2.34 ± .014 59,4 ± 0,36	(2) Between Ckts. 5-6 & 10-11
6	.93 ± .010 23,6 ± 0,25	—						



Side Entry



Bottom Entry



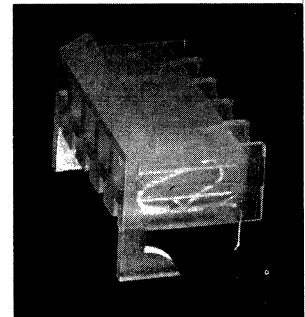
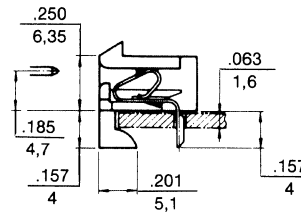
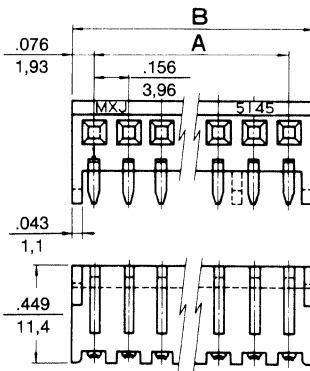
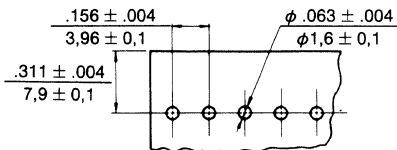
Top Entry

.156" (3,96 mm) Center P.C. Board Connectors



5145-NAH Right Angle Mount

- Mates with Molex 5271 header
- Material: nylon 6/6, 94V-2

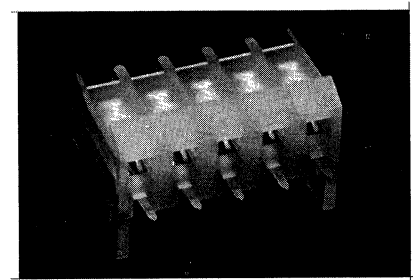
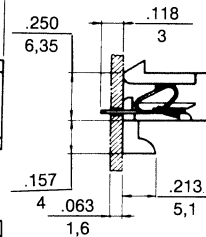
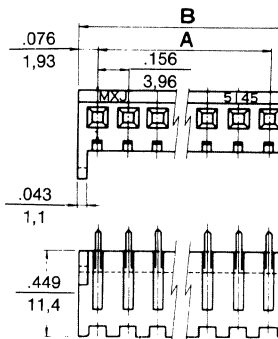
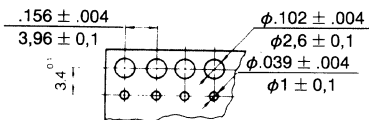


Ordering Information 5145-NAH (Preferred version in the Far East)

Order No. 26-01-1XX6
Replace XX with number of circuits, 02-12

5145-NBH Bottom Entry

- Mates with Molex 41661-ANC header

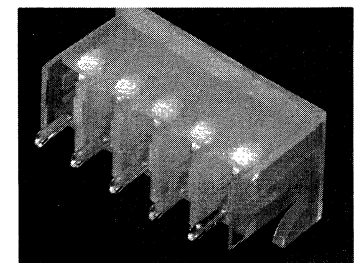
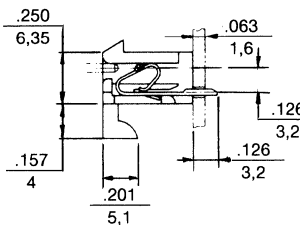
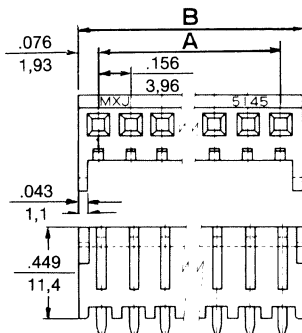
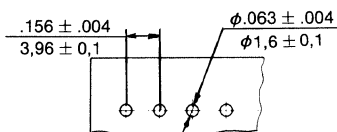


Ordering Information 5145-NBN (Preferred version in the Far East)

Order No. 26-01-1XX8
Replace XX with number of circuits, 02-12

5145-NCH Top Entry

- Mates with Molex 5271 header



Ordering Information 5145-NCH (Preferred version in the Far East)

Order No. 26-01-1XX9
Replace XX with number of circuits, 02-12

Dimensional Information 5145-NAH/NBH/NCH

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 3,96	.308 7,82	5	.624 15,84	.776 19,80	8	1.091 27,72	1.243 31,58	10	1.403 35,64	1.555 39,50
3	.312 7,92	.464 11,78	6	.780 19,80	.931 23,66	9	1.247 31,68	1.399 35,54	12	1.715 43,56	1.870 47,42
4	.468 11,88	.620 15,74	7	.935 23,76	1.087 27,62						



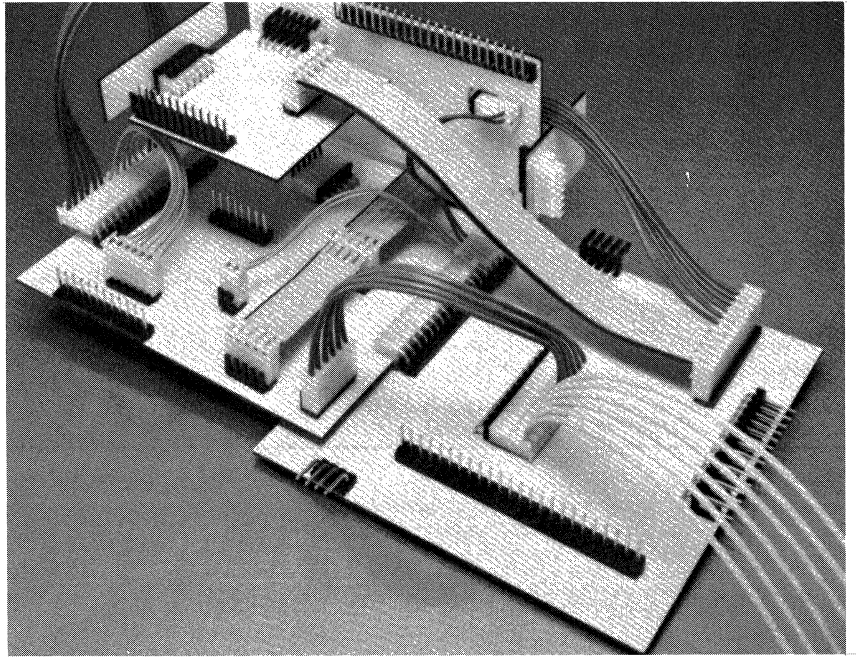
.156" (3,96 mm) Center Breakaway Headers

These Molex low cost, industry compatible .156" headers simplify ordering and inventory management.

With tin or gold plated .045" pins, the headers may be purchased cut to specific circuit size from our factory or in full 24 circuit sticks and broken to desired size(s) by the customer.

E

- 2-24 circuits
- Friction lock and polarizing backwalls available
- .045" (1,14mm) square straight or right angle pins
- .045" (1,14mm) dia. round straight pins
- Stackable end-to-end on .156" (3,96mm) center line
- Voids available in any circuit location(s). Contact factory
- Dimensioned for automated insertion into PC board



Specifications

Materials — Molded glass filled polyester housing, brass pins

Flammability Rating — UL 94V-0

Color — Black

Temperature Rating — -40°F to 221°F
(-40°C to 105°C)

Pin Pushout Force — 3 pounds minimum prior to soldering

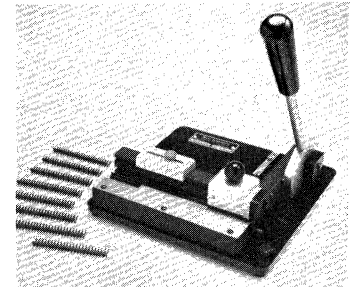
Plating — **Standard Tin:** 200 microinches (5 μm) minimum tin over 100 microinches (2.5 μm) minimum copper

Standard Gold: 20 microinches (.51 μm) gold over 30 microinches (.76 μm) minimum nickel

Agency Approvals — UL File E29179. CSA File LR56881

Application Tooling

- Manual tool is capable of cutting Molex header series 41661, 41662, 41671, 41672, 41681, 41682 to desired circuit size
- Tool indexes and cuts 24-circuit parts to lengths of 2-23 circuits with simple set-up adjustment



Ordering Information

Manual Tool		Replacement Blade	
Eng. No.	Order No.	Eng. No.	Order No.
AM-60594	11-20-0901	AM-60594-18	11-31-7504

Dimensional Information

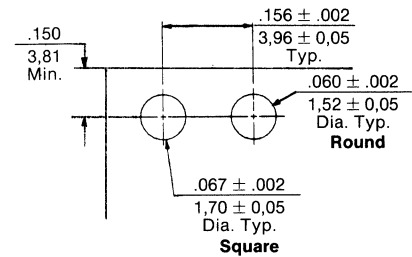
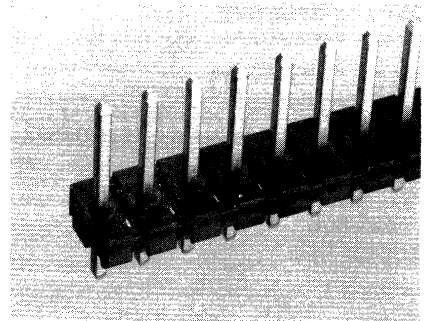
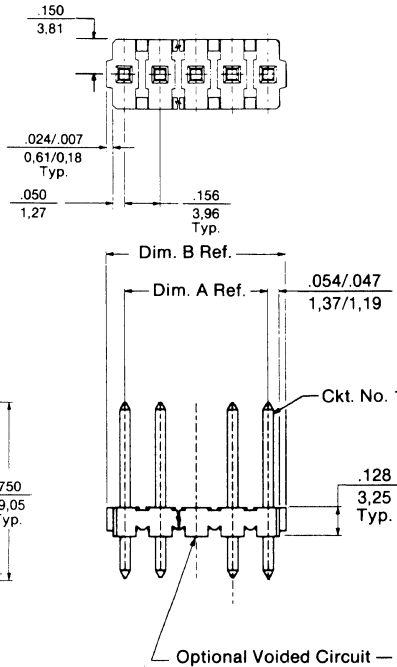
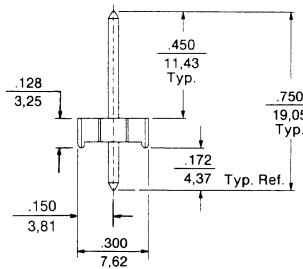
Circuits	Dim. A Ref.	Dim. B Ref.	Circuits	Dim. A Ref.	Dim. B Ref.	Circuits	Dim. A Ref.	Dim. B Ref.	Circuits	Dim. A Ref.	Dim. B Ref.
2	.156 3,96	.267/.310 6,78/7,87	8	1.092 27,74	1.203/1.246 30,56/31,65	14	2.028 51,51	2.139/2.182 54,33/55,42	20	2.964 75,29	3.075/3.118 78,11/79,20
3	.312 7,92	.423/.466 10,74/11,84	9	1.248 31,70	1.359/1.402 34,52/35,61	15	2.184 55,47	2.295/2.338 58,29/59,39	21	3.120 79,25	3.231/3.274 82,07/83,16
4	.468 11,89	.579/.622 14,71/15,80	10	1.404 35,66	1.515/1.558 38,48/39,57	16	2.340 59,44	2.451/2.494 62,26/63,35	22	3.276 83,21	3.387/3.430 86,03/87,12
5	.624 15,85	.735/.778 18,67/19,76	11	1.560 39,62	1.671/1.714 42,44/43,54	17	2.496 63,40	2.607/2.650 66,22/67,31	23	3.432 87,17	3.541/3.586 89,94/91,08
6	.780 19,81	.891/.934 22,63/23,72	12	1.716 43,59	1.827/1.870 46,41/47,50	18	2.652 67,36	2.763/2.806 70,18/71,27	24	3.588 91,14	3.695/3.740 93,85/95,00
7	.936 23,77	1.047/1.090 26,59/27,69	13	1.872 47,55	1.983/2.026 50,37/51,46	19	2.808 71,32	2.919/2.962 74,14/75,23			

.156" (3,96 mm) Center Breakaway Headers



41661 Series Straight Pin Header

- Preferred over Molex 2461 and 2402 (09-67-1XX3 and 09-64-1XX1)
- .045" (1,4mm) square pins or .045" diameter round pins
- 94V-0 material
- 2-24 circuits available



Recommended PC Board Hole Layout
41661 and 41701

Ordering Information 41661

Square Pin	Order No.
Tin	26-48-1XX1
Gold	26-48-2XX1

Replace XX with number of circuits desired, 02-24

- The 24 circuit header is the U.S. Standard Product available through Molex franchised distributors.

Ordering Information 41701

Round Pin	Order No.
Tin	26-51-0XX1
Gold	26-51-2XX0

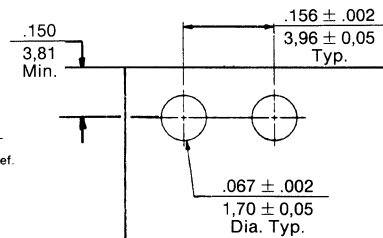
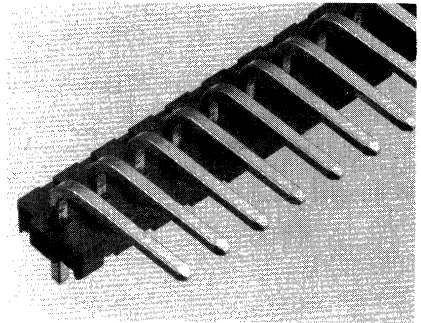
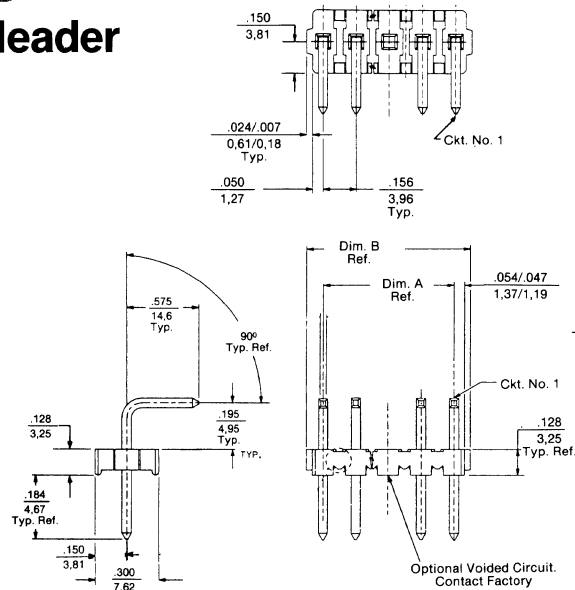
Replace XX with number of circuits desired, 02-24

NOTES:

- Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
- Refer to page 30E for Dim. A and Dim. B

41662 Series Right Angle Pin Header

- Preferred over 2373 (09-66-1XX1)
- 94V-0 material
- 2-24 circuits available



Recommended P.C. Board Hole Layout
41662

Ordering Information 41662

Square Pin	Order No.
Tin	26-48-1XX2
Gold	26-48-2XX2

Replace XX with number of circuits desired, 02-24

- The 24 circuit header is the U.S. Standard Product available through Molex franchised distributors.

NOTES:

- Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
- Refer to page 30E for Dim. A and Dim. B

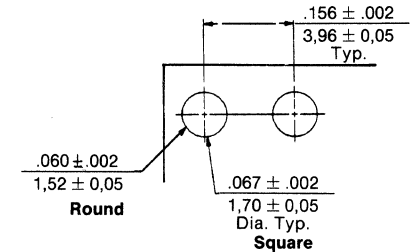
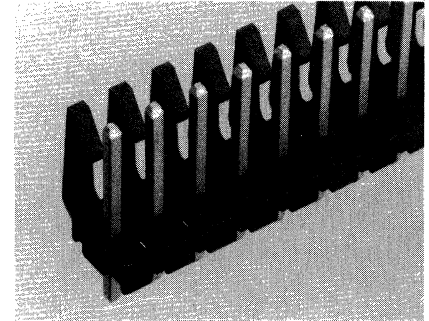
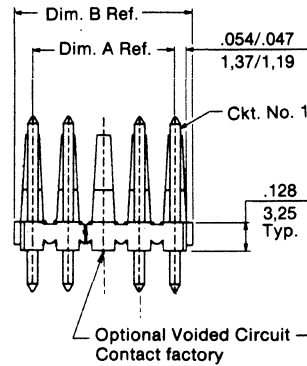
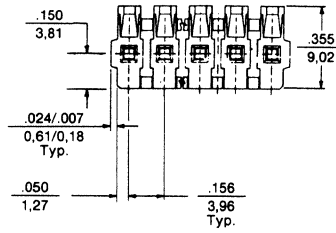
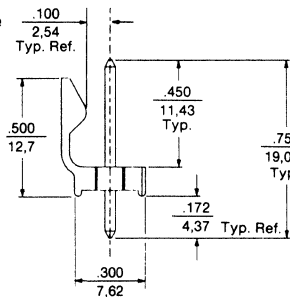


.156" (3,96 mm) Center Pin Breakaway Headers



41671 Series Straight Pin Friction Lock Header

- Preferred over Molex 2630 and 2391 (09-74-1XX1 and 09-65-1XX1)
- .045" (1,14mm) square pins or .065" diameter round pins
- 94V-0 material
- 2-24 circuits available



Recommended PC Board Hole Layout
41671 and 41711

Ordering Information 41671

Square Pin	Order No.
Tin	26-48-1XX5
Gold	26-48-2XX5

Replace XX with number of circuits desired, 02-24

- The 24 circuit header is the U.S. Standard Product available through Molex franchised distributors.

Ordering Information 41711

Round Pin	Order No.
Tin	26-51-0XX2
Gold	26-51-2XX2

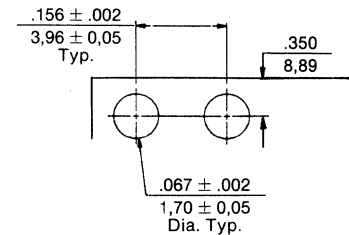
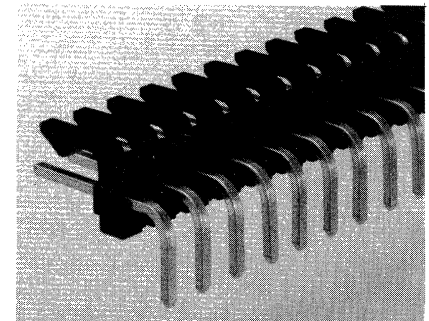
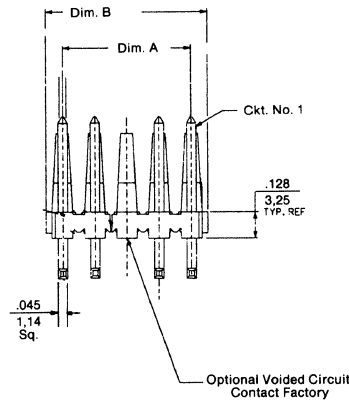
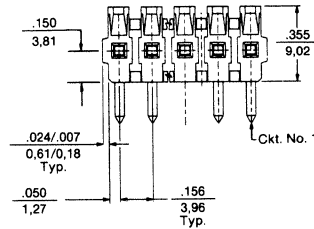
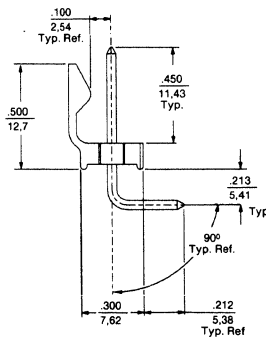
Replace XX with number of circuits desired, 02-24

NOTES:

1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 30E for Dim. A and Dim. B

41672 Series Right Angle Pin Friction Lock Header

- Edgemount only
- Preferred over Molex 2420 (09-75-1XX1)
- 94V-0 material
- 2-24 circuits available



Recommended PC Board Hole Layout
41672
Edge Mount Only

Ordering Information 41672

	Order No.
Tin	26-48-1XX6
Gold	26-48-2XX6

Replace XX with number of circuits desired, 02-24

- The 24 circuit header is the U.S. Standard Product available through Molex franchised distributors.

NOTES:

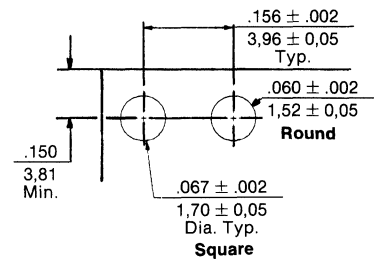
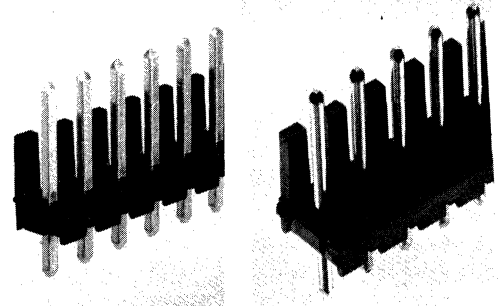
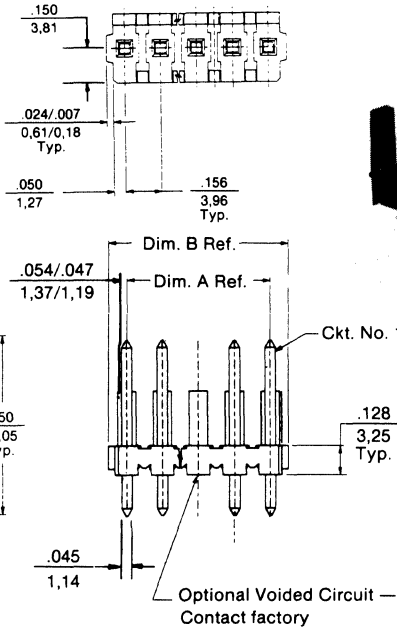
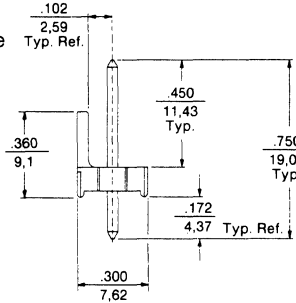
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 30E for Dim. A and Dim. B

.156" (3,96 mm) Center Breakaway Headers



41681 Series Straight Pin Polarizing Wall Header

- Preferred over Molex 2403 and 6393 (09-60-1XX1 and 09-88-1XX1)
- .045" (1,14mm) square pins or .045" diameter round pins
- 94V-0 material
- 2-24 circuits available



Ordering Information 41681

Square Pin	Order No.
Tin	26-48-1XX3
Gold	26-48-2XX3

Replace XX with number of circuits desired, 02-24

- The 24 circuit header is the U.S. Standard Product available through Molex franchised distributors.

Ordering Information 41721

Round Pin	Order No.
Tin	26-51-0XX3
Gold	26-51-2XX3

Replace XX with number of circuits desired, 02-24

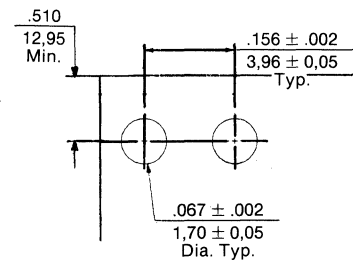
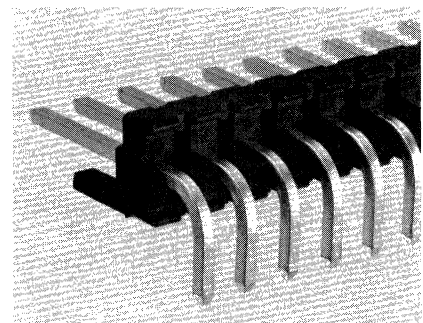
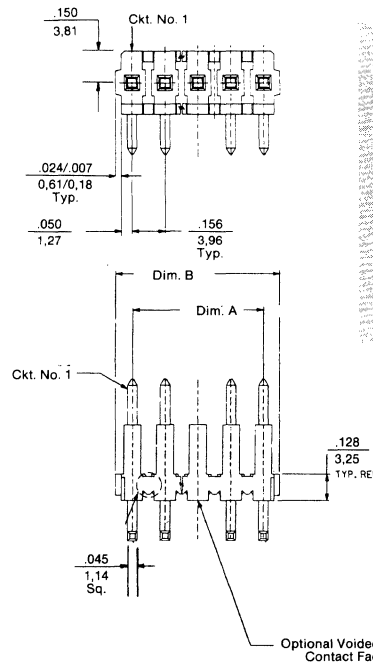
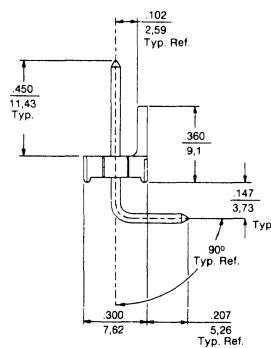
Recommended PC Board Hole Layout
41681 and 41721

NOTES:

1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 30E for Dim. A and Dim. B

41682 Series Right Angle Pin Polarizing Wall Header

- Preferred over Molex 2534 (09-88-2XX1)
- 94V-0 material
- 2-24 circuit available



Ordering Information 41682

	Order No.
Tin	26-48-1XX4
Gold	26-48-2XX4

Replace XX with number of circuits desired, 02-24

- The 24 circuit header is the U.S. Standard Product available through Molex franchised distributors.

Recommended PC Board Hole Layout
41682

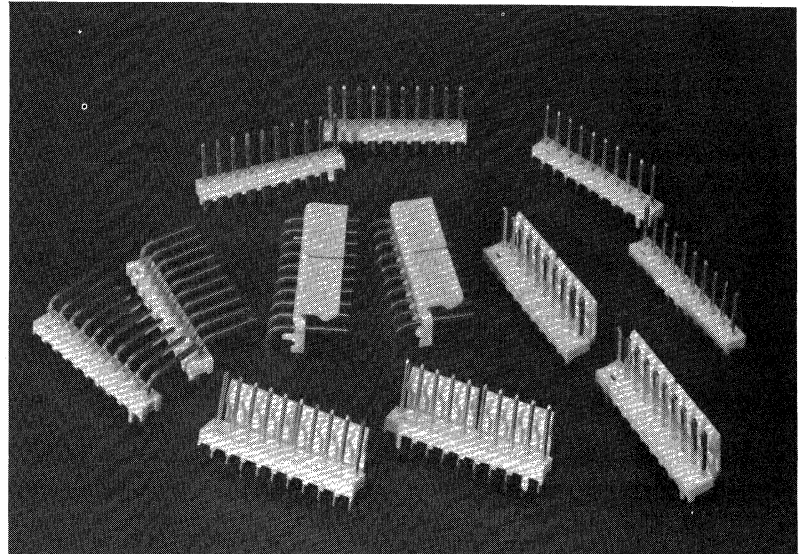
NOTES:

1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 30E for Dim. A and Dim. B

E

.156" (3,96 mm) Center Headers

- 2-18 circuits
- Optional printed circuit board hold down pegs
- Friction lock backwall and flat versions available
- .045" (1,14mm) square straight or right angle pins
- .045" (1,14mm) dia. round straight pins
- Stackable end-to-end on .156" (3,96mm) center line
- Voids available in any circuit location(s). Contact factory
- Dimensioned for automated insertion into PC board



E

Specifications

Materials:

Molded glass filled polyester housing, brass pins

Flammability Rating:

UL 94V-0

Color:

Natural White

Temperature Rating:

-40°F to 221°F
(-40°C to 105°C)

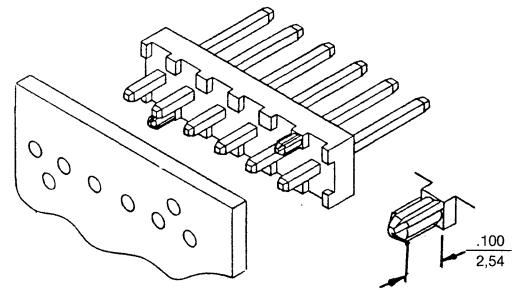
Pin Pushout Force:

3 pounds minimum prior to soldering

Plating:

Standard Tin — 200 micro-inches (5μm) minimum tin over 100 microinches (2,5μm) minimum copper

Standard Gold — 20 micro-inches (.51μm) gold over 30 microinches (.76μm) minimum nickel



Dimensions

Circuits	Dim. A	Dim. B	No. of Pegs	Circuits	Dim. A	Dim. B	No. of Pegs	Circuits	Dim. A	Dim. B	No. of Pegs
2	156 ± .002 3,96 ± 0,05	.306 7,77	1	8	1,092 ± .005 27,74 ± 0,13	1,242 31,55	2	14	2,028 ± .007 51,51 ± 0,18	2,178 55,32	2
3	.312 ± .003 7,92 ± 0,08	.462 11,73	2	9	1,248 ± .005 31,70 ± 0,13	1,398 35,51	2	15	2,184 ± .007 55,47 ± 0,18	2,334 59,28	2
4	.468 ± .003 11,89 ± 0,08	.618 15,70	2	10	1,404 ± .005 35,66 ± 0,13	1,554 39,47	2	16	2,340 ± .007 59,44 ± 0,18	2,490 63,25	2
5	.624 ± .004 15,85 ± 0,10	.774 19,66	2	11	1,560 ± .006 39,62 ± 0,15	1,710 43,43	2	17	2,496 ± .008 63,40 ± 0,20	2,646 67,21	2
6	.780 ± .004 19,81 ± 0,10	.930 23,62	2	12	1,716 ± .006 43,59 ± 0,15	1,866 47,40	2	18	2,652 ± .008 67,36 ± 0,20	2,802 71,17	2
7	.936 ± .004 23,77 ± 0,10	1,086 27,58	2	13	1,872 ± .006 47,55 ± 0,15	2,022 51,36	2				

.156" (3,96 mm) Center Headers

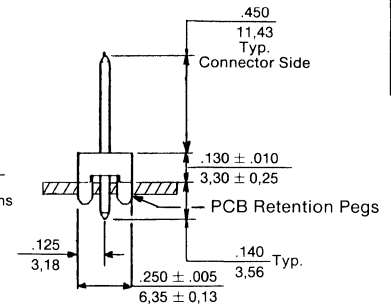
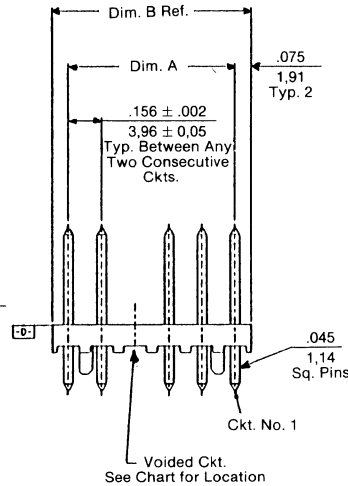
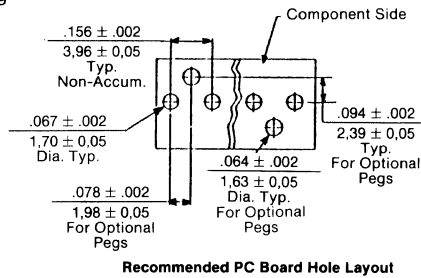


42471 Series Straight Square Pin Header with Pegs

- Preferred over Molex 2461 and 2402 (09-67-1XX3 and 09-64-1XX1)
- .045" (1,14mm) square pins
- Polyester 94V-0 material
- 2-18 circuits
- Pegs provide retention to printed circuit board during handling and soldering

Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Ordering Information

	Order No.
Tin	26-64-2XX0
Gold	26-65-2XX0

Replace XX with number of circuits desired, 02-18

NOTES:

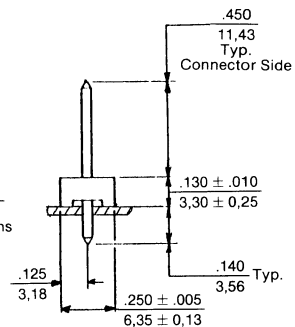
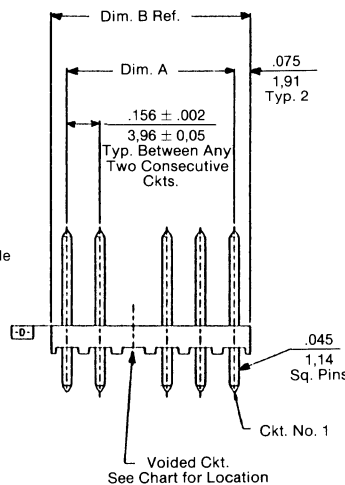
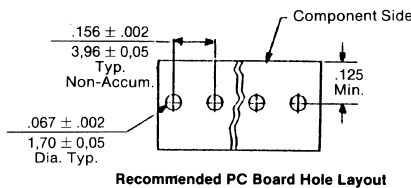
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 34E for Dim. A and Dim. B
3. Two pegs for ckt. sizes 3-18. One peg for ckt. size 2.

41771 Series Straight Square Pin Header

- Preferred over Molex 2461 and 2402 (09-67-1XX3 and 09-64-1XX1)
- .045" (1,14mm) square pins
- Polyester 94V-0 material
- 2-18 circuits

Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Ordering Information

	Order No.
Tin	• 26-60-2XX0
Gold	• 26-61-2XX0

Replace XX with number of circuits desired, 02-18

• U.S. Standard Product, available through Molex franchised distributors.

NOTES:

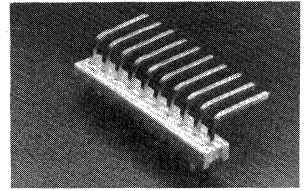
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 34E for Dim. A and Dim. B

.156" (3,96 mm) Center Header



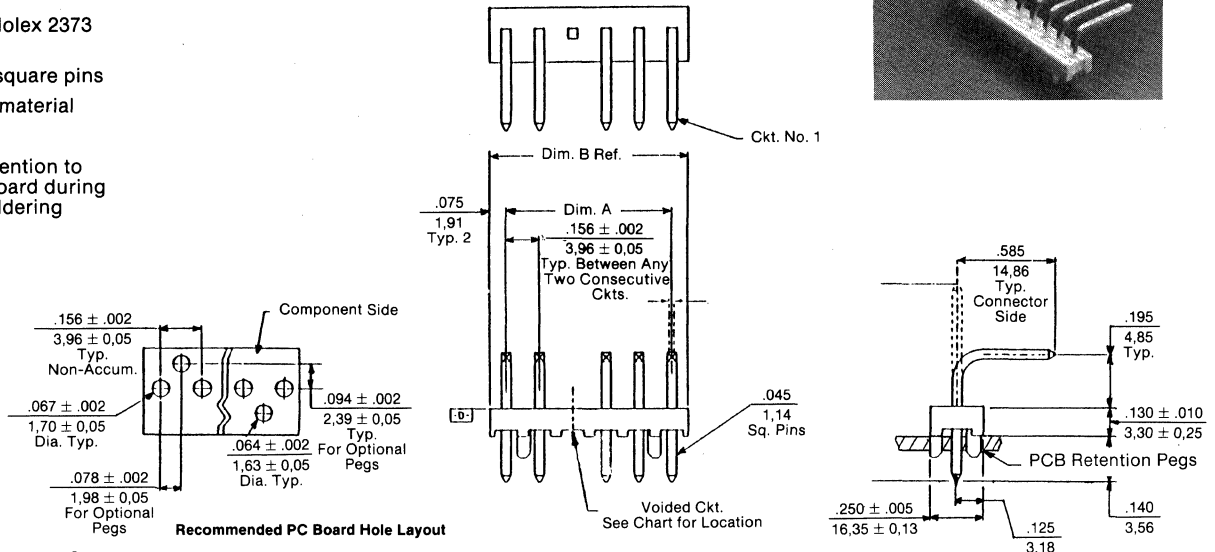
42472 Series Right Angle Square Pin Header with Pegs

- Preferred over Molex 2373 (09-66-1XX1)
- .045" (1,14mm) square pins
- Polyester 94V-0 material
- 2-18 circuits
- Pegs provide retention to printed circuit board during handling and soldering



Mates with

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Ordering Information

	Order No.
Tin	26-64-3XX0
Gold	26-65-3XX0

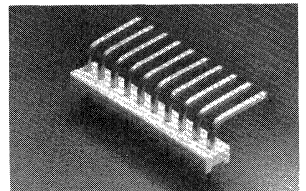
Replace XX with number of circuits desired, 02-18

NOTES:

1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 34E for Dim. A and Dim. B
3. Two pegs for ckt. sizes 3-18.
One peg for ckt. size 2.

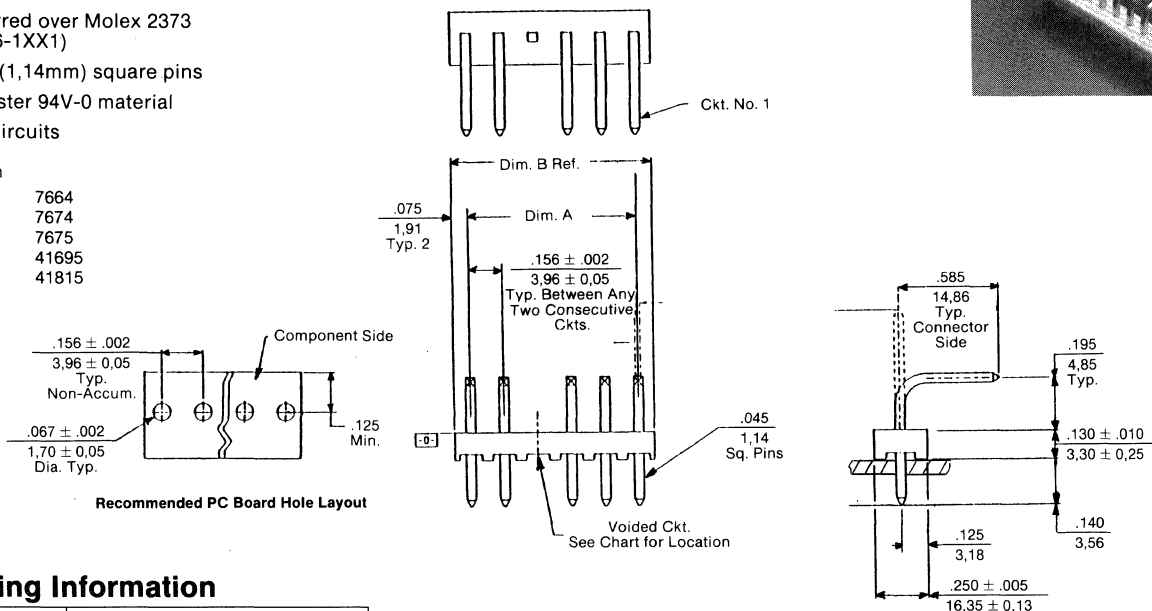
41772 Series Right Angle Square Pin Header

- Preferred over Molex 2373 (09-66-1XX1)
- .045" (1,14mm) square pins
- Polyester 94V-0 material
- 2-18 circuits



Mates with

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Ordering Information

	Order No.
Tin	• 26-60-3XX0
Gold	• 26-61-3XX0

Replace XX with number of circuits desired, 02-18

• U.S. Standard Product, available through Molex franchised distributors.

NOTES:

1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 34E for Dim. A and Dim. B

.156" (3,96 mm) Center Headers

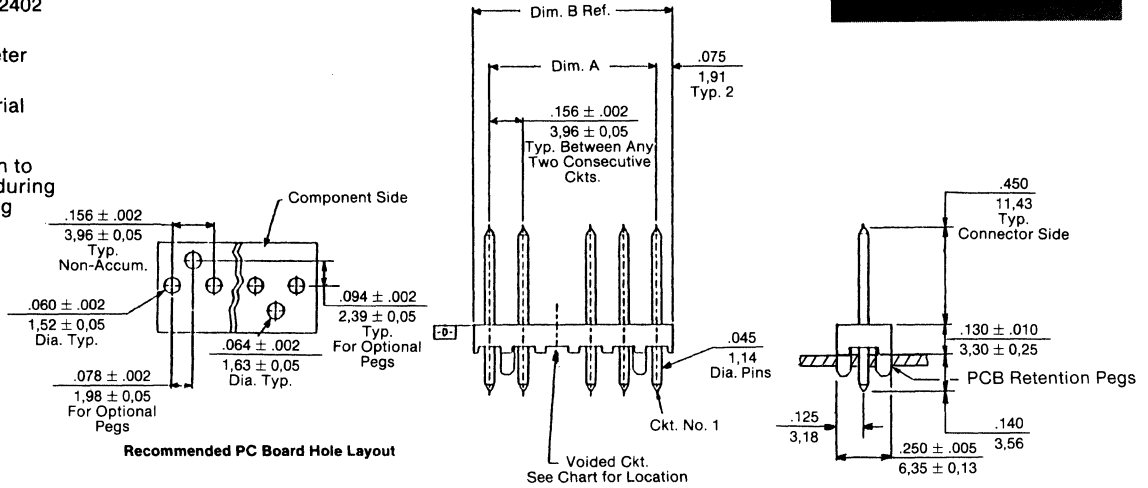


42441 Series Straight Round Pin Header with Pegs

- Preferred over Molex 2402 (09-64-1XX1)
- .045" (1,14mm) diameter round pins
- Polyester 94V-0 material
- 2-18 circuits
- Pegs provide retention to printed circuit board during handling and soldering

Mates with

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Ordering Information

	Order No.
Tin	26-64-0XX0
Gold	26-65-0XX0

Replace XX with number of circuits desired, 02-18

NOTES:

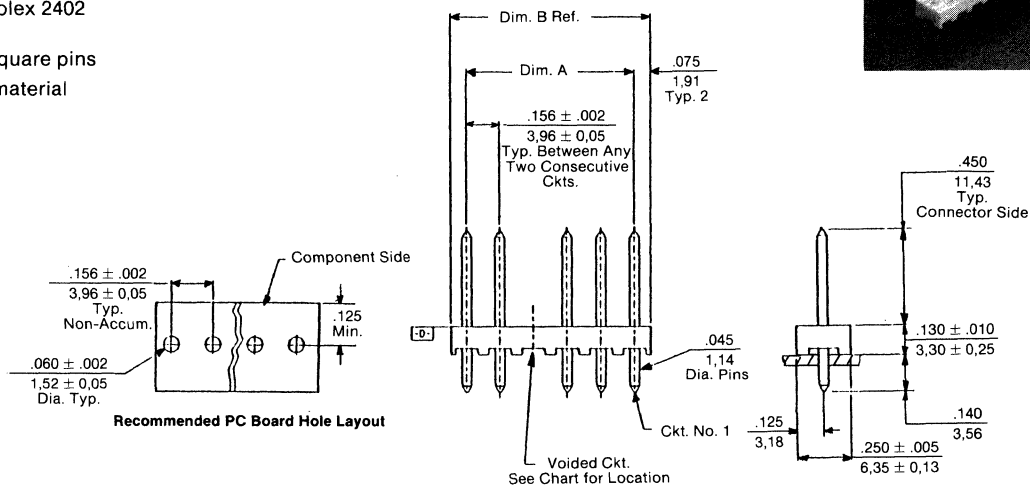
- Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
- Refer to page 34E for Dim. A and Dim. B
- Two pegs for ckt. sizes 3-18. One peg for ckt. size 2.

41741 Series Straight Round Pin Header

- Preferred over Molex 2402 (09-64-1XX1)
- .045" (1,14mm) square pins
- Polyester 94V-0 material
- 2-18 circuits

Mates with

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Ordering Information

	Order No.
Tin	• 26-60-0XX0
Gold	• 26-61-0XX0

Replace XX with number of circuits desired, 02-18

• U.S. Standard Product, available through Molex franchised distributors.

NOTES:

- Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
- Refer to page 34E for Dim. A and Dim. B

.156" (3,96 mm) Center Headers

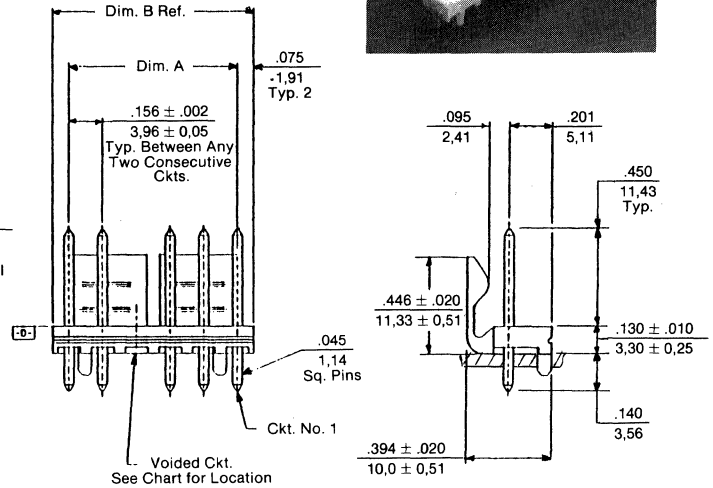
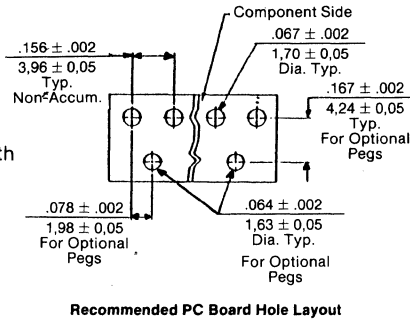


42491 Series Straight Square Pin Locking Header with Pegs

- Preferred over Molex 2630 and 2391 (09-74-1XX1 and 09-65-1XX1)
- .045" (1,14mm) square pins
- Polyester 94V-0 material
- 2-18 circuits
- Pegs provide retention to printed circuit board during handling and soldering
- Provides left to right polarization when mated with 41695 .156" crimp housing with the optional polarizing ribs

Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Ordering Information

	Order No.
Tin	26-64-4XX0
Gold	26-65-4XX0

Replace XX with number of circuits desired, 02-18

NOTES:

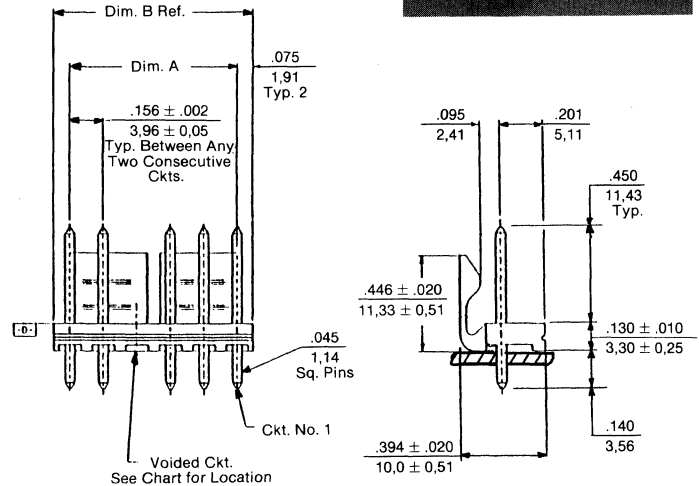
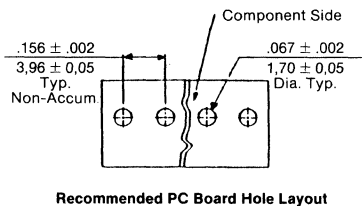
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 34E for Dim. A and Dim. B
3. Two pegs for ckt. sizes 3-18.
One peg for ckt. size 2.

41791 Series Straight Square Pin Locking Header

- Preferred over Molex 2630 and 2391 (09-74-1XX1 and 09-65-1XX1)
- .045" (1,14mm) square pins
- Polyester 94V-0 material
- 2-18 circuits
- Provides left to right polarization when mated with 41695 .156" crimp housing with the optional polarizing ribs

Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Ordering Information

	Order No.
Tin	• 26-60-4XX0
Gold	• 26-61-4XX0

Replace XX with number of circuits desired, 02-18

• U.S. Standard Product, available through Molex franchised distributors.

NOTES:

1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 34E for Dim. A and Dim. B

.156" (3,96 mm) Center Headers

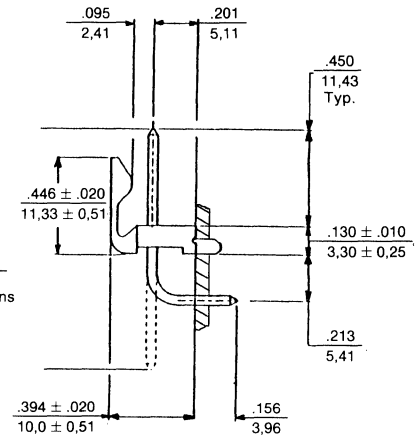
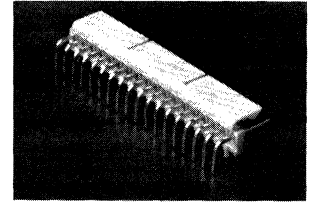
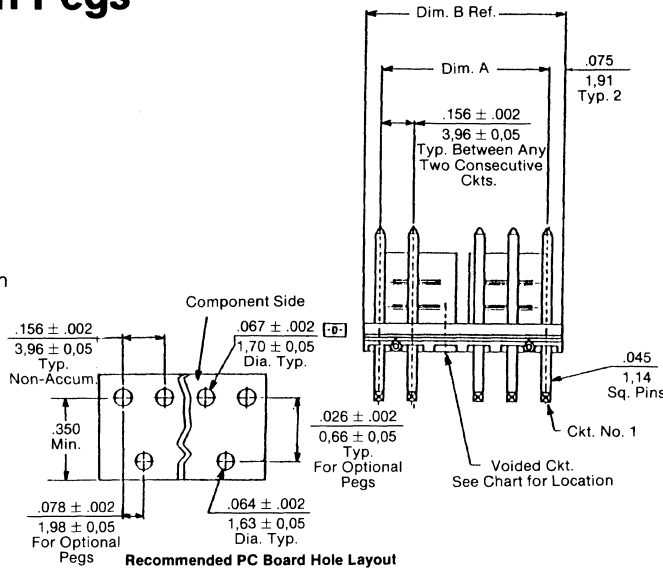


42492 Series Right Angle Square Pin Header with Pegs

- Preferred over Molex 2420 (09-75-1XX1)
- .045" (1,14mm) square pins
- Polyester 94V-0 material
- 2-18 circuits
- Pegs provide retention to printed circuit board during handling and soldering
- Provides left to right polarization when mated with 41695 .156" crimp housing with the optional polarizing ribs

Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Ordering Information

	Order No.
Tin	26-64-5XX0
Gold	26-65-5XX0

Replace XX with number of circuits desired, 02-18

NOTES:

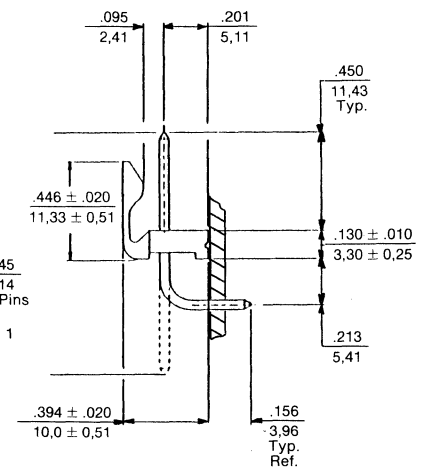
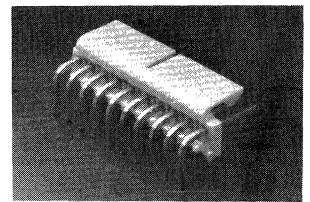
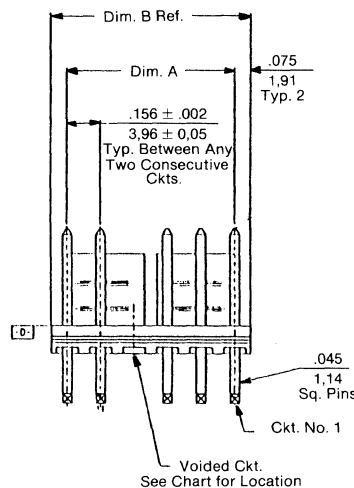
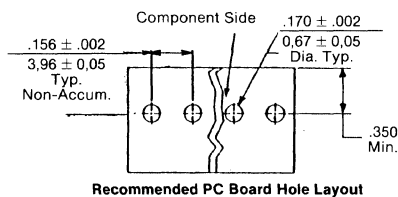
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 34E for Dim. A and Dim. B
3. Two pegs for ckt. sizes 3-18. One peg for ckt. size 2.

41792 Series Right Angle Square Pin Header

- Preferred over Molex 2420 (09-75-1XX1)
- .045" (1,14mm) square pins
- Polyester 94V-0 material
- 2-18 circuits
- Provides left to right polarization when mated with 41695 .156" crimp housing with the optional polarizing ribs

Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Ordering Information

	Order No.
Tin	• 26-60-5XX0
Gold	• 26-61-5XX0

Replace XX with number of circuits desired, 02-18

• U.S. Standard Product, available through Molex franchised distributors.

NOTES:

1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 34E for Dim. A and Dim. B



.156" (3,96 mm) Center Headers

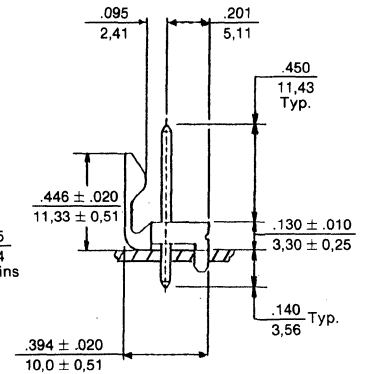
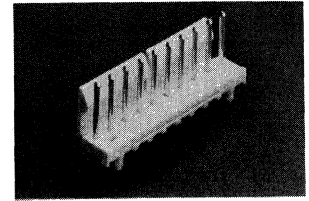
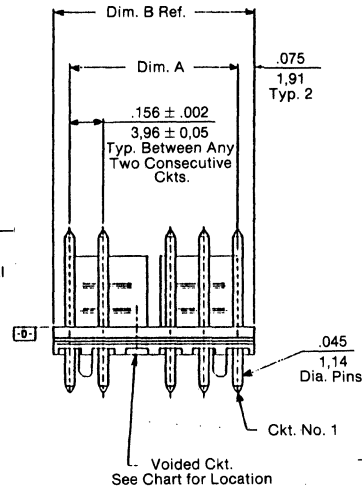
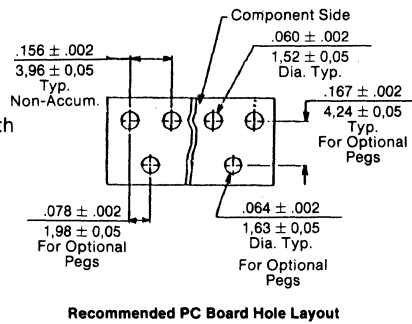


42461 Series Straight Round Pin Locking Header with Pegs

- Preferred over Molex 2391 (09-65-1XX1)
- .045" (1,14mm) diameter round pins
- Polyester 94V-0 material
- 2-18 circuits
- Pegs provide retention to printed circuit board during handling and soldering
- Provides left to right polarization when mated with 41695 .156" crimp housing with the optional polarizing ribs

Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Ordering Information

	Order No.
Tin	26-64-1XX0
Gold	26-65-1XX0

Replace XX with number of circuits desired, 02-18

NOTES:

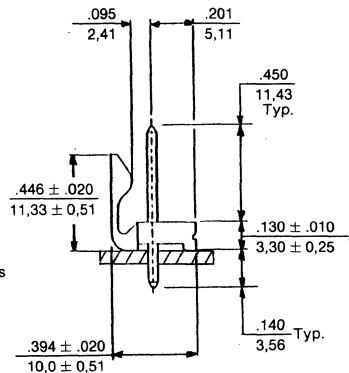
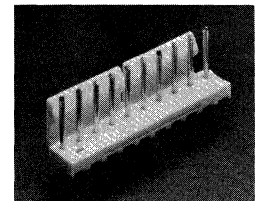
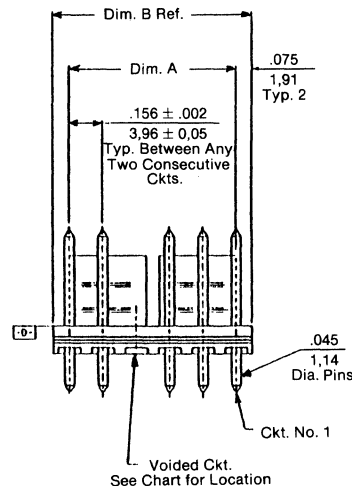
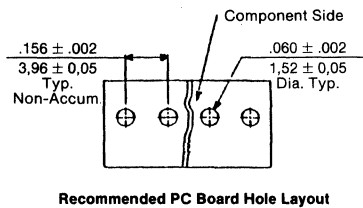
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 34E for Dim. A and Dim. B
3. Two pegs for ckt. sizes 3-18. One peg for ckt. size 2.

41761 Series Straight Round Pin Locking Header

- Preferred over Molex 2391 (09-65-1XX1)
- .045" (1,14mm) diameter round pins
- Polyester 94V-0 material
- 2-18 circuits
- Provides left to right polarization when mated with 41695 .156" crimp housing with the optional polarizing ribs

Mates with:

2139	7664
2145	7674
3069	7675
6442	41695
7660	41815



Ordering Information

	Order No.
Tin	• 26-60-1XX0
Gold	• 26-61-1XX0

Replace XX with number of circuits desired, 02-18

• U.S. Standard Product, available through Molex franchised distributors.

NOTES:

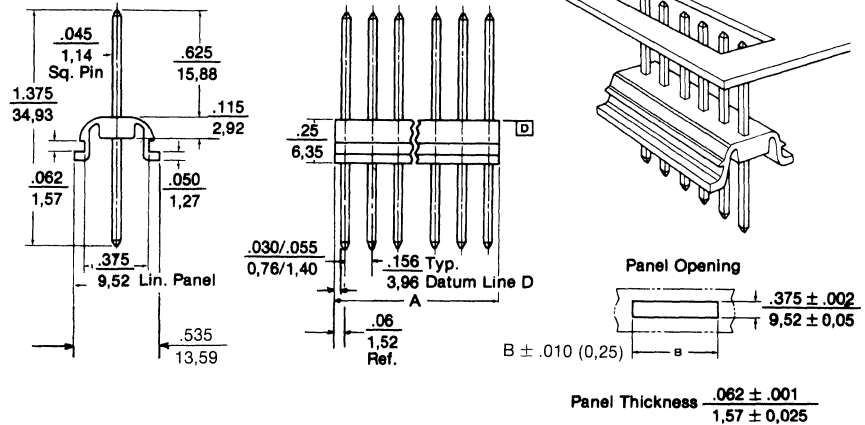
1. Circuit number designation is for ordering purposes only. Check corresponding circuit designation on mating connector.
2. Refer to page 34E for Dim. A and Dim. B

.156" (3,96 mm) Center Headers



2220 Series Chassis Mount Header

- 2-18 circuits
- Mounts in chassis .062" thick
- .045" (1,14mm) square brass pins
- 94V-2 nylon housing
- Mates with Molex .156" (3,96mm) centerline connectors



Dimensional Information 2220

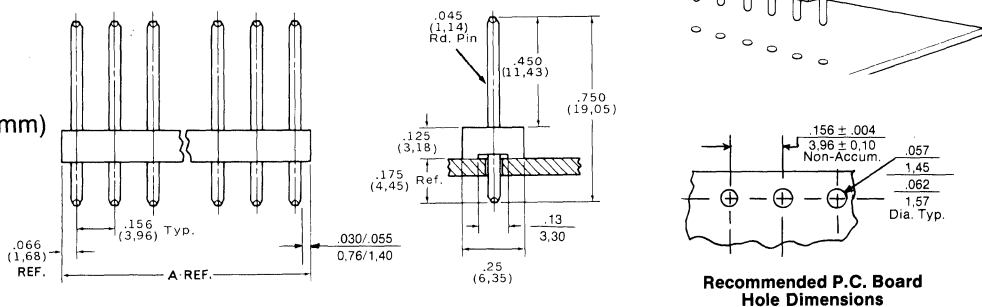
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.290 7,37	.302 7,67	6	.914 23,22	.926 23,52	10	1.538 39,07	1.550 39,37	13	2.006 50,95	2.108 53,54	16	2.474 62,84	2.486 63,14
3	.446 11,33	.458 11,63	7	1.070 27,18	1.082 27,48	11	1.694 43,03	1.706 43,33	14	2.162 54,91	2.174 55,22	17	2.630 66,80	2.642 67,11
4	.602 15,29	.614 15,60	8	1.226 31,14	1.238 31,45	12	1.850 46,99	1.862 47,29	15	2.318 58,88	2.330 59,18	18	2.786 70,76	2.798 71,07
5	.758 19,25	.770 19,56	9	1.382 35,10	1.394 35,41									

Ordering Information 2220

Tin Order No. 09-57-1XX5
Gold Order No. 09-78-1XX1
Replace XX with number of circuits, 02-18

3192 Series Round Pin Straight Header

- 2-18 Circuits
- .045" (1,14mm) straight round brass pins
- 94V-2 nylon housing
- Mates with Molex .156" (3,96mm) center connectors
- Stackable end-to-end



Dimensional Information 3192

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.288 7,32	5	.756 19,20	8	1.224 31,09	11	1.692 42,98	14	2.160 54,86	17	2.628 66,75
3	.444 11,28	6	.912 23,17	9	1.380 35,05	12	1.848 46,94	15	2.316 58,83	18	2.784 70,71
4	.600 15,24	7	1.068 27,13	10	1.536 39,01	13	2.004 50,90	16	2.472 62,79		

Ordering Information 3192 (Preferred version in Europe and Far East)

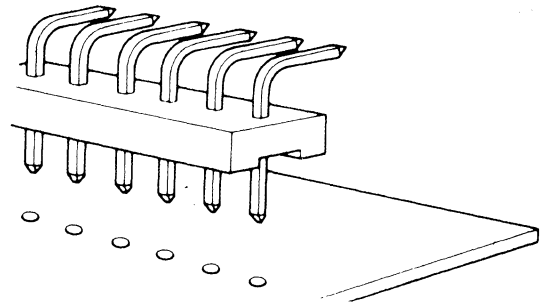
Tin Order No. 26-20-2XX1
Gold Order No. 26-23-2XX1
Replace XX with number of circuits, 02-18

.156" (3,96 mm) Center Headers

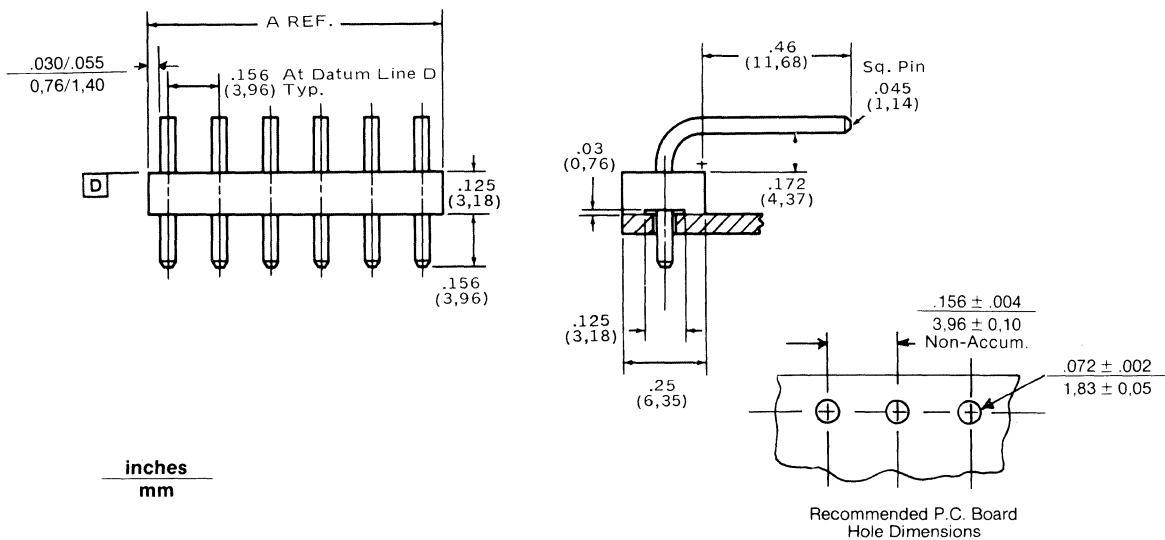


3246 Series Square Pin Right Angle Header

- 2-18 circuits
- .045" right angle square pins
- 94V-2 nylon insulator
- Mates with Molex .156" (3,96mm) center connectors



E



Dimensional Information 3246

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.288 7,32	5	.756 19,20	8	1.224 31,09	11	1.692 42,98	14	2.160 54,86	17	2.628 66,75
3	.444 11,28	6	.912 23,17	9	1.380 35,05	12	1.848 46,94	15	2.316 58,83	18	2.784 70,71
4	.600 15,24	7	1.068 27,13	10	1.536 39,01	13	2.004 50,90	16	2.472 62,70		

Ordering Information 3246

(Preferred version in Europe and the Far East)

Tin Order No.* 26-10-2XX1
Replace XX with number of circuits, 02-18

*Contact Factory Representative for Gold Plated 3246 Information

.156" (3,96 mm) Center Square Pin Polarizing Header

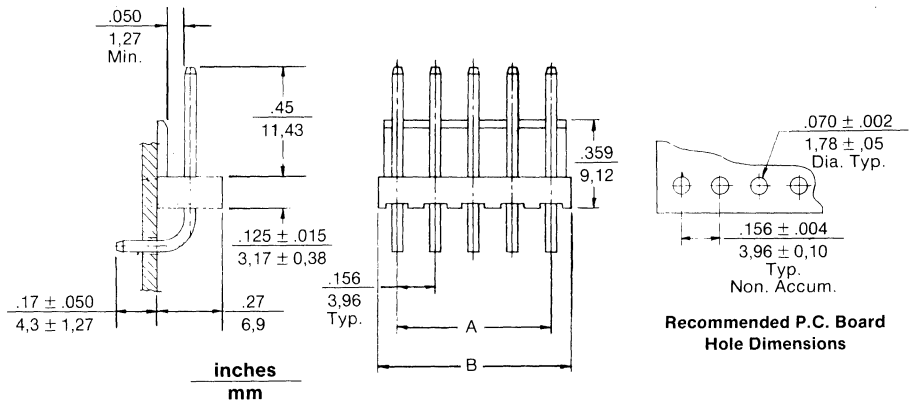


Preferred Version in Europe and the Far East

3243 Series

Square Pin Right Angle Polarizing Wall

- .045" (1,14mm) square pins, brass
- 94V-2 nylon housing
- .00030" (0,0076mm) tin over copper or .000020" min. (0,0005mm) gold over nickel



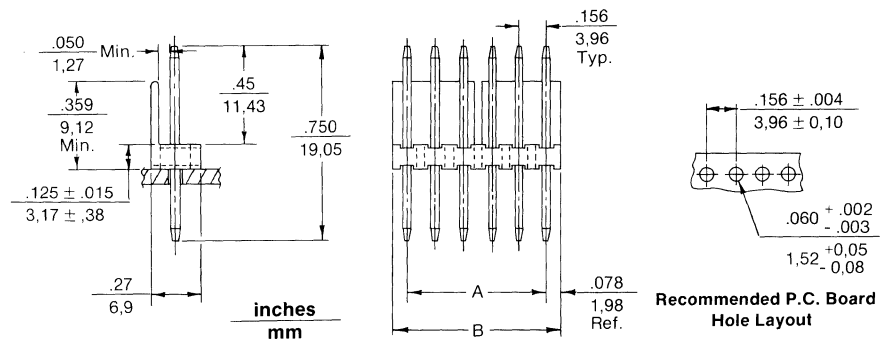
Ordering Information

Circuits	Tin Order No.	Gold Order No.	Circuits	Tin Order No.	Gold Order No.	Circuits	Tin Order No.	Gold Order No.
2	26-17-1021	26-26-1021	8	26-17-1081	26-26-1081	13	26-17-1131	26-26-1131
3	26-17-1031	26-26-1031	9	26-17-1091	26-26-1091	14	26-17-1141	26-26-1141
4	26-17-1041	26-26-1041	10	26-17-1101	26-26-1101	15	26-17-1151	26-26-1151
5	26-17-1051	26-26-1051	11	26-17-1111	26-26-1111	16	26-17-1161	26-26-1161
6	26-17-1061	26-26-1061	12	26-17-1121	26-26-1121	17	26-17-1171	26-26-1171
7	26-17-1071	26-26-1071						

3190 Series

Straight Round Pin Polarizing Wall

- .045" (1,14mm) dia. round pins, brass
- Pre-tinned or gold plate, .000030" (0,0008) min. over .000060" (0,0015) min. nickel
- Pin pushout force: 3 lbs. min.



Ordering Information

Pre-Tinned Brass Order No. 26-19-2XX1
Gold Order No. 26-22-2XX1
Replace XX with number of circuits, 02-18

Assemblies over 5 circuits have slot in polarizing wall

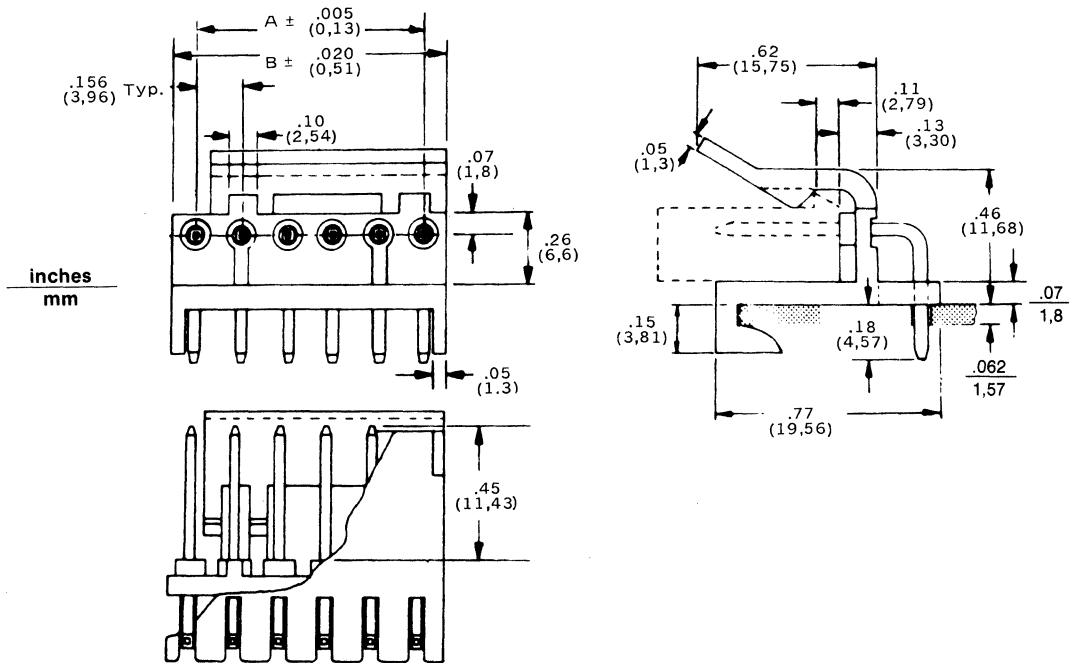
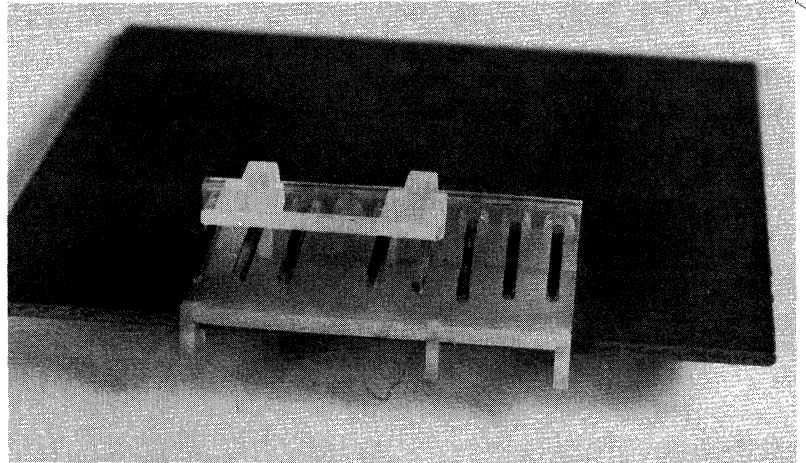
Dimensional Information 3243/3190

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.156 3,96	.312 7,92	7	.936 23,77	1.092 27,74	11	1.560 39,62	1.716 43,59	15	2.184 55,47	2.340 59,44
3	.312 7,92	.468 11,89	8	1.092 27,74	1.248 31,70	12	1.716 43,59	1.872 47,55	16	2.340 59,44	2.496 63,40
4	.468 11,89	.624 15,85	9	1.248 31,70	1.404 35,66	13	1.872 47,55	2.028 51,51	17	2.496 63,40	2.652 67,36
5	.624 15,85	.780 19,81	10	1.404 35,66	1.560 39,62	14	2.028 51,51	2.184 55,47	18	2.652 67,36	2.808 71,32
6	.780 19,81	.936 23,77									

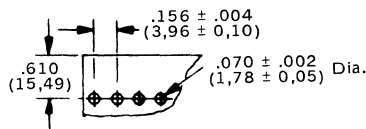
.156" (3,96 mm) Center Headers

A-4042 Series Right Angle Friction Lock

- 6, 7 & 9 circuits
- 94V-2 nylon housing
- Mates with 2139 & 3069
- .045" (1,14mm) square wire pins
- Voids available in various locations - Contact factory



P.C. Board Hole Dimensions



Dimensional Information A-4042

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
6	.780 19,81	.93 23,6	9	1.248 31,70	1.40 35,6
7	.936 23,77	1.09 27,7	9 (a)	1.248 31,70	1.40 35,6

(a) Number four circuit void

Ordering Information A-4042

Circuits	Tin	Gold	Circuit	Tin	Gold
6	09-81-1061	Contact	9	09-81-1091	Contact
7	09-81-1071	Factory	9 (a)	09-81-1094	Factory

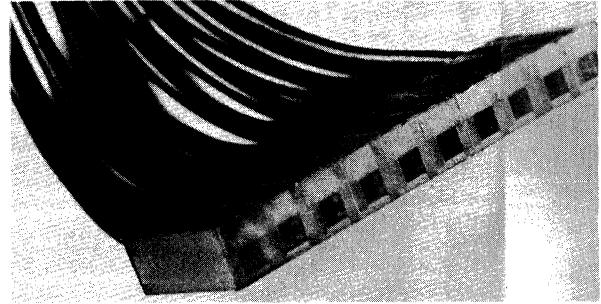
(a) Number four circuit void.

.200" (5,08 mm) Center Crimp Terminal Housings

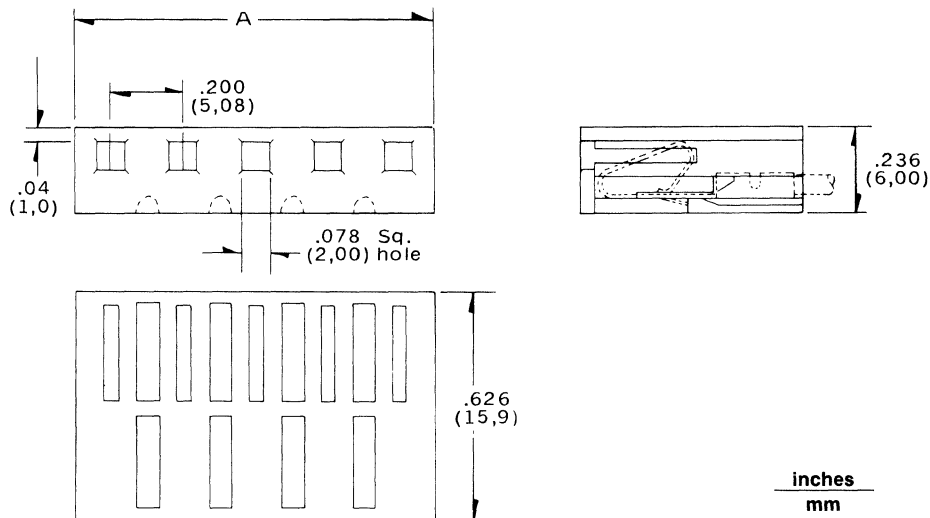


3001 Series

- Mates with .045" (1,14mm) round or square pins
- Accepts Molex double cantilever crimp terminals, see page 24E
- 94V-2 nylon standard, 94V-0 optional
- 1-20 circuits available
- Mates with Molex KK .200" (5,08mm) center headers or staked pins
- Available with polarizing peg on sidewall. Contact factory for 3001P
- Accommodates polarizing key 2561-1 and polarizing peg 2560-2



Mating headers:
3003 3061
3008



Dimensional Information 3001

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
1	.200 5,08	5	1.000 25,40	9	1.800 45,72	12	2.400 60,96	15	3.00 76,20	18	3.600 91,44
2	.400 10,16	6	1.200 30,48	10	2.000 50,80	13	2.600 66,04	16	3.200 81,28	19	3.800 96,52
3	.600 15,24	7	1.400 35,56	11	2.200 55,88	14	2.800 71,12	17	3.400 86,36	20	4.000 101,60
4	.800 20,32	8	1.600 40,64								

Ordering Information 3001

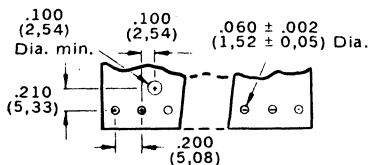
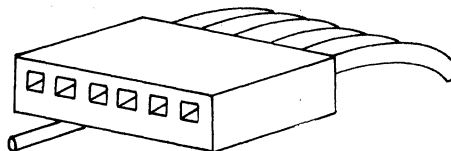
Order No. 10-01-1XX4
Replace XX with number of circuits, 01-20

.200" (5,08 mm) Center Crimp Terminal Housing

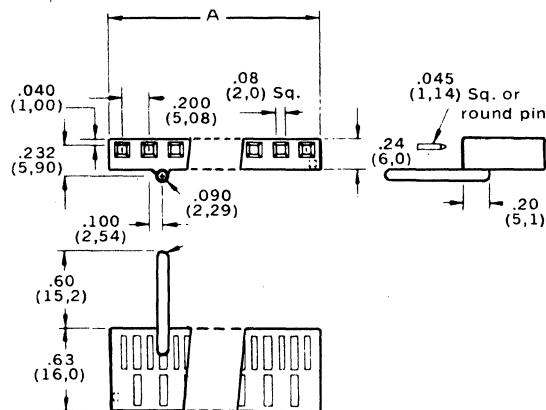


3011 Series

- Molded in polarizing peg on side of housing
- Accepts Molex crimp type terminals 2478, 2578 and 2878. Order separately, page 24E
- Mates with Molex series 3003 headers and .045" (1,14mm) staked pins
- 94V-2 nylon standard; 94V-1 or 94V-0 flame retardant material are optional
- Available with shorter polarizing peg. Contact factory for 3480



P.C. Board Hole Dimensions



Inches
mm

Dimensional Information 3011

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.400 10,16	6	1.200 30,48	9	1.800 45,72	12	2.400 60,96	15	3.000 76,20	18	3.600 91,44
3	.600 15,24	7	1.400 35,56	10	2.000 50,80	13	2.600 66,04	16	3.200 81,28	19	3.800 96,52
4	.800 20,32	8	1.600 40,64	11	2.200 55,88	14	2.800 71,12	17	3.400 86,36	20	4.000 101,60
5	1.000 25,40										

Ordering Information 3011

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2 (a)	• 10-13-1024	6 (b)	• 10-13-1064	10 (b)	• 10-13-1106	14 (b)	10-13-1144	18 (b)	10-13-1184
3 (b)	• 10-13-1034	7 (b)	10-13-1075	11 (b)	• 10-13-1114	15 (b)	10-13-1154	19 (b)	10-13-1194
4 (b)	• 10-13-1044	8 (b)	10-13-1085	12 (b)	• 10-13-1125	16 (b)	10-13-1164	20 (b)	10-13-1204
5 (b)	• 10-13-1055	9 (b)	• 10-13-1094	13 (b)	• 10-13-1134	17 (b)	10-13-1174		

Polarizing peg between circuits:
(a) 1 and 2 (b) 2 and 3

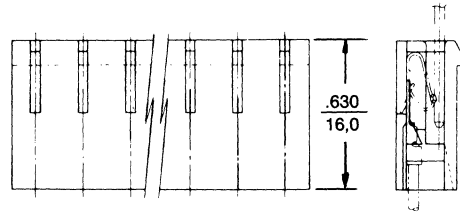
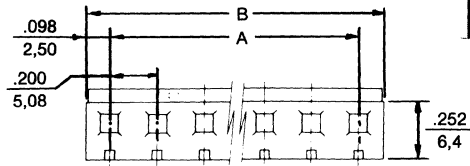
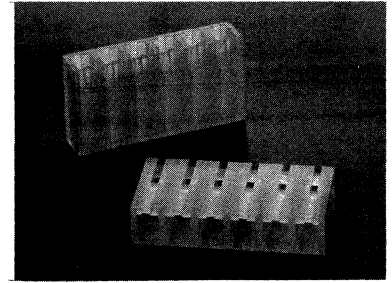
• U.S. Standard Product, available through Molex franchised distributors.

.200" (5,08 mm) Center Connector



5058-N Housing

- 94V-2 nylon, 6/6
- Mates with 5282-NA or .045" (1,14mm) staked pins
- For use with Molex terminals 5167, 5168, 2478G, GL and 2578G, GL
- Locking ramp
- Accommodates polarizing key 2560-1 and polarizing peg 2560-2



Dimensional Information 5058-N

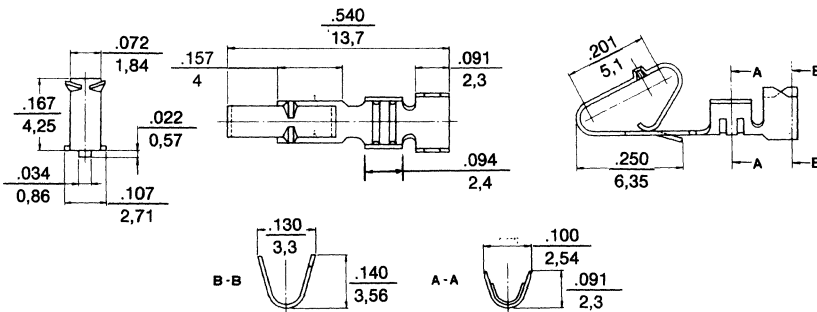
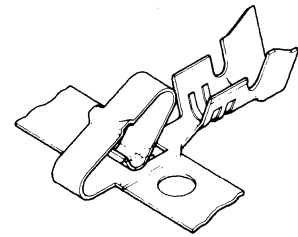
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.200 5,08	.397 10,08	4	.600 15,24	.797 20,24	6	1.000 25,4	1.197 30,40	8	1.400 35,56	1.597 40,56
3	.400 10,16	.597 15,16	5	.800 20,32	.997 25,32	7	1.200 30,48	1.397 35,48	9	1.600 40,64	1.797 45,64

Ordering Information 5058-N (Preferred version in the Far East)

Order No. 10-01-5XX2
Replace XX with number of circuits, 02-09

5167/5168 Cat Ear Terminals

- For use with 5058-N housing



Ordering/Dimensional Information 5167/5168 (Preferred version in the Far East)

Order No.	Eng. No.	Wire Accommodations	Insulation Outside Dia.	Form	Material	Automatic Tooling		Hand Tool
						Press	Crimp Die	
08-70-0012	5167	AWG #18-#24	2,5mm Max.	Chain	Pre-Plated Tin	M15A	JM5868A	JHTR2445A
08-70-0013	5167			Loose				
08-70-0018	5168	AWG #22-#28	1,7mm Max.	Chain				
08-70-0019	5168			Loose				

.200" (5,08 mm) Center P.C. Board Connectors

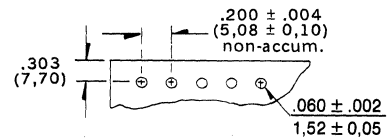
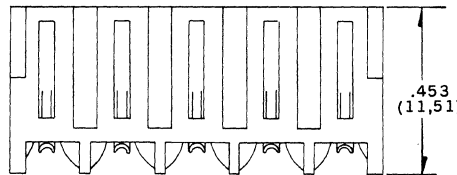
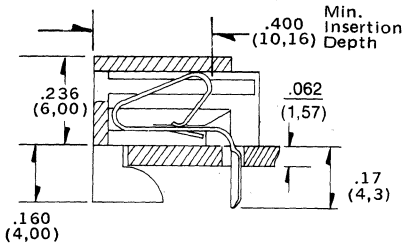
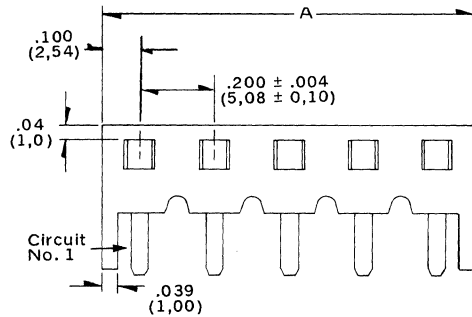


3002-A Series Right Angle Mount Style A

- 2-20 Circuits
- Right angle mount
- 94V-2 nylon housing
- Mates with Molex .200" (5,08mm) center headers 3003, 3008, 2599
- Terminal plating: .000040" tin/lead / .000080" copper min. (1,0 microns tin/lead / 2,0 microns copper min.)

E

or
.000020" gold / .000030" nickel
min. (0,5 microns gold/.0,75
microns nickel min.)



P.C. Board Hole Dimensions

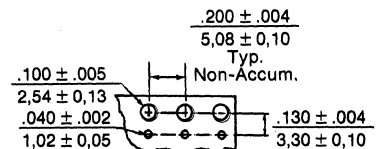
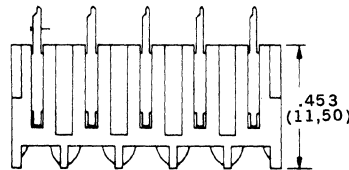
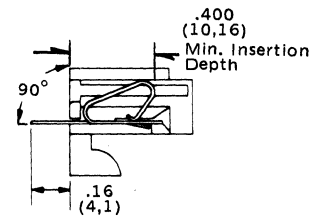
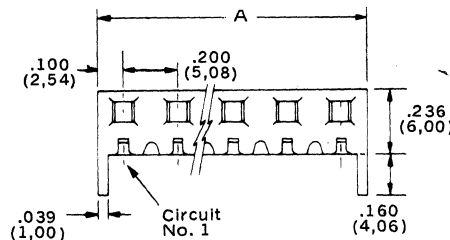
Ordering Information 3002-A

Tin Order No. 10-10-1XX1
Gold Order No. 10-10-1XX4
Replace XX with number of circuits, 02-20

inches
mm

3002-B Series Bottom Entry Connectors Style B

- 2-20 Circuits
- Bottom entry connectors
- 94V-2 nylon housing
- Mates with Molex .200" (5,08mm) headers, 3003, 3008 and 2599
- Same plating as "A" version



Ordering Information 3002-B

Order No. 10-02-1XX2
Replace XX with number of circuits, 02-20

Dimensional Information 3002-A/3002-B Use Table on Next Page

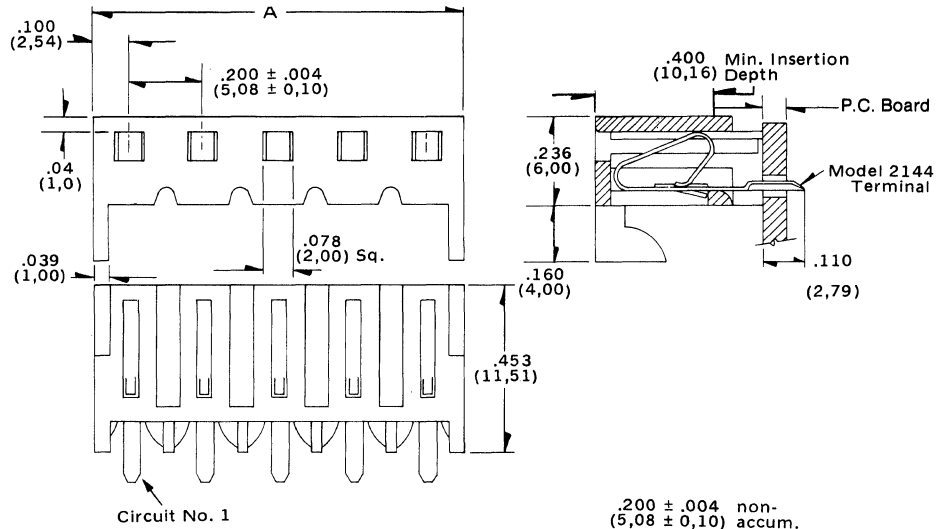
.200" (5,08 mm) Center P.C. Board Connectors



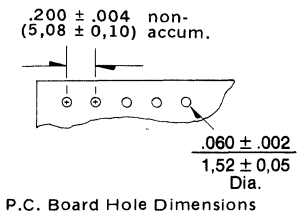
3002-C Series

Top Entry Connectors Style C

- 2-20 Circuits
- Top entry mount
- 94V-2 nylon housing
- Mates with Molex .200" (5,08mm) center headers 3003, 3008 and 2599
- Same plating as "A & B" versions



Inches
mm

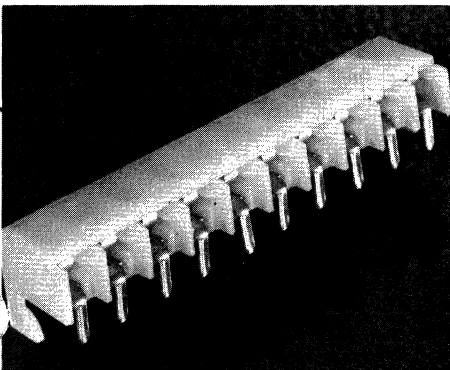


Ordering Information 3002-C

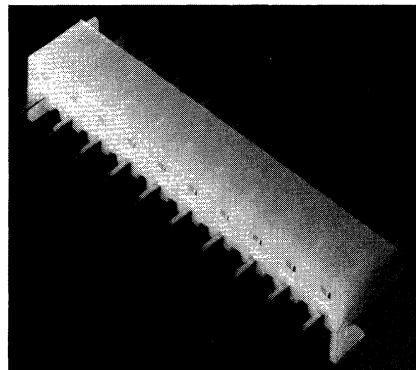
Tin Order No. 10-10-1XX3
Gold Order No. 10-10-1XX8
Replace XX with number of circuits, 02-20

Dimensional Information 3002-A-B-C Versions

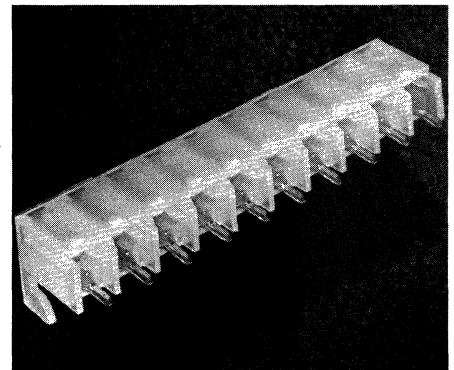
Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.400 10,16	6	1.200 30,48	9	1.800 45,72	12	2.400 60,96	15	3.000 76,20	18	3.600 91,44
3	.600 15,24	7	1.400 35,56	10	2.000 50,80	13	2.600 66,04	16	3.200 81,28	19	3.800 96,52
4	.800 20,32	8	1.600 40,64	11	2.200 55,88	14	2.800 71,12	17	3.400 86,36	20	4.000 101,60
5	1.000 25,40										



A



B



C

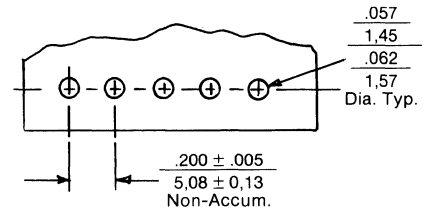
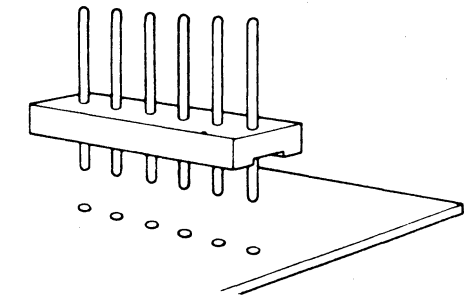
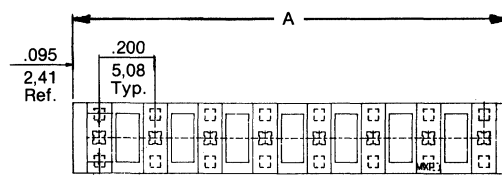
.200" (5,08 mm) Center Headers



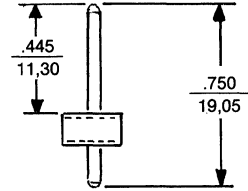
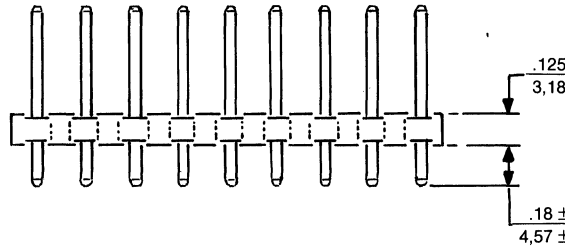
3003 Series Round Pin Straight Header

- 2-15 circuits
- .045" straight round wire pins
- 94V-2 nylon, V-1 or V-0 available
- Mates with Molex .200" (5,08mm) center connectors
- Available with voids - contact factory
- Molded insulator Mating connectors

3001 5058-N
3007 3002
3011



Recommended P.C. Board Hole Dimensions



Dimensional Information 3003

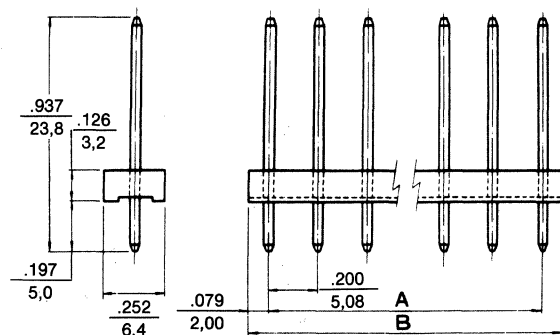
Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.390 9,91	4	.790 20,07	6	1.190 30,23	8	1.590 40,39	10	1.990 50,55	12	2.390 60,71	14	2.790 70,87	15	2.990 75,95
3	.590 14,99	5	.990 25,15	7	1.390 35,31	9	1.790 45,47	11	2.190 55,63	13	2.590 65,79				

Ordering Information 3003

Tin Order No. 10-08-1XX1
Gold Order No. 10-45-1XX1
Replace XX with number of circuits, 02-15

5077-NC Square Pin Straight Header

- Mates with 2767-NBH



Ordering Information 5077-NC

(Preferred version in the Far East)

Circuits	Order No.	Circuits	Order No.
3	10-02-4034	5	10-02-4054
4	10-02-4044	6	10-02-4064

Dimensional Information 5077-NC

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
3	.400 ± .006 10,16 ± 0,15	.557 14,16	5	.800 ± .010 20,32 ± 0,25	.957 24,32
4	.600 ± .008 15,24 ± 0,15	.757 19,24	6	1.000 ± .010 25,4 ± 0,25	1.157 29,40

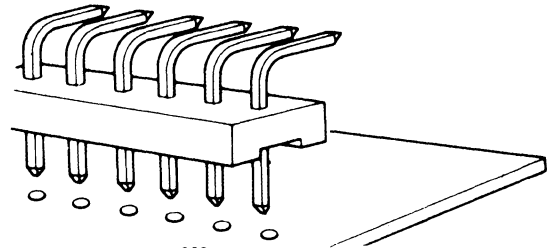
.200" (5,08 mm) Center Headers



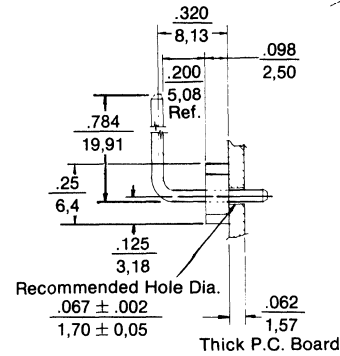
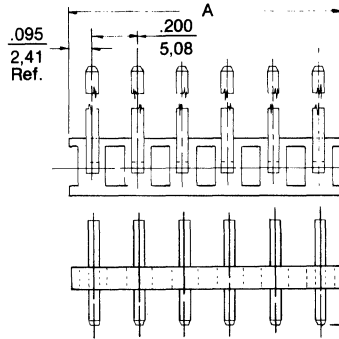
3061 / 2673 Series

Square Pin Right Angle Headers

- 2-15 circuits
- .045" square pins
- 94V-2 nylon housing
- Pin material - brass
- Mates with Molex 3001

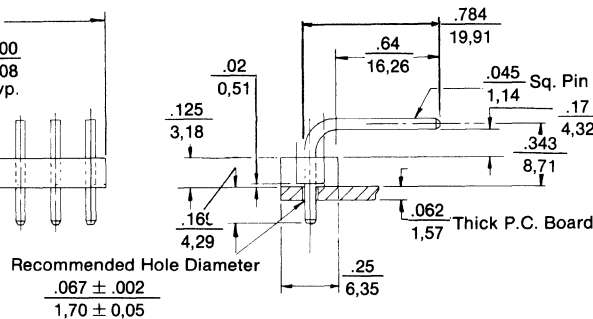
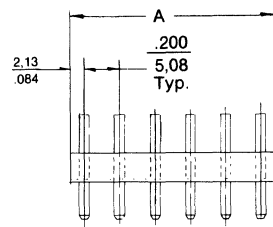


3061



Inches
mm

2673



Dimensional Information 3061

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.390 9,91	5	.990 25,15	8	1.590 40,39	10	1.990 50,55	12	2.390 60,71	14	2.790 70,89
3	.590 14,99	6	1.190 30,23	9	1.790 45,47	11	2.190 55,57	13	2.590 65,79	15	2.990 75,99
4	.790 20,07	7	1.390 35,31								

Ordering Information 3061 (Preferred version in Europe)

Circuits	Tin	Gold	Circuits	Tin	Gold	Circuits	Tin	Gold	Circuits	Tin	Gold
2	10-06-1025	38-00-2012	6	10-06-1065	38-00-2016	10	10-06-1105	38-00-2020	13	10-06-1135	38-00-2023
3	10-06-1035	38-00-2013	7	10-06-1075	38-00-2017	11	10-06-1115	38-00-2021	14	10-06-1145	38-00-2024
4	10-06-1045	38-00-2014	8	10-06-1085	38-00-2018	12	10-06-1125	38-00-2022	15	10-06-1155	38-00-2025
5	10-06-1055	38-00-2015	9	10-06-1095	38-00-2019						

Dimensional Information 2673

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
2	.368 9,35	5	.968 24,59	8	1.568 39,83	10	1.968 49,99	12	2.368 60,15	14	2.768 70,31
3	.568 14,43	6	1.168 29,67	9	1.788 44,91	11	2.168 55,07	13	2.568 65,23	15	2.968 75,39
4	.768 19,51	7	1.368 34,75								

Ordering Information 2673 (Preferred version in the Americas)

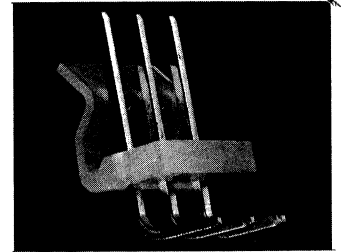
Order No. 10-06-1XX1
Replace XX with number of circuits, 02-15

E

.200" (5,08 mm) Center Headers

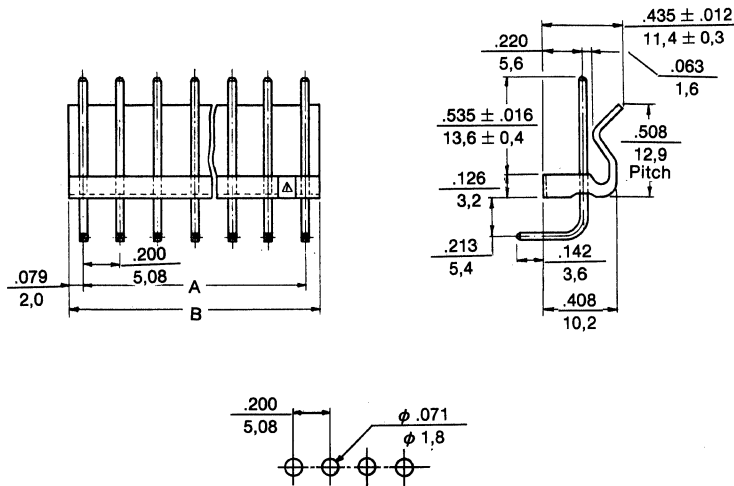


5282-NA Square Pin Right Angle Header



- 2-7 circuits
- Mates with 5058-N housing using 5167/5168, 2478 or 2578 terminals

E



Dimensional Information 5282-NA

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.200 5,08	.357 9,08	4	.600 15,24	.757 19,24	6	1,000 25,4	1,157 29,4
3	.400 10,16	.557 14,16	5	.800 20,32	.957 24,32	7	1,200 30,48	1,357 34,48

Ordering Information 5282-NA (Preferred version in the Far East)

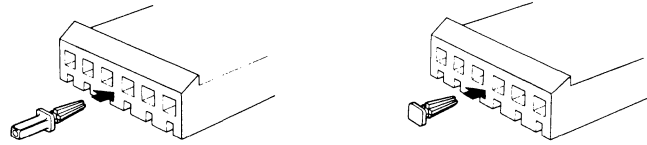
Order No. 10-33-1XX2
Replace XX with number of circuits, 02-07

Polarizing Keys and Pegs

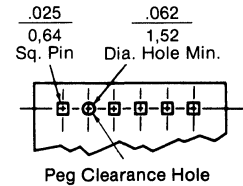
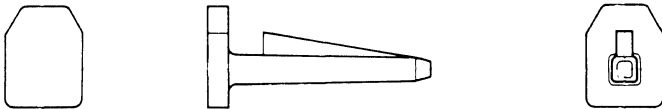


.098" (2,50 mm)
.100" (2,54 mm)

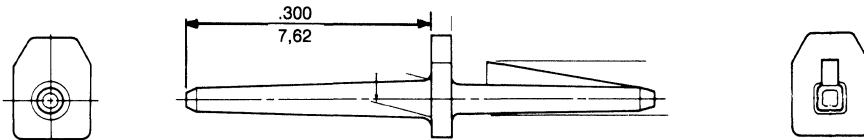
- Snap fit into KK Series housings
- Polarizing peg or key
- 94V-2 nylon material



Polarizing Key



Polarizing Peg



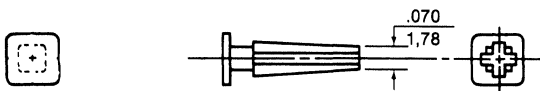
Ordering Information

	Eng. No.	Order No.	Fits Connector Housings
Polarizing Key	4161-1	• 15-04-9209	2695, 4025, 4455, 5051, 6471
Polarizing Peg	4161-2	• 15-04-9210	

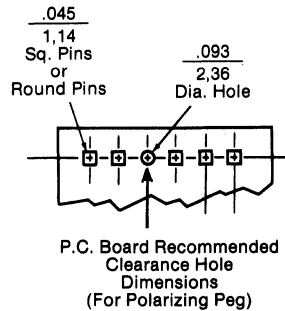
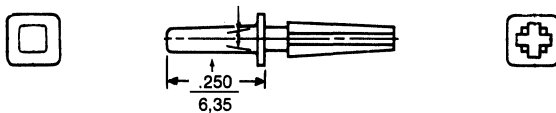
.200" (5,08 mm)
.156" (3,96 mm)

inches
mm

Polarizing Key



Polarizing Peg



Ordering Information

	Eng. No.	Order No.	Fits Connector Housings
Polarizing Key	2560-1	• 15-04-0219	2139, 2145
Polarizing Peg	2560-2	• 15-04-0220	
Polarizing Key	7580-1	89-00-3001	6442
Polarizing Peg	7580-2	89-00-3002	6442

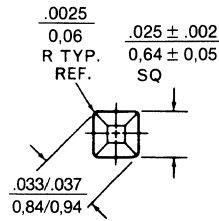
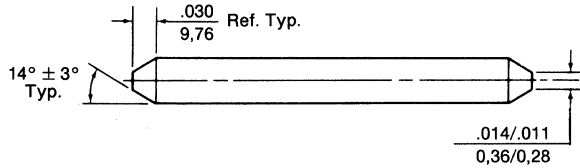
• U.S. Standard Product, available through Molex franchised distributors.



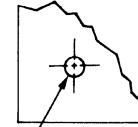


.025" (0,64 mm) and .045" (1,14 mm) Square Pins

.025" (0,64 mm) Square Pins



Recommended Hole for Press Fitting
Pin into .062" thick P.C. Board



$\frac{.030 \pm .002}{0,76 \pm 0,05}$	PUNCH
or	
$\frac{.031 \pm .0015}{0,787 \pm .038}$	DRILL
$\frac{.0295^{+ .003}}{0,75 - 0,05}$	Plated Thru Hole

inches
mm

2766 Series Hard Drawn Brass

Ordering Information 2766

Length	Plating	Order No.	Length	Plating	Order No.
.560"	Tin	• 89-00-0051	.437"	Tin	89-00-0068
.560"	Gold	• 89-00-0060	.437"	Gold	89-00-0114

• U.S. Standard Product, available through Molex franchised distributors.

4166 Series Phosphor Bronze

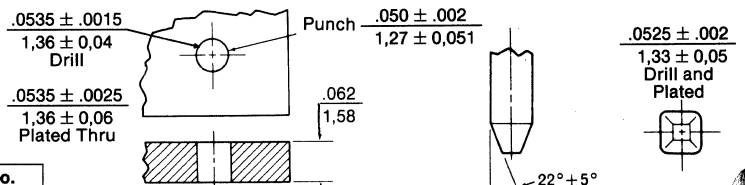
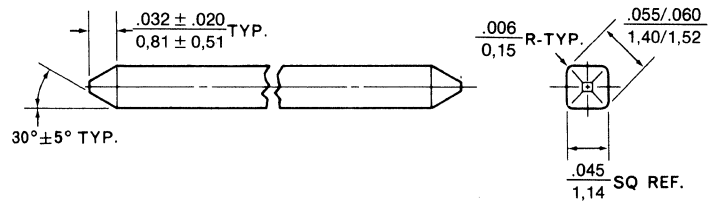
Ordering Information 4166

Length	Plating	Order No.	Length	Plating	Order No.
.560"	Tin	08-52-0601	.405"	Tin	08-52-0622
.560"	Gold	08-58-0611	.405"	Gold	08-58-0622

Contact factory for other plating options

.045" (1,14 mm) Square Pins

2161 Series Hard Drawn Brass



Ordering Information 2161

Length	Plating	Order No.	Length	Plating	Order No.
.750"	Tin	• 08-50-0401	.500"	Gold	08-56-0404
.750"	Gold	• 08-56-0401	.437"	Tin	08-50-0410
.500"	Tin	08-50-0404	.437"	Gold	08-56-0410

• U.S. Standard Product, available through Molex franchised distributors.

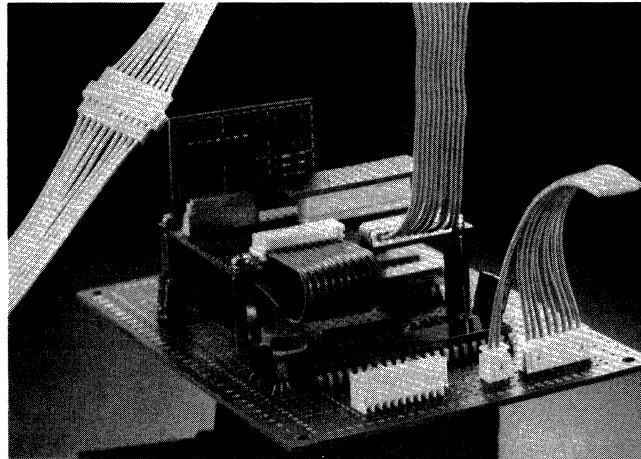
Recommended Hole for Press Fitting
Pin into .062" thick P.C. Board

OPTIONAL
TIP

The Molex Spox Interconnection System



Contents



E

The Spox Family features spring-box terminals

Introduction	56E
Specifications	57E

Micro Spox .079" (2,0mm) Centers

Crimp Terminal and Housing	58E
Straight and Right Angle Friction Lock Headers	59E

Mini Spox .098" (2,5mm) Centers

Crimp Terminals and Housings	60E
Straight and Right Angle Friction Lock Headers	61E
Crimp Terminal Housing and Polarized Header	62E
Crimp Terminal Housing and Friction Lock Header	63E
Male Crimp Terminal and Plug Housing	64E
Anti-fishhooking Terminal and Housing, Very Low Profile	65E
Straight and Right Angle Fully Shrouded Headers	66E

Standard Spox .156" (3,96mm) Centers

Crimp Terminal and Housing	67E
Straight and Right Angle Header	68E
Straight and Right Angle Friction Lock Header	69E
Polarized Crimp Terminal Housing and Header	70E
Right Angle Pin Header and Straight Pin Friction Lock Header	71E

Macro Spox .197" (5,0mm)/.295" (7,5mm)

Crimp Terminal Housing and Straight Pin Header	72E
Right Angle Pin Header and Straight Pin Friction Lock Header	73E

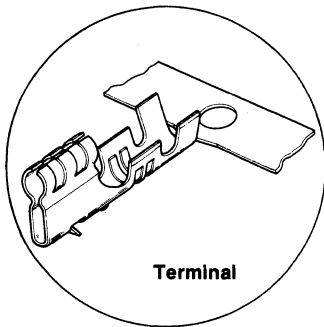
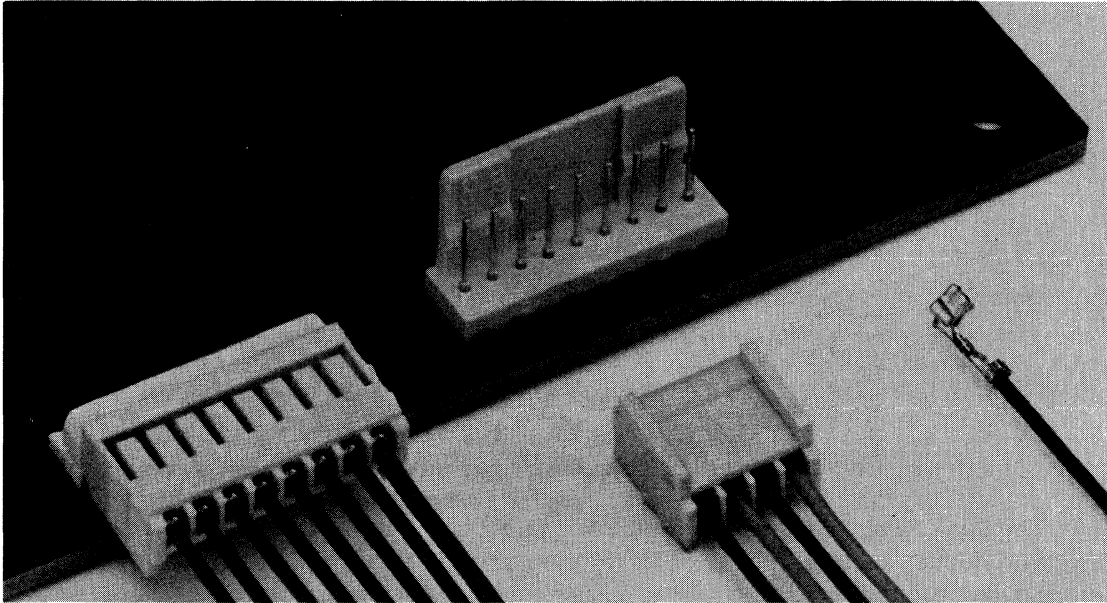
.200" (5,08mm) Centers

Crimp Terminal Housing and Straight Pin Header	74E
Right Angle and Straight Headers	75E
Housing and Header with Voids	76E
Right Angle and Straight Headers with Voids	77E

The Molex Spox Interconnection System



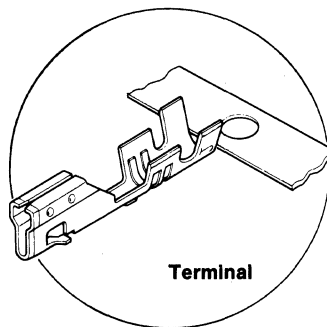
Introduction



Terminal

Micro Spox

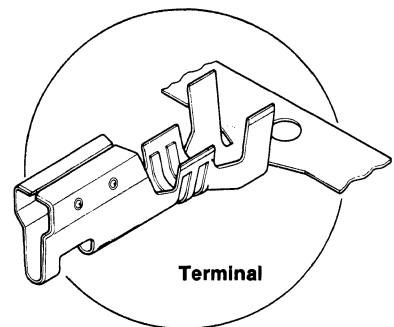
- .079" (2,0 mm) Center Spacings
- Current Rating: 1 amp
- Wire Gauge: 22-30 AWG wire
- The smallest crimp connector of its type available on market



Terminal

Mini Spox

- .098" (2,5 mm) Center Spacings
- Current Rating: 3 amps
- Wire Gauge: 22-28 AWG
- Also available in wire-to-wire versions



Terminal

Standard and Macro Spox

- .156" (3,96 mm), .200" (5,08 mm) and .197"/.295" (5,0/7,5mm) Center Spacings
- Current Rating: 7 amps
- Wire Gauge: 18-28 AWG

The Spox (spring box) line is a recent addition to Molex's family of modular P.C.B. interconnection systems. The Spox system originally consisted of connectors designed to mate with rigid wire pins either inserted into a P.C. board or assembled in a nylon carrier strip (header).

All Spox connectors feature strong, durable terminals which provide high pressure contact with the mating pin and resist the collapsing and deformation which can be caused in assembly. The terminals themselves vary in shape depending on the size of the connector.

Spox Technical Data Reference*



Micro Spox .079" (2,0 mm) Center Spacing

UL Recognized (File #E29179)

Voltage Rating - 125 VAC maximum
Current Rating - 1 Amp maximum
Contact Resistance - 20 mΩ maximum (between both ends of mated terminals. Dry circuit of DC 50 mV, 50 mA maximum.)
After 30 cycles: Less than twice initial
Dielectric Withstanding Voltage - 500 VAC for 60 seconds
Insulation Resistance - 1,000 MΩ minimum
Temperature Rise - +30°C maximum
Temperature Range - -40°C to +105°C

Engagement Force: - 0.88 lb. (0,40 kg) max., initial insertion with tin plated .020" (0,5mm) round pin
Disengagement Force: - 0.33 lb. (0,15 kg) min., initial cycle with tin plated .020" (0,5mm) round pin

Terminal Retention Force in Housing - 3.3 lbs. minimum (1,5 kg)
Wire Pullout Force Crimp Strength - 22 AWG 8.8 lbs. minimum (4 kg)
30 AWG 1.1 lb. minimum (0,5 kg)

*Detailed product specifications should be requested for approval testing.

Mini Spox .098" (2,5 mm) Center Spacing

UL Recognized (File #E29179)

Voltage Rating - 250 VAC maximum
Current Rating - 3 Amps maximum
Contact Resistance - 20 mΩ maximum (between both ends of mated terminal. Dry circuit of DC 50 mV, 50 mA maximum.)
After 30 cycles: Less than twice initial.
Dielectric Withstanding Voltage - 1,000 VAC for 60 seconds
Insulation Resistance - 1,000 MΩ minimum
Temperature Rise - +30° maximum
Temperature Range - -40°C to +105°C

Engagement Force - 3.97 lbs. (1,8 kg) maximum, initial insertion with tin plated .025" (0,64 mm) square pin
Disengagement Force - .33 lbs. (0,15 kg) minimum, initial cycle with tin plated .025" (0,64 mm) square pin

Terminal Retention Force in Housing - 3.3 lbs. minimum (1,5 kg)
Crimp Strength - 22 AWG 8.8 lbs. minimum (4,0 kg)
28 AWG 2.2 lbs. minimum (1,0 kg)

*Detailed product specifications should be requested for approval testing.

Standard Spox .156" (3,96 mm), 200" (5,08 mm), .197/.295" (5,0/7,5 mm) Center Spacing

UL Recognized (File #E29179)

CSA Recognized (File #19980)

Voltage Rating - 250 VAC maximum
Current Rating - 7 Amps maximum
Contact Resistance - 10 mΩ maximum (between both ends of mated terminal. Dry circuit of DC 50 mV, 50 mA maximum.)
After 30 cycles: Less than twice initial
Dielectric Withstanding Voltage - 1,500 VAC for 60 seconds
Insulation Resistance - 1,000 MΩ minimum
Temperature Rise - +30°C maximum
Temperature Range - -40°C to +105°C

Engagement Force - 4.85 lbs. maximum (2,2 kg), initial insertion with tin plated .045" (1,14 mm) square pin
Disengagement Force - 0.7 lbs. minimum (0,3 kg), initial cycle with tin plated .045" (1,14 mm) square pin

Terminal Retention Force in Housing - 6.6 lbs. minimum (3,0 kg)
Wire Pullout Force Crimp Strength - 18 AWG 19.8 lbs. minimum (9,0 kg)
24 AWG 6.6 lbs. minimum (3,0 kg)

*Detailed product specifications should be requested for approval testing.

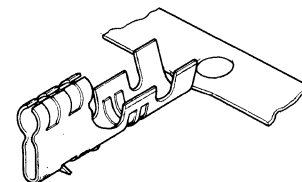
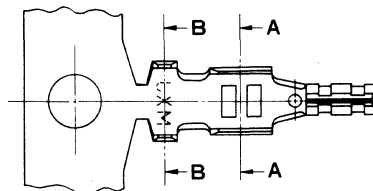
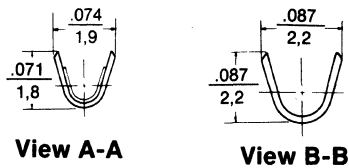


.079" (2,0 mm) Crimp Housing

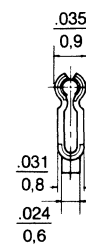
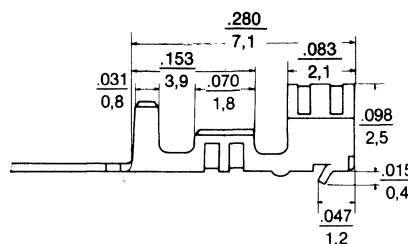


5230 Series Crimp Terminal

- Low profile
- Smallest crimp terminal available
- 4 point contact
- Material: pre-tinned, phosphor bronze
- Used in Molex 5231 housing
- Anti-fishhooking contact design



inches
mm



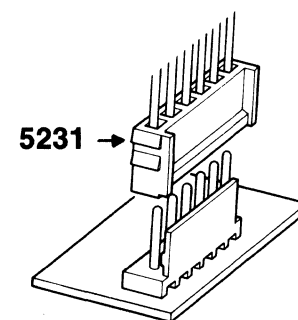
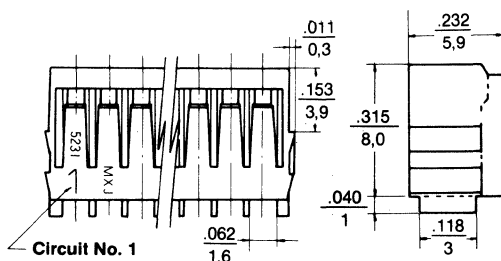
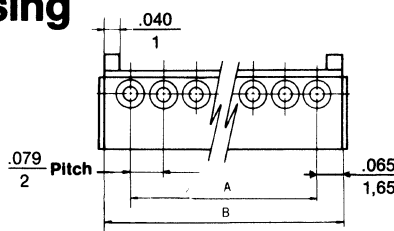
Ordering and Dimensional Information

Order No.	Terminal	Wire Gauge	Insulation Diameter	Contact Material	Hand Tool	Automatic Tooling		Extraction Tool
						Press	Crimp Die	
08-70-0072	Chain	AWG #22 - #30	.054 φ (1,5) MAX.	Phosphor Bronze	—	M15A	JM5864A	J5800-008 11-26-7074
08-70-0073	Loose					11-26-0033	11-26-0056	

Recommended wire range assumes stranded wire.

5231 Series Crimp Terminal Housing

- 2-15 Circuits
- Extremely low profile
- UL 94V-0 nylon 6/6
- Friction lock
- Polarized
- Terminal: Molex 5230 terminal
- Mating Wafer: Molex 5233/5234



inches
mm

Ordering and Dimensional Information - in. (mm)

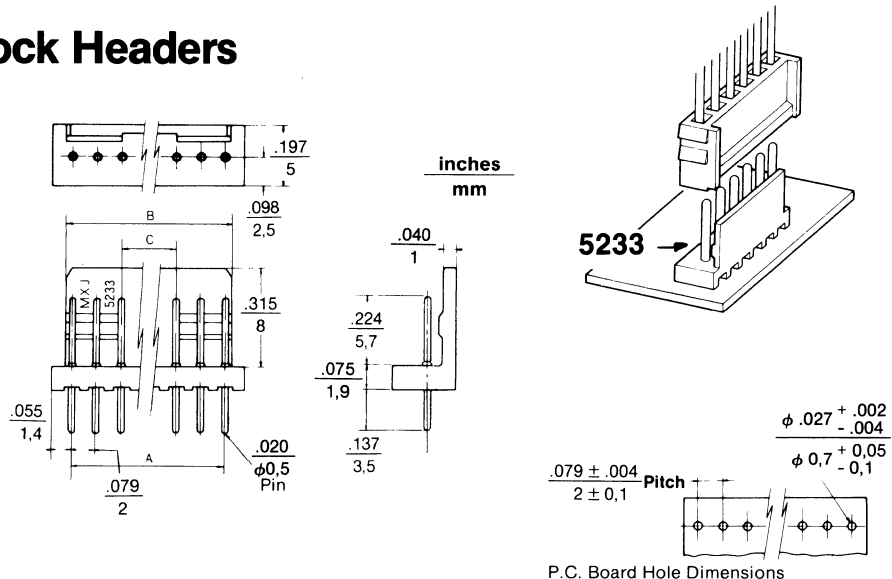
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-01-4024	.079 (2,0)	.217 (5,5)	9	10-01-4094	.630 (16,0)	.768 (19,5)
3	10-01-4034	.157 (4,0)	.295 (7,5)	10	10-01-4104	.709 (18,0)	.846 (21,5)
4	10-01-4044	.236 (6,0)	.374 (9,5)	11	10-01-4114	.787 (20,0)	.925 (23,5)
5	10-01-4054	.315 (8,0)	.453 (11,5)	12	10-01-4124	.866 (22,0)	1.004 (25,5)
6	10-01-4064	.394 (10,0)	.531 (13,5)	13	10-01-4134	.945 (24,1)	1.083 (27,5)
7	10-01-4074	.472 (12,0)	.610 (15,5)	14	10-01-4144	1.024 (26,0)	1.161 (29,5)
8	10-01-4084	.551 (14,0)	.689 (17,5)	15	10-01-4154	1.102 (28,0)	1.240 (31,5)

.079" (2,0 mm) Headers



5233 Series Straight Pin Friction Lock Headers

- 2-15 Circuits
- Low profile
- UL 94V-0 nylon 6/6
- Friction lock
- .020" (0,5 mm) tin-plated brass pin
- Mates with Molex 5231 housing

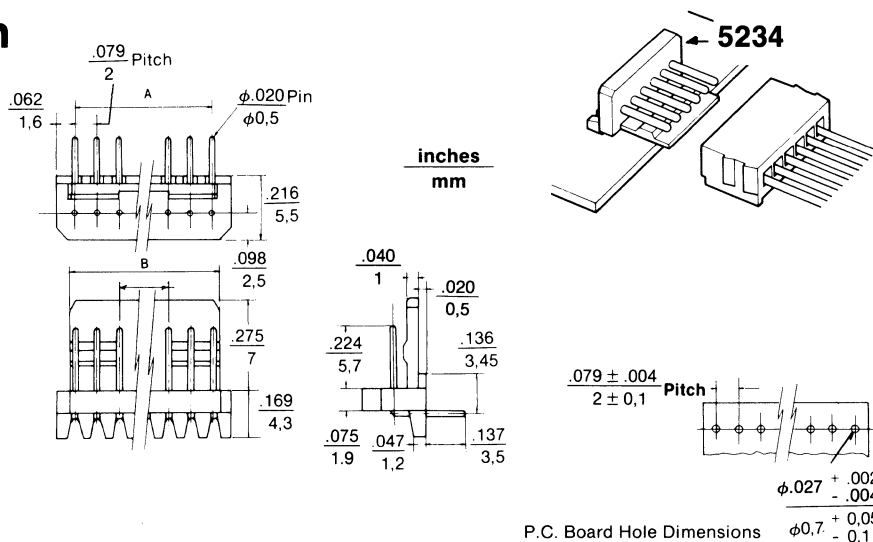


Ordering and Dimensional Information - in. (mm)

Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
2	10-32-1023	.079 (2,0)	.126 (3,2)	—	9	10-32-1093	.630 (16,0)	.677 (17,2)	.315 (8,0)
3	10-32-1033	.157 (4,0)	.205 (5,2)	—	10	10-32-1103	.709 (18,0)	.756 (19,2)	.394 (10,0)
4	10-32-1043	.236 (6,0)	.283 (7,2)	—	11	10-32-1113	.787 (20,0)	.835 (21,2)	.472 (12,0)
5	10-32-1053	.315 (8,0)	.362 (9,2)	—	12	10-32-1123	.866 (22,0)	.913 (23,2)	.551 (14,0)
6	10-32-1063	.394 (10,0)	.441 (11,2)	.079 (2,0)	13	10-32-1132	.945 (24,0)	.992 (25,2)	.630 (16,0)
7	10-32-1073	.472 (12,0)	.520 (13,2)	.157 (4,0)	14	10-32-1143	1.024 (26,0)	1.071 (27,2)	.709 (18,0)
8	10-32-1083	.551 (14,0)	.598 (15,2)	.236 (6,0)	15	10-32-1153	1.102 (28,0)	1.150 (29,2)	.787 (20,0)

5234 Series Right Angle Pin Friction Lock Header

- 2-15 Circuits
- Low profile
- UL 94V-0 nylon 6/6
- Friction lock
- .020" (0,5 mm) tin-plated brass pin
- Mates with Molex 5231 housing



Ordering and Dimensional Information - in. (mm)

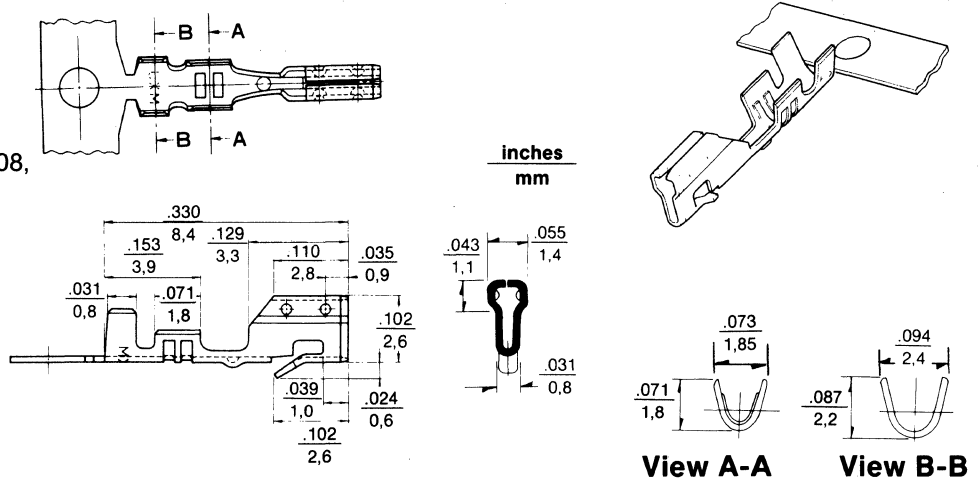
Circuits	Order No.	Dim. A	Dim. B	Dim. C	Circuits	Order No.	Dim. A	Dim. B	Dim. C
2	10-33-1024	.079 (2,0)	.126 (3,2)	—	9	10-33-1094	.630 (16,0)	.677 (17,2)	.315 (8,0)
3	10-33-1034	.157 (4,0)	.205 (5,2)	—	10	10-33-1104	.709 (18,0)	.756 (19,2)	.394 (10,0)
4	10-33-1044	.236 (6,0)	.283 (7,2)	—	11	10-33-1114	.787 (20,0)	.835 (21,2)	.472 (12,0)
5	10-33-1054	.315 (8,0)	.362 (9,2)	—	12	10-33-1124	.866 (22,0)	.913 (23,2)	.551 (14,0)
6	10-33-1064	.394 (10,0)	.441 (11,2)	.079 (2,0)	13	10-33-1134	.945 (24,0)	.992 (25,2)	.630 (16,0)
7	10-33-1074	.472 (12,0)	.520 (13,2)	.157 (4,0)	14	10-33-1144	1.024 (26,0)	1.071 (27,2)	.709 (18,0)
8	10-33-1084	.551 (14,0)	.598 (15,2)	.236 (6,0)	15	10-33-1154	1.102 (28,0)	1.150 (29,2)	.787 (20,0)

.098" (2,5 mm) Crimp Terminal and Housing



5103 Series Crimp Terminal

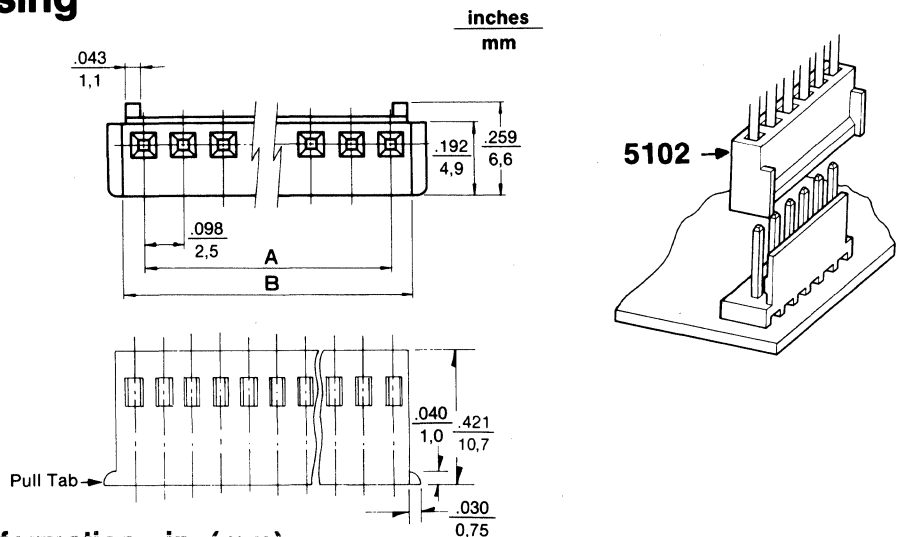
- Low profile
- 4 point contact
- Pre-tinned brass or phosphor bronze
- Used in Molex 5102, 5207, 5208, 5209 housing series
- Wire range: #22-#28 AWG
- Anti-fishhooking contact design



Order No.	Terminal	Wire Gauge	Insulation Diameter	Contact Material	Hand Tool	Automatic Tooling		Extraction Tool
						Press	Crimp Die	
08-70-0056	Chain	AWG #22 ~ #28	φ1,9 MAX.	Tin Plated Brass	—	M15A 11-26-0033	JM5857A 11-26-0023	11-26-7074 J5800-008
08-70-0057	Loose				JHTR 5907	—	—	
08-70-0058	Chain			M15A 11-26-0033	JM5857A 11-26-0023			
08-70-0059	Loose			JHTR5907	—			

5102 Series Crimp Terminal Housing

- 2-15 Circuits
- Low profile
- UL 94V-0 nylon 6/6
- Molded pull tab
- Friction lock
- Accepts Molex terminal 5103
- Mates with Molex 5045, 5046 header series



Ordering and Dimensional information - in. (mm)

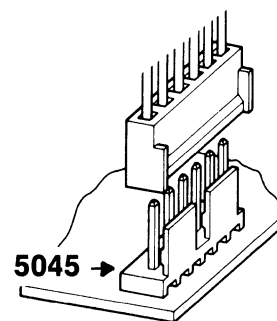
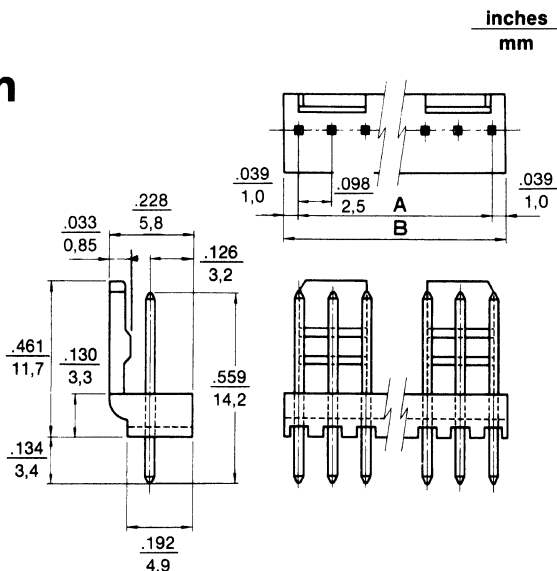
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	22-01-1024	.098 (2,5)	.236 (6,0)	9	22-01-1094	.787 (20,0)	.925 (23,5)
3	22-01-1034	.197 (5,0)	.335 (8,5)	10	22-01-1104	.886 (22,5)	1.024 (26,0)
4	22-01-1044	.295 (7,5)	.433 (11,0)	11	22-01-1114	.984 (25,0)	1.122 (28,5)
5	22-01-1054	.394 (10,0)	.531 (13,5)	12	22-01-1124	1.083 (27,5)	1.220 (31,0)
6	22-01-1064	.492 (12,5)	.630 (16,0)	13	22-01-1134	1.181 (30,0)	1.319 (33,5)
7	22-01-1074	.591 (15,0)	.728 (18,5)	14	22-01-1144	1.280 (32,5)	1.417 (36,0)
8	22-01-1084	.689 (17,5)	.827 (21,0)	15	22-01-1154	1.378 (35,0)	1.516 (38,5)

.098" (2,5 mm) Headers

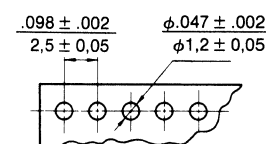


5045 Series Straight Pin Friction Lock Header

- 2-15 Circuits
- .025" (0,64mm) straight square wire pins
- Friction lock
- Various pin lengths available
- 94V-0 Nylon
- Mates with 5102 housing
- Tin plated brass pins. Plating options available
- Current rating - 3 amps max.



5045 →



P.C. Board Hole Dimensions

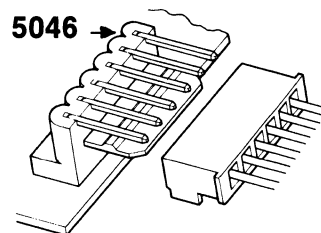
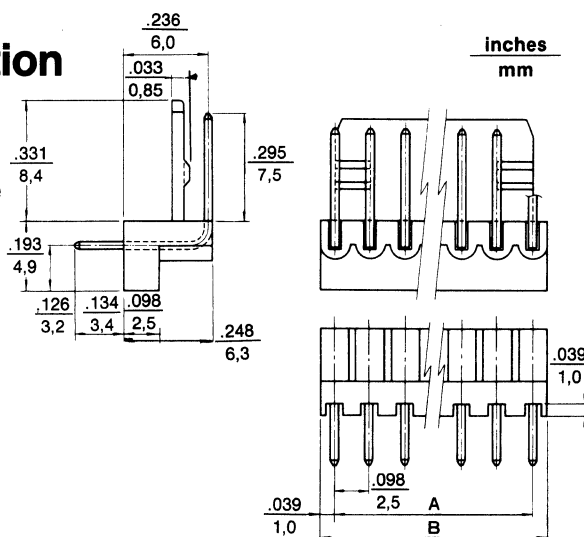
Ordering and Dimensional Information - in. (mm)

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	• 22-04-1021	.098 (2,5)	.177 (4,5)	9	• 22-04-1091	.787 (20,0)	.866 (22,0)
3	• 22-04-1031	.197 (5,0)	.276 (7,0)	10	• 22-04-1101	.886 (22,5)	.965 (24,5)
4	• 22-04-1041	.295 (7,5)	.374 (9,5)	11	• 22-04-1111	.984 (25,0)	1.063 (27,0)
5	• 22-04-1051	.394 (10,0)	.472 (12,0)	12	• 22-04-1121	1.083 (27,5)	1.161 (29,5)
6	• 22-04-1061	.492 (12,5)	.571 (14,5)	13	• 22-04-1131	1.181 (30,0)	1.260 (32,0)
7	• 22-04-1071	.591 (15,0)	.669 (17,0)	14	• 22-04-1141	1.280 (32,5)	1.358 (34,5)
8	• 22-04-1081	.689 (17,5)	.768 (19,5)	15	• 22-04-1151	1.378 (35,0)	1.457 (37,0)

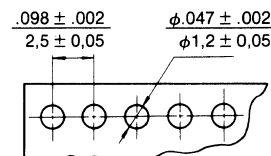
• U.S. Standard Product, available through Molex franchised distributors.

5046 Series Right Angle Pin Friction Lock Header

- 2 - 15 Circuits available
- .025" (0,64mm) right angle square wire pins
- Friction lock
- Various pin lengths available
- 94V-0 Nylon
- Mates with 5102 housing
- Tin plated brass pins. Plating options available



5046 →



P.C. Board Hole Dimensions

Ordering and Dimensional Information - in. (mm)

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	• 22-05-1022	.098 (2,5)	.177 (4,5)	9	• 22-05-1092	.787 (20,0)	.866 (22,0)
3	• 22-05-1032	.197 (5,0)	.276 (7,0)	10	• 22-05-1102	.886 (22,5)	.965 (24,5)
4	• 22-05-1042	.295 (7,5)	.374 (9,5)	11	• 22-05-1112	.984 (25,0)	1.063 (27,0)
5	• 22-05-1052	.394 (10,0)	.472 (12,0)	12	• 22-05-1122	1.083 (27,5)	1.161 (29,5)
6	• 22-05-1062	.492 (12,5)	.571 (14,5)	13	• 22-05-1132	1.181 (30,0)	1.260 (32,0)
7	• 22-05-1072	.591 (15,0)	.669 (17,0)	14	• 22-05-1142	1.280 (32,5)	1.358 (34,5)
8	• 22-05-1082	.689 (17,5)	.768 (19,5)	15	• 22-05-1152	1.378 (35,0)	1.457 (37,0)

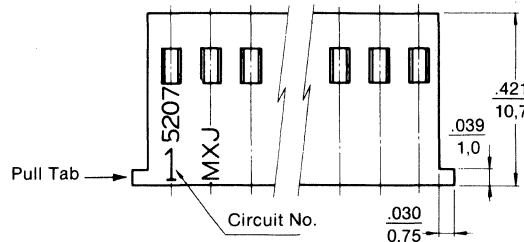
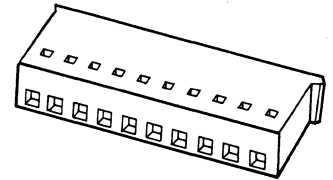
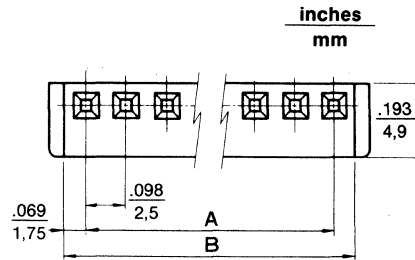
• U.S. Standard Product, available through Molex franchised distributors.

.098" (2,5 mm) Crimp Housing and Header



5207 Series Crimp Terminal Housing

- 6-15 Circuits
- Low profile
- UL 94V-0 nylon 6/6
- Molded pull tabs
- Accepts Molex mini-spox 5103 terminal
- Mates with Molex 3022, 3094, 5089 header series (5207 series)

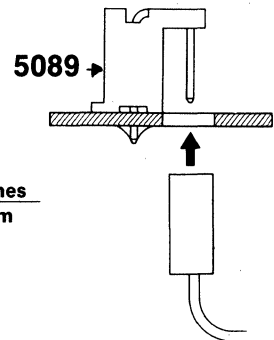
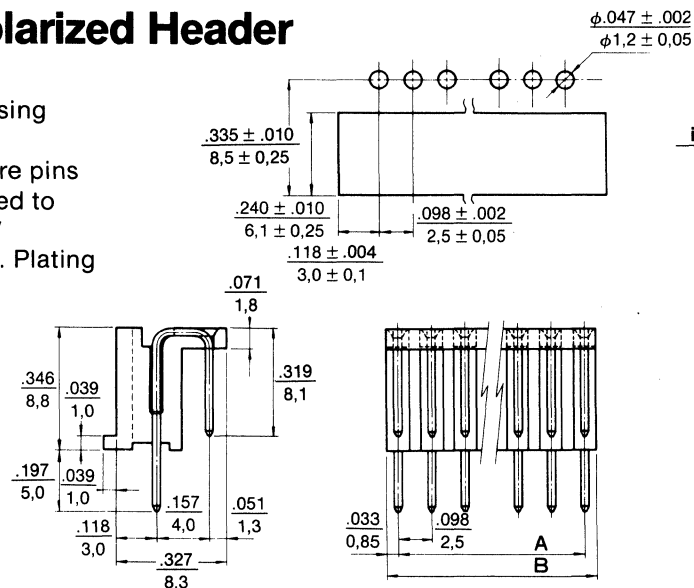


Ordering and Dimensional Information - in. (mm)

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
6	10-30-8061	.492 (12,5)	.630 (16,0)	11	10-30-8111	.984 (25,0)	1.122 (28,5)
7	10-30-8071	.591 (15,0)	.728 (18,5)	12	10-30-8121	1.083 (27,5)	1.220 (31,0)
8	10-30-8081	.689 (17,5)	.827 (21,0)	13	10-30-8131	1.181 (30,0)	1.319 (33,5)
9	10-30-8091	.787 (20,0)	.925 (23,5)	14	10-30-8141	1.280 (32,5)	1.417 (36,0)
10	10-30-8101	.886 (22,5)	1.024 (26,0)	15	10-30-8151	1.378 (35,0)	1.516 (38,5)

5089 Series Feed-Through Polarized Header

- Bottom entry mount
- Mates with 5207 housing
- UL 94V-0 nylon 6/6
- .025" (0,64mm) square pins
- Housing wall polarized to prevent misassembly
- Tin plated brass pins. Plating options available



Ordering and Dimensional Information - in. (mm)

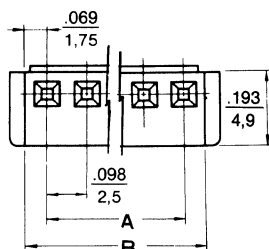
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
6	22-21-1061	.492 (12,5)	.559 (14,2)	11	22-21-1111	.984 (25,0)	1.051 (26,7)
7	22-21-1071	.591 (15,0)	.657 (16,7)	12	22-21-1121	1.083 (27,5)	1.150 (29,2)
8	22-21-1081	.689 (17,5)	.756 (19,2)	13	22-21-1131	1.181 (30,0)	1.248 (31,7)
9	22-21-1091	.787 (20,0)	.854 (21,7)	14	22-21-1141	1.280 (32,5)	1.346 (34,2)
10	22-21-1101	.886 (22,5)	.953 (24,2)	15	22-21-1151	1.378 (35,0)	1.445 (36,7)

.098" (2,5 mm) Crimp Housing and Headers

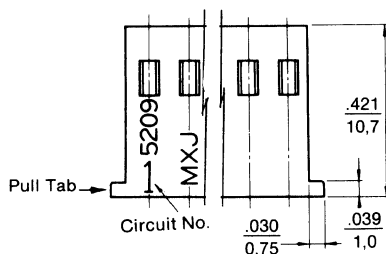
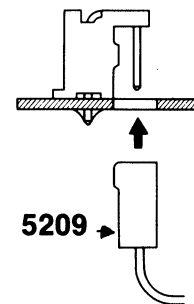


5209 Series Crimp Terminal Housing

- 2-5 Circuits available
- Low profile
- UL 94V-0, nylon 6/6
- Molded pull tabs
- Accepts Molex terminal 5103
- Mates with Molex 5129 bottom entry connector
- Locking Ramp



inches
mm

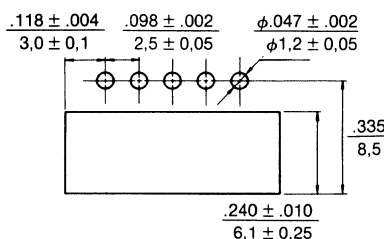


Ordering and Dimensional Information - in. (mm)

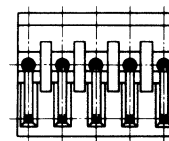
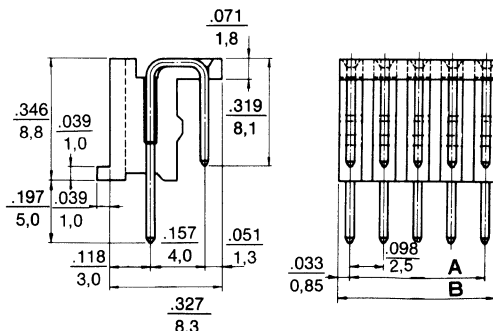
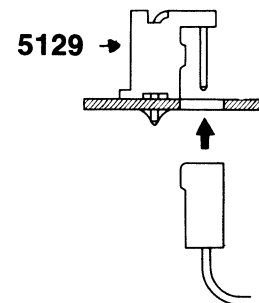
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-30-8023	.098 (2,5)	.236 (6,0)	4	10-30-8043	.295 (7,5)	.433 (11,0)
3	10-30-8033	.197 (5,0)	.335 (8,5)	5	10-30-8053	.394 (10,0)	.531 (13,5)

5129 Series Feed-Thru Friction Lock Header

- 2-5 Circuits available
- Friction lock for bottom entry wire to board connections
- .025" (0,64mm) square wire pins
- UL 94V-2 nylon 6/6
- Mates with 5209 housing
- Tin plated brass pins. Plating options available



inches
mm



Ordering and Dimensional Information - in. (mm)

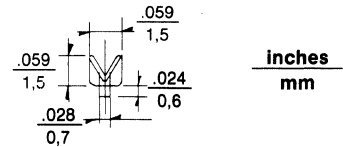
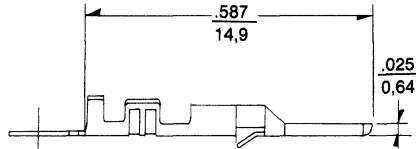
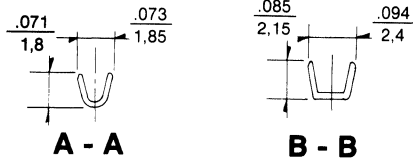
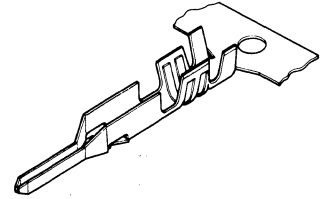
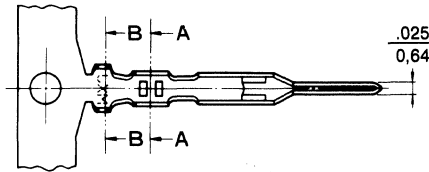
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	29-04-1028	.098 (2,5)	.165 (4,2)	4	29-04-1048	.295 (7,5)	.362 (9,2)
3	29-04-1038	.197 (5,0)	.264 (6,7)	5	29-04-1058	.394 (10,0)	.461 (11,7)

.098" (2,5 mm) Wire-to-Wire Connector



5241 Series Crimp Terminal, Male

- Rigid contact
- Pre-tinned brass
- Used in Molex 5240 housing series
- Wire range - 22-28 AWG
- Mates with Molex mini terminal 5103



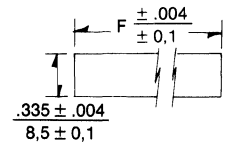
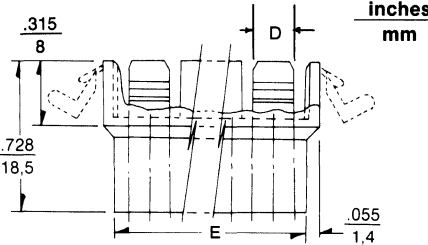
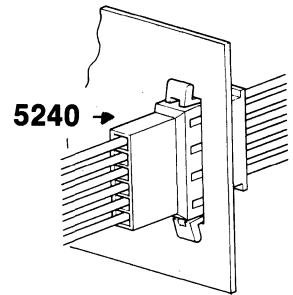
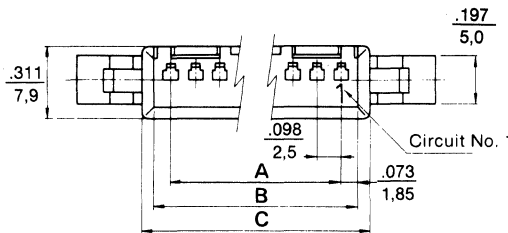
Ordering and Dimensional Information

Order No.	Terminal	Wire Gauge	Insulation Diameter	Contact Material	Hand Tool	Automatic Tooling		Extraction Tool
						Press	Crimp Die	
08-70-0102	Chain	AWG #22 - #28 #26 - #28	1.9mm MAX. 1,3 - 1,6mm 0,8 - 1,3mm	Tin Plated Brass	—	11-26-0033 M15A	11-26-0050 M5860A	J5800-005 11-26-0060
08-70-0103	Loose					JHT2262A 11-26-0009 JHTR2262J 11-26-0025		

Recommended wire range assumes stranded wire.

5240 Series Plug Housing

- 2-12 Circuits
- Wire to wire application
- Mounting ears (5240-N)
- Without mounting ears (5240-N1)
- UL 94V-0, nylon 6/6
- Accepts Molex mini terminal 5241
- Mates with Molex 5102 housing series



Recommended Panel Slot

Ordering and Dimensional Information - in. (mm)

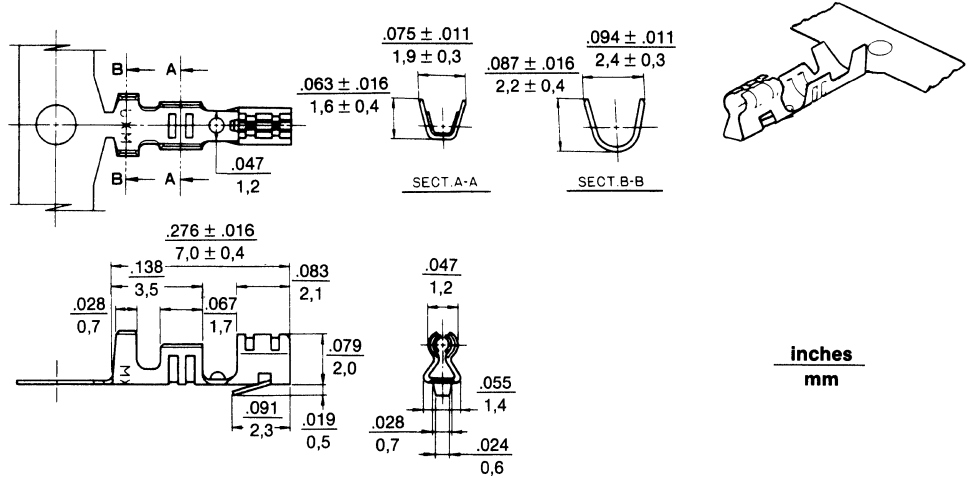
Circuits	Order No.		Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F
	With Ears	Without Ears						
2	29-11-0022	29-11-0023	.098 (2,5)	.244 (6,2)	.338 (8,6)	.098 (2,5)	.228 (5,8)	.488 (12,4)
3	29-11-0032	29-11-0033	.197 (5,0)	.342 (8,7)	.437 (11,1)	.197 (5,0)	.484 (8,3)	.587 (14,9)
4	29-11-0042	29-11-0043	.295 (7,5)	.440 (11,2)	.535 (13,6)	.295 (7,5)	.346 (10,8)	.685 (17,4)
5	29-11-0052	29-11-0053	.393 (10,0)	.539 (13,7)	.633 (16,1)	.145 (3,7)	.405 (13,3)	.783 (19,9)
6	29-11-0062	29-11-0063	.492 (12,5)	.637 (16,2)	.732 (18,6)	.197 (5,0)	.543 (15,8)	.882 (22,4)
7	29-11-0072	29-11-0073	.591 (15,0)	.736 (18,7)	.830 (21,1)	.197 (5,0)	.602 (18,3)	.980 (24,9)
8	29-11-0082	29-11-0083	.689 (17,5)	.834 (21,2)	.929 (23,6)	.197 (5,0)	.740 (20,8)	1.079 (27,4)
9	29-11-0092	29-11-0093	.787 (20,0)	.933 (23,7)	1.027 (26,1)	.197 (5,0)	.799 (23,3)	1.177 (29,9)
10	29-11-0102	29-11-0103	.886 (22,5)	1.031 (26,2)	1.125 (28,6)	.197 (5,0)	.937 (25,8)	1.276 (32,4)
11	29-11-0112	29-11-0113	.984 (25,0)	1.130 (28,7)	1.224 (31,1)	.197 (5,0)	1.122 (28,5)	1.374 (34,9)
12	29-11-0122	29-11-0123	1.083 (27,5)	1.228 (31,2)	1.323 (33,6)	.197 (5,0)	1.213 (30,8)	1.472 (37,4)

.098" (2,5mm) Crimp Housing



5263 Series Crimp Terminal

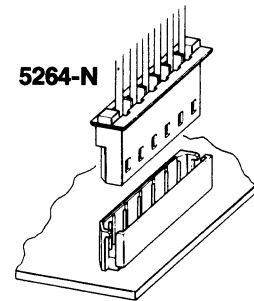
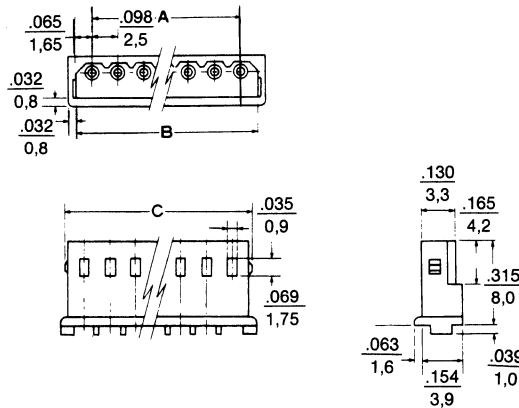
- Very low profile
- Material: Pre-tinned phosphor bronze
- Used in 5264 housing
- Anti-fishhooking design
- Box protects pin contact area from contamination during handling



Order No.	Eng. No.	Wire Range	Insulation Diameter	Hand Tool	Tooling	
					Press	Crimp Die
08-70-1039 Chain	5263PBT	AWG #22 ~ #28	.075" φ1,9 mm Max.	11-26-0167 JHTR5974A	11-26-0033 M15A	JM5996A 11-26-0117
08-70-1040 Loose	5263PBT					

5264-N Series Shrouded Crimp Terminal Housing

- Very low profile
- 2-15 Circuits
- UL 94V-0 nylon 6/6
- Accepts Molex 5263 terminal
- Mates with 5267-NA, 5268-NA wafers polarized
- Molded-in pull tabs
- Friction lock



Dimensional Information 5264-N

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.098 2,5	.228 5,8	.252 6,4	6	.492 12,5	.622 15,8	.646 16,4	10	.886 22,5	1.016 25,8	—	13	1.181 30,0	1.311 33,3	—
3	.197 5,0	.327 8,3	.350 8,9	7	.591 15,0	.720 18,3	.744 18,9	11	.984 25,0	1.114 28,3	—	14	1.280 32,5	1.409 35,8	—
4	.295 7,5	.425 10,8	.449 11,4	8	.689 17,5	.819 20,8	.843 21,4	12	1.083 27,5	1.213 30,8	—	15	1.378 35,0	1.508 38,3	—
5	.394 10,0	.524 13,3	.547 13,9	9	.787 20,0	.917 23,3	—								

Ordering Information 5264-N

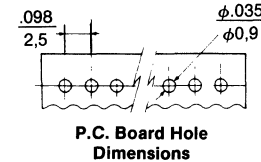
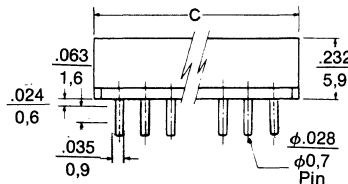
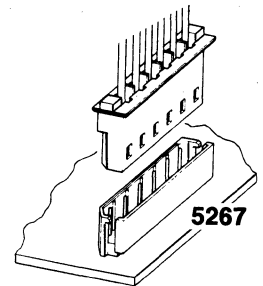
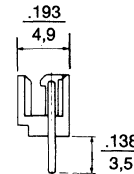
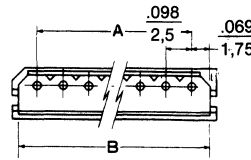
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	50-37-5023	5	50-37-5053	8	50-37-5083	10	50-37-5103	12	50-37-5123	14	50-37-5143
3	50-37-5033	6	50-37-5063	9	50-37-5093	11	50-37-5113	13	50-37-5133	15	50-37-5153
4	50-37-5043	7	50-37-5073								

.098" (2,5mm) Header



5267-NA Series Straight Pin Fully Shrouded Headers

- 2-15 circuits
- UL 94V-0 nylon 6/6
- Tin plated brass pins
- .027" (0,7mm) straight round pins
- Polarized
- Mates with 5264 crimp terminal housing
- Friction lock



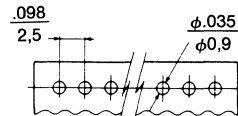
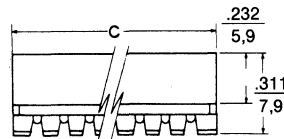
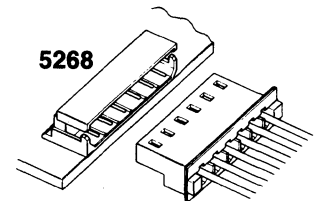
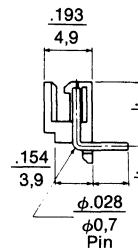
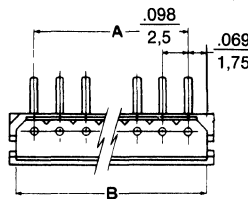
inches
mm

Ordering Information 5267-NA

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	22-03-5025	5	22-03-5055	8	22-03-5085	10	22-03-5105	12	22-03-5125	14	22-03-5145
3	22-03-5035	6	22-03-5065	9	22-03-5095	11	22-03-5115	13	22-03-5135	15	22-03-5155
4	22-03-5045	7	22-03-5075								

5268-NA Series Right Angle Fully Shrouded Headers

- 2-15 circuits
- UL 94V-0 nylon 6/6
- Tin plated brass pins
- .027" (0,7mm) right angle round pins
- Polarized
- Mates with 5264 crimp terminal housing
- Friction lock



inches
mm

Ordering Information 5268-NA

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	22-05-7025	5	22-05-7055	8	22-05-7085	10	22-05-7105	12	22-05-7125	14	22-05-7145
3	22-05-7035	6	22-05-7065	9	22-05-7095	11	22-05-7115	13	22-05-7135	15	22-05-7155
4	22-05-7045	7	22-05-7075								

Dimensional Information 5267-NA and 5268-NA

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.098 2,5	.236 6,0	.291 7,4	6	.492 12,5	.630 16,0	.685 17,4	10	.886 22,5	1.024 26,0	1.079 27,4	13	1.181 30,0	1.319 33,5	1.374 34,9
3	.197 5,0	.335 8,5	.390 9,9	7	.591 15,0	.728 18,5	.783 19,9	11	.984 25,0	1.220 28,5	1.117 29,9	14	1.280 32,5	1.417 36	1.472 37,4
4	.295 7,5	.433 11	.488 12,4	8	.689 17,5	.827 21,0	.882 22,4	12	1.083 27,5	1.220 31	1.276 32,4	15	1.378 35,0	1.516 38,5	1.571 39,9
5	.394 10,0	.531 13,5	.587 14,9	9	.787 20,0	.925 23,5	.980 24,9								

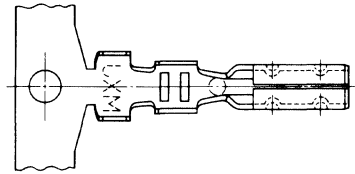
E

.156" (3,96 mm) Crimp Terminal and Housing

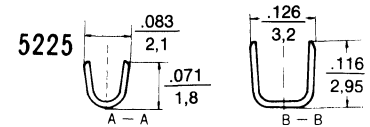
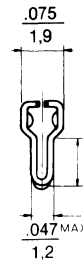
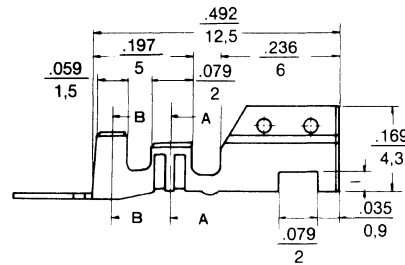
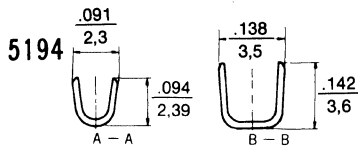
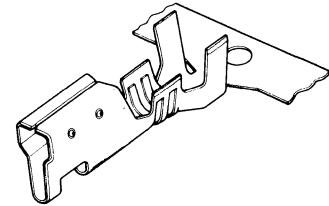


5194/5225 Series Crimp Terminal

- 4 point contact
- Used in Molex 5195, 5196, 5197, 5198 housing series
- Wire range: #18-#24 AWG and 22-28 AWG
- Anti-fishhooking contact design
- Current rating 7 amps max.



inches
mm



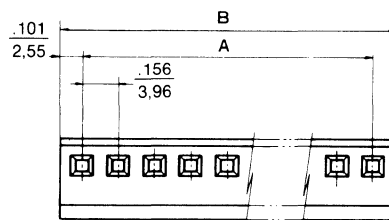
Ordering and Dimensional Information - in. (mm)

Order No.	Terminal	Wire Gauge	Insulation Diameter	Contact Material	Automatic Tooling		Tool
					Press	Crimp Die	
08-70-1031	Chain	AWG #18 ~ #24	φ 1,3mm ~ 3,2 mm	Tin Plated Brass	11-26-0033 M15A	11-26-0028 JM5859A	11-26-0058 JHTR5904
08-70-1030	Loose				—	—	
08-70-1029	Chain	AWG #22 ~ #28	φ 1,2 mm ~ 2,6 mm		11-26-0033 M15A	11-26-0028 JM5859A	
08-70-1028	Loose				—	—	

Recommended wire range assumes stranded wire.

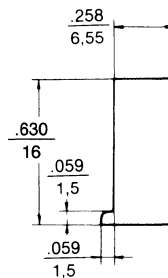
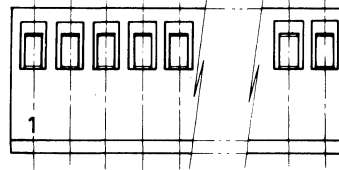
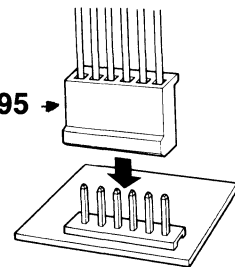
5195 Series Crimp Terminal Housing

- 2-12 Circuits
- With locking ramp
- Molded in locking arm for terminal
- UL 94V-2 nylon 6/6
- Accepts Molex spox terminal 5194/5225
- Mates with Molex 5271, 5272, 5273, 5274, 5292 header series



inches
mm

5195



Ordering and Dimensional Information - in. (mm)

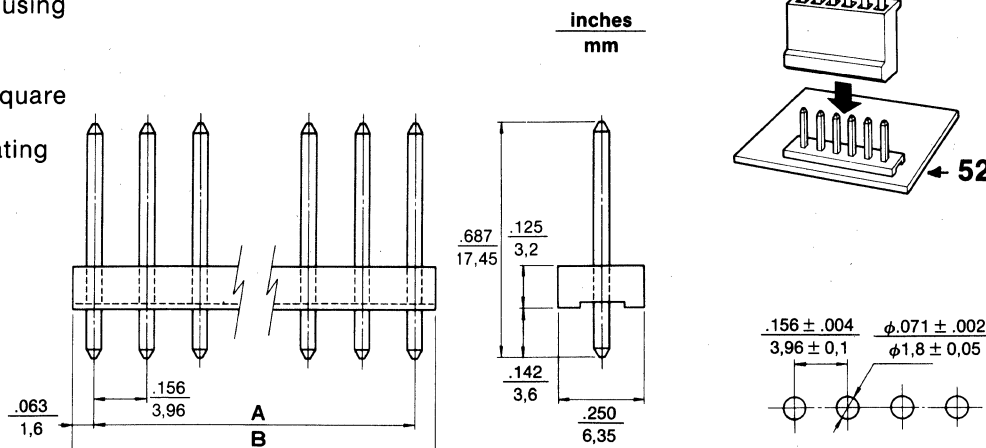
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	09-50-1021	.156 (3,96)	.357 (9,06)	8	09-50-1081	1.092 (27,74)	1.292 (32,82)
3	09-50-1031	.312 (7,92)	.513 (13,02)	9	09-50-1091	1.248 (31,70)	1.448 (36,78)
4	09-50-1041	.468 (11,89)	.669 (16,98)	10	09-50-1101	1.404 (35,66)	1.604 (40,74)
5	09-50-1051	.624 (15,85)	.824 (20,94)	11	09-50-1111	1.560 (39,62)	1.760 (44,7)
6	09-50-1061	.780 (19,81)	.980 (24,9)	12	09-50-1121	1.716 (43,59)	1.916 (48,66)
7	09-50-1071	.936 (23,77)	1.136 (28,86)				

.156" (3,96 mm) Headers

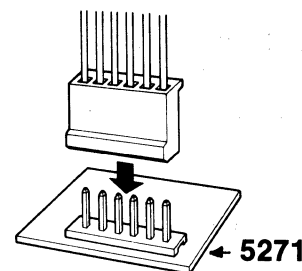


5271 Series Straight Pin Header

- Mates with 5195 series housing
- 2-12 Circuits
- UL 94V-2 nylon 6/6
- .045" (1,14mm) straight square wire pin
- Tin plated brass pins. Plating options available



P.C. Board Hole Dimensions

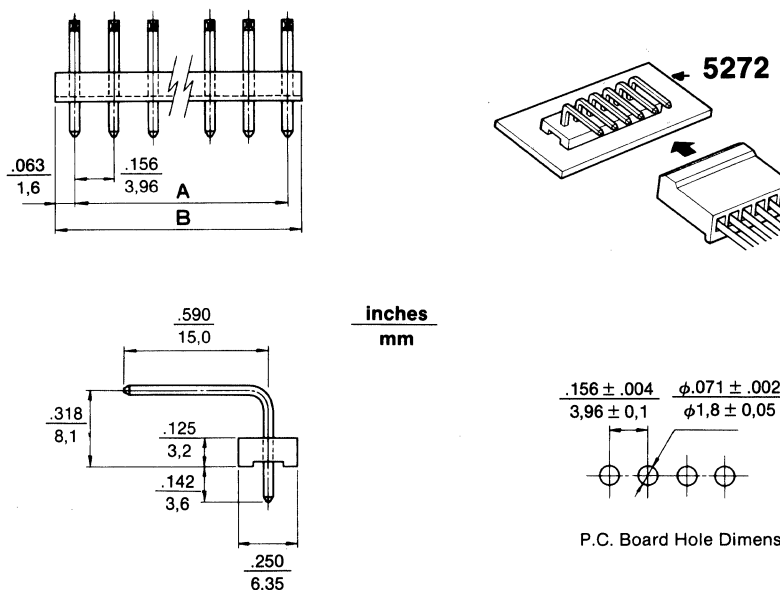


Ordering and Dimensional Information - in. (mm)

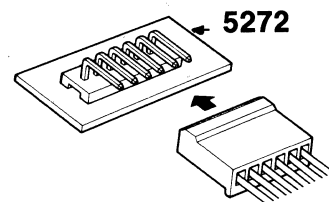
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	09-67-4021	.156 (3,96)	.282 (7,16)	8	09-67-4081	1.092 (27,74)	1.22 (30,9)
3	09-67-4031	.312 (7,92)	.438 (11,13)	9	09-67-4091	1.248 (31,70)	1.37 (34,8)
4	09-67-4041	.468 (11,89)	.591 (15,0)	10	09-67-4101	1.404 (35,66)	1.53 (38,8)
5	09-67-4051	.624 (15,85)	.748 (19,0)	11	09-67-4111	1.560 (39,62)	1.69 (42,8)
6	09-67-4061	.780 (19,81)	.906 (23,0)	12	09-67-4121	1.716 (43,59)	1.84 (46,7)
7	09-67-4071	.936 (23,77)	1.06 (26,9)				

5272 Series Right Angle Pin Header

- Mates with 5195 series housing
- 2-12 Circuits
- UL 94V-2 nylon 6/6
- Rt. angle .045" (1,14mm) square wire pin
- Tin plated brass pins. Plating options available



P.C. Board Hole Dimensions



Ordering and Dimensional Information - in. (mm)

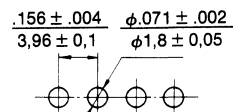
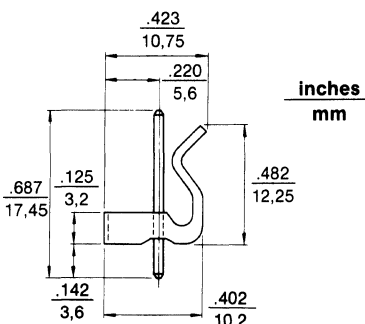
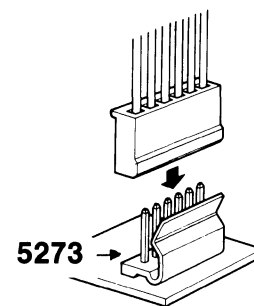
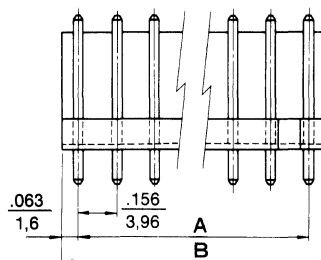
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	09-66-5022	.156 (3,96)	.282 (7,16)	8	09-66-5082	1.092 (27,74)	1.22 (30,9)
3	09-66-5032	.312 (7,92)	.438 (11,13)	9	09-66-5092	1.248 (31,70)	1.37 (34,8)
4	09-66-5042	.468 (11,89)	.591 (15,0)	10	09-66-5102	1.404 (35,66)	1.53 (38,8)
5	09-66-5052	.624 (15,85)	.748 (19,0)	11	09-66-5112	1.560 (39,62)	1.69 (42,8)
6	09-66-5062	.780 (19,81)	.906 (23,0)	12	09-66-5122	1.716 (43,59)	1.84 (46,7)
7	09-66-5072	.936 (23,77)	1.06 (26,9)				

.156" (3,96 mm) Headers



5273 Series Straight Pin Friction Lock Header

- Mates with 5195 series housing
- UL 94V-2 nylon 6/6
- 2-8 Circuits
- .045" (1,14mm) square pins
- Tin plated brass pins. Plating options available



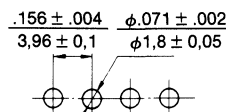
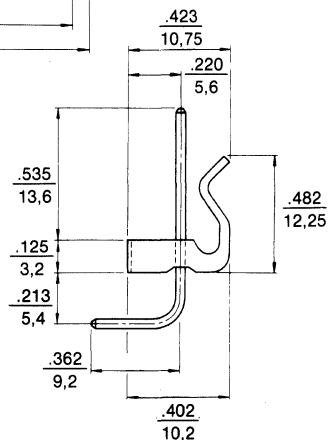
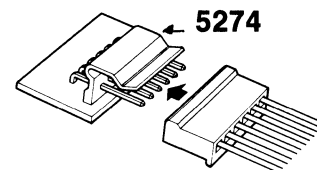
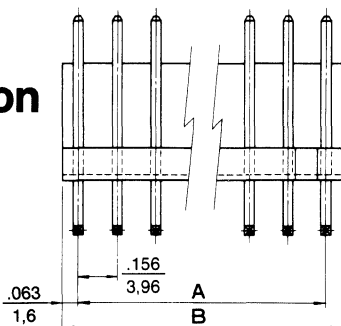
P.C. Board Hole Dimensions

Ordering and Dimensional Information - in. (mm)

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	09-65-2028	.156 (3,96)	.282 (7,16)	6	09-65-2068	.780 (19,81)	.906 (23,0)
3	09-65-2038	.312 (7,92)	.438 (11,13)	7	09-65-2078	.936 (23,77)	1.06 (26,9)
4	09-65-2048	.468 (11,89)	.591 (15,0)	8	09-65-2088	1.092 (27,74)	1.22 (30,9)
5	09-65-2058	.624 (15,85)	.748 (19,0)				

5274 Series Right Angle Pin Friction Lock Header

- Mates with 5195 series housing
- UL 94V-2 nylon 6/6
- 2-6 Circuits
- .045" (1,14mm) square pins
- Tin plated brass pins. Plating options available



P.C. Board Hole Dimensions

Ordering and Dimensional Information - in. (mm)

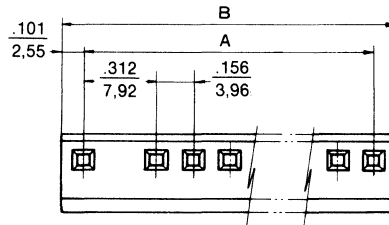
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	09-75-2024	.156 (3,96)	.357 (9,06)	5	09-75-2054	.624 (15,85)	.824 (20,94)
3	09-75-2034	.312 (7,92)	.513 (13,02)	6	09-75-2064	.780 (19,81)	.980 (24,9)
4	09-75-2044	.468 (11,89)	.669 (24,9)				

.156" (3,96 mm) Crimp Housing and Header

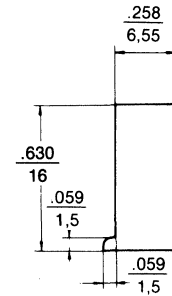
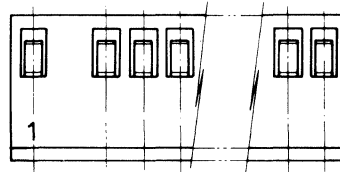
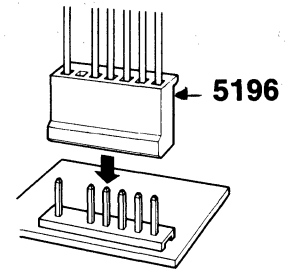


5196 Series Crimp Terminal Housing

- 3-11 Circuits
- UL 94V-2 nylon 6/6
- With locking ramp
- 2nd circuits blanked for polarization
- Molded pull tab
- Molded in locking arm for terminal
- Accepts Molex spox terminal 5194/5225
- Mates with Molex 5275, 5276, 5277 header series



inches
mm

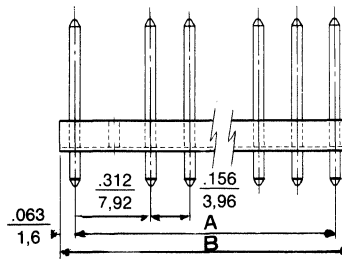


Ordering and Dimensional Information - in. (mm)

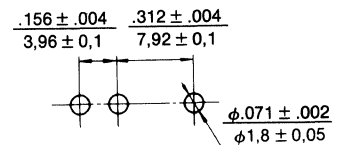
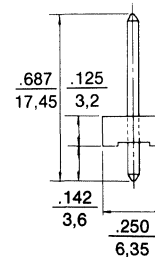
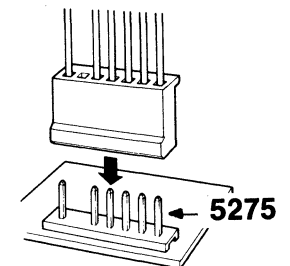
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	09-50-1033	.468 (11,89)	.669 (16,98)	8	09-50-1083	1.248 (31,70)	1.448 (36,78)
4	09-50-1043	.624 (15,85)	.824 (20,94)	9	09-50-1093	1.404 (35,66)	1.604 (40,74)
5	09-50-1053	.780 (19,81)	.980 (24,9)	10	09-50-1103	1.560 (39,62)	1.760 (44,7)
6	09-50-1063	.936 (23,77)	1.136 (28,86)	11	09-50-1113	1.716 (43,59)	1.916 (48,66)
7	09-50-1073	1.092 (27,74)	1.292 (32,82)				

5275 Series Straight Pin Header

- 3-11 Circuits
- .045" (1,14mm) square wire pins
- UL 94V-2 nylon 6/6
- 2nd circuit blanked for polarization
- Mates with 5196 series housing
- Tin plated brass pins. Plating options available



inches
mm



P.C. Board Hole Dimensions

Ordering and Dimensional Information - in. (mm)

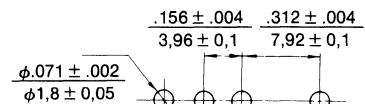
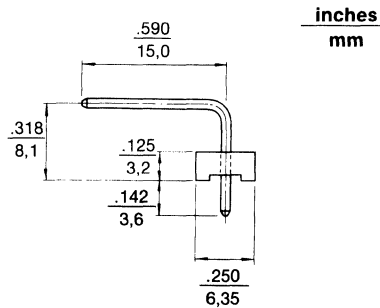
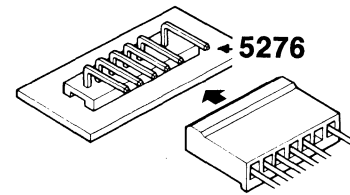
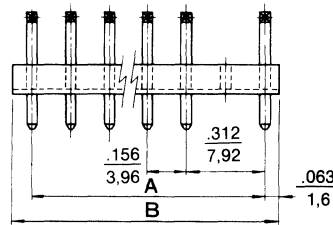
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	09-67-4032	.468 (11,89)	.594 (15,08)	8	09-67-4082	1.248 (31,70)	1.373 (34,88)
4	09-67-4042	.624 (15,85)	.750 (19,04)	9	09-67-4092	1.404 (35,66)	1.529 (38,84)
5	09-67-4052	.780 (19,81)	.906 (23,0)	10	09-67-4102	1.560 (39,62)	1.685 (42,8)
6	09-67-4062	.936 (23,77)	1.061 (26,96)	11	09-67-4112	1.716 (43,59)	1.841 (46,76)
7	09-67-4072	1.092 (27,74)	1.217 (30,92)				

.156" (3,96 mm) Headers



5276 Series Right Angle Pin Flat Headers

- .045" (1,14mm) right angle square wire pins
- 3-11 Circuits
- UL 94V-2 nylon 6/6
- Mates with 5196 housing
- Tin plated brass pins. Plating options available



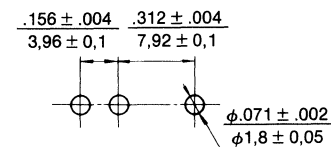
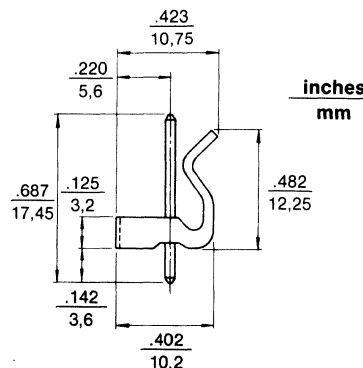
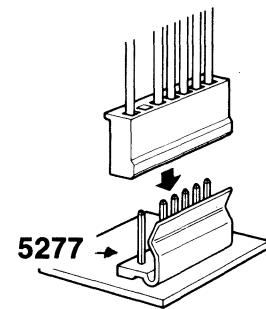
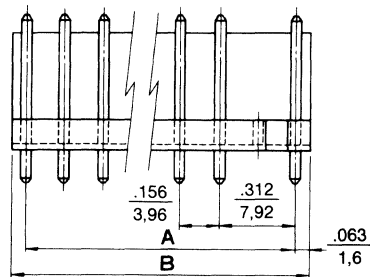
P.C. Board Hole Dimensions

Ordering and Dimensional Information - in. (mm)

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	09-66-5033	.468 (11,89)	.594 (15,08)	8	09-66-5083	1.248 (31,70)	1.373 (34,88)
4	09-66-5043	.624 (15,85)	.750 (19,04)	9	09-66-5093	1.404 (35,66)	1.529 (38,84)
5	09-66-5053	.780 (19,81)	.906 (23,0)	10	09-66-5103	1.560 (39,62)	1.685 (42,8)
6	09-66-5063	.936 (23,77)	1.061 (26,96)	11	09-66-5113	1.716 (43,59)	1.841 (46,76)
7	09-66-5073	1.092 (27,74)	1.217 (30,92)				

5277 Series Straight Pin Friction Lock Headers

- Locking ramp
- .045" (1,14mm) straight square wire pins
- 3-7 Circuits
- UL 94V-2 nylon 6/6
- Mates with 5196 housing
- Tin plated brass pins. Plating options available



P.C. Board Hole Dimensions

Ordering and Dimensional Information - in. (mm)

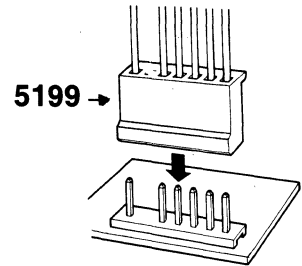
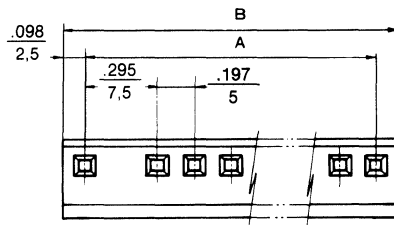
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	09-65-2039	.468 (11,89)	.594 (15,08)	6	09-65-2069	.936 (23,77)	1.061 (26,96)
4	09-65-2049	.624 (15,85)	.750 (19,04)	7	09-65-2079	1.092 (27,74)	1.217 (30,92)
5	09-65-2059	.780 (19,81)	.906 (23,0)				

.197" (5,0 mm) / .295" (7,5 mm) Crimp Housing and Header

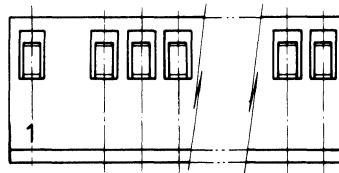
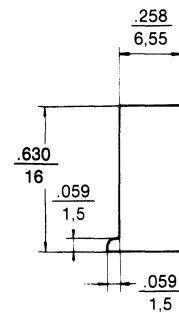


5199 Series Crimp Terminal Housing

- 2-6 Circuits available
- UL 94V-2 nylon 6/6
- Polarization through varied center spacing between circuit 1 & 2
- With locking ramp
- Molded pull tab
- Molded in locking arm for terminal
- Accepts Molex spox terminal 5194/5225
- Mates with Molex 5287, 5288, 5289 header series



inches
mm

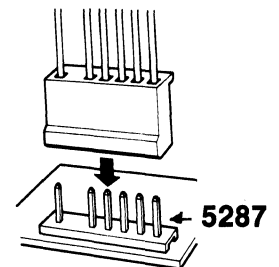
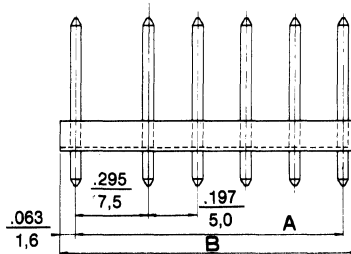


Ordering and Dimensional Information - in. (mm)

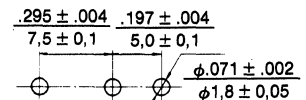
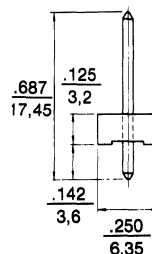
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-63-3024	.295 (7,5)	.492 (12,5)	5	10-63-3054	.886 (22,5)	1.083 (27,5)
3	10-63-3034	.492 (12,5)	.689 (17,5)	6	10-63-3064	1.083 (27,5)	1.280 (32,5)
4	10-63-3044	.689 (17,5)	.886 (22,5)				

5287 Series Straight Pin Headers

- 2-6 Circuits available
- UL 94V-2 nylon 6/6
- Polarization through varied center spacing between circuit 1 and 2
- Mates with 5199 housing
- .045" (1,14mm) straight square pin
- Tin plated brass pins. Plating options available



inches
mm



P.C. Board Hole Dimensions

Ordering and Dimensional Information - in. (mm)

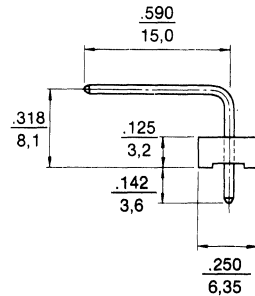
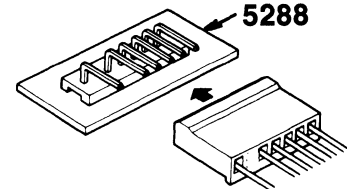
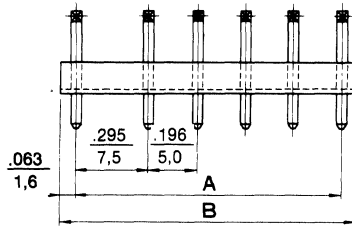
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-63-3023	.295 (7,5)	.421 (10,7)	5	10-63-3053	.886 (22,5)	1.012 (25,7)
3	10-63-3033	.492 (12,5)	.618 (15,7)	6	10-63-3063	1.083 (27,5)	1.209 (30,7)
4	10-63-3043	.689 (17,5)	.815 (20,7)				

.197" (5,0 mm) / .295" (7,5 mm) Connector and Header

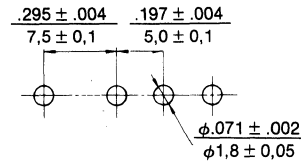


5288 Series Right Angle Pin Header

- 2-6 Circuits available
- UL 94V-2 nylon 6/6
- Polarization through varied center spacing between circuit 1 and 2
- .045" (1,14mm) straight square wire pins
- Mates with 5199 connector housing
- Tin plated brass pins. Plating options available



inches
mm



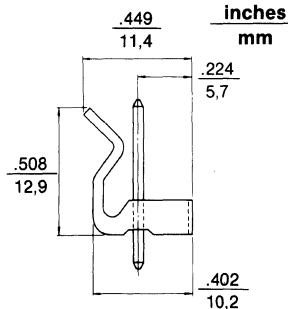
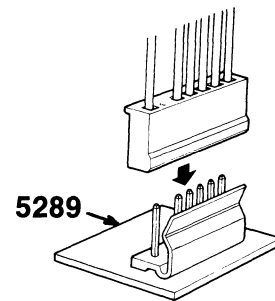
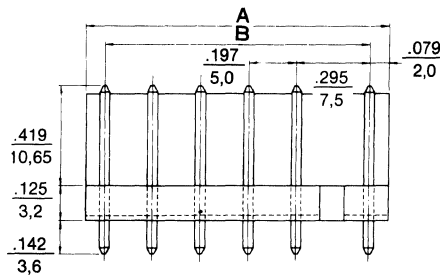
P.C. Board Hole Dimensions

Ordering and Dimensional Information - in. (mm)

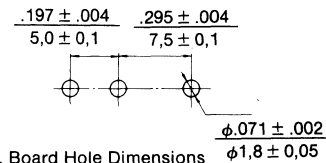
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-68-3021	.295 (7,5)	.421 (10,7)	5	10-68-3051	.886 (22,5)	1.012 (25,7)
3	10-68-3031	.492 (12,5)	.615 (15,62)	6	10-68-3061	1.083 (27,5)	1.209 (30,7)
4	10-68-3041	.689 (17,5)	.811 (20,60)				

5289 Series Straight Pin Friction Lock Header

- Locking ramp
- 2-6 Circuits
- UL 94V-2 nylon 6/6
- Polarization through varied center spacing between circuit 1 and 2
- .045" (1,14mm) straight square wire pins
- Mates with 5199 connector housing
- Tin plated brass pins. Plating options available



inches
mm



P.C. Board Hole Dimensions

Ordering and Dimensional Information - in. (mm)

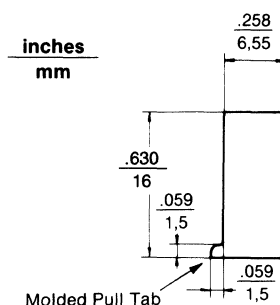
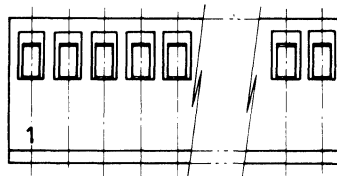
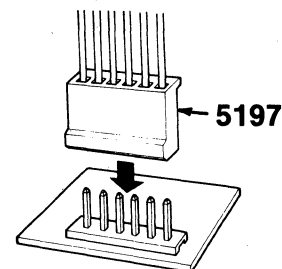
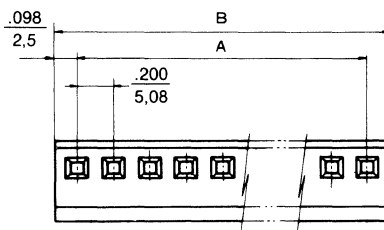
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-31-1028	.295 (7,5)	.453 (11,5)	5	10-31-1058	.886 (22,5)	1.043 (26,5)
3	10-31-1038	.492 (12,5)	.650 (16,5)	6	10-31-1068	1.083 (27,5)	1.240 (31,5)
4	10-31-1048	.689 (17,5)	.846 (21,5)				

.200" (5,08 mm) Connector and Header



5197 Series Crimp Terminal Housing

- 2-9 Circuits
- UL 94V-2 nylon 6/6
- Molded pull tab
- With locking ramp
- Molded in locking arm for terminal
- Accepts Molex spox terminal 5194/5225
- Mates with Molex 5279, 5280, 5281, 5282, 5293 header series

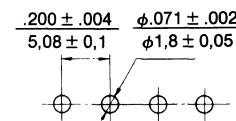
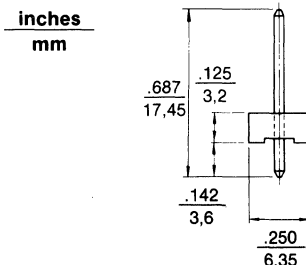
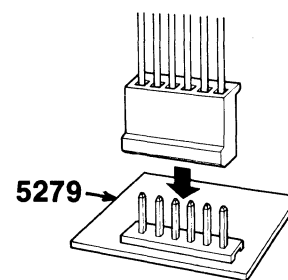
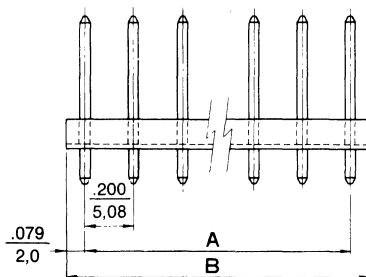


Ordering and Dimensional Information - in. (mm)

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-01-3026	.200 (5,08)	.397 (10,08)	6	10-01-3066	1.000 (25,40)	1.197 (30,40)
3	10-01-3036	.400 (10,16)	.597 (15,16)	7	10-01-3076	1.200 (30,48)	1.397 (35,48)
4	10-01-3046	.600 (15,24)	.797 (20,24)	8	10-01-3086	1.400 (35,56)	1.597 (40,56)
5	10-01-3056	.800 (20,32)	.997 (25,32)	9	10-01-3096	1.600 (40,64)	1.797 (45,64)

5279 Series Straight Pin Flat Header

- 2-9 Circuits
- UL 94V-2 nylon 6/6
- .045" (1,14mm) straight square wire pin
- Mates with 5197 housing
- Tin plated brass pins. Plating options available



P.C. Board Hole Dimensions

Ordering and Dimensional Information - in. (mm)

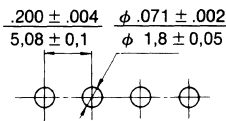
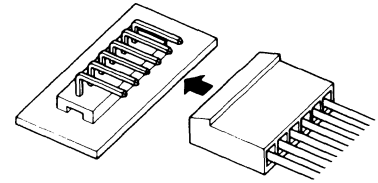
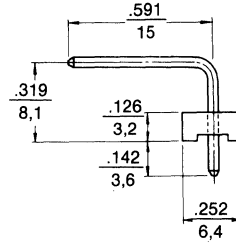
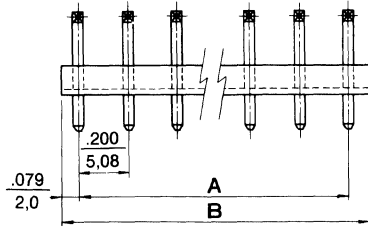
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-02-1027	.200 (5,08)	.357 (9,08)	6	10-02-1067	1.000 (25,40)	1.157 (29,40)
3	10-02-1037	.400 (10,16)	.557 (14,16)	7	10-02-1077	1.200 (30,48)	1.357 (34,48)
4	10-02-1047	.600 (15,24)	.757 (19,24)	8	10-02-1087	1.400 (35,56)	1.557 (39,57)
5	10-02-1057	.800 (20,32)	.957 (24,32)	9	10-02-1097	1.600 (40,64)	1.757 (44,64)

.200" (5,08 mm) Header



5280-NA Series Right Angle Pin Header

- 2-9 circuits
- UL 94V-2 nylon 6/6
- .045" (1,14mm) square wire pins
- Mates with 5197 connector housing
- Tin plated brass pins

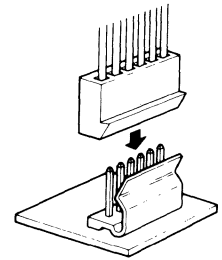
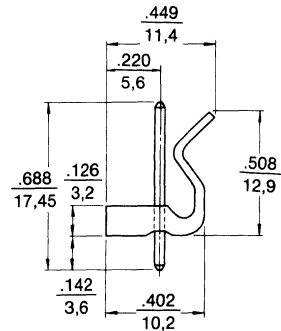
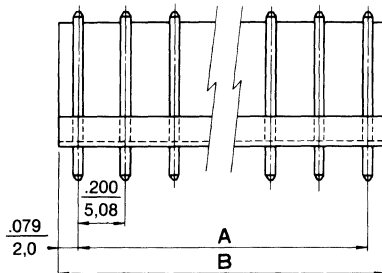


Ordering and Dimensional Information - in. (mm)

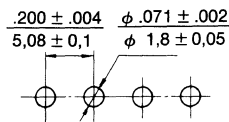
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-33-1021	.197 (5,0)	.354 (9,0)	6	10-33-1061	1.000 (25,4)	1.157 (29,4)
3	10-33-1031	.398 (10,1)	.555 (14,1)	7	10-33-1071	1.197 (30,4)	1.354 (34,4)
4	10-33-1041	.599 (15,2)	.756 (19,6)	8	10-33-1081	1.398 (35,5)	1.555 (39,5)
5	10-33-1051	.799 (20,3)	.957 (24,3)	9	10-33-1091	1.598 (40,6)	1.756 (44,6)

5281-NA Series Straight Pin Friction Lock Header

- 2-9 circuits
- UL 94V-2 nylon 6/6
- .045" (1,14mm) square wire pins
- Mates with 5197 connector housing
- Tin plated brass pins



inches
mm



Ordering and Dimensional Information - in. (mm)

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-32-1021	.197 (5,0)	.354 (9,0)	6	10-32-1061	1.000 (25,4)	1.157 (29,4)
3	10-32-1031	.398 (10,1)	.555 (14,1)	7	10-32-1071	1.197 (30,4)	1.354 (34,4)
4	10-32-1041	.599 (15,2)	.756 (19,6)	8	10-32-1081	1.398 (35,5)	1.555 (39,5)
5	10-32-1051	.799 (20,3)	.957 (24,3)	9	10-32-1091	1.598 (40,6)	1.756 (44,6)

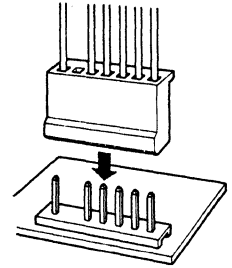
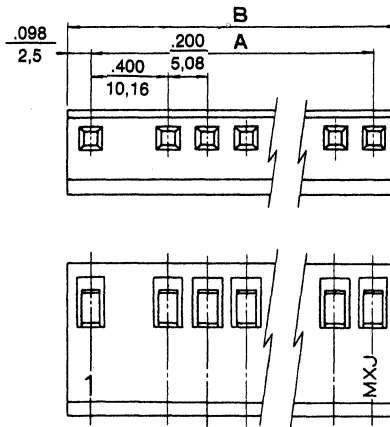
.200" (5,08 mm) Connector and Header



5198-N

Crimp Terminal Housing

- 3-8 circuits
- Same as 5197 but with second circuit void



E

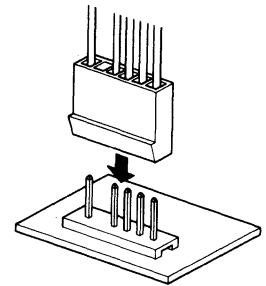
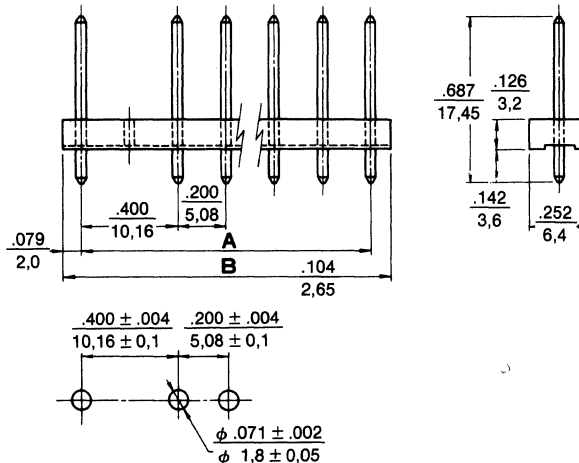
Ordering and Dimensional Information - in. (mm)

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	10-22-1032	.599 (15,2)	.795 (20,2)	6	10-22-1062	1.197 (30,4)	1.394 (35,4)
4	10-22-1042	.799 (20,3)	.996 (25,3)	7	10-22-1072	1.398 (35,5)	1.594 (40,5)
5	10-22-1052	1.0 (25,4)	1.197 (30,4)	8	10-22-1082	1.598 (40,6)	1.795 (45,6)

5283-NA

Straight Pin Header

- 3-8 circuits
- Mates with 5198-N housing
- Same as 5279 but with second pin void



Ordering and Dimensional Information - in. (mm)

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	10-63-1033	.599 (15,2)	.756 (19,2)	6	10-63-1063	1.197 (30,4)	1.354 (34,4)
4	10-63-1043	.799 (20,3)	.957 (24,3)	7	10-63-1073	1.398 (35,5)	1.555 (39,5)
5	10-63-1053	1.0 (25,4)	1.157 (29,4)	8	10-63-1083	1.598 (40,6)	1.756 (44,6)

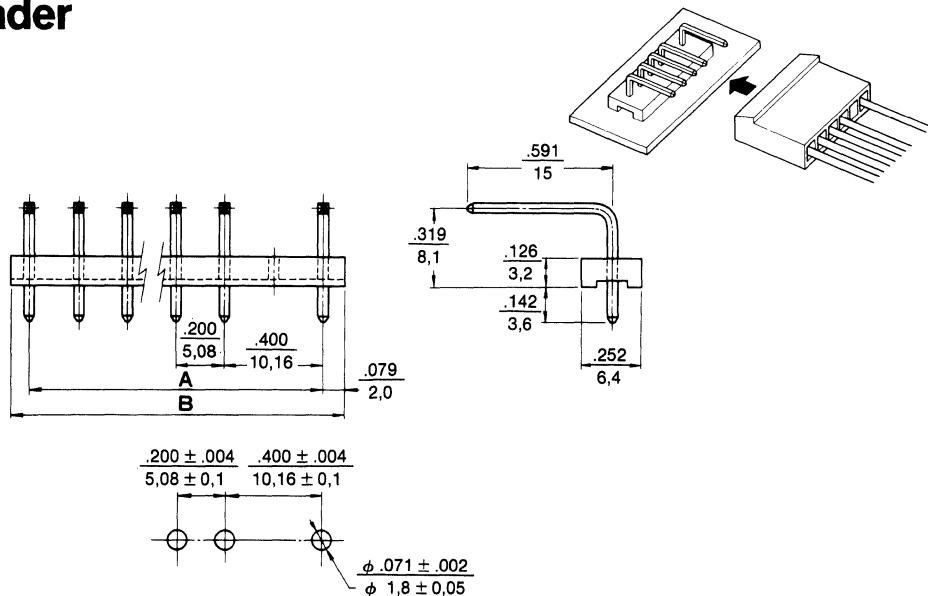
.200" (5,08 mm) Connector and Header



5284-NA

Right Angle Pin Header

- 3-8 circuits
- UL 94V-2 nylon 6/6
- .045" (1,14mm) square pins
- Mates with 5198-N housing
- Tin plated brass pins
- Second pin void



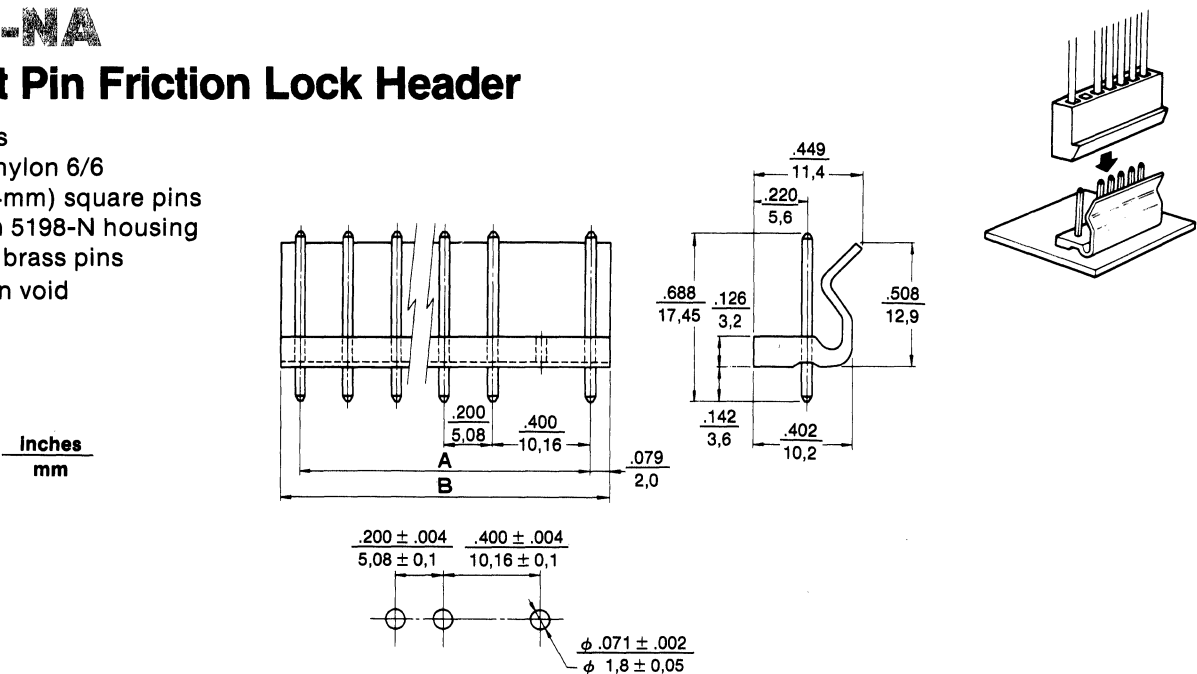
Ordering and Dimensional Information - in. (mm)

Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	10-68-1035	.599 (15,2)	.756 (19,2)	6	10-68-1065	1.197 (30,4)	1.354 (34,4)
4	10-68-1045	.799 (20,3)	.957 (24,3)	7	10-68-1075	1.398 (35,5)	1.555 (39,5)
5	10-68-1055	1.0 (25,4)	1.157 (29,4)	8	10-68-1085	1.598 (40,6)	1.756 (44,6)

5285-NA

Straight Pin Friction Lock Header

- 3-8 circuits
- UL 94V-2 nylon 6/6
- .045" (1,14mm) square pins
- Mates with 5198-N housing
- Tin plated brass pins
- Second pin void



Inches
mm

Ordering and Dimensional Information - in. (mm)

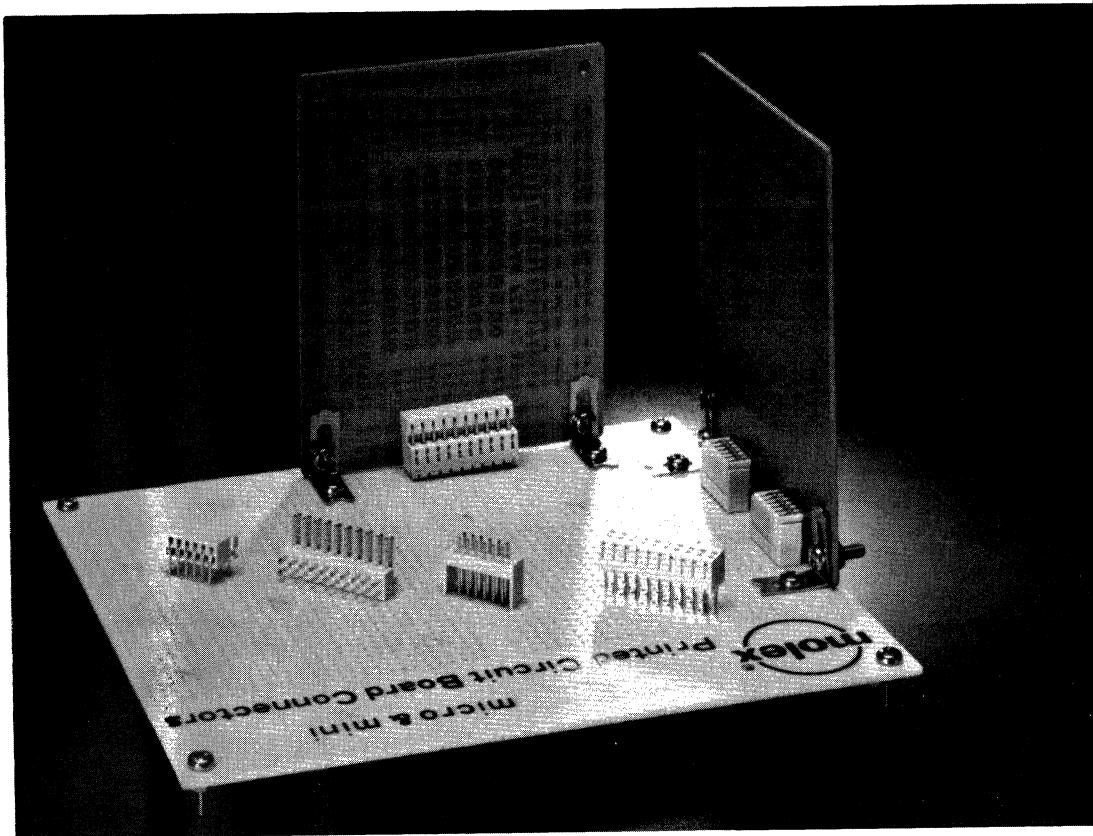
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
3	10-63-1039	.599 (15,2)	.756 (19,2)	6	10-63-1069	1.197 (30,4)	1.354 (34,4)
4	10-63-1049	.799 (20,3)	.957 (24,3)	7	10-63-1079	1.398 (35,5)	1.555 (39,5)
5	10-63-1059	1.0 (25,4)	1.157 (29,4)	8	10-63-1089	1.598 (40,6)	1.748 (44,4)

E

Micro-Components for Printed Circuit Board Interconnections



Contents



E

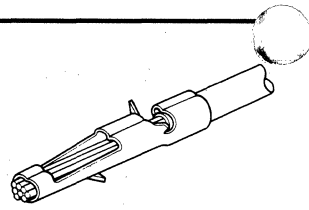
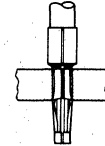
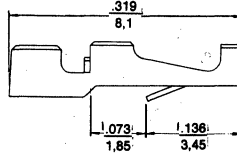
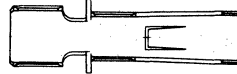
Stand-Alone Board-In Crimp Terminals.....	80E
.079" (2,0mm) Center	
Crimp Terminals and Housing	81E-82E
.098" (2,5 mm) Center	
Board-In Terminal and Housing	83E
.079" (2,0mm) Center	
Wire-to-Wire System	84E
Wire-to-Board System	85E-87E
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Wire-to-Board System	88E-89E
.049" (1,25 mm) Center	
Hinged Board-to-Board Connector	90E
.059" (1,5 mm) Center	
Board-to-Board Connectors	91E-92E
.079" (2,0mm) Center	
Board-to-Board Systems	93E-94E
.079" x .098" (2,0 x 2,5 mm)	
Board-to-Board Headers and Connectors	95E-96E

Stand Alone Board-in Crimp Terminals



5190 Series P.C. Board Crimp Terminal

- Secures wire to P.C. board before wave soldering
- Rapid and economical means of hand wiring P.C. boards
- Wire solders directly to P.C. board
- No additional contact resistance
- Low profile
- Recommended P.C. board hole diameter $.048 \pm .003$ ($1,2 \pm 0,08$) for $.062''$ ($1,57\text{mm}$) thick P.C. board

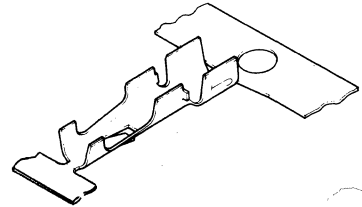
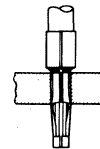
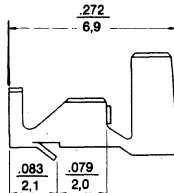
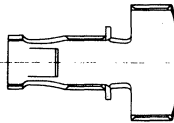


Ordering Information

Order No.	Wire Gauge	Insulation Diameter	Terminal	Contact Material	Automatic Tooling	
					Press	Crimp Die
08-70-0060	AWG #22 ~ #26	$1.3 \sim 1.7 \text{ MAX.}$ ϕ	Chain Form	Tin Plated Brass	11-26-0033 M15A	JM5865A 11-26-0093

5298 Series P.C. Board Crimp Terminal

- Secures wire to P.C. board before wave soldering
- Rapid and economical means of hand wiring P.C. boards
- Wire solders directly to P.C. board
- No additional contact resistance
- Low profile
- Recommended P.C. board hole diameter $.071 + .001/-0$ ($1,8 + 0,1/-0$)

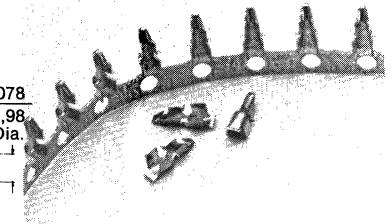
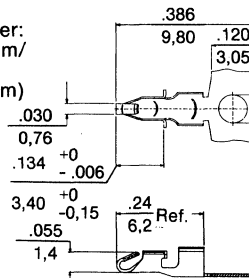


Ordering Information

Order No.	Wire Gauge	Insulation Diameter	Terminal	Contact Material	Automatic Tooling	
					Press	Crimp Die
08-70-0106	AWG #18 ~ #22	$\phi 3.05 \text{ MAX.}$	Chain Form	Tin Plated Brass	11-26-0033 M15A	JM5998A 11-26-0104

90198 Series

- Low profile
- Terminal locking lance holds wire in PCB for flow soldering
- Design allows both wire and terminal to be soldered and assures proper solder flow
- Insulation support prevents damage to the wire or solder joint
- Total height above PCB is less than most components ($.106''/2,8\text{mm}$)
- No terminal resistance, resistance is limited to integrity of the solder joint
- Application tooling available. See below
- PCB mounting hold diameter: 22 AWG $.048''/.051''$ ($1,23\text{mm}/1,30\text{mm}$); 24 and 26 AWG $.046''/.049''$ ($1,17\text{mm}/1,25\text{mm}$)
- PCB thickness $.054''/.070''$ ($1,37\text{mm}/1,77\text{mm}$)



Ordering Information

Order No.	Wire Gauge AWG	Insulation (Max.)	Terminal	Contact Material	Application Tooling
90198-0001	22, 24, 26	$.060''$ 1,52	Reels of 10,000	Tin/Lead Plated Phosphor Bronze	See Below

Application Tooling: Molex Euro TM40 Crimp Terminator, Eng. No. 69001

	Order No.
Complete Terminator Module Assembly	69001-1024
Applicator Only	69001-0171

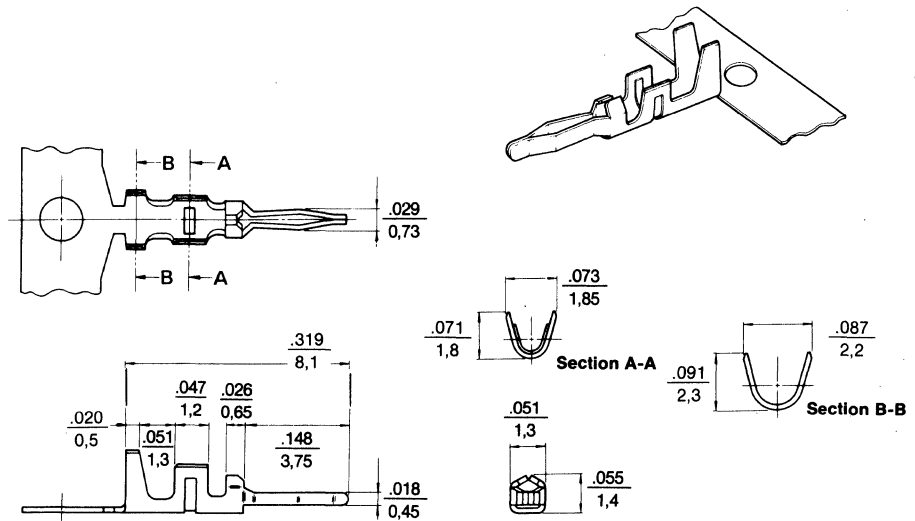
Contact factory for tooling variations

.079" (2,0 mm) Board-In Connector



5294 Series Crimp Terminal

- Use with 5295 housing
- Accepts wire gauge: #24-28
- Compliant tip holds terminal to board
- Terminal solders directly to board

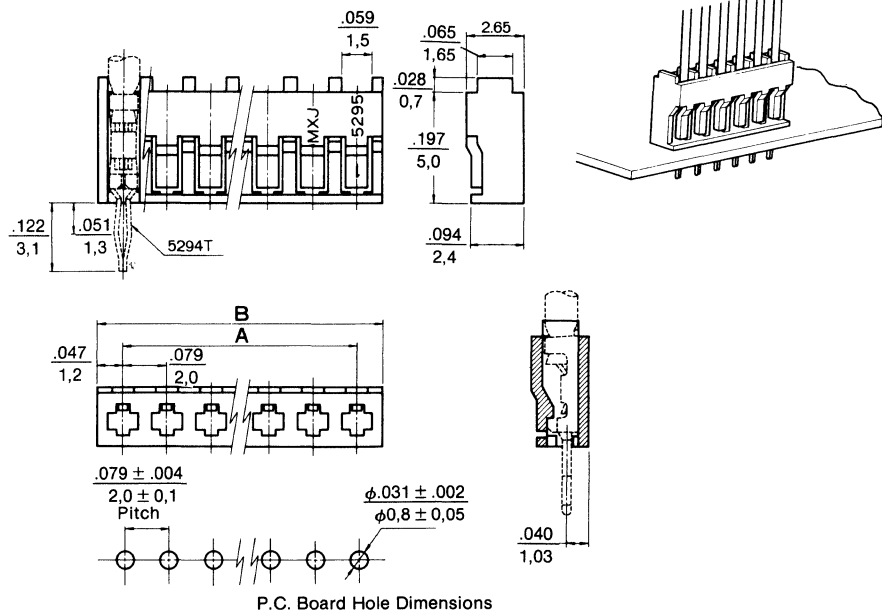


Order No.	Terminal	Wire Gauge #24 - #28	Insulation Diameter φ (1,5) MAX.	Contact Material Tin Plated Brass	Hand Tool JHTR5911 11-26-0101	Automatic Tooling		Extraction Tool J5800-009 11-26-0100
						Press 11-26-0033 M15A	Crimp Die 11-26-0097 JM5999A	
08-70-1041	Chain							
08-70-1042	Loose							

Recommended wire range assumes stranded wire.

5295 Series Housing

- 2-15 Circuits
- Uses 5294 terminal
- Mates directly to P.C. board
- UL 94V-0 nylon
- Use with .062" (1,57mm) thick P.C. board



Ordering and Dimensional Information - in. (mm)

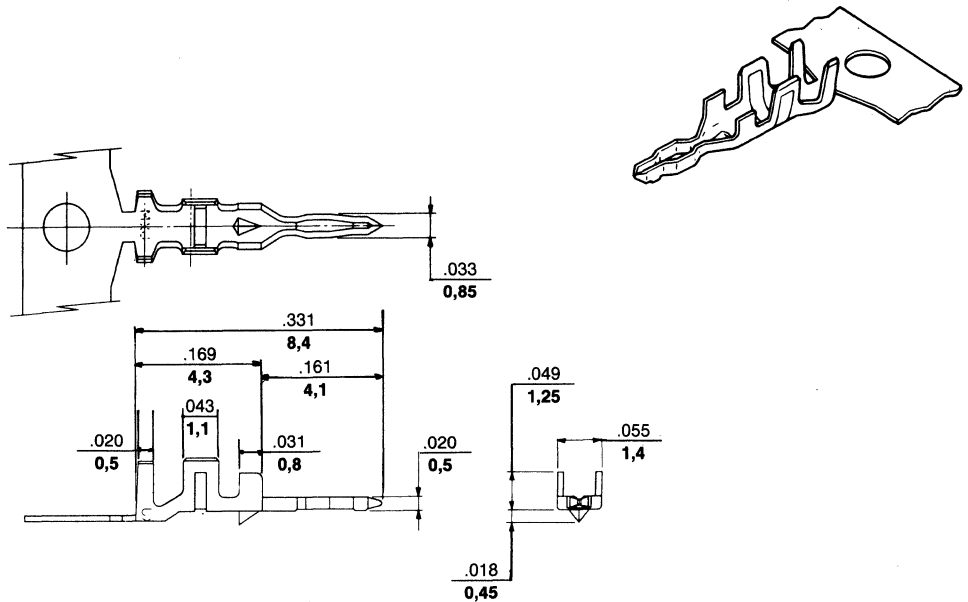
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	10-17-3025	.079 (2,0)	.173 (4,4)	9	10-17-3095	.630 (16,0)	.724 (18,4)
3	10-17-3035	.157 (4,0)	.252 (6,4)	10	10-17-3105	.709 (18,0)	.803 (20,4)
4	10-17-3045	.236 (6,0)	.331 (8,4)	11	10-17-3115	.787 (20,0)	.882 (22,4)
5	10-17-3055	.315 (8,0)	.409 (10,4)	12	10-17-3125	.866 (22,0)	.961 (24,4)
6	10-17-3065	.394 (10,0)	.488 (12,4)	13	10-17-3135	.945 (24,0)	1.039 (26,4)
7	10-17-3075	.472 (12,0)	.567 (14,4)	14	10-17-3145	1.024 (26,0)	1.118 (28,4)
8	10-17-3085	.551 (14,0)	.646 (16,4)	15	10-17-3155	1.102 (28,0)	1.197 (30,4)

.079" (2,0 mm) Low Profile Board-In Connector



5378 Terminal

- Wire range: AWG #24-#28
- Insulation diameter: ϕ 1.5 mm max.
- Strip length: 1.7-2.3 mm
- Accepts housing: 5379-N

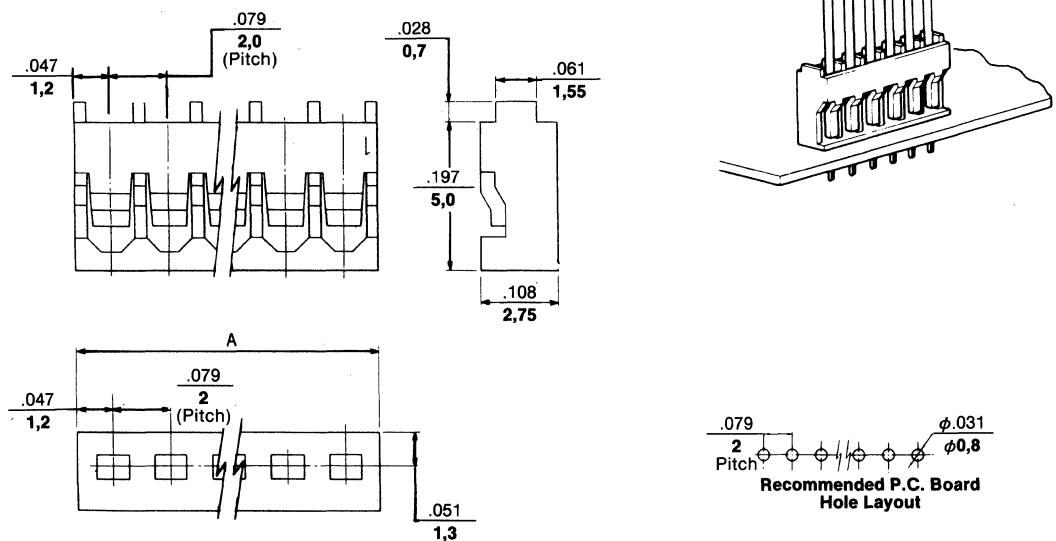


Ordering Information

Order No.	Terminal	Contact Material	Max. Current		Automatic Tooling		Hand Tool	Extraction Tool	Insertion Tool
			Amp.	Volt.	Press	Crimp Die			
5378T	Chain	Tin Plated Brass	2A	125V	M15A	57007-3000	57050-5000	—	—
5378TL	Loose								

5379-N Housing

- Nylon 6/6, UL 94V-2
- 2-15 circuits
- Accepts terminal: 5378



Dimensions

Circuits	Dim. A	Circuits	Dim. A
2	.173 4,4	9	.724 18,4
3	.252 6,4	10	.803 20,4
4	.331 8,4	11	.882 22,4
5	.409 10,4	12	.961 24,4
6	.488 12,4	13	1.039 26,4
7	.567 14,4	14	1.118 28,4
8	.646 16,4	15	1.197 30,4

Ordering Information

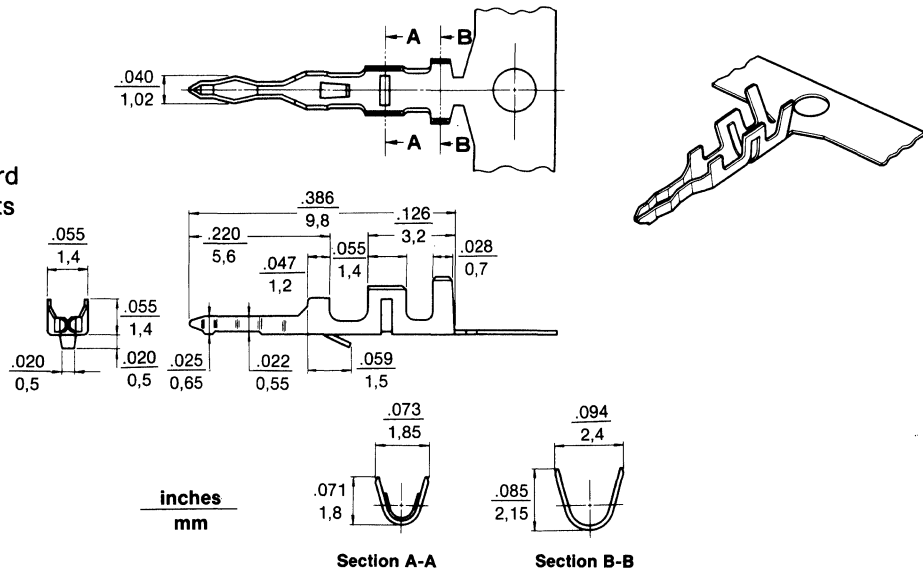
Circuits	Order No.	Circuits	Order No.
2	5379-02	9	5379-09
3	5379-03	10	5379-10
4	5379-04	11	5379-11
5	5379-05	12	5379-12
6	5379-06	13	5379-13
7	5379-07	14	5379-14
8	5379-08	15	5379-15

.098" (2,5 mm) Board-In Terminal and Housing



5394 Series Crimp Terminal

- Use with 5395 housing
- Compliant tip holds terminal to board
- Terminal solders directly to board
- Tab near tip of terminal prevents deformation

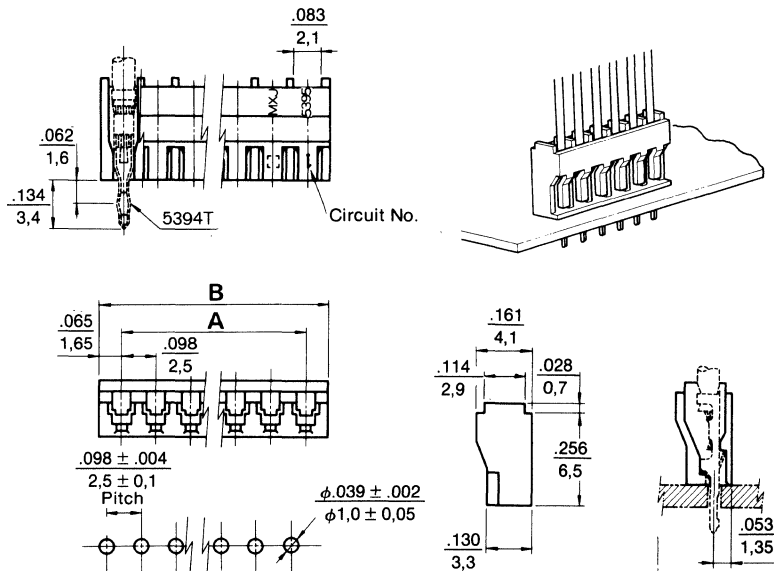


Ordering and Dimensional Information

Order No.	Terminal	Wire Gauge	Insulation Diameter	Contact Material	Hand Tool	Automatic Tooling	
						Press	Crimp Die
08-70-1043	Chain	AWG #22 ~ #28	.075" ϕ (1.9) MAX.	Tin Plated Brass	—	11-26-0033 M15A	JM5997A 11-26-0108
08-70-1044	Loose					—	

5395 Series Crimp Terminal Housing

- 2-15 Circuits
- Uses 5394 terminal
- Mates directly to P.C. board
- UL 94V-0 nylon
- Use with .062" (1,6mm) thick P.C. board



Ordering and Dimensional Information - in. (mm)

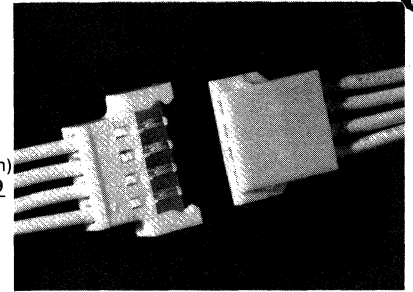
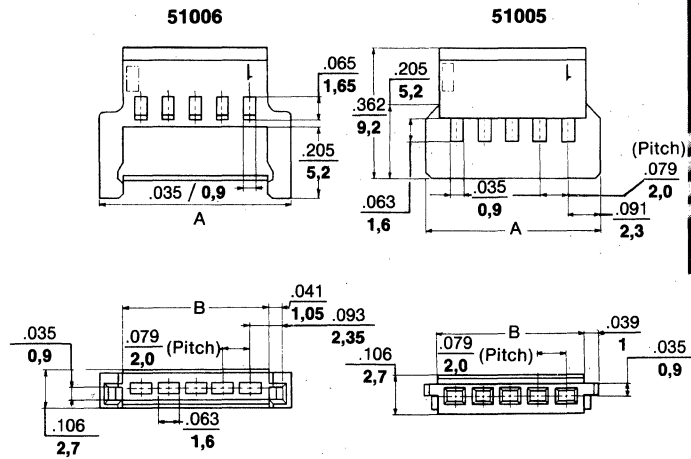
Circuits	Order No.	Dim. A	Dim. B	Circuits	Order No.	Dim. A	Dim. B
2	22-02-4027	.098 (2,5)	.228 (5,8)	9	22-02-4097	.787 (20,0)	.917 (23,3)
3	22-02-4037	.197 (5,0)	.327 (8,3)	10	22-02-4107	.866 (22,5)	1.016 (25,8)
4	22-02-4047	.295 (7,5)	.425 (10,8)	11	22-02-4117	.984 (25,0)	1.114 (28,3)
5	22-02-4057	.394 (10,0)	.524 (13,3)	12	22-02-4127	1.083 (27,5)	1.213 (30,8)
6	22-02-4067	.492 (12,5)	.622 (15,8)	13	22-02-4137	1.181 (30,0)	1.311 (33,3)
7	22-02-4077	.591 (15,0)	.720 (18,3)	14	22-02-4147	1.280 (32,5)	1.409 (35,8)
8	22-02-4087	.689 (17,5)	.819 (20,8)	15	22-02-4157	1.378 (35,0)	1.508 (38,3)

.079" (2,0 mm) Low Profile Wire-to-Wire System



51006 Plug 51005 Receptacle

- Polyester, UL 94V-0
- Tin plated phos-bronze terminals
- 125V, 2 Amps, max.
- 2-10 circuits
- Wire range: AWG #24-#28



Dimensions

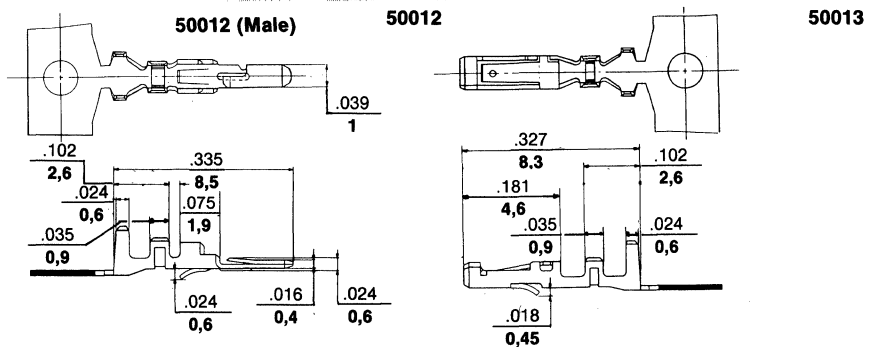
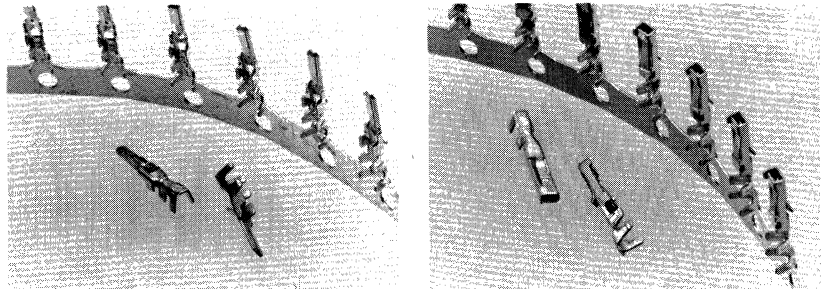
51006 - Plug					51005 - Receptacle						
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.315	8	7	.709	18	2	.260	6,6	7	.654	16,6
3	.394	10	8	.787	20	3	.339	8,6	8	.732	18,6
4	.472	12	9	.866	22	4	.417	10,6	9	.811	20,6
5	.551	14	10	.945	24	5	.496	12,6	10	.890	22,6
6	.630	16				6	.575	14,6			

Ordering Information

Plug Order No.	Receptacle Order No.
51006-XX00	51005-XX00
Replace XX in Order No. with number of circuits required, 02-10	

50012 Male Crimp Terminal 50013 Female Crimp Terminal

- Wire range: AWG #24-#28
- Insulation diameter: ϕ 1,15 mm max.
- Strip length: 1.7-2.3 mm
- 51006-XX00 (50012-8X00)
- 51005-XX00 (50013-8X00)



Ordering Information

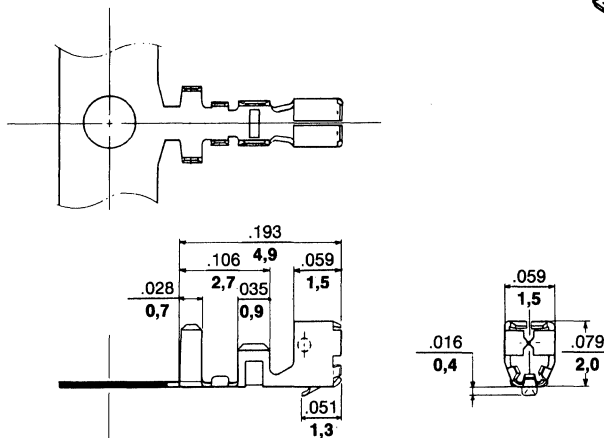
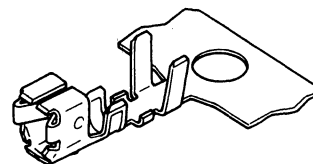
Order No.	Terminal	Contact Material	Max. Current		Automatic Tooling		Hand Tool	Extraction Tool	Insertion Tool
			Amp.	Volt.	Press	Crimp Die			
50012-8000	Chain	Tin Plated Phos. Bronze	2A	125V	M15A	57045-3000	—	—	—
50013-8000					—	—			
50012-8100	Loose	Tin Plated Phos. Bronze	2A	125V	—	—	57046-5000	—	—
50013-8100					—	—			

.079" (2,0 mm) Wire-to-Board System



50011 Crimp Terminal

- Wire range: AWG #24-#30
- Insulation diameter: ϕ 1.4 mm max.
- Strip length: 1.6-2.1 mm
- Accepts housing: 51004

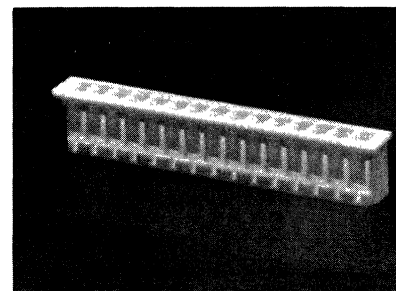
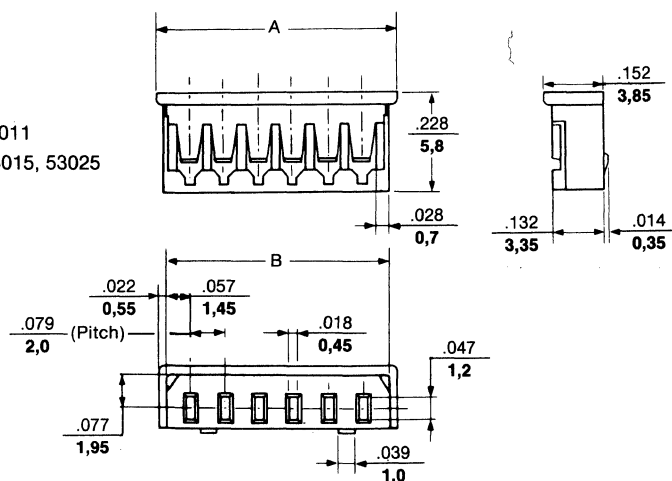


Ordering Information

Order No.	Terminal	Contact Material	Max. Current		Automatic Tooling		Hand Tool	Extraction Tool	Insertion Tool
			Amp.	Volt.	Press	Crimp Die			
50011-8000	Chain	Tin Plated Phos-Bronze	2A	125V	M15A	57030-3000	57032-5000	—	—
50011-8100	Loose								

51004 Housing

- Polyester, UL 94V-0
- 2-15 circuits
- Accepts terminal: 50011
- Mates with 53014, 53015, 53025



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.236	6	9	.787	20
3	.315	8	10	.866	22
4	.394	10	11	.945	24
5	.472	12	12	1.024	26
6	.551	14	13	1.102	28
7	.630	16	14	1.181	30
8	.709	18	15	1.260	32

Ordering Information

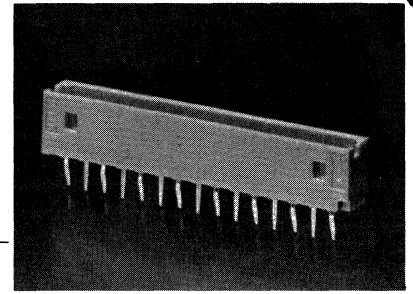
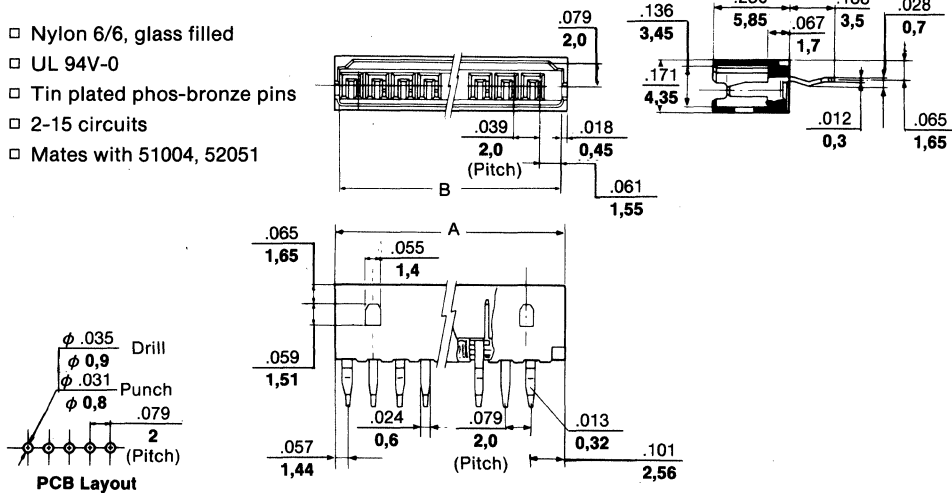
Circuits	Order No.	Circuits	Order No.
2	51004-0200	9	51004-0900
3	51004-0300	10	51004-1000
4	51004-0400	11	51004-1100
5	51004-0500	12	51004-1200
6	51004-0600	13	51004-1300
7	51004-0700	14	51004-1400
8	51004-0800	15	51004-1500

.079" (2,0 mm) Wire-to-Board System



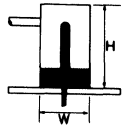
53014 Straight Header

- Nylon 6/6, glass filled
- UL 94V-0
- Tin plated phos-bronze pins
- 2-15 circuits
- Mates with 51004, 52051



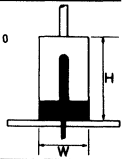
Mating With I.D.T. Connector

52051-***10
H=9mm W=4,4mm



Mating With Crimp Connector

50011-8*00 · 51004-***00 · 53014-***10
H=7,6mm W=4,4mm



Dimensions

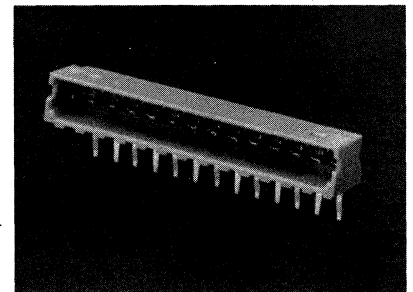
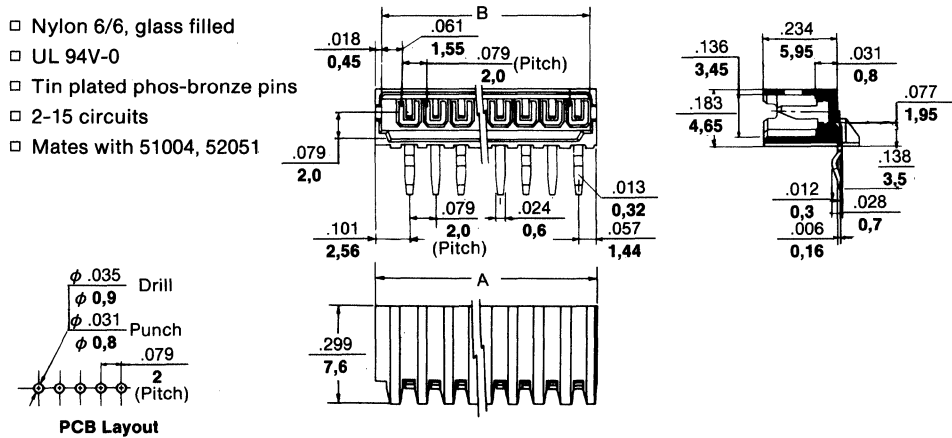
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.236 6	.201 5,1	9	.787 20	.752 19,1
3	.315 8	.280 7,1	10	.866 22	.831 21,1
4	.394 10	.358 9,1	11	.945 24	.909 23,1
5	.472 12	.437 11,1	12	1.024 26	.988 25,1
6	.551 14	.516 13,1	13	1.102 28	1.067 27,1
7	.630 16	.594 15,1	14	1.181 30	1.146 29,1
8	.709 18	.673 17,1	15	1.260 32	1.224 31,1

Ordering Information

Circuits	Order No.	Circuits	Order No.
2	53014-0210	9	53014-0910
3	53014-0310	10	53014-1010
4	53014-0410	11	53014-1110
5	53014-0510	12	53014-1210
6	53014-0610	13	53014-1310
7	53014-0710	14	53014-1410
8	53014-0810	15	53014-1510

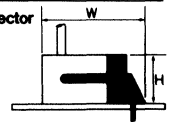
53015 Right Angle Header

- Nylon 6/6, glass filled
- UL 94V-0
- Tin plated phos-bronze pins
- 2-15 circuits
- Mates with 51004, 52051



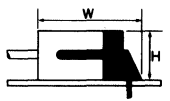
Mating With I.D.T. Connector

52051-***10
H=4,7mm W=10,75mm



Mating With Crimp Connector

50011-8*00 · 51004-***00 · 53015-***10
H=4,7mm W=9,3mm



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.236 6	.201 5,1	9	.787 20	.752 19,1
3	.315 8	.280 7,1	10	.866 22	.831 21,1
4	.394 10	.358 9,1	11	.945 24	.909 23,1
5	.472 12	.437 11,1	12	1.024 26	.988 25,1
6	.551 14	.516 13,1	13	1.102 28	1.067 27,1
7	.630 16	.594 15,1	14	1.181 30	1.146 29,1
8	.709 18	.673 17,1	15	1.260 32	1.224 31,1

Ordering Information

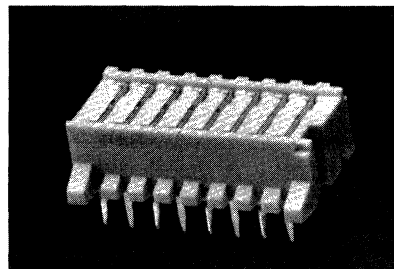
Circuits	Order No.	Circuits	Order No.
2	53015-0210	9	53015-0910
3	53015-0310	10	53015-1010
4	53015-0410	11	53015-1110
5	53015-0510	12	53015-1210
6	53015-0610	13	53015-1310
7	53015-0710	14	53015-1410
8	53015-0810	15	53015-1510

.079" (2,0 mm) Wire-to-Board System

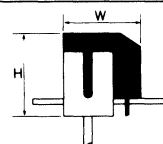


53025 Header, Bottom Entry Type

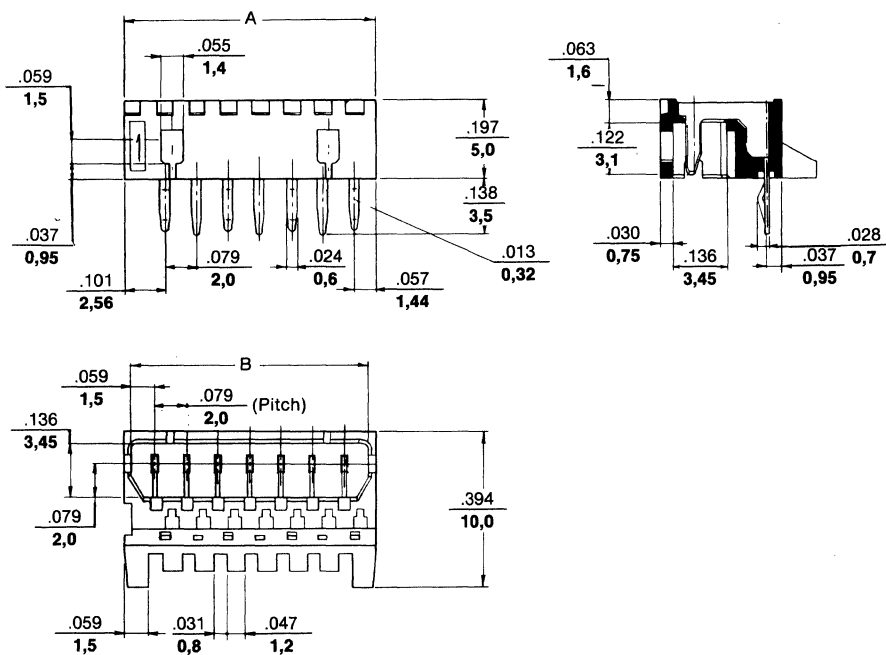
- Nylon 6/6, glass filled
- UL 94V-0
- Tin plated phos-bronze pins
- 2-10 circuits
- Mates with 51004



Mating With
50011-8*00-51004-***00
53025-***10
H=7,4mm W=10mm



E



PCB Layout

Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.236 6	.197 5	7	.630 16	.590 15
3	.315 8	.276 7	8	.709 18	.669 17
4	.394 10	.354 9	9	.787 20	.748 19
5	.472 12	.433 11	10	.866 22	.827 21
6	.551 14	.512 13			

Ordering Information

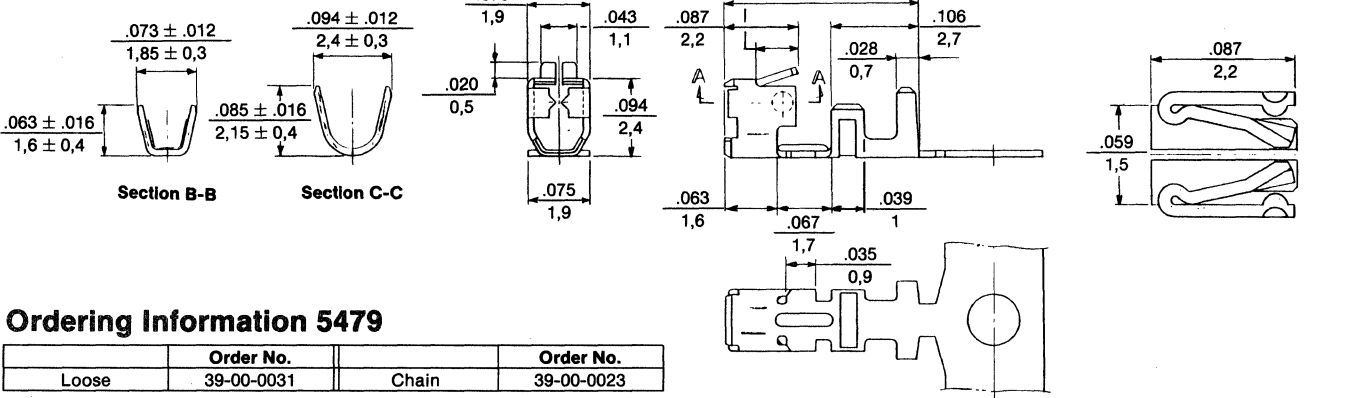
Circuits	Order No.	Circuits	Order No.
2	53025-0210	7	53025-0710
3	53025-0310	8	53025-0810
4	53025-0410	9	53025-0910
5	53025-0510	10	53025-1010
6	53025-0610		

.098" (2,5 mm) Center Wire-to-Board System



5479 Series Low Profile Terminal

- For use with Molex 5480 housing
- Wire range AWG 22-28 with max. ins. dia. .075" (1,9mm)
- Current rating (with max. wire size) 3 amps DC/AC
- Voltage rating, 250 V AC/DC
- Phosphor bronze, pre-tinned

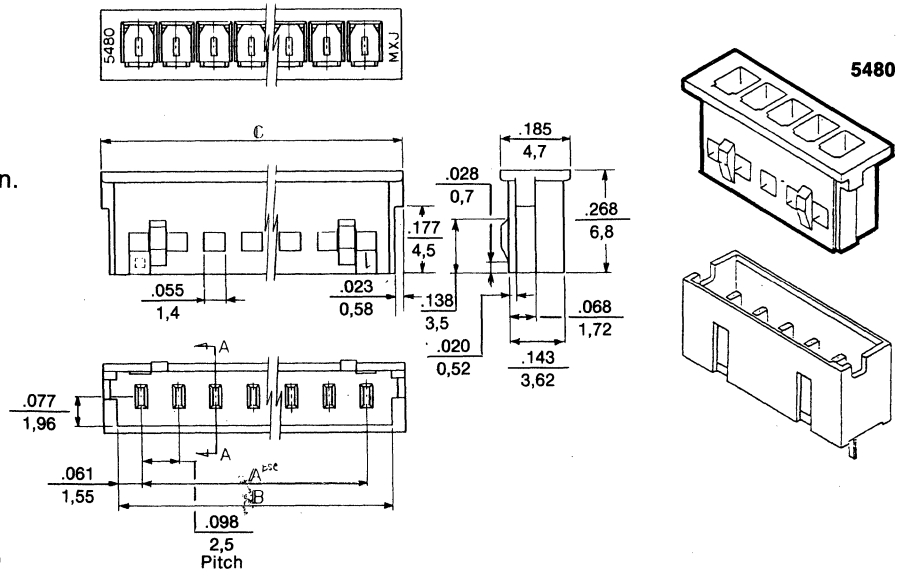


Ordering Information 5479

	Order No.		Order No.
Loose	39-00-0031	Chain	39-00-0023

5480 Series Low Profile Housing

- Mates with Molex 5483 and 5484 Series headers
- UL 94V-2 polyester material
- Dielectric strength 1000V AC 1 min.



Dimensional Information 5480

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.098 2,5	.220 5,6	.291 7,4	6	.492 12,5	.614 15,6	.685 17,4	10	.886 22,5	1.008 25,6	1.079 27,4
3	.197 5,0	.319 8,1	.390 9,9	7	.591 15,0	.713 18,1	.783 19,9	11	.984 25,0	1.106 28,1	1.177 29,9
4	.295 7,5	.417 10,6	.488 12,4	8	.689 17,5	.811 20,6	.882 22,4	12	1.083 27,5	1.205 30,6	1.276 32,4
5	.394 10,0	.516 13,1	.587 14,9	9	.787 20,0	.909 23,1	.908 24,9	13	1.181 30,0	1.327 33,1	1.374 34,9

Ordering Information 5480

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	39-01-0023	4	39-01-0043	6	39-01-0063	8	39-01-0083	10	39-01-0103	12	39-01-0123
3	39-01-0033	5	39-01-0053	7	39-01-0073	9	39-01-0093	11	39-01-0113	13	39-01-0133

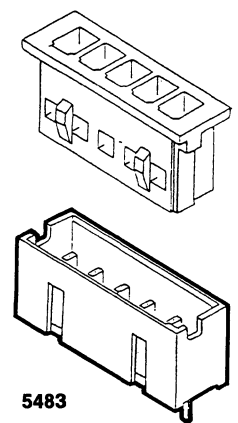
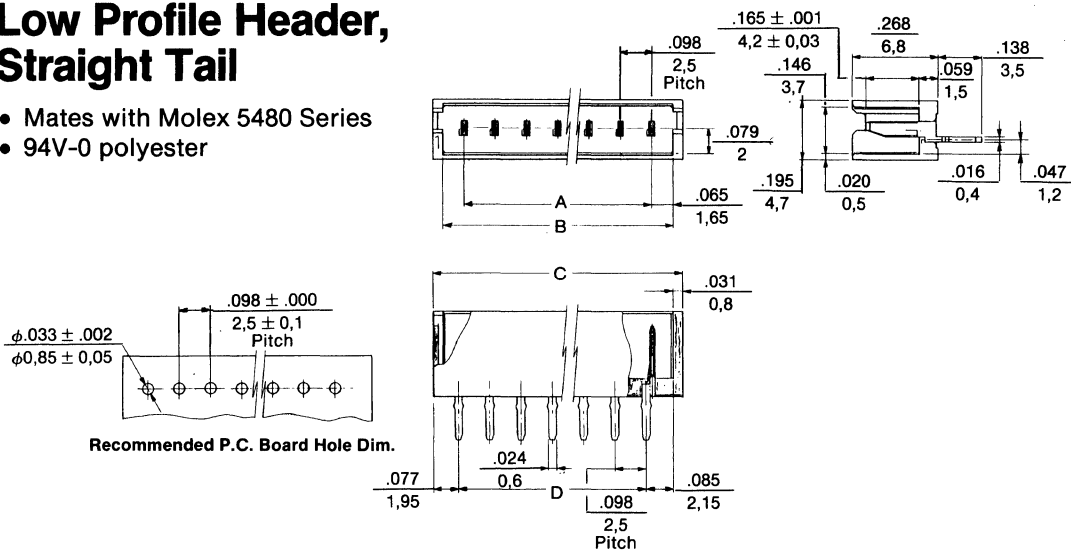
.098" (2,5 mm) Center Wire-to-Board System



5483-NA

Low Profile Header, Straight Tail

- Mates with Molex 5480 Series
- 94V-0 polyester



5483

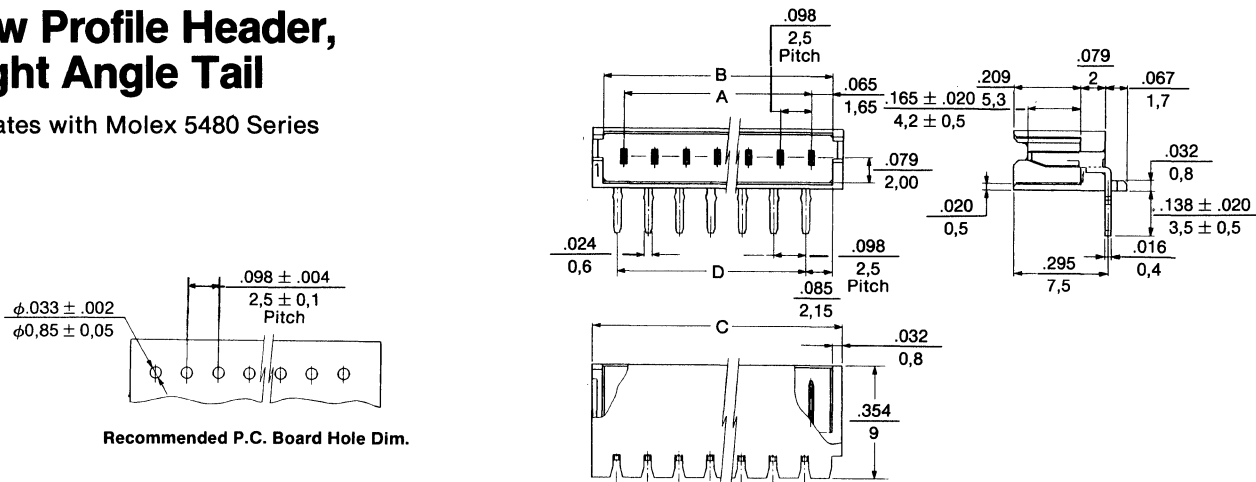
Ordering Information 5483-NA

Order No. 39-27-0XX1
Replace XX with number of circuits, 02-13

5484-NA

Low Profile Header, Right Angle Tail

- Mates with Molex 5480 Series



Recommended P.C. Board Hole Dim.

Ordering Information 5484-NA

Order No. 39-27-0XX2
Replace XX with number of circuits, 02-13

Dimensional Information 5483-NA/5494-NA

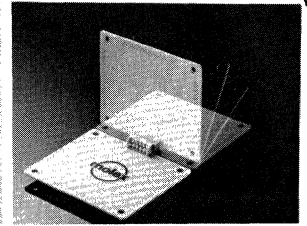
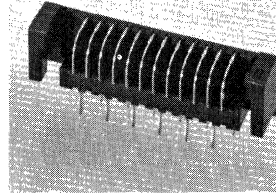
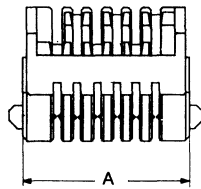
Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D
2	.098 2,5	.228 5,8	.291 7,4	.098 2,5	6	.492 12,5	.622 15,8	.685 17,4	.492 12,5	10	.886 22,5	1.016 25,8	1.079 27,4	.886 22,5
3	.197 5,0	.327 8,3	.390 9,9	.197 5,0	7	.591 15,0	.720 18,3	.783 19,9	.591 15,0	11	.984 25,0	1.114 28,3	1.177 29,9	.984 25,0
4	.295 7,5	.425 10,8	.488 12,4	.295 7,5	8	.689 17,5	.819 20,8	.882 22,4	.689 17,5	12	1.083 27,5	1.213 30,8	1.276 32,4	1.083 27,5
5	.394 10,0	.524 13,3	.587 14,9	.394 10,0	9	.787 20,0	.917 23,3	.980 24,9	.787 20,0	13	1.181 30,0	1.311 33,3	1.374 34,9	1.181 30,0

.049" (1,25 mm) Hinged Board-to-Board Connector

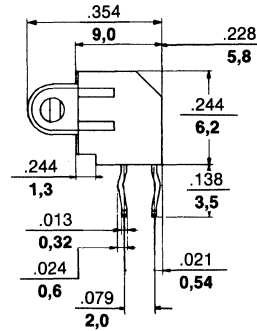
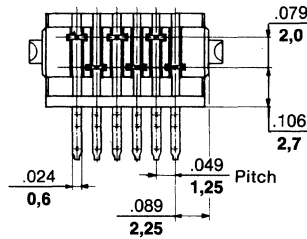
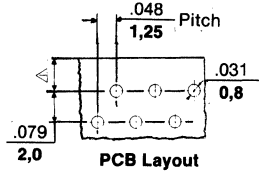


52061 Series Hinged

- Polyester, UL 94V-0
- Tin plated phos-bronze terminals
- Select circuit sizes
- 125V 1 amp, max.
- Mates with 53045-XX11



52061 and 53045 shown in Board-to-Board Application



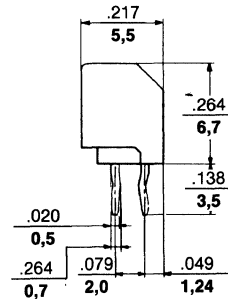
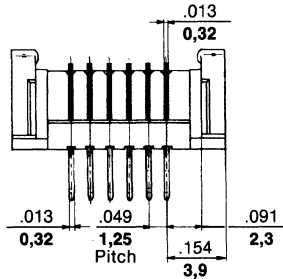
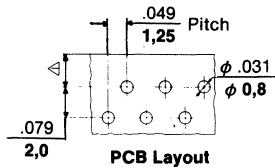
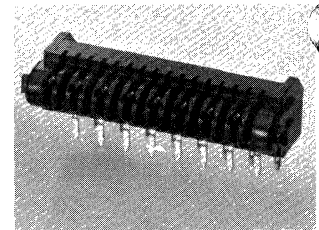
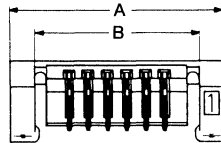
Dimensions

Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A	Circuits	Dim. A
4	.325 8,25	10	.620 15,75	14	.817 20,75	18	1.014 25,75
6	.423 10,75	12	.719 18,25	16	.915 23,35	20	1.112 28,25
8	.522 13,25						

Contact Factory to Order

53045 Series Hinged

- Polyester, UL 94V-0
- Tin plated phos-bronze pins
- Select circuit sizes
- Mates with 52061-XX11

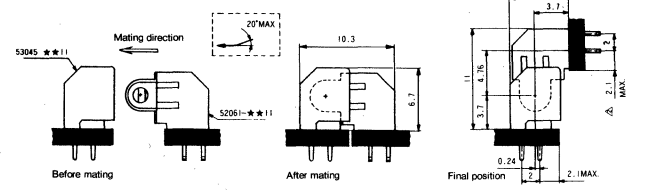


Dimensions

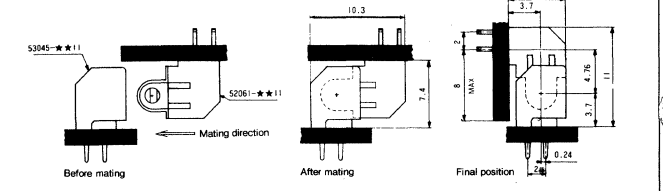
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.455 11,55	.329 8,35	10	.624 15,85	.750 19,05	14	.947 24,05	.821 20,85	18	1.018 25,85	1.144 29,05
6	.427 10,85	.553 14,05	12	.722 18,35	.848 21,55	16	.919 23,35	1.045 26,55	20	1.116 28,35	1.242 31,55
8	.526 13,35	.652 16,55									

Contact Factory to Order

EXAMPLE 1



EXAMPLE 2



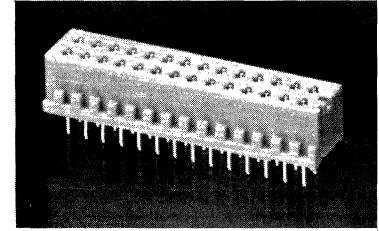
Examples 1 and 2 dimensions in millimeters

.059" (1,5 mm) Dual Row Board-to-Board Connectors

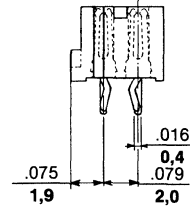
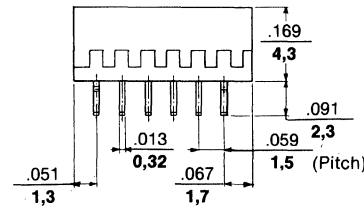
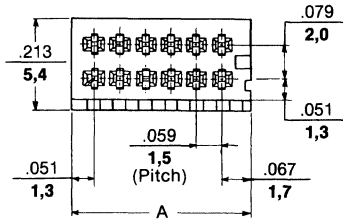
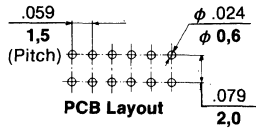
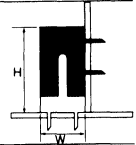


52022 Series Connector

- Nylon 6/6, UL 94V-0
- Tin plated phos-bronze terminals
- 6-30 circuits
- 125V, 1 Amp, max.
- Mates with 53020
- High pressure tuning fork terminal



Mating With
52022-★10 - 53020-★10
H = 7,3mm W = 5,5mm



End tails kinked for 6 and 8 circuit versions only

Dimensions

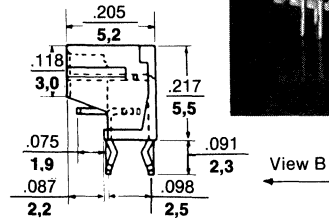
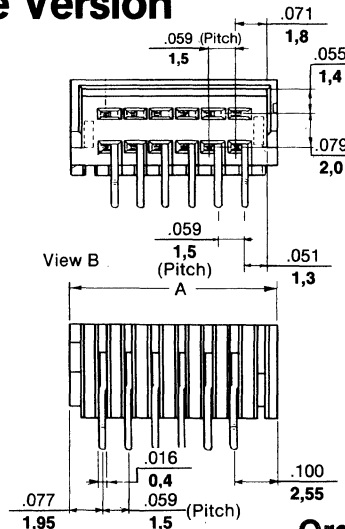
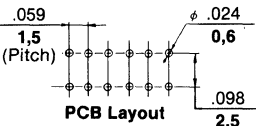
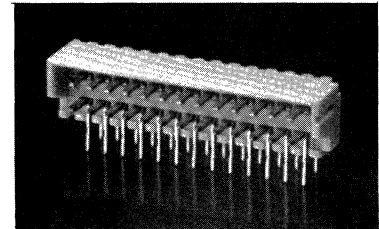
Circuits	Dim. A	Circuits	Dim. A
6	.236 6,0	20	.650 16,5
8	.295 7,5	22	.709 18,0
10	.354 9,0	24	.768 19,5
12	.413 10,5	26	.827 21,0
14	.472 12,0	28	.886 22,5
16	.531 13,5	30	.945 24,0
18	.591 15,0		

Ordering Information

Circuits	Order No.	Circuits	Order No.
6	52022-0610	20	52022-2010
8	52022-0810	22	52022-2210
10	52022-1010	24	52022-2410
12	52022-1210	26	52022-2610
14	52022-1410	28	52022-2810
16	52022-1610	30	52022-3010
18	52022-1810		

53020 Series Header, Right Angle Version

- Nylon 6/6, UL 94V-0
- Tin plated phos-bronze pins
- 6-30 circuits
- Mates with 52022



View B

Dimensions

Circuits	Dim. A	Circuits	Dim. A
6	.295 7,5	20	.709 18,0
8	.354 9,0	22	.768 19,5
10	.413 10,5	24	.827 21,0
12	.472 12,0	26	.886 22,5
14	.531 13,5	28	.945 24,0
16	.591 15,0	30	1.004 25,5
18	.650 16,5		

Ordering Information

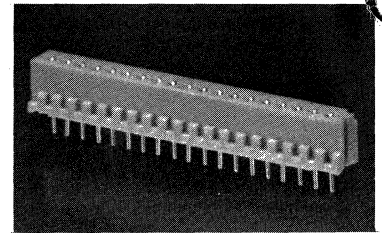
Circuits	Order No.	Circuits	Order No.
6	53020-0610	20	53020-2010
8	53020-0810	22	53020-2210
10	53020-1010	24	53020-2410
12	53020-1210	26	53020-2610
14	53020-1410	28	53020-2810
16	53020-1610	30	53020-3010
18	53020-1810		

.059" (1,5 mm) Single Row Board-to-Board Connectors

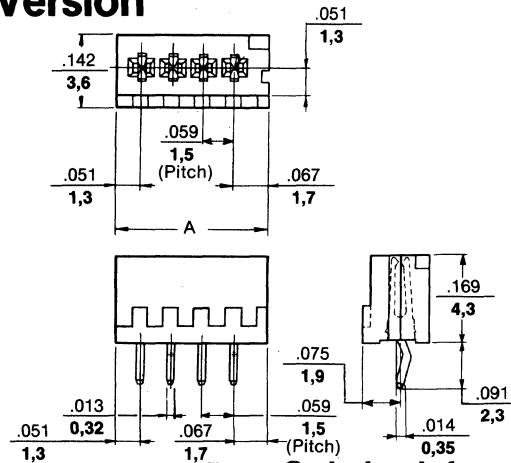
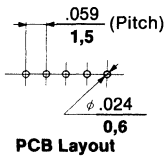
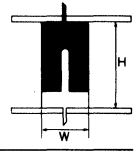


52024 Series Connector, Straight Version

- Nylon 6/6, UL 94V-0
- Tin plated phos-bronze terminals
- 2-20 circuits
- 125V, 1 Amp, max.
- Mates with 53022



Mating With
52024-★*10 • 53022-★*10
H = 6mm W = 3,7mm



Dimensions

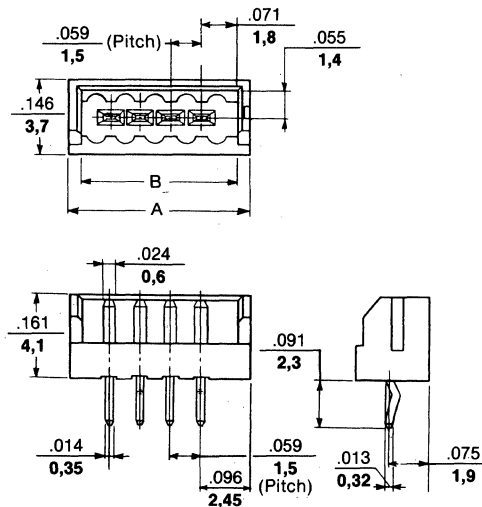
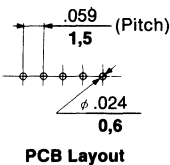
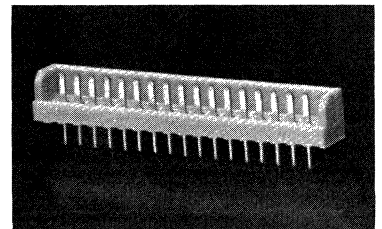
Circuits	Dim. A	Circuits	Dim. A
2	.177 4,5	12	.768 19,5
3	.236 6,0	13	.827 21,0
4	.295 7,5	14	.886 22,5
5	.354 9,0	15	.945 24,0
6	.413 10,5	16	1.004 25,5
7	.472 12,0	17	1.063 27,0
8	.531 13,5	18	1.122 28,5
9	.591 15,0	19	1.181 30,0
10	.650 16,5	20	1.240 31,5
11	.709 18,0		

Ordering Information

Circuits	Order No.	Circuits	Order No.
2	52024-0210	12	52024-1210
3	52024-0310	13	52024-1310
4	52024-0410	14	52024-1410
5	52024-0510	15	52024-1510
6	52024-0610	16	52024-1610
7	52024-0710	17	52024-1710
8	52024-0810	18	52024-1810
9	52024-0910	19	52024-1910
10	52024-1010	20	52024-2010
11	52024-1110		

53022 Series Header, Straight Version

- Nylon 6/6, UL 94V-0
- Tin plated phos-bronze pins
- 2-20 circuits
- Mates with 52024



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.236 6,0	.185 4,7	12	.827 21,0	.776 19,7
3	.295 7,5	.244 6,2	13	.886 22,5	.835 21,2
4	.354 9,0	.303 7,7	14	.945 24,0	.894 22,7
5	.413 10,5	.362 9,2	15	1.004 25,5	.853 24,2
6	.472 12,0	.421 10,7	16	1.063 27,0	1.012 25,7
7	.531 13,5	.480 12,2	17	1.122 28,5	1.071 27,2
8	.591 15,0	.539 13,7	18	1.181 30,0	1.130 28,7
9	.650 16,5	.598 15,2	19	1.240 31,5	1.189 30,2
10	.709 18,0	.657 16,7	20	1.299 33,0	1.248 31,7
11	.768 19,5	.717 18,2			

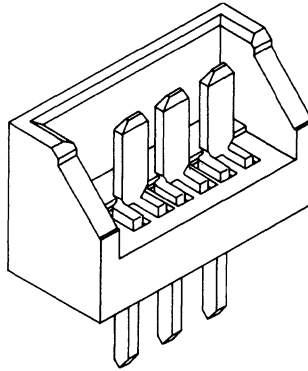
Ordering Information

Circuits	Order No.	Circuits	Order No.
2	53022-0210	12	53022-1210
3	53022-0310	13	53022-1310
4	53022-0410	14	53022-1410
5	53022-0510	15	53022-1510
6	53022-0610	16	53022-1610
7	53022-0710	17	53022-1710
8	53022-0810	18	53022-1810
9	53022-0910	19	53022-1910
10	53022-1010	20	53022-2010
11	53022-1110		

.079" (2,0 mm) Board-to-Board System



5512-NA Header



- 2-20 circuits
- Low profile
- Tin-plated phos-bronze
- UL 94V-0 housing material
- For high pressure tuning fork terminals
- Mates with 5513 NCPB and 5513 NACB

Specifications for 5512-NA, 5513 NAPB, 5513 NCPB

Electrical:

Rated Voltage and Current — AC 125V 1.5 amp
DC 125V 1.5 amp

Contact Resistance — 20mΩ max.

Dielectric Strength — AC 500V 1 min.

Insulation Resistance — 1000MΩ min.

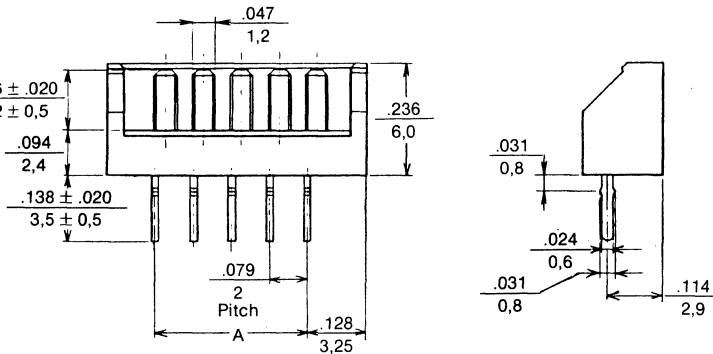
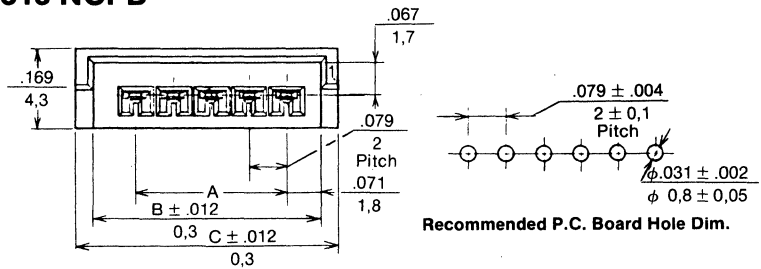
Mechanical:

Terminal Retention Force — 1 kg min.

Environmental:

Temperature rise — 30° C max.

Ambient Temperature Range — -40°C ~ 105°C



Dimensional Information 5512-NA/5513-NAPB/5513-NCPB

Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C	Circuits	Dim. A	Dim. B	Dim. C
2	.079 2	.240 6,1	.311 7,9	9	.630 16	.791 20,1	.862 21,9	15	1.102 28	1.264 32,1	1.335 33,9
3	.157 4	.319 8,1	.390 9,9	10	.709 18	.870 22,1	.941 23,9	16	1.181 30	1.343 34,1	1.413 35,9
4	.236 6	.398 10,1	.469 11,9	11	.787 20	.949 24,1	1.020 25,9	17	1.260 32	1.421 36,1	1.492 37,9
5	.315 8	.476 12,1	.547 13,9	12	.866 22	1.028 26,1	1.098 27,9	18	1.339 34	1.500 38,1	1.571 39,9
6	.394 10	.555 14,1	.626 15,9	13	.945 24	1.106 28,1	1.177 29,9	19	1.417 36	1.579 40,1	1.650 41,9
7	.472 12	.634 16,1	.705 17,9	14	1.024 26	1.185 30,1	1.256 31,9	20	1.496 38	1.657 42,1	1.728 43,9
8	.551 14	.713 18,1	.783 19,9								

Ordering Information 5512-NA

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
2	39-26-9026	7	39-26-9076	12	39-26-9126	17	39-26-9176
3	39-26-9036	8	39-26-9086	13	39-26-9136	18	39-26-9186
4	39-26-9046	9	39-26-9096	14	39-26-9146	19	39-26-9196
5	39-26-9056	10	39-26-9106	15	39-26-9156	20	39-26-9206
6	39-26-9066	11	39-26-9116	16	39-26-9166		

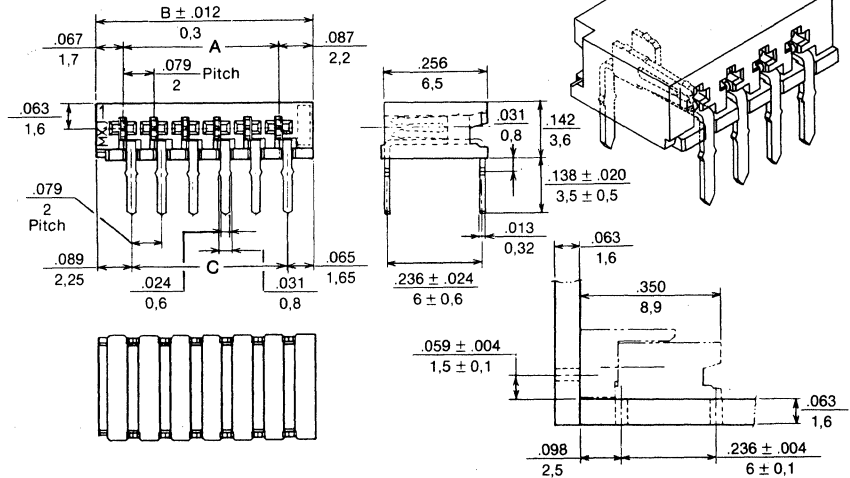
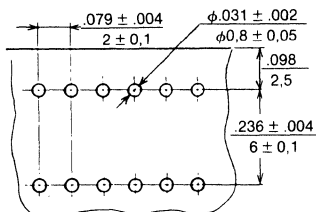


.079" (2,0 mm) Board-to-Board Connectors



5513-NAPB Right Angle Version

- 2-20 circuits
- Tin-plated phos-bronze terminal
- UL 94V-0 housing material
- High-pressure tuning fork contact
- Low profile
- Mates with 5512 header

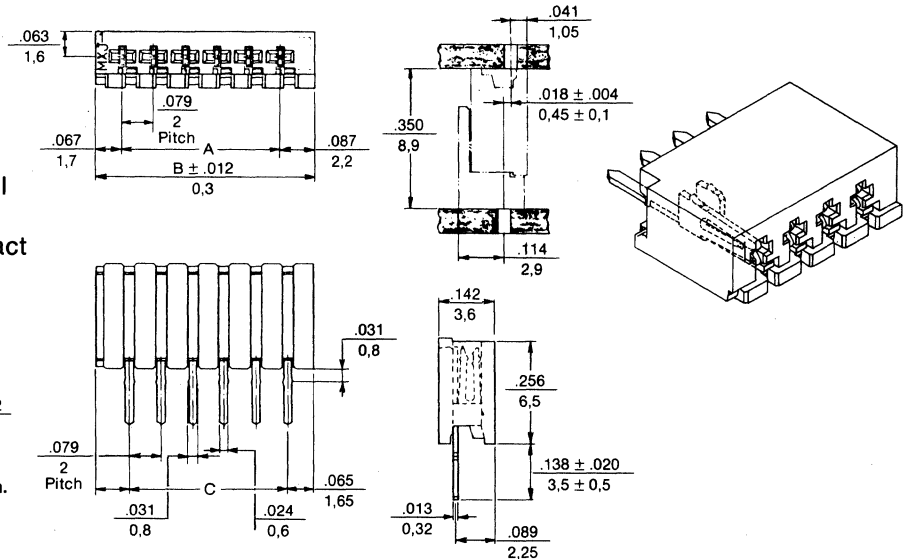
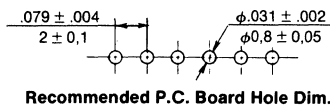


Ordering Information 5513-NAPB

Order No. 39-51-3XX0
Replace XX with number of circuits, 02-20

5513-NCPB Straight Version

- 2-20 circuits
- Low profile
- Tin-plated phos-bronze terminal
- UL 94V-0 housing material
- High-pressure tuning fork contact
- Mates with 5512 header



Ordering Information 5513-NCPB

Order No. 39-51-3XX1
Replace XX with number of circuits, 02-20

Dimensional Information 5513-NAPB/NCPB

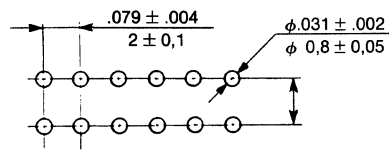
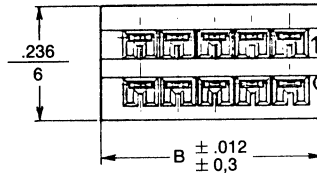
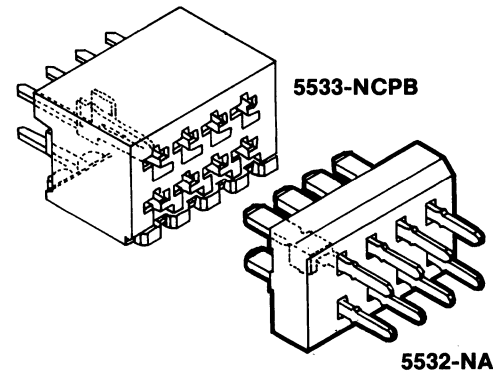
Circuits	Dims. A & C	Dim. B	Circuits	Dims. A & C	Dim. B	Circuits	Dims. A & C	Dim. B	Circuits	Dims. A & C	Dim. B	Circuits	Dims. A & C	Dim. B
2	.079 2	.232 5,9	6	.394 10	.547 13,9	10	.709 18	.862 21,9	14	1.024 26	1.177 29,9	18	1.339 34	1.492 37,9
3	.157 4	.311 7,9	7	.472 12	.626 15,9	11	.787 20	.941 23,9	15	1.102 28	1.256 31,9	19	1.417 36	1.571 39,9
4	.236 6	.390 9,9	8	.551 14	.705 17,9	12	.866 22	1.020 25,9	16	1.181 30	1.335 33,9	20	1.496 38	1.650 41,9
5	.315 8	.469 11,9	9	.630 16	.783 19,9	13	.945 24	1.098 27,9	17	1.260 32	1.413 35,9			

.079" (2,0 mm) x .098" (2,5 mm) Board-to-Board Header

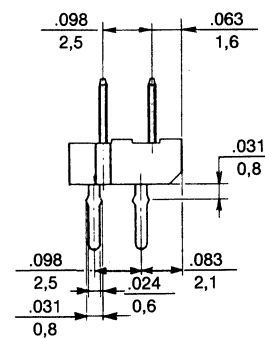
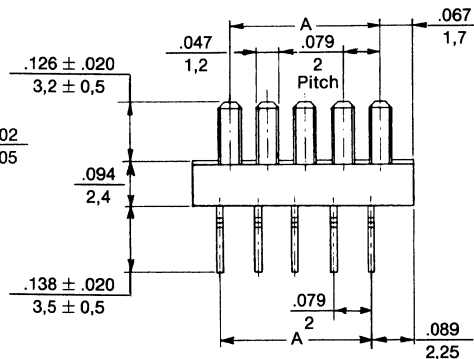


5532-NA

- Compact size
- 4-40 circuits
- Mates with the 5533 NCPB and 5533 NAPB headers
- Nylon 66 (UL 94V-0)
- Tin-plated phos-bronze terminal



Recommended P.C. Board Hole Dim.



Specifications

Electrical:

Rated Voltage and Current — 125V AC/DC, 1.5 amps

Contact Resistance — 20 milliohms (mΩ)

Dielectric Strength — 500V 1 min.

Insulation Resistance — 1000 megohms min. (MΩ)

Mechanical:

Terminal Retention Force — 1 kg min.

Environmental:

Ambient Temperature Range — -40°C ~ 105°C

Dimensional Information 5532-NA/5533-NAPB/5533-NCPB

Circuits	Dims. A & C	Dim. B	Circuits	Dims. A & C	Dim. B	Circuits	Dims. A & C	Dim. B	Circuits	Dims. A & C	Dim. B	Circuits	Dims. A & C	Dim. B
4	.079 2	.232 5,9	12	.394 10	.547 13,9	20	.709 18	.862 21,9	28	1.024 26	1.177 29,9	36	1.339 34	1.492 37,9
6	.157 4	.311 7,9	14	.472 12	.626 15,9	22	.787 20	.941 23,9	30	1.102 28	1.256 31,9	38	1.417 36	1.571 39,9
8	.236 6	.390 9,9	16	.551 14	.705 17,9	24	.866 22	1.020 25,9	32	1.181 30	1.335 33,9	40	1.496 38	1.650 41,9
10	.315 8	.469 11,9	18	.630 16	.783 19,9	26	.945 24	1.098 27,9	34	1.260 32	1.413 35,9			

Ordering Information 5532-NA

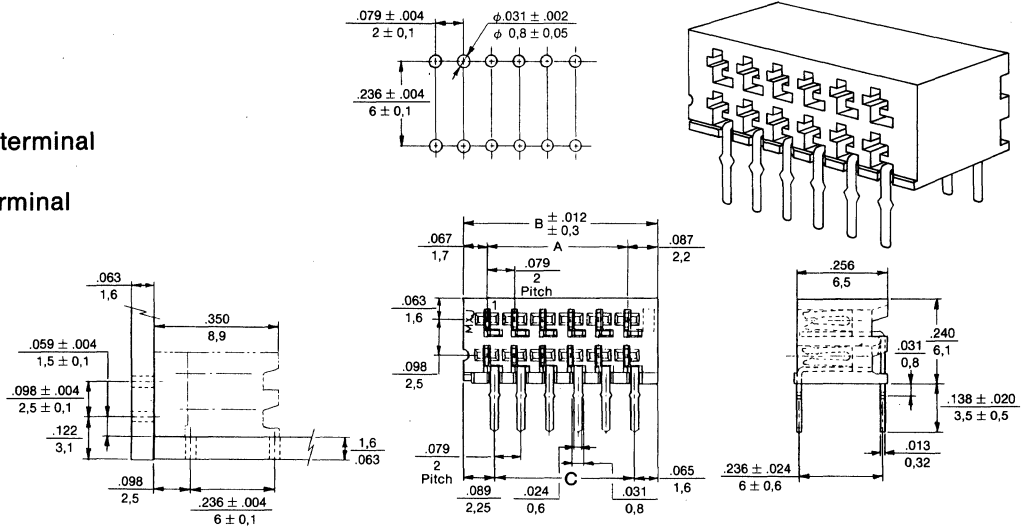
Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	39-26-9047	12	39-26-9127	18	39-26-9187	24	39-26-9247	30	39-26-9307	36	39-26-9367
6	39-26-9067	14	39-26-9147	20	39-26-9207	26	39-26-9267	32	39-26-9327	38	39-26-9387
8	39-26-9087	16	39-26-9167	22	39-26-9227	28	39-26-9287	34	39-26-9347	40	39-26-9407
10	39-26-9107										

.079" (2,0 mm) x .098" (2,5 mm) Board-to-Board Connector



5533-NAPB Right Angle Tail

- Compact size
- Mates with 5532 header
- 4-40 circuits
- High pressure tuning fork terminal
- Nylon 66 (UL 94V-0)
- Tin-plated phos-bronze terminal

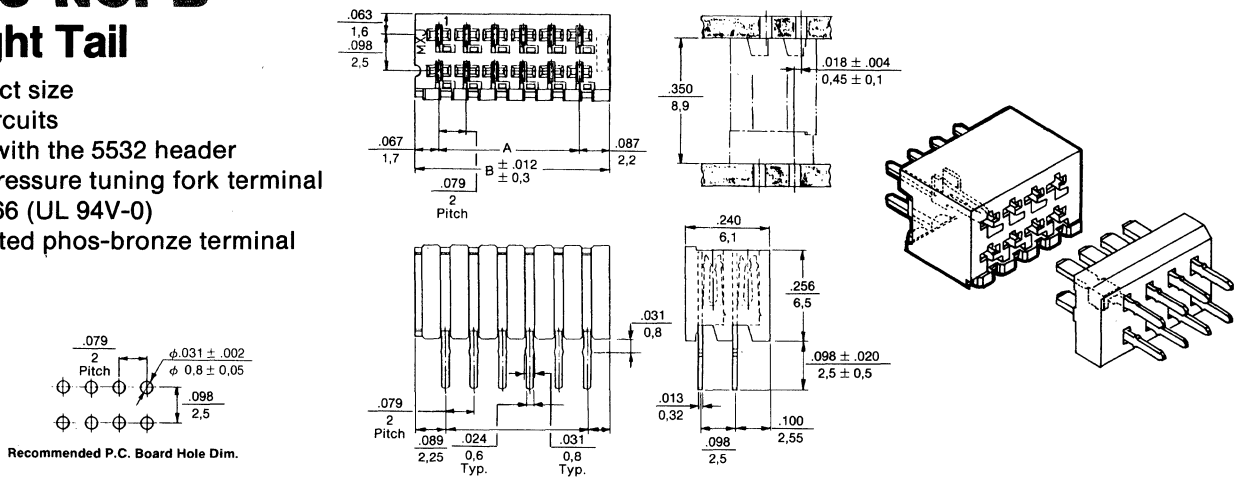


Specifications/Dimensional Information 5533 NAPB - see previous page
Ordering Information 5533-NAPB

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	39-51-2049	12	39-51-2129	18	39-51-2189	24	39-51-2249	30	39-51-2309	36	39-51-2369
6	39-51-2069	14	39-51-2149	20	39-51-2209	26	39-51-2269	32	39-51-2329	38	39-51-2389
8	39-51-2089	16	39-51-2169	22	39-51-2229	28	39-51-2289	34	39-51-2249	40	39-51-2409
10	39-51-2109										

5533-NCPB Straight Tail

- Compact size
- 4-40 circuits
- Mates with the 5532 header
- High-pressure tuning fork terminal
- Nylon 66 (UL 94V-0)
- Tin-plated phos-bronze terminal

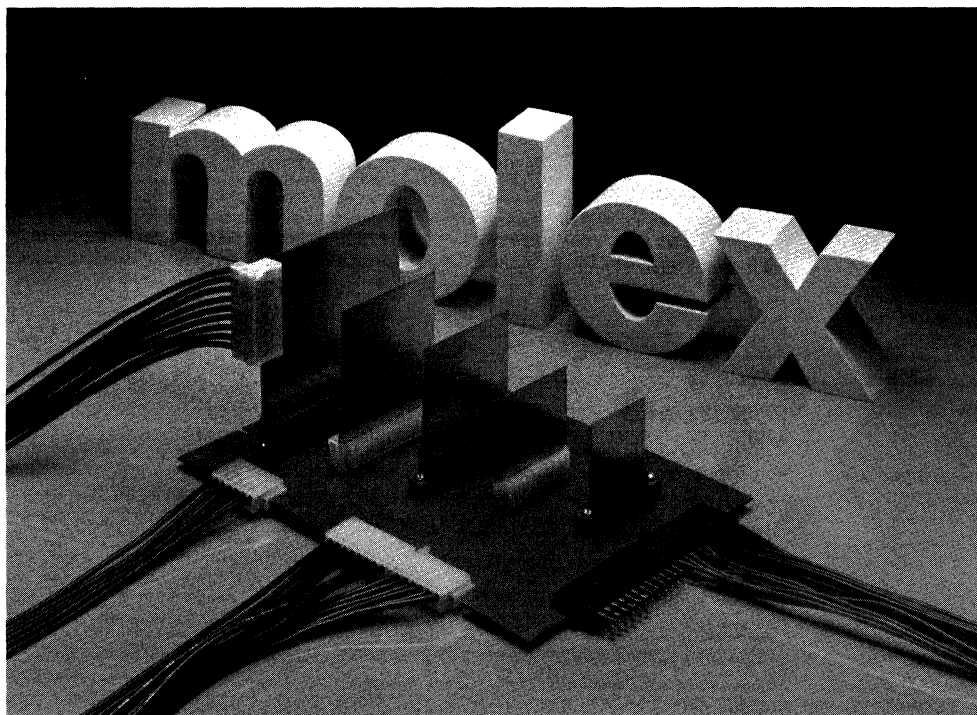


Recommended P.C. Board Hole Dim.

Specifications/Dimensional Information 5533-NCPB - see previous page
Ordering Information 5533-NCPB

Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.	Circuits	Order No.
4	39-51-3042	12	39-51-3122	18	39-51-3182	24	39-51-3242	30	39-51-3302	36	39-51-3362
6	39-51-3062	14	39-51-3142	20	39-51-3202	26	39-51-3262	32	39-51-3322	38	39-51-3382
8	39-51-3082	16	39-51-3162	22	39-51-3222	28	39-51-3282	34	39-51-3342	40	39-51-3402
10	39-51-3102										

Contents



SIMM* Socket

(*Single-In-Line Memory Module)

Serves as the connector portion of a high-density board-to-board packaging system 2F-11F

Double Sided

.100" (2,54mm) P.C. Tail (Solder Tail) Connectors	12F-16F
.100" (2,54mm) Insulation Displacement Connector for .050" (1,27mm) Center Ribbon Cable	17F
.156" (3,96mm) Crimp Housing	18F
P.C. Crimp and Solder Eyelet Terminals	19F
.156" (3,96 mm) P.C. Tail (Solder Tail) Connector	20F

Single Sided

.156" (3,96mm) P.C. Tail (Solder Tail) Connectors	21F
.156" (3,96mm) International P.C. Housing for Crimp Terminals	22F
Crimp Terminals	23F
.156" (3,96mm) Polarized Housing and Crimp Terminals	24F-25F
Polarized Housing with Positive Lock	26F

F

SIMM Socket for High Density Packaging



SIMM Socket ZIF (Zero Insertion Force) Edge Card Connector

- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Molded-in polarizing pegs provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- High pressure tin contact system provides reliable interface
- Accepts modules of any type such as memory, I/O, and other custom circuits
- Materials, costs and geometries to meet varying needs and applications
- JEDEC standard dimensions

Specifications

Material:

Housing - PES Polyether-sulfone, 94V-0, glass-filled black

LCP - Liquid crystal polymer 94V-0, glass filled black

Contacts - BeCu Beryllium Copper; PhBr Phosphor Bronze Alloy

Mechanical:

Contact Force - Normal to terminal at working deflection - in excess of 150 grams per circuit initial average

Terminal Retention in Socket - 2 lbs. per circuit min.

Mating Cycles - 25 (tested) tin system

Electrical:

Contact Resistance - 30 milliohms max. initial

Insulation Resistance - 1 meg megohm min. @ 500 V. AC initial

Dielectric Strength - 1500 V RMS

Rated Voltage - 250 V.

Capacitance Between Terminals - 2 picofarads

Environmental:

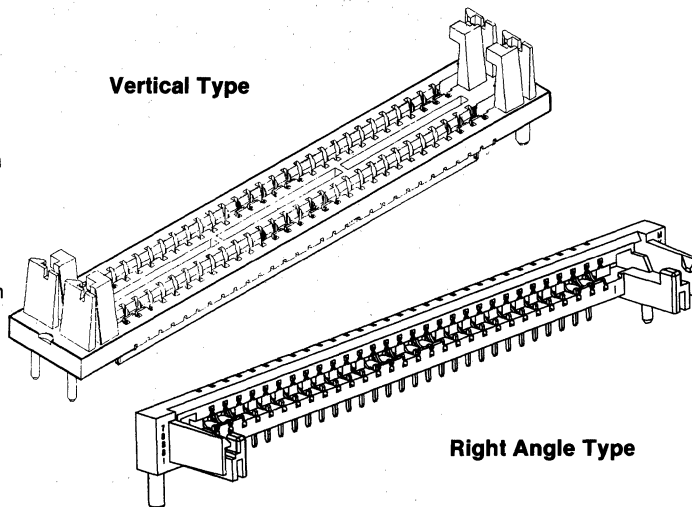
Temperature Rating - PES Housing and LCP Housing - 40-85°C (operating/storage)

Plating:

Post Plate 200 μ in (5,08 μ M) min. tin/lead over 50 μ in. (1,27 μ M) min. nickel overall

Select plated 30 μ in. min. gold in mating area and 200 μ in. min. tin lead on the tails over 75 μ in. nickel overall

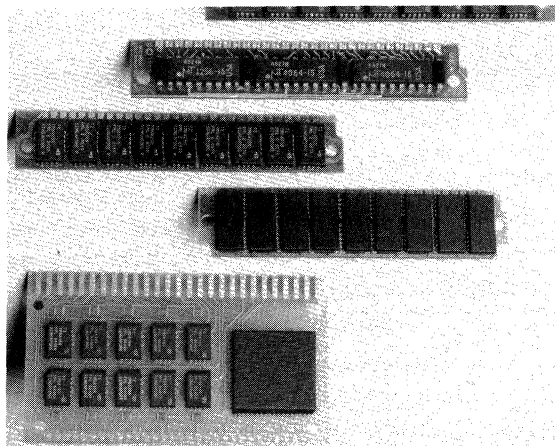
Vertical Type



Right Angle Type

Features of Customer-Supplied SIP Module

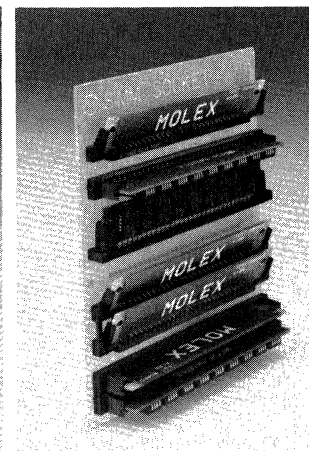
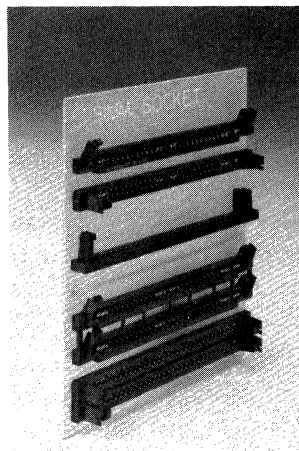
- Leadless - no broken or bent pins
- Surface mountable components
- JEDEC standard
- Fully-tested ready-to-use assemblies
- Easily ejected from socket for replacement



Shown:
Variety of
SIP modules
(customer
supplied)

Shown Left:
SIMM Sockets
mounted on
P.C. board.

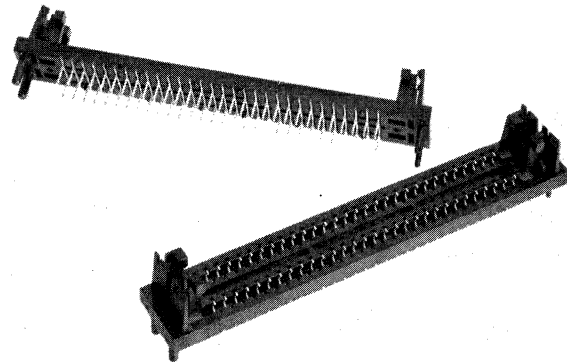
Shown Right:
SIP modules
inserted into
SIMM Sockets
mounted on
P.C. board.



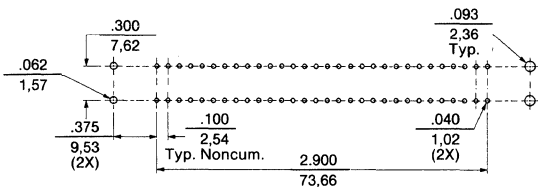
SIMM Socket Vertical (Upright)



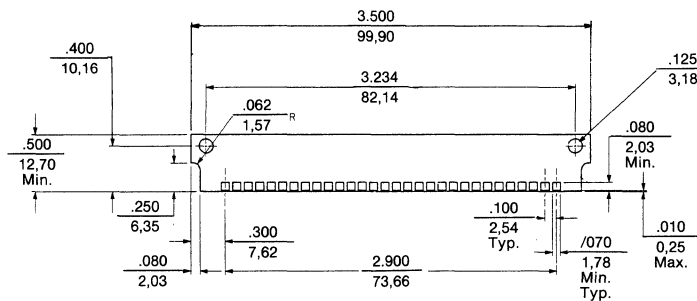
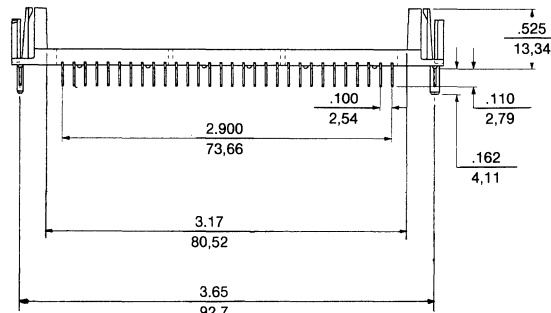
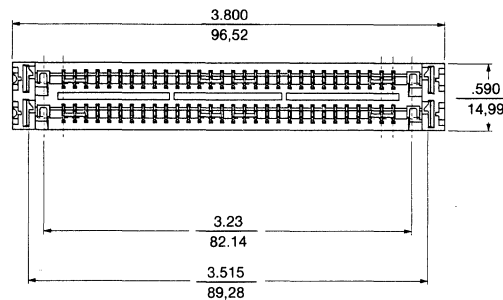
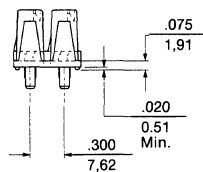
78859 Series .100" x .300" Spacing Dual Row (2 x 30) Internally Bused Uses Least Board Space



- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Molded-in polarizing pegs provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- High pressure tin contact system provides reliable interface
- Accepts modules of any type such as memory, I/O, and other custom circuits
- Materials, costs and geometries to meet varying needs and applications
- JEDEC standard dimensions
- Specially designed latch with anti-overstress feature



Recommended Socket P.C. Board Layout



"SIMM" P.C. Board Layout

Ordering Information

ORDER NO.	CONTACT MATERIAL	SPLIT BUS BAR	PLATING	ORDER NO.	CONTACT MATERIAL	SPLIT BUS BAR	PLATING
15-46-0030	PhBr.	None	Tin ¹	15-46-0028	PhBr.	2, 27, 28	Gold ²
15-46-0033	PhBr.	2, 27, 28	Tin ¹	15-46-0034	PhBr.	All	Tin ¹
15-46-0026	PhBr.	All	Gold ²				

Contact local Molex sales office for other busing arrangements

PLATING:

¹Post plated 200μ in. min. tin/lead over 50μ in. min. nickel overall.
²Post plated 30μ in. min. gold over 75μ in. min. nickel overall.

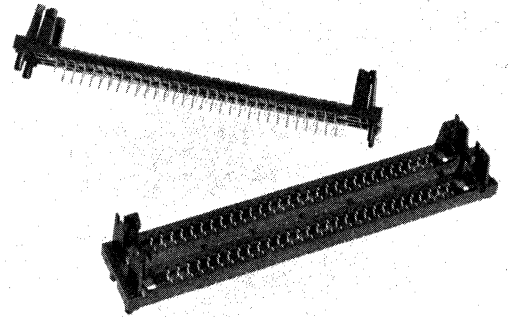
F

SIMM Socket Vertical (Upright)

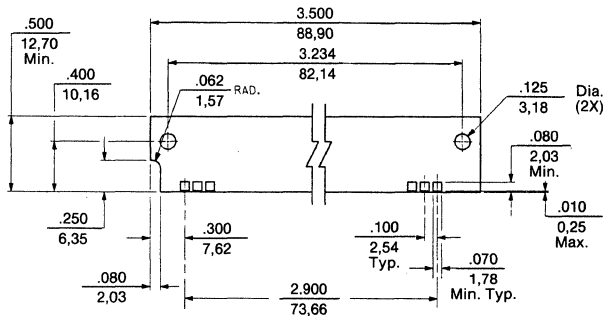


78872 Series .100" x .400" Spacing Dual Row (2 x 30) Internally Bused

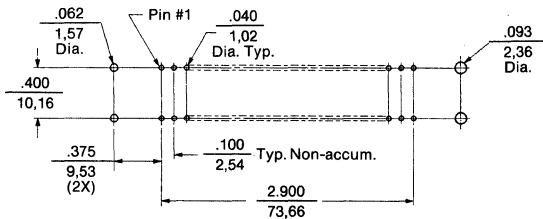
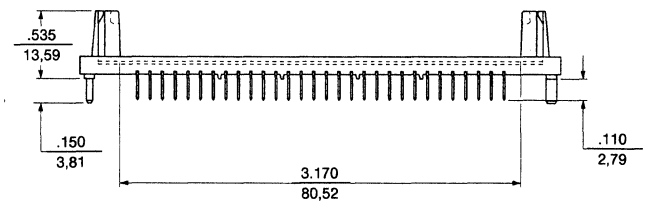
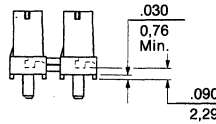
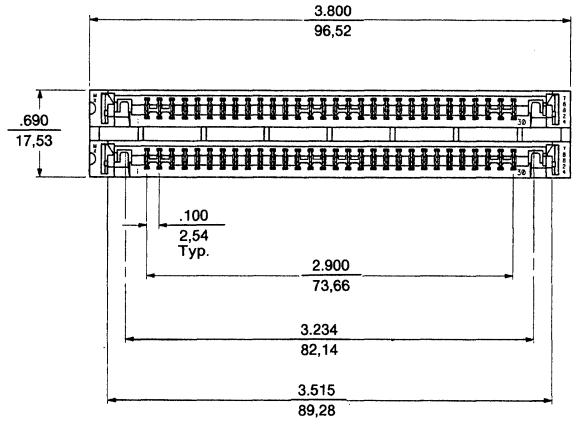
- Accepts double sided modules
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Molded-in polarizing pegs provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- High pressure tin contact system provides reliable interface
- Accepts modules of any type such as memory, I/O, and other custom circuits
- Materials, costs and geometries to meet varying needs and applications
- JEDEC standard dimensions



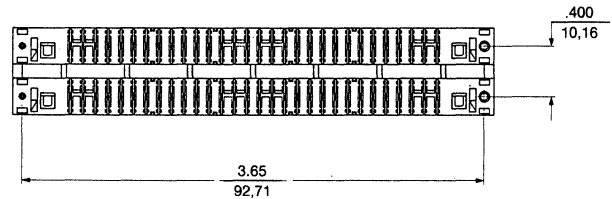
F



"SIMM" P.C. Board Layout



Recommended Socket P.C. Board Layout



Ordering Information

CIRCUITS	ORDER NO.	CONTACT MATERIAL	PLATING	SPLIT BUS BARS
		PhBr		
2x30	15-46-0730	X	Tin ¹	All
2x30	15-46-0733	X	Gold ²	All
2x30	15-46-0702	X	Gold ²	2, 27 & 28

Other Sizes Available: 2x10 2x22 2x36
2x12 2x24 2x40
2x15 2x32 2x42
2x18 2x34 2x45
2x20 2x35

Contact local sales office for assistance

PLATING:

¹Post plated 200μ in. min. tin/lead over 50μ in. min. nickel overall

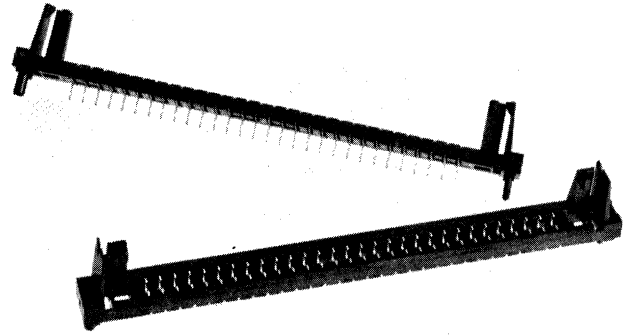
²Select plated 30μ in. min. gold in mating area and 200μ in. min. tin/lead on the tails over 75μ in. min. nickel overall.

SIMM Socket Vertical (Upright)

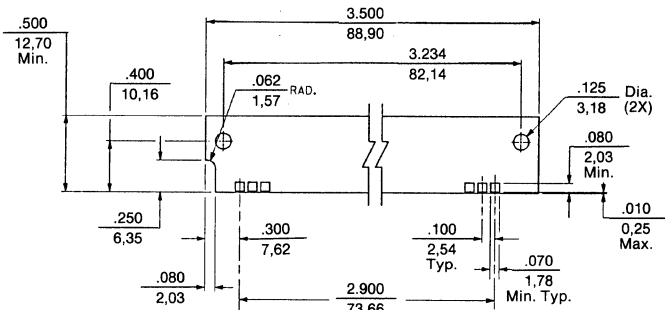


78877 Series Single Row (30 Circuit) .100" Contact Spacing

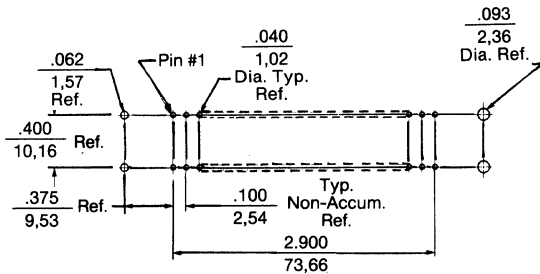
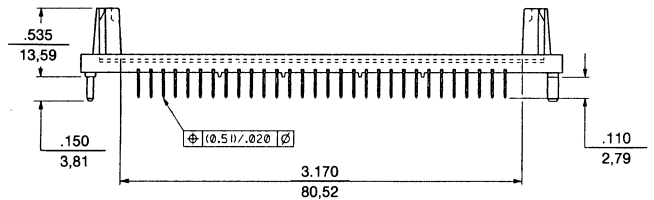
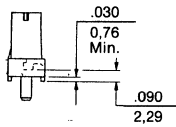
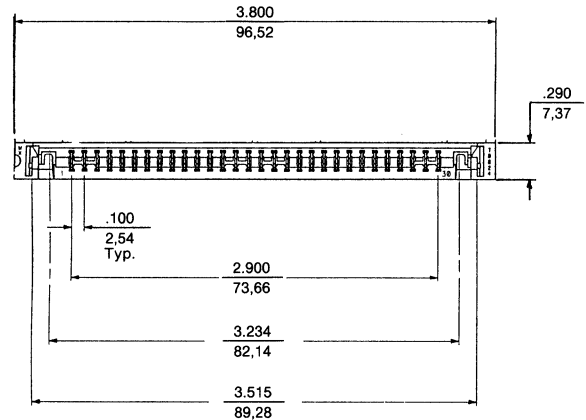
- Allows varied row-to-row spacing
- Accepts double sided module
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Molded-in polarizing pegs provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- High pressure tin contact system provides reliable interface
- Accepts modules of any type such as memory, I/O, and other custom circuits
- Materials, costs and geometries to meet varying needs and applications
- JEDEC standard dimensions



F



"SIMM" P.C. Board Layout



Recommended Socket P.C. Board Layout

Ordering Information

ORDER NO.	CONTACT MATERIAL	PLATING
15-46-0780	PhBr.	Tin ¹
15-46-0783	PhBr.	Gold ²

PLATING:

¹Post plated 200μ in. min. tin/lead over 50μ in. min. nickel overall.

²Post plated 30μ in. min. gold in mating area and 200μ in. min. tin/lead on tails over 75μ in. min. nickel overall.

Other circuit sizes available:

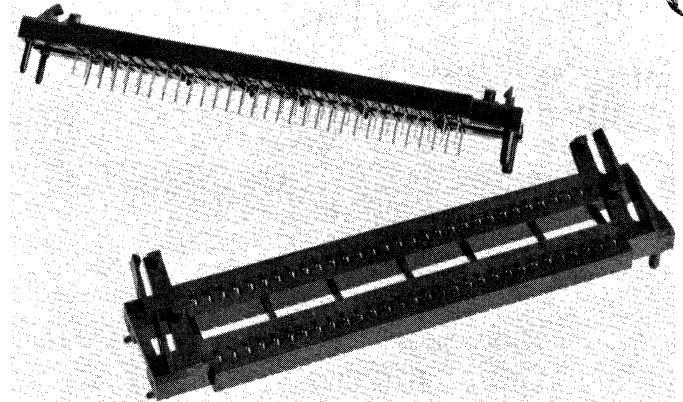
10, 12, 15, 18, 20, 22, 24, 32, 34, 35, 36, 40, 42, 45

Contact local Molex sales office for assistance

SIMM Socket Low Profile (25°)

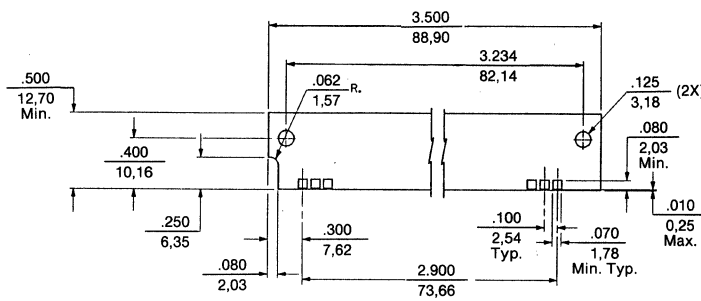


78863 Series .100" x .500" Spacing Dual Row (2 x 30) Internally Bused Permits Lower Between-Board Dimension

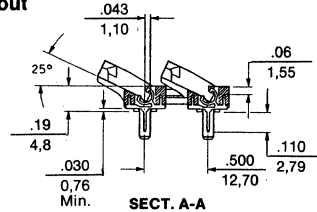


- Allows better heat dissipation by exposing more module surface area
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Molded-in polarizing pegs provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- High pressure tin contact system provides reliable interface
- Accepts modules of any type such as memory, I/O, and other custom circuits
- Materials, costs and geometries to meet varying needs and applications
- JEDEC standard dimensions

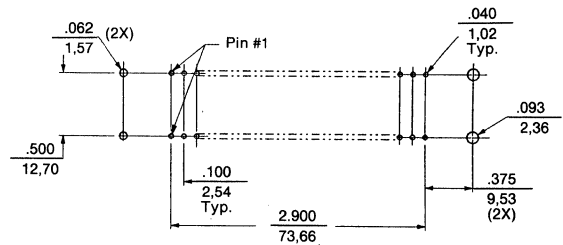
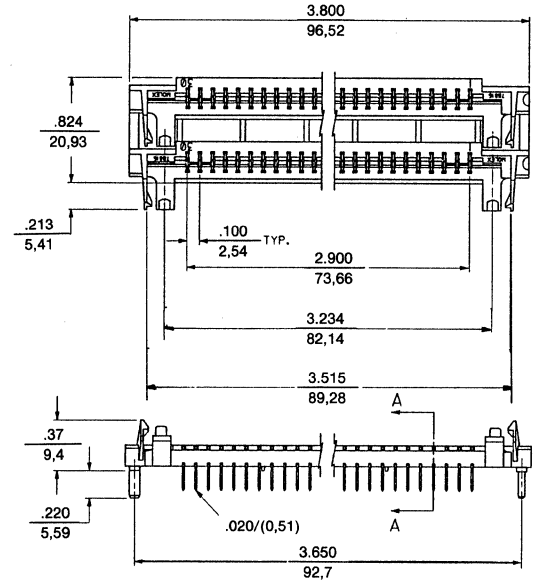
F



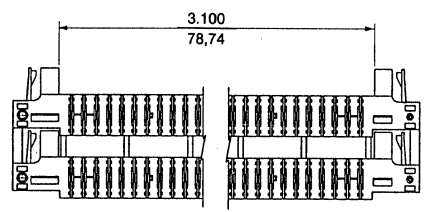
"SIMM" P.C. Board Layout



SECT. A-A



Recommended Socket P.C. Board Layout



Ordering Information

ORDER NO.	CONTACT MATERIAL	SPLIT BAR BUS	PLATING
15-46-0330	PhBr.	All	Tin ¹
15-46-0329	PhBr.	All	Gold ²
15-46-0302	PhBr.	None	Gold ²

Also available in the following sizes:
 2x10 2x15 2x20 2x24 2x34 2x36 2x42
 2x12 2x18 2x22 2x32 2x35 2x40 2x45

Contact local Molex sales office for assistance

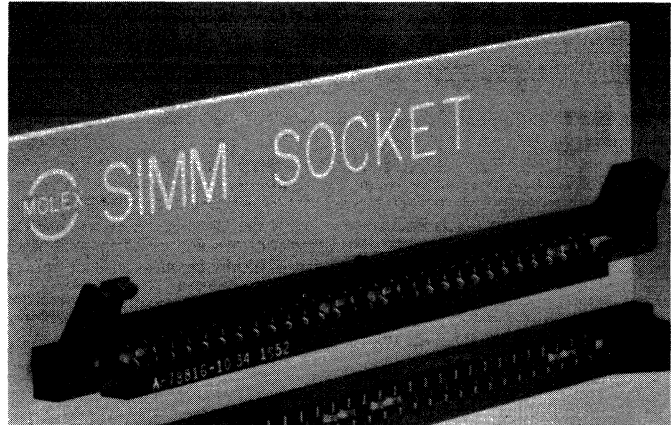
PLATING:
¹Post plated 200μ in. min. tin/lead over 50μ in. min. nickel overall.
²Select plated 30μ in. min. gold in mating area and 200μ in. min. tin/lead in tail area over 75μ in. min. nickel overall.

SIMM Socket Low Profile (25°)

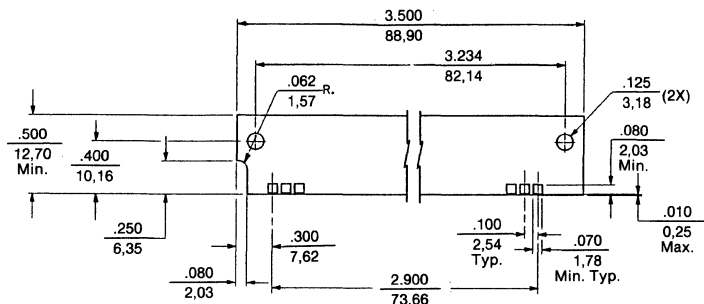


78867 Series Single Row (30 Circuit) .100" Contact Spacing

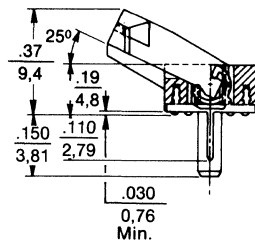
- Permits lower between-board dimension
- Accepts double sided module
- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Molded-in polarizing pegs provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- High pressure tin contact system provides reliable interface
- Accepts modules of any type such as memory, I/O, and other custom circuits
- Materials, costs and geometries to meet varying needs and applications
- JEDEC standard dimensions



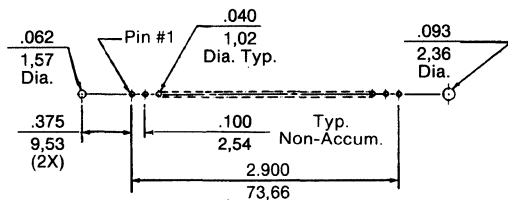
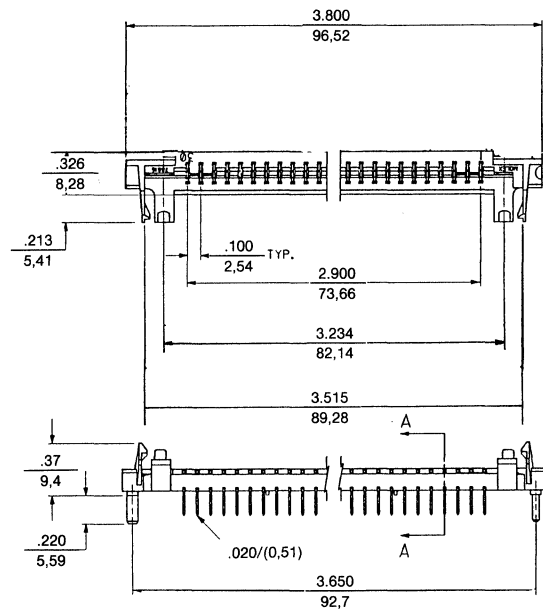
F



"SIMM" P.C. Board Layout



SECT. A-A



Recommended Socket P.C. Board Layout

Ordering Information

ORDER NO.	CONTACT MATERIAL	PLATING
15-46-0380	PhBr.	Tin ¹
15-46-0352	PhBr.	Gold ²

PLATING:

¹Post plated 200μ in. min. tin/lead over 50μ in. min. nickel overall.

²Select plated 30μ in. min. gold in mating area over 75μ in. min. nickel overall.

Also available in the following sizes:

10, 12, 15, 18, 20, 22, 24, 32, 34, 35, 36, 40, 42, 45

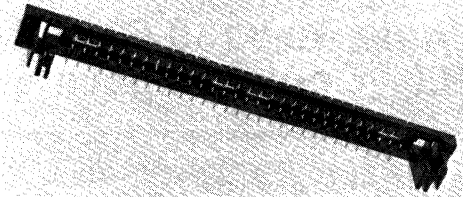
Contact local Molex sales office for assistance

SIMM Socket Right Angle

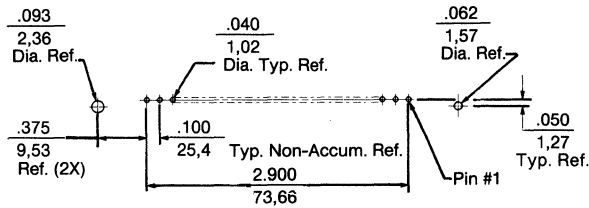
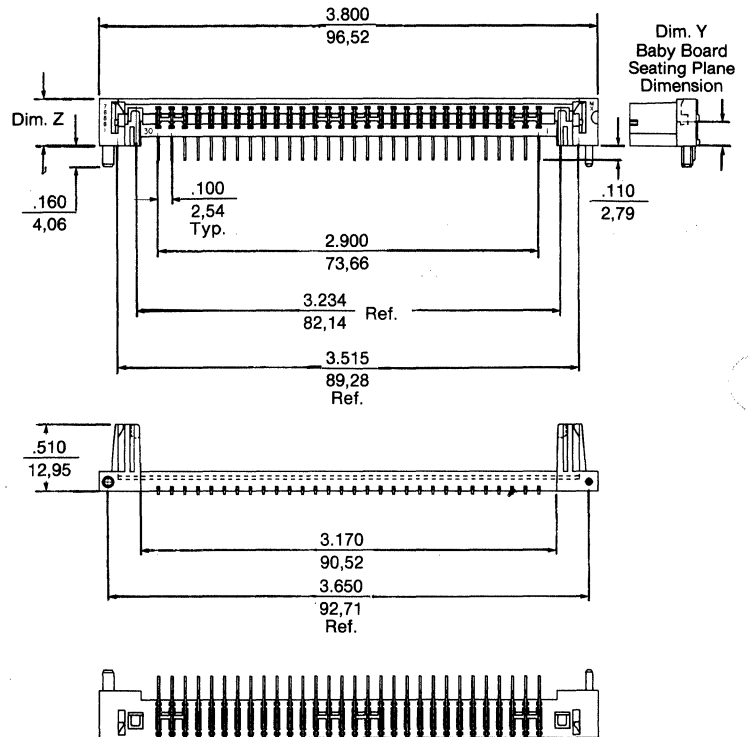


78906 Series Single Row (30 Circuit) .100" Contact Spacing Lowest Mated Height

- Low insertion force contacts improve socket and module contact life and provide for fast on-line assembly
- Molded-in polarizing pegs provide orientation for proper loading of socket into printed circuit board
- Polarization rib properly orients module to socket
- High pressure tin contact system provides reliable interface
- Accepts modules of any type such as memory, I/O, and other custom circuits
- Materials, costs and geometries to meet varying needs and applications
- JEDEC standard dimensions
- Product specification PSX-78859 (Phos. Br.)



F



Recommended Socket PC Board Hole Pattern

Ordering Information

CIRCUITS	ORDER NO.		PLATING	DIM. Y		DIM. Z		POLARIZATION
	SINGLE SIDED MODULE APPLICATIONS	DUAL SIDED MODULE APPLICATIONS						
30	15-46-0451	—	Tin ¹	.145	3,68	.315	8,00	*Standard
30	15-46-0452	—	Gold ²	.145	3,68	.315	8,00	*Standard
30	15-46-0454	—	Tin ¹	.145	3,68	.315	8,00	**Reversed
30	—	15-46-0450	Tin ¹	.190	4,83	.360	9,14	*Standard
30	—	15-46-0462	Gold ²	.190	4,83	.360	9,14	*Standard
30	—	15-46-0455	Tin ¹	.290	7,37	.460	11,68	*Standard

¹Top of board applications
²Bottom of board applications

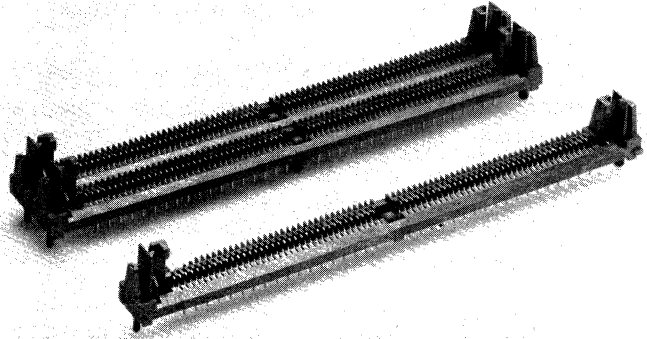
¹Post plated 200μ in. min. tin/lead over 50μ in. min. nickel overall
²Post plated 30μ in. min. gold over 70μ in. min. nickel overall.

SIMM Socket Vertical (Upright)

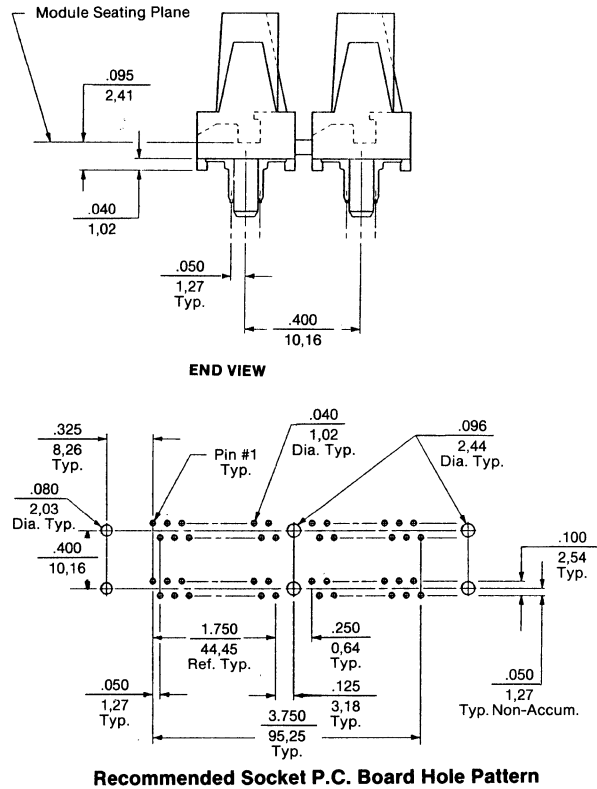
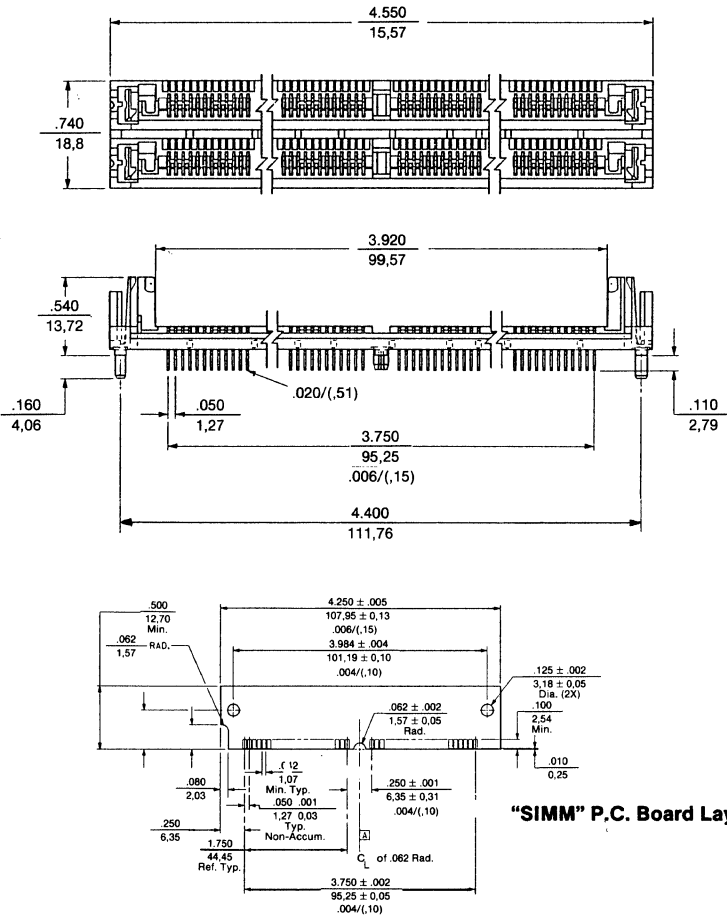


78954/78962 Series Vertical (.100" x .400") Dual or Single Row .050" Contact Spacing

- Specially designed latch with anti-overstress feature
- High temperature surface mount compatible plastic
- Low insertion/high normal force contacts improve socket and module life while providing a reliable interface
- Molded-in polarizing pegs provide orientation for proper loading of socket into printed circuit board
- Center peg has compliant section for better retention to the P.C. board
- Polarization rib properly orients module to socket
- Phos. bronze contact material available with tin or selective gold plating
- JEDEC standard dimension



F



Ordering Information Other sizes available - Contact local Molex sales office for assistance

Order No.	Plating	Single or Dual
15-82-0701	Tin ¹	Dual
15-82-0702	Gold ²	Dual
15-82-0741	Tin ¹	Single
15-82-0742	Gold ²	Single

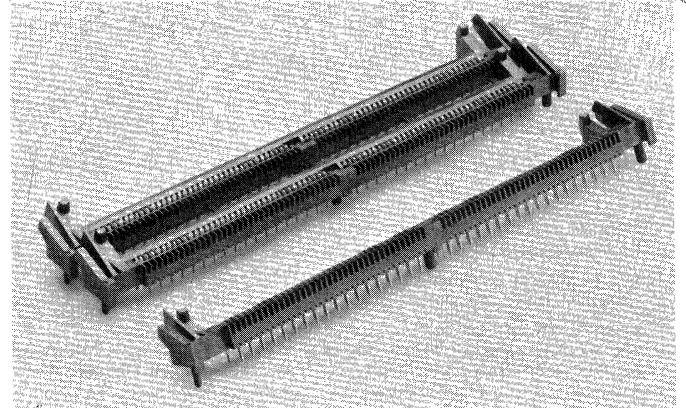
1. .000200/(.00508) min. tin/lead over .000050/(.00127) nickel overall
2. .000030/(.00076) min. gold in select areas and .000200/(.00502) min. tin lead in select area over .000075/(.00127) nickel overall.

SIMM Socket Low Profile (22½°)

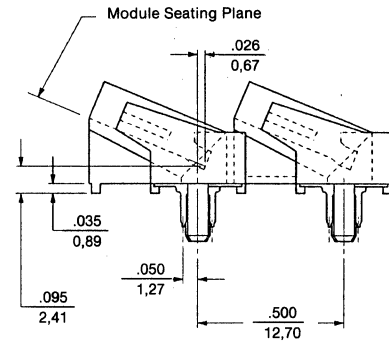
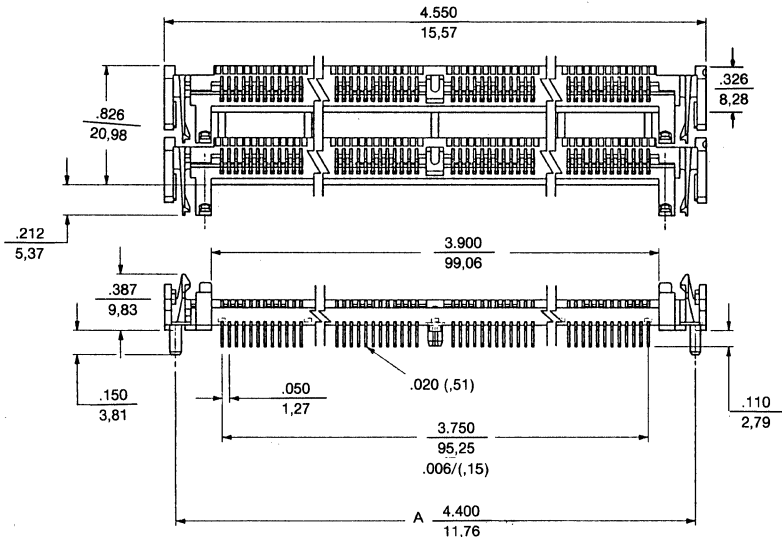


78955/78964 Series Low Profile (22½°) Dual or Single Row .050" Contact Spacing

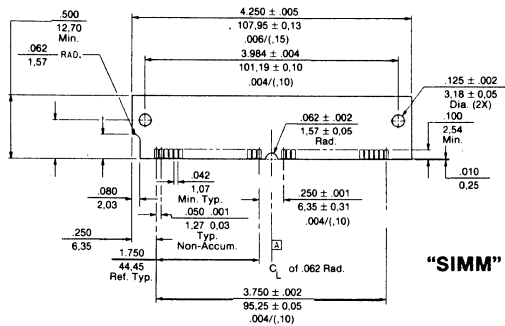
- Specially designed latch with anti-overstress feature
- High temperature surface mount compatible plastic
- Low insertion/high normal force contacts improve socket and module life while providing a reliable interface
- Molded-in polarizing pegs provide orientation for proper loading of socket into printed circuit board
- Center peg has compliant section for better retention to the P.C. board
- Polarization rib properly orients module to socket
- Phos. bronze contact material available with tin or selective gold plating
- JEDEC standard dimension



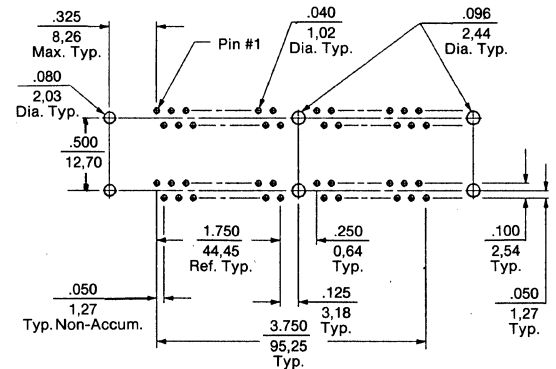
F



END VIEW



"SIMM" P.C. Board Layout



Recommended Socket P.C. Board Hole Pattern

Ordering Information Other sizes available - Contact local Molex sales office for assistance

Order No.	Plating	Single or Dual
15-82-0721	Tin ¹	Dual
15-82-0722	Gold ²	Dual
15-82-0671	Tin ¹	Single
15-82-0672	Gold ²	Single

- .000200/(.00508) min. tin/lead over .000050/(.00127) nickel overall
- .000030/(.00076) min. gold in select areas and .000200/(.00502) min. tin lead in select area over .000075/(.00127) nickel overall.

Leadless SIP Module or Baby Board* Dimensions for SIMM Sockets



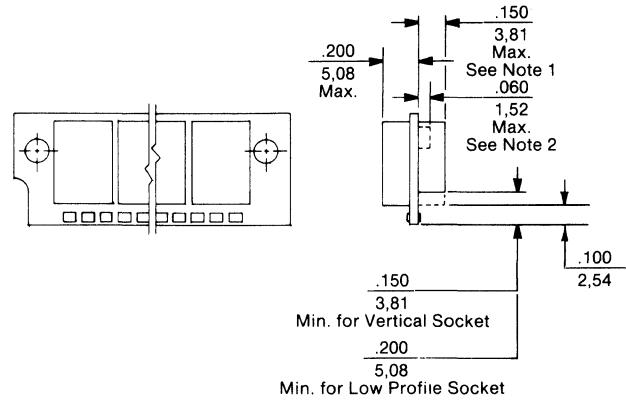
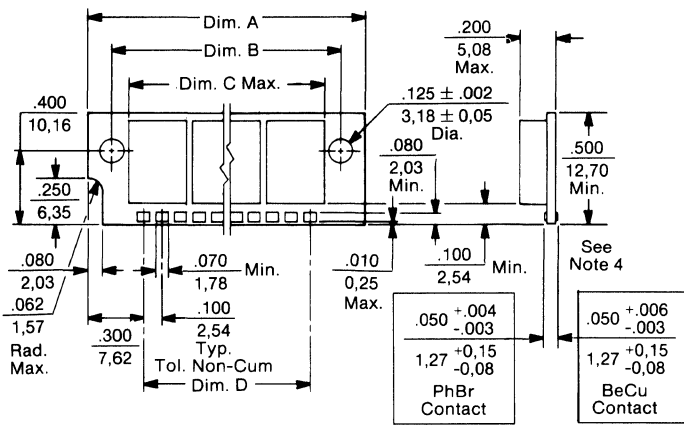
*CUSTOMER SUPPLIED

Single sided leadless SIP module configuration requirements:

1. Copper contact pads are to be overplated with .000050 min. nickel followed with .000030 min. tin/lead reflow or .000030 min. gold over .000075 min. nickel
2. Contact pads are required on both component and circuit sides of module. Paired contacts should be electrically shunted, otherwise all electrical input/outputs should be routed to pads located on the circuit side
3. Maximum allowable warpage = .010" bow. Printed circuit board thickness presumes .047" stock with 1 oz. copper foil

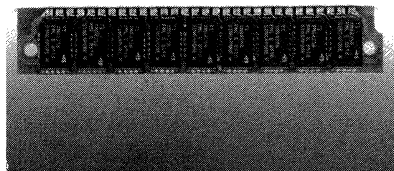
Double sided leadless SIP module configuration requirements [in addition to notes 1-3 (left)]

1. Two modules mounted vertically on .300" centers must have the IC packages staggered on their facing surfaces in order to achieve an interleaf condition
2. No interleaving is necessary on .300" centers for components not in excess of .060"
3. Low profile modules are to be mounted using single row sockets and spaced on .800" centers minimum
Consult factory for design characteristics on right angle (parallel mounting) product.

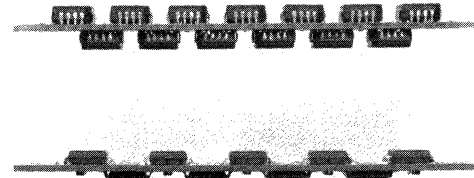


Dimensions

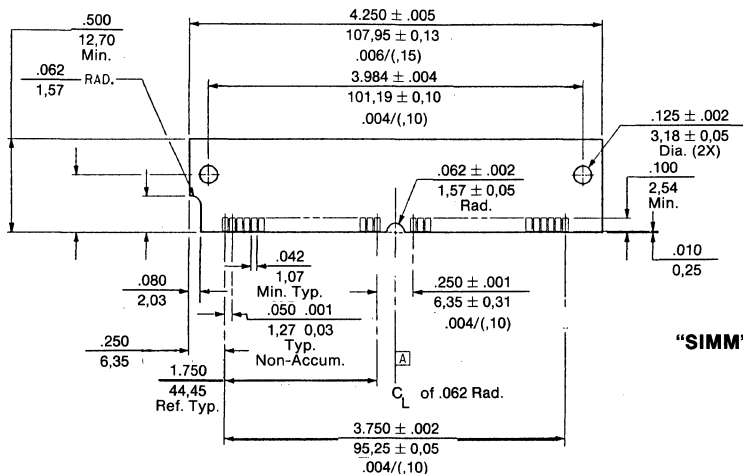
CKTS.	DIM. A	DIM. B	DIM. C MAX.	DIM. D
30	3,500 88,90	3,234 82,14	3,050 77,47	2,900 73,66



Single Sided 256K x 9 DRAM



Double Sided Interleaved D and SRAM Modules



"SIMM" P.C. Board Layout

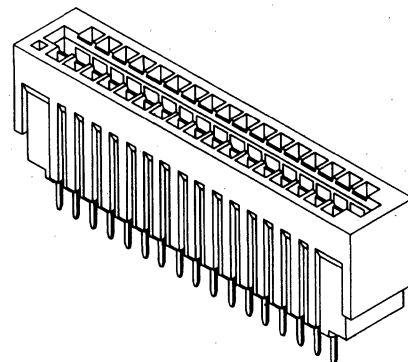
Double Sided Edge Connector



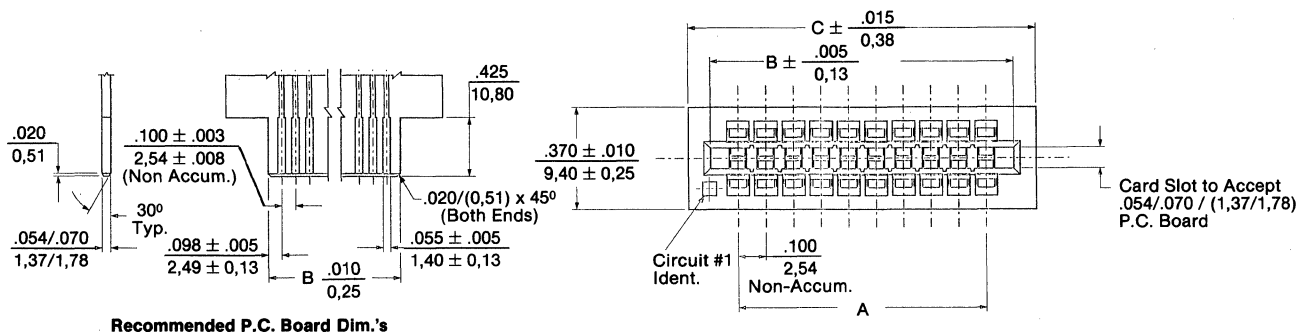
71006

.100" (2,54 mm) Center PC Tail Connector Non-Flanged Version

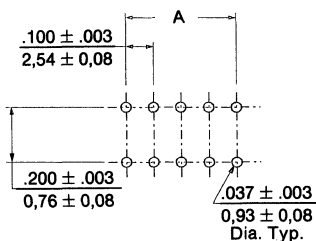
- .100" (2,54mm), contact spacing
- .200" (5,08mm), row to row spacing
- Selective gold plated contact area - 15 microinches gold over 50 microinches nickel - solder plated tail
- Bifurcated, cantilevered beam phosphor bronze terminal
- Glass filled 94V-0 polyester housing - black color
- Industry standard dimensions - Drop in, cost saving replacement
- P.C. tail only
- **Robotically insertable**
- Also available with .125" P.C. tails



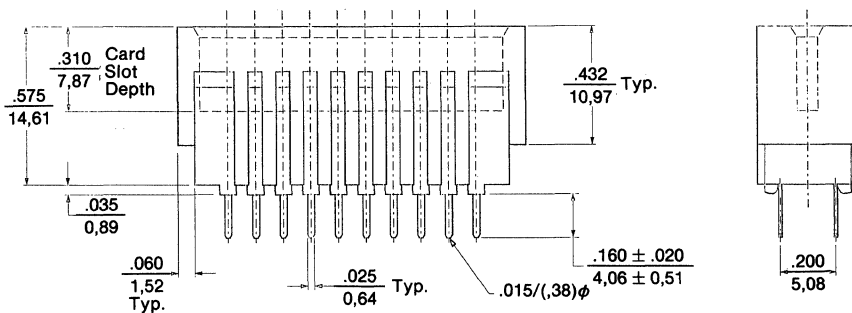
F



Recommended P.C. Board Dim.'s



Recommended P.C Board Hole Layout



Dimensions Same as 71006 Flanged Version on preceding page

Ordering Information Non-Flanged Version

Ckt. Size	Order No.	Ckt. Size	Order No.	Ckt. Size	Order No.	Ckt. Size	Order No.	Ckt. Size	Order No.	Ckt. Size	Order No.
10/20	15-46-1101	16/32	15-46-1161	21/42	15-46-1211	26/52	15-46-1261	31/62	15-46-1311	36/72	15-46-1361
11/22	15-46-1111	17/34	15-46-1171	22/44	15-46-1221	27/54	15-46-1271	32/64	15-46-1321	37/74	15-46-1371
12/24	15-46-1121	18/36	15-46-1181	23/46	15-46-1231	28/56	15-46-1281	33/66	15-46-1331	38/76	15-46-1381
13/26	15-46-1131	19/38	15-46-1191	24/48	15-46-1241	29/58	15-46-1291	34/68	15-46-1341	39/78	15-46-1391
14/28	15-46-1141	20/40	15-46-1201	25/50	15-46-1251	30/60	15-46-1301	35/70	15-46-1351	40/80	15-46-1401
15/30	15-46-1151										

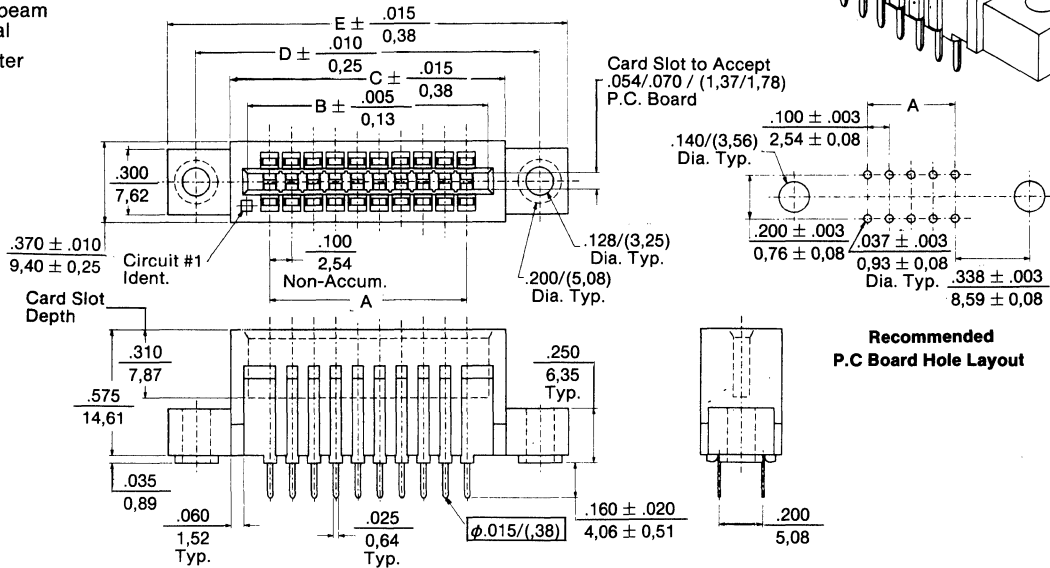
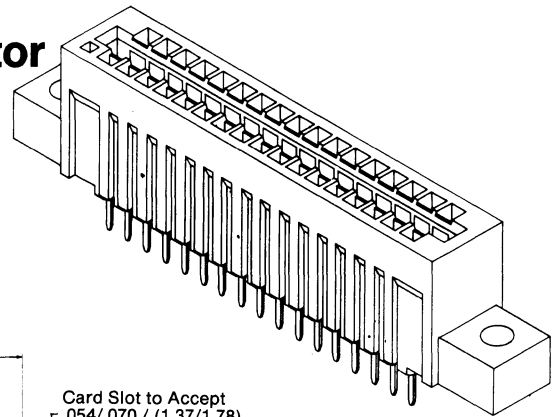
Double Sided Edge Connector



71006

.100" (2,54 mm) Center PC Tail Connector Flanged Version

- .100" (2,54mm), contact spacing
- .200" (5,08mm), row to row spacing
- Selective gold plated contact area - 15 microinches gold over 50 microinches nickel - solder plated tail
- Bifurcated, cantilevered beam phosphor bronze terminal
- Glass filled 94V-0 polyester housing - black color
- Industry standard dimensions - Drop in, cost saving replacement
- P.C. tail only
- **Robotically insertable**
- Also available with .125" P.C. tails. Contact factory



Dimensions

Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Ckt. Size	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
10/20	.900 22,86	1.100 27,94	1.260 32,00	1.575 40,01	1.835 46,61	21/42	2.000 50,80	2.200 55,88	2.360 59,94	2.675 67,95	2.935 74,55	31/62	3.000 76,20	3.200 81,28	3.360 85,34	3.675 93,35	3.935 99,95
11/22	1.000 25,40	1.200 30,48	1.360 34,54	1.675 42,55	1.935 49,15	22/44	2.100 53,34	2.300 58,42	2.460 62,48	2.775 70,49	3.035 77,09	32/64	3.100 78,74	3.300 83,82	3.460 87,88	3.775 95,89	4.035 102,49
12/24	1.100 27,94	1.300 33,02	1.460 37,08	1.775 45,09	2.035 51,69	23/46	2.200 55,88	2.400 60,96	2.560 65,02	2.875 73,03	3.135 79,63	33/66	3.200 81,28	3.400 86,36	3.560 90,42	3.875 98,43	4.135 105,03
13/26	1.200 30,48	1.400 35,56	1.560 39,62	1.875 47,63	2.135 54,23	24/48	2.300 58,42	2.500 63,50	2.660 67,56	2.975 75,57	3.235 82,17	34/68	3.300 83,82	3.500 88,90	3.660 92,96	3.975 100,97	4.235 107,57
14/28	1.300 33,02	1.500 38,10	1.660 42,16	1.975 50,17	2.235 56,77	25/50	2.400 60,96	2.600 66,04	2.760 70,10	3.075 78,11	3.335 84,71	35/70	3.400 86,36	3.600 91,44	3.760 95,50	4.075 103,51	4.335 110,11
15/30	1.400 35,56	1.600 40,64	1.760 44,70	2.075 52,71	2.335 59,31	26/52	2.500 63,50	2.700 68,58	2.860 72,64	3.175 80,65	3.435 87,25	36/72	3.500 88,90	3.700 93,98	3.860 98,04	4.175 106,05	4.435 112,65
16/32	1.500 38,10	1.700 43,18	1.860 47,24	2.175 55,25	2.435 61,85	27/54	2.600 66,04	2.800 71,12	2.960 75,18	3.275 83,19	3.535 89,79	37/74	3.600 91,44	3.800 96,52	3.960 100,58	4.275 108,59	4.535 115,19
17/34	1.600 40,64	1.800 45,72	1.960 49,78	2.275 57,79	2.535 64,39	28/56	2.700 68,58	2.900 73,66	3.060 77,72	3.375 85,73	3.635 92,33	38/76	3.700 93,98	3.900 99,06	4.060 103,12	4.375 111,13	4.635 117,73
18/36	1.700 43,18	1.900 48,26	2.060 52,32	2.375 60,33	2.635 66,93	29/58	2.800 71,12	3.000 76,20	3.160 80,26	3.475 88,27	3.735 94,87	39/78	3.800 96,52	4.000 101,60	4.160 105,66	4.475 113,67	4.735 120,27
19/38	1.800 45,72	2.000 50,80	2.160 54,86	2.475 62,87	2.735 69,47	30/60	2.900 73,66	3.100 78,74	3.260 82,80	3.575 90,81	3.835 97,41	40/80	3.900 99,06	4.100 104,14	4.260 108,20	4.575 116,21	4.835 122,82
20/40	1.900 48,26	2.100 53,34	2.260 57,40	2.575 65,41	2.835 72,00												

Ordering Information Flanged Version

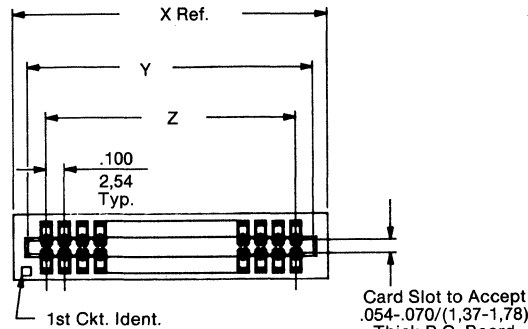
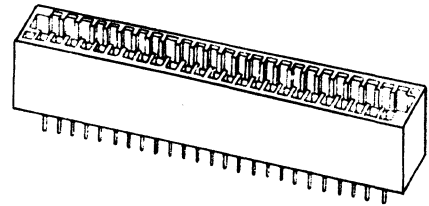
Ckt. Size	Order No.	Ckt. Size	Order No.	Ckt. Size	Order No.	Ckt. Size	Order No.	Ckt. Size	Order No.	Ckt. Size	Order No.
10/20	15-46-1102	16/32	15-46-1162	21/42	15-46-1212	26/52	15-46-1262	31/62	15-46-1312	36/72	15-46-1362
11/22	15-46-1112	17/34	15-46-1172	22/44	15-46-1222	27/54	15-46-1272	32/64	15-46-1322	37/74	15-46-1372
12/24	15-46-1122	18/36	15-46-1182	23/46	15-46-1232	28/56	15-46-1282	33/66	15-46-1332	38/76	15-46-1382
13/26	15-46-1132	19/38	15-46-1192	24/48	15-46-1242	29/58	15-46-1292	34/68	15-46-1342	39/78	15-46-1392
14/28	15-46-1142	20/40	15-46-1202	25/50	15-46-1252	30/60	15-46-1302	35/70	15-46-1352	40/80	15-46-1402
15/30	15-46-1152										

Double Sided Edge Connector

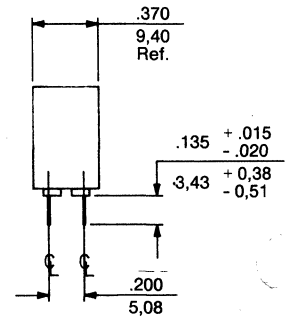
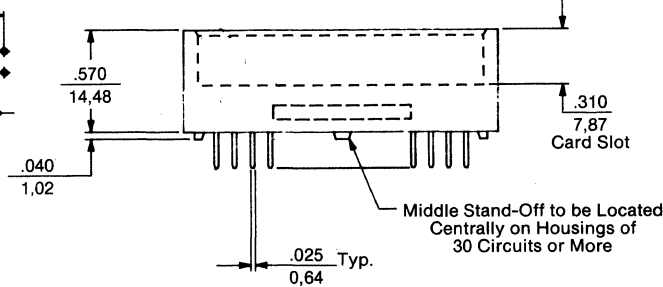


71003 .100 (2,54 mm) Center P.C. Tail Connector

- .100" (2,54mm) contact spacing
- .200" (5,08mm) row-to-row spacing
- Selective gold plated contact area
- Various gold options over 50 microinches nickel; tin/lead in solder area
- Bifurcated, cantilevered beam phosphor bronze terminal
- Glass filled 94V-0 polyester housing — black color
- Low insertion force version available. See 87087 Series



Recommended P.C. Board Layout



Dimensions

Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z
10/20	1.260 32,00	1.100 27,94	.900 22,86	21/42	2.360 59,94	2.200 55,88	2.000 50,80	31/62	3.360 85,34	3.200 81,28	3.000 76,20	41/82	4.360 110,74	4.200 106,68	4.000 101,60
11/22	1.360 34,54	1.200 30,48	1.000 25,40	22/44	2.460 62,48	2.300 58,42	2.100 53,34	32/64	3.460 87,88	3.300 83,82	3.100 78,74	42/84	4.460 113,28	4.300 109,22	4.100 104,14
12/24	1.460 37,08	1.300 33,02	1.100 27,94	23/46	2.560 65,02	2.400 60,96	2.200 55,88	33/66	3.560 90,42	3.400 86,36	3.200 81,28	43/86	4.560 115,82	4.400 111,76	4.200 106,68
13/26	1.560 39,62	1.400 35,56	1.200 30,48	24/48	2.660 67,56	2.500 63,50	2.300 58,42	34/68	3.660 92,96	3.500 88,90	3.300 83,82	44/88	4.660 118,36	4.500 114,30	4.300 109,22
14/28	1.660 42,16	1.500 38,10	1.300 33,02	25/50	2.760 70,10	2.600 66,04	2.400 60,96	35/70	3.760 95,50	3.600 91,44	3.400 86,36	45/90	4.760 120,90	4.600 116,84	4.400 111,76
15/30	1.760 44,70	1.600 40,64	1.400 35,56	26/52	2.860 72,64	2.700 68,58	2.500 63,50	36/72	3.860 98,04	3.700 93,98	3.500 88,90	46/92	4.860 123,44	4.700 119,38	4.500 114,30
16/32	1.860 47,24	1.700 43,18	1.500 38,10	27/54	2.960 75,18	2.800 71,12	2.600 66,04	37/74	3.960 100,58	3.800 96,52	3.600 91,44	47/94	4.960 125,98	4.800 121,92	4.600 116,84
17/34	1.960 49,78	1.800 45,72	1.600 40,64	28/56	3.060 77,72	2.900 73,66	2.700 68,58	38/76	4.060 103,12	3.900 99,06	3.700 93,98	48/96	5.060 128,52	4.900 124,46	4.700 119,38
18/36	2.060 52,32	1.900 48,26	1.700 43,18	29/58	3.160 80,26	3.000 76,20	2.800 71,12	39/78	4.160 105,66	4.000 101,60	3.800 96,52	49/98	5.160 131,06	5.000 127,00	4.800 121,92
19/38	2.160 54,86	2.000 50,80	1.800 45,72	30/60	3.260 82,80	3.100 78,74	2.900 73,66	40/80	4.260 108,20	4.100 104,14	3.900 99,06	50/100	5.260 133,60	5.100 129,54	4.900 124,46
20/40	2.260 57,40	2.100 53,34	1.900 48,26												

Ordering Information

Order No. Formula
71003-XX,XX

41 = 15 microinches min. gold in contact area
17 = 20 microinches min. gold in contact area
44 = 30 microinches min. gold in contact area

= Circuit size desired - 10-50

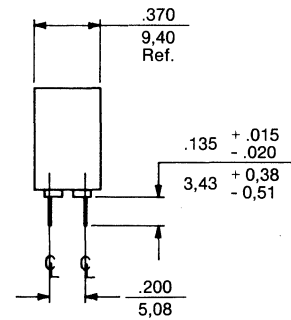
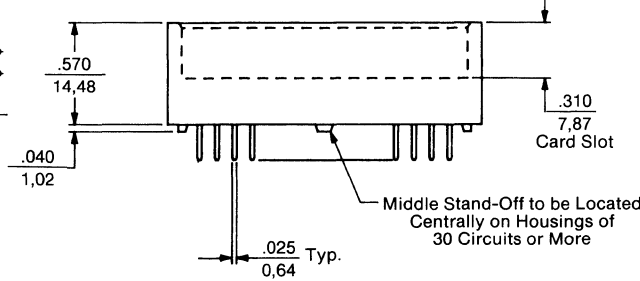
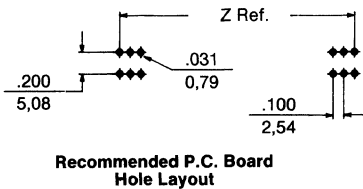
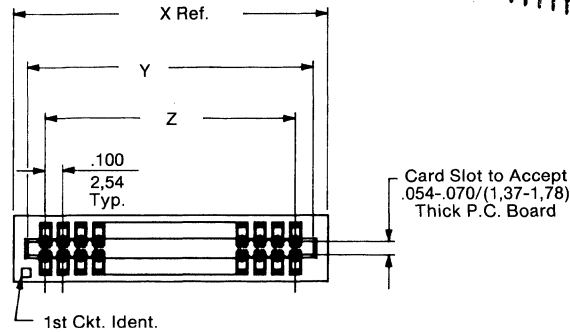
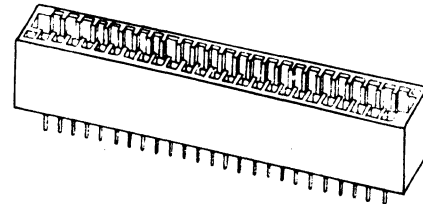
Example: For 18/36 size with 20 microinches min. gold in contact area, Order No. is 71003-1718
Contact factory for other plating options

Double Sided Edge Connector



87087 .100 (2,54 mm) Center P.C. Tail Connector Low Insertion Force

- .100" (2,54mm) contact spacing
- .200" (5,08mm) row-to-row spacing
- Selective gold plated contact area
- Various gold options over 50 microinches nickel; tin/lead in solder area
- Bifurcated, cantilevered beam phosphor bronze terminal
- Glass filled 94V-0 polyester housing — black color



Dimensions

Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z	Ckts.	Dim. X	Dim. Y	Dim. Z
10/20	1.260 32,00	1.100 27,94	.900 22,86	23/46	2.560 65,02	2.400 60,96	2.200 55,88	36/72	3.860 98,04	3.700 93,98	3.500 88,90	49/98	5.160 131,06	5.000 127,00	4.800 121,92
11/22	1.360 34,54	1.200 30,48	1.000 25,40	24/48	2.660 67,56	2.500 63,50	2.300 58,42	37/74	3.960 100,58	3.800 96,52	3.600 91,44	50/100	5.260 133,60	5.100 129,54	4.900 124,46
12/24	1.460 37,08	1.300 33,02	1.100 27,94	25/50	2.760 70,10	2.600 66,04	2.400 60,96	38/76	4.060 103,12	3.900 99,06	3.700 93,98	51/102	5.360 136,14	5.200 132,08	5.000 127,00
13/26	1.560 39,62	1.400 35,56	1.200 30,48	26/52	2.860 72,84	2.700 68,58	2.500 63,50	39/78	4.160 105,66	4.000 101,60	3.800 96,52	52/104	5.460 138,68	5.300 134,62	5.100 129,54
14/28	1.660 42,16	1.500 38,10	1.300 33,02	27/54	2.960 75,18	2.800 71,12	2.600 66,04	40/80	4.260 108,20	4.100 104,14	3.900 99,06	53/106	5.560 141,22	5.400 137,16	5.200 132,08
15/30	1.760 44,70	1.600 40,64	1.400 35,56	28/56	3.060 77,72	2.900 73,66	2.700 68,58	41/82	4.360 110,74	4.200 106,68	4.000 101,60	54/108	5.660 143,76	5.500 139,70	5.300 134,62
16/32	1.860 47,24	1.700 43,18	1.500 38,10	29/58	3.160 80,26	3.000 76,20	2.800 71,12	42/84	4.460 113,28	4.300 109,22	4.100 104,14	55/110	5.760 146,30	5.600 142,24	5.400 137,16
17/34	1.960 49,78	1.800 45,72	1.600 40,64	30/60	3.260 82,80	3.100 78,74	2.900 73,66	43/86	4.560 115,82	4.400 111,76	4.200 106,68	56/112	5.860 148,84	5.700 144,78	5.500 139,70
18/36	2.060 52,32	1.900 48,26	1.700 43,18	31/62	3.360 85,34	3.200 81,28	3.000 76,20	44/88	4.660 118,36	4.500 114,30	4.300 109,22	57/114	5.960 151,38	5.800 147,32	5.600 142,24
19/38	2.160 54,86	2.000 50,80	1.800 45,72	32/64	3.460 87,88	3.300 83,82	3.100 78,74	45/90	4.760 120,90	4.600 116,84	4.400 111,76	58/116	6.060 153,92	5.900 149,86	5.700 144,78
20/40	2.260 57,40	2.100 53,34	1.900 48,26	33/66	3.560 90,42	3.400 86,36	3.200 81,28	46/92	4.860 123,44	4.700 119,38	4.500 114,30	59/118	6.160 156,46	6.000 152,40	5.800 147,32
21/42	2.360 59,94	2.200 55,88	2.000 50,80	34/68	3.660 92,96	3.500 88,90	3.300 83,82	47/94	4.960 125,98	4.800 121,92	4.600 116,84	60/120	6.260 159,00	6.100 154,94	5.900 149,86
22/44	2.460 62,48	2.300 58,42	2.100 53,34	35/70	3.760 95,50	3.600 91,44	3.400 86,36	48/96	5.060 128,52	4.900 124,46	4.700 119,38				

Ordering Information

Order No. Formula
87087-XX,XX

00 = 15 microinches min. gold in contact area
12 = 20 microinches min. gold in contact area
03 = 30 microinches min. gold in contact area

= Circuit size desired - 10-60

Example: For 18/36 size with 20 microinches min. gold in contact area, Order No. is 87087-1218

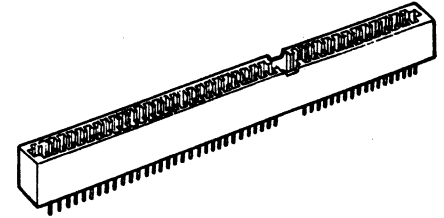
Contact factory for other plating options. For versions with kinked tails for P.C. board retention, contact factory for 71015 Series

F

Double Sided Edge Connector

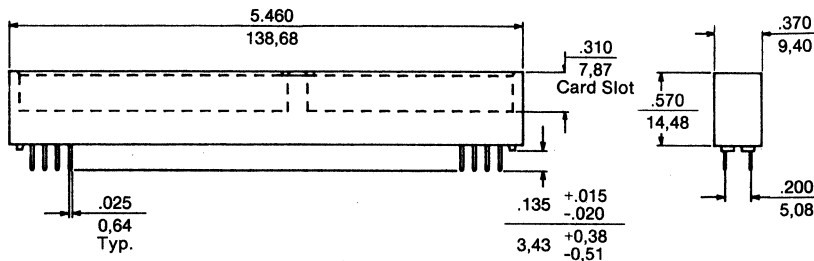
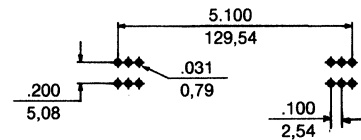
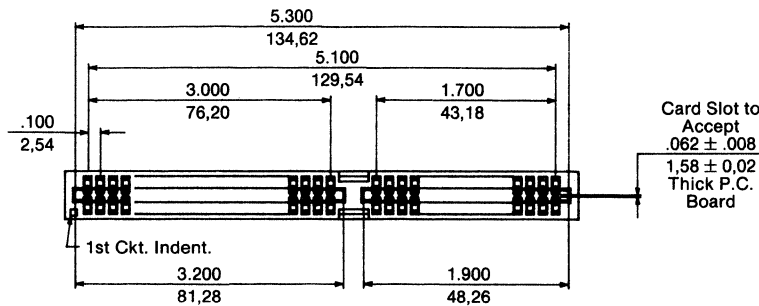


87087 .100 (2,54 mm) Center P.C. Tail Connector Dual Slot 98 Circuit Version



- .100" (2,54mm), contact spacing; .200" (5,08mm), row to row spacings
- Selective gold plated contact area
- Bifurcated phosphor bronze terminal
- Glass filled 94V-0 polyester housing
- Industry standard dimensions
- Dual slots (36 and 62 positions)
- Board retention option available

F



Ordering Information 98 Circuit Version

Order No.	Plating
87087-0099	15 microinches (38 microns) min. gold in contact area
87087-1299	20 microinches (50 microns) min. gold in contact area
87087-0399	30 microinches (76 microns) min. gold in contact area

For version with a pair of P.C. tails kinked on each end for board retention, contact factory.

Edge Card Connector for .050" (1,27mm) Center Ribbon Cable



6874 Series .100" (2,54mm) Center

- Insulation Displacement of .050" (1,27mm) flat cable
- 10, 14, 16, 20, 26, 34, 40, 50 and 64 circuits
- Terminates to either side of cable
- Error free wiring
- Pre-assembled upper and lower housing
- Optional molded-in polarization
- Meets edge board industry standards

Wire Accommodation - 26 and 28 AWG stranded
PCB Insertion Force - 7.2 oz. per contact pair max.
PCB Withdrawal Force - 4 oz. per contact pair min.

Electrical:

Current Rating - 1 ampere
Insulation Resistance - Greater than 200K megohms
Dielectric Withstand Voltage - Greater than 1.0K volts rms at sea level

Environmental:

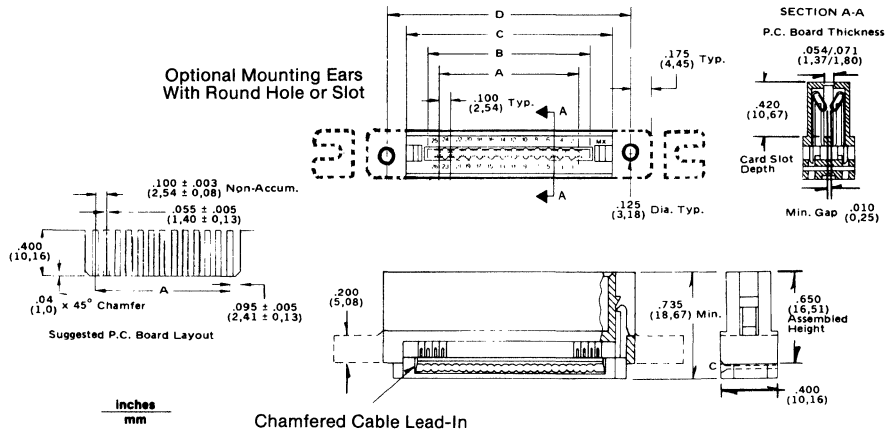
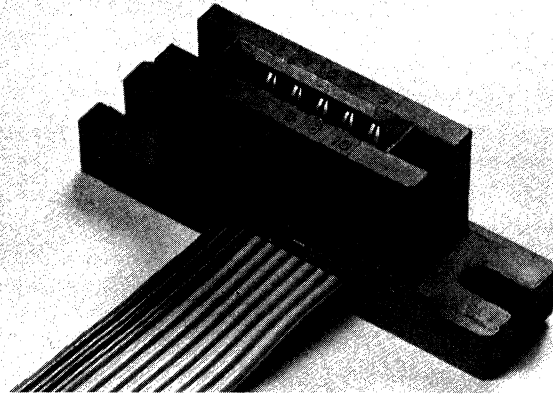
Temperature Range - -40°C to 105°C

Specifications

Insulator Material - Glass reinforced polyester 94V-0, black

Contact Plating - .000030 min. selective gold in contact area, .00010 min. selective tin/lead in tail area; both over .000050 min. nickel overall

or
 Overall tin plating .0002/.0003 thick



Dimensions 6874

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D
10	.400 10,16	.600 15,24	1.00 25,40	1.300 33,02	26	1.200 30,42	1.400 35,56	1.800 45,70	2.100 53,30	50	2.400 61,0	2.600 66,04	3.000 76,2	3.300 83,82
14	.600 15,24	.800 20,32	1.200 30,42	1.500 38,10	34	1.600 40,6	1.800 45,7	2.200 55,9	2.500 63,50	60	2.900 73,7	3.100 78,74	3.500 88,9	3.800 96,52
16	.700 17,78	.900 22,86	1.300 33,02	1.600 40,64	40	1.900 48,3	2.100 53,3	2.500 63,50	2.800 71,12	64	3.100 78,7	3.300 83,82	3.700 94,0	4.000 101,6
20	.900 22,86	1.100 27,94	1.500 38,1	1.800 45,72										

Ordering Information



Recommended Molex ribbon cable for use with 6874 Series: Eng. Nos. 8863, 6800, 40158, 24107, 24108

GOLD/TIN LEAD ORDER NO. FORMULA		OVERALL TIN ORDER NO. FORMULA	
No. of Circuits (10, 14, 16, 20, 26, 34, 40, 50, 60, 64)	• 15-29 - 0 XX X	No. of Circuits (10, 14, 16, 20, 26, 34, 40, 50, 60, 64)	15-25 - X XX X
	No Mounting Ears - 1		No Mounting Ears 8 XX 5
	Round Hole Mounting Ears - 2		Round Hole Mounting Ears 9 XX 0
	Slotted Mounting Ears - 3		Slotted Mounting Ears 9 XX 8

U.S. Standard Product, available through Molex franchised distributors.

Available but not shown. Contact factory for:

- Molded in P.C.B. polarization. Designated as 8173 product.
- Short ear [.115" (2,92mm)] for slotted version. Designated as 8621 Series product.
- Wider mounting center 'D' + .100" (2,54mm). Designated 6874-N-A Series product.

	Order No.
Optional Polarizing Key 7515K	89-00-7001

Double Sided Edge Connector Housing

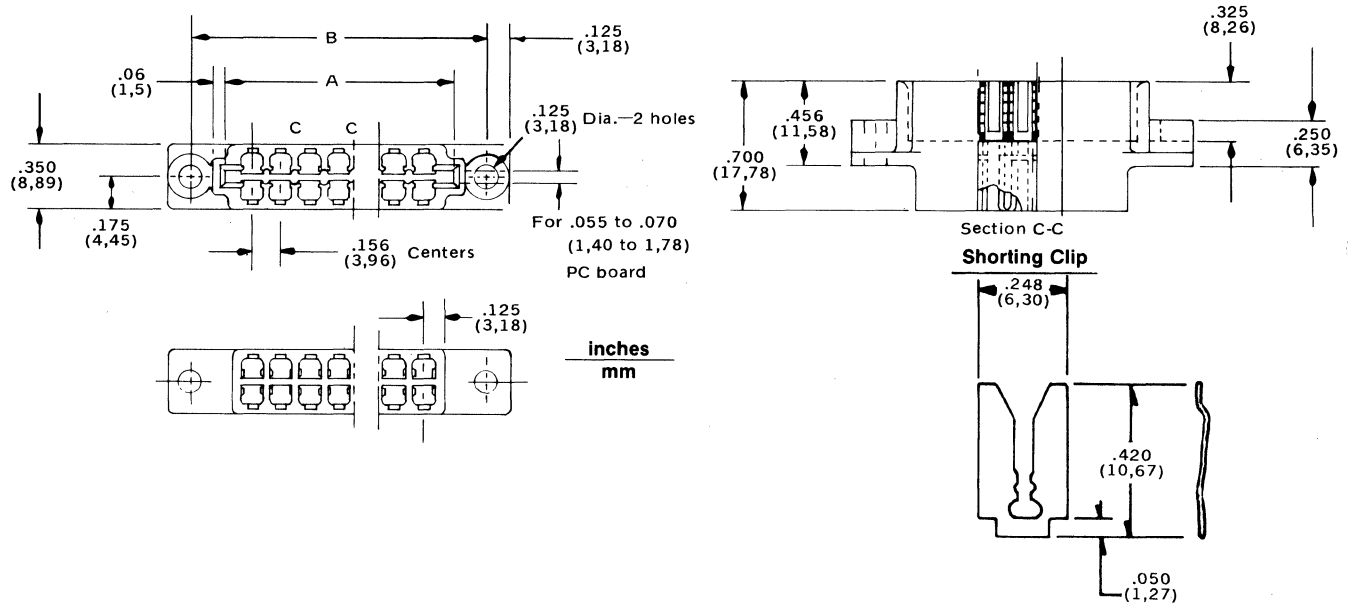
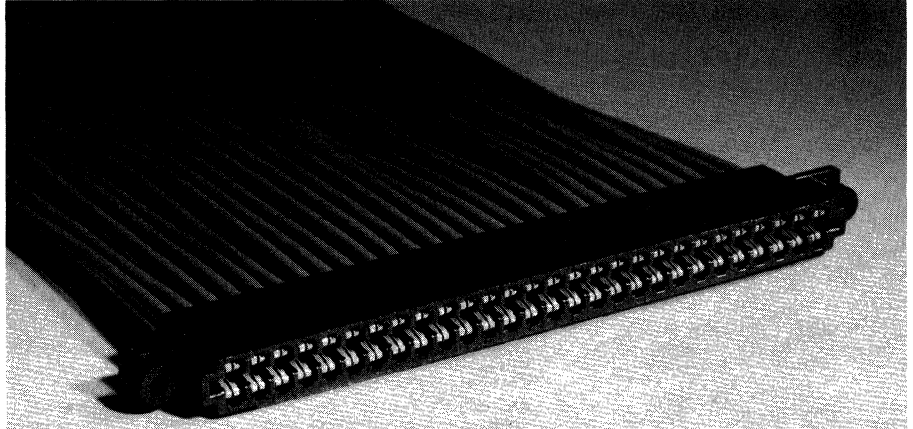


4338

.156" (3,96mm) Double Sided Crimp Housing

- 94V-0 polyester housing material
- Optional mounting flanges
- Optional polarizing keys
 - 6532 (intercontact) plastic
 - 4338K (on contact) plastic (See ordering information below)
- Will accept .062" thick P.C. boards
- Shorting clip, engineering series 6523
- U.L. listed

Terminals: 4366, 4573, 4574, 4837; Order separately. See next page



Dimensions

No. of Dual Positions	Dim. A	Dim. B	No. of Dual Positions	Dim. A	Dim. B	No. of Dual Positions	Dim. A	Dim. B	No. of Dual Positions	Dim. A	Dim. B	No. of Dual Positions	Dim. A	Dim. B
6	1.100 27,94	1.531 38,89	10	1.722 43,74	2.160 54,80	15	2.504 63,60	2.940 74,60	22	3.596 91,34	4.030 102,4	25	4.060 103,12	4.50 113,9
8	1.410 35,81	1.770 44,90	12	2.034 51,66	2.470 62,6	18	2.950 74,93	3.410 86,50	24	3.909 99,29	4.343 110,31	28	4.530 115,06	4.960 126,0

Ordering Information

No. of Dual Positions	Order No. With Mtg. Flange	Order No. Without Mtg. Flange	No. of Dual Positions	Order No. With Mtg. Flange	Order No. Without Mtg. Flange	No. of Dual Positions	Order No. With Mtg. Flange	Order No. Without Mtg. Flange	No. of Dual Positions	Order No. With Mtg. Flange	Order No. Without Mtg. Flange
6	• 09-50-6065	09-50-5065	12	• 09-50-6125	09-50-5125	22	• 09-50-6225	09-50-5225	25	• 09-50-6255	09-50-5255
8	• 09-50-6085	09-50-5085	15	• 09-50-6155	09-50-5155	24	• 09-50-6245	09-50-5245	28	• 09-50-6285	09-50-5285
10	• 09-50-6105	09-50-5105	18	• 09-50-6185	09-50-5185						

• U.S. Standard Product, available through Molex franchised distributors.

Optional Polarizing Keys	Order No.
6532	15-04-0233

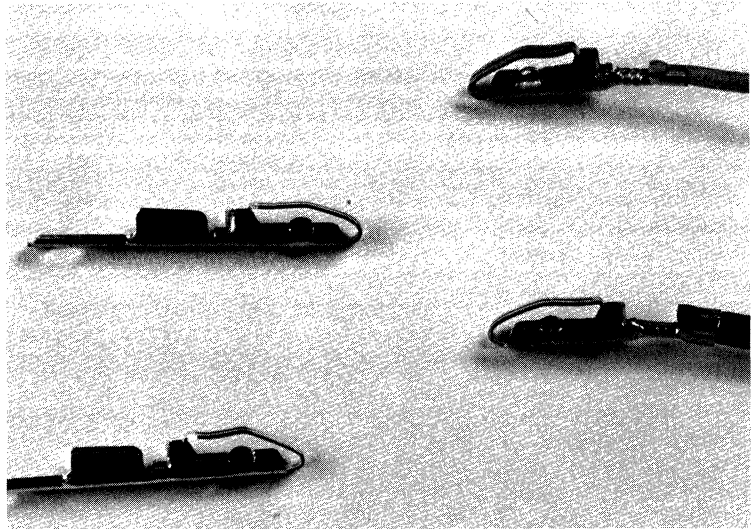
Shorting Clip	Order No.	Material
	16-02-0022	Pre-Tin Plated

Double Sided Edge Connector Terminals

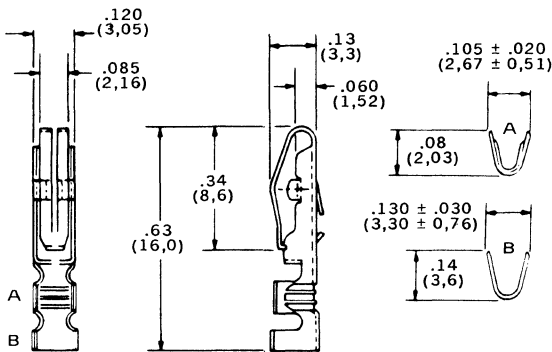


4366, 4573, 4574 and 4837 P.C. Crimp and Solder Eyelet

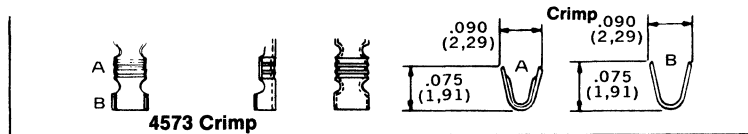
- For use with 4338 housing
- Crimp wire size 18-30 AWG
- Contact material brass
- Pre-tin or selective gold plating
- Solder loop and split eyelet version available
- Anti-fishhooking feature prevents terminals from snagging
- Wire barrier prevents stripped wire from entering the contact area
- Coined outside edges prevent excess scoring of the solder pad surfaces
- Patented bifurcated contact area



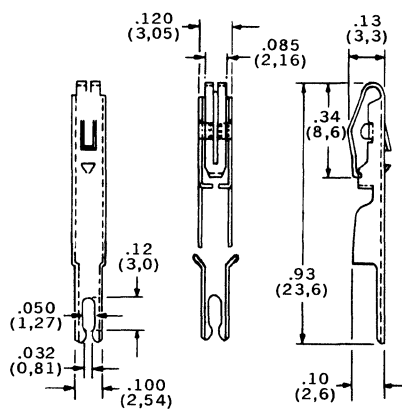
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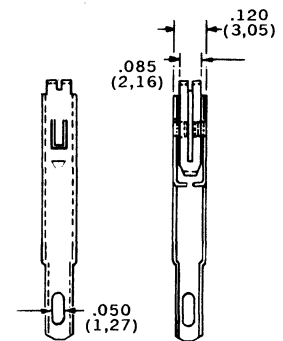
4366 Crimp



4573 Crimp



4837 Split Eyelet



4574 Eyelet

Ordering Information

Crimp Wire Size	Insulation Diameter	Eng. No.	Order Number	
			Chain Form	Loose Form
18-24	.060/.120 1,52/3,05	4366	● 08-03-0303	● 08-03-0304
		4366 (a)	● 08-05-0301	● 08-05-0302
24-30	.040/.090 1,02/2,29	4573	● 08-03-0305	● 08-03-0306
		4573 (a)	● 08-05-0303	● 08-05-0304
PC Tail Solder Loop		4574 (b)	08-01-0201	● 08-01-0202
PC Tail Split Eyelet		4837	—	08-01-0203

● U.S. Standard Product, available through Molex franchised distributors.

- (a) .00002 (0,0005mm) minimum selective gold plating over .00003 (0,0008mm) minimum overall nickel plate.
- (b) Tab loop will accommodate a maximum of two 16 AWG solid wires or two 18 stranded wires.

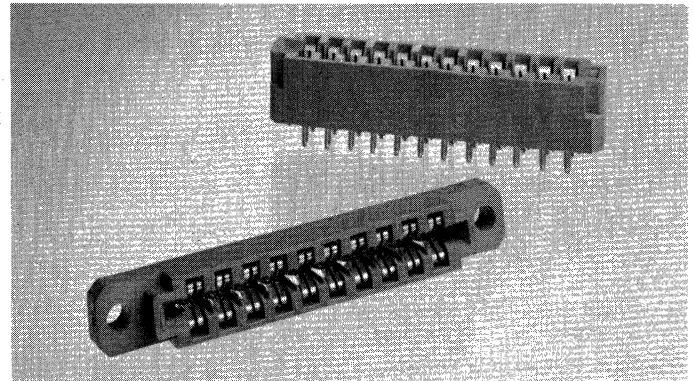
For application tooling see Section M of this catalog.

Double Sided Edge Connector

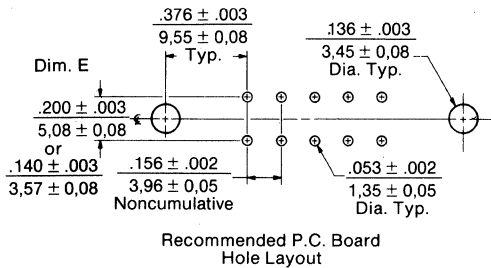
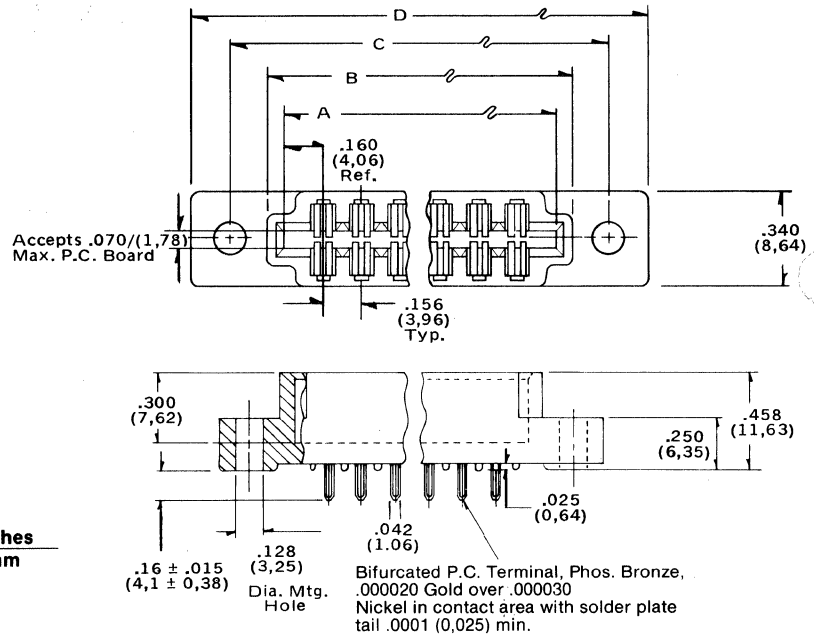


6511 .156" (3,96 mm) Center P.C. Tail Connector

- .140" (3,57mm) or .200" (5,08mm) row to row spacings
- Selective gold plated contact area - 20 microinches gold over 30 microinches nickel; solder plated tail
- Phosphor bronze terminal
- 94V-0 glass filled polyester housing, green color
- Industry standard dimensions - Drop in, cost saving replacements
- P.C. tail only
- Optional polarizing key SP558
- Accepts .062" (1,57mm) thick P.C. boards
- Optional mounting flange



F



inches
mm

Dimensions

Positions	Dim. A	Dim. B	Dim. C*	Dim. D*	Positions	Dim. A	Dim. B	Dim. C*	Dim. D*	Positions	Dim. A	Dim. B	Dim. C*	Dim. D*
6	1.100 27,94	1.244 31,60	1.532 38,91	1.780 45,21	15	2.504 63,60	2.648 67,26	2.936 74,57	3.184 80,87	24	3.908 99,26	4.052 102,92	4.340 110,23	4.588 116,53
10	1.724 43,78	1.868 47,45	2.156 54,76	2.404 61,06	18	2.972 75,48	3.116 79,15	3.404 86,46	3.652 92,76	25	4.064 103,22	4.208 106,88	4.496 114,19	4.744 120,49
12	2.036 51,71	2.180 55,37	2.468 62,68	2.716 68,98	22	3.596 91,33	3.740 95,05	4.028 102,31	4.276 108,61					

*With Mounting Flange Only

Ordering Information

Positions	Order No. With Mounting Flange		Order No. Without Mounting Flange		Positions	Order No. With Mounting Flange		Order No. Without Mounting Flange	
	.140" Spacing Between Rows	.200" Spacing Between Rows	.140" Spacing Between Rows	.200" Spacing Between Rows		.140" Spacing Between Rows	.200" Spacing Between Rows	.140" Spacing Between Rows	.200" Spacing Between Rows
6	09-04-7062	09-04-7061	09-04-6062	09-04-6061	18	09-04-7182	09-04-7181	09-04-6182	09-04-6181
10	09-04-7102	09-04-7101	09-04-6102	09-04-6101	22	09-04-7222	09-04-7221	09-04-6222	09-04-6221
12	09-04-7122	09-04-7121	09-04-6122	09-04-6121	24	09-04-7242	09-04-7241	09-04-6242	09-04-6241
15	09-04-7152	09-04-7151	09-04-6152	09-04-6151	25	09-04-7252	09-04-7251	09-04-6252	09-04-6251

Polarizing Key SP558	Order No. 89-00-0144
----------------------	-------------------------

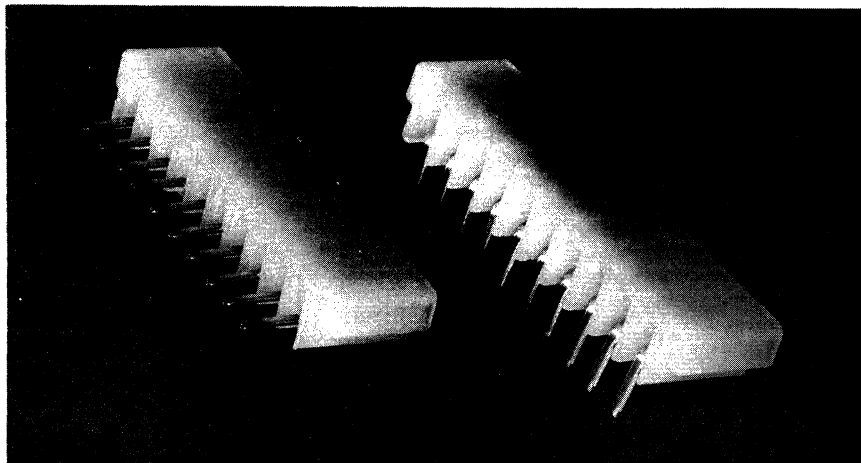
Single Sided Edge Connector



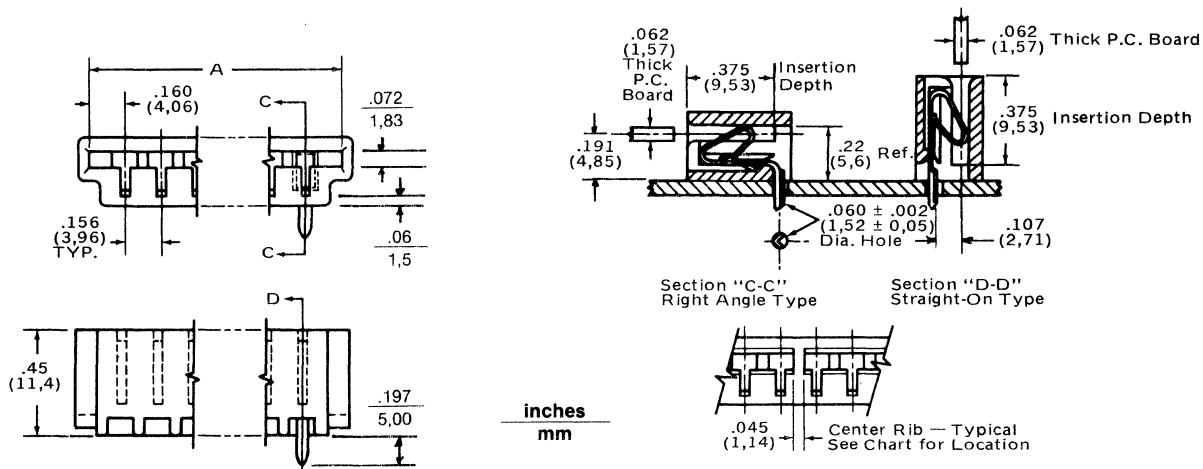
2184

.156" (3,96 mm) Center Single Sided P.C. Tail Edge Connector

- 94V-2 nylon
- Polarization provided by structural ribs
- Housing preassembled with terminals
- Straight or right angle mounting
- Will accept .062" (1,57mm) P.C. board
- Tin or gold plated brass terminals



F



Dimensions

Circuits	Dim. A	Center Rib Location
6	1.100 \pm .015 27,94 \pm 0,38	None
9	1.568 \pm .015 39,83 \pm 0,38	Between ckt. 5 & 6
10	1.724 \pm .015 43,79 \pm 0,38	(2) Between ckt. 4 & 5; 7 & 8

Ordering Information

Circuits	Straight On	Right Angle
	Order No.*	Order No.*
6	09-03-1062	09-03-1061
9	09-03-1092	09-03-1091
10	09-03-1102	—

*These order numbers are for Tin-Plated Brass Terminals.
For Gold, use number 09-04-XXXX in place of 09-03-XXXX.

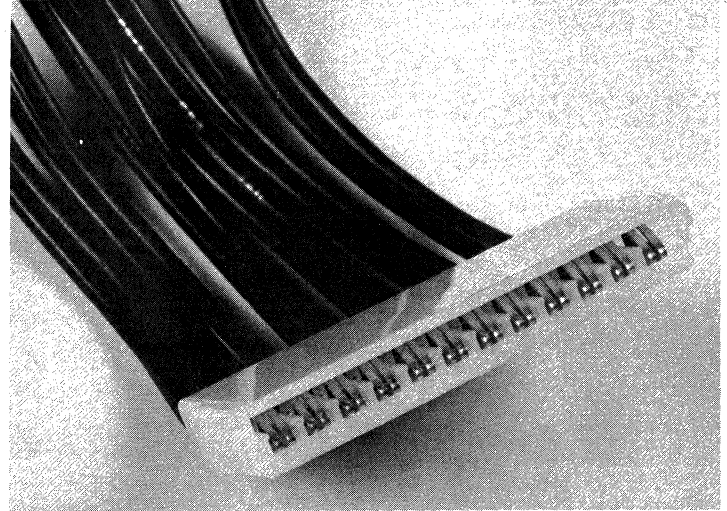
Single Sided Edge Connector Housing



1796

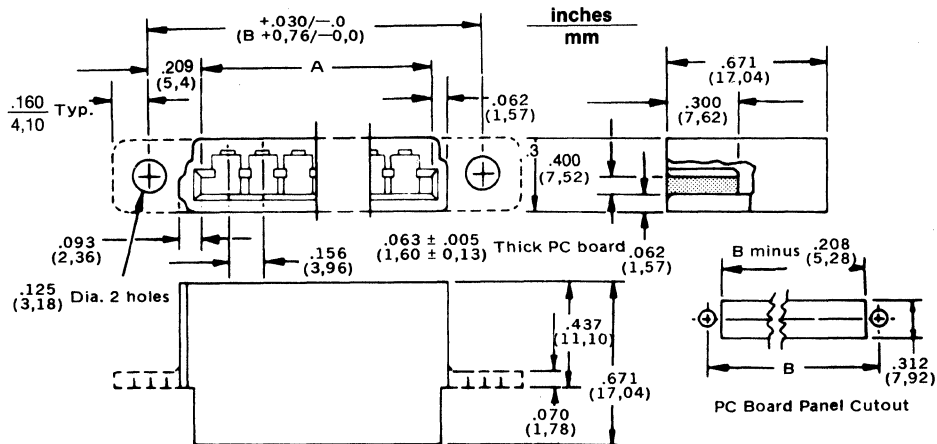
.156" (3,96 mm) International Single Sided P.C. Edge Connector Housing for Crimp Terminals

- 94V-2 nylon
- Optional mounting flanges
- Optional polarizing key 2011 (on contact)
- Optional patented bifurcated terminals
- Will accept .062" thick (1,57mm) P.C. boards
- U/L and CSA recognized



Terminals: 1797, 1917, 2012, 4295, and 2014; Order separately. See next page

- Current rating 7 amps (18 AWG. wire)



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
6	.966 (+.020/-0.00) 24,54 (+0,51/-0,00)	1.392 35,36	15	2.370 (+.020/-0.00) 60,20 (+ 0,51/-0,00)	2.796 71,02	22	3.462 (+.025/-0.00) 87,94 (+ 0,64/-0,00)	3.888 98,76
9	1.434 (+.020/-0.00) 36,42 (+ 0,51/-0,00)	1.860 47,24	18	2.838 (+.020/-0.00) 72,09 (+ 0,51/-0,00)	3.264 82,91	24	3.774 (+.030/-0.00) 95,86 (+ 0,76/-0,00)	4.200 106,68
12	1.902 (+.020/-0.00) 48,31 (+ 0,51/-0,00)	2.328 59,13	21	3.306 (+.025/-0.00) 83,97 (+ 0,64/-0,00)	3.732 94,79			

Ordering Information

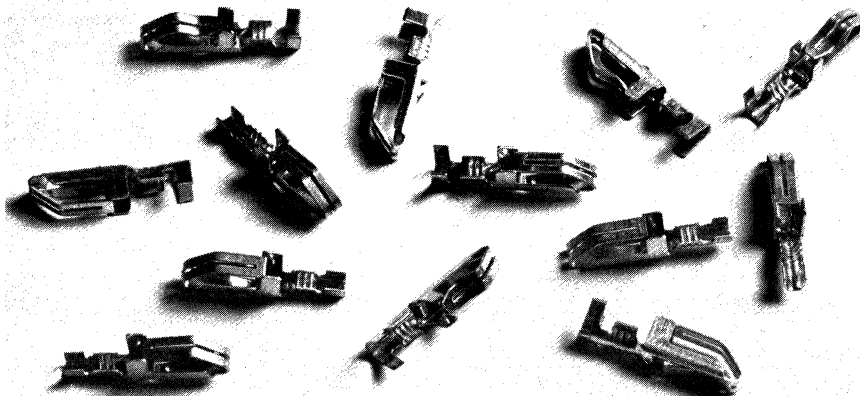
Circuits	Order No. Without Flange	Order No. With Flange	Circuits	Order No. Without Flange	Order No. With Flange	Circuits	Order No. Without Flange	Order No. With Flange
6	09-01-1061	09-01-2061	15	09-01-1151	09-01-2151	22	09-01-1221	09-01-2221
9	09-01-1091	09-01-2091	18	09-01-1181	09-01-2181	24	09-01-1241	09-01-2241
12	09-01-1121	09-01-2121	21	09-01-1211	09-01-2211			

Single Sided Edge Connector Terminals

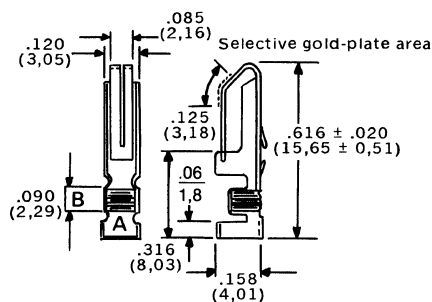


1797, 1917, 2012, 2014, and 4295 Crimp Terminals

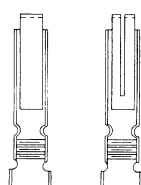
- For use with 1796 housing
- Crimp wire size 18-30 AWG
- Contact material, brass or phosphor bronze
- Pre-tinned or gold plate
- Patented bifurcated contact



F

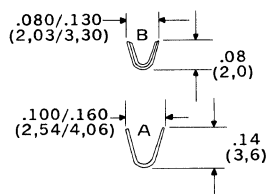
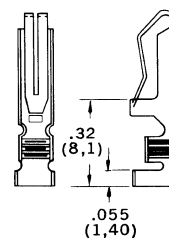


● Non-bifurcated



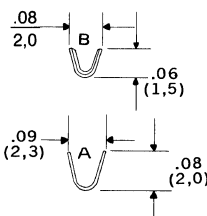
inches
mm

4295



Conductor Crimp Area
**1797, 1917,
2012, 4295**

Insulation Crimp Area



2014

Dimensions common except as shown

Ordering Information

Crimp Wire Size	Insulation Diameter	Eng. No.	Order Number	
			Chain Form	Loose Form
18-24	.060-.120 1,52-3,05	1797 (a)	08-01-0101	08-01-0102
		1797 (b)	08-05-0103	08-05-0104
		1797 (c)	08-06-0101	08-06-0102
		1917 (d)	08-03-0101	08-03-0102
		1917 (e)	08-07-0101	08-07-0102
		*2012 (a)	08-01-0110	08-01-0111
		4295 (a)	08-01-0112	08-01-0113
24-30	.040-.090 1,02-2,29	2014 (a)	08-01-0105	08-01-0106
		2014 (b)	08-05-0105	—
		2014 (c)	08-06-0105	08-06-0106

* Non-bifurcated.

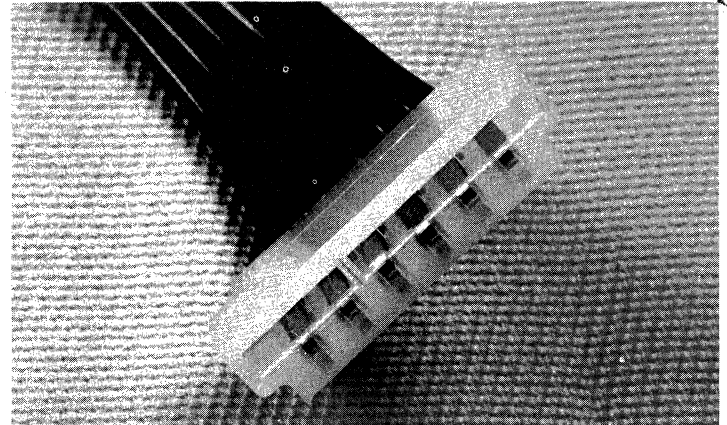
- (a) Tin-plated.
- (b) .00003 (0,0008mm) minimum selective gold plate over .00003 (0,0008mm) minimum nickel-plated brass.
- (c) .00002 (0,0005mm) minimum gold plate over .00003 (0,0008mm) minimum nickel-plated brass.
- (d) Tin-plated phosphor bronze.
- (e) .00002 (0,0005mm) minimum gold plate over .00003 (0,0008mm) minimum nickel-plated phosphor bronze.

For application tooling see Section M of this catalog.

Single Sided Edge Connector Housing



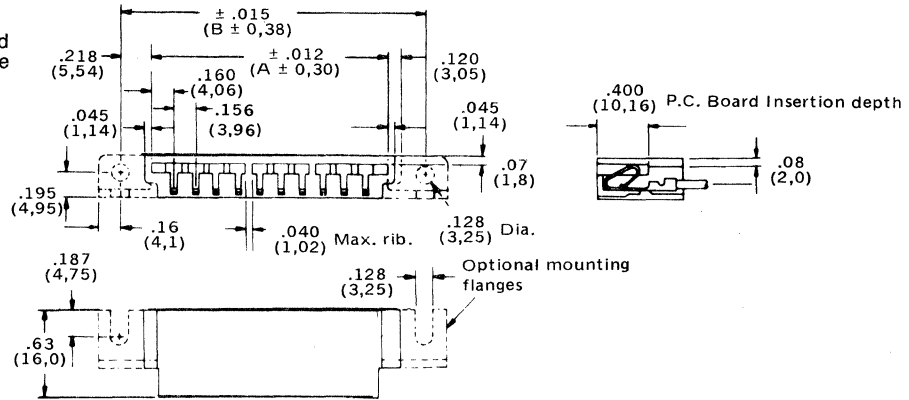
2574 .156" (3,96mm) Polarized Edge Connector Housings for Crimp Terminals



- .156" centers
- 94V-2 nylon material
- Optional mounting flanges
- Polarization provided by structural ribs
- Uses optional bifurcated terminals
- Will accept .062" thick P.C. boards
- IDC version (7241 product)

Terminals: 2478, 2578 or bifurcated 2878; Order separately. See next page

- Current rating 7 amps (18 AWG wire)



Dimensions

Circuits	Dim. A	Dim. B	Center Ribs Between Circuits	Circuits	Dim. A	Dim. B	Center Ribs Between Circuits
3	.632 16,05	1.14 29,0		9(d)	1.568 39,83	2.00 50,8	3 & 4 and 5 & 6
4	.788 20,02	1.30 33,02		10(e)	1.724 43,79	2.16 54,9	4 & 5 and 7 & 8
5	.944 23,98	1.38 35,1		12(k)	2.036 51,71	2.47 62,74	5 & 6 and 8 & 9
6	1.100 27,94	1.54 39,1		15(f)	2.504 63,60	2.94 74,7	4 & 5, 7 & 8 and 11 & 12
6(a)	1.100 27,94	1.54 39,1	2 & 3	16(h)	2.600 ± .012 67,56 ± 0,30	3.096 ± .015 78,64 ± 0,38	4 & 5, 7 & 8, 11 & 12 and 15 & 16
7(b)	1.256 31,90	1.69 42,9	3 & 4	17(l)	2.816 71,53	3.25 82,55	5 & 6, 10 & 11 and 14 & 15
8	1.412 35,86	1.85 47,0		18(g)	2.972 75,49	3.41 86,6	5 & 6 and 10 & 11
8(a)	1.412 35,86	1.85 47,0	2 & 3	19(n)	3.128 79,45	3.56 90,4	5 & 6, 11 & 12 and 16 & 17
8(b)	1.412 35,86	1.85 47,0	3 & 4	21(m)	3.440 ± .015 87,38 ± 0,38	3.88 ± .015 98,55 ± 0,38	5 & 6, 10 & 11 and 15 & 16
8(c)	1.412 35,86	1.85 47,0	5 & 6	22(n)	3.596 ± .015 91,34 ± 0,38	4.03 ± .020 102,36 ± 0,51	5 & 6, 11 & 12 and 16 & 17
9(a)	1.568 39,83	2.00 50,8	2 & 3	24(j)	3.908 ± .020 99,26 ± 0,51	4.34 ± .020 110,2 ± 0,50	4 & 5, 8 & 9, 12 & 13, 16 & 17, 20 & 21
9(c)	1.568 39,83	2.00 50,8	5 & 6				

Ordering Information

Circuits	Order No. W/O Flange	Order No. With Flange	Circuits	Order No. W/O Flange	Order No. With Flange	Circuits	Order No. W/O Flange	Order No. With Flange	Circuits	Order No. W/O Flange	Order No. With Flange
3	09-01-6031	09-01-7031	8	—	09-01-7081	9(d)	09-01-6091	09-01-7091	18(g)	09-01-6181	09-01-7181
4	09-01-6041	—	8(a)	09-01-6085	—	10(e)	09-01-6101	09-01-7101	19(n)	09-01-6191	09-01-7191
5	09-01-6051	09-01-7051	8(b)	09-01-6086	—	12(k)	09-01-6121	—	21(m)	09-01-6211	09-01-7211
6	—	09-01-7064	8(c)	09-01-6083	09-01-7083	15(f)	09-01-6151	09-01-7151	22(n)	09-01-6224	09-01-7224
6(a)	09-01-6061	09-01-7061	9(a)	09-01-6095	09-01-7095	16(h)	09-01-6161	09-01-7161	24(j)	09-01-6241	09-01-7241
7(b)	09-01-6071	09-01-7071	9(c)	09-01-6094	09-01-7094	17(l)	09-01-6171	09-01-7171			

Note: Use KK® terminal 2578 for 22-26 AWG wire, or 2478 and 2878 (Bifurcated) for 18-24 AWG with .110" (2,79mm) diameter maximum insulation.

Single Sided Terminals



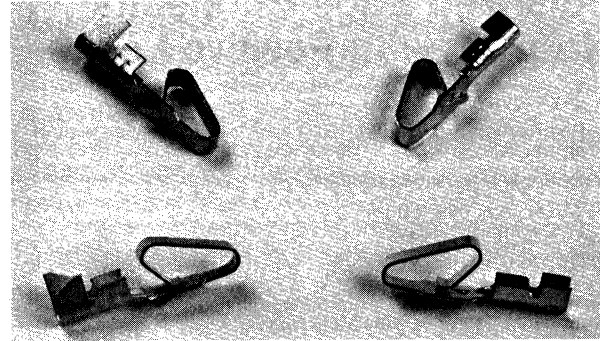
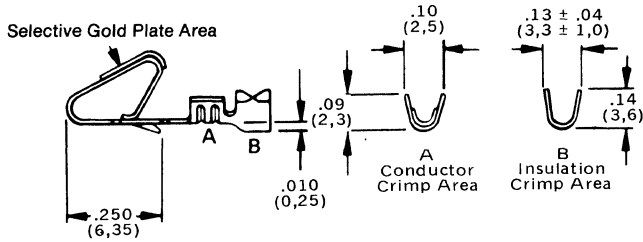
2478, 2578 and 2878

Crimp Terminals for Single Sided Housings

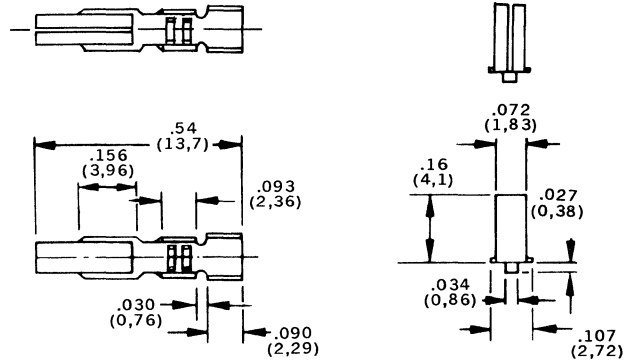
- For use with 2574 housing
- Crimp wire size 18-26 AWG
- Contact material brass
- Tin, bright acid tin or gold plate
- Patented double cantilever design

2478, 2878

For 18-24 AWG Only



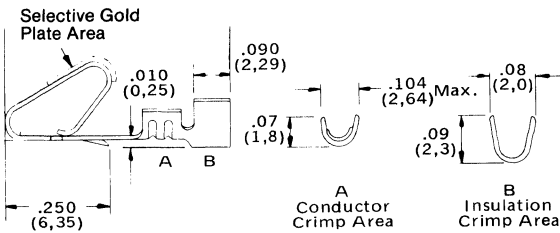
2878 Bifurcated Version For 18-24 AWG



inches
mm

2578

For 22-28 AWG



Tooling Specifications and Ordering Information

Terminal Eng. No.	Hand Tools		Crimp Machine	
	Crimping Order and (Eng.) No.	Extraction Order and (Eng.) No.	Bench Order and (Eng.) No.	Automatic Type
	(JHTR-2445-A)	(HTA-2174)	(CM-2442-E)	
2478	11-01-0026	11-03-0016	11-04-0062	Artos (b)
2578(a)			11-04-0063	
2878			11-04-0062	

(a) Specify bench machine stripper-crimper SC-2769-244-C, Order Number 11-04-0040a, for special application cable wire that cannot be stripped automatically;

(b) Contact Molex representative for combined Molex/Artos specifications.

Specifications and Ordering Information 2478/2578/2878

Crimp Wire Size	Insulation Diameter (Max.)	Eng. No.	Order Number		Plating
			Loose	Chain	
18-24	.110 2,79	2478	• 08-50-0106	• 08-50-0105	Tin
18-24	.110 2,79	2478	• 08-56-0106	• 08-56-0105	Gold
18-24	.110 2,79	2478	• 08-55-0104	• 08-55-0103	Sel. Gold
18-24	.110 2,79	2878	• 08-50-0116	• 08-50-0115	Tin
22-28	.065 1,65	2578	• 08-50-0108	• 08-50-0107	Tin
22-28	.065 1,65	2578	• 08-55-0106	• 08-55-0105	Sel. Gold

• U.S. Standard Product, available through Molex franchised distributors

F

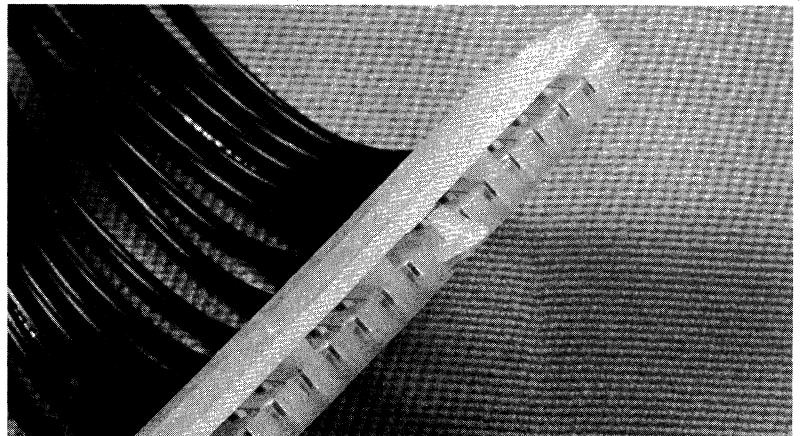
Single Sided Edge Connector Housing



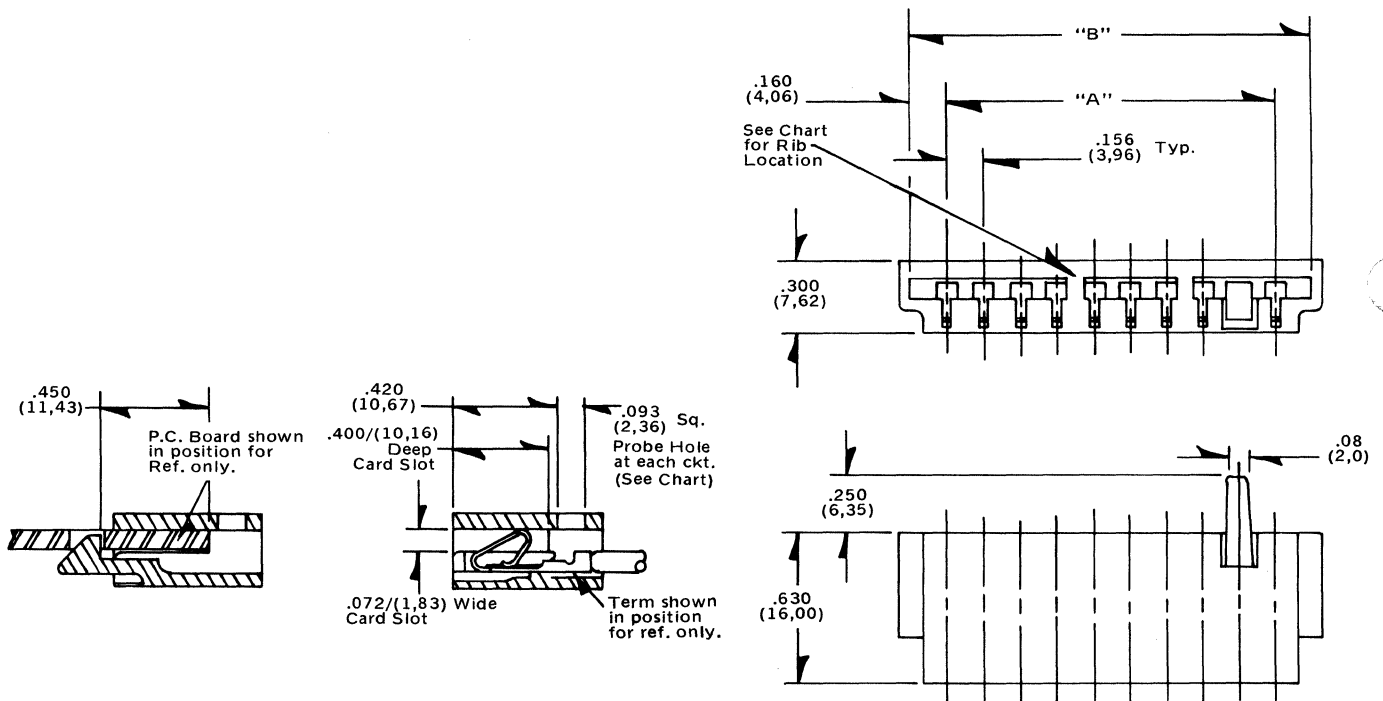
6422 .156" (3,96 mm) Center Polarized Edge Connector Housing with Positive Lock

- 94V-2 nylon
- Polarization provided by structural ribs
- Optional bifurcated terminals
- Will accept .062" thick (1,57mm) P.C. boards
- Optional probe hole

Terminals: 2478, 2578 or bifurcated 2878; Order separately. See preceding page



F



Dimensions

Circuits*	Rib Loc. Between Ckts.	Hook Loc. Between Ckts.	Dim. A	Dim. B	Circuits*	Rib Loc. Between Ckts.	Hook Loc. Between Ckts.	Dim. A	Dim. B
3	None	1 & 3	.312 ± .007 7,92 ± 0,18	.632 ± .007 16,05 ± 0,18	10	4 & 5, 7 & 8	8 & 10	1.404 ± .011 35,66 ± 0,28	1.724 ± .011 43,79 ± 0,28
5	None	1 & 3	.624 ± .009 15,85 ± 0,23	.944 ± .009 23,98 ± 0,23	12	6 & 7	8 & 10	1.716 ± .011 43,58 ± 0,28	2.036 ± .007 51,71 ± 0,18
6	None	1 & 3	.780 ± .009 18,81 ± 0,23	1.100 ± .009 27,94 ± 0,23	15	4 & 5, 7 & 8 11 & 12	8 & 10	2.184 ± .013 55,47 ± 0,33	2.504 ± .013 63,61 ± 0,33
9	3 & 4, 5 & 6	3 & 5	1.248 ± .011 31,67 ± 0,28	1.568 ± .011 39,80 ± 0,28	21	5 & 6, 10 & 11 15 & 16	8 & 10	3.120 ± .018 79,25 ± 0,46	3.440 ± .018 87,38 ± 0,46

Ordering Information

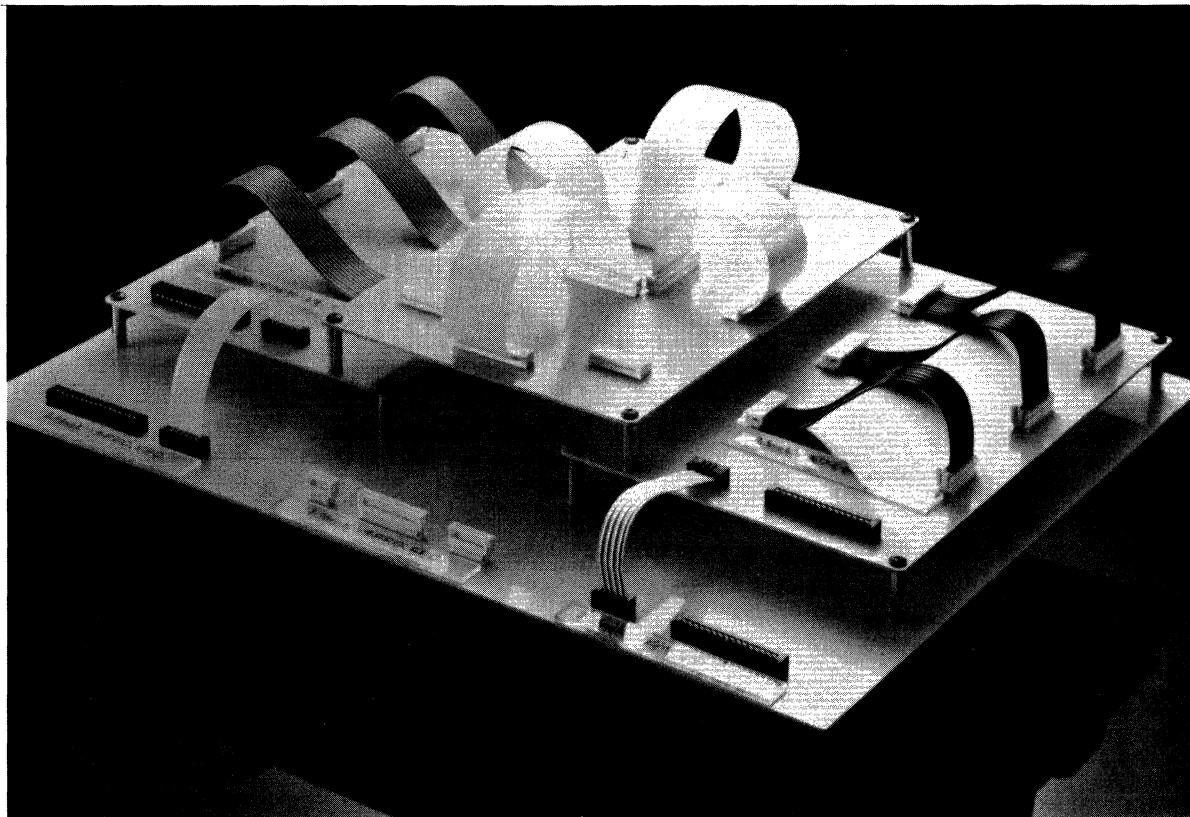
Circuits*	Order No. With Probe Hole	Order No. Without Probe Hole	Circuits*	Order No. With Probe Hole	Order No. Without Probe Hole	Circuits*	Order No. With Probe Hole	Order No. Without Probe Hole
3	—	09-01-1038	9	09-01-1096	09-01-1098	15	—	09-01-1158
5	09-01-1056	09-01-1058	10	—	09-01-1108	21	09-01-1216	09-01-1218
6	—	09-01-1068	12	—	09-01-1128			

*One circuit lost to provide locking hook; i.e., 3 circuit accepts two terminals only.

Membrane Switch, Planar Cable and Flex Circuitry Connectors



Contents



G

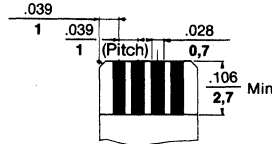
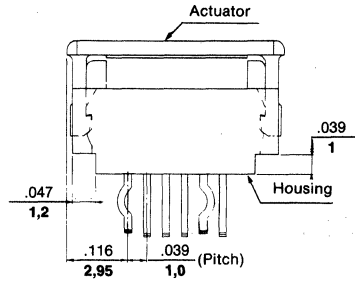
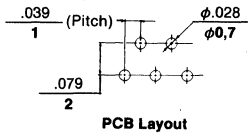
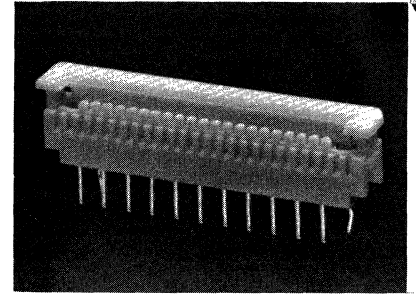
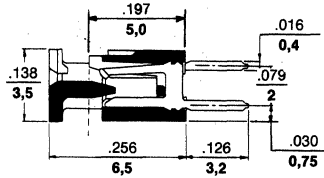
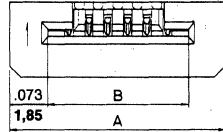
.039" (1,0 mm)	
FFC/FPC Connectors	2G-3G
.049 (1,25 mm)	
Zif-Type Connectors for FFC/FPC	4G-5G
FFC/FPC Connectors	6G
.059" (1,5 mm)	
Ribbon Cable Holders	7G
Wire Trap Connectors for Ribbon Cable.....	8G
.079" (2,0 mm)	
Wire Trap Connectors for Ribbon Cable.....	9G
.098" (2,5 mm)	
Wire Trap Connectors for Ribbon Cable.....	9G
.100" (2,54 mm)	
FFC Connectors	10G-16G
Membrane Switch Tail Connectors.....	10G, 13G, 15G
Ribbon Cable Connectors, Cable-to-Cable/Cable-to-Board.....	17G-18G
Ribbon Cable Connectors, PCB Solder Tail	19G

.039" (1,0 mm) FFC/FPC Connectors



52030 Series Straight Version

- Housing, nylon 6/6
- Actuator, polyester UL 94V-0
- Tin plated phos-bronze terminals
- 4-30 circuits
- 50V, 0.5 Amp, max.
- For 0.3 mm thick FFC/FPC



Dimensions

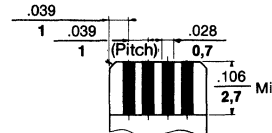
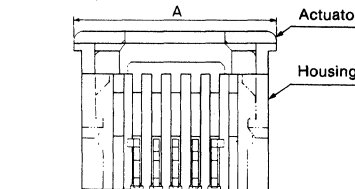
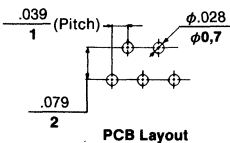
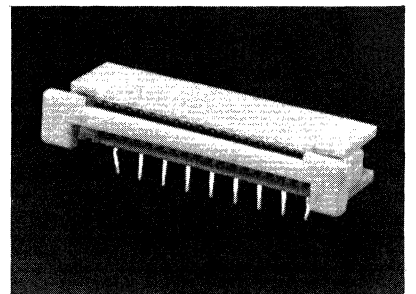
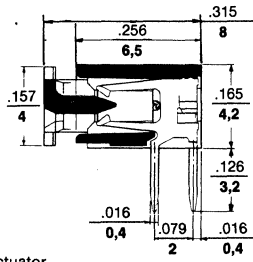
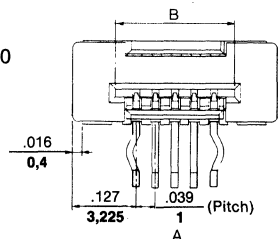
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.350 8,9	.205 5,2	18	.902 22,9	.756 19,2
6	.429 10,9	.283 7,2	20	.980 24,9	.834 21,2
8	.508 12,9	.362 9,2	22	1.060 26,9	.913 23,2
10	.587 14,9	.441 11,2	24	1.138 28,9	.992 25,2
12	.665 16,9	.520 13,2	26	1.217 30,9	1.070 27,2
14	.744 18,9	.598 15,2	28	1.296 32,9	1.150 29,2
16	.823 20,9	.677 17,2	30	1.374 34,9	1.228 31,2

Ordering Information

Order No. - 52030-XX10
Replace XX in Order No. with circuit size required, 04-30, even numbers only

52043 Series Right Angle Version

- Housing, nylon 6/6
- Actuator, polyester UL 94V-0
- Tin plated phos-bronze terminals
- 4-20 circuits
- 50V, 0.5 Amp, max.
- For 0.3 mm thick FFC/FPC



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.372 9,45	.205 5,2	9	.569 14,45	.402 10,2	13	.726 18,45	.559 14,2	17	.804 22,45	.717 18,2
5	.411 10,45	.244 6,2	10	.608 15,45	.441 11,2	14	.766 19,45	.598 15,2	18	.923 23,45	.756 19,2
6	.451 11,45	.283 7,2	11	.648 16,45	.480 12,2	15	.805 20,45	.638 16,2	19	.963 24,45	.795 20,2
7	.490 12,45	.323 8,2	12	.687 17,45	.520 13,2	16	.844 21,45	.677 17,2	20	1.00 25,45	.834 21,2
8	.530 13,45	.362 9,2									

Ordering Information

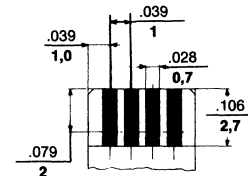
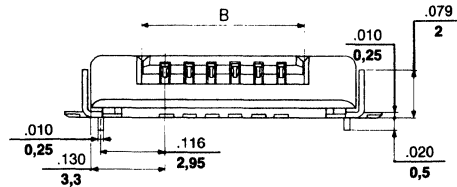
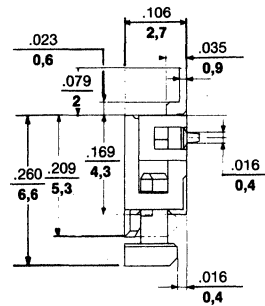
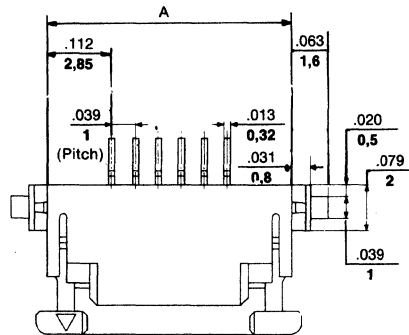
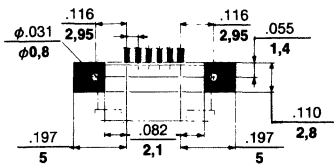
Order No. - 52043-XX10
Replace XX in Order No. with circuit size required, 04-20

.039" (1,0 mm) FFC Connector with Actuator, Surface Mount



52103 Series Surface Mount, Right Angle

- Housing: PPS, UL 94V-0
- Actuator: PPS, UL 94V-0
- Tin plated phos-bronze terminals
- Select circuit sizes
- 50V, 0.5 Amp, max.
- Tin plated brass stabilizing solder tabs
- Locator pegs on bottom of housing



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
4	.343 8,7	.205 5,2	14	.736 18,7	.598 15,2
6	.421 10,7	.283 7,2	16	.815 20,7	.677 17,2
8	.500 12,7	.362 9,2	18	.894 22,7	.756 19,2
10	.579 14,7	.441 11,2	20	.972 24,7	.834 21,2
12	.657 16,7	.520 13,2	22	1.051 26,7	.913 23,2

Ordering Information

Contact factory to order

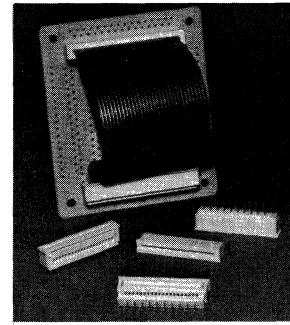


ZIF Connector for .049" (1,25 mm) Center FFC/FPC

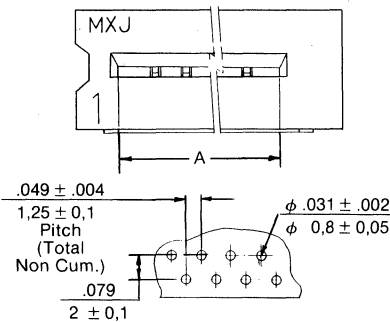


5597/5598 Series

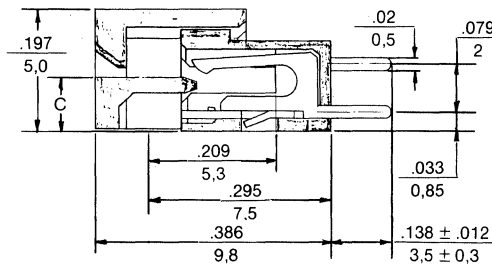
- 5597 accommodates FFC/FPC .012" (0,3mm) thick
- 5598 accommodates FFC/FPC .004" (0,1mm) thick
- Staggered solder tails, .138" (3,5mm) long
- Circuits sizes 3-30
- Housing - 94V-0 polyester
- Terminal - phosphor bronze, tin plating



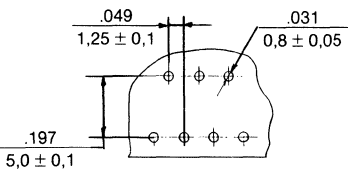
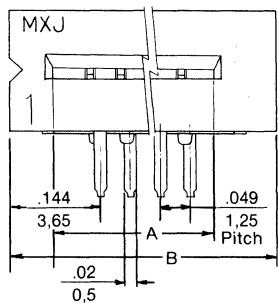
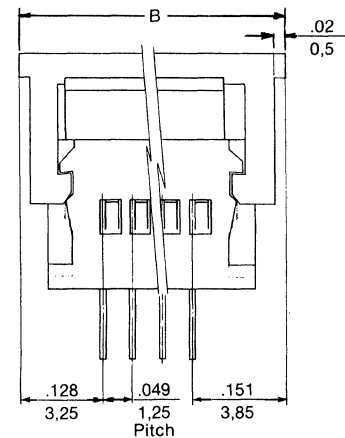
Dimensions



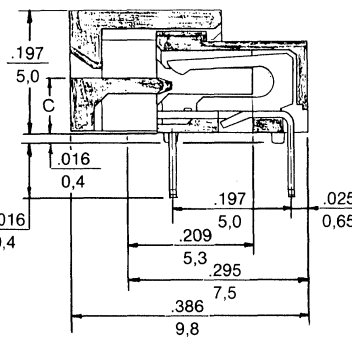
Recommended P.C. Board Hole Dimension



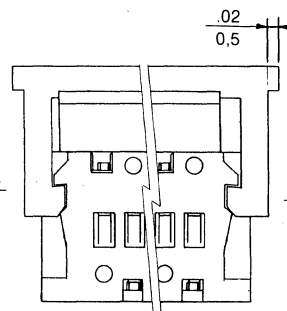
Straight Tail Version
5597-NCPB
5598-NCPB



Recommended P.C. Board Hole Dimension



Right Angle Version
5597-NAPB
5598-NAPB



FFC

	Recommended FFC	Dim. C
5597	.012" (0,3mm) thick	.091" (2,3mm)
5598	.004" (0,1mm) thick	.098" (2,5mm)

Dimensions 5597/5598

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
3	.205 5,2	.378 9,6	10	.549 13,95	.722 18,35	17	.894 22,7	1.067 27,1	24	1.238 31,45	1.411 35,85
4	.254 6,45	.427 10,85	11	.598 15,2	.772 19,6	18	.943 23,95	1.116 28,35	25	1.287 32,7	1.461 37,1
5	.303 7,7	.476 12,1	12	.648 16,45	.821 20,85	19	.992 25,2	1.165 29,6	26	1.337 33,95	1.510 38,35
6	.352 8,95	.526 13,35	13	.697 17,7	.870 22,1	20	1.041 26,45	1.214 30,85	27	1.386 35,2	1.559 39,6
7	.401 10,2	.574 14,6	14	.746 18,95	.919 23,35	21	1.090 27,7	1.264 32,1	28	1.435 36,45	1.609 40,85
8	.451 11,45	.624 15,85	15	.795 20,2	.968 24,6	22	1.140 28,95	1.313 33,35	29	1.484 37,7	1.657 42,1
9	.500 12,7	.673 17,1	16	.845 21,45	.978 25,85	23	1.189 30,2	1.362 34,6	30	1.534 38,95	1.707 43,35

ZIF Connector for .049" (1,25 mm) Center FFC/FPC



Specifications

Electrical:

Voltage Rating — 200V (ac/dc)
 Current Rating — 1 amp (ac/dc)
 Contact Resistance — 20 milliohms max.
 Insulation Resistance — 500 megohms min.
 Dielectric Strength — 500 Vac

Mechanical:

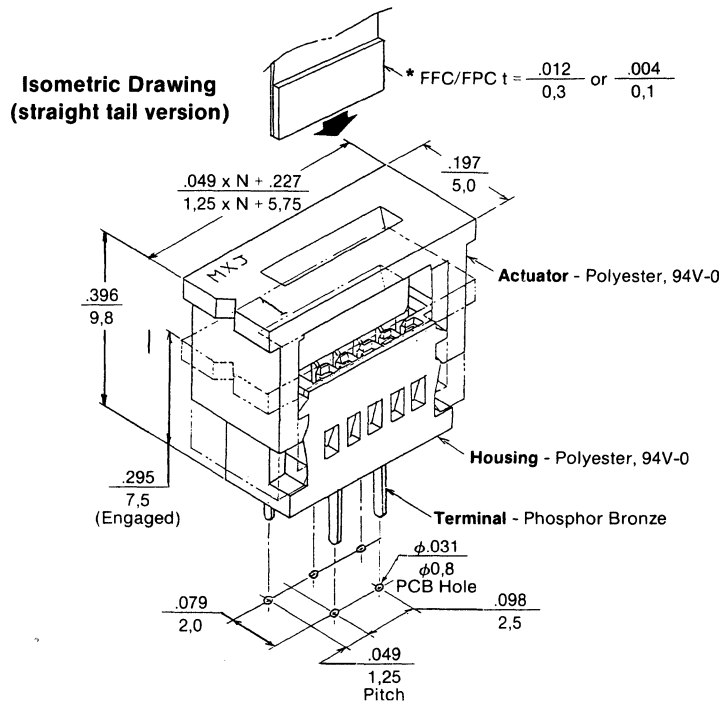
Max. Actuator Insertion and Extraction Force
 Newtons — (23.5 + 1.5 X ckt)
 Lbs. — (5.3 + 0.33 X ckt)
 Kg. — (2.4 + 0.15 X ckt)
 FCC/FPC Retention Force —
 (Under 10 circuits)
 Newtons — (1.5 + 0.5 X ckt)
 Lbs. — (0.33 + 0.11 X ckt)
 Kg. — (0.15 + 0.05 X ckt)

(Over 10 circuits)

Newtons — (3.9 + 0.5 X ckt)
 Lbs. — (0.88 + 0.11 X ckt)
 Kg. — (0.4 + 0.05 X ckt)
 Terminal Retention Force
 Newtons — 5.9
 Lbs. — 1.3
 Kg. — 0.6

Environmental:

Ambient Temperature Range
 — -40°C - 105°C



Primary Applications

Printer Carriage Heads
 Keyboards
 Video Cameras/Audio Products
 Automobiles/Motorcycles and other severe vibration situations.

Ordering Information 5597/5598

5597		5598	
Straight Tail Version For .012" (0,3mm) Thick FFC/FPC	Right Angle Tail Version	Straight Tail Version For .004" (0,1mm) Thick FFC/FPC	Right Angle Tail Version
39-51-3XX4	39-51-3XX3	39-51-4XX2	39-51-4XX1
Replace XX in Order No. with circuit size desired. 03-30			

*Molex offers FFC on .049" (1,25mm) centers. See Section D, this catalog.

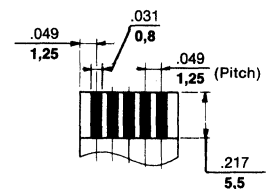
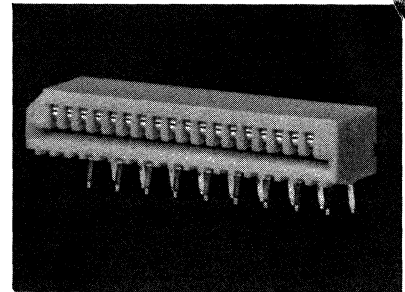
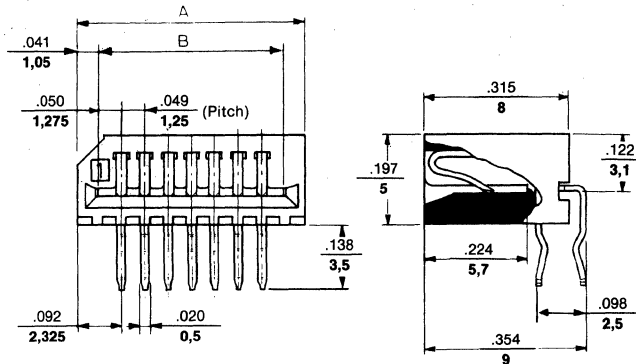
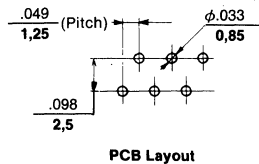


.049" (1,25 mm) FFC/FPC Connectors



52044 Series Right Angle Version

- Polyester, UL 94V-0
- Tin plated phos-bronze terminals
- 200V, 1 Amp, max.
- 3-40 circuits
- For 0.3 mm thick FFC/FPC

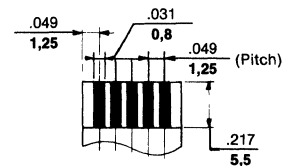
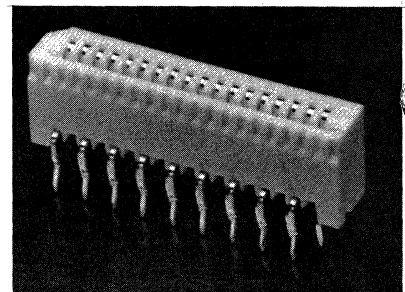
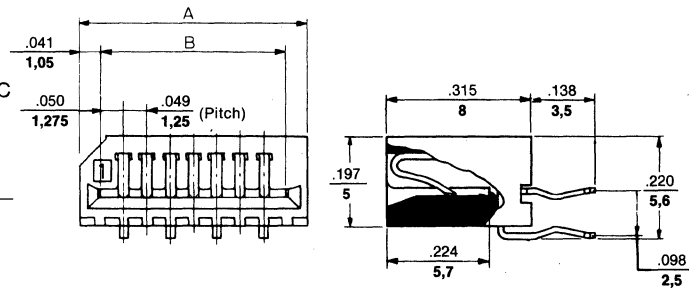
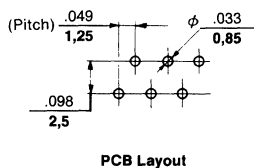


Ordering Information

Order No. - 52044-XX10
Replace XX in Order No. with circuit size required, 03-40

52045 Series Straight Version

- Polyester, UL 94V-0
- Tin plated phos-bronze terminals
- 200V, 1 Amp, max.
- 3-40 circuits
- For 0.3 mm thick FFC/FPC



Ordering Information

Order No. - 52045-XX10
Replace XX in Order No. with circuit size required, 03-40

Dimensions 52044/52045

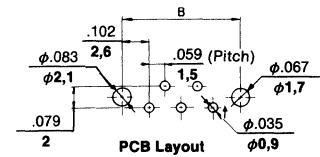
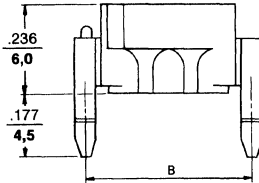
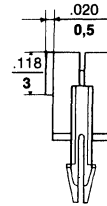
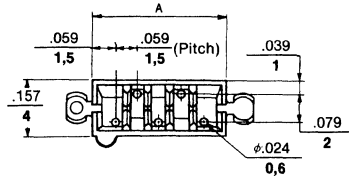
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
3	.281	7,15	13	.774	19,65	23	1.266	32,15	32	1.709	43,40
4	.331	8,40	14	.823	20,90	24	1.314	33,40	33	1.758	44,65
5	.380	9,65	15	.872	22,15	25	1.364	34,65	34	1.807	45,90
6	.429	10,90	16	.921	23,40	26	1.413	35,90	35	1.856	47,15
7	.478	12,15	17	.970	24,65	27	1.463	37,15	36	1.906	48,40
8	.528	13,40	18	1.020	25,90	28	1.512	38,40	37	1.955	49,65
9	.577	14,65	19	1.069	27,15	29	1.561	39,65	38	2.004	50,90
10	.626	15,90	20	1.118	28,40	30	1.610	40,90	39	2.053	52,15
11	.675	17,15	21	1.167	29,65	31	1.659	42,15	40	2.102	53,40
12	.724	18,40	22	1.217	30,90						

.059" (1,5 mm) Ribbon Cable Holder



51016 Series Straight Version

- Nylon 6/6, UL 94V-0
- 3-12 circuits
- For topcoated ribbon cable
- Wire range: AWG #26
- Insulation diameter: ϕ 1.3 mm max.
- Strip length: 7 mm



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
3	.236 6,0	.323 8,2	8	.531 13,5	.618 15,7
4	.295 7,5	.382 9,7	9	.591 15,0	.677 17,2
5	.354 9,0	.441 11,2	10	.650 16,5	.736 18,7
6	.413 10,5	.500 12,7	11	.709 18,0	.795 20,2
7	.472 12,0	.559 14,2	12	.768 19,5	.854 21,7

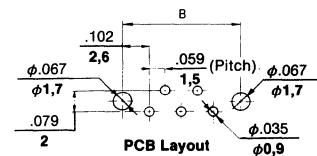
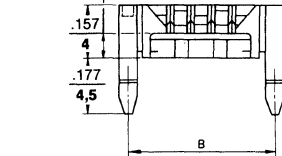
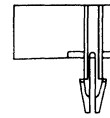
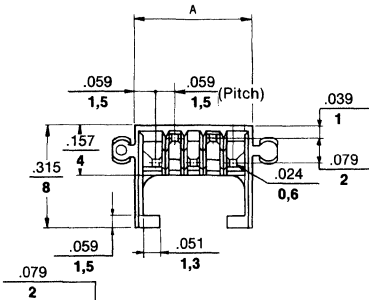
Ordering Information

Order No. - 51016-XX00
Replace XX in Order No. with number of circuits required, 03-12

G

51020 Series Right Angle Version

- Nylon 6/6, UL 94V-2
- 3-12 circuits
- For topcoated ribbon cable
- Wire range: AWG #26
- Insulation diameter: ϕ 1.3 mm max.
- Strip length: 7 mm



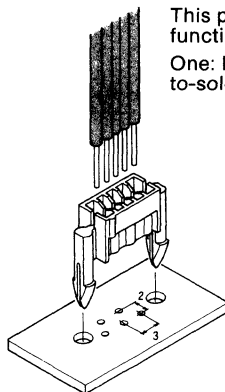
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
3	.236 6,0	.323 8,2	8	.531 13,5	.618 15,7
4	.295 7,5	.382 9,7	9	.591 15,0	.677 17,2
5	.354 9,0	.441 11,2	10	.650 16,5	.736 18,7
6	.413 10,5	.500 12,7	11	.709 18,0	.795 20,2
7	.472 12,0	.559 14,2	12	.768 19,5	.854 21,7

Ordering Information

Order No. - 51020-XX00
Replace XX in Order No. with number of circuits required, 03-12

Cable Holder

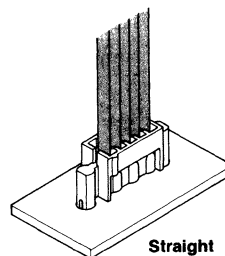


This product serves three important functions.

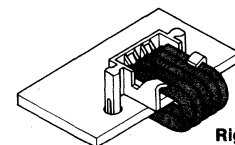
One: It guides the cable leads into an easy-to-solder 2 mm by 3 mm PCB layout

Two: It secures the cable to the PCB for soldering.

Three: It serves as a strain relief to prevent undue stress on the solder joints.



Straight



Right Angle

Wire-Trap Connectors for Ribbon Cable



For .059" (1,5 mm), .079" (2,0 mm) and .098" (2,5 mm) Center Ribbon Cable

- Reduces assembly costs
- High cable retention force keeps cable firmly in high vibration situations
- Easy to disconnect
- Simple insertion
- Compact size
- Secure electrical contact: The terminals inside the connector are spring loaded to provide high contact force. The contact style eliminates wear on the cable leads during disconnection.
- Secure board mounting: Kinked solder tails firmly hold the connectors onto circuit boards during soldering
- Simple one-step operation

Specifications

Electrical:

Voltage/Current Rating - 150V ac, 3 amps .059" (1,5mm); 150V ac, 3 amps .079" (2,0mm); 250V ac, 3 amps .098" (2,5mm)

Insulation Resistance - DC 500V between adjacent terminals 1,000MΩ min.

Dielectric Strength - AC 500V between adjacent terminals for one minute.

Contact Resistance - 20mΩ max.

Mechanical:

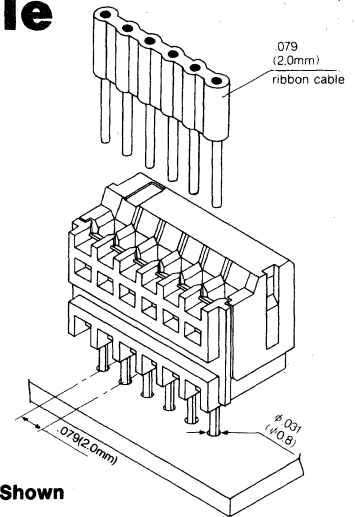
Housing Material - Glass filled polyester, UL94V-0

Terminal Material - Pre-tinned, phosphor bronze

Cable Insertion Force - 500g max. per circuit

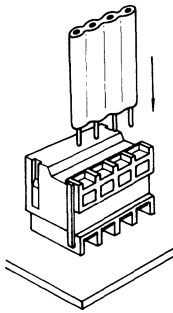
Cable Pull-Out Force - 1 kg min. per circuit

Note: Following specifications are for AWG #24-26 topcoated 2,0mm center ribbon cable.

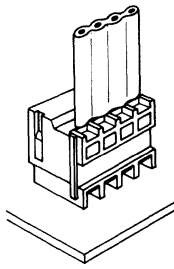


52007 Shown

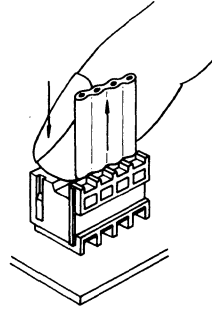
G



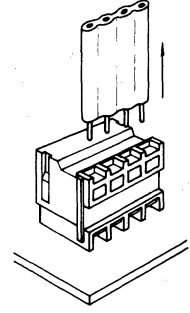
Simply insert the trimmed cable end into the connector. Absolutely no tooling is required.



The connector locks the cable securely in place.

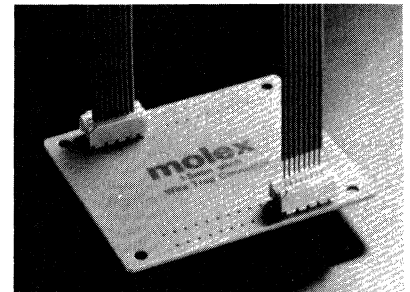
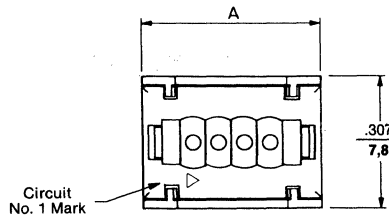
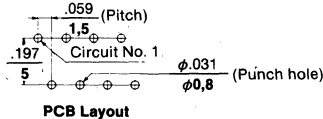


Press the cover of the connector and the cable lifts out easily. Pressing the cover can also facilitate insertion by reducing the force required.



Lift the cable out of the connector.

52004 Series For .059" (1,5mm) Center Ribbon Cable

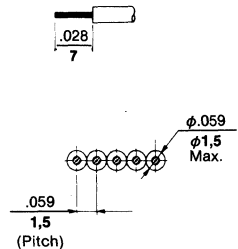
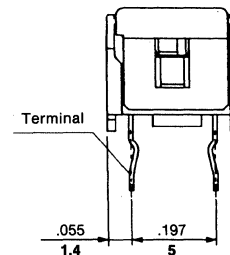
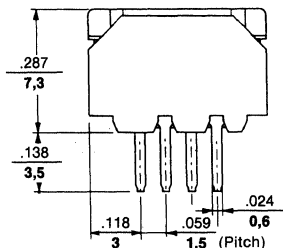


Dimensions

Circuits	Dim. A	Circuits	Dim. A
3	.354 9,0	8	.650 16,5
4	.413 10,5	9	.709 18,0
5	.472 12,0	10	.768 19,5
6	.531 13,5	11	.827 21,0
7	.590 15,0	12	.886 22,5

Ordering Information

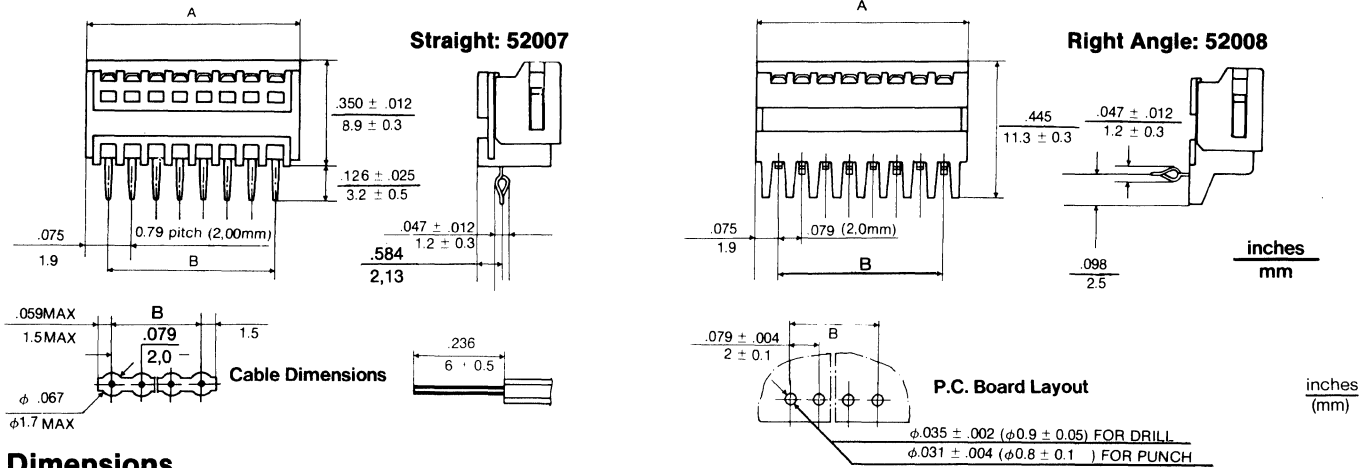
Order No. - 52004-XX10
Replace XX in Order No. with number of circuits required, 03-12



Wire-Trap Connectors for Ribbon Cable



52007/52008 Series For .079" (2,0mm) Center Ribbon Cable



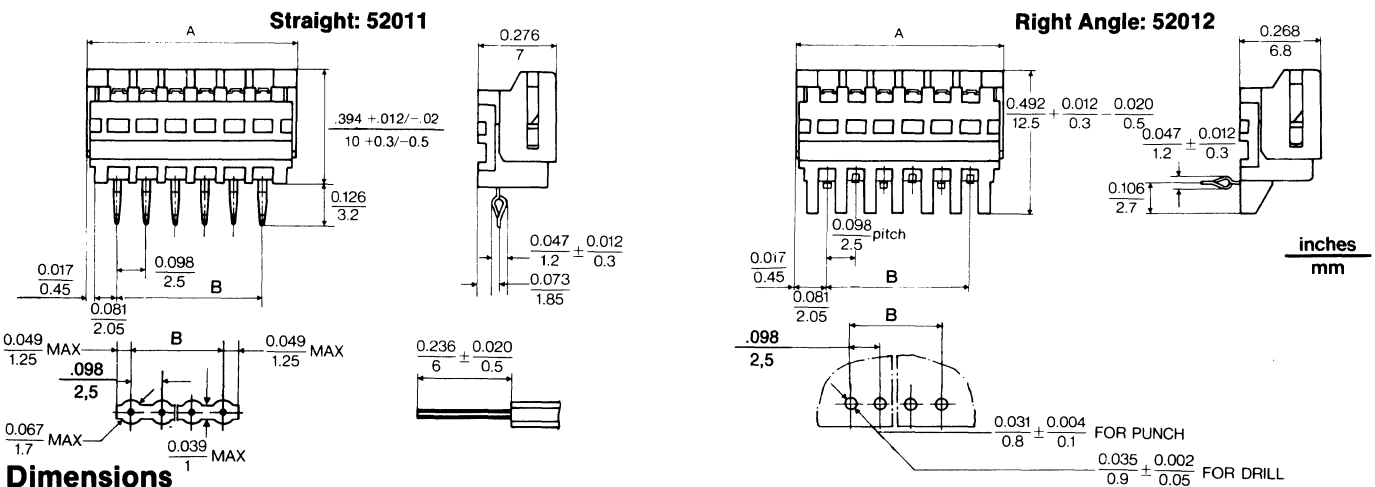
Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.228 5,8	.079 2	4	.386 9,8	.236 6	6	.543 13,8	.393 10	8	.701 17,8	.551 14	10	.858 21,8	.709 18	12	1.016 25,8	.866 22
3	.307 7,8	.157 4	5	.464 11,8	.315 8	7	.622 15,8	.472 12	9	.780 19,8	.630 16	11	.937 23,8	.737 20			

Ordering Information 52007/52008

52007 STRAIGHT TAIL	52008 RIGHT ANGLE TAIL
Order No. 52007-XX10	Order No. 52008-XX10
Replace XX with number of circuits, 02-12	

52011/52012 Series For .098" (2,5mm) Center Ribbon Cable



Dimensions

Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.32 8,1	.98 2,5	4	.516 13,1	.295 7,5	6	.713 18,1	.492 12,5	8	.909 23,1	.689 17,5	10	1.016 28,1	.886 22,5	12	1.205 33,1	.984 27,5
3	.417 10,6	.197 5	5	.614 15,6	.393 10	7	.811 20,6	.591 15	9	1.008 25,6	.787 20						

Ordering Information 52011/52012

52011 STRAIGHT TAIL	52012 RIGHT ANGLE TAIL
Order No. 52011-XX10	Order No. 52012-XX10
Replace XX with number of circuits, 02-12	

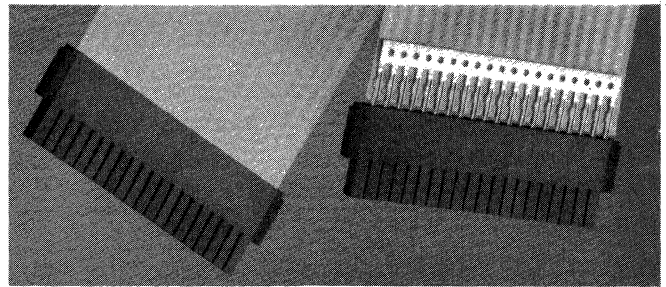


Mass Terminated Flex-C-Term™ Connector for .100" Center Planar Circuitry



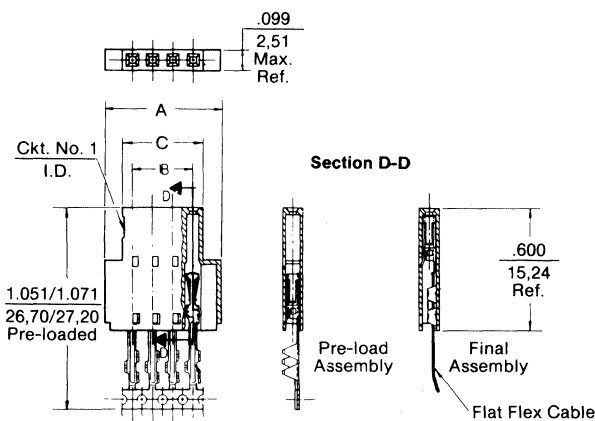
40556 Series

- Terminates membrane switches, flat connector flat cable, and flexible circuitry
- Insulation piercing terminals preassembled into housing
- Stripping of insulation not required
- Mates with .025" pins and Molex 70431 Series male connector
- Positive locking option available
- Circuit sizes 4-27



Left — Membrane switch tail fully seated and secured in housing. Connector ready to plug onto .025" pins.

Right — Product shown terminated to membrane switch tail prior to seating.



Specifications

- Housing* — 94V-0 polyester
- Terminals* — Copper alloy
- Tin Plating* — 200 microinches min. tin over 100 microinches copper
- Gold Plating* — 15 microinches gold in contact area. Min. 75 microinches tin/lead in termination area both over 50 microinches nickel
- Mating Pin Length* — .200" min., .320" max. Accepts cable thickness from .005" to .012"
- Accepts trace widths of .040" to .062"
- Min. Cable Tail Length .750"
- Current Rating* — 1 amp with copper conductors

Reference only. Contact factory for detailed specifications and drawings.

Ordering Information/Dimensions

Circuits	Tin Order No.	Gold Order No.	Dim. A	Dim. B	Dim. C	Circuits	Tin Order No.	Gold Order No.	Dim. A	Dim. B	Dim. C
4	• 22-41-9043	• 22-51-9043	.580 14,73	.300 7,62	.399 10,13	16	• 22-41-9163	• 22-51-9163	1.780 45,21	1.500 38,10	1.599 40,61
5	• 22-41-9053	• 22-51-9053	.680 17,27	.400 10,16	.499 12,67	17	• 22-41-9173	• 22-51-9173	1.880 47,75	1.600 40,64	1.699 43,15
6	• 22-41-9063	• 22-51-9063	.780 19,81	.500 12,70	.599 15,21	18	• 22-41-9183	• 22-51-9183	1.980 50,29	1.700 43,18	1.799 45,69
7	• 22-41-9073	• 22-51-9073	.880 22,35	.600 15,24	.699 17,75	19	• 22-41-9193	• 22-51-9193	2.080 52,83	1.800 45,72	1.899 48,23
8	• 22-41-9083	• 22-51-9083	.980 24,89	.700 17,78	.799 20,29	20	• 22-41-9203	• 22-51-9203	2.180 55,37	1.900 48,26	1.999 50,77
9	• 22-41-9093	• 22-51-9093	1.080 27,43	.800 20,32	.899 22,83	21	• 22-41-9213	• 22-51-9213	2.280 57,91	2.000 50,80	2.099 53,31
10	• 22-41-9103	• 22-51-9103	1.180 29,97	.900 22,86	.999 25,37	22	• 22-41-9223	• 22-51-9223	2.380 60,45	2.100 53,34	2.199 55,85
11	• 22-41-9113	• 22-51-9113	1.280 32,51	1.000 25,40	1.099 27,91	23	• 22-41-9233	• 22-51-9233	2.480 62,99	2.200 55,88	2.299 58,39
12	• 22-41-9123	• 22-51-9123	1.380 35,05	1.100 27,94	1.199 30,45	24	• 22-41-9243	• 22-51-9243	2.580 65,53	2.300 58,42	2.399 60,93
13	• 22-41-9133	• 22-51-9133	1.480 37,59	1.200 30,48	1.299 32,99	25	• 22-41-9253	• 22-51-9253	2.680 68,07	2.400 60,96	2.499 63,47
14	• 22-41-9143	• 22-51-9143	1.580 40,13	1.300 33,02	1.399 35,53	26	• 22-41-9263	• 22-51-9263	2.780 70,61	2.500 63,50	2.599 66,01
15	• 22-41-9153	• 22-51-9153	1.680 42,67	1.400 35,56	1.499 38,07	27	• 22-41-9273	• 22-51-9273	2.800 73,15	2.600 66,04	2.699 68,55

• U.S. Standard Product, available through Molex franchised distributors.

Arbor Press Termination Tooling

Type	Eng. No.	Order No.
Manual	HCM8564AD	11-04-0592
Pneumatic	CM8564E	11-04-0617

For use with Flex-C Term Connector
Universal Polarizing Peg
40713-1
Order No. 15-04-0292

Actual Size

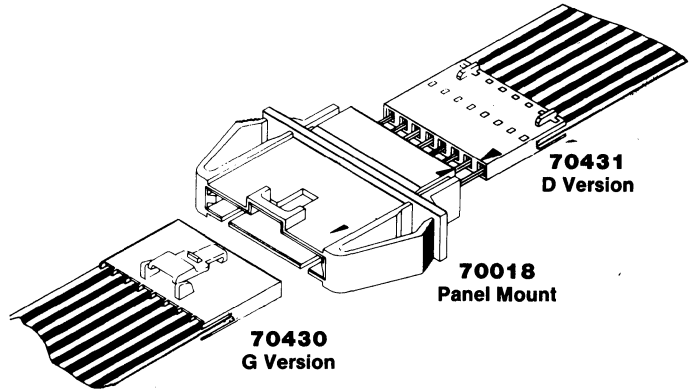
Delivered on a carrier with 20 pieces per strip.

.100" (2,54 mm) Center Flat Flex Connectors



70431 Series Male 70430 Series Female Modular Connectors for Planar Circuitry

- For use with C-Grid single row shrouded headers and clips
- Features piercing crimp which provides three high pressure interfaces with the conductor
- Housing completely surrounds planar substrate
- Terminals preloaded into housing
- Polarization and positive locking options
- Circuit sizes 2-25
- Application Tooling available. See 40556 Series, preceding page



Specifications

- Housing** — 94V-0 polyester
- Terminals** — Phosphor bronze alloy
- Tin Plating** — 200 microinches min. tin over 100 microinches copper
- Gold Plating** — 15 microinches min. selective gold in contact area with 75 microinches min. tin/lead in the termination area over 50 microinches min. nickel overall
 - 30 microinches min. selective gold in contact area with 75 microinches min. tin/lead in the termination area over 50 microinches min. nickel overall

Flat Flexible Cable/Printed Circuit Recommended by Molex — Copper conductors on .100" centers to be .062" ± .003" wide x .003" thick (#26 AWG). Total cable thickness should not exceed .014" thick.

Silver ink on .100" centers to be .065"/.040" wide on .005"/.011" thick mylar

Cable length required to successfully terminate assemblies in Molex equipment is 1.0" min.

NOTE: The 70430/31 Series connectors are compatible with all copper conductor and conductive ink circuitry which meets the following specifications: IPC (Institute of Printed Circuits)—FC-220B, tolerance classes III and IV

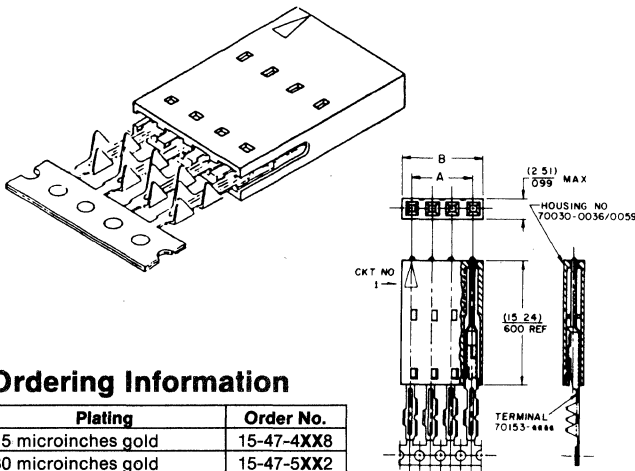
Current Rating* — Copper conductor cable or circuits, 2.0 amps max. Silver ink conductor cable or circuits, 500 milliamps max.

*Current rating is limited by the cable used. The connector assembly is capable of carrying 3 amps per conductor.

70431 Series Male

A Version

- Stackable end-to-end and side-by-side
- Mates with .100" center single- or dual-row female connectors



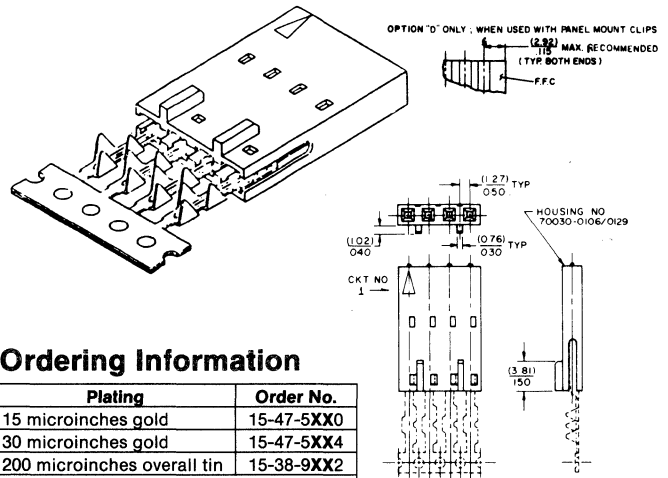
Ordering Information

Plating	Order No.
15 microinches gold	15-47-4XX8
30 microinches gold	15-47-5XX2
200 microinches overall tin	15-38-9XX0

Replace XX with number of circuits, 02-25

D Version

- Stackable end-to-end
- Back ribs prevent movement when used within interim clip or panel mount housings
- Mates with female connectors on .100" centers and 70018, 70022, and 70104



Ordering Information

Plating	Order No.
15 microinches gold	15-47-5XX0
30 microinches gold	15-47-5XX4
200 microinches overall tin	15-38-9XX2

Replace XX with number of circuits, 02-25

See Dimensions next page.



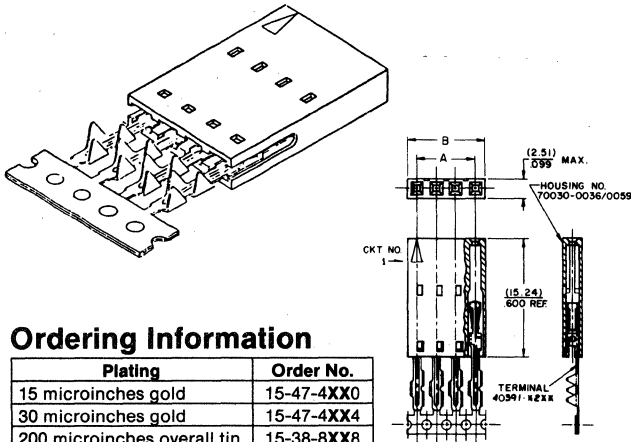
.100" (2,54 mm) Center Flat Flex Connectors



70430 Series Female

A Version

- Stackable end-to-end and side-by-side
- Mates with .100" center single- or dual-row headers or pins in the P.C. board



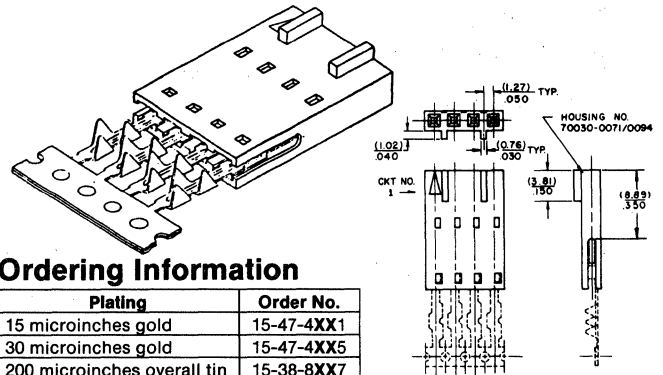
Ordering Information

Plating	Order No.
15 microinches gold	15-47-4XX0
30 microinches gold	15-47-4XX4
200 microinches overall tin	15-38-8XX8

Replace XX with number of circuits, 02-25

C Version

- Stackable side-by-side
- Mates with 70374, 70376, 70390 and 70392 straight and right angle polarized headers
- Front polarizing ribs prevent pin damage during disconnect. Housing cannot be twisted off pins



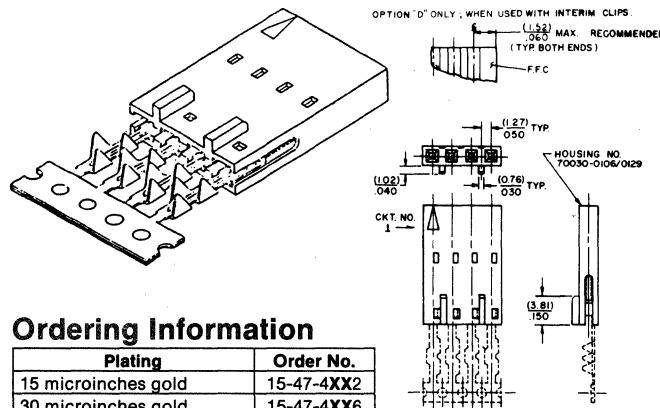
Ordering Information

Plating	Order No.
15 microinches gold	15-47-4XX1
30 microinches gold	15-47-4XX5
200 microinches overall tin	15-38-8XX7

Replace XX with number of circuits, 02-25

D Version

- Mates with 70004 and 70013 single- and dual-row interim clips, panel mounts
- Back polarizing ribs prevent the assembly from drifting within the interim clip when another module is removed



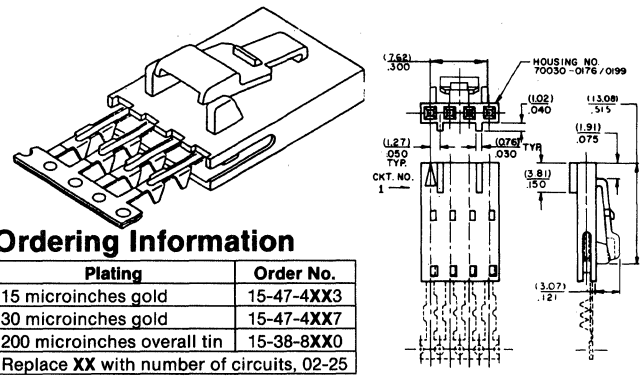
Ordering Information

Plating	Order No.
15 microinches gold	15-47-4XX2
30 microinches gold	15-47-4XX6
200 microinches overall tin	15-38-8XX9

Replace XX with number of circuits, 02-25

G Version

- Stackable side-by-side
- Mates with C-Grid locking headers, interim clips and panel mounts
- Stackable end-to-end
- Positive latch secures connector to mating part
- Anti-entanglement ribs prevent discrete wires from catching under latch during harness manufacturing and storage



Ordering Information

Plating	Order No.
15 microinches gold	15-47-4XX3
30 microinches gold	15-47-4XX7
200 microinches overall tin	15-38-8XX0

Replace XX with number of circuits, 02-25

Dimensions

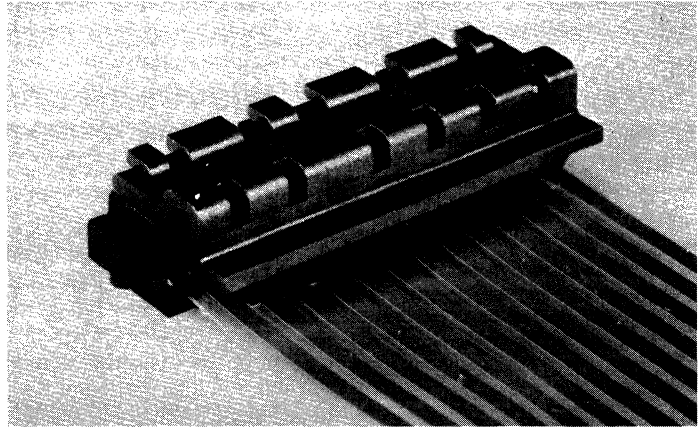
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
2	.100 2,54	.199 5,05	7	.600 15,24	.699 17,75	12	1.100 27,94	1.199 30,45	17	1.600 40,64	1.699 43,15	22	2.100 53,34	2.199 55,85
3	.200 5,08	.299 7,59	8	.700 17,78	.799 20,29	13	1.200 30,48	1.299 32,99	18	1.700 43,18	1.799 45,69	23	2.200 55,88	2.299 58,39
4	.300 7,62	.399 10,13	9	.800 20,32	.899 22,83	14	1.300 33,02	1.399 35,53	19	1.800 45,72	1.899 48,23	24	2.300 58,42	2.399 60,93
5	.400 10,16	.499 12,67	10	.900 22,86	.999 25,37	15	1.400 35,56	1.499 38,07	20	1.900 48,26	1.999 50,77	25	2.400 60,96	2.499 63,47
6	.500 12,70	.599 15,21	11	1.000 25,40	1.099 27,91	16	1.500 38,10	1.599 40,61	21	2.000 50,80	2.099 53,31			

.100" (2,54 mm) Center Flat Flex Connector



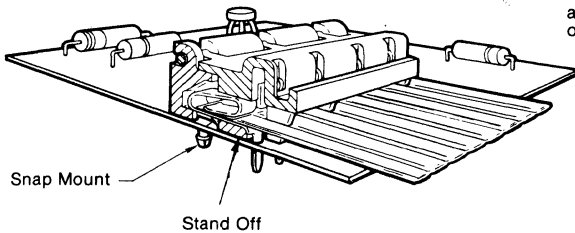
4850 Flat Flexible Cable Connector

- Accepts flat conductor flexible cable or flat flexible circuitry on .100" centers
- Snaps into P.C. board with retaining locks
- Printed circuit board solder tail terminals
- Built-in polarized strain relief
- 5-25 Circuits
- Low insertion force
- Material 94V-0 glass filled polyester



Design Features:

Pre-notched cable is inserted between the second arm and the base of the double cantilever terminal. Closing the cover of the connector actuates the cam. (See Fig. 2) This forces the terminal contact area to wipe the oxides from the cable without damaging conductor plating. The cover then locks the cable in place. (See Fig. 1)



Locking Force: To be applied in direction shown to allow cover to "FLEX" out over the locking dimples of the housing

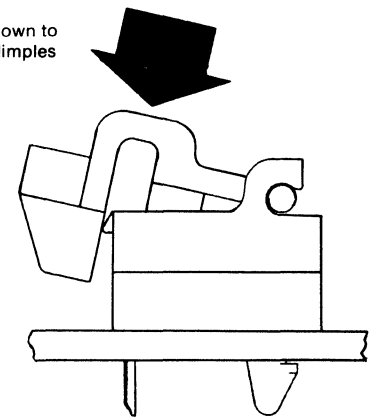


Fig. 1

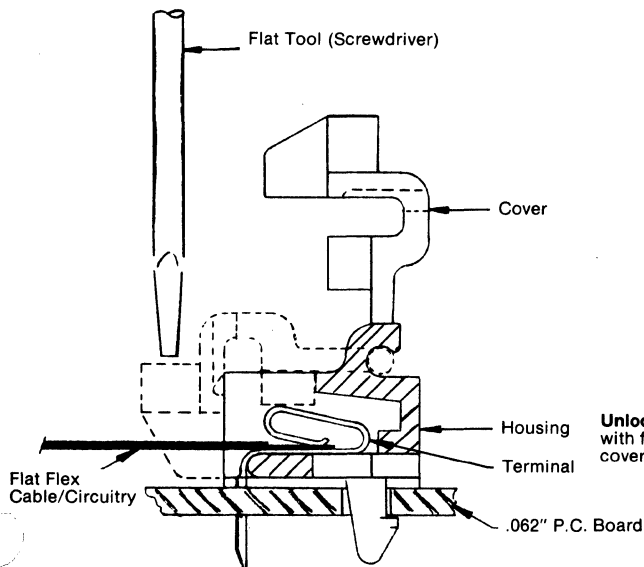
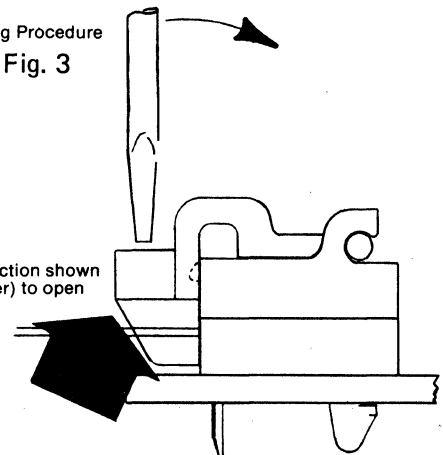


Fig. 2

Unlocking Force: To be applied in direction shown with fingers or use flat tool (screwdriver) to open cover applying pressure as shown.

Locking/Unlocking Procedure
Fig. 3

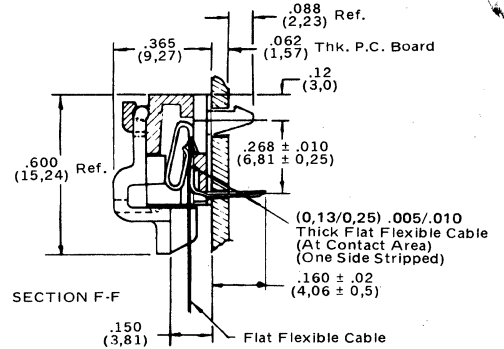
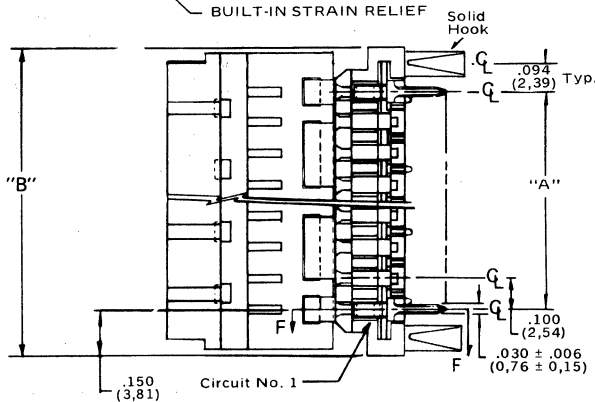
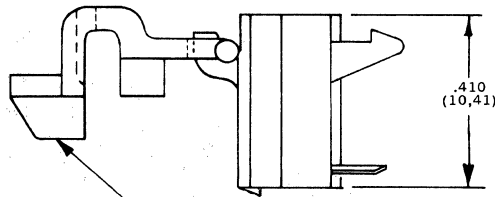


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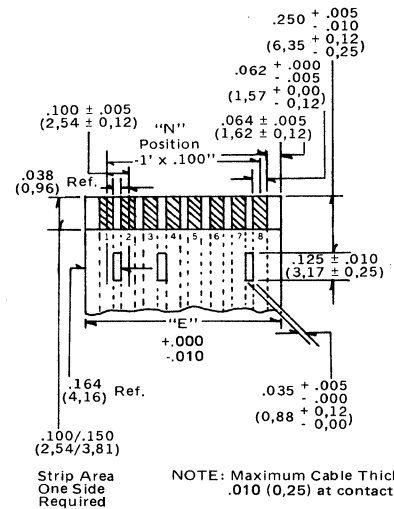
.100" (2,54 mm) Center Flat Flex Connector



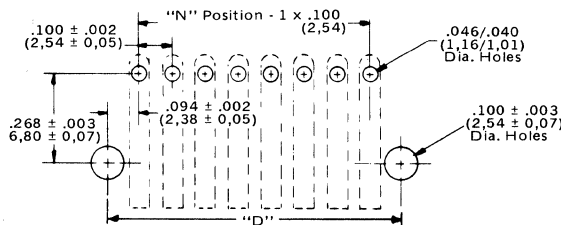
4850 Dimensions



CABLE LAYOUT DIMENSIONS



P.C. Board Layout Dimensions



NOTE: Cable must be notched.

Dimensions

Circuits	Dim. A	Dim. B	Dim. D	Dim. E	Cable Slots for Strain Relief Located Between	Circuits	Dim. A	Dim. B	Dim. D	Dim. E	Cable Slots for Strain Relief Located Between
5	.400 10,16	.700 17,78	.588 14,94	.590 14,98	1 & 2, 3 & 4	16	1.500 38,10	1.800 45,72	1.688 42,87	1.690 42,92	1 & 2, 3 & 4, 15 & 16
6	.500 12,70	.800 20,32	.688 17,47	.690 17,52	1 & 2, 4 & 5	17	1.600 40,64	1.900 48,26	1.788 45,41	1.790 45,46	1 & 2, 3 & 4, 16 & 17
7	.600 15,24	.900 22,86	.788 20,02	.790 20,06	1 & 2, 5 & 6	18	1.700 43,18	2.000 50,80	1.888 47,95	1.890 48,00	1 & 2, 3 & 4, 17 & 18
8	.700 17,79	1.000 25,40	.888 22,56	.890 22,60	1 & 2, 3 & 4, 7 & 8	19	1.800 45,72	2.100 53,34	1.988 50,49	1.990 50,54	1 & 2, 3 & 4, 18 & 19
9	.800 20,32	1.100 27,94	.988 25,10	.990 25,14	1 & 2, 3 & 4, 8 & 9	20	1.900 48,26	2.200 55,90	2.088 53,03	2.090 53,08	1 & 2, 3 & 4, 19 & 20
10	.900 22,86	1.200 30,50	1.088 27,64	1.090 27,68	1 & 2, 3 & 4, 9 & 10	21	2.000 50,80	2.300 58,42	2.188 55,57	2.190 55,62	1 & 2, 3 & 4, 20 & 21
11	1.000 25,40	1.300 33,02	1.188 30,18	1.190 30,22	1 & 2, 3 & 4, 10 & 11	22	2.100 53,34	2.400 60,96	2.288 58,11	2.290 58,16	1 & 2, 3 & 4, 21 & 22
12	1.100 27,94	1.400 35,56	1.288 32,71	1.290 32,76	1 & 2, 3 & 4, 11 & 12	23	2.200 55,90	2.500 63,50	2.388 60,65	2.390 60,70	1 & 2, 3 & 4, 22 & 23
13	1.200 30,48	1.500 38,10	1.388 35,26	1.390 35,30	1 & 2, 3 & 4, 12 & 13	24	2.300 58,42	2.600 66,04	2.488 63,19	2.490 63,24	1 & 2, 3 & 4, 23 & 24
14	1.300 33,02	1.600 40,64	1.488 37,79	1.490 37,84	1 & 2, 3 & 4, 13 & 14	25	2.400 60,96	2.700 68,58	2.588 65,73	2.590 65,78	1 & 2, 3 & 4, 24 & 25
15	1.400 35,56	1.700 43,18	1.588 40,34	1.590 40,38	1 & 2, 3 & 4, 14 & 15						

Ordering Information 4850 (Tin Plating)

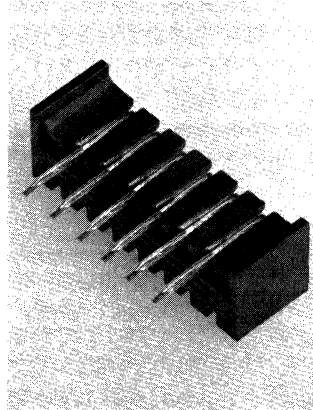
Order No. 15-25-4XX1
Replace XX with number of circuits, 05-25

Membrane Switch Tail and FFC/FPC Connector

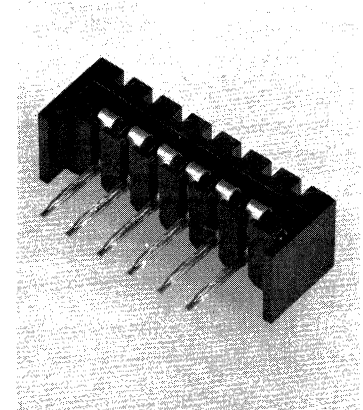


5229 NCPB Straight Tail 5229 NAPB Right Angle Tail Flat Flexible Cable Connector .100" (2,54 mm) Centers

- Low profile
- UL 94V-0 glass filled polyester
- 3-27 Circuits
- Low engagement force
- Mates with conductive ink circuit (membrane switch) as well as FFC/FPC
- Pre-tinned phosphor bronze terminals
- Completely eliminates flux intrusion



Straight Tail



Right Angle Tail

Specifications and Dimensions

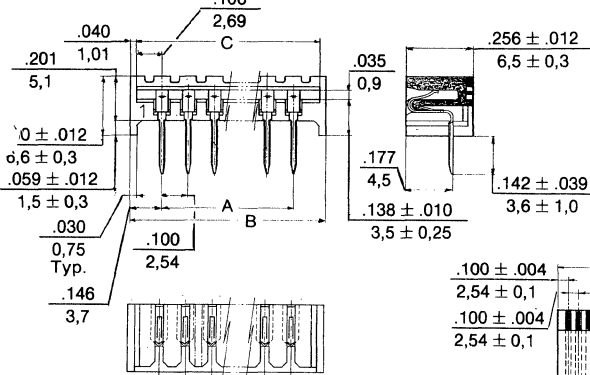
Max. Insertion

Force — Newtons (4.9 + 2.9 x ckt.)
Lbs. (1.1 + 0.66 x ckt.)
Kg. (0.5 + 0.3 x ckt.)

Min. Initial

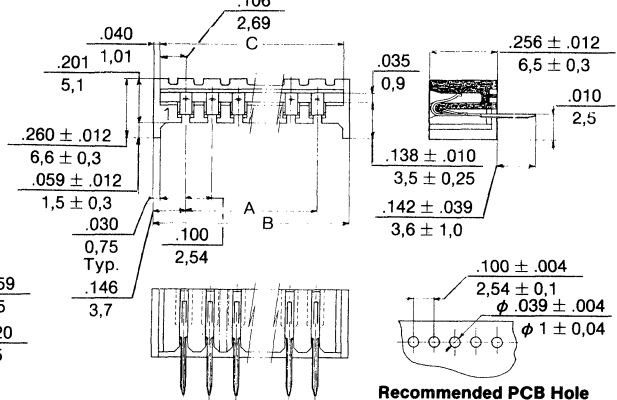
Extraction Force — Newtons (0.24 x ckt.)
Lbs. (0.05 x ckt.)
Kg. (0.024 x ckt.)

5229 NAPB



Recommended FFC

5229 NCPB



Recommended PCB Hole

Dimensions 5229 NCPB/NAPB

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D
3	200 5,08	.491 12,48	.412 10,46	.400 10,16	12	1.100 25,40	1.391 35,34	1.312 33,32	1.300 33,02	20	1.900 48,26	2.191 55,66	2.112 53,64	2.100 53,34
4	.300 7,62	.591 15,02	.512 13,0	.500 12,7	13	1.200 30,48	1.491 37,88	1.412 35,86	1.400 35,56	21	2.000 50,80	2.291 58,20	2.212 56,18	2.200 55,88
5	.400 10,16	.691 17,56	.612 15,54	.600 15,24	14	1.300 33,02	1.591 40,42	1.512 38,4	1.500 38,1	22	2.100 53,34	2.391 60,74	2.312 58,72	2.300 58,42
6	.500 12,70	.791 20,10	.712 18,08	.700 17,78	15	1.400 35,56	1.691 42,96	1.612 40,94	1.600 40,64	23	2.200 55,88	2.491 63,28	2.412 61,26	2.400 60,96
7	.600 15,24	.891 22,64	.812 20,62	.800 20,32	16	1.500 38,10	1.791 45,50	1.712 43,48	1.700 43,18	24	2.300 58,42	2.591 65,82	2.512 63,8	2.500 63,5
8	.700 17,78	.991 25,18	.912 23,16	.900 22,86	17	1.600 40,64	1.891 48,04	1.812 46,02	1.800 45,72	25	2.400 60,96	2.691 68,36	2.612 66,34	2.600 66,04
9	.800 20,32	1.091 27,72	1.012 25,7	1.000 25,4	18	1.700 43,18	1.991 50,58	1.912 48,56	1.900 48,26	26	2.500 63,5	2.791 70,9	2.712 68,88	2.700 68,58
10	.900 22,86	1.191 30,26	1.112 28,24	1.100 27,94	19	1.800 45,72	2.091 53,12	2.012 51,1	2.000 50,8	27	2.600 66,04	2.891 73,44	2.812 71,42	2.800 71,12
11	1.000 25,40	1.291 32,80	1.212 30,78	1.200 30,48										

Ordering Information 5229 NCPB (Straight Tail) / NAPB (Right Angle Tail)

NCPB - Straight Tail Version	NAPB - Right Angle Tail Version
22-02-3XX3	22-15-3XX3

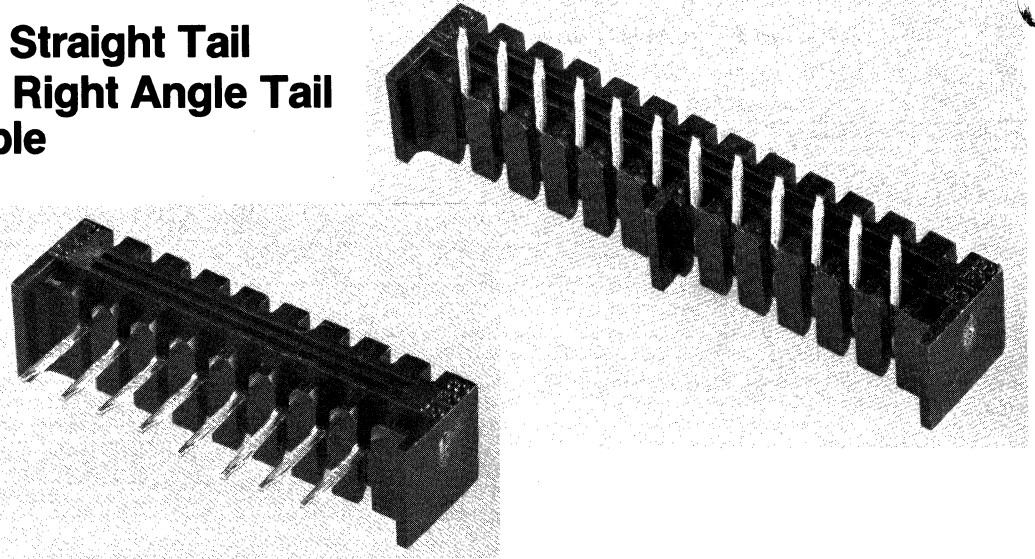
Replace XX with number circuits desired, 03-27

.100" (2,54 mm) Center FFC/FPC Connectors



5138 NCPB Straight Tail 5138 NAPB Right Angle Tail Flat Flexible Cable Connectors

- Low profile
- UL 94V-0 glass filled polyester
- 3-15 Circuits
- High pressure, gas tight contact
- Pre-tinned phosphor bronze terminal
- For FCC/FPC cables
- Eliminates flux intrusion



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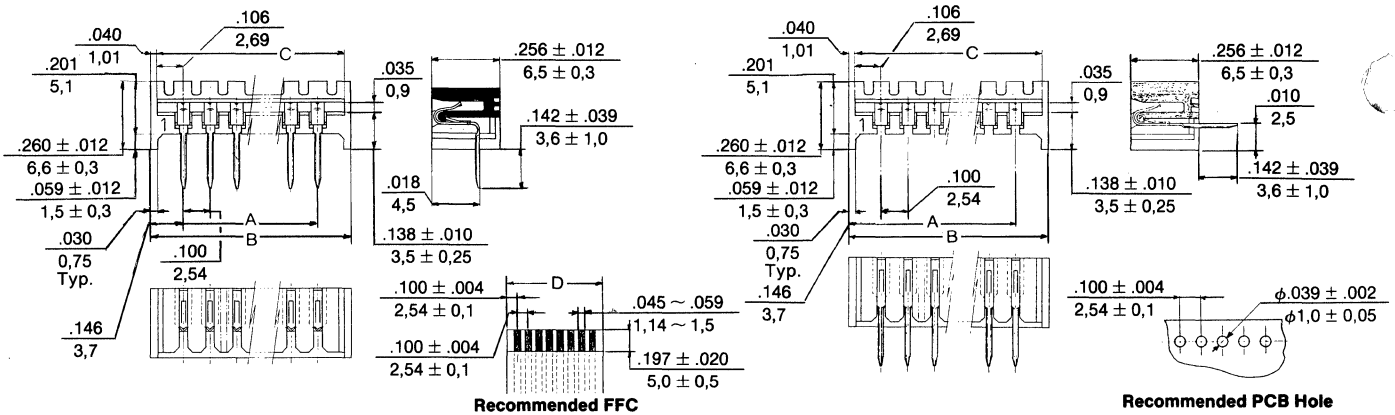
Specifications and Dimensions

Max. Insertion Force

— Newtons (4.9 + 2.9 x ckt.)
— Lbs. (1.1 + 0.66 x ckt.)
— Kg. (0.5 + 0.3 x ckt.)

Min. Initial Extraction Force

— Newtons (0.29 x ckt.)
— Lbs. (0.07 x ckt.)
— Kg. (0.03 x ckt.)



Dimensions 5138 NCPB/NAPB

Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D	Circuits	Dim. A	Dim. B	Dim. C	Dim. D
3	.200 5,08	.491 12,48	.412 10,46	.400 10,16	8	.700 17,78	.991 25,18	.912 23,16	.900 22,86	12	1.100 25,40	1.391 35,34	1.312 33,32	1.300 33,02
4	.300 7,62	.591 15,02	.512 13,0	.500 12,7	9	.800 20,32	1.091 27,72	1.012 25,7	1.000 25,4	13	1.200 30,48	1.491 37,88	1.412 35,86	1.400 35,56
5	.400 10,16	.691 17,56	.612 15,54	.600 15,24	10	.900 22,86	1.191 30,26	1.112 28,24	1.100 27,94	14	1.300 33,02	1.591 40,42	1.512 38,4	1.500 38,1
6	.500 12,70	.791 20,10	.712 18,08	.700 17,78	11	1.000 25,40	1.291 32,80	1.212 30,78	1.200 30,46	15	1.400 35,56	1.691 42,96	1.612 40,94	1.600 40,64
7	.600 15,24	.891 22,64	.812 20,62	.800 20,32										

Ordering Information 5138 NCPB (Straight Tail) / NAPB (Right Angle Tail)

NCPB - Straight Tail Version	NAPB - Right Angle Tail Version
22-02-3XX2	22-15-3XX4

Replace XX with number circuits desired, 03-15

.100" (2,54 mm) Center C-Grid™ Ribbon Cable Connectors

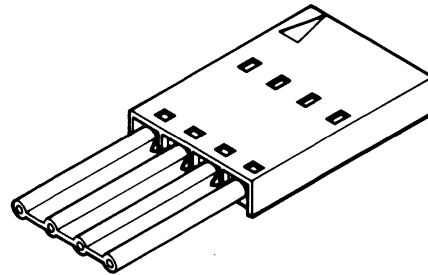


70475 Series Male 70400 Series Female

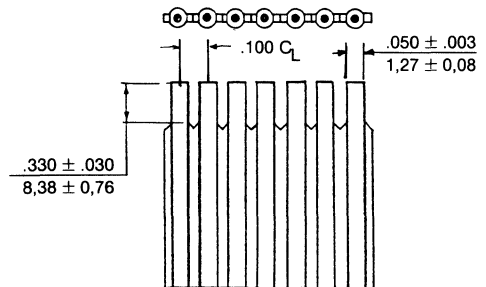
- Modular connectors for use with C-Grid single row shrouded headers and clips
- Terminals pre-loaded into housing
- Polarization and positive locking options
- Circuit sizes 2-25
- Recommended Molex Ribbon Cable Eng. Nos.

7307	8996
24241	8997
24226	24369
7767	24389

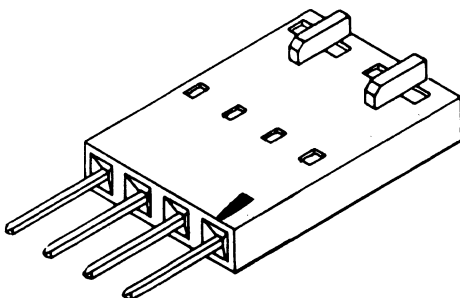
Order Cable Separately
See Section D, this catalog



**Notch Specification for
Ribbon Cable**

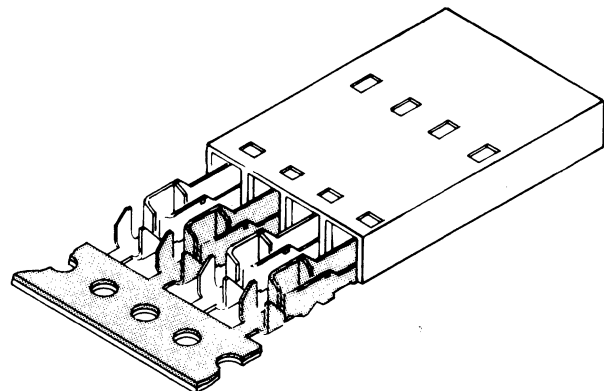


70475 Series Male "D" Version



See Section A, this catalog, for complete specifications and ordering information

70400 Series Female "A" Version

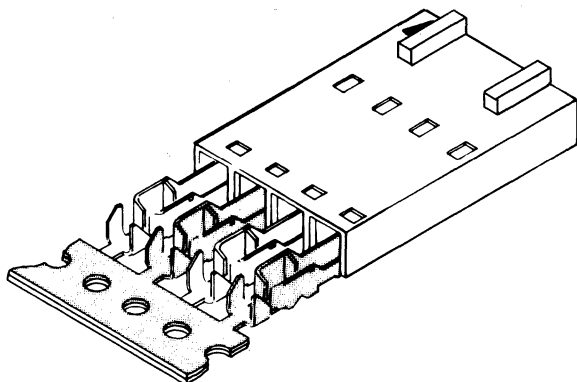


See Section A, this catalog, for complete specifications and ordering information

.100" (2,54mm) Center C-Grid™ Ribbon Cable Connectors

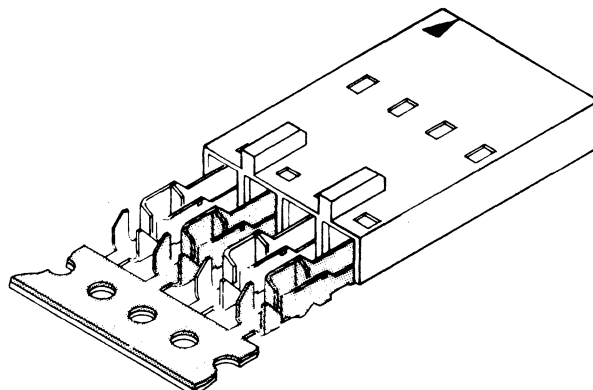


70400 Series Female "C" Version



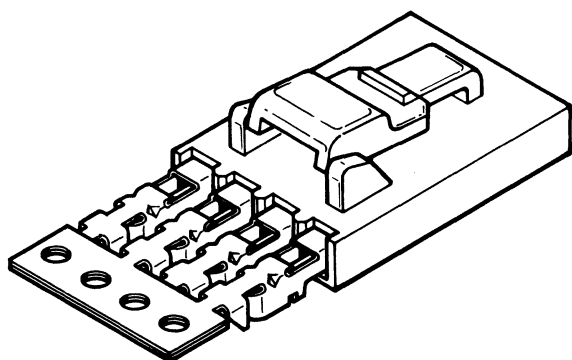
See Section A, this catalog, for complete specifications and ordering information

70400 Series Female "D" Version



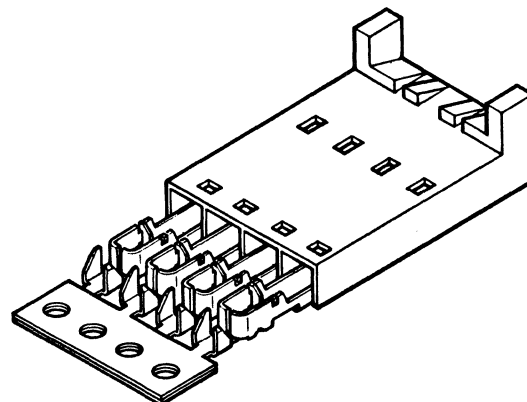
See Section A, this catalog, for complete specifications and ordering information

70400 Series Female "G" Version



See Section A, this catalog, for complete specifications and ordering information.

70400 Series Female "H" Version



See Section A, this catalog, for complete specifications and ordering information.

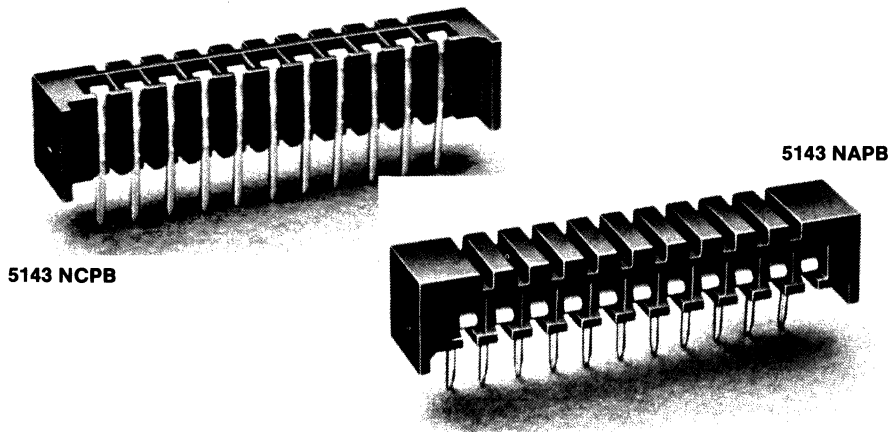
G

.100" (2,54 mm) Center Round Conductor Flat Cable Connector



5143 NAPB Right Angle Solder Tail 5143 NCPB Straight Solder Tail

- Low profile
- UL 94V-0 glass filled polyester
- 3-25 Circuits
- .004" (0,1mm²) (AWG #27) top coated stranded or solid conductor
- Pre-tinned phosphor bronze
- Completely eliminates flux intrusion



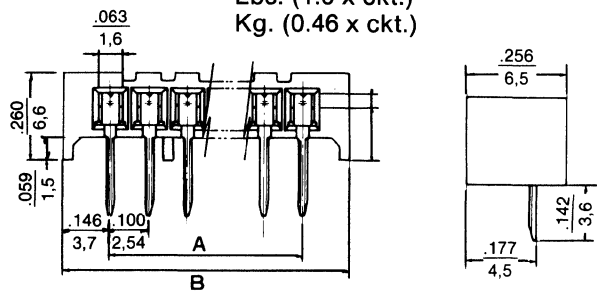
Specifications and Dimensions

Max. Insertion

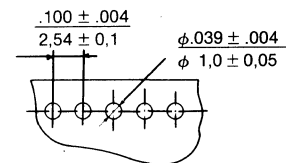
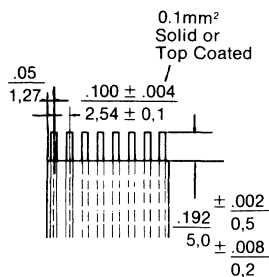
Force — Newtons (4.5 x ckt.)
Lbs. (1.0 x ckt.)
Kg. (0.46 x ckt.)

Min. Initial

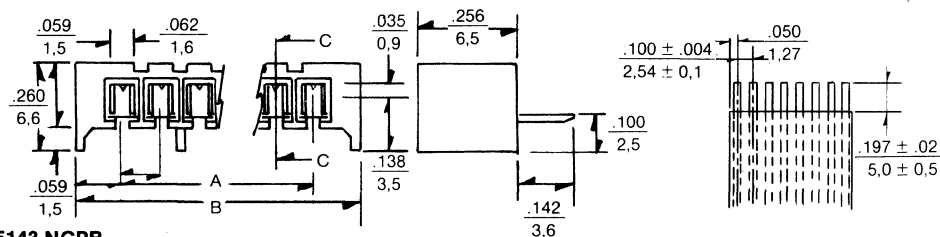
Extraction Force — Newtons (0.59 x ckt.)
Lbs. (0.13 x ckt.)
Kg. (0.06 x ckt.)



5143 NAPB



P.C. Board Hole Dimensions



5143 NCPB

Dimensions Straight and Right Angle Versions

						inches mm					
Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B	Circuits	Dim. A	Dim. B
3	.200 5,08	.491 12,48	9	.800 20,32	1.091 27,72	15	1.400 35,56	1.691 42,96	21	2.000 50,80	2.291 58,20
4	.300 7,62	.591 15,02	10	.900 22,86	1.191 30,26	16	1.500 38,10	1.791 45,50	22	2.100 53,34	2.391 60,74
5	.400 10,16	.691 17,56	11	1.000 25,40	1.291 32,80	17	1.600 40,64	1.891 48,04	23	2.200 55,88	2.491 63,28
6	.500 12,70	.791 20,10	12	1.100 27,94	1.391 35,34	18	1.700 43,18	1.991 50,58	24	2.300 58,42	2.591 65,82
7	.600 15,24	.891 22,64	13	1.200 30,48	1.491 37,88	19	1.800 45,72	2.091 53,12	25	2.400 60,96	2.691 68,36
8	.700 17,78	.991 25,18	14	1.300 33,02	1.591 40,42	20	1.900 48,26	2.191 55,66			

Ordering Information 5143 NAPB (Right Angle)

Order No. 22-15-3XX5

Replace XX in Order No.
with number of circuits desired, 03-25.

Ordering Information 5143 NCPB (Straight)

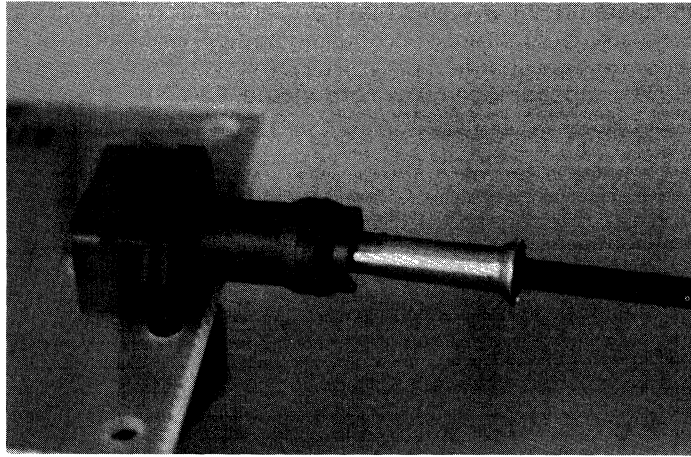
Order No. 22-02-3XX6

Replace XX in Order No.
with number of circuits desired, 03-25.



G

Contents



Introduction	2H
5 MBd Simplex System	3H-4H
Transmitter Specifications	5H
Low Speed System (up to 56 kilobaud)	5H-7H
Optical Interrupter	8H
Optical Coupler	9H
Duplex System	9H
Mechanical Specifications	10H

Fiber Optic Links

Molex's series of fiber optic links are unique systems that transfer electronic signals using fiber optics. Each system includes a fiber optic transmitter and receiver, housing and preterminated cable assembly. The **Molex** systems are available in SIMPLEX (single channel) or DUPLEX (two channels) configurations to process digital electronic signals. They have TTL output and can solve grounding, EMI, and RFI signal transmission problems.

Features:

- Low cost packages
- LSTTL/TTL compatible output level
- Single +5V receiver power supply
- Operating temperature 0 to +70°C
- Sealed against dust and moisture
- Low profile (Simplex)
- Electrical connector interface (Duplex)
- Simple field termination
- Low electromagnetic susceptibility and emissions
- Operation to 93 meters
- Standard or special length cable assemblies
- Color coded transmitter and receiver — Simplex
- Choice of collector pull-up resistors
- Low cost plastic cable assemblies

Applications:

- Electronic control systems
- Static protection
- High voltage isolation
- Extremely wet or dirty environments
- Inter/intra-system data links
- EMC regulated systems (FCC, VDE)
- Secure data communications
- Medical equipment
- Class I and II control circuitry

5 MBd

The DC to 5 MBd link has a Schmitt trigger output and operates up to 10 meters. Typical drive currents range from 15 to 30 ma and the operating temperature range is -40° to 70°C. The receiver is compatible with LSTTL/TTL/CMOS logic levels and the LED transmitter is easily interfaced to the same standard logics.

Transmission Characteristics

Parameters	Min.	Typ.	Max.	Units	Conditions	Reference
Data Rate	DC		5.0	MBD	Fig. 1, 2	Notes 1, 2
Length			10	m		
Propagation Delay						
‡PLH		60	140	ns	Fig. 3	Notes 2, 3, 5
‡PHL		60	140	ns		
Pulse Width Distortion		±30		ns		Notes 5, 6
BER	10 ⁻⁹					

NOTES:

1. Data rate can exceed 5 MBd but added pulse distortion with respect to nominal pulse width may result.
2. Specification figures based on 2.5 MHz 50% duty cycle square wave input pulse.
3. Measurement taken between 50% of input signal and 1.5 volt level on output signal.
4. The propagation delay times are measured with 1m of ESKA extra cable. The propagation delay of 1m of cable (4.64ns) is included.
5. All typical data is at V_{CC} = 5 volts and 25°C.
6. Input pulse width measured at 50% of the input signal. Output pulse width measured at the 1.5 volt level on the output signal.

Recommended Operating Conditions

Parameter	Min.	Typ.	Max.	Units	Reference
Operating Temp.	-40°		+70°	°C	
Storage Temp.	-40°		+80°	°C	
Receiver Supply Voltage	4.5	5.0	5.5	V	
Transmitter Drive Current	17		50	mA	Notes 1, 2
TTL Gate Fanout			8	Gates	Note 3

NOTES:

1. Derated for D.C. function at 70°C.
2. Actual drive current dependent upon link length and application; see chart below.
3. TTL @ 1.6 mA/Gate.

Receiver Specification — Electrical Characteristics (-40° to 70°C except as noted)

Parameter	Min.	Typ.	Max.	Units	Symbol	Conditions
Supply Voltage	4.5	5.0	5.5	V	V _{CC}	
High Level Output Current		100	250	μA	I _{OH}	Note 1
High Level Output Voltage	3.6	4.5	V _{CC}	V _{OH}	Note 1	
Low Level Output Current		13	mA	I _{OL}	Note 1	
Low Level Output Voltage		.2	.5	V	V _{OL}	Note 1
Power Dissipation			85	mW		
Rise Time 10 to 90%	—	25	—	nSEC	tr	CL = 15pf RL = 330 OHMS
Fall Time 10 to 90%	—	25	—	nSEC	tf	CL = 15pf RL = 330 OHMS

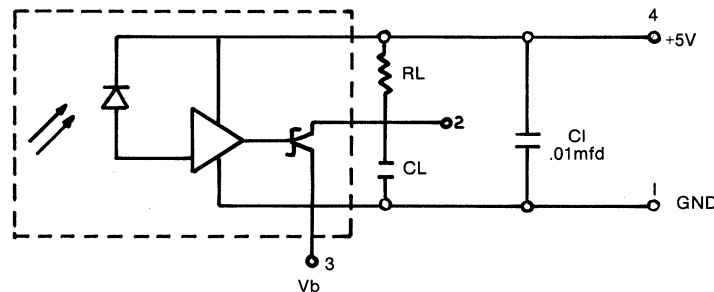
NOTES: 1. V_{CC} = 5 volts, R_L = 330Ω, C₁ = .01 mfd

Absolute Maximum Rating (Ta = 25°C)

Characteristics	Symbol	Maximum Ratings	Units
Output Power Dissipation	pd	85	mW
Supply Voltage	V _{CC}	7	V
Operating Temperature	T _{OPR}	-40 ~ 70	°C
Storage Temperature	T _{STG}	-40 ~ 80	°C

Schematic Pinouts

1. GND
2. V_{OUT} (TTL)
3. V_B
4. V_{CC} (+5V)



5 MBd (continued)

Transmitter Drive Current vs. Distance Curve

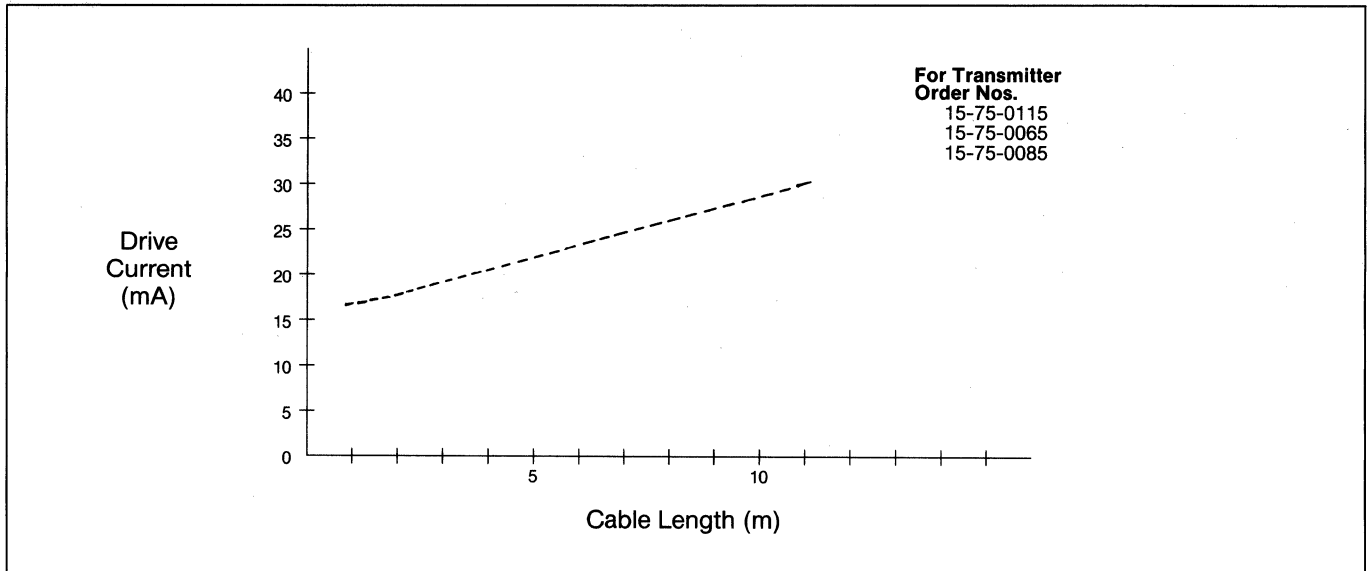
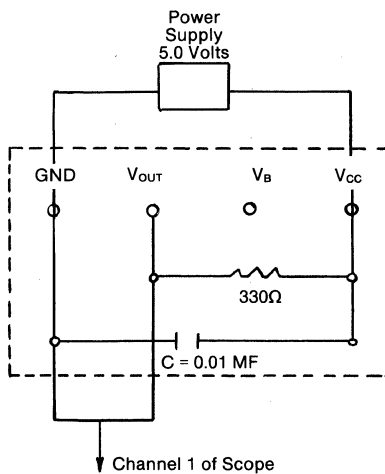
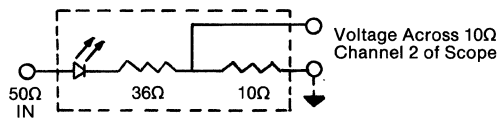


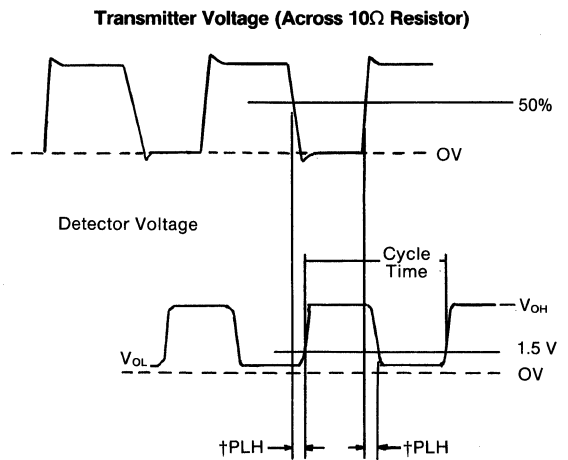
Figure 2



Detector Test Box Circuitry



Emitter Test Box Circuitry



$$\text{Data Rate} = 2 \left(\frac{1}{\text{Cycle Time}} \right)$$

5MBd Simplex System Ordering Information - See mechanical specifications

	6 Pin Order No.	Bubble Lock Order No.	Vertical Mount Order No.
Transmitter	15-75-0115	15-75-0065	15-75-0085
Receiver	15-75-0097	15-75-0057	15-75-0077

For additional information consult factory for product specification #PS-71860.

Transmitter Specifications

The Molex system transmitter incorporates a 660 nm LED for best compatibility with plastic core fiber optic cable, and visible operational checks. The transmitter is easily interfaced to standard TTL logic.

Electrical/Optical Characteristics (Ta = 25°C)

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Units
Forward Voltage	V _F	I _F = 20mA		1.7	2.0	V
Reverse Current	I _R	V _R = 4V			100	μA
Capacitance	C _O	V = 0 V, f = 1 MHz		50		pF
Radiant Intensity (See Note 2)	P _T	I _F = 20 mA	25			μW
	P _T	I _F = 20 mA	70			μW
Peak Wavelength	λ _P	I _F = 20 mA		660		nm
Spectral Bandwidth	Δλ	I _F = 20 mA		30		nm
Rise / Fall Time	TR ; TF	I _F = 20 mA		50	100	ns

Absolute Maximum Ratings (Ta = 25°C)

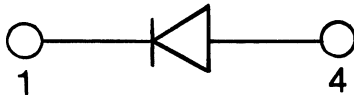
Characteristics	Symbol	Maximum Rating	Units	Conditions
Power Dissipation	P _d	160	mW	
Operating Temperature	T _{OPR}	-40 ~ 70	°C	
Storage Temperature	T _{STG}	-40 ~ 80	°C	
Reverse Voltage	V _R	4	V	I _R = 100 μW
Forward Current	I _F	80	mA	See Note 1
	I _{FPK}	160	mA	50% Duty Cycle

NOTES:

- Derating Rate: 0.67mA/°C.
- Intensity at the end of 1 meter Eska EH-4001 fiber.
- Warning:** When viewed under some conditions, the optical part of the Transmitter may expose the eye beyond the Maximum Permissible Exposure recommended in ANSI 8-136-1, 1981.

Schematic

Pin #1 = cathode
Pin #4 = anode



Ordering Information (Devices loaded into "Simplex" System)

	6 Pin Version Order No.	Bubble Lock Version Order No.	Vertical Order No.
High Power	15-75-0115	15-75-0065	15-75-0085
Low Power	15-75-0111	15-75-0061	15-75-0081

For additional information consult factory for product specification #PS-40398

Low Speed System

The low speed system is designed to fill your applications that require data rates up to 56 kilobaud.

System Specifications

R _L (See Note 5)	System with High Power Emitters				System with Low Power Emitters				Units	Conditions	Reference
	330Ω		2KΩ		330Ω		2KΩ				
Temperature Range	-40° - 70°	25°	-40° - 70°	25°	-40° - 70°	25°	-40° - 70°	25°	C		Notes 1 & 7
System Length (Max.)	36	56	73	93	18	38	21	76	Meters		
Data Rate	DC-56		DC-6.6		DC-56		DC-6.6		K Baud	Fig. 1, 2	Note 2
Prop. Delay	T _{PLH} Max.	5.0	22.5		5.0	22.5			Micro Sec.	Fig. 2	Note 3
	T _{PHC} Max.	6.6	16.5		6.6	16.5					
Fanout	8		1		8		1		Gates		Note 4
BER	10 ⁻⁹				10 ⁻⁹						
Ordering Information See Note 6	Simplex Emitter	15-75-0015		15-75-0111							
	Simplex Receiver	15-75-0091		15-75-0091							
	Duplex	15-60-XX00		15-53-XX00							

NOTES:

- For 25°C systems I_{FPK} = 160 mA; 50% duty cycle for 0-70°C systems I_{F AVG} = 50 mA
- Data rate: Transmission rate at which either V_{OH} reaches min. value or V_{OL} reaches max. value (Paragraph 3.2) (50% duty cycle square wave input).
- Measurement taken between 50% of input signal and 1.5 volt output signal.
- TTL at 1.6 ma/gate.
- Indicates resistance value used for test purposes, actual value in application depends upon nature of usage circuits.
- The Simplex transmitter and receiver numbers shown are the 6 pin version. See the individual device specifications for variations. The XX is replaced by the length in meters for the Duplex assembly.
- Temperature range for receivers: 0-70°C.

Low Speed System *(continued)* Recommended Link Operating Conditions

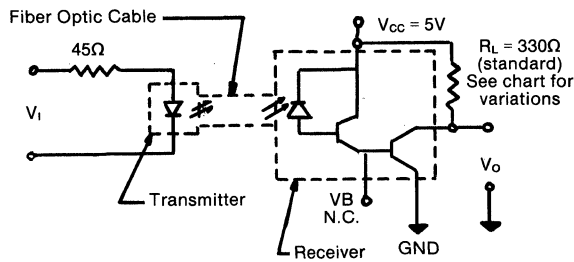


Fig. 1 Digital Test Ckt.

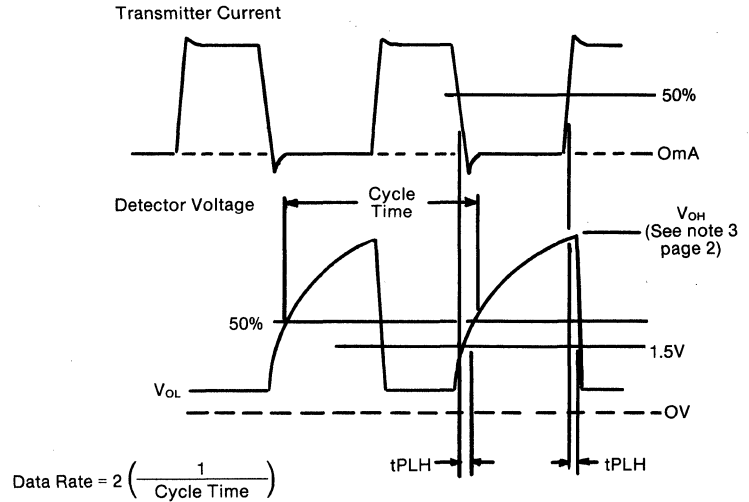


Fig. 2

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions (See Test Circuits)
Operating Temperature		-40		70	°C	See Note 7
Storage Temperature		-40		80	°C	
Receiver Supply Voltage	V_{CC}	4.5	5.0	5.5	V	
Transmitter Drive Current	$I_{F\text{AVG}}$			50	mA	Continuous at 70°C
Fanout, TTL	I_{FPK}			160	mA	25°C; 50% Duty Cycle
Lead Soldering Temp.				8	Gates	1.6 mA per Gate
				260	°C	5 Seconds, 1.6 mm below seating plate

NOTES:

7. Operating temperature of receiver is 0-70°C.

Low Speed Receiver Specifications

The Molex system receiver features a built-in amplifier. It is TTL compatible and can be operated in digital or analog modes.

Electrical Characteristics ($T_a = 25^\circ$)

Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions
Supply Voltage	V_{CC}	4.5	5.0	10.0	V	
High Level Output Current	I_{OH}		0.10	0.25	mA	$V_{CC} = 5\text{ Volt}; R_L = 330\Omega$
Low Level Output Voltage	V_{OH}		4.5	V_{CC}	V	$V_{CC} = 5\text{ Volt}; R_L = 330\Omega$
Low Level Output Current	I_{OL}		13		mA	$V_{CC} = 5\text{ Volt}; R_L = 330\Omega$
Low Level Output Voltage	V_{OL}		0.2	0.5	V	$V_{CC} = 5\text{ Volt}; R_L = 330\Omega$
Propagation Delay Low to High	t_{plh}	—	—	6.6	μSEC	$V_{CC} = 5.0; R_L = 330\text{ OHMS}$ See Figure 1
Propagation Delay High to Low	t_{phl}	—	—	6.6	μSEC	$V_{CC} = 5.0; R_L = 330\text{ OHMS}$ See Figure 1
Rise Time 10 to 90%	t_r	—	2.8	—	μSEC	$V_{CC} = 5.0; R_L = 330\text{ OHMS}$
Fall Time 10 to 90%	t_f	—	43	—	μSEC	$V_{CC} = 5.0; R_L = 330\text{ OHMS}$
Minimum Power	P_t	1.0	2.0	2.99	μW	$R_L = 330\Omega; \lambda = 660\text{ nm}; V_{ol} = .5$ See Note 1

Absolute Maximum Rating ($T_a = 25^\circ\text{C}$)

Characteristics	Symbol	Maximum Ratings	Units
Output Power Dissipation	p_d	150	mW
Operating Temperature	T_{OPR}	0 ~ 70	°C
Storage Temperature	T_{STG}	-40 ~ 80	°C

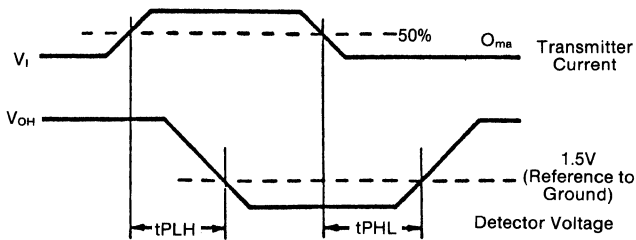
NOTES:

1. P_T may be modified by adjusting R_L .

Fiber Optic Systems

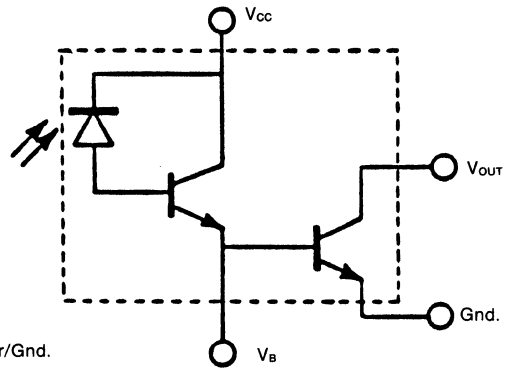


Figure 1 -Propagation Delay



Measurement taken between 50% of input signal and 1.5 volt output signal. $R_L = 330\Omega$; probe capacitance = 12.3 pf and 10 megohms impedance.

Schematic



Pinouts

1. Emitter/Gnd.
2. V_{out}
3. V_B - Base
4. V_{cc}

Ordering Information (Devices assembled into "Simplex" System)

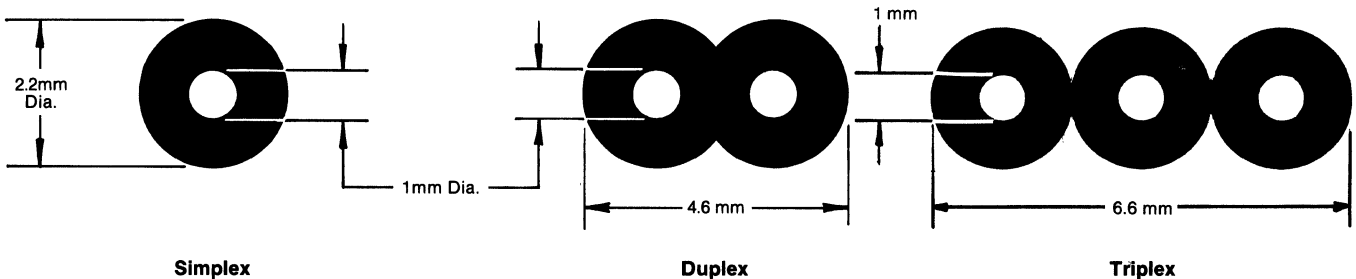
6 Pin Version Order No.	Bubble Lock Version Order No.	Vertical Order No.
15-75-0091	15-75-0051	15-75-0071

For additional information consult factory for product specification #PS-40398

Plastic Fiber Optic Cable



Parameter	Min.	Typ.	Abs. Max.	Units	Conditions
Tensile Force (Single Channel) (Dual Channel)			50 100	N N	Not for continuous use
Bend Radius	35			mm	Continuous and Operational
Flexing			1000	Cycles	Flexed over 10mm radius
Impact			1	Kg	Dropped 5 cm with 20 mm striking radius
Travel Time Constant		5.0		n sec/m	25°C



Ordering Information

Order Numbers - Simplex	Terminated Cable Assembly* Length
15-59-0100	1 meter
15-59-0200	2 meters
15-59-0500	5 meters
15-59-1000	10 meters
15-59-XX00	XX is in meters ie., a 15 meter simplex cable assembly would be 15-59-1500. For fractions of meters, consult factory.

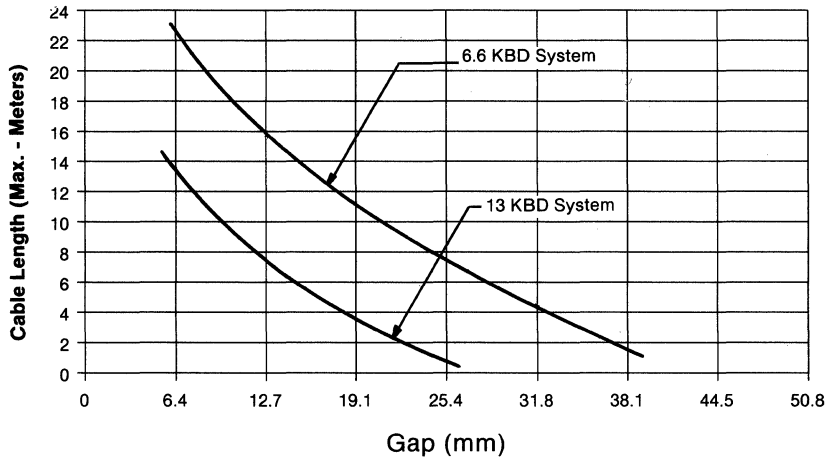
*Assemblies are built to a tolerance of -0 to +10%.
For all special orders, consult factory.
Fiber optic product specifications subject to change without notice.

Optical Interrupter

The Opto interrupter is a thru beam type sensor which is used to detect the presence or absence of an object.

Parameter	Min.	Typ.	Max.	Units	Conditions
Axial Offset			1.02	mm	See Figure 2
Angular Offset			2	Degrees	See Figure 2
Data Rate			13	KBD	

Figure 1 - Cable Length vs. Gap



Operating Conditions

Emitter - #15-75-0111

Receiver - #15-75-0091

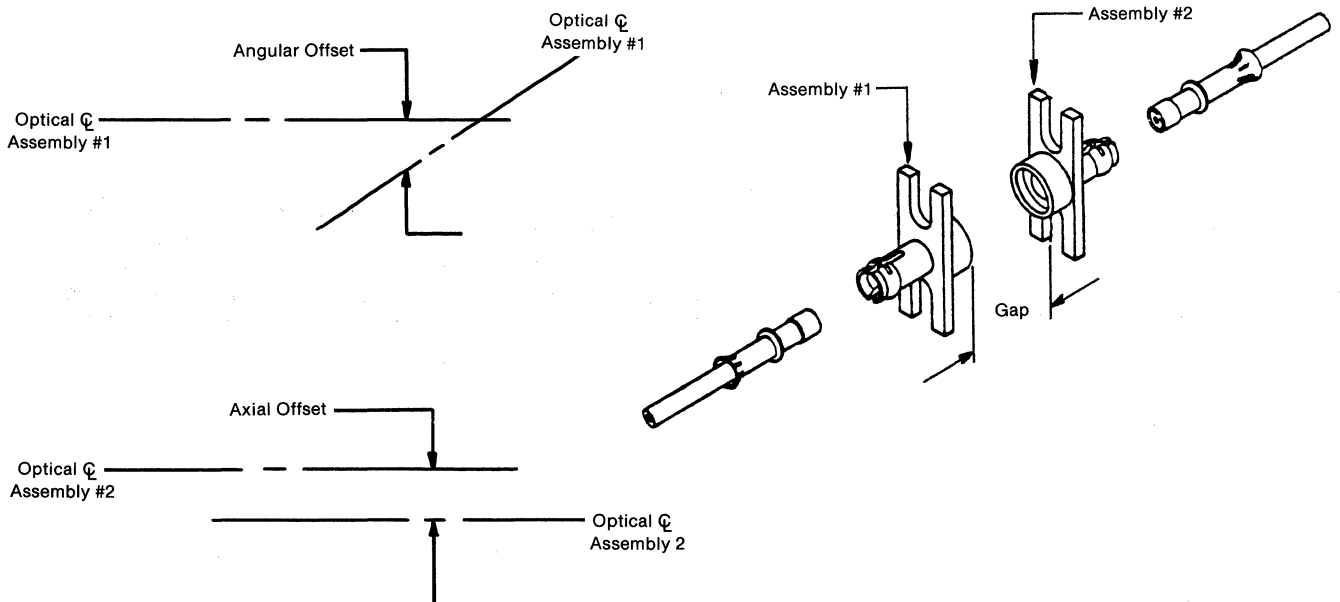
Emitter Drive Current - 50 ma

Receiver R_L - 2000 ohms: 6.6KBD;
1000 ohms: 13KBD

See individual devices for housing variations

NOTE:
Rated at 25°

Figure 2



Ordering Information

Order Number	Color
15-75-0048	Red
15-75-0049	Black

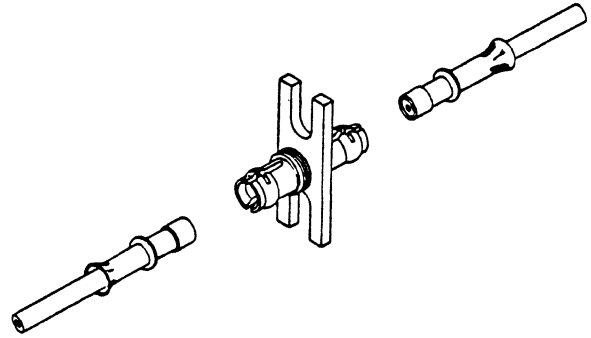
For additional information consult factory for product specification #PS-41936.

Fiber Optic Systems



Optical Coupler

The Molex Optical Coupler is designed to enable fiber to fiber connections. It can be used for passing signals through back panels, bulkheads, or for splicing cable.



Ordering Information

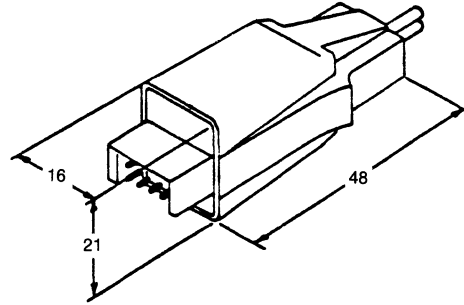
Order Number	Color
50-35-0010	Black
50-35-0011	Red

Parameter	Min.	Typ.	Max.	Units	Conditions
Fiber to fiber loss			3.2	dB	0-70°C
Nut Torque		5	6	in/lb	Note 1
Molex 56 KBd System Loss Length	13			Meters	

NOTE 1: The coupler may be panel mounted with either (1) hex panel nut Molex #89-00-0853 or (2) #6 screws.

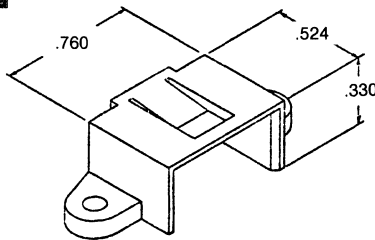
Duplex Fiber Optic System

Molex's Duplex Fiber Optic System offers the opportunity to transfer TTL level electrical signals optically. With the Duplex System, the P.C. board interface is done with standard 8 pin P.C. board electrical connectors and the system's plugs convert the electrical signals into optical signals and optical signals to electrical signals. The signals travel optically across the cable assembly and is offered as a preterminated cable assembly. The Duplex System offers an excellent solution to EMI, electrical isolation and ground loop problems. The 5 MBd, and the low speed opto-electronics are available in the Duplex system. Also, the Simplex System, Opto Interrupter and Coupler can be mixed and matched with the Duplex System.



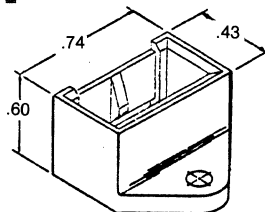
Duplex System (One End Shown)

Duplex System Right Angle Shroud & Board Connector



Order Number	50-35-0008
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Duplex System Vertical Shroud & Board Connector



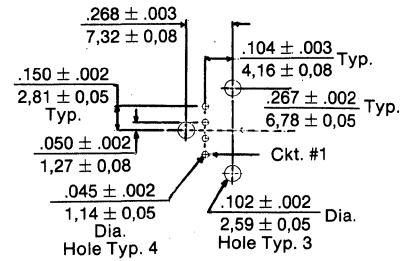
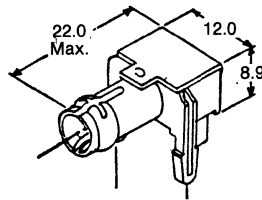
Order Number	50-35-0009
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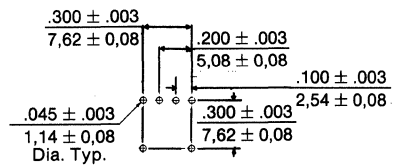
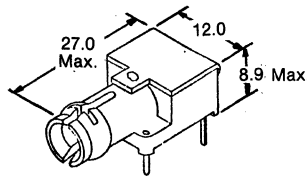
Mechanical Specifications

Recommended P.C. Board Layouts
 Component side shown - 0.062" ± .007" (1,57 ± 0,18mm) thick
 Dimensions shown are in inch/mm.

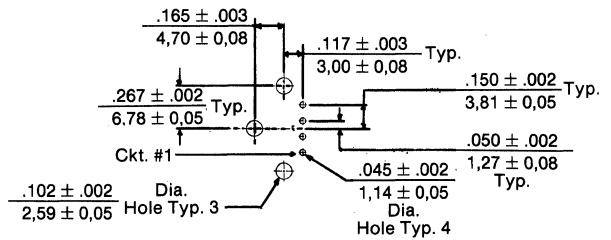
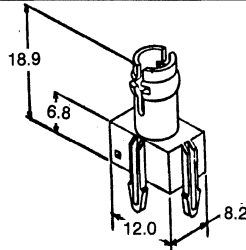
Simplex Header Bubble Lock Version



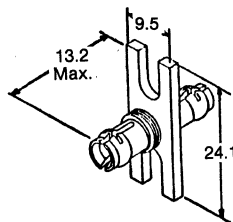
Simplex Header 6 Pin Version



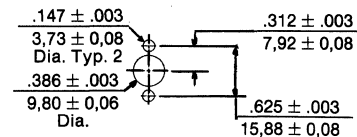
Simplex Header Vertical Mount



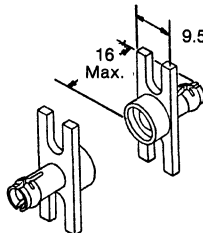
Coupler



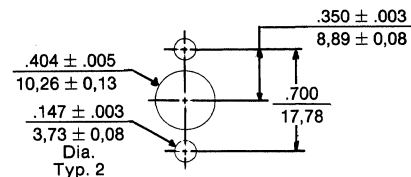
Recommended Panel Opening



Opto Interrupter

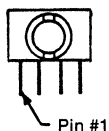


Recommended Panel Opening



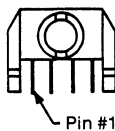
Pinouts

6 Pin



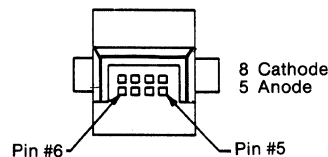
Simplex System

Bubble Lock



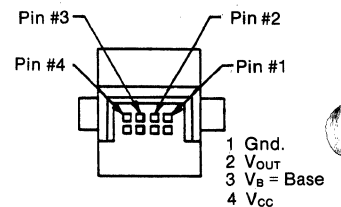
NOTE: The front two pins on the 6 pin package are for board retention only and not connected for signal use.

Transmitter



Duplex System

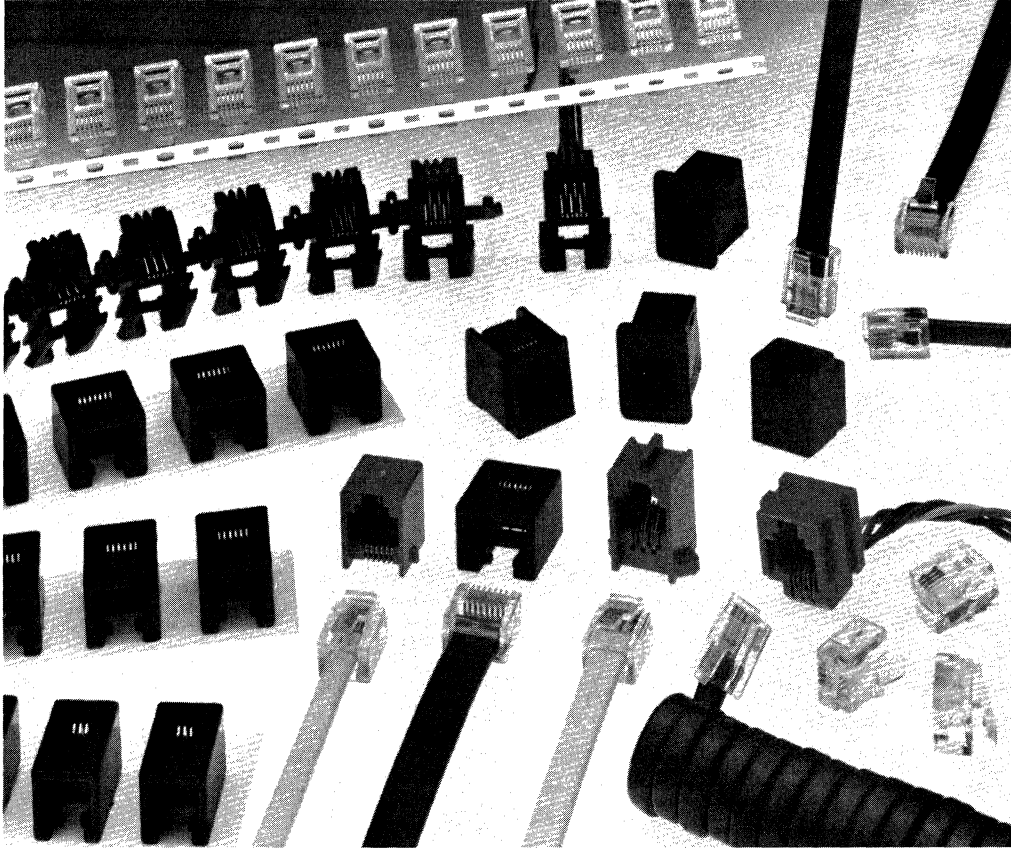
Receivers



Telephone Interconnection Products



Contents



FCC-68 Type Plug	2I
Receptacle Housing/IDT Jacks	3I-5I
Leaded Jacks for Handset Cord Connections	6I-11I
Modular P.C. Board Jacks	12I-26I
British Telecom-Type Plug	27I

FCC-68 Plugs



90075 Series

Features:

- Mates with FCC-68 style jacks
- Pre-assembled contacts
- Selective gold platings
- To terminate flat oval telephone cord to REA Bulletin 345-80, PE 75
- Strip mounting – cost efficiencies – time saving
- 4, 6 & 8 way loaded or partially loaded

Plating 2: 1,27 µm/50 µinch min. gold in contact area, 1,27 µm/50 µinch min. tin/lead in pierce area 1,27 µm/50 µinch nickel all over

Cable to Plug Tensile Strength: 7.71 kg (17 lbs) min.

Voltage Rating: > 125V DC

Current Rating: 1.5A max. per circuit

Contact Resistance: 20 milliohms max. at 100 mA max. 50 mV max.

Insulation Resistance: 500 megohms min. at 500V DC

Dielectric Withstanding Voltage: 1000V AC rms

Surge Test: 1000V per REA spec PE-76

Temperature Range: -40°C to 60°C

Product Spec: PSX 90075-E

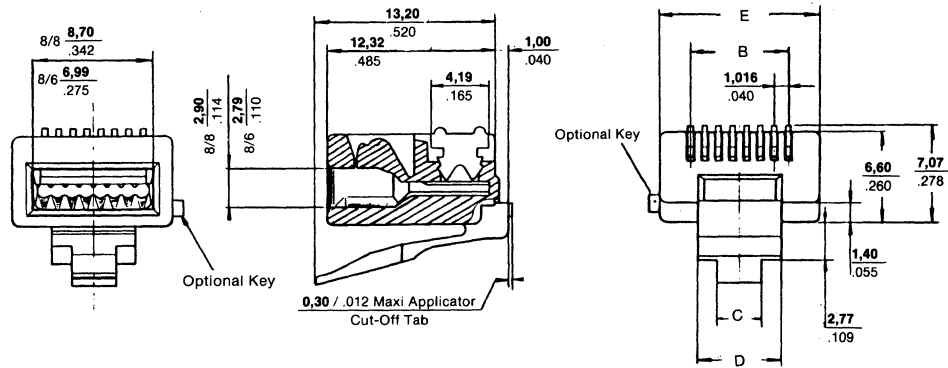
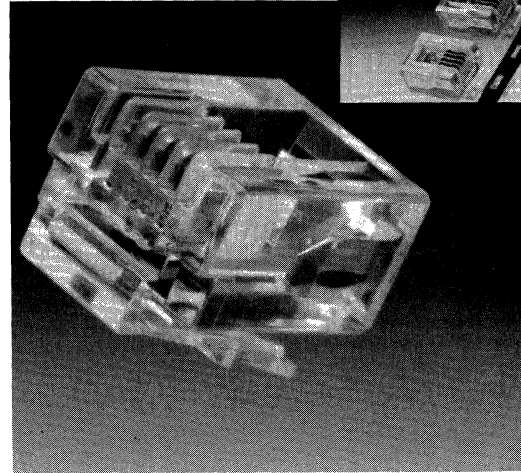
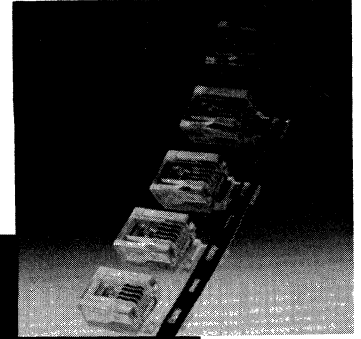
Specifications:

Housing: Natural polycarbonate UL 94V-2

Contact Material: Phosphor Bronze

Platings:

Plating 1: 0,76 µm/30 µinch min. gold in contact area, 1,27 µm/50 µinch min. tin/lead in pierce area both over 1,27 µm/50 µinch min. nickel



Ordering Information

		4, 6 & 8 CIRCUITS								
		STRIP MOUNTED ORDER Nos.		LOOSE PIECE ORDER Nos.		DIM.				
CTS	LOADED CONTACTS	KEY	PLATING No. 1	PLATING No. 2	PLATING No. 1	PLATING No. 2	B	C	D	E
4	4	NO	90075-0001	90075-0025	90075-0003	90075-0027	3,05 .120	2,54 .100	4,95 .195	7,62 .300
6	4	NO	↑ -0009	↑ -0033	↑ -0011	↑ -0035	5,08 .200	3,25 .128	6,05 .238	9,65 .380
6	4	YES	↓ -0010	↓ -0034	↓ -0012	↓ -0036	5,08 .200	3,25 .128	6,05 .238	9,65 .380
6	6	NO	↑ -0005	↑ -0029	↑ -0007	↑ -0031	5,08 .200	3,25 .128	6,05 .238	9,65 .380
6	6	YES	↓ -0006	↓ -0030	↓ -0008	↓ -0032	5,08 .200	3,25 .128	6,05 .238	9,65 .380
8	6	NO	↑ -0134	↑ -0143	↑ -0136	↑ -0145	7,11 .280	3,25 .128	6,10 .240	11,68 .460
8	8	NO	90075-0130	90075-0139	90075-0132	90075-0141	7,11 .280	3,25 .128	6,10 .240	11,68 .460

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

IDT™ Modular Jack Retainers



90080 Series

Features:

- Designed so customer can build custom harness
- One modular jack retainer for any wire application. Single inventory – cost reduction – flexibility
- For use with Molex 90079 or equivalent for mating with FCC-68 plug 90075 Series
- Uses insulation displacement technology

Specifications:

Housing: Charcoal grey polypropylene UL 94-V0

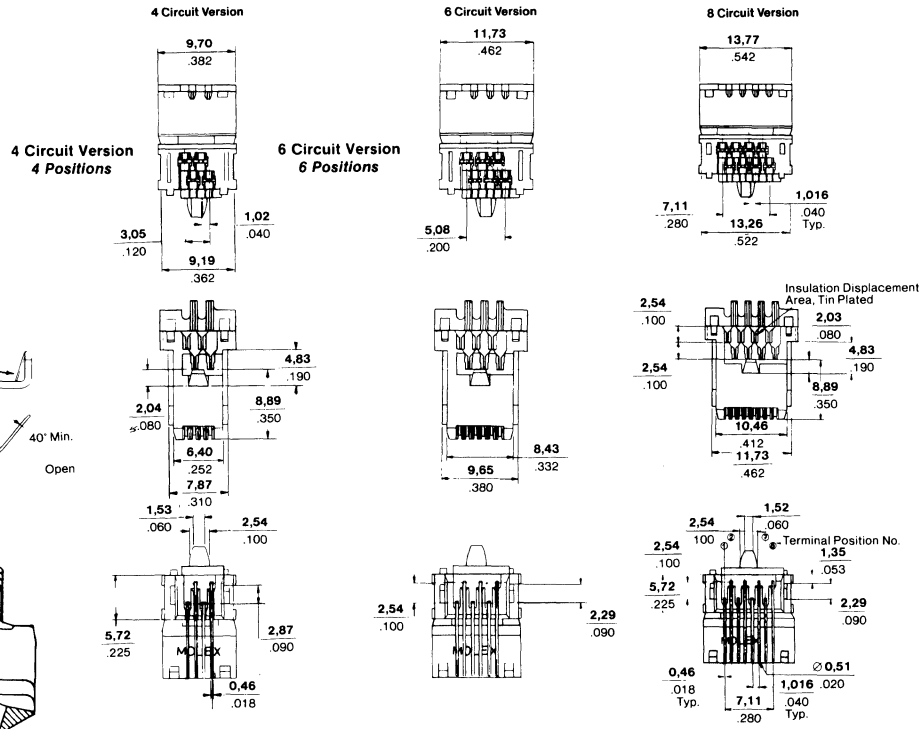
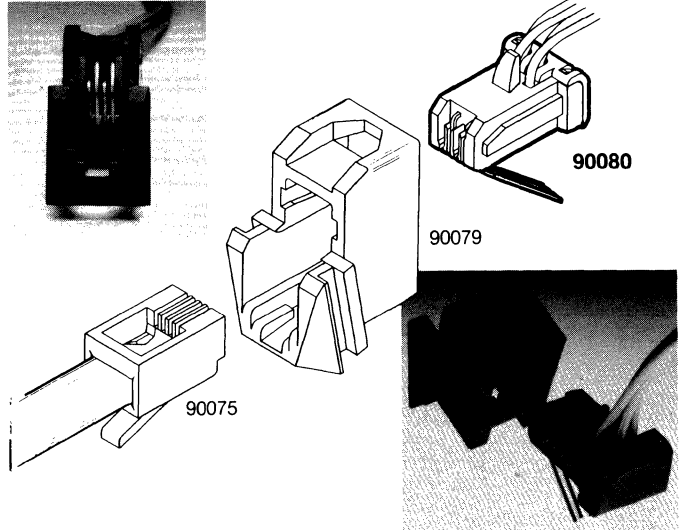
Contact Material: Phosphor Bronze

Plating: 1,27 µm/50 µinch min. electro tin in ID area and 1,27 µm/50 µinch min. gold in area of contact with jack both over 1,27 µm/50 µinch min. nickel overall

Wire: Intended to terminate 26 AWG stranded top-coated or solid wire or 24 AWG stranded wire

Product Spec: PSX 90080-E

Application Spec: ASX 90080-E



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

CTS.	LOADED CONTACTS	ORDER No.
4	4	90080-0001
6	4	-0003
6	6	-0002
8	4	-0005
8	6	-0006
8	8	90080-0007

Receptacle Housings



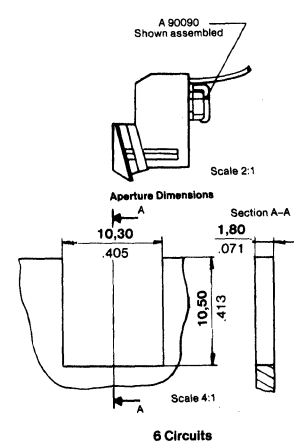
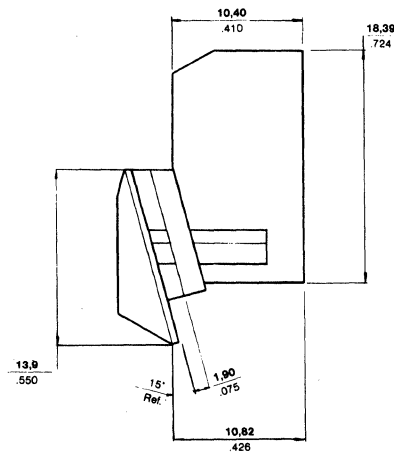
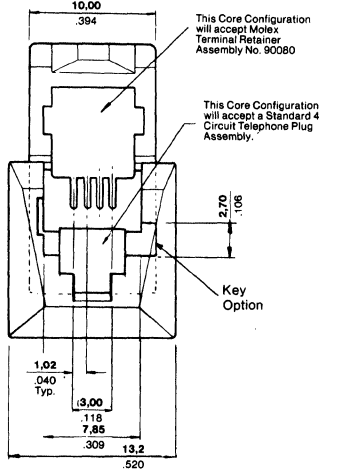
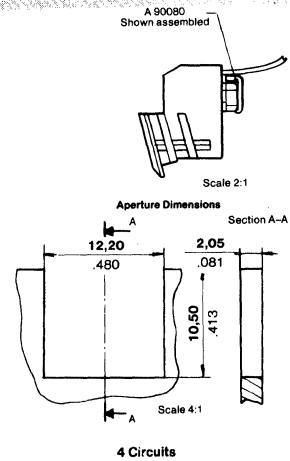
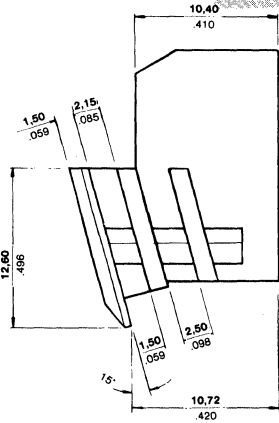
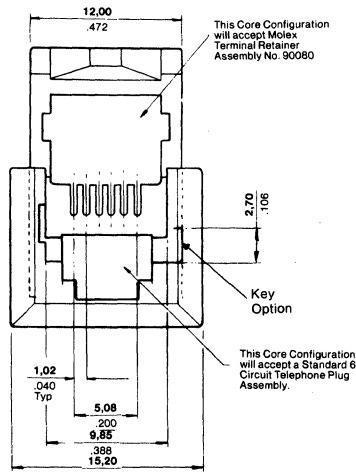
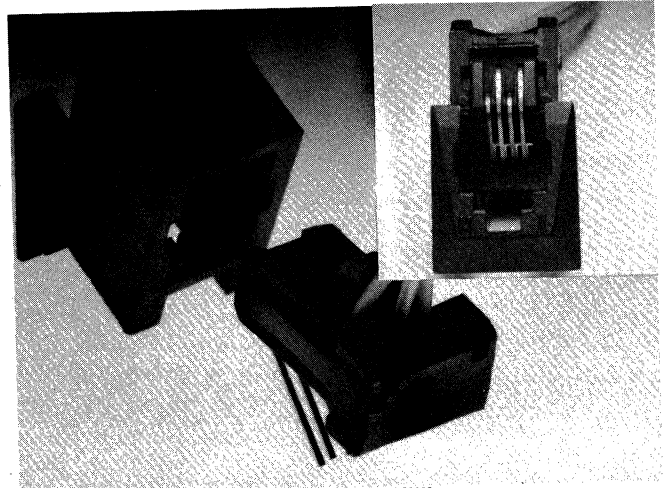
90079 Series

Features:

- For 4 and 6 way FCC-68 jack retainer, 90080 series
- Front face can be custom designed
- Standard colour is black, but custom colours are available to match telephone shell

Specifications:

Housing: Black polyester 94V-O



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

CTS	UNKEYED ORDER No.	KEYED ORDER No.
4	90079-0001	90079-0003
6	90079-0002	90079-0004

IDT™ Low Profile Jacks



90133 Series

Features:

- One piece construction
- Low profile – recommended for applications in handsets
- Front part may be adapted to customer specifications
- Active part of contact gold plated-tin in IDT area
- Available in loose or strip form for high volume applications
- Uses insulation displacement technology for mass termination

Specifications:

Housing: Black polyester UL 94V-O

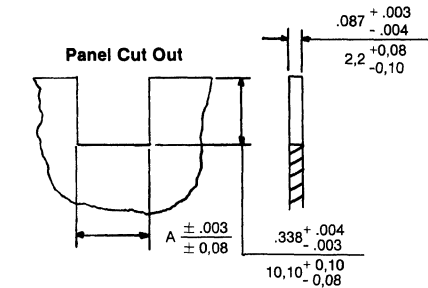
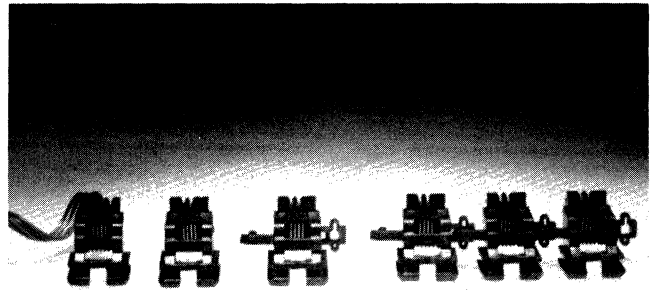
Contact Material: Phosphor Bronze

Plating: ID area plated with 1,27 µm/50 µinch min. electro tin over 1,27 µm/50 µinch min. nickel overall. Area of contact with retainer 1,27 µm/50 µinch min. gold in contact area over 1,27 µm/50 µinch min. nickel overall

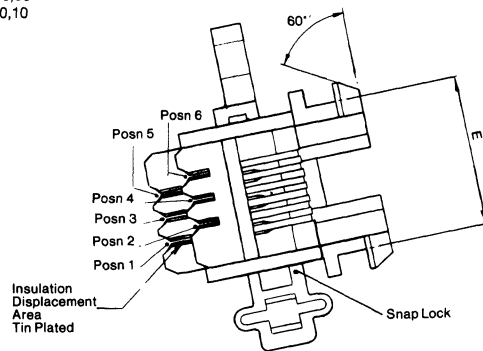
Wire: Intended to terminate 26 AWG stranded top-coated wire and solid wire or 24 AWG stranded wire

Product Spec: PSX 90133-E

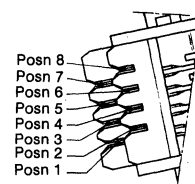
Application Spec: ASX 90133-E



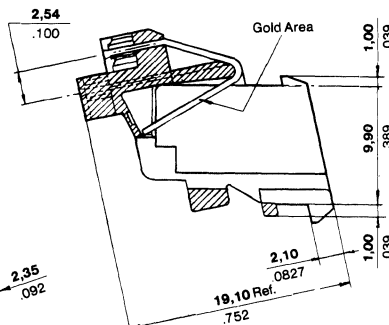
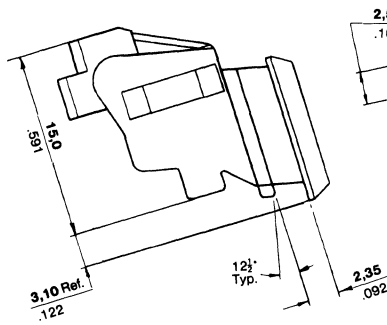
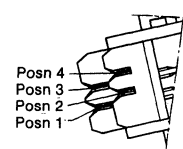
	4/4	6/6, 6/4	8/8, 8/6, 8/4
A	.414 10,52	.494 12,54	.574 14,56



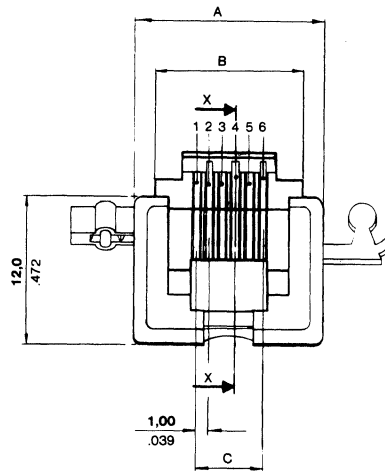
Low Profile Jack 8 Circuits



Low Profile Jack 4 Circuits



Section on X - X



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

CTS	LOADED CONTACTS	STRIP MOUNTED ORDER No.	LOOSE PIECES ORDER No.	DIM.							
				A		B		C		E	
4	4	90133-0001	90133-7001	13,15	.518	10,20	.402	3,05	.120	10,35	.407
6	6	↑ -0002	↑ -7002	15,20	.600	12,20	.480	5,08	.200	12,35	.486
6	4	↑ -0003	↑ -7003	15,20	.600	12,20	.480	5,08	.200	12,35	.486
6	2	↑ -0004	↑ -7004	15,20	.600	12,20	.480	5,08	.200	12,35	.486
4	2	↓ -0005	↓ -7005	13,15	.518	10,20	.402	3,05	.120	10,35	.407
8	6	↓ -0006	↓ -7006	17,22	.678	14,22	.560	7,11	.280	14,38	.566
8	8	90133-0007	90133-7007	17,22	.678	14,22	.560	7,11	.280	14,38	.566

623K Telephone Jacks



90319 Series

Features:

- Mates with WE-type 6 position plug
- Conforms to 623K industry standard
- Available with 2, 4 or 6 positions loaded
- Selective gold plating
- Delivered with wires pre-assembled to housing
- Customer specified wire lengths available in addition to standards listed below
- Stripped or semi stripped wires available on request

Specifications:

Housing: Grey or beige polyester
UL 94V-0

Contact Material: Phosphor
Bronze

Plating:

Plating 1: 1,27 µm/50 µinch gold
over 1,27 µm/50 µinch nickel

Plating 2: 0,76 µm/30 µinch gold
over 1,27 µm/50 µinch nickel

Plating 3: 0,27µm/5 microinches
min. gold over 1,27µm/50
microinches nickel

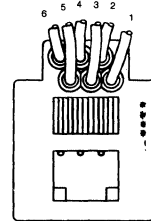
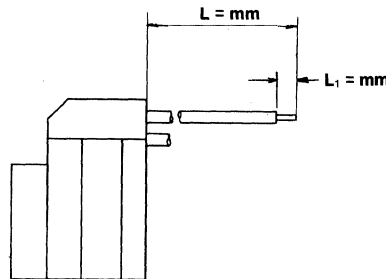
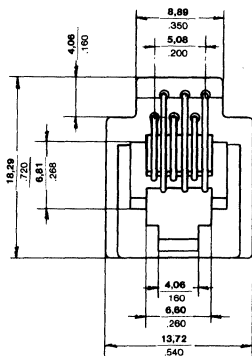
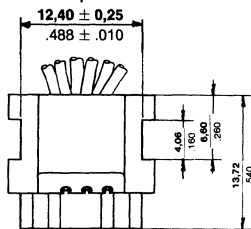
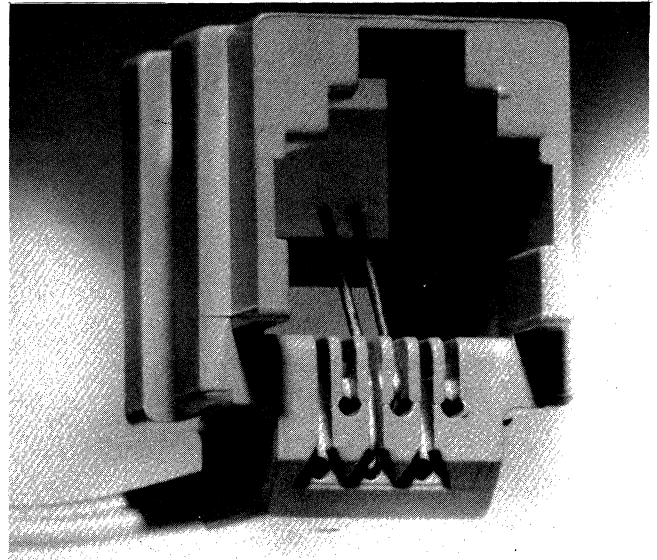
Wires: 26 AWG stranded

Contact Resistance: 20 milliohms
at 2A

Insulation Resistance: 10
megohms at 500V DC

Current Rating: 2A DC

Withstanding Voltage: 1000V DC
r.m.s. for 1 minute



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

ORDER NO.	PLATING No.	LENGTH L = mm	STRIP LENGTH L ₁ = mm	COLOR CKT. 1 to 6	COLOR OF JACK	ORDER NO.	PLATING No.	LENGTH L = mm	STRIP LENGTH L ₁ = mm	COLOR CKT. 1 to 6	COLOR OF JACK
90319-0001	1	80	10	4 Void, yellow, green, red, black, void	Grey	90319-0103	1	50	10	4 Void, yellow, green, red, black, void	Grey
90319-0002	1	80	10	2 Void, void, green, red, void, void	Grey	90319-0104	1	40	4	6 Blue, black, red, green, yellow, white	Grey
90319-0003	1	170	10	2 Void, void, green, red, void, void	Grey	90319-0031	2	80	10	4 Void, yellow, green, red, black, void	Grey
90319-0004	1	80	10	2 Void, void, green, red, void, void	Beige	90319-0032	2	80	10	2 Void, void, green, red, void, void	Grey
90319-0005	1	80	10	6 Blue, black, red, green, yellow, white	Grey	90319-0033	2	80	10	6 Blue, black, red, green, yellow, white	Grey
90319-0006	1	440	10	2 Void, void, green, red, void, void	Grey	90319-0036	2	30	4.7	6 Blue, black, red, green, yellow, white	Grey
90319-0007	1	30	4.7	6 Blue, black, red, green, yellow, white	Grey	90319-0037	2	305	10	4 Void, yellow, green, red, black, void	Grey
90319-0008	1	200	3	2 Void, void, red, green, void, void	Grey	90319-0038	2	305	5	4 Void, yellow, green, red, black, void	Grey
90319-0009	1	200	3	2 Void, void, yellow, blue, void, void	Grey	90319-0021	3	80	10	4 Void, yellow, green, red, black, void	Grey
90319-0010	1	400	3	2 Void, void, red, green, void, void	Grey	90319-0022	3	80	10	2 Void, void, green, red, void, void	Grey
90319-0101	1	400	3	2 Void, void, yellow, blue, void, void	Grey	90319-0023	3	80	10	6 Blue, black, red, green, yellow, white	Grey
90319-0102	1	105	2.5	4 Void, yellow, green, red, black, void	Grey	90319-0024	3	88.9	—	2 Void, yellow, void, void, black, void	Grey

Other versions are available, contact factory

623T-4 Type Telephone Jacks



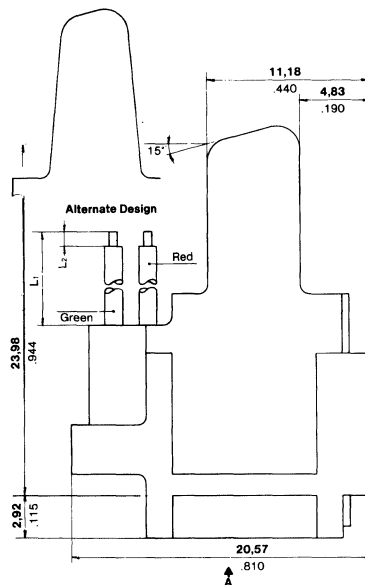
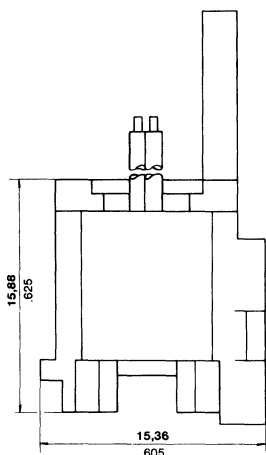
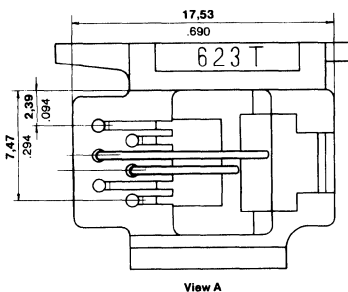
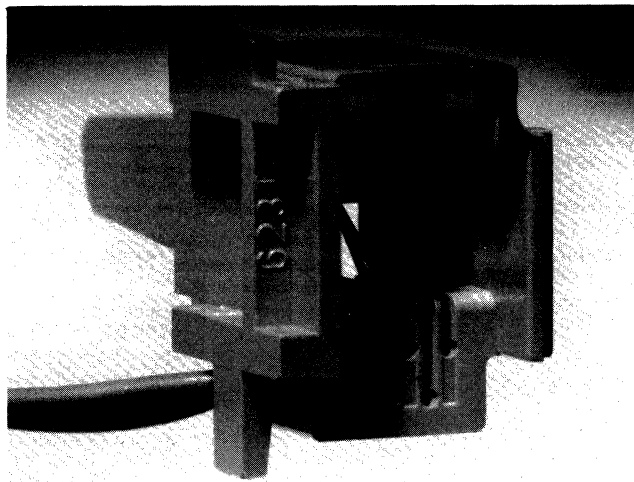
96701 Series

Features:

- Mates with WE-type 6 position plug
- Conforms to 623T industry standard
- Available with 2, 4 or 6 positions loaded
- Full gold plating
- Delivered with wires pre-assembled to housing
- Customer specified wire lengths and colours available

Specifications:

- Housing:** ABS medium grey
- Contact Material:** Phosphor Bronze
- Platings:** 1,27 µm/50 µinch gold over 2,54 µm/100 µinch nickel. Other platings, contact factory
- Wires:** 26 AWG stranded
- Current Rating:** 2A DC
- Contact Resistance:** 20 milliohms at 2A
- Insulation Resistance:** 10 megohms at 500V DC
- Withstanding Voltage:** 1000V DC r.m.s. for 1 minute



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

ORDER No.	WIRE	L ₁ = mm		L ₁ = mm	
		186	7.323	5	.197
96701-0001	Red	186	7.323	5	.197
	Green	288	11.339	5	.197

616L-Type Telephone Jacks



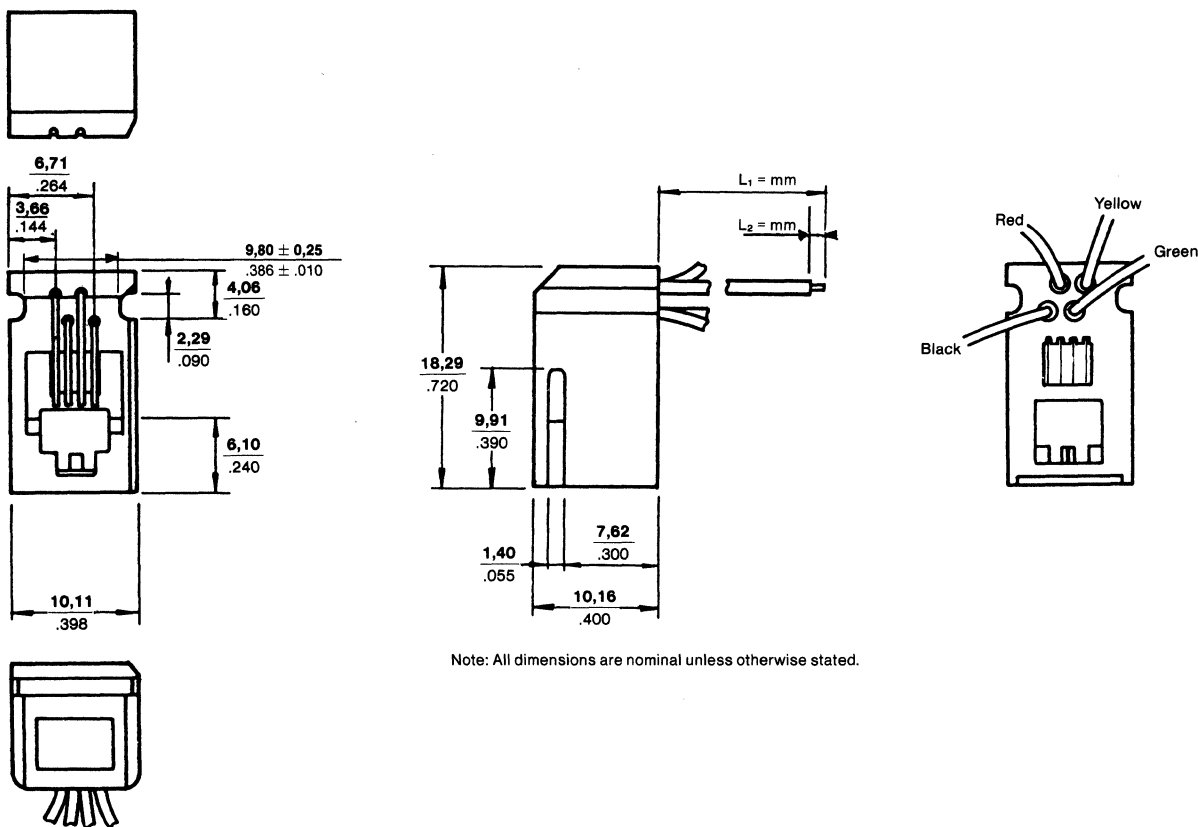
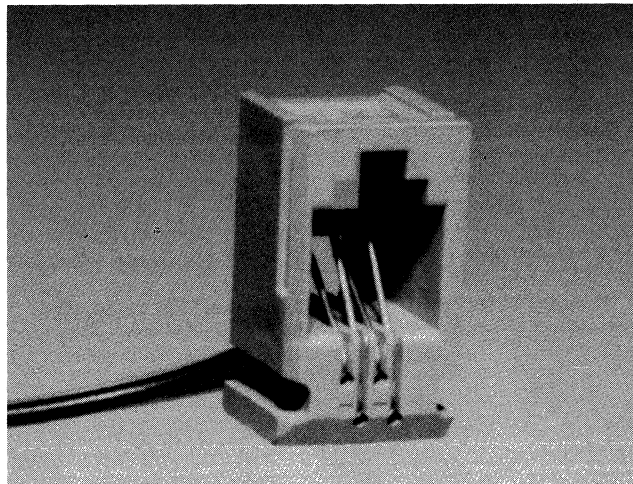
96702 Series

Features:

- Mates with WE-type plugs
- Conforms to 616M industry standard
- Available with 2 or 4 positions loaded
- Delivered with wires pre-assembled to housing
- Customer-specified wire lengths available in addition to standard lengths offered below
- Stripped or semi stripped wires available on request

Specifications:

Housing: ABS medium grey
Contact material: Phosphor Bronze
Plating: 1,27 μm /50 μinch gold over 2,54 μm /100 μinch nickel. Other platings, contact factory
Wires: 26 AWG stranded
Current Rating: 2A DC
Contact Resistance: 20 milliohms at 2A
Insulation Resistance: 10 megohms at 500V DC
Withstanding Voltage: 1000V DC r.m.s. for 1 minute



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

ORDER No.	WIRE COLOUR	$L_1 = \text{mm}$		$L_2 = \text{mm}$	
96702-0001	Yellow	178	7.008	3,18	.125
	Green	288	11.339	5	.197
	Red	186	7.323	5	.197
	Black	178	7.008	3,18	.125

616M-Type Telephone Jacks



96703 Series

Features:

- Mates with WE-type plugs
- Conforms to 616M industry standard
- Available with 2 or 4 positions loaded
- Delivered with wires pre-assembled to housing
- Customer-specified wire lengths available in addition to standard lengths offered below
- Stripped or semi stripped wires available on request

Specifications:

Housing: ABS, UL 94V-O, grey or beige

Contact Material: Phosphor Bronze

Platings: 1,27 µm/50 µinch gold over 1,27 µm/50 µinch nickel. Other platings, contact factory

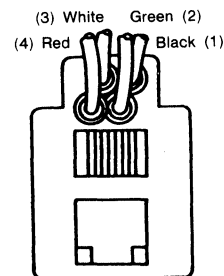
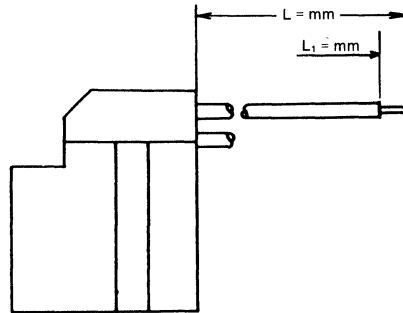
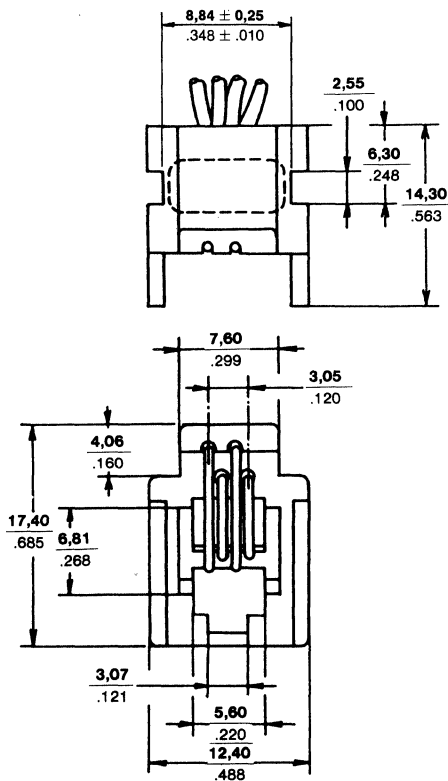
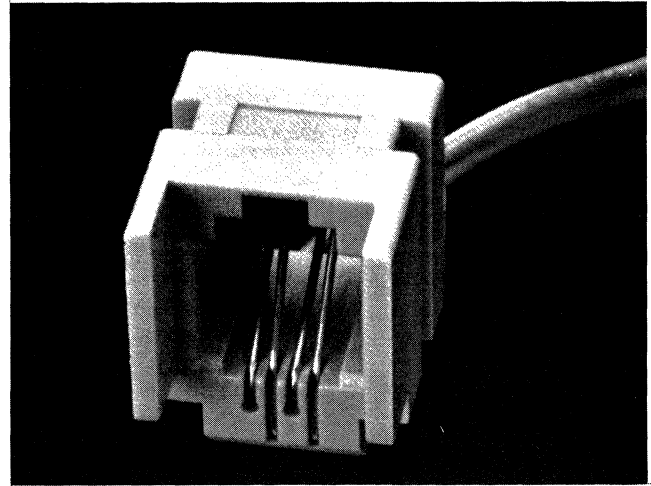
Wire: UL 1061 AWG 26 or OS-1

Current rating: 2A DC

Contact Resistance: 20 milliohms at 2A

Insulation Resistance: 10 megohms at 500V DC

Withstanding Voltage: 1000V DC r.m.s. for 1 minute



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

ORDER No.	L ₁ = mm		L ₁ = mm		No. OF WIRES	WIRE COLOUR
96703-0001	75	2.952	10	.394	4	(1) Black (2) Green (3) White (4) Red
96703-0002	75	2.952	10	.394	2	(1) Void (2) Green (3) White (1) Void
96703-0003	100	3.94	5	.197	4	(1) Black (2) Green (3) White (4) Red
96703-0004	80	3.15	2,5	.098	2	(1) Void (2) Green (3) Red (4) Void
96703-0005	305	12	2,5	.098	2	(1) Void (2) Green (3) Red (4) Void

616P-Type Telephone Jacks



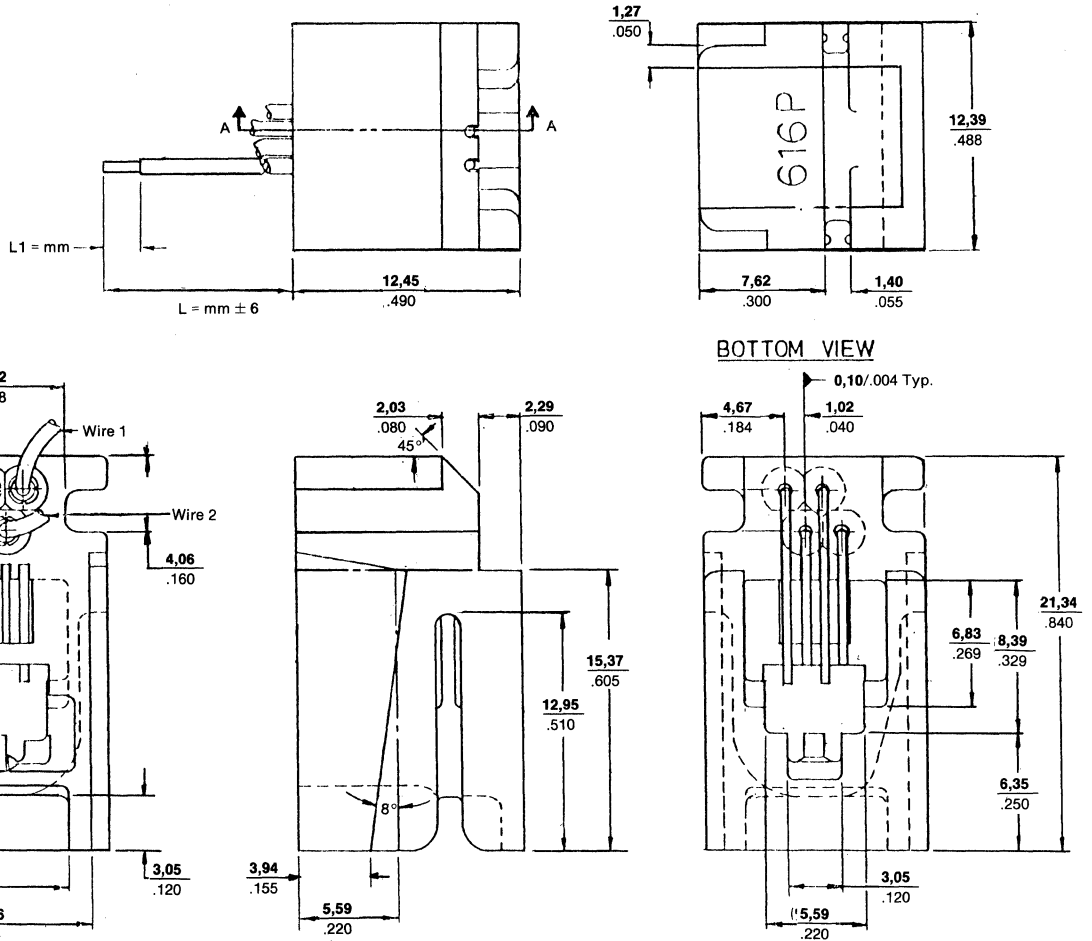
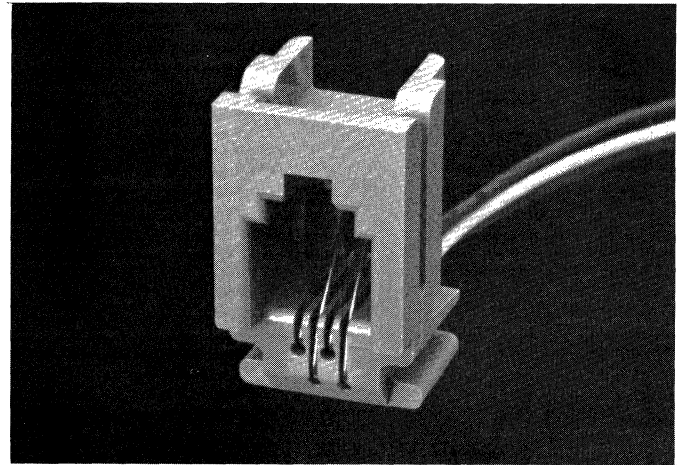
87032 Series

Features:

- Mates with WE-type plugs
- Conforms to 616P industry standard
- Available with 2 or 4 positions loaded
- Delivered with wires preassembled to housing
- Customer-specified wire lengths available in addition to standard lengths offered
- Stripped or semi-stripped wires available on request

Specifications:

Housing: ABS, UL 94-V0, grey
Contact Material: Phosphor bronze
Plating: Post plate (1,27µm) 50 µinch min. gold in contact area. (1,27µm) 50 µinch min. tin/lead in tail area over (1,27µm) 50 µinch min. nickel overall.
Wire: 26 AWG, stranded
Current Rating: 1.2A DC
Contact Resistance: 20 milliohms
Withstanding Voltage: 1000V DC r.m.s. for 1 minute



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

ORDER NO.	NO. OF WIRES	WIRE 1	WIRE 2	WIRE 3	WIRE 4	Wire Length		COLOR OF JACK
						L = mm	L1 = mm	
87032-0001	4	Black	—	—	Red	245	5 ± .5	Grey
		—	Green	White	—	92	5 ± .5	

616W-Type Telephone Jacks



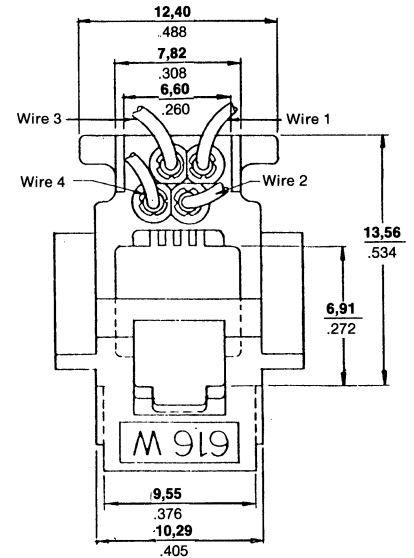
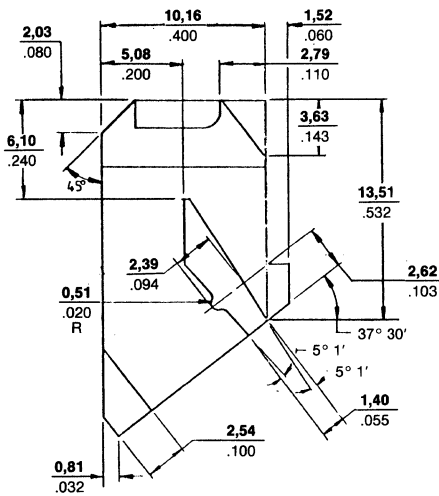
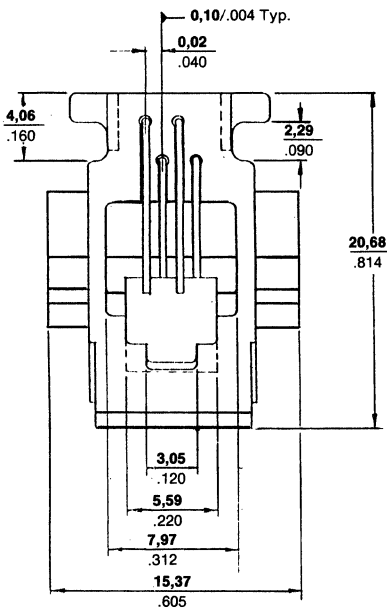
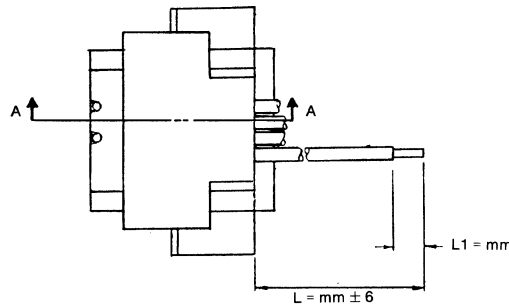
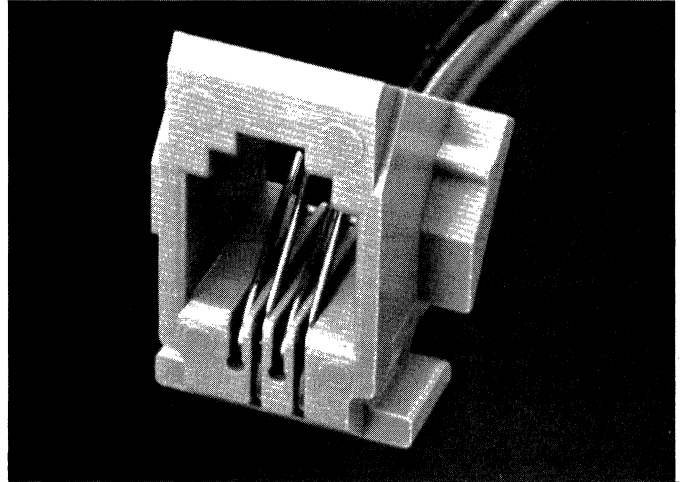
87033 Series

Features:

- Mates with WE-type plugs
- Conforms to 616W industry standard
- Available with 2 or 4 positions loaded
- Delivered with wires preassembled to housing
- Customer-specified wire lengths available in addition to standard lengths offered
- Stripped or semi-stripped wires available on request

Specifications:

Housing: ABS, UL 94-V0, grey
Contact Material: Phosphor bronze
Plating: Post plate (1,27 μ m) 50 μ inch min. gold in contact area. (1,27 μ m) 50 μ inch min. tin/lead in tail area over (1,27 μ m) 50 μ inch min. nickel overall.
Wire: 26 AWG, stranded
Current Rating: 1.2A DC
Contact Resistance: 20 milliohms
Withstanding Voltage: 1000V DC r.m.s. for 1 minute



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

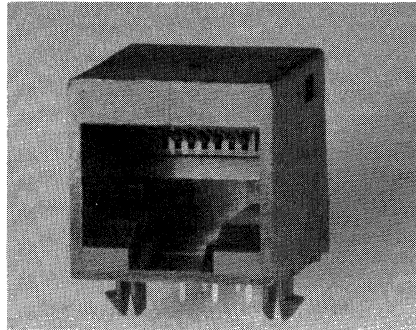
ORDER NO.	NO. OF WIRES	WIRE 1	WIRE 2	WIRE 3	WIRE 4	Wire Length		COLOR OF JACK
						L = mm	L1 = mm	
87033-0001	4	Red	White	Green	Black	205	3.2 ± .5	Grey

Right Angle Modular Jacks

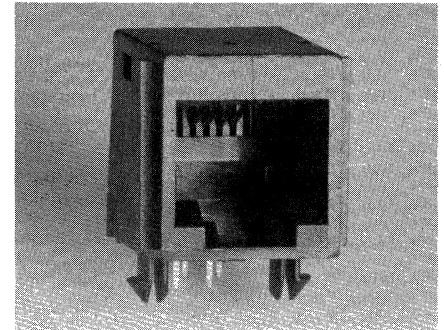


41314 Series

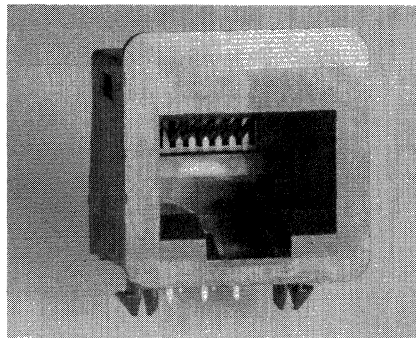
- UL recognized; CSA listed
- For mating with FCC 68 plugs
- Flush, flange or flangeless housings
- Duplex plating standard — gold on contact area, tin-lead on solder tails
- Covered leads for better circuit protection
- Contacts pre-loaded and self aligned
- Industry compatible profiles and footprints
- Snap fit PCB retention bosses
- Three housing sizes for 4, 6 or 8 contacts
- Keyed 8 available in flush mount and flangeless series
- Standard pack on film for robotic insertion or tray pack for manual insertion



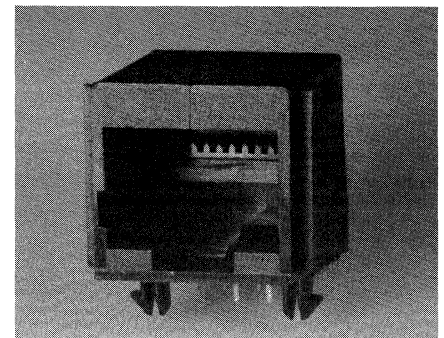
Flange Mount



Flush Mount



Flangeless



Modem Keying Option

Specifications:

Current Rating: 1.5 amps

Dielectric Withstand Voltage: 1000 VAC
RMS 60 Hz, 1 min.

Insulation Resistance: 500 megohms min.

Durability: 500 mating cycles

Housing: Black glass filled polyester 94V-0

Contacts: Phosphor bronze

P.C. Board Thickness: .062" (1,57mm) thick

Product Specs: PS 41314

Plating:

Type	Contact Area	PCB Tail	Under Plate
1	50 μ " Gold	50 μ " Tin/Lead	50 μ " Nickel
2	30 μ " Gold	50 μ " Tin/Lead	50 μ " Nickel
3	15 μ " Gold	50 μ " Tin/Lead	50 μ " Nickel

Note: FCC Part 68 requires 50 μ " gold at the network interface.

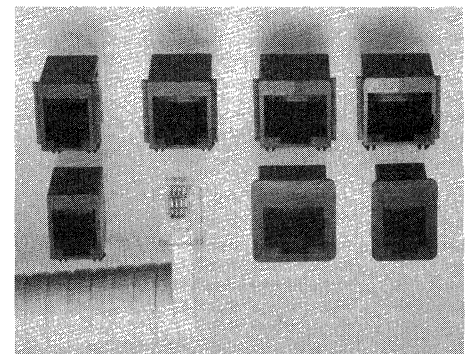
Quality Issues

The Molex series of right angle Modular Jacks are designed using CAD and manufactured under SPC specifications.

Contact width is controlled statistically to FCC Part 68 requirements.

Contacts are plated after stamping, eliminating bare edges in the functional area.

Every jack must pass 3 functional tests, including hi pot, before packaging.

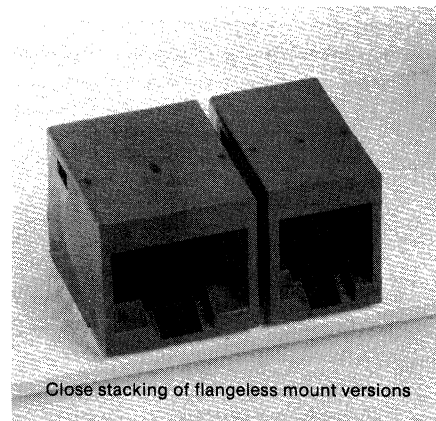
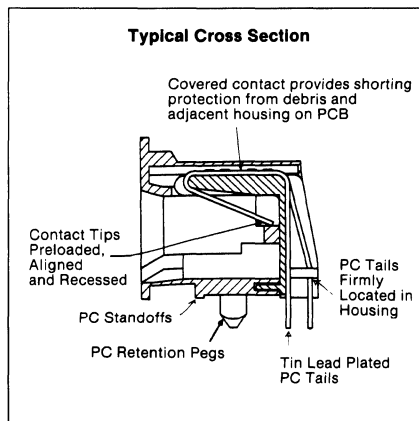
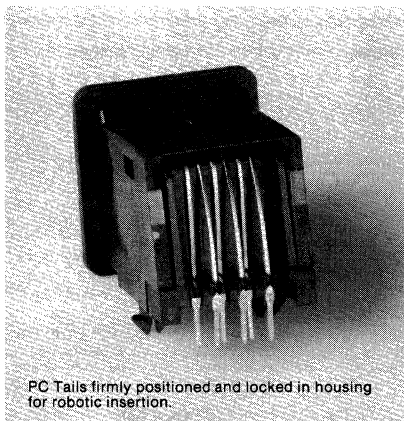


Right Angle Modular Jacks

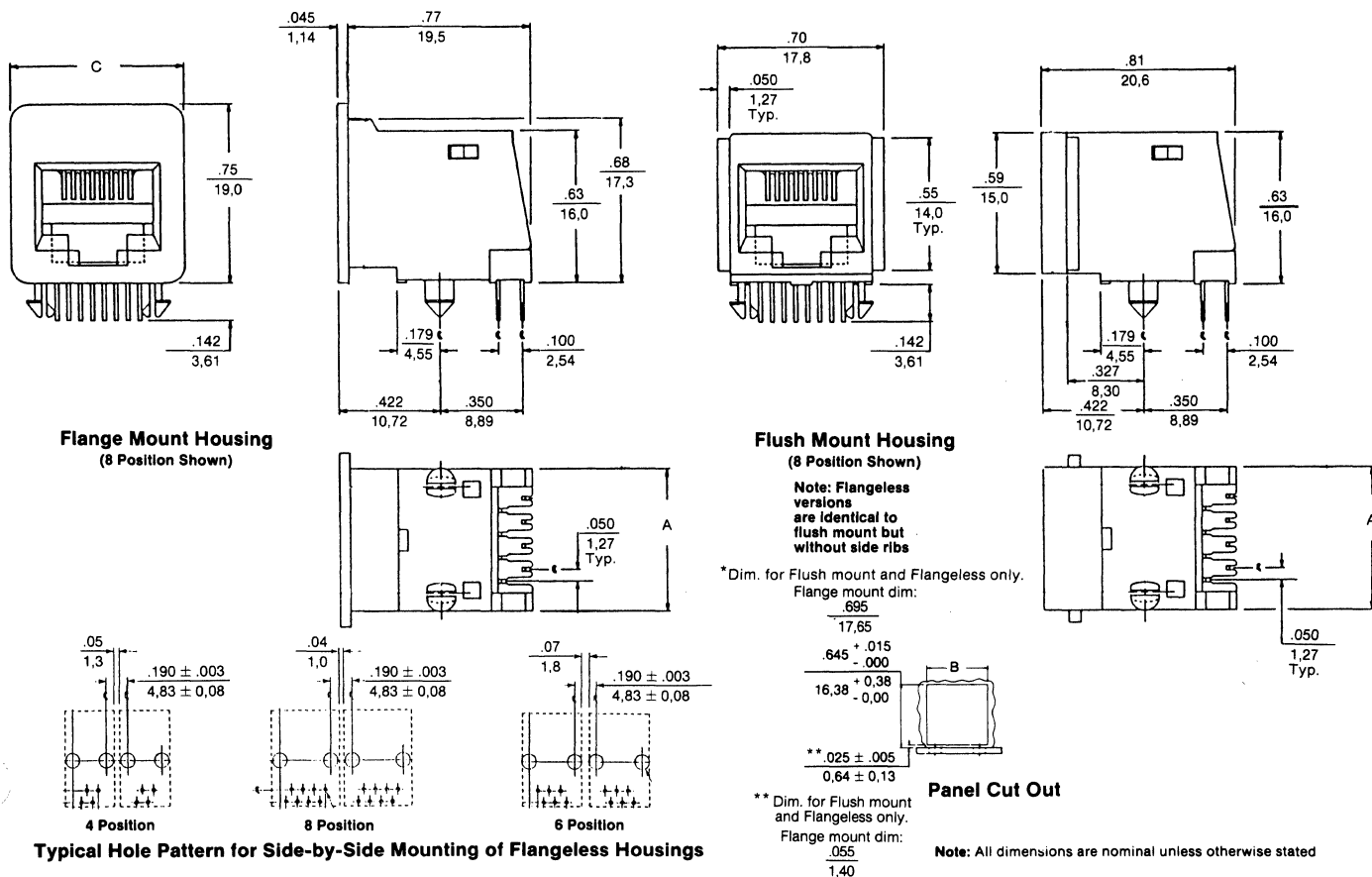


Features and Benefits

- No exposed contacts on jack top
 - Allows for closer stacking of PCBs without shorting potential
- All contact tips guided within FCC specified target zone
 - Positive alignment prevents shorting and damage from probing
- Unique high force PCB retention posts
 - Adds mechanical integrity both before and after soldering
- Contact tails firmly locked into housing — Precise tail location for robotic or manual insertion
- Optional duplex platings
 - 50, 30, or 15 microinches gold in contact area with tin/lead on PC tails with overall nickel underplate
- PCB footprint .050 x .100
 - Easier CAD layouts
 - Industry compatible
- PCB standoffs — Easy cleaning of flux
- FCC 1000 volt test
- UL 94V-0 housing



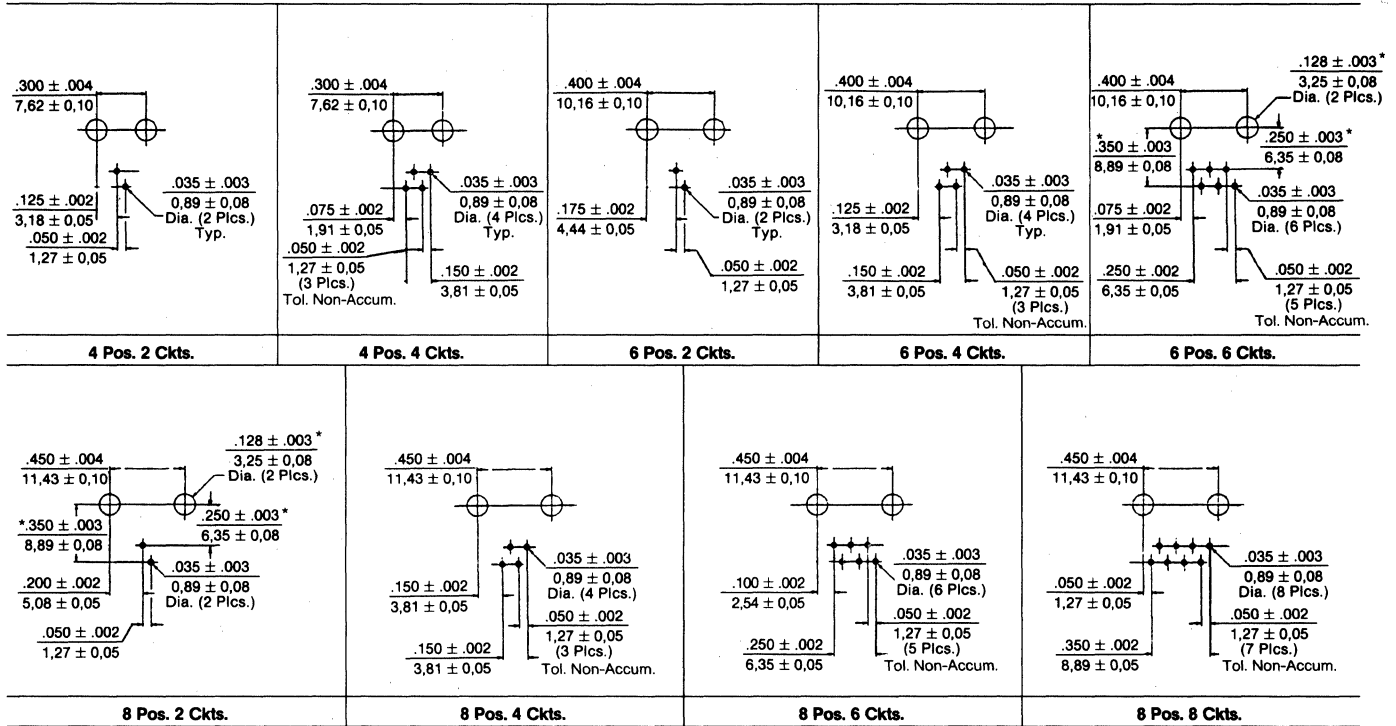
Dimensions



Right Angle Modular Jacks



Recommended P.C. Board Layout Dimensions



Note: Dimensions marked with asterisk (*) are typical for each layout shown above.

Ordering Information

HOUSING SIZE	LOADED CONTACTS	FLANGE MOUNT FILM PACK ORDER NO.	FLANGE MOUNT TRAY PACK ORDER NO.	FLUSH MOUNT FILM PACK ORDER NO.	FLUSH MOUNT TRAY PACK ORDER NO.	FLANGELESS MOUNT FILM PACK ORDER NO.	FLANGELESS MOUNT TRAY PACK ORDER NO.	USOC	PLATING	KEYED	DIMENSIONS				
											A	B*	C*		
4	2	15-43-6042	15-43-6542	15-43-7040	15-43-7540	15-43-8041	15-43-8541		1	No	.44 (11.2)	.455 (11.56)	.57 (14.5)		
		15-43-6043	15-43-6543	15-43-7042	15-43-7542	15-43-8042	15-43-8542				2	No	.44 (11.2)	.455 (11.56)	.57 (14.5)
		15-43-6046	15-43-6546	15-43-7043	15-43-7543	15-43-8043	15-43-8543				3	No	.44 (11.2)	.455 (11.56)	.57 (14.5)
4	4	15-43-6044	15-43-6544	15-43-7044	15-43-7544	15-43-8044	15-43-8544		1	No	.44 (11.2)	.455 (11.56)	.57 (14.5)		
		15-43-6045	15-43-6545	15-43-7045	15-43-7545	15-43-8045	15-43-8545				2	No	.44 (11.2)	.455 (11.56)	.57 (14.5)
		15-43-6041	15-43-6541	15-43-7041	15-43-7541	15-43-8046	15-43-8546				3	No	.44 (11.2)	.455 (11.56)	.57 (14.5)
6	2	15-43-6063	15-43-6563	15-43-7063	15-43-7563	15-43-8061	15-43-8561	RJ11W/RJ11C	1	No	.52 (13.2)	.535 (13.59)	.65 (16.5)		
		15-43-6068	15-43-6568	15-43-7068	15-43-7568	15-43-8062	15-43-8562				2	No	.52 (13.2)	.535 (13.59)	.65 (16.5)
		15-43-6069	15-43-6569	15-43-7069	15-43-7569	15-43-8063	15-43-8563				3	No	.52 (13.2)	.535 (13.59)	.65 (16.5)
6	4	15-43-6064	15-43-6564	15-43-7064	15-43-7564	15-43-8064	15-43-8564	RJ11/RJ13/RJ14	1	No	.52 (13.2)	.535 (13.59)	.65 (16.5)		
		15-43-6065	15-43-6565	15-43-7065	15-43-7565	15-43-8065	15-43-8565				2	No	.52 (13.2)	.535 (13.59)	.65 (16.5)
		15-43-6061	15-43-6561	15-43-7061	15-43-7561	15-43-8069	15-43-8569				3	No	.52 (13.2)	.535 (13.59)	.65 (16.5)
6	6	15-43-6066	15-43-6566	15-43-7066	15-43-7566	15-43-8066	15-43-8566	RJ12/RJ18	1	No	.52 (13.2)	.535 (13.59)	.65 (16.5)		
		15-43-6067	15-43-6567	15-43-7067	15-43-7567	15-43-8067	15-43-8567				2	No	.52 (13.2)	.535 (13.59)	.65 (16.5)
		15-43-6062	15-43-6562	15-43-7062	15-43-7562	15-43-8068	15-43-8568				3	No	.52 (13.2)	.535 (13.59)	.65 (16.5)
8	2	15-43-6090	15-43-6590	15-43-7090	15-43-7590	15-43-8090	15-43-8590		1	No	.60 (15.2)	.615 (15.62)	.73 (18.5)		
		15-43-6091	15-43-6591	15-43-7091	15-43-7591	15-43-8091	15-43-8591				2	No	.60 (15.2)	.615 (15.62)	.73 (18.5)
		15-43-6092	15-43-6592	15-43-7091	15-43-7591	15-43-8092	15-43-8592				3	No	.60 (15.2)	.615 (15.62)	.73 (18.5)
8	2	—	—	15-43-9010	15-43-9510	15-43-8010	15-43-8510		1	Yes/RJ-45	.60 (15.2)	.615 (15.62)	.73 (18.5)		
		—	—	15-43-9011	15-43-9511	15-43-8011	15-43-8511				2	Yes/RJ-45	.60 (15.2)	.615 (15.62)	.73 (18.5)
		—	—	15-43-9012	15-43-9512	15-43-8012	15-43-8512				3	Yes/RJ-45	.60 (15.2)	.615 (15.62)	.73 (18.5)
8	4	15-43-6084	15-43-6584	15-43-7084	15-43-7584	15-43-8084	15-43-8584		1	No	.60 (15.2)	.615 (15.62)	.73 (18.5)		
		15-43-6085	15-43-6585	15-43-7085	15-43-7585	15-43-8085	15-43-8585				2	No	.60 (15.2)	.615 (15.62)	.73 (18.5)
		15-43-6081	15-43-6581	15-43-7081	15-43-7581	15-43-8081	15-43-8581				3	No	.60 (15.2)	.615 (15.62)	.73 (18.5)
8	4	—	—	15-43-9007	15-43-9507	15-43-8007	15-43-8507		1	Yes/RJ-45	.60 (15.2)	.615 (15.62)	.73 (18.5)		
		—	—	15-43-9008	15-43-9508	15-43-8008	15-43-8508				2	Yes/RJ-45	.60 (15.2)	.615 (15.62)	.73 (18.5)
		—	—	15-43-9009	15-43-9509	15-43-8009	15-43-8509				3	Yes/RJ-45	.60 (15.2)	.615 (15.62)	.73 (18.5)
8	6	15-43-6086	15-43-6586	15-43-7086	15-43-7586	15-43-8086	15-43-8586		1	No	.60 (15.2)	.615 (15.62)	.73 (18.5)		
		15-43-6087	15-43-6587	15-43-7087	15-43-7587	15-43-8087	15-43-8587				2	No	.60 (15.2)	.615 (15.62)	.73 (18.5)
		15-43-6082	15-43-6582	15-43-7082	15-43-7582	15-43-8082	15-43-8582				3	No	.60 (15.2)	.615 (15.62)	.73 (18.5)
8	6	—	—	15-43-9004	15-43-9504	15-43-8004	15-43-8504		1	Yes/RJ-45	.60 (15.2)	.615 (15.62)	.73 (18.5)		
		—	—	15-43-9005	15-43-9505	15-43-8005	15-43-8505				2	Yes/RJ-45	.60 (15.2)	.615 (15.62)	.73 (18.5)
		—	—	15-43-9006	15-43-9506	15-43-8006	15-43-8506				3	Yes/RJ-45	.60 (15.2)	.615 (15.62)	.73 (18.5)
8	8	15-43-6088	15-43-6588	15-43-7088	15-43-7588	15-43-8088	15-43-8588		1	No	.60 (15.2)	.615 (15.62)	.73 (18.5)		
		15-43-6089	15-43-6589	15-43-7089	15-43-7589	15-43-8089	15-43-8589				2	No	.60 (15.2)	.615 (15.62)	.73 (18.5)
		15-43-6083	15-43-6583	15-43-7083	15-43-7583	15-43-8083	15-43-8583				3	No	.60 (15.2)	.615 (15.62)	.73 (18.5)
8	8	—	—	15-43-9001	15-43-9501	15-43-8001	15-43-8501	RJ-14/RJ45	1	Yes/RJ-45	.60 (15.2)	.615 (15.62)	.73 (18.5)		
		—	—	15-43-9002	15-43-9502	15-43-8002	15-43-8502				2	Yes/RJ-45	.60 (15.2)	.615 (15.62)	.73 (18.5)
		—	—	15-43-9003	15-43-9503	15-43-8003	15-43-8503				3	Yes/RJ-45	.60 (15.2)	.615 (15.62)	.73 (18.5)

Plating 1: 50 microinches gold Plating 2: 30 microinches gold Plating 3: 15 microinches gold

*Dim. C applies to flange mount only
Dim. B applies to panel cut-outs only.

Right Angle Modular Telephone Jacks



90077 Series

- For mating with FCC-68 plugs 90075 Series
- Industry compatible
- Flush or flange mounted
- Selective plating — gold on contact area, tin on solder posts
- Non-keyed versions are standard. For keyed versions contact Molex
- 4 and 6 ckt. versions with bubble lock retention pegs. 8 ckt. versions with snap-in retention pegs

Plating:

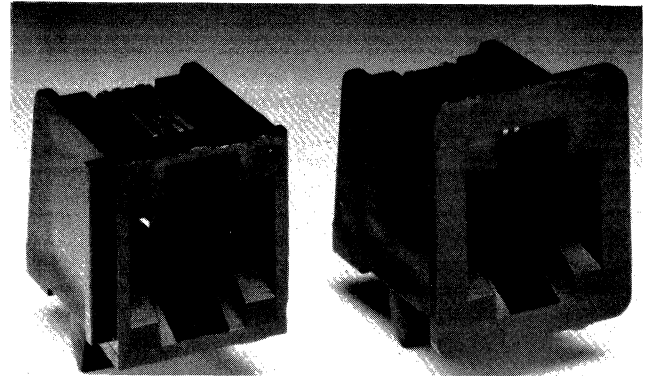
Plating 1: Post plate 0,76µm/30µ inch gold in contact area. 1,27µ/50µinch 60/40 tin/lead in tail area, both over 1,27µm/50µinch nickel overall

Plating 2: same as plating 1 except post plate 1,27µm/50µinch gold in contact area

PC Board Thickness: 1,57mm/.062 inch

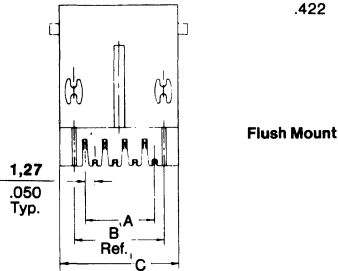
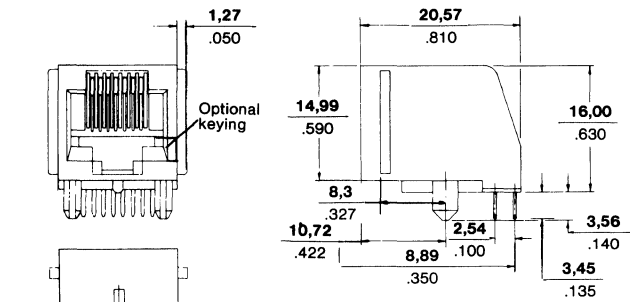
PC Board Retention: 9,07kb/20 lbs.

Product Spec: PSX90077-E

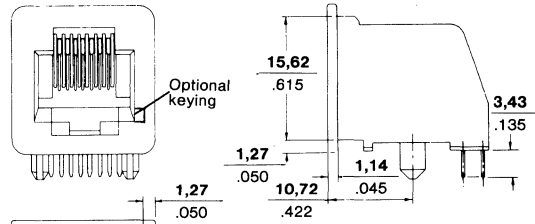


Specifications:

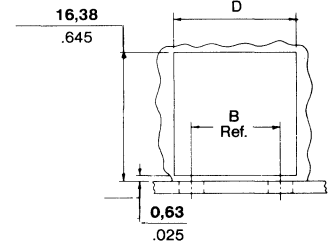
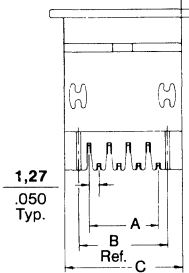
Housing: Black polyester UL 94V-0 or grey ABS



Flush Mount



Flange Mount



Panel Cut Out

P.C.B. Hole Layout Seen from Component Side

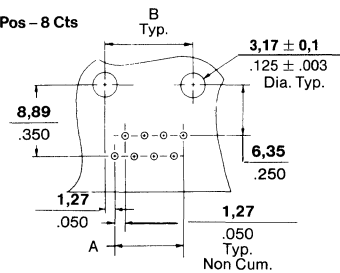
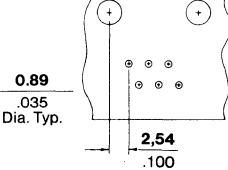
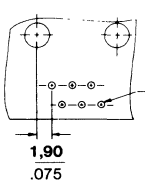
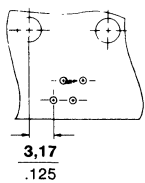
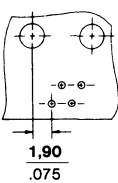
4 Pos - 4 Cts

6 Pos - 4 Cts

6 Pos - 6 Cts

8 Pos - 6 Cts

8 Pos - 8 Cts



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

CKTS.	LOADED CONTACTS	FLANGE MOUNTING	FLUSH MOUNTING	PLATING NO.	KEY	DIM.							
						A	B	C	D				
4	4	90077-0040	90077-1077	1	NO	3,81	.150	7,62	.300	11,18	.440	11,56	.456
		90077-0041	90077-1078	2	NO								
6	4	90077-0046	90077-1076	1	NO	3,81	.150	10,16	.400	13,21	.520	13,59	.535
		90077-0047	90077-1073	2	NO								
6	6	90077-0052	90077-1081	1	NO	6,36	.250	10,16	.400	13,21	.520	13,59	.535
		90077-0053	90077-1082	2	NO								
8	6	90077-0064	90077-1064	1	NO	8,89	.350	11,43	.450	15,24	.600	15,62	.615
		90077-0065	90077-1065	2	NO								
8	8	90077-0070	90077-1070	1	NO	8,89	.350	11,43	.450	15,24	.600	15,62	.615
		90077-0071	90077-1071	2	NO								

Low Profile Right Angle Telephone Jacks



95001 Series

Features:

- Mates with FCC-68 plug
- Foot pattern identical to 90077
- Very low profile – about $\frac{2}{3}$ that of industry standard
- Automatic placement possible

Specifications:

Housing: Black polyester UL 94V-O

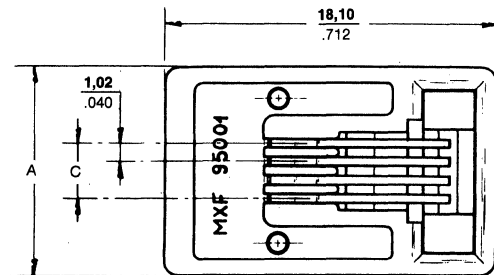
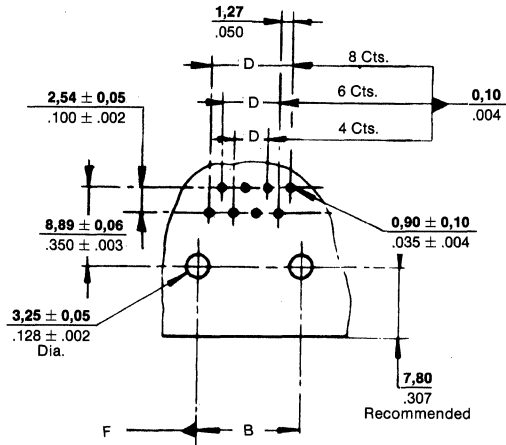
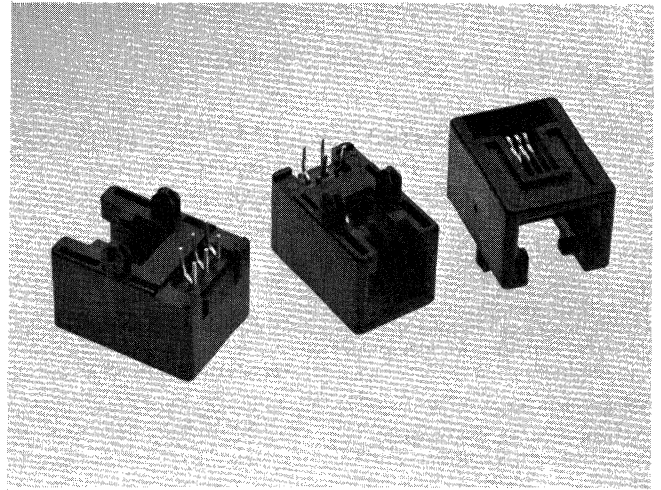
Contact Material: Phosphor Bronze

Plating:

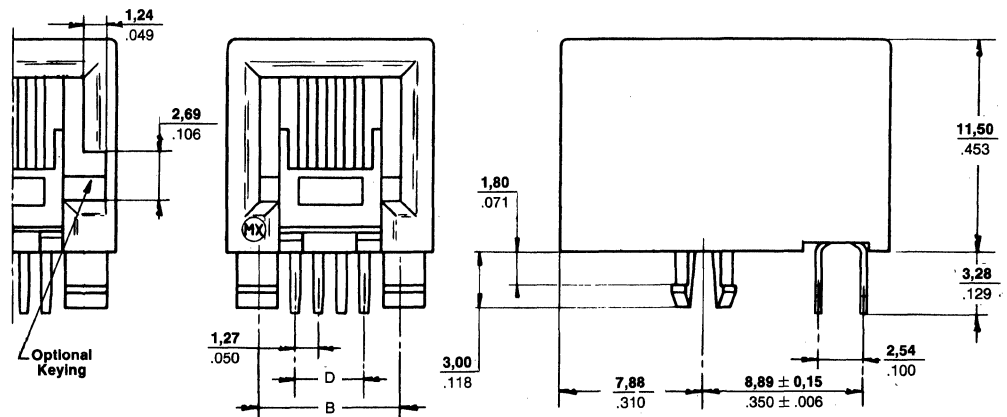
Plating 1: Post plate 0,76 μ m/30 μ inch min. gold in contact area, 1,90 μ m/75 μ inch min. (90/10) tin/lead in tail area both over 1,27 μ m/50 μ inch min. nickel overall

Plating 2: Same as plating 1 except post plate 1,27-1,52 μ m/50-60 μ inch gold in contact area

Plating 3: Same as plating 1 except post plate 0,38 μ m/15 μ inch gold in contact area



P.C.B. Hole Layout
Seen from Component Side



Note: All dimensions are nominal unless otherwise stated.

Low Profile Right Angle Telephone Jacks



95001 Series

Ordering Information

CTS	LOADED CONTACTS	ORDER No.	PLATINGS	KEY	DIM.							
					A		B		C		D	
4	4	95001-1441	1	NO	11,18	.440	7,62	.300	3,05	.120	3,81	.150
4	4	-1442	1	YES								
4	4	-2441	2	NO								
4	4	-2442	2	YES								
4	4	-3441	3	NO								
4	4	-3442	3	YES								
6	4	-1641	1	NO	13,21	.520	10,16	.400	3,05	.120	3,81	.150
6	4	-1642	1	YES								
6	4	-2641	2	NO								
6	4	-2642	2	YES								
6	4	-3641	3	NO								
6	4	-3642	3	YES								
6	6	-1661	1	NO	13,21	.520	10,16	.400	5,08	.200	6,35	.250
6	6	-1662	1	YES								
6	6	-2661	2	NO								
6	6	-2662	2	YES								
6	6	-3661	3	NO								
6	6	-3662	3	YES								
8	6	-1861	1	NO	15,24	.600	11,43	.450	5,08	.200	6,35	.250
8	6	-1862	1	YES								
8	6	-2861	2	NO								
8	6	-2862	2	YES								
8	6	-3861	3	NO								
8	6	-3862	3	YES								
8	8	-1881	1	NO	15,24	.600	11,43	.450	7,11	.280	8,89	.350
8	8	-1882	1	YES								
8	8	-2881	2	NO								
8	8	-2882	2	YES								
8	8	-3881	3	NO								
8	8	95001-3882	3	YES								

• U.S. Standard Product, available through Molex franchised distributors.

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

SMT Low Profile Right Angle Telephone Jacks



95001 Series Surface Mount Version

Features:

- Mates with FCC-68 plug
- Automatic placement possible with standard pick and place equipment
- Very low profile - $\frac{3}{4}$ of industry standard

Specifications:

Housing: Black polyester UL 94V-O high temperature plastic

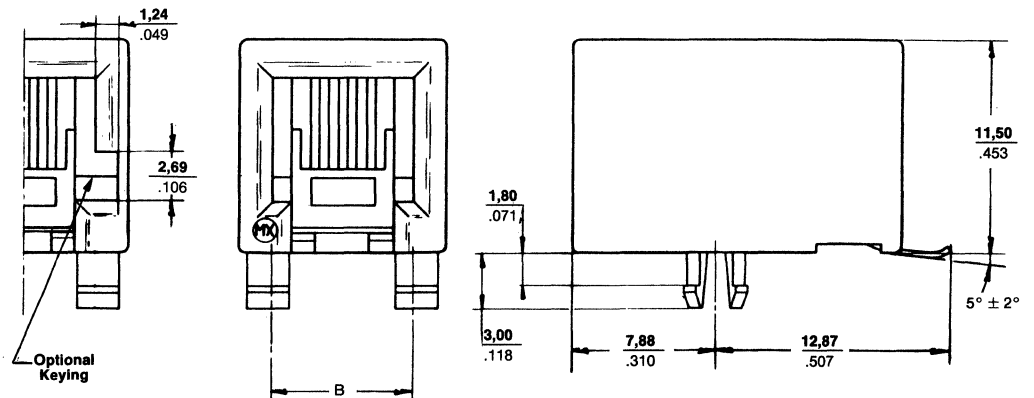
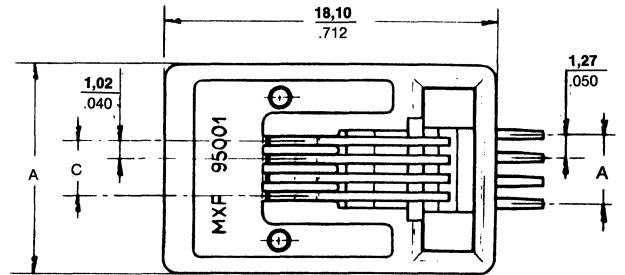
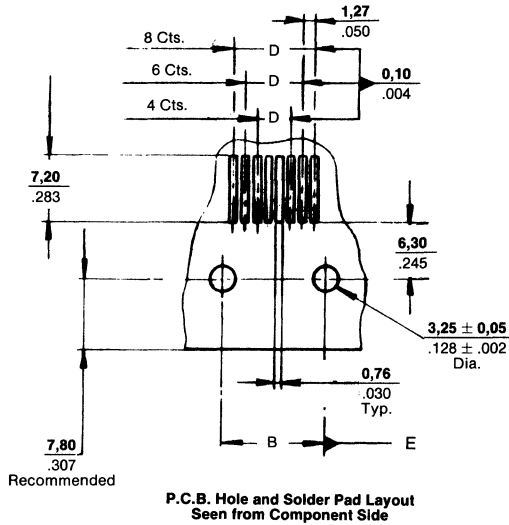
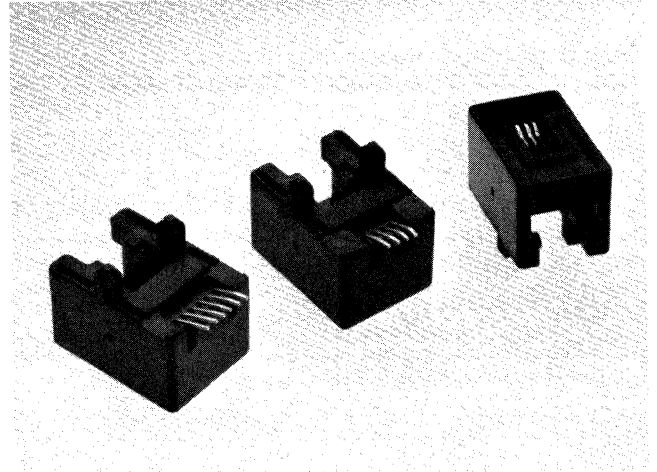
Contact Material: Phosphor Bronze

Plating:

Plating 1: Post plate 0,76 μm /30 μinch min. gold in contact area, 1,90 μm /75 μinch min. (90/10) tin/lead in tail area both over 1,27 μm /50 μinch min. nickel overall

Plating 2: Same as plating 1 except post plate 1,27-1,52 μm /50-60 μinch gold in contact area

Plating 3: Same as plating 1 except post plate 0,38 μm /15 μinch gold in contact area



Note: All dimensions are nominal unless otherwise stated.


SMT-Low Profile Right Angle Telephone Jacks



95001 Series Surface Mount Version

Ordering Information

CTS	LOADED CONTACTS	ORDER No.	PLATINGS	KEY	DIM.							
					A		B		C		D	
4	4	95001-5441	1	NO	11,18	.440	7,62	.300	3,05	.120	3,81	.150
4	4	-5442	1	YES								
4	4	-6441	2	NO								
4	4	-6442	2	YES								
4	4	-7441	3	NO								
4	4	-7442	3	YES	13,21	.520	10,16	.400	3,05	.120	3,81	.150
6	4	-5641	1	NO								
6	4	-5642	1	YES								
6	4	-6641	2	NO								
6	4	-6642	2	YES								
6	4	-7641	3	NO	13,21	.520	10,16	.400	5,08	.200	6,35	.250
6	4	-7642	3	YES								
6	6	-5661	1	NO								
6	6	-5662	1	YES								
6	6	-6661	2	NO								
6	6	-6662	2	YES	15,24	.600	11,43	.450	5,08	.200	6,35	.250
6	6	-7661	3	NO								
6	6	-7662	3	YES								
8	6	-5861	1	NO								
8	6	-5862	1	YES								
8	6	-6861	2	NO	15,24	.600	11,43	.450	7,11	.280	8,89	.350
8	6	-6862	2	YES								
8	6	-7861	3	NO								
8	6	-7862	3	YES								
8	8	-5881	1	NO								
8	8	-5882	1	YES	15,24	.600	11,43	.450	7,11	.280	8,89	.350
8	8	-6881	2	NO								
8	8	-6882	2	YES								
8	8	-7881	3	NO	15,24	.600	11,43	.450	7,11	.280	8,89	.350
8	8	-7882	3	YES								
8	8	95001-7882	3	YES								

 Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Low Profile Top Entry Telephone Jacks



95003 Series

Features:

- Mates with FCC-68 plugs
- Industry compatible
- Automatic placement on PC boards possible
- Foot patterns identical to industry standard jacks
- Very low profile
- Commoning between contacts (contact factory)

Specifications:

Housing: Black polyester UL 94V-0

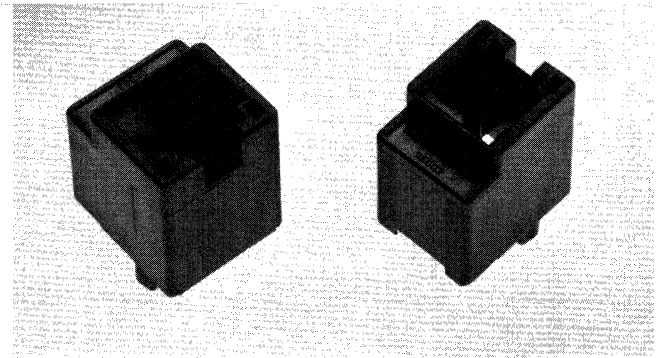
Contact Material: Phosphor Bronze

Plating:

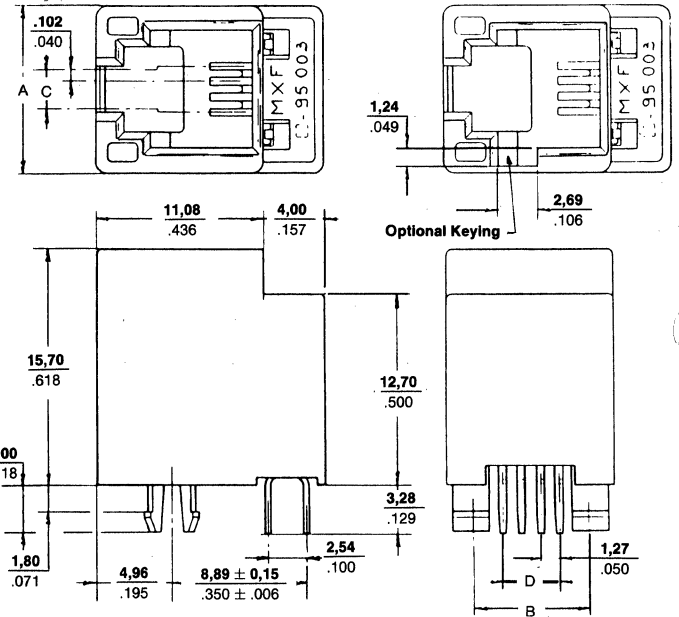
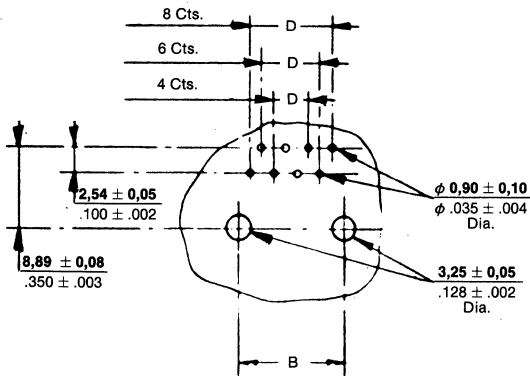
Plating 1: Post plate 0,76 µm/30 µinch min. gold in contact area, 1,90 µm/75 µinch min. (90/10) tin/lead in tail area both over 1,27 µm/50 µinch min. nickel overall

Plating 2: Same as plating 1 except post plate 1,27-1,52 µm/50-60 µinch gold in contact area

Plating 3: Same as plating 1 except post plate 0,38 µm/15 µinch gold in contact area



P.C.B. Hole Layout
Seen from Component Side



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

CTS	LOADED CONTACTS	ORDER No.	PLATINGS	KEY	DIM.			
					A	B	C	D
4	4	95003-1441	1	NO				
4	4	-1442	1	YES				
4	4	-2441	2	NO	11,18	.440	7,62	.300
4	4	-2442	2	YES			3,05	.120
6	4	-1641	1	NO				3,81
6	4	-1642	1	YES				.150
6	4	-2641	2	NO	13,21	.520	10,16	.400
6	4	-2642	2	YES			3,05	.120
6	6	-1661	1	NO				3,81
6	6	-1662	1	YES				.150
6	6	-2661	2	NO	13,21	.520	10,16	.400
6	6	-2662	2	YES			5,08	.200
8	6	-1861	1	NO				6,35
8	6	-1862	1	YES				.250
8	6	-2861	2	NO	15,24	.600	11,43	.450
8	6	-2862	2	YES			5,08	.200
8	8	-1881	1	NO				6,35
8	8	-1882	1	YES				.250
8	8	-2881	2	NO	15,24	.600	11,43	.450
8	8	-2882	2	YES			7,11	.280
8	8	95003-2882	2	YES				8,89
								.350

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

SMT-Low Profile Top Entry Telephone Jacks



95003 Series Surface Mount Version

Features:

- Mates with FCC-68 plugs
- Industry compatible
- Automatic placement on PC boards possible
- Foot patterns identical to industry standard jacks
- Commoning between contacts (contact factory)

Specifications:

Housing: Black polyester UL 94V-O high temperature plastic

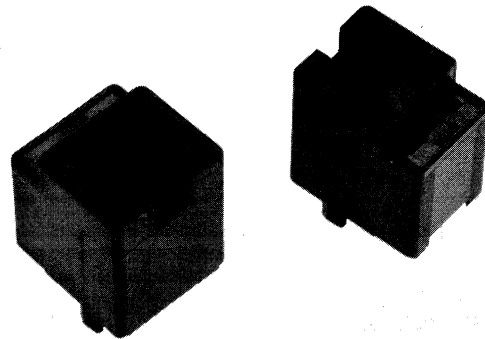
Contact Material: Phosphor Bronze

Plating:

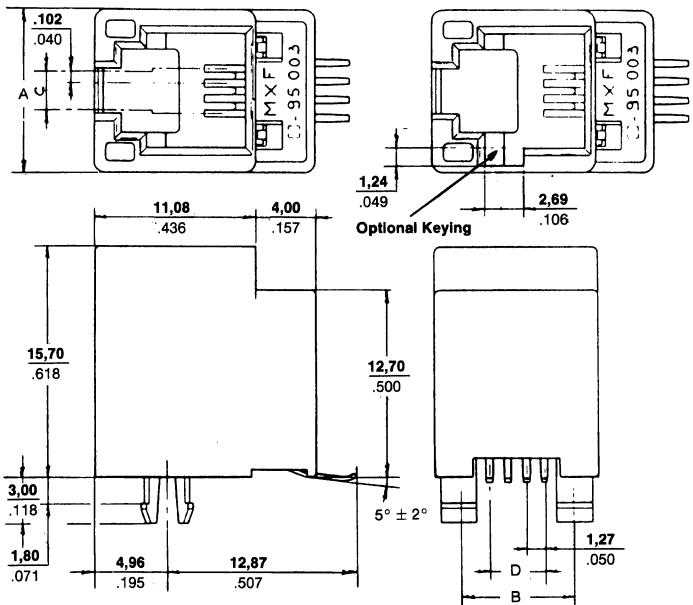
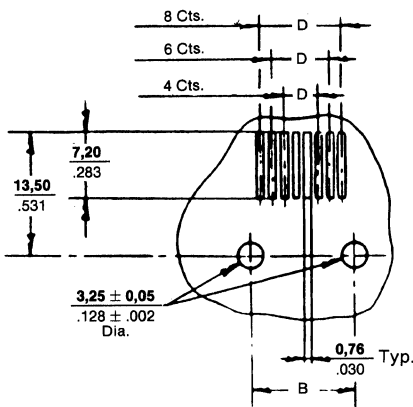
Plating 1: Post plate 0,76 µm/30 µinch min. gold in contact area, 1,90 µm/75 µinch min. (90/10) tin/lead in tail area both over 1,27 µm/50 µinch min. nickel overall

Plating 2: Same as plating 1 except post plate 1,27-1,52 µm/50-60 µinch gold in contact area

Plating 3: Same as plating 1 except post plate 0,38 µm/15 µinch gold in contact area



P.C.B. Hole and Solder Pad Layout
Seen from Component Side



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

CTS	LOADED CONTACTS	ORDER No.	PLATINGS	KEY	DIM.			
					A	B	C	D
4	4	95003-5441	1	NO				
4	4	5442	1	YES	11,18	7,62	3,05	3,81
4	4	6441	2	NO	.440	.300	.120	.160
4	4	6442	2	YES				
6	4	5641	1	NO				
6	4	5642	1	YES	13,21	10,16	3,05	3,81
6	4	6641	2	NO	.520	.400	.120	.150
6	4	6642	2	NO				
6	6	5661	1	NO				
6	6	5662	1	YES	13,21	10,16	5,08	6,35
6	6	6661	2	NO	.520	.400	.200	.250
6	6	6662	2	YES				
8	6	5861	1	NO				
8	6	5862	1	YES	15,24	11,43	5,08	6,35
8	6	6861	2	NO	.600	.450	.200	.250
8	6	6862	2	YES				
8	8	5881	1	NO				
8	8	5882	1	YES	15,24	11,43	7,11	8,89
8	8	6881	2	NO	.600	.450	.280	.350
8	8	95003-6882	2	YES				

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Low Profile Right Angle Telephone Jack



95009 Series

- Mates with FCC-68 plug
- Industry compatible
- Flush mount
- Foot pattern identical to 90077
- Optional keying feature
- Split snap-fit retention pegs
- Selective plating - gold on contact area, tin-lead on solder tails

SPECIFICATIONS:

Housing: Black polyester, UL 94V-0

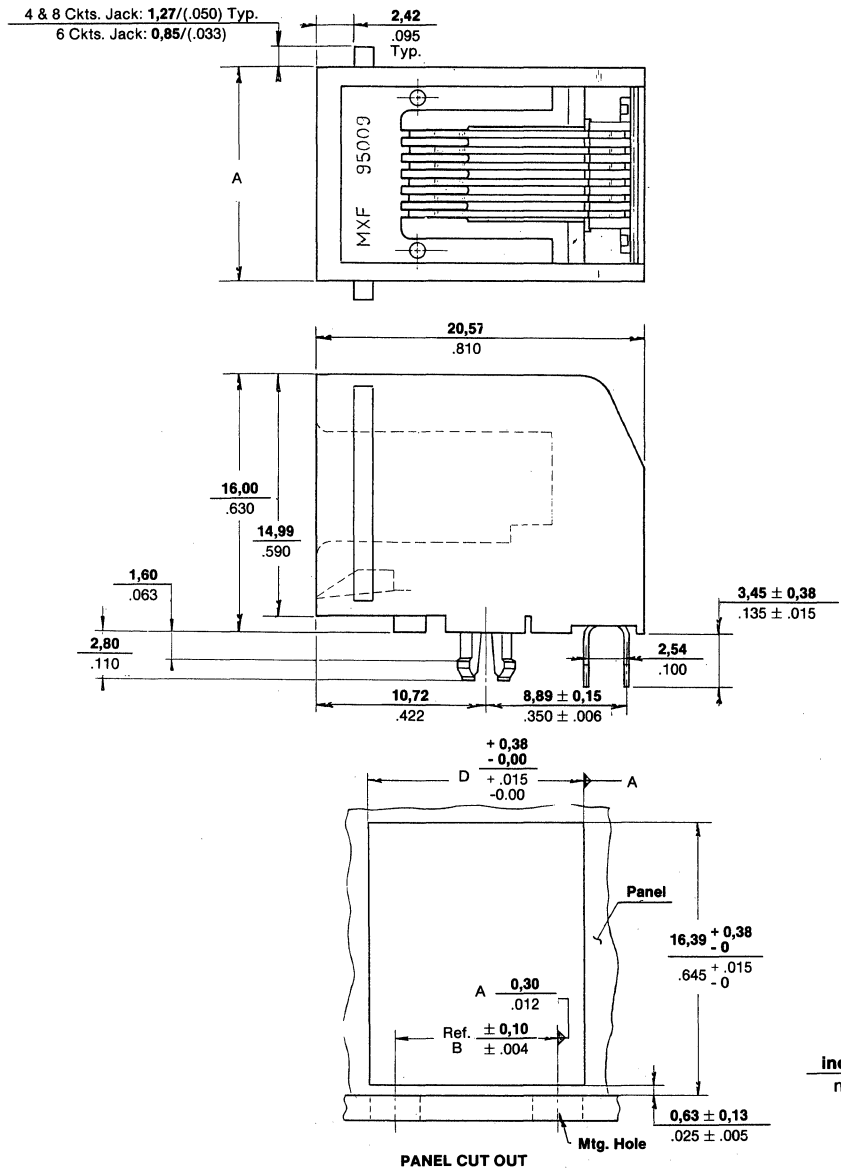
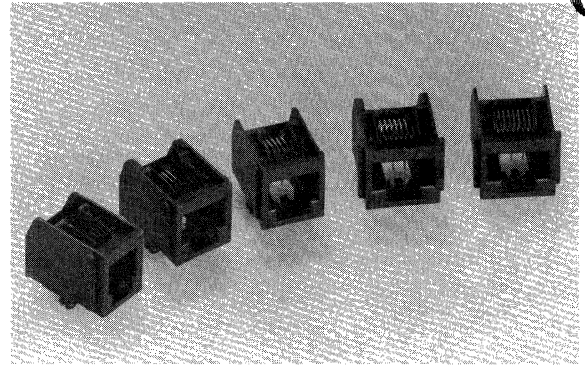
Contact Material: Phosphor bronze

Plating:

Plating 1: Post plate 0,76 μm /30 μinch min. gold in contact area, 1,90 μm /75 μinch min. (90/10) tin/lead in tail area both over 1,27 μm /50 μinch min. nickel overall

Plating 2: Same as plating 1 except post plate 1,27-1,52 μm /50-60 μinch gold in contact area

Plating 3: Same as plating 1 except post plate 0,38 μm / 15 μinch gold in contact area

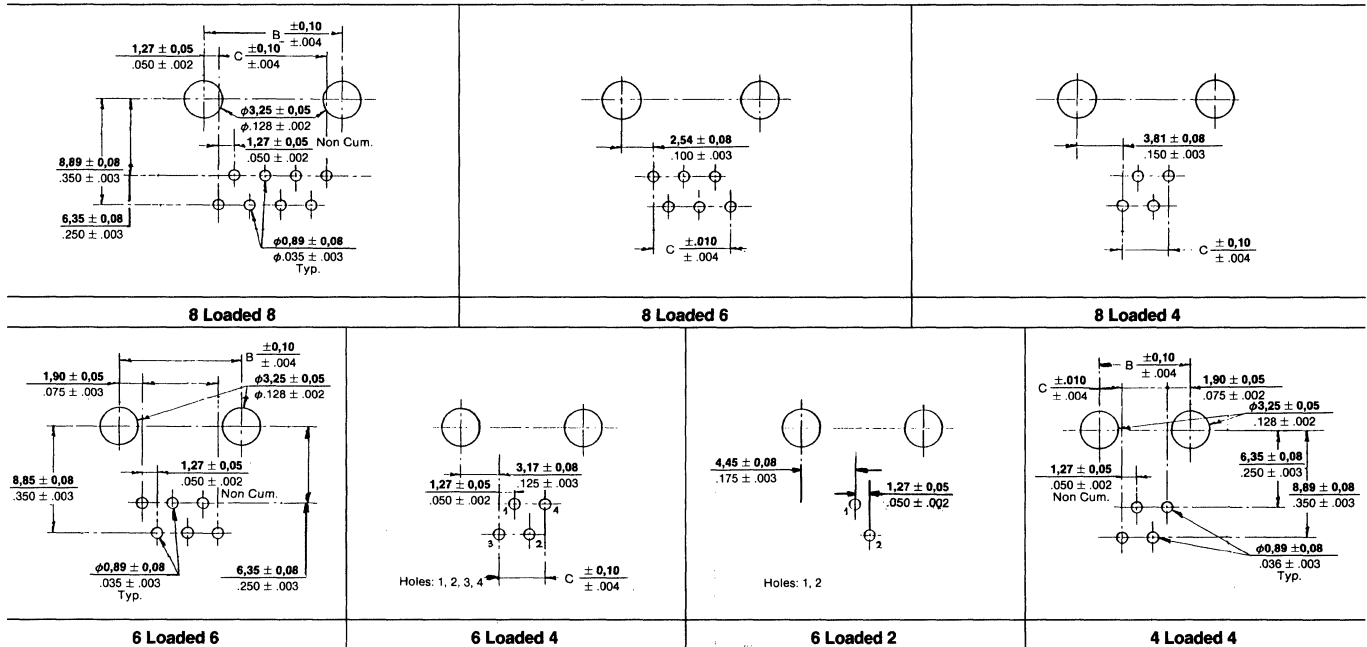


Low Profile Right Angle Telephone Jack



95009 Series

P.C.B. Hole Layout — Seen from Component Side



Ordering Information

CKTS.	LOADED CONTACTS	ORDER NO.	PLATINGS	KEY	DIM.							
					A	B	C	D				
4	4	95009-1441	1	No	11,18	.440	7,62	.300	3,81	.150	11,56	.455
4	4	95009-1442	1	Yes								
4	4	95009-2441	2	No								
4	4	95009-2442	2	Yes								
4	4	95009-3441	3	No	13,21	.520	10,16	.400	1,27	.050	13,59	.535
4	4	95009-3442	3	Yes								
6	2	95009-1621	1	No								
6	2	95009-1622	1	Yes								
6	2	95009-2621	2	No	13,21	.520	10,16	.400	3,81	.150	13,59	.535
6	2	95009-2622	2	Yes								
6	2	95009-3621	3	No								
6	2	95009-3622	3	Yes								
6	4	95009-1641	1	No	13,21	.520	10,16	.400	3,81	.150	13,59	.535
6	4	95009-1642	1	Yes								
6	4	95009-2641	2	No								
6	4	95009-2642	2	Yes								
6	4	95009-3641	3	No	13,21	.520	10,16	.400	6,35	.250	13,59	.535
6	4	95009-3642	3	Yes								
6	6	95009-1661	1	No								
6	6	95009-1662	1	Yes								
6	6	95009-2661	2	No	13,21	.520	10,16	.400	6,35	.250	13,59	.535
6	6	95009-2662	2	Yes								
6	6	95009-3661	3	No								
6	6	95009-3662	3	Yes								
8	4	95009-1841	1	No	15,24	.600	11,43	.450	3,81	.150	15,62	.615
8	4	95009-1842	1	Yes								
8	4	95009-2841	2	No								
8	4	95009-2842	2	Yes								
8	4	95009-3841	3	No	15,24	.600	11,43	.450	6,35	.250	15,62	.615
8	4	95009-3842	3	Yes								
8	6	95009-1861	1	No								
8	6	95009-1862	1	Yes								
8	6	95009-2861	2	No	15,24	.600	11,43	.450	8,89	.350	15,62	.615
8	6	95009-2862	2	Yes								
8	6	95009-3861	3	No								
8	6	95009-3862	3	Yes								
8	8	95009-1881	1	No	15,24	.600	11,43	.450	8,89	.350	15,62	.615
8	8	95009-1882	1	Yes								
8	8	95009-2881	2	No								
8	8	95009-2882	2	Yes								
8	8	95009-3881	3	No	15,24	.600	11,43	.450	8,89	.350	15,62	.615
8	8	95009-3882	3	Yes								

Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Right Angle P.C. Solder Tail Telephone Jacks



52018 Series

Features:

- Industry compatible
- Selective gold platings
- Fits FCC-68 specification
- Stamped contact

Specifications:

Housing: Glass filled polyester
94-VO

Material Contact: Phosphor
Bronze

Plating:

Plating 1: 0,1 μm /4 μinch minimum
gold over nickel 1,0 μm /40
 μinch minimum

Plating 2: 0,38 μm /15 μinch
minimum gold over nickel 1,0
 μm /40 μinch minimum

Plating 3: 0,76 μm /30 μinch
minimum gold over nickel 1,0
 μm /40 μinch minimum

Plating 4: 1,27 μm /50 μinch
minimum gold over nickel 1,0
 μm /40 μinch minimum

Solder area: Tin-Lead

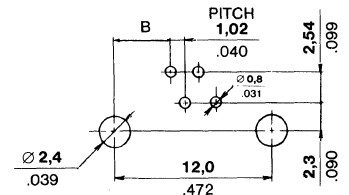
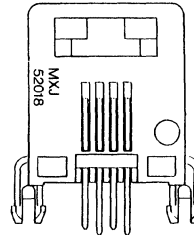
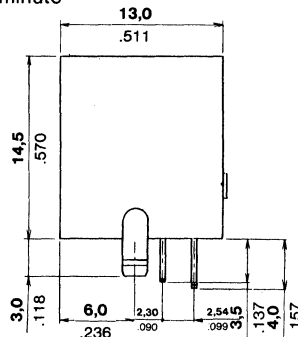
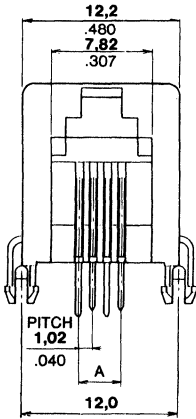
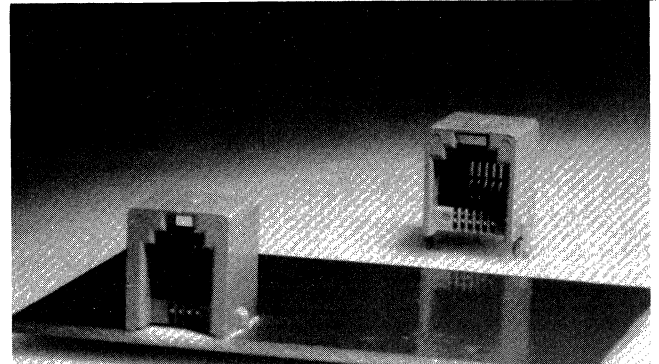
PC Board Thickness:
1,57mm/.062 inch

Current Rating: 1.2A

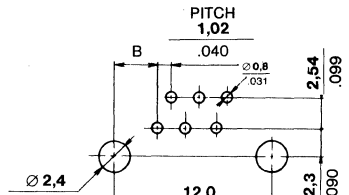
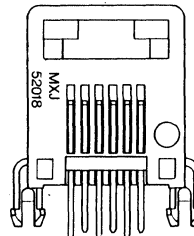
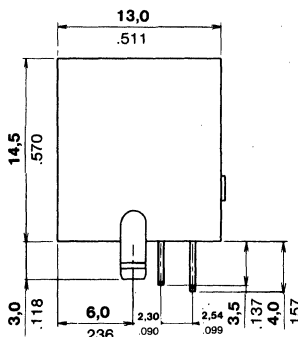
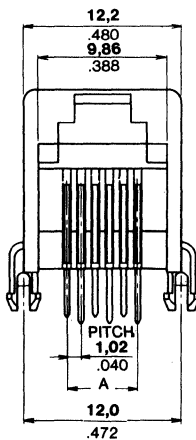
Contact Resistance: 20 milliohms
maximum, initial

Insulation Resistance: 10
megohms (DC 500V)

Dielectric Strength: 1000V AC for
1 minute



52018-4 Position
P.C.B. Hole Layout
Seen from Component Side



52018-6 Position
P.C.B. Hole Layout
Seen from Component Side

Note: All dimensions are nominal unless otherwise stated.

Ordering Information

CTS	LOADED CONTACTS	ORDER No.	PLATING No.	DIM. A	DIM. B	CTS	LOADED CONTACTS	ORDER No.	PLATING No.	DIM. A	DIM. B
4	2	52018-4215	1	1,02 0.040	5,49 0.216	6	2	52018-6235	3	1,02 0.040	5,49 0.216
4	2	↑ -4225	2	1,02 0.040	5,49 0.216	6	2	↑ -6245	4	1,02 0.040	5,49 0.216
4	2	↑ -4235	3	1,02 0.040	5,49 0.216	6	4	↑ -6415	1	3,05 0.120	4,48 0.176
4	2	↑ -4245	4	1,02 0.040	5,49 0.216	6	4	↑ -6425	2	3,05 0.120	4,48 0.176
4	4	↑ -4415	1	3,05 0.120	4,48 0.176	6	4	↑ -6435	3	3,05 0.120	4,48 0.176
4	4	↑ -4425	2	3,05 0.120	4,48 0.176	6	4	↑ -6445	4	3,05 0.120	4,48 0.176
4	4	↑ -4435	3	3,05 0.120	4,48 0.176	6	6	↑ -6615	1	5,08 0.200	3,46 0.136
4	4	↑ -4445	4	3,05 0.120	4,48 0.176	6	6	↑ -6625	2	5,08 0.200	3,46 0.136
6	2	↓ -6215	1	1,02 0.040	5,49 0.216	6	6	↓ -6635	3	5,08 0.200	3,46 0.136
6	2	52018-6225	2	1,02 0.040	5,49 0.216	6	6	52018-6645	4	5,08 0.200	3,46 0.136

Right Angle Modular Jacks With Metal Pegs



52065 Series

Features:

- Metal hold down pegs
- Meets FCC-68 specifications
- Insert molded
- Industry compatible

Specifications:

Housing: Glass filled polyester
94V-0

Material Contact: Phosphor
bronze

Plating:

Plating 1: 0,1 μm /4 μinch minimum
gold over nickel 1,0 μm /40
 μinch minimum

Plating 2: 0,38 μm /15 μinch
minimum gold over nickel 1,0
 μm /40 μinch minimum

Plating 3: 0,76 μm /30 μinch
minimum gold over nickel 1,0
 μm /40 μinch minimum

Plating 4: 1,27 μm /50 μinch
minimum gold over nickel 1,0
 μm /40 μinch minimum

Solder Area: Tin-Lead

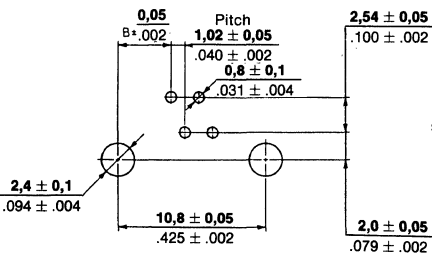
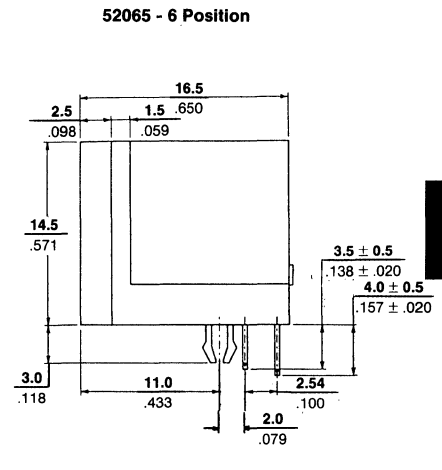
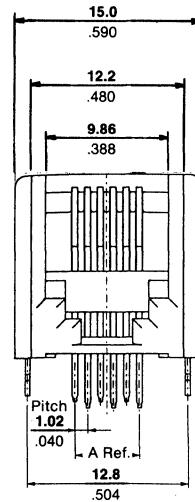
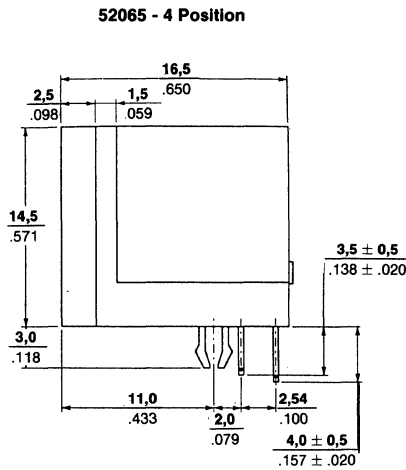
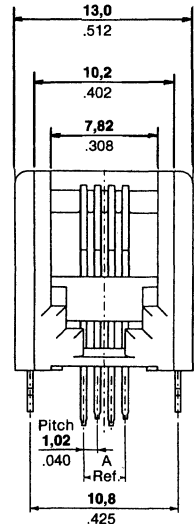
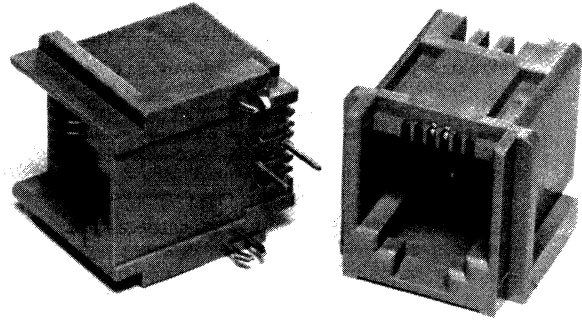
PC Board Thickness:
1,57 mm/.062 inch

Current Rating: 1.2A

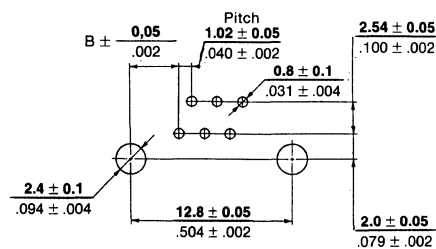
Contact Resistance: 20 milliohms
maximum, initial

Insulation Resistance: 1000
megohms (DC 500V)

Dielectric Strength: 1000V AC for
1 minute



P.C.B Hole Layout
seen from Component Side



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

CTS	LOADED CONTACTS	ORDER No.	PLATING No.	DIM. A	DIM. B	CTS	LOADED CONTACTS	ORDER No.	PLATING No.	DIM. A	DIM. B
4	2	52065-4215	1	1,02 0.040	4,89 0.192	6	2	52065-6235	3	1,02 0.040	5,89 0.232
4	2	↑ -4225	2	1,02 0.040	4,89 0.192	6	2	↑ -6245	4	1,02 0.040	5,89 0.232
4	2	-4235	3	1,02 0.040	4,89 0.192	6	4	↑ -6415	1	3,05 0.120	4,87 0.192
4	2	-4245	4	1,02 0.040	4,89 0.192	6	4	↑ -6425	2	3,05 0.120	4,87 0.192
4	4	-4415	1	3,05 0.120	3,87 0.152	6	4	↑ -6435	3	3,05 0.120	4,87 0.192
4	4	-4425	2	3,05 0.120	3,87 0.152	6	4	↑ -6445	4	3,05 0.120	4,87 0.192
4	4	-4435	3	3,05 0.120	3,87 0.152	6	6	↑ -6615	1	5,08 0.200	3,85 0.152
4	4	-4445	4	3,05 0.120	3,87 0.152	6	6	↑ -6625	2	5,08 0.200	3,85 0.152
6	2	↓ -6215	1	1,02 0.040	5,89 0.232	6	6	↓ -6635	3	5,08 0.200	3,85 0.152
6	2	52065-6225	2	1,02 0.040	5,89 0.232	6	6	52065-6645	4	5,08 0.200	3,85 0.152

Right Angle P.C. Solder Tail Telephone Jacks



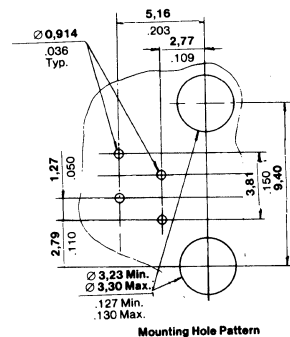
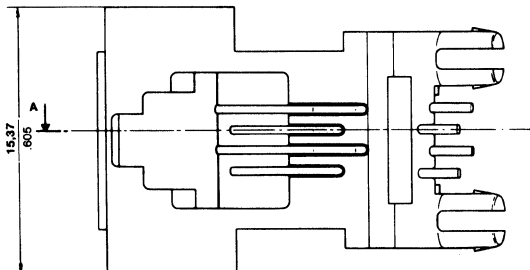
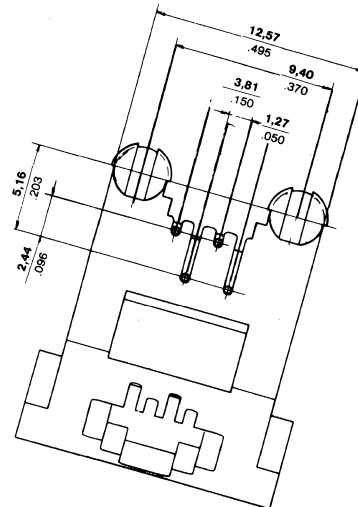
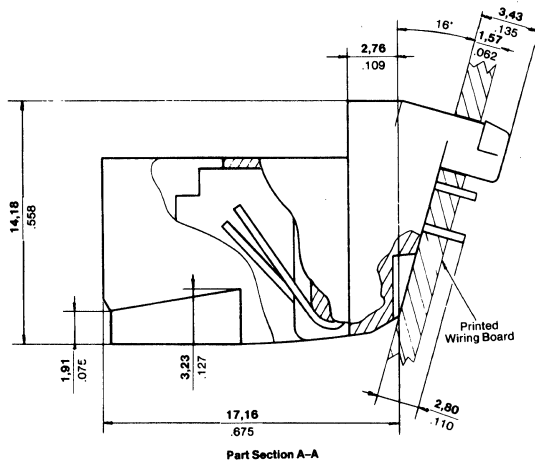
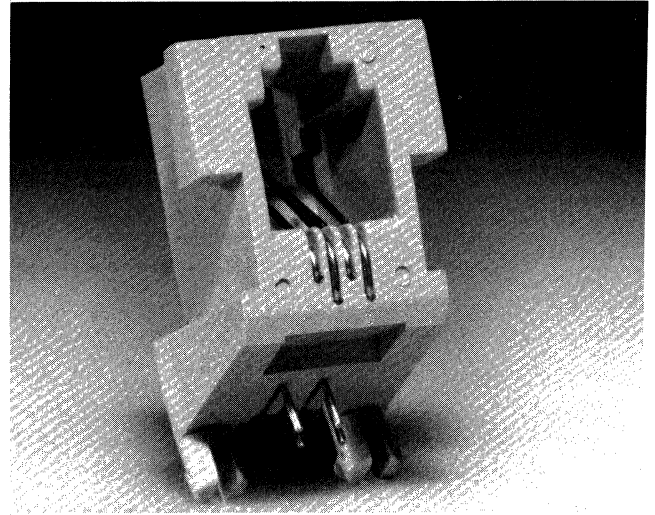
96700 Series

Features:

- Fits FCC-68 specifications
- For handset applications
- Round pin terminals
- For use with 1,57 mm/.062 inch PCBs

Specifications:

- Housing:** Glass filled polyester, light grey
- Contact Material:** Phosphor Bronze
- Plating:** 1,27 μ m/50 μ inch gold over 2,54 μ m/100 μ inch nickel. Other platings, contact factory
- Current Rating:** 1.2A
- Contact Resistance:** 20 milliohms max. initial
- Insulation Resistance:** 10 megohms (DC 500V)
- Dielectric Strength:** 1000V AC for 1 minute



Note: All dimensions are nominal unless otherwise stated.

Ordering Information

ORDER No.
96700-0001

British Telecom-Type Plugs



90074 Series

Features:

- 4 & 6 way
- Locking lance on right or left
- Insulation piercing contact method
- Terminates cables upon CW 1311 specification
- Selective gold plating

Specifications:

Housing: Unfilled polyester, white

Material Contact: Phosphor Bronze

Plating: 1,27 µm/50 µinch gold in contact area over 1,27 µm/50 µinch nickel

Insertion Force (latch inoperative): 4 way 10N maximum. 6 way 15N maximum

Withdrawal Force (unlatched): 4 way 10N maximum, 2N minimum. 6 way 15N maximum, 2N minimum

Voltage Rating: 200V DC

Current Rating: 250A DC per contact

Contact Resistance: 100 milliohms maximum (includes 75 mm cordage). 20 milliohms maximum rise after test

Insulation Resistance: 100 megohms minimum at 500V DC

Robustness of Termination: 50N (Newtons) minimum

Part No: NS/2237/123/D/600005

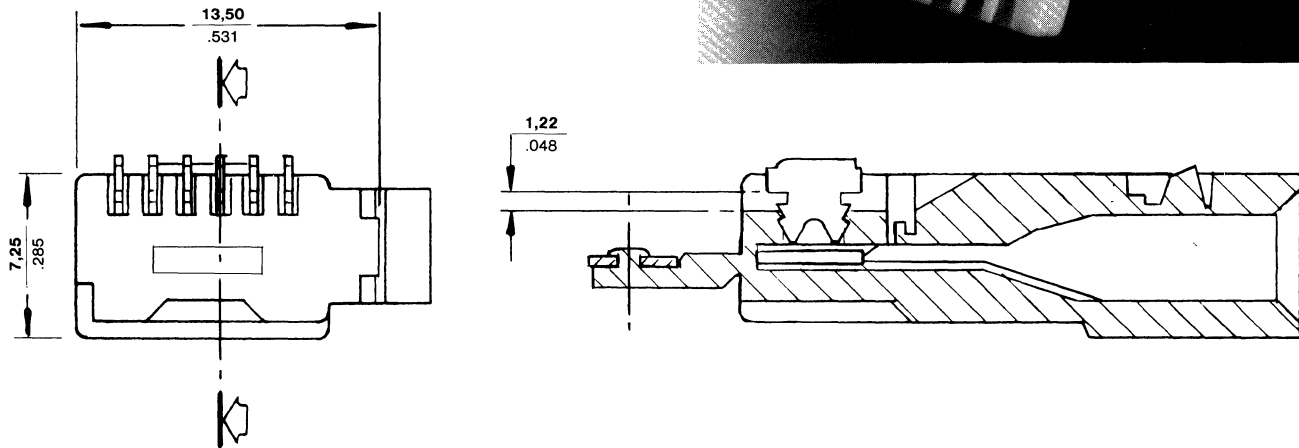
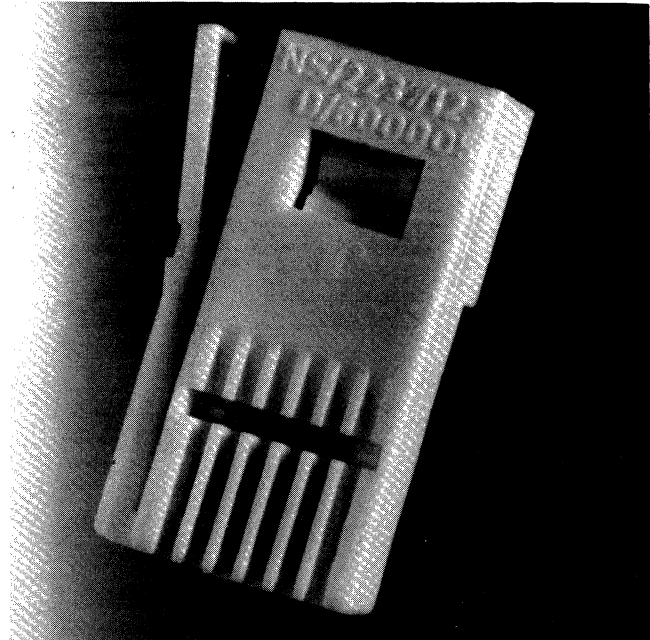
British Telecom applied to BT specifications

Mating Information (BT reference only):

431A and 631A mate with 601A jacks

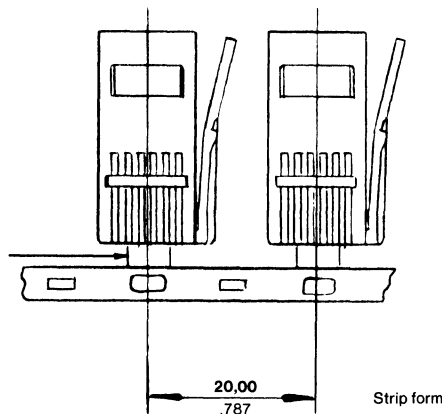
430A and 630A mate with 602A jacks

BT identification on letter 'g'



Left Hand Assembly shown

Carrying lug cut off on termination machine



Note: All dimensions are nominal unless otherwise stated.

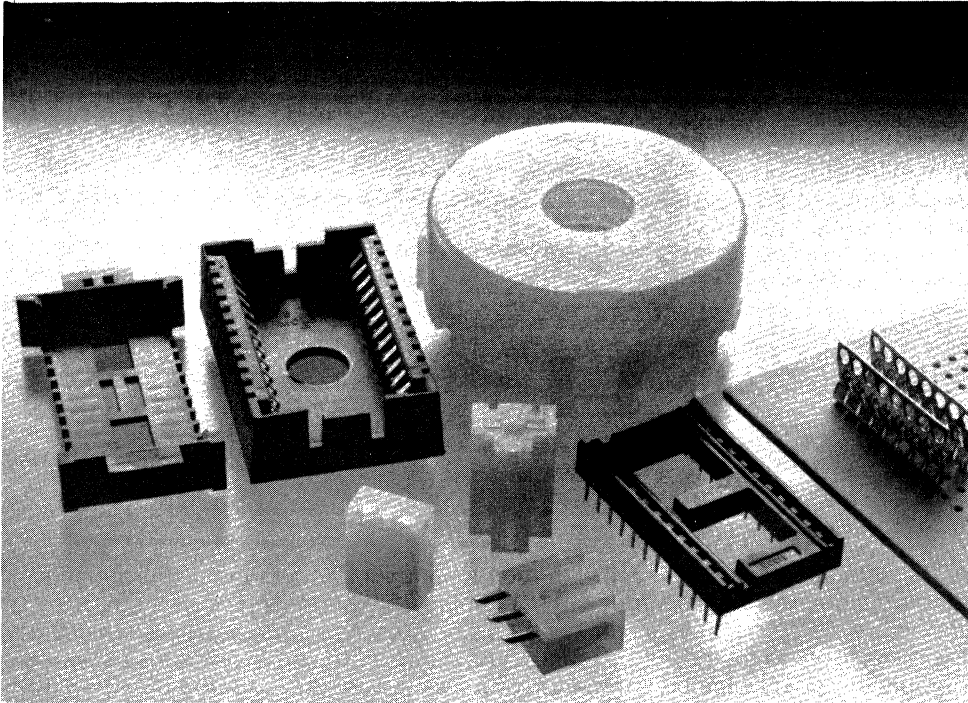
Ordering Information

LEFT HAND SIDE POLARISATION				RIGHT HAND SIDE POLARISATION			
BT TYPE	CTS	STRIP MOUNTED ORDER No.	LOOSE PIECE ORDER No.	BT TYPE	CTS	STRIP MOUNTED ORDER No.	LOOSE PIECE ORDER No.
430A	4	90074-0001	90074-0002	431A	4	90074-0005	90074-0006
630A	6	90074-0003	90074-0004	432A	4	↓ -0017	↓ -0018
—	—	—	—	631A	6	90074-0007	90074-0008



I

Contents



Transducer Sockets	2J-3J
Transistor Sockets - Crimp Type	4J
Transistor Sockets - Solder Tail	5J
I.C. Socket Terminals	6J
I.C. Sockets	7J-13J
SIMM Socket	14J

Transducer Sockets

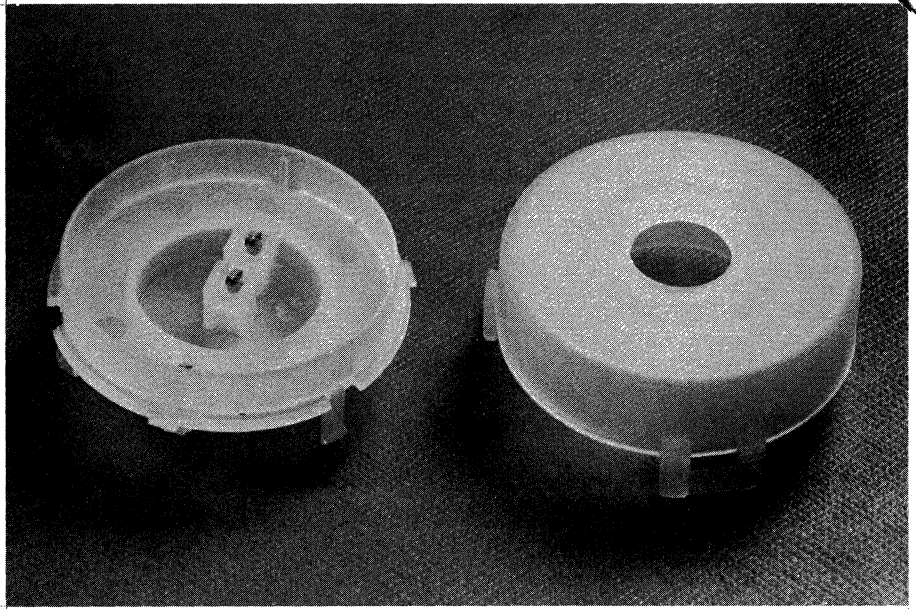


ATM7373 High Output

- 85dB @ 10 ft.
- 3.2 KHZ (nominal) with feedback
- Molded integral acoustic chambers
- Mounting hardware not needed
- Designed for wave soldering
- Housing material UL94-V2 or V-0
- UL component recognized S-2191

Applications:

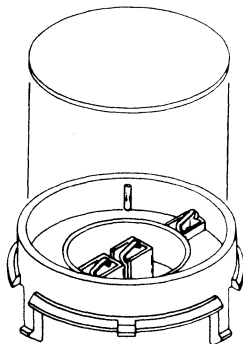
- Smoke alarms
- Gas alarms
- Intrusion alarms
- Industrial alarms
- Computer terminals
- Telephones



The Audio-tone Transducer Socket ATM7373 with the recommended transducer (Piezoelectric) is an acoustic device, engineered to provide high audio output with maximum efficiency. This socket has a Helmholtz resonating cavity and provides positive clamping pressure at the nodal diameter. Terminals are provided in the base for electrical connection from the transducer to the printed circuit board. No need to use R.T.V. adhesives or solder leads. This socket provides a simple low cost assembly for manufacturers of products requiring 85+dB @ 10 ft. audio alarm.

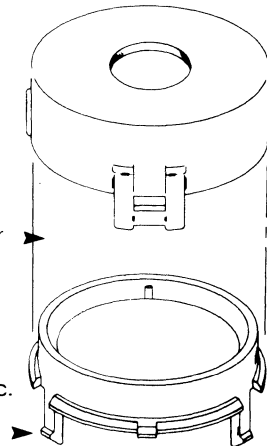
J

Suggested Method of Assembly:



STEP 1
Assemble Disk
To Base

STEP 2
Assemble Cover To Base
By Applying Equal Pressure
Simultaneously At The Cover
Locking Tabs. (3 Places)
Use Of Assembly Fixture
Is Suggested



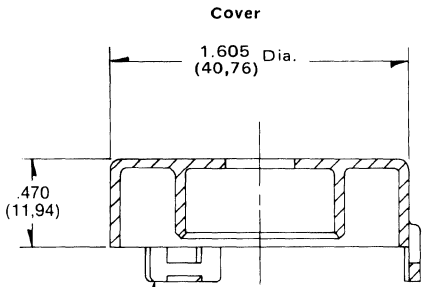
STEP 3
Snap completed assembly onto P.C.
Board before soldering

Transducer Sockets



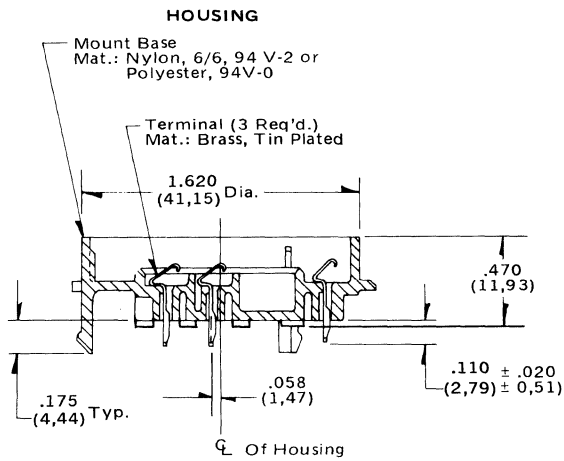
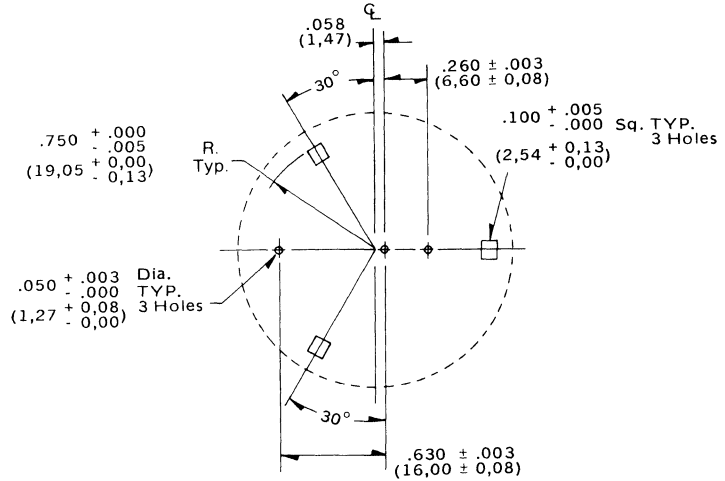
ATM7373

Dimensions:



Material: Nylon, 6/6, 94V-2 or Polyester, 94V-0

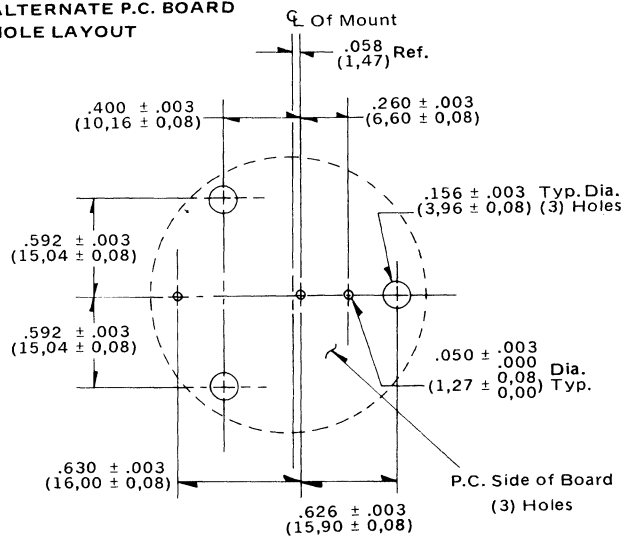
RECOMMENDED P.C. BOARD HOLE LAYOUT FOR 7373



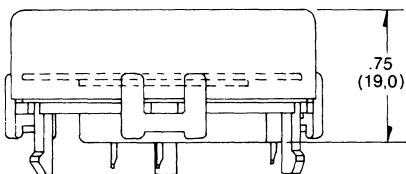
Mount Base
Mat.: Nylon, 6/6, 94 V-2 or Polyester, 94V-0

Terminal (3 Req'd.)
Mat.: Brass, Tin Plated

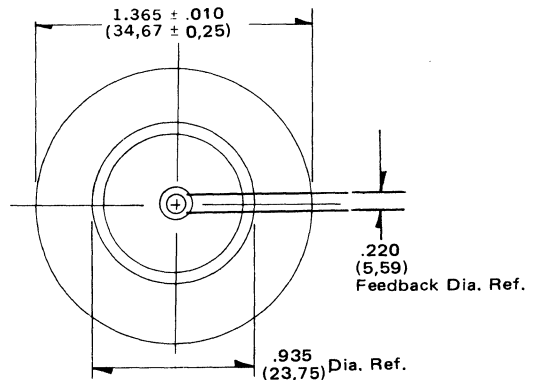
ALTERNATE P.C. BOARD HOLE LAYOUT



HOUSING ASS'Y.



inches
mm



Recommended Transducer

Ordering Information

Order No.	Description
• 15-24-4024	Nylon (94V-2)
15-25-0002	Polyester (94V-0)

• U.S. Standard Product, available through Molex franchised distributors.



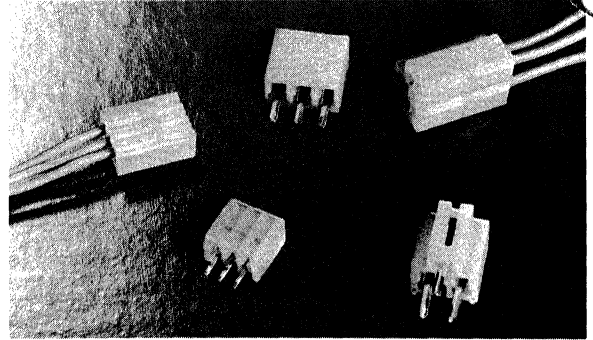
Transistor Sockets



2539 & 4025 Crimp Type

These sockets allow the use of transistors when a P.C. board is not set up to use a direct solder socket. The double cantilever terminal allows linear movement in the socket and maintains consistent contact reliability.

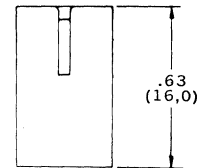
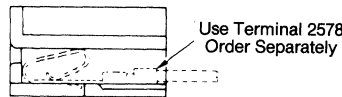
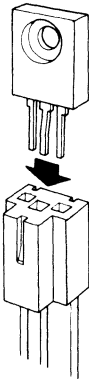
- 4025 Series .100" (2,54mm) centers in line
- 2539 Series .100" (2,54mm) centers staggered
- Uses crimp type double cantilever terminals
- Tin or gold plated brass terminals



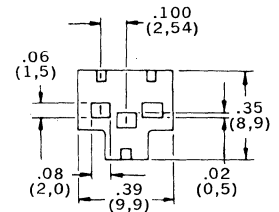
2539 Series

.100" (2,54mm) centers staggered row

Dimensions/Ordering Information:



inches
mm



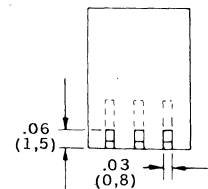
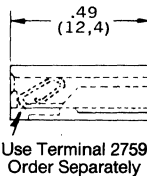
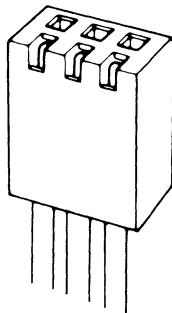
Ordering Information

Eng. No.	Order No.
2539	10-01-2031

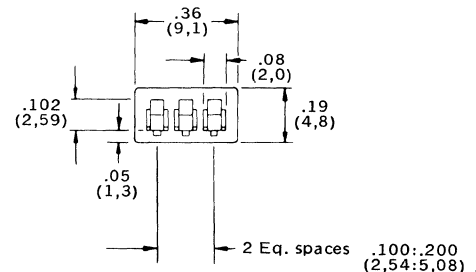
4025 Series

.100" (2,54mm) centers in-line

Dimensions/Ordering Information:



inches
mm



Ordering Information

Eng. No.	Order No.
4025	10-17-2032

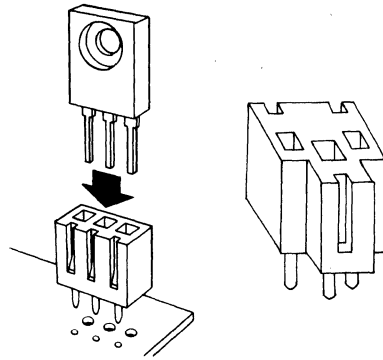
Transistor Sockets



2512, 4038 & 2169 Solder-Tail Transistor Sockets

These 3 circuit transistor sockets are preassembled and ready for soldering to a P.C. board. The proven double cantilever design eliminates circuit failure due to thermal expansion and/or mechanical tolerances. Linear movement of the transistor leads in the socket does not affect contact reliability.

- 4038 and 2512 on .100" (2,54mm) centers
- 2169 on .156" (3,96mm) centers
- 2512 features P.C. solder tails
- Tin or gold plated brass
- 94V-2 rated nylon

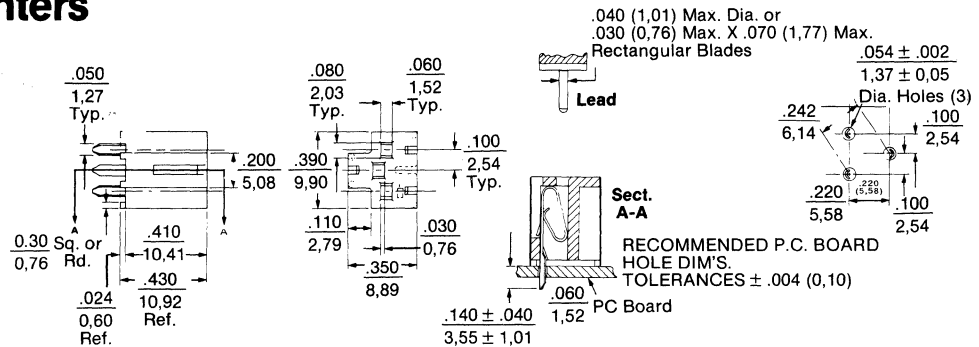


2512 Series .100" (2,54mm) centers

Dimensions/Ordering Information:

Eng. No.	Tin-Plated Brass Order No.
2512-3	09-48-3031
*2512-3-5	09-48-3032

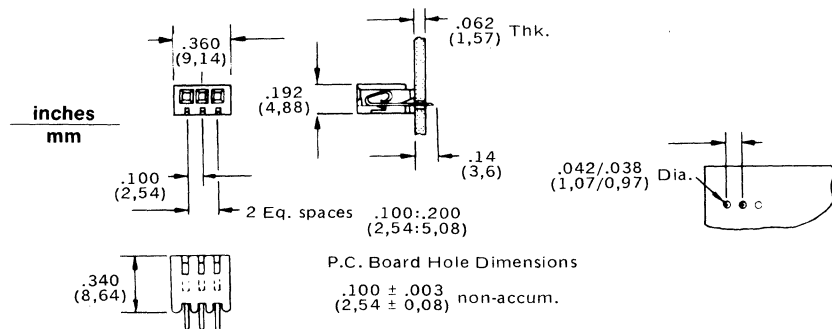
*Terminal design different to reduce mating force; consult factory for drawing.



4038 Series .100" (2,54mm) centers

Dimensions/Ordering Information:

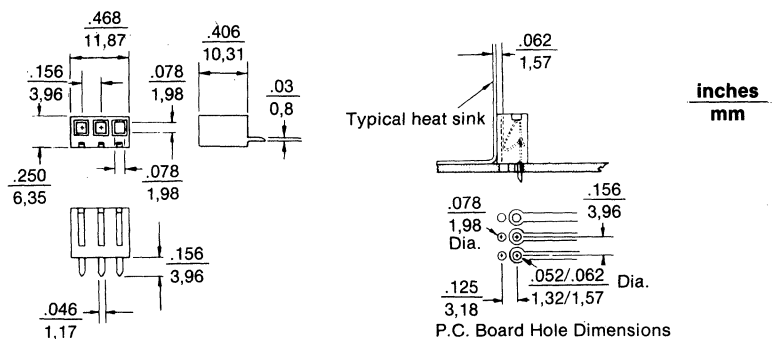
Eng. No.	Tin-Plated Brass Order No.
4038	10-18-2031



2169 Series .156" (3,96mm) centers with heat sink slots

Dimensions/Ordering Information:

Eng. No.	Tin-Plated Brass Order No.	Gold-Plated Brass Order No.
2169	09-52-3030	09-62-3030

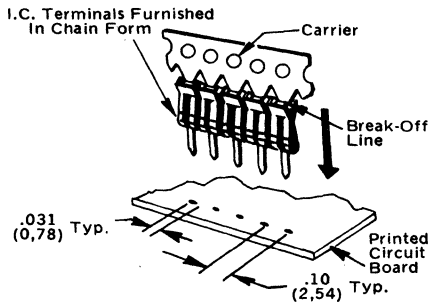
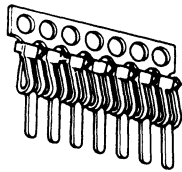
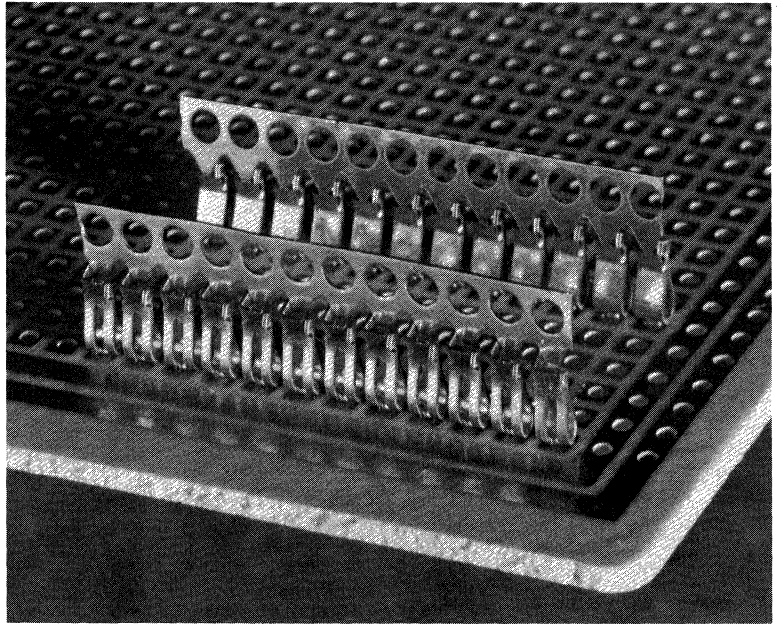


IC Socket Terminals



1938-4 IC Socket Terminals

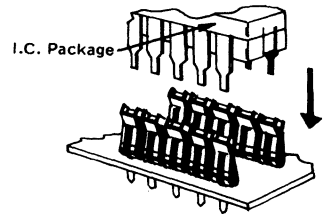
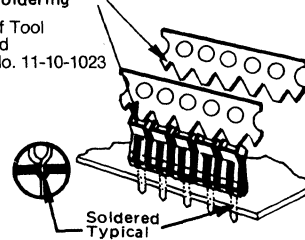
- Intended for applications where a full ladder style socket is not needed
- Available in chain form or pre-cut strips
- Phos/bronze or brass material
- Tin plate finish



Carrier Broken Off After Soldering

Breakoff Tool Required

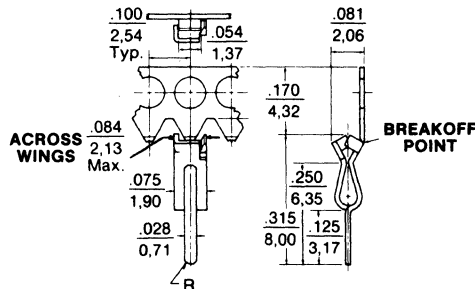
Order No. 11-10-1023



1938-4 Series

.100" (2,54) centers

Dimensions



Ordering Information 1938-4

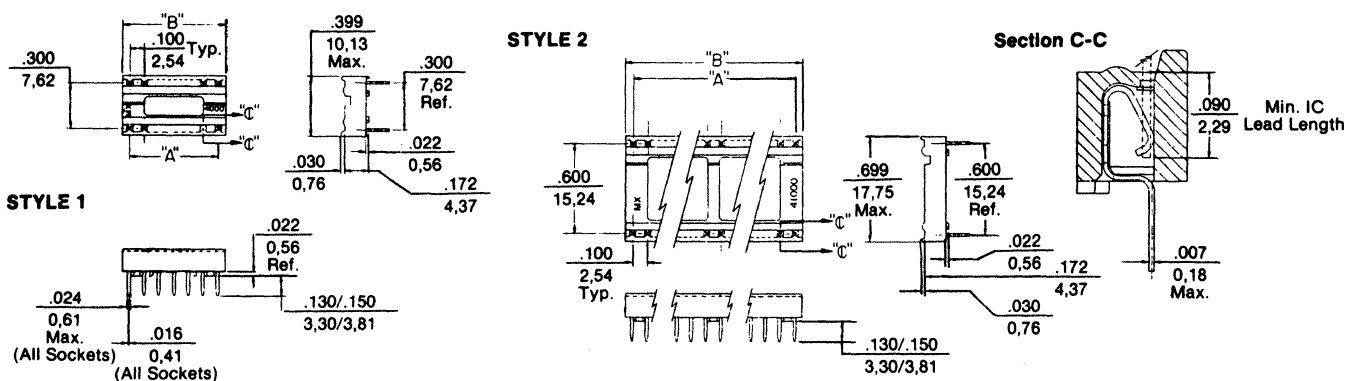
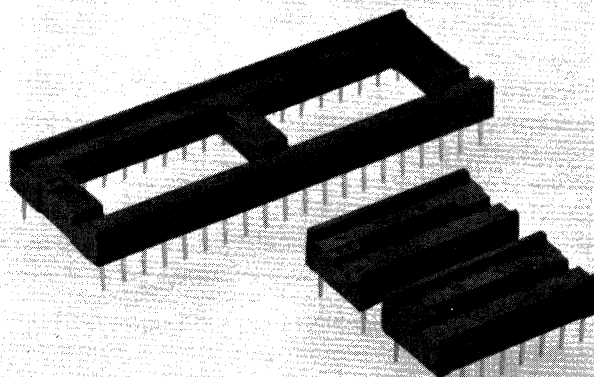
PRE-TINNED BRASS				CHAIN FORM		
	Order No.		Order No.	Material	Finish	Order No.
Configuration chain form on reels	05-30-0001	8 per pre-cut strip	05-30-0008	70/30 brass	Tin plate	05-30-0001
2 per pre-cut strip	05-30-0002	9 per pre-cut strip	05-30-0009	Phos/bronze	Tin plate	05-33-0001
3 per pre-cut strip	05-30-0003	20 per pre-cut strip	05-30-0020			
7 per pre-cut strip	05-30-0007	25 per pre-cut strip	05-30-0025			

Dual-In-Line IC Socket



41000 Series

- Designed to house and protect fragile IC leads
- Compatible with major brand auto-insertion machines
- Meets performance standards of MIL 83734-D and EIA Standards RS-415-A Class II
- Packaged in plastic tubes oriented in one direction
- Housing sidewalls guide and orient IC leads during insertion
- Visible polarization
- Takes variety of leads
- Stackable on .100" (2,54mm) centers end-to-end
- Standoffs eliminate capillary ladder condition
- Tails exposed on component side of PC board to simplify cleaning operation



Specifications

Material:

Housing - Glass filled polyester UL rated 94V-0, color - black

Terminal - Phosphor bronze

Finish - Tin/lead .0002" (0,005mm) min. thick

Optional Finish - Tin .000035" (0,00089) min. over copper flash

Mechanical:

Insertion Forces - 12 oz. (340,2 grams) using a .015" (0,38mm) thick x .025" (0,64mm) wide probe

Withdrawal Forces - 1.0 oz. (28,4 grams) using an .008" (0,20mm) thick x .015" (0,38mm) wide probe. [After 25 cycles with a .015" (0,38mm) thick by .025" (0,64mm) wide probe]

Terminal/Housing Retention Force - Terminal withstands a one pound (0,45 kg.) min. axial push/pull out force applied at base of terminal

Electrical:

Insulation Resistance - Greater than 500K megohms

Contact Resistance - 20 milliohms

Rated Voltage - 250 volts

Rated Current - 1 AMP max.

Dielectric Strength - 1500 volts R.M.S.

Capacitance Between Terminals - 500 pfd max.

Environmental:

Thermal Shock - (Per MIL-STD-202F, Method 107D)

Physical Shock - (Per MIL-STD-202E, Method 213B, Condition A)

Vibration - (Per MIL-STD-202E, Method 201A)

Humidity - (Per MIL-STD-202E, Method 106)

Salt Spray - (Per MIL-STD-202F, Method 101D)

Cyclic Humidity - (Per MIL-STD-202F, Method 106E Step 7A)

Notes:

1. Accept IC Leads .008" (0,20mm)/.017" (0,43mm) thick by .014" (0,36mm)/.024" (0,61mm) wide.

2. Suggested PC board hole dia. .028" (0,71mm) / .043" (1,09mm)

3. Min. IC lead length .090" (2,29mm) (See Section C-C)

Ordering Information

Tin/Lead Order Number	Tin Order Number	Circuits	Dim. A	Dim. B (Max.)	Socket Style	Tin/Lead Order Number	Tin Order Number	Circuits	Dim. A	Dim. B (Max.)	Socket Style
A-41000-0830	A-41000-0810	8	.300 7,62	.399 10,13	1	A-41000-2030	• A-41000-2010	20	.900 22,86	.999 25,37	1
A-41000-1430	• A-41000-1410	14	.600 15,24	.699 17,75	1	A-41000-2430	• A-41000-2410	24	1.100 27,94	1.199 30,45	2
A-41000-1630	• A-41000-1610	16	.700 17,78	.799 20,29	1	A-41000-2830	• A-41000-2810	28	1.300 33,02	1.399 35,53	2
A-41000-1830	• A-41000-1810	18	.800 20,32	.899 22,83	1	A-41000-4300	• A-41000-4010	40	1.900 48,26	1.999 50,77	2

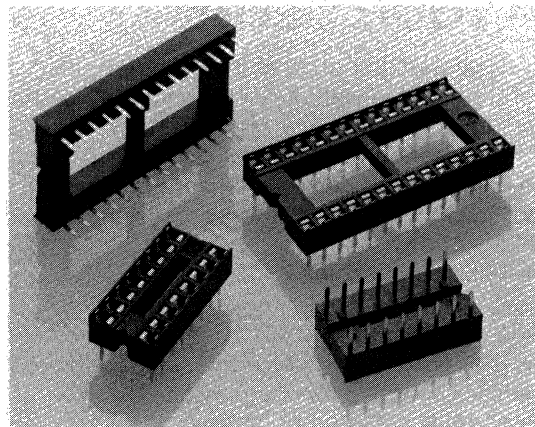
• U.S. Standard Product, available through Molex franchised distributors.

Dual-In-Line IC Socket



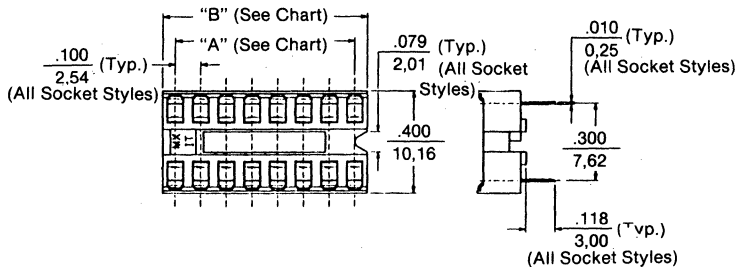
42000 Series

- Easy I.C. insertion - large target area. Takes a variety of leads
- Socket, stackable side-by-side and end-to-end on .100" (2,54mm) grid spacing
- Visible polarization
- Low profile
- Sockets are packaged in plastic tubes oriented in one direction
- Closed-bottom sockets have a .020" (0,51mm) standoff at base to facilitate post-soldering board cleaning operations.
- Two points of contact. High reliability connection with low insertion force
- Compatible with major brand auto-insertion machines



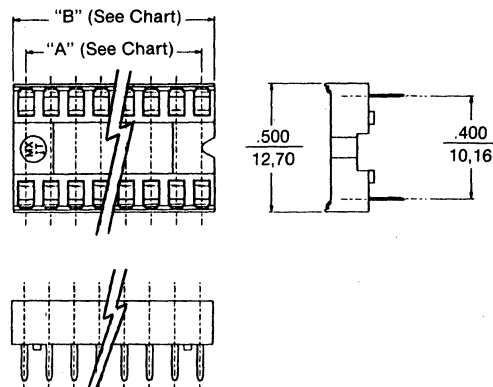
STYLE 1

.300" (7,62mm) x .100" (2,54mm)



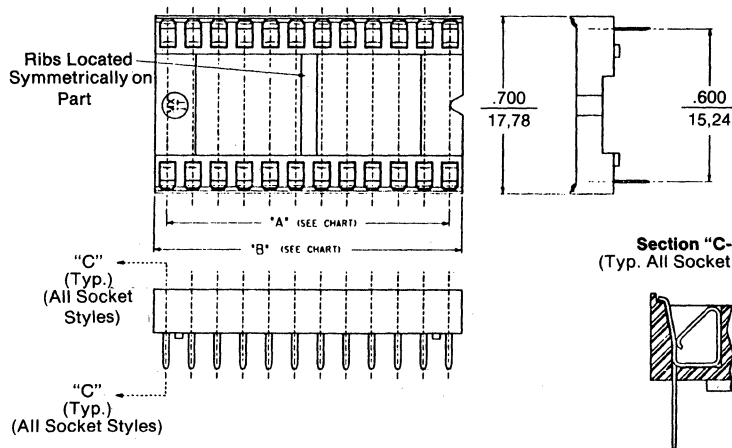
STYLE 2

.400" (10,16mm) x .100" (2,54mm)
 Available in 22 circuit version only



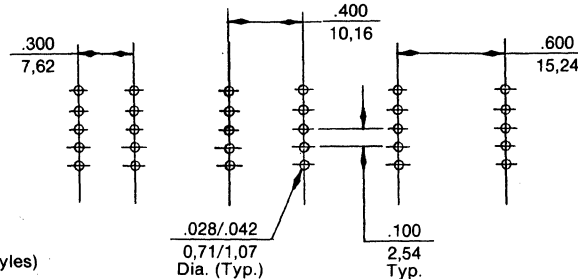
STYLE 3

.600" (15,24mm) x .100" (2,54mm)



Recommended PC Board Specification

Board Thickness .062 ± .008



Dual-In-Line IC Socket



42000 Series

Specifications

Materials:

Housing — 94V-0 glass filled polyester, black

Terminal — Phosphor bronze

Plating — Pre-Tinned, .0002" (0,005mm)

Mechanical:

Insertion Forces — Maximum insertion force per terminal is 296 grams using a .013" (0,33mm) thick x .020" (0,51 mm) wide probe

Withdrawal Forces — After 2 cycles with a .013" (0,33mm) thick x .020" (0,51mm) wide probe, the minimum withdrawal force must be 28 grams using a .008" (0,20mm) thick x .015" (0,38mm) wide probe.

Contact Retention in Housing — 400 gram min.

Electrical:

Insulation Resistance — Greater than 500k megohms

Contact Resistance — 15 milliohms max. (initial)
30 milliohms max. (after test)

Rated Voltage — 250 volts

Rated Current — 1 amp max./circuit at 20° C.

Dielectric Strength — Withstands 1000 volts R.M.S. applied between adjacent terminals for (60) seconds without breakdown

Environmental:

Operating Temperature — -40°C +105°C

Dimensions

Circuits	Dim. A	Dim. B (Max.)	Circuits	Dim. A	Dim. B (Max.)	Circuits	Dim. A	Dim. B (Max.)
6	.200 5,08	.300 7,62	16	.700 17,78	.800 20,32	24	1.100 27,94	1.200 30,48
8	.300 7,62	.400 10,16	18	.800 20,32	.900 22,86	28	1.300 33,02	1.400 35,56
10	.400 10,16	.500 12,70	20	.900 22,86	1.000 25,40	40	1.900 48,26	2.000 50,80
14	.600 15,24	.700 17,78	22	1.000 25,40	1.100 27,94			

Ordering Information

Circuits	Style	Order No.	Circuits	Style	Order No.	Circuits	Style	Order No.
6	1	A-42000-0610	16	1	A-42000-1610	24	3	A-42000-2430
8	1	A-42000-0810	18	1	A-42000-1810	28	3	A-42000-2830
10	1	A-42000-1010	20	1	A-42000-2010	40	3	A-42000-4030
14	1	A-42000-1410	22	2	A-42000-2220			



Zig-Zag In-Line Package IC Socket



90510 Series For ZIP IC Modules

- Uses half the board space of conventional DIP sockets
- Side-to-side and end-to-end stackable
- Dual beam contacts
- Large target areas enable easy IC insertion
- Two sizes available: 16 position for 256K devices; 20 position for 1 megabyte chips
- Packaged in tubes

Specifications

Housing:
Glass filled polyester,
UL 94V-0, black

Contact:
Phosphor bronze

Plating:
Pre-tinned

Recommended PCB Thickness:
.062" (1,57mm)

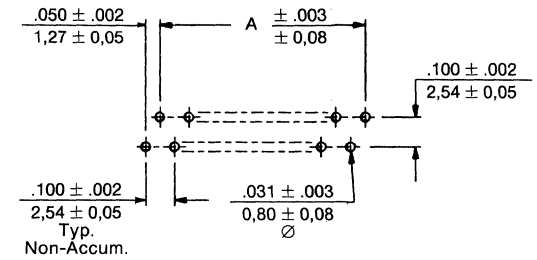
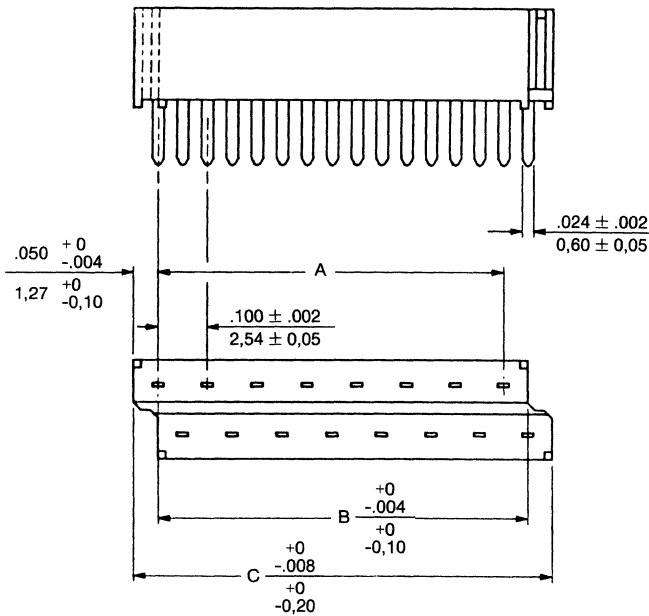
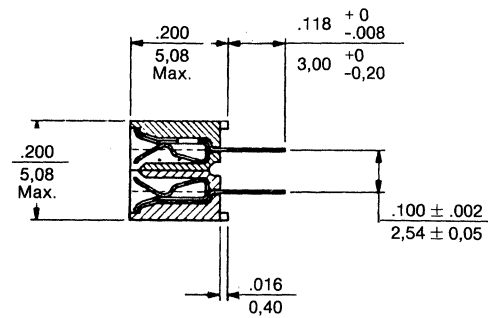
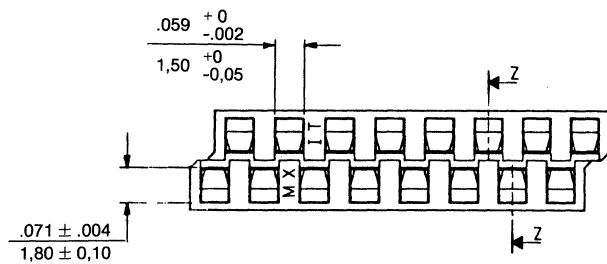
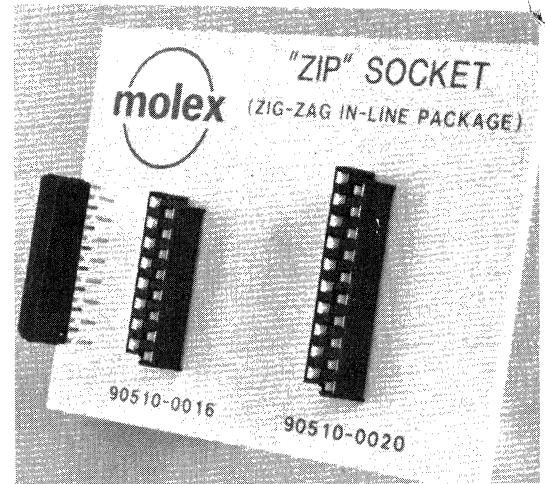
Voltage Rating:
250 V ac

Current Rating:
1 Amp max./circuit

Insulation Resistance:
1000 Megohms min.

Contact Resistance:
15 milliohms initial

Dielectric Strength:
Withstands 750 V ac



**Recommended PCB Layout
Viewed from Component Side**

Dimensions and Ordering Information

Circuit Size	Order No.	Dim. A	Dim. B	Dim. C
16	90510-0016	.700 17,78	.750 19,05	.850 21,59
20	90510-0020	.900 22,86	.950 24,13	1.050 26,67

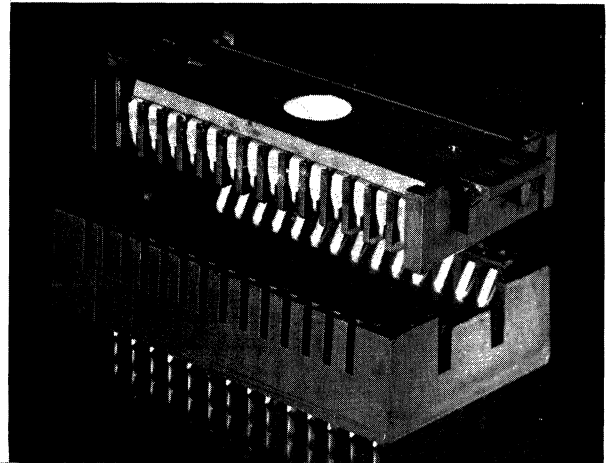
Modular IC Socket System



78804/5/7

"User Friendly" Socket & Carrier

- Cost effective method for interchanging IC devices by non-technical personnel
- Prevents damage to IC device thru a fully shrouded carrier
- Pull tabs for fast and easy insertion/withdrawal
- Polarizing keys prevent misassembly of carrier to socket
- Socket contacts solder to a .062" (1,57mm) thick PC board
- For standard .100" x .600" (2,54 x 15,24mm) PC hole patterns
- Recommended .040" (1,02mm) dia. PC board hole
- Double cantilever terminal
- Low profile, .410" (10,41mm) high



The 7880X is useful wherever field replacement, updating, or reprogramming is required of microprocessors, ROM's, PROM's, E-PROMS.

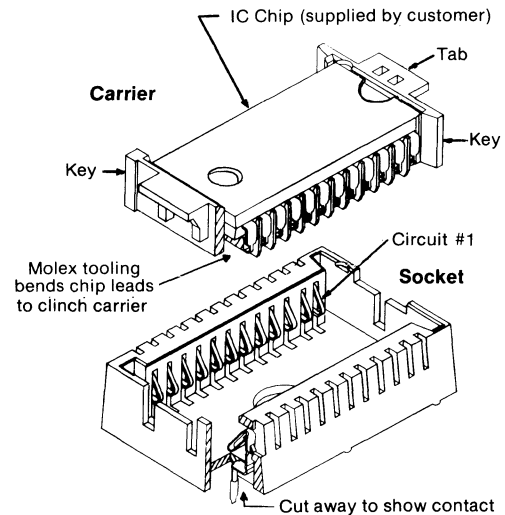
Applications:

- | | |
|--|---------------------------------|
| Language translators | Process and industrial controls |
| Instrumentation | Electronic games |
| Telecommunications | Automotive |
| Business machines | Vending machines |
| Electronic printers/Computer equipment | |
| Medical instrumentation | |

Specifications:

For use with 24, 28, and 32 pin lead frame IC devices on .100" x .600" grid.

Materials - Socket, Carrier: Glass filled polyester 94V-0
 Terminal: Beryllium Copper
 Plating: .000200 min. tin/lead in contact area
 .000075 min. tin/lead in PC tail area
 over .000050 min. nickel overall



Terminal Retention

in Socket - 1 lb. per circuit min.

Carrier Insertion

Withdrawal Forces - Insertion: 68-204 grams per circuit*
 Withdrawal: 68-250 grams per circuit

Max. Mating Cycles - Tin: 5 cycles*

*Dependent upon terminal/IC device interface configuration and plating - such as plating type, composition and quality.

Ordering Information

Sockets, Black			Carriers, Black		
Eng. No.	Size	Tin	Eng. No.	Size	Glass Filled Polyester
78804	24	15-29-9242	78802	24	50-39-5248
78805	28	15-29-9282	78802	28	50-39-5288
78807	32	15-41-3329	78802	32	50-57-5283

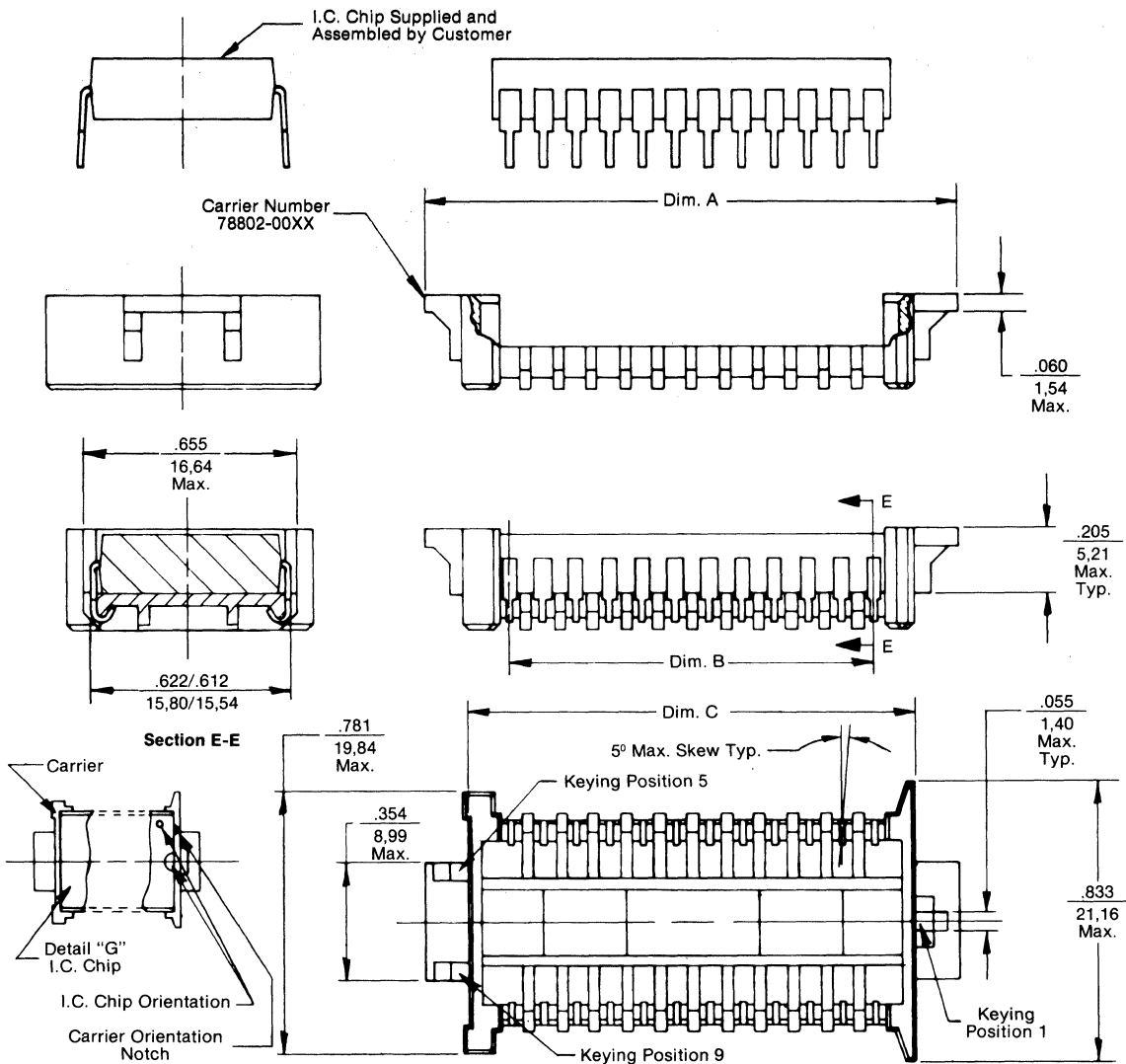


IC Socket System



78804/5/7

Carrier Dimensions



J

Application Tooling:

AM 60161	Manually operated bench tool. Crimps two sides of chip to carrier at once.
AM 60181	Semi-automatic assembly machine. Crimps two sides of chip to carrier at once.

NOTE: Carrier dimensions reflect Molex approved standards for IC packages using standard lead frame construction. Consult factory for socket system using side brazed IC version.

Refer to Application Tooling Section of this catalog for further information. Customer IC packages required setup of tooling by Molex.

Dimensions

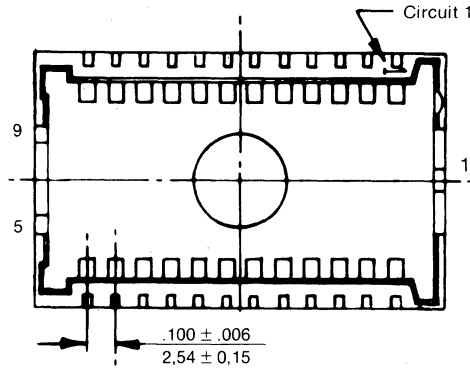
Circuits	inches			Circuits	inches		
	Dim. A	Dim. B	Dim. C		Dim. A	Dim. B	Dim. C
24	1.637	1.100	1.367	32	2.037	1.500	1.767
	41,58	27,95	34,72		51,74	38,10	44,88
28	1.837	1.300	1.567				
	46,66	33,02	39,80				

IC Socket System

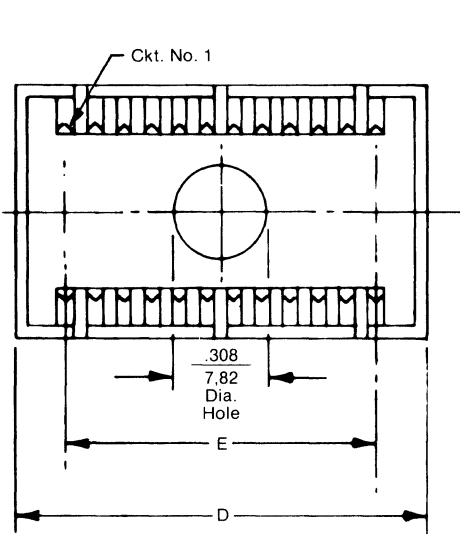


78804/5/7

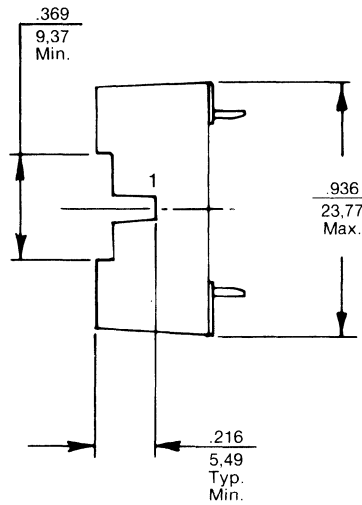
Socket Dimensions



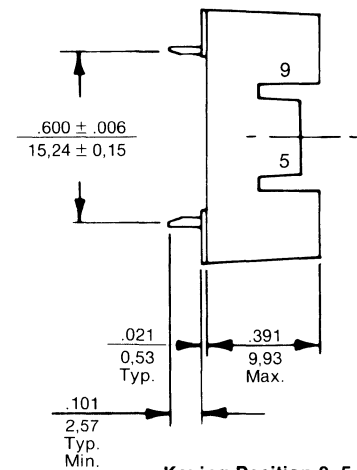
Top View



Bottom View



Keying Position 1

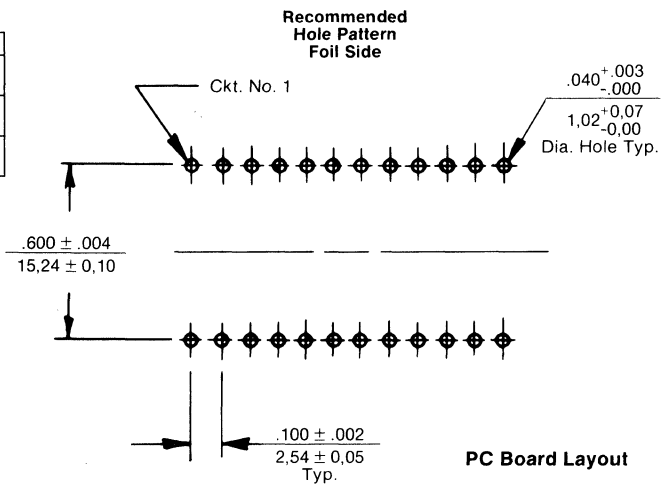


Keying Position 9, 5

Dimensions - Socket

Circuits	Dim. D (Max.)	Dim. E (Min.)
24	1,465 37,21	1,100 \pm .006 27,94 \pm 0,15
28	1,665 42,30	1,300 \pm .006 33,02 \pm 0,15
32	1,860 42,74	1,500 \pm .006 38,16 \pm 0,15

NOTE: Dimensions given across centerline are symmetrical about those centerlines within half the total tolerance.



PC Board Layout



SIMM* Socket



*Single In-Line Memory Module

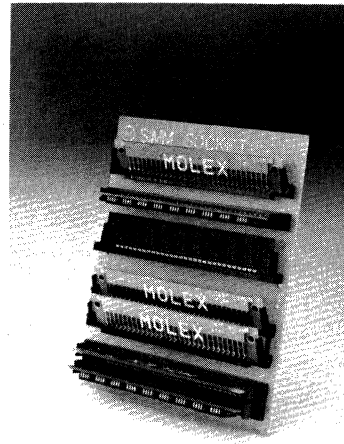
788XX Series

Molex's single in-line memory module socket serves as the connector portion of a high-density board-to-board packaging system.

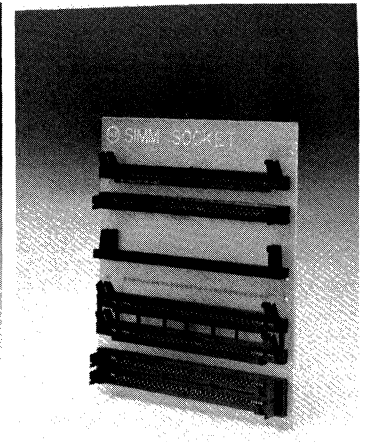
Its name implies it is a socket. It is, in fact, an edge connector which accommodates baby boards with SIP modules attached.

See this product in Section F, this catalog.

The SIMM Socket appears on pages 2F-6F of this catalog.



Five styles of SIMM Sockets inserted into P.C. Board.



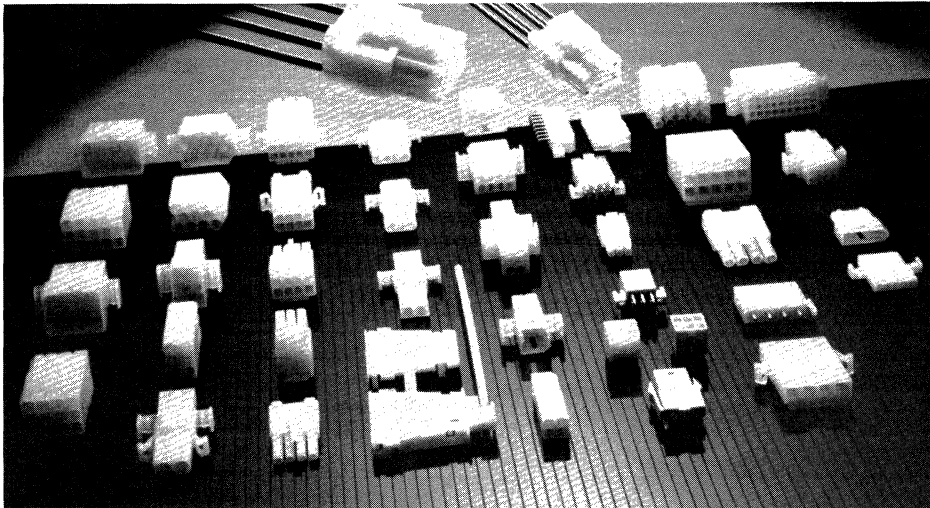
SIMM Sockets with customer-supplied baby boards inserted.

J

Pin and Socket Connectors and High Current Components



Contents



Pin and Socket Selection Guide 2K-3K

Mini-Fit, Jr. Connector Systems

Wire-to-Wire, Board Mount 4K-5K

.093" (2,36mm) Diameter

Power Connector Housings 6K-8K
Terminals for .093" Dia. Housings 9K-10K

.062" (1,57mm) Diameter

Power Connector Housings 11K-13K
Terminals for .062" Dia. Housings 14K

.125" (3,18mm) Diameter

High Current Power Connector Housings 15K
.125" Dia. Terminals 16K

Pin and Socket Wafers

Wafers and Terminals, 3099 and 1840 Series 17K-18K

Miscellaneous Special Purpose

Claspcon Wire-to-Board Crimp Terminal Sockets 19K
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Disk Drive Power Connection Systems 22K-26K
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Industry Standard Power Supply Connector 28K
A.C. Receptacle 29K
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Ceramic and Phenolic Range Receptacles 33K
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Terminals for Multi-Contact Connector Housings 35K-40K
Push-On Terminal and Housing for High Current Applications 41K-42K
Qik Konnect-Female Receptacles, Tabs, Qik Snaps 43K-58K



Pin and Socket Connectors

Choosing the right power connector

The right power connector will assure the safety and integrity of your electrical and electronic products. Molex's broad line of power connectors allows you the design flexibility to choose **the right connector**. Is your decision driven by the downsizing of your products or the need to add capabilities? Do you require a smaller connector that can carry more current, or a larger connector that can handle heavier gauge wire? Do you want a greater selection of printed circuit board mounted connectors? Molex is your source for the right power connector.

This cross reference was developed to make your selection easier. To assure you the highest performance in your application consider first:

Current Rating (Current Density)
Connector Size (Circuit Density)
Engagement Force

Wire Size
Configuration and Circuit Size
Operating Voltage

Reference Chart

	STANDARD .062	5025 SERIES	MINI-FIT JR.	STANDARD .093	1991 SERIES	3191 SERIES	STANDARD .125"
Current Density¹⁰ amps/ckt. at smallest ckt. size at largest ckt. size	5 4	5 5	9 6	12 ⁶ 7.5	11 ⁶ 6	12 ⁶ 6	20 12
Circuit Density ckts/in ²	31-35	15-22	25-31	9-18	16-15	11-13	11-14
Operating Voltage - Maximum	250	600	250	250/600 ³	600	600	250
Housing Lock Type Yes - Positive Lock No - Passive Lock (Detent)	36 ckt. only Yes	Yes No	Yes No	2, 3, 4, 5 ckt. only ³ Yes	Yes No	Yes No	Yes ⁴ Yes ⁴
Wire-To-Wire	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Header Straight Right Angle	Yes ^{8,9} No	No No	Yes Yes	Yes ^{1,9} No	Yes ⁹ No	Yes ^{2,9} Yes	No No
Panel Mount (Mounting Ears) Plug Receptacle	Yes Yes	Yes No	Yes No	Yes Yes	Yes Yes	Yes No	Yes Yes
Connector Engaging Force (lbs./ckt.)	2.3	2.3	1.54	3.5 ⁵	3.5 ⁵	3.5 ⁵	5.75 ¹¹
Connector Disengage Force (lbs./ckt.)	0.8	0.8	0.11	2.75	2.75	2.75	3.4 ¹¹
Fully Isolated Contacts	No	Yes	Yes	No	No	Yes	No
Agencies UL Recognized CSA Certified VDE Listed/TUV Licensed	Yes Yes No	Yes Yes TUV	Yes Yes TUV	Yes Yes No	Yes Yes TUV Applied For	Yes Yes TUV	Yes Yes No
Circuit Size	1, 2, 3, 4, 5, 6, 9, 12, 15, 24, 36	2, 3, 4, 6, 9, 12, 15	2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	1, 2, 3, 4, 5, 6, 9, 12, 15	3, 4, 6, 9, 12, 15	1, 2, 3, 4, 6, 9, 12, 15	2, 6, 12
Wire Size - AWG	18-24, 24-30	18-24, 24-30	16, 18-24, 22-28	14-20, 18-22, 22-24, 24-30	14-20, 18-22, 22-24, 24-30	14-20, 18-22, 22-24, 24-30	10-14, 16-18
Flammability Rating 94V-2 94V-0	Yes No	Yes No	Yes Yes	Yes No	Yes No	Yes Yes	Yes No
Strain Relief Available⁷	Yes	No	Yes	Yes	No	Yes	No

¹Use 1840 or 3099 header

²Use 5219 header

³Use 1816 or 6496

⁴6 ckt. has passive lock only

⁵Use 7238 terminal for a force of 2.2 lbs/ckt.

⁶Use 7238 and 7239 terminal to obtain additional 2 amps/ckt.

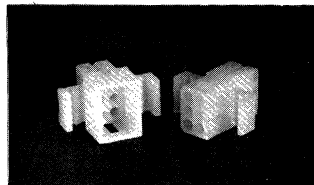
⁷Available as a separate component, contact factory

⁸Also available as 41799 series (Pre-assembled)

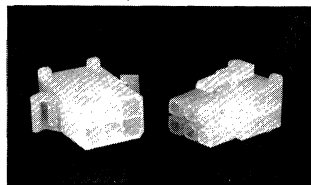
⁹Use P.C. tail terminal in plug

¹⁰Based on largest listed wire size, other application factors may affect current density

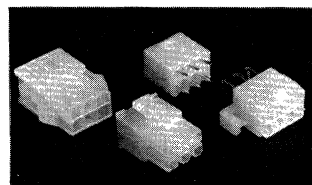
¹¹Low force terminals also available



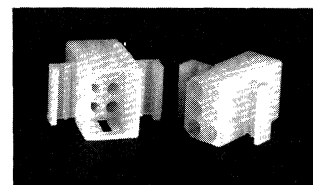
.062"



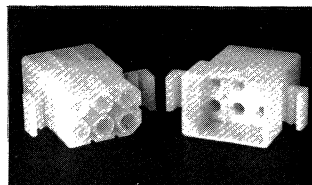
5025



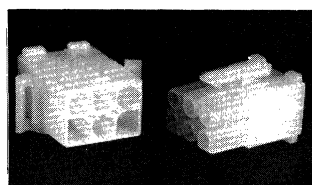
Mini-Fit, Jr.



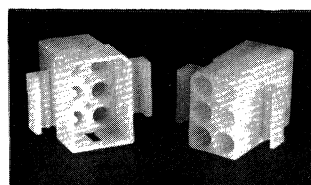
.093"



1991



3191



.125"

Pin and Socket Connectors



Current Rating (Current Density)

Current rating is key to selecting the right connector. It is stated in amperes per circuit with each circuit of the connector carrying the rated current. The rating is based on the current level passing through the terminal resulting in a 30 degree Centigrade (maximum) temperature rise. The current level is then de-rated due to adjacent terminal heating, based on the number of circuits in the housing (insulator).

Connector Size (Circuit Density)

Circuit density, expressed in circuits per square inch, is a relative measure of the size of a connector as reflected in the number of circuits that can be accommodated in one square inch of real estate. The higher the circuit density, the smaller the connector. Connector size is a major design consideration in printed circuit board applications and where equipment downsizing is required. When a connector is mounted in a panel or bulkhead, size may also be a factor.

Engagement Force

Engagement force, measured in pounds per circuit, is the effort required to mate the plug to the receptacle. Total connector engagement force is approximated by multiplying the number of circuits in the housing by the per circuit engagement force. (Due to other factors, actual force may be somewhat higher.) Engagement force can be a major concern in higher circuit count housings due to potentially high total mating forces, and in printed circuit board applications where high mating forces could damage the printed circuit board. In these cases a connector family with a lower engagement force or a terminal having a lower engagement force within a family should be chosen.

Wire Size

The size of wire to which terminals are crimped is not generally a critical consideration. The Molex connectors listed on this chart will typically accommodate the range of 16-28 AWG. Should your application require a heavier wire gauge (a smaller AWG number) for mechanical strength or current carrying capability, choose a compatible connector family.

Configuration and Circuit Size

Molex power connector families are all available in free-hanging or panel mounted wire-to-wire configurations. Most are also offered in vertical printed circuit board

header assembly configurations. PC tail terminals can be used to customize the standard plug with any combination of male and female pc (solder) tail terminals. Right angle header assemblies are also available in some connector families.

Choose the circuit size that meets your specifications based on:

1. current rating
2. number of module-to-module interconnects needed
3. total connector engagement force
4. size of the connector

Operating Voltage

The voltage rating is established by U.L. standards at either 250 or 600 volts. These voltage ratings are RMS values (Root Mean Square) and therefore apply to both AC and DC voltages. Generally the higher voltage ratings are obtained by fully enclosing both the male and female terminals in the housing (insulator). Shrouded housings, or fully isolated contacts also offer protection of the contacts during assembly and handling of your products.

Materials and Plating

Housings are available in nylon with a flammability ratings of UL 94V-2 and, in some families, a 94V-0 rating. The higher 94V-0 rating indicates that the material will extinguish itself (in case of fire) more rapidly than the 94V-2 material. A 94V-0 rating does not infer a higher operating temperature rating, but rather a higher resistance to flame continuance.

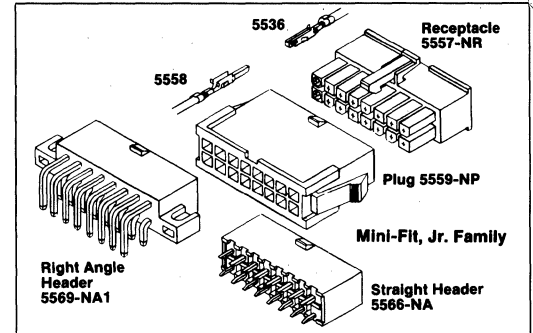
The standard terminal plating options available for Molex power connectors are tin, tin/lead, and overall or select gold. Tin plating is appropriate for most applications where per circuit currents are above 0.5 amperes. Gold plating should generally be specified in applications where signal or low current lines are used, high mating cycles (>30 cycles) are likely, or within harsh environments. Terminal base materials offered are brass and phosphor bronze. Brass is the standard material and affords an excellent combination of strength and current carrying capability. Phosphor bronze is recommended where:

1. a thinner base material is used to obtain a lower engagement force
2. high engagement/disengagement cycles are likely.
3. prolonged exposure to high ambient temperatures are likely.

K

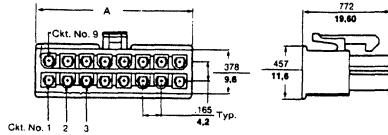
High Current/High Density

- UL recognized, CSA certified, and TUV licensed
- Up to 9 amperes/circuit*
- 250 volt rating*
- Positive lock
- Fully isolated terminals
- Peg mounted vertical header available
- Peg mounted right angle header available
- Low engagement force -1.5 lbs/circuit
- Available in 94V-2 and 94V-0
- One piece strain reliefs available



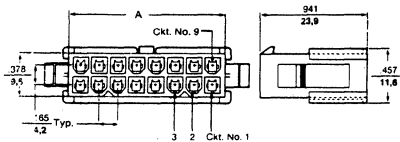
5557-NR Housing

Uses 5556 Terminal



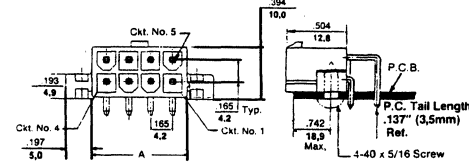
5559-NP Housing

Shown with Optional Panel Mounting Ears
Uses 5558 Terminal



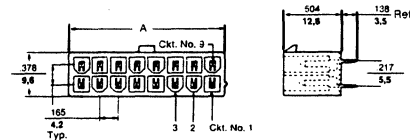
5569-NA1 Right Angle Header with Flange

Peg Mounted Version Available



5566-NA Header Assembly

Peg Mounted Version Available



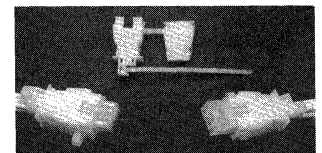
Ordering Information

Series-Circuit Size	inches											
	2	4	6	8	10	12	14	16	18	20	22	24
Amperes/Circuit (Max)*	9	8	8	7	7	6	6	6	6	6	6	6
Voltage Rating (Max)*	250	250	250	250	250	250	250	250	250	250	250	250
Dim. A	.213 (5,4)	.378 (9,6)	.543 (13,8)	.709 (18,0)	.874 (22,2)	1.039 (26,4)	1.205 (30,6)	1.370 (34,8)	1.535 (39,0)	1.700 (43,2)	1.865 (47,4)	2.030 (51,6)
RECEPTACLE												
94V-2	•39-01-2020	•39-01-2040	•39-01-2060	•39-01-2080	•39-01-2100	•39-01-2120	•39-01-2140	•39-01-2160	•39-01-2180	•39-01-2200	•39-01-2220	•39-01-2240
94V-0	•39-01-2025	•39-01-2045	•39-01-2065	•39-01-2085	•39-01-2105	•39-01-2125	•39-01-2145	•39-01-2165	•39-01-2185	•39-01-2205	•39-01-2225	•39-01-2245
PLUG												
Panel Mount 94V-2	•39-01-2021	•39-01-2041	•39-01-2061	•39-01-2081	•39-01-2101	•39-01-2121	•39-01-2141	•39-01-2161	Consult Factory			
94V-0	•39-01-2026	•39-01-2046	•39-01-2066	•39-01-2086	•39-01-2106	•39-01-2126	•39-01-2146	•39-01-2166				
Free Hanging 94V-2	•39-01-3023	•39-01-3043	•39-01-3063	•39-01-3083	•39-01-3103	•39-01-3123	•39-01-3143	•39-01-3163				
94V-0	•39-01-3029	•39-01-3049	•39-01-3069	•39-01-3089	•39-01-3109	•39-01-3129	•39-01-3149	•39-01-3169				
Panel Cutout "E"	.425 (10,8)	.591 (15,0)	.756 (19,2)	.921 (23,4)	1.087 (27,6)	1.252 (31,8)	1.417 (31,1)	1.583 (40,2)				
VERTICAL HEADER												
94V-2†	•39-28-1023	•39-28-1043	•39-28-1063	•39-28-1083	•39-28-1103	•39-28-1123	•39-28-1143	•39-28-1163	•39-28-1183	•39-28-1203	•39-28-1223	•39-28-1243
94V-0†	•39-28-8020	•39-28-8040	•39-28-8060	•39-28-8080	•39-28-8100	•39-28-8120	•39-28-8140	•39-28-8160	•39-28-8180	•39-28-8200	•39-28-8220	•39-28-8240
94V-2 w/peg†	•39-29-9023	•39-29-9043	•39-29-9063	•39-29-9083	•39-29-9103	•39-29-9123	•39-29-9143	•39-29-9163	•39-29-9183	•39-29-9203	•39-29-9223	•39-29-9243
94V-0 w/peg†	•39-29-9027	•39-29-9047	•39-29-9067	•39-29-9087	•39-29-9107	•39-29-9127	•39-29-9147	•39-29-9167	•39-29-9187	•39-29-9207	•39-29-9227	•39-29-9247
RT. ANGLE HEADER												
94V-2††	•39-29-1028	•39-29-1048	•39-29-1068	•39-29-1088	•39-29-1108	•39-29-1128	•39-29-1148	•39-29-1168	•39-29-1188	•39-29-1208	•39-29-1228	•39-29-1248
94V-0††	•39-29-1027	•39-29-1047	•39-29-1067	•39-29-1087	•39-29-1107	•39-29-1127	•39-29-1147	•39-29-1167	•39-29-1187	•39-29-1207	•39-29-1227	•39-29-1247
94V-2 w/peg††	•39-30-1020	•39-30-1040	•39-30-1060	•39-30-1080	•39-30-1100	•39-30-1120	•39-30-1140	•39-30-1160	•39-30-1180	•39-30-1200	•39-30-1220	•39-30-1240
94V-0 w/peg††	•39-30-0020	•39-30-0040	•39-30-0060	•39-30-0080	•39-30-0100	•39-30-0120	•39-30-0140	•39-30-0160	•39-30-0180	•39-30-0200	•39-30-0220	•39-30-0240

NOTES: *Rating based on fully loaded housings
†Select gold header assemblies available
††Gold header assemblies available; contact factory

• U.S. Standard Product, available through Molex franchised distributor

Strain Relief



Ordering Information

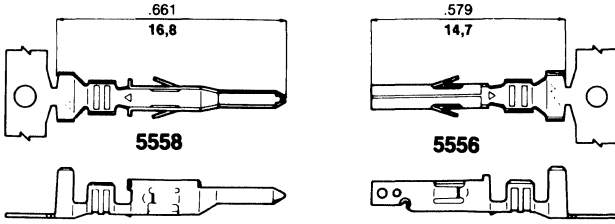
Circuit Size	2	4	6	8	10	12	14	16	18	20	22	24
41995 Series**	Contact Factory	•15-04-0294	•15-04-0296	•15-04-0343	Contact Factory	Contact Factory	Contact Factory	Contact Factory	Contact Factory	Contact Factory	Contact Factory	Contact Factory

**Strain relief accepts both plug and receptacle. Requires use of "Free Hanging" Plug (w/o ears). Accepts standard receptacle in sizes 6-24. For 4 circuit, strain relief uses receptacle Order No. 39-01-3042 or 39-01-3048.
• U.S. Standard Product, available through Molex franchised distributors

Mini-Fit, Jr.



5556/5558 Terminals



inches
mm

Ordering Information

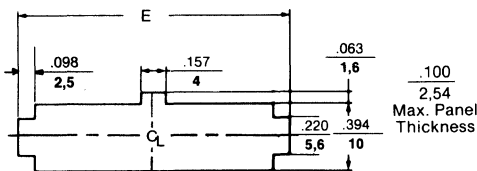
Plating	Wire Size	Insulation Diameter	Form	Terminal Order No.	
				5558 Male	5556 Female
Tin Plated Brass	AWG #16	.071" - .122" (1,8mm-3,1mm)	Chain	39-00-0081	39-00-0077
			Loose	39-00-0082	39-00-0078
	AWG #18-24	.051"-.122" (1,3mm-3,1mm)	Chain	● 39-00-0040	● 39-00-0038
			Loose	● 39-00-0041	● 39-00-0039
	AWG #22-28	.035" - .071" (0,9-1,8mm)	Chain	● 39-00-0048	● 39-00-0046
			Loose	● 39-00-0049	● 39-00-0047
Tin Plated Phosphor Bronze	AWG #16	.071" - .122" (1,8mm-3,1mm)	Chain	39-00-0083	39-00-0079
			Loose	39-00-0084	39-00-0080
	AWG #18-24	.051"-.118" (1,3mm-3mm)	Chain	● 39-00-0061	● 39-00-0059
			Loose	● 39-00-0062	● 39-00-0060
	AWG #22-28	.035" - .071" (0,9-1,8mm)	Chain	39-00-0067	39-00-0060
			Loose	39-00-0068	39-00-0065
30 microinches Gold Plated Brass	AWG #16	.071" - .122" (1,8mm-3,1mm)	Chain	39-00-0095	39-00-0089
			Loose	39-00-0096	39-00-0090
	AWG #18-24	.051"-.118" (1,3mm-3mm)	Chain	39-00-0053	39-00-0055
			Loose	39-00-0054	39-00-0056
	AWG #22-28	.035"-.071" (0,9-1,8mm)	Chain	39-00-0087	39-00-0085
			Loose	39-00-0088	39-00-0086

Mini-Fit, Jr. Application Tooling

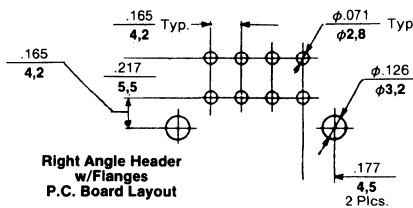
Ordering Information

Crimping Tool	Eng. No.	Order No.	Wire Size	Crimping Tool	Eng. No.	Order No.	Wire Size
Hand Tool	HTR 60622	● 11-01-0122	AWG #18-24	Spare Tooling Kit	K8352A	11-40-3117	AWG #18-24
	HTR 60639	● 11-01-0125	AWG #22-28		K8352B	11-40-3133	AWG #22-28
	HTR 60670	11-01-0145	AWG #16		K8352C	11-40-3189	AWG #16
TM40 Terminating Die	T8352A	11-40-2119	AWG #18-24	Extraction Tool	HT60630A	● 11-03-0038	—
	T8352B	11-40-2137	AWG #22-28		MA60704A	11-18-2002	AWG #18-24
	T8352C	11-40-2187	AWG #16		MA60704B	11-18-2003	AWG #22-28
TM40 Terminating Machine with Die	TM40D8352A	11-04-0594	AWG #18-24	Mini-Mac Die	MA-60704C	11-18-2069	AWG #16
	TM40D8352B	11-04-0616	AWG #22-28				
	TM40D8352C	11-04-0659	AWG #16				

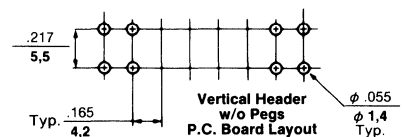
● U.S. Standard Product, available from Molex franchised distributors.



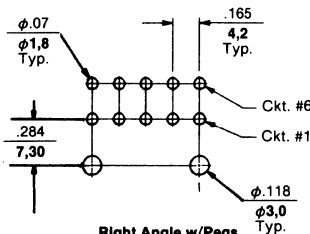
Mounting Hole Details for 5559-NP Housing



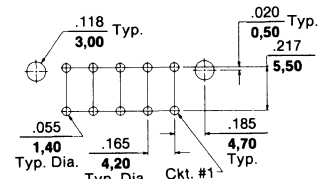
Right Angle Header w/Flanges P.C. Board Layout



Vertical Header w/o Pegs P.C. Board Layout



Right Angle w/Pegs Recommended P.C. Board Layout 6-24 Ckts.



Vertical Header w/Pegs Recommended P.C. Board Layout

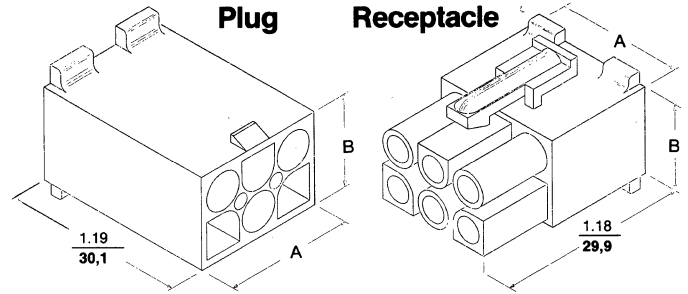
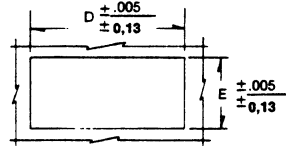
K

.093" (2,36mm) Power Connector



3191 International

- UL recognized, CSA certified and TUV licensed
- Up to 12 amperes per circuit*
- 600 volt rating*
- Positive lock
- Fully isolated terminals
- Mates with 5219 vertical header
- Right angle header available, (42419 Series, consult factory)
- One piece strain reliefs available (42142 Series, see Full Line Catalog)



Ordering Information (Order Terminals on Pages 9K and 10K of this catalog)

Ckt. I.D. Shown is Mating Side of Receptacle; Wire Side of Plug	3191-1	3191-2	3191-3	3191-4	3191-6	3191-9	3191-12	3191-15
Circuit Size	12	12	11	9	9	9	9	9
Amperes/Circuit (Max)* Voltage Rating (Max)*	600	600	600	600	600	600	600	600
RECEPTACLE Order No.								
94V-2	19-09-1019	• 19-09-1029	• 19-09-1039	• 19-09-1049	• 19-09-1069	• 19-09-1099	• 19-09-1129	• 19-09-1159
94V-0	19-09-1016	• 19-09-1026	• 19-09-1036	• 19-09-1046	• 19-09-1066	• 19-09-1096	• 19-09-1126	• 19-09-1156
Dimension A	.40 (10,16)	.56 (14,3)	.830 (21,0)	1.09 (27,7)	.83 (21,0)	.83 (21,0)	1.09 (27,7)	1.35 (34,4)
B	.30 (7,6)	.30 (7,6)	.30 (7,6)	.30 (7,6)	.56 (14,3)	.83 (21,0)	.83 (21,0)	.83 (21,0)
PLUG Order No.								
Panel Mount 94V-2	19-09-2018	• 19-09-2028	• 19-09-2038	• 19-09-2048	• 19-09-2068	• 19-09-2098	• 19-09-2128	• 19-09-2158
94V-0	19-09-2017	• 19-09-2027	• 19-09-2037	• 19-09-2047	• 19-09-2067	• 19-09-2097	• 19-09-2127	• 19-09-2157
Free Hanging 94V-2	19-09-2019	• 19-09-2029	• 19-09-2039	• 19-09-2049	• 19-09-2069	• 19-09-2099	• 19-09-2129	• 19-09-2159
94V-0	19-09-2016	• 19-09-2026	• 19-09-2036	• 19-09-2046	• 19-09-2066	• 19-09-2096	• 19-09-2126	• 19-09-2156
Dimensions A	.32 (8,1)	.58 (14,7)	.85 (21,59)	1.11 (28,3)	.85 (21,6)	.85 (21,6)	1.11 (28,3)	1.39 (35,4)
B	—	.32 (8,1)	.32 (8,2)	.32 (8,2)	.59 (14,9)	.87 (22,1)	.87 (22,1)	.87 (22,1)
Panel D	.485 (12,31)	.80 (20,32)	1.02 (25,9)	1.270 (32,26)	1.047 (26,6)	1.048 (26,82)	1.300 (33,02)	1.552 (39,42)
Cutout E	.343 (8,71)	.365 (9,27)	.39 (10,0)	.365 (9,27)	.68 (17,3)	.909 (23,10)	.910 (23,10)	.910 (23,11)
HEADER Order No. (5219 Series)								
Vertical	N/A	15-31-1026	15-31-1036	15-31-1046	15-31-1066	Consult Factory ³	Consult Factory ³	Consult Factory ³
Right Angle	N/A	See Note 2	See Note 2	See Note 2	See Note 2	N/A	N/A	N/A

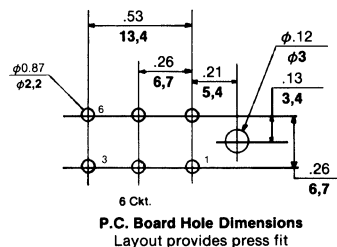
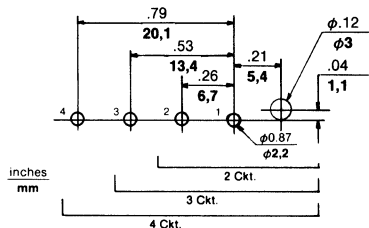
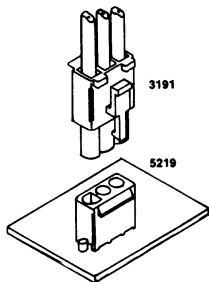
NOTES: *Rating based on fully loaded housings • U.S. Standard Product, available through Molex franchised distributors
¹Mating PCB vertical header available, see 5219 Series shown below, and Full Line Catalog
²Mating PCB right angle header available, see 42419 Series, consult factory
³Vertical header may be assembled using PC terminals (shown in this handbook and Full Line Catalog) in standard housing.

Strain Relief Ordering Information

Eng. No.	Order No.
42142	Contact Factory

5219 Series

.098" (2,36mm) Header for 3191 Wire-to-Board Applications

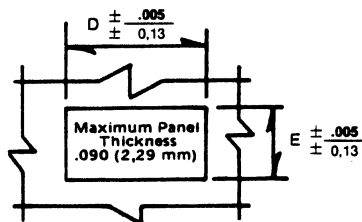


.093" (2,36mm) Power Connector

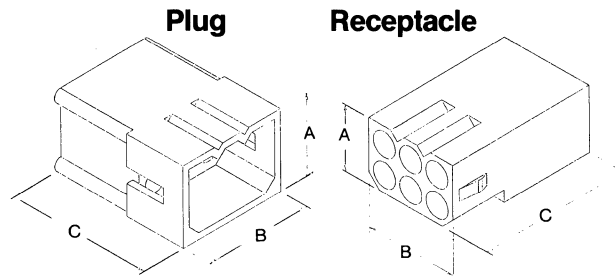


Standard

- UL recognized, CSA certified
- Up to 12 amperes per circuit*
- 250 rating*
- Passive (friction) lock
- 1 to 15 circuit housings
- Panel and PCB mountable
- One piece strain reliefs available (42148 Series, see Full Line Catalog)
- Mating headers available (see notes 2, 3 & 4)



Mounting Hole Detail



inches
mm

Ordering Information (Order Terminals on Pages 9K and 10K of this catalog)

Ckt. I.D. Shown is Mating Side of Receptacle; Wire Side of Plug	1951-1	1619-1	1545-2	1396-3	1490-4	2163-4	1653-5	1261-6	1292-9	1360-12	1375-15
Series-Circuit Size	1951-1	1619-1	1545-2	1396-3	1490-4	2163-4	1653-5	1261-6	1292-9	1360-12	1375-15
Amperes/Circuit (Max)*	12	12	12	12	9	9	9	9	9	7.5	7.5
Voltage Rating (Max)*	5,000	250	250	250	250	250	250	250	250	250	250
VERTICAL HEADERS	N/A	N/A	See Note 4	See Note 2, 3 & 4	See Note 2, 3 & 4	See Note 2, 3 & 4	See Note 2, 3 & 4	See Note 2, 3 & 4	See Note 2, 3 & 4	See Note 2, 3 & 4	See Note 2, 3 & 4
RECEPTACLE Order No.											
Panel Mount	N/A	N/A	● 03-09-1021	● 03-09-1031	● 03-09-1041	● 03-09-1040	N/A	● 03-09-1061	● 03-09-1091	● 03-09-1125	● 03-09-1154
Free Hanging	● 03-09-1014	● 03-09-1011	● 03-09-1022	● 03-09-1032	● 03-09-1042	● 03-09-1049	● 03-09-1052	● 03-09-1064	● 03-09-1094	● 03-09-1126	● 03-09-1157
Dimension A	—	—	.54 (13,6)	.67 (17,0)	.87 (22,1)	.434 (11,02)	1.07 (27,2)	.43 (11,0)	.66 (16,9)	.87 (22,1)	1.07 (27,1)
B	.31 (7,9)	.23 (5,9)	.25 (6,4)	.24 (6,1)	.24 (6,0)	.434 (11,02)	.24 (6,2)	.63 (16,0)	.62 (15,9)	.63 (16,0)	.63 (16,0)
C	1.85 (47,0)	1.00 (25,4)	1.03 (26,2)	1.01 (25,7)	1.03 (26,2)	1.00 (25,9)	1.00 (25,4)	1.02 (25,9)	1.02 (25,9)	1.02 (25,9)	1.02 (25,9)
Panel Mount	—	—	.725 (18,42)	.830 (21,1)	1.038 (26,37)	.500 (12,70)	1.238 (31,45)	.718 (18,24)	.828 (21,03)	1.05 (26,67)	1.240 (31,50)
Panel Cutout	—	—	.312 (7,92)	.312 (7,92)	.312 (7,92)	.600 (15,24)	.312 (7,92)	.600 (15,24)	.725 (18,42)	.655 (16,64)	.655 (16,64)
PLUG Order No.											
Panel Mount	N/A	N/A	● 03-09-2021	● 03-09-2031	● 03-09-2041	● 03-09-2040	N/A	● 03-09-2061	● 03-09-2091	● 03-09-2122	● 03-09-2152
Free Hanging	● 03-09-2014	● 03-09-2011	● 03-09-2022	● 03-09-2032	● 03-09-2042	● 03-09-2049	● 03-09-2052	● 03-09-2064	● 03-09-2092	● 03-09-2121	● 03-09-2154
Dimension A	—	—	.64 (16,2)	.77 (19,6)	.97 (24,7)	.54 (13,7)	1.18 (30,0)	.54 (13,7)	.77 (19,6)	.98 (24,9)	1.17 (29,7)
B	.44 (11,2)	.36 (9,1)	.35 (8,9)	.34 (8,6)	.34 (8,6)	.54 (13,7)	.34 (8,6)	.73 (18,6)	.73 (18,5)	.74 (18,8)	.73 (18,6)
C	2.25 (57,2)	1.00 (25,4)	1.00 (25,4)	1.00 (25,4)	1.00 (25,4)	1.02 (26,0)	1.00 (25,4)	1.00 (25,4)	1.00 (25,4)	1.00 (25,4)	1.00 (25,4)
Panel Mount	—	—	.8 (20,32)	.933 (23,70)	1.131 (28,73)	.555 (14,10)	1.331 (33,81)	.750 (19,05)	.937 (23,80)	1.155 (29,34)	1.343 (34,11)
Panel Cutout	—	—	.375 (9,53)	.375 (9,53)	.375 (9,53)	.695 (17,65)	.375 (9,75)	.695 (17,65)	.660 (16,76)	.760 (19,30)	.760 (19,30)

- NOTES**
- Positive lock configuration available, see Full Line Catalog
 - Vertical header (shrouded) available, see 3099 Series shown below, and Full Line Catalog
 - Vertical header (unshrouded) available, see 1840 Series in Full Line Catalog
 - Vertical headers may be assembled using PC tail terminals (shown in handbook and Full Line Catalog) in standard housings
 - Rating based on fully loaded housings
- U.S. Standard Product, available through Molex franchised distributors.

42148 Series Strain Relief

Ordering Information

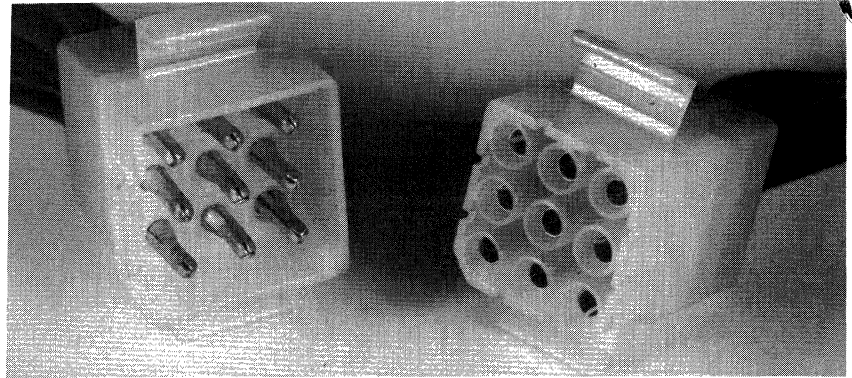
Ckt. Size	STRAIN RELIEF		USED WITH	
	Part Number	Order Number	Plug Order Number	Receptacle Order No.
2	42148-2AA	15-04-0222	03-09-2021	03-09-1021
3	42148-3AA	Contact Factory	03-09-2031	03-09-1031
4	42148-4LA	15-04-0223	03-09-2041	03-09-1041
4	42148-4SAA	Contact Factory	03-09-2040	03-09-1040
5	42148-5AA	Contact Factory	Contact Factory	Contact Factory
6	42148-6AA	Contact Factory	03-09-2061	03-09-1061
9	42148-9AA	Contact Factory	03-09-2091	03-09-1091
12	42148-12AA	Contact Factory	03-09-2122	03-09-1125
15	42148-15AA	Contact Factory	03-09-2152	03-09-1151

.093" (2,36mm) Power Connector



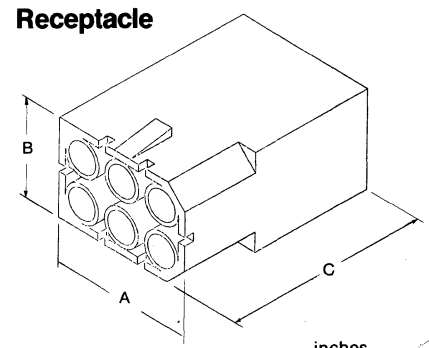
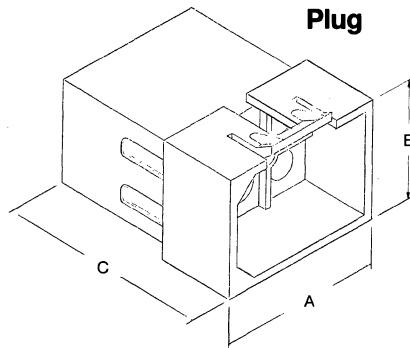
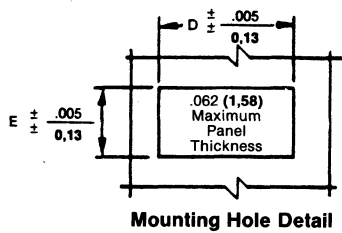
1991 International

- UL recognized, CSA certified, and VDE listed
- Up to 12 amperes per circuit*
- 600 volt rating*
- Positive lock
- 3 to 15 circuit housings



Plug

Receptacle



inches
mm

Ordering Information (Order Terminals on Pages 9K and 10K of this catalog)

	1991-3	1991-4	1991-6	1991-9	1991-12	1991-15
Ckt. I.D. Shown is Mating Side of Receptacle; Wire Side of Plug						
Engineering No. Circuit Size	1991-3 3	1991-4 4	1991-6 6	1991-9 9	1991-12 12	1991-15 15
Amperes/Circuit (Max)* Voltage Rating (Max)*	11 600	9 600	9 600	8 600	6 600	6 600
RECEPTACLE Order No.						
Panel Mount	19-09-1031	19-09-1041	19-09-1061	19-09-1091	19-09-1121	19-09-1151
Free Hanging	19-09-1032	19-09-1042	19-09-1062	19-09-1092	19-09-1122	19-09-1152
Dimension A	.76 (19,3)	1.01 (25,7)	.780 (19,8)	.79 (20,1)	1.03 (26,2)	1.28 (32,6)
B	.25 (6,4)	.25 (6,4)	.53 (13,5)	.79 (20,1)	.79 (20,1)	.79 (20,1)
C	1.14 (28,9)	1.14 (28,9)	1.14 (28,9)	1.14 (28,9)	1.14 (28,9)	1.14 (28,9)
Panel D	.920 (23,37)	1.168 (29,67)	.946 (24,03)	.946 (24,03)	1.094 (30,33)	1.442 (36,63)
Cutout E	.310 (7,87)	.311 (7,90)	.608 (15,44)	.850 (21,59)	.850 (21,59)	.850 (21,59)
PLUG Order No.						
Panel Mount	19-09-2031	19-09-2041	19-09-2061	19-09-2091	19-09-2122	19-09-2153
Free Hanging	19-09-2032	19-09-2042	19-09-2062	19-09-2092	19-09-2121	19-09-2151
Dimension A	.86 (21,8)	1.110 (28,2)	.89 (22,6)	.89 (22,5)	1.14 (28,9)	1.39 (35,3)
B	.35 (8,9)	.35 (8,9)	.64 (16,3)	.89 (22,5)	.89 (22,6)	.89 (22,6)
C	1.10 (27,9)	1.10 (27,9)	1.10 (27,9)	1.10 (27,9)	1.10 (27,9)	1.10 (27,9)
Panel D	1.022 (25,95)	1.270 (32,26)	1.048 (26,62)	1.048 (26,62)	1.300 (33,02)	1.552 (39,42)
Cutout E	.365 (9,27)	.365 (9,27)	.658 (16,710)	.910 (23,11)	.910 (23,11)	.910 (23,11)
VERTICAL HEADERS						
	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1	See Note 1

NOTES: *Vertical headers may be assembled using PC tail terminals shown in handbook and Full Line Catalog in above housing
*Rating is based on fully loaded housings

.093" (2,36mm) Diameter Terminals



Specifications:

Electrical:

Resistance - MV voltage drop per amp, $\pm 10\%$: • 1st engagement 3.0 • 10th engagement 3.1

High Voltage Test - Withstands 1500 volts RMS for 60 seconds min. applied between adjacent terminals.

Temperature Rise: 30°C maximum for all connectors at maximum rated current.

Current Rating: Amperage rating up to 12 amps on some sizes.

Storage Temperature Range: -40°C to 125°C

Mechanical:

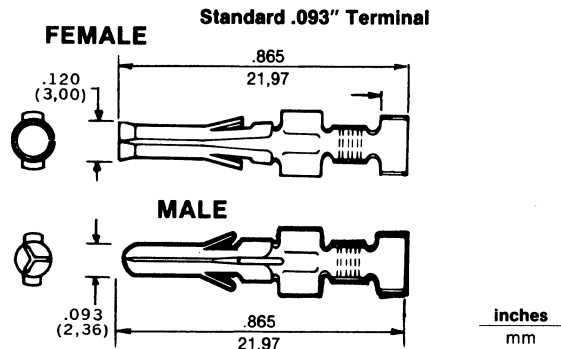
Terminal Crimp Strength - Minimum pull-out force in pounds (kilograms) for AWG wire sizes:

14—35 (15,9)	24—8 (3,63)
16—30 (13,6)	26—5 (2,27)
18—20 (9,07)	28—3 (1,36)
20—15 (6,80)	30—2 (0,91)
22—10 (4,54)	

Engage/Disengage Forces - Standard terminal of .010" (0,25mm) stock 70/30 brass. Average engage/disengage forces in plug/receptacle connector with +30% tolerance in pounds (kilograms) by circuit:

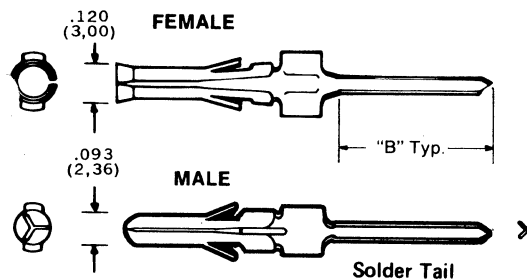
1 circuit	3.5/ 2.75 (1,59/1,25)
2 circuit	7.0/ 5.5 (3,18/2,50)
3-circuit	9.5/ 8.26 (4,77/3,75)
4-circuit	14.0/11.02 (6,36/5,00)

5-circuit	17.5/13.7 (7,95/ 6,24)
6-circuit	21.0/16.5 (9,53/ 7,50)
9-circuit	31.5/24.8 (14,30/11,24)
12-circuit	42.0/33.07 (19,06/15,00)
15-circuit	52.5/41.3 (23,84/18,73)



Special Purpose .093" Diameter Terminals

P.C. Tail

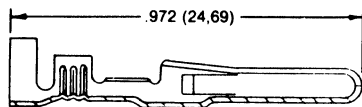


Typical PCB Hole Layout

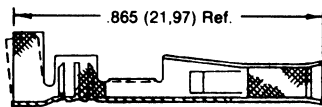
Housing	Dim. A	Dim. B*	
		P.C. Tails	
		1376/1377	2605/2606
.093	.198 5,03	.145 3,68	.285 7,24
1991	.248 6,30	N/A	.185 4,70
3191	.264 6,71	N/A	.210 5,33

* Useable tail length when inserted into housing.

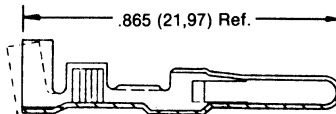
Grounding Pin "Make first-Break last" 1973 Series



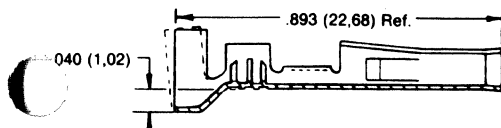
High Current/Low Engagement Force 7238 Series



7239 Series



Power Cord - offset insulation crimp section 41483 Series



K

.093" (2,36mm) Diameter Terminals



Ordering Information

Inches
mm

Crimp Wire Size	Insulation Diameter	Male/Female Series	Chain Form (a) Order Numbers		Loose Form Order Numbers		Application Tooling Order Numbers			
			Male	Female	Male	Female	Hand Tool	TM-40 Die*	Mini Mac Die*	Extraction Tool
Standard Brass .010"										
Tin Plated										
14-20	.065/.160 (1,65/4,06)	1190/1189	● 02-09-2101	● 02-09-1102	● 02-09-2103	● 02-09-1104	11-01-0084	11-40-2001	11-18-2005	11-03-0006
18-22	.060/.120 (1,52/3,05)	1380/1381	● 02-09-2116	● 02-09-1117	● 02-09-2118	● 02-09-1119	11-01-0084	11-40-2002	11-18-2006 11-18-2007	11-03-0006
22-24	.050/.070 (1,27/1,78)	2870/2871	02-09-2136	02-09-1138	02-09-2137	02-09-1139	11-01-0097	11-40-2020	11-18-2102	11-03-0006
24-30	.030/.060 (.076/1,52)	1434/1433	● 02-09-2141	● 02-09-1142	● 02-09-2143	● 02-09-1144	11-01-0006	11-40-2003	11-18-2008	11-03-0006
Select Gold (.000015" min.)										
14-20	.065/.160 (1,65/4,06)	1190/1189	● 02-09-6100	● 02-09-5100	● 02-09-6106	● 02-09-5106	11-01-0084	11-40-2001	11-18-2005	11-03-0006
18-22	.060/.120 (1,52/3,05)	1380/1381	● 02-09-6122	● 02-09-5143	● 02-09-6123	● 02-09-5142	11-01-0084	11-40-2002	11-18-2006 11-18-2007	11-03-0006
24-30	.030/.060 (.076/1,52)	1434/1433	● 02-09-6144	● 02-09-5146	● 02-09-6145	● 02-09-5147	11-01-0006	11-40-2003	11-18-2008	11-03-0006
Select Gold (.000050" min.)										
14-20	.065/.160 (1,65/4,06)	1190/1189	● 02-09-6101	● 02-09-5102	● 02-09-6110	● 02-09-5111	11-01-0084	11-40-2001	11-18-2005	11-03-0006
18-22	.060/.120 (1,52/3,05)	1380/1381	● 02-09-6125	● 02-09-5130	● 02-09-6126	● 02-09-5133	11-01-0084	11-40-2002	11-18-2006 11-18-2007	11-03-0006
Low Engagement Force (d)										
Brass .008" Tin Plated										
18-22	.060/.120 (1,52/3,05)	4272/2273	02-09-1151	02-09-1122	02-09-1149	02-09-1123	11-01-0084	11-40-2002	11-18-2006	11-03-0006
Grounding Pin "Make First - Break Last"										
14-18	.065/.140 (1,65/3,56)	1973-2	02-09-8108	—	02-09-8109	—	11-01-0084	11-40-2048	11-18-2011	11-03-0017
18-22	.060/.120 (1,52/3,05)	1973	02-09-8103	—	02-09-8104	—	11-01-0084	11-40-2048	11-18-2011	11-03-0017
High Current/Low Engagement Force (c)										
14-18	.065/.140 (1,65/3,56)	7239/7238	02-09-2111	02-09-1111	02-09-2112	02-09-1112	11-01-0084	11-40-2131	N/A	11-03-0006
18-22	.060/.120 (1,52/3,05)	8058	—	02-09-1148	—	—	11-01-0084	11-40-2020	11-18-2012	11-03-0006
Power Cord - Offset Insulation Crimp Section (b)										
14-18	.180 max. (4,57)	42138/41483	02-09-2170	02-09-1153	02-09-2171	02-09-1154	11-01-0084	N/A	11-18-2061	11-03-0006
P.C. Tail										
For Std. .093 Housing (Tin)										
		1376/1377	—	—	● 02-09-2134	● 02-09-1134	N/A	N/A	N/A	N/A
For Std. .093 Housing (Select Gold .000030 min.)										
		1376/1377	—	—	● 02-09-6132	● 02-09-5132	N/A	N/A	N/A	N/A
For 3191/1991 Housing (Tin) - May also be used in Std. .093 Housing										
		2606/2605	—	—	● 02-09-8113	● 02-09-1145	N/A	N/A	N/A	N/A
Phos-Bronze .010"										
Tin Plated										
18-22	.060/.120 (1,52/3,05)	2152/2151	02-09-2201	02-09-1203	02-09-2202	02-09-1204	11-01-0084	11-40-2002	11-18-2006	11-03-0006
14-20	.065/.160 (1,65/4,06)	4549/4550	02-09-2166	02-09-1205	02-09-2167	02-09-1206	11-01-0084	11-40-2001	11-18-2005	11-03-0006
Select Gold (.000030 min.)										
14-20	.065/.160 (1,65/4,06)	4549/4550	02-09-5166	02-09-5169	—	02-09-5170	11-01-0084	11-40-2001	11-18-2005	11-03-0006
Phos-Bronze .008"										
Tin Plated										
14-20	.065/.160 (1,65/4,06)	6310	—	02-09-1209	—	02-09-1211	11-01-0084	11-40-2001	11-18-2005	11-03-0006
18-22	.060/.120 (1,52/3,05)	6271	—	02-09-1208	—	02-09-1212	11-01-0084	N/A	N/A	11-03-0006
Select Gold (.000020" min.)										
14-20	.065/.160 (1,65/4,06)	6310	—	02-09-5205	—	02-09-5206	11-01-0084	11-40-2001	11-18-2005	11-03-0006
18-22	.060/.120 (1,52/3,05)	6271	—	02-09-5207	—	02-09-5208	11-01-0084	N/A	N/A	11-03-0006

(a) 7,000 terminals/reel, 8,000 terminals/reel for 1433, 1434, 2273, 2870, 2871.

(b) Will fit 1991, 3191, 1816 & 6496 housings only

(c) High Current: Rated current for standard terminal plus 2 amperes per circuit using 7238 with 7239 Series.

Low Force: Approximately 2 lbs. per circuit using 7238 or 8058 Series female terminal mated with standard male terminal (i.e., 1190, 1380, 2878, 1434 Series)

(d) Engagement force is approximately 2.5 lbs. per circuit. Current rating is de-rated from standard terminals by 2 amperes per circuit.

† See tooling section for extraction tools, presses & automatic crimping equipment.

*Die only, does not include press or spare tooling

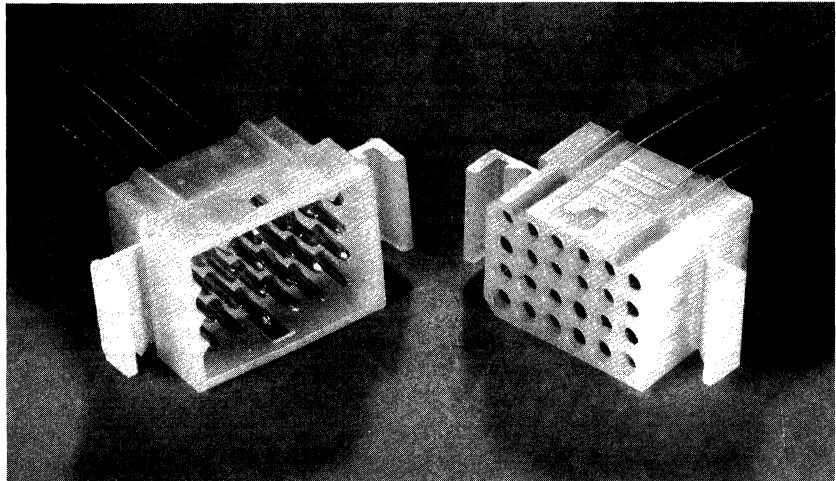
● U.S. Standard product, available through Molex franchised distributors.

.062" (1,57 mm) Power Connector



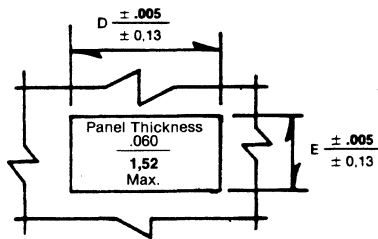
Standard High Density

- UL recognized and CSA certified
- Up to 5 amperes per circuit*
- 250 volt rating*
- Friction lock
- Standard color - natural. Can be dyed to customer specifications
- 1 to 36 circuit housings
- Panel and PCB mountable
- One piece strain relief available. 41316 Series

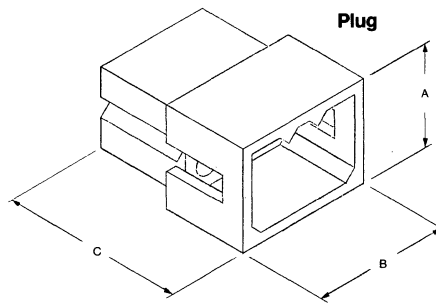


Plug

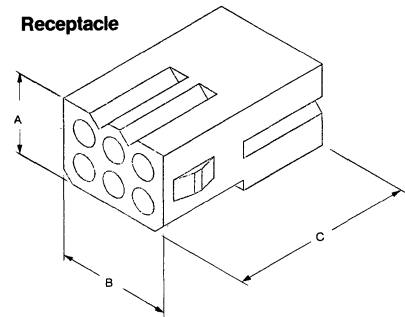
Receptacle



Mounting Hole Detail



Plug



Receptacle

Ordering Information (Order Terminals on Page 14K of this Catalog)

inches
mm



Ckt. I.D. Shown is Mating Side of Receptacle; Wire Side of Plug	1625-1	1625-2	1625-3	1625-4	2004	1625-5	1625-6
Series-Circuit Size	1625-1	1625-2	1625-3	1625-4	2004-4	1625-5	1625-6
Amperes/Circuit (Max)*	5	5	5	5	5	5	5
Voltage Rating (Max)*	250	250	250	250	250	250	250
RECEPTACLE							
Panel Mount	N/A	● 03-06-1022	● 03-06-1031	● 03-06-1041	● 03-06-1043	● 03-06-1055	● 03-06-1061
Free Hanging	● 03-06-1011	● 03-06-1023	● 03-06-1032	● 03-06-1042	● 03-06-1044	● 03-06-1056	● 03-06-1062
Dimension A	.19 (4,9)	.34 (8,6)	.48 (12,3)	.63 (16,0)	.34 (8,6)	.78 (19,7)	.34 (8,7)
B	N/A	.19 (4,9)	.19 (4,9)	.19 (4,9)	.34 (8,6)	.19 (4,9)	.49 (12,5)
C	.78 (19,8)	.81 (20,6)	.78 (19,8)	.780 (19,8)	.75 (19,1)	.78 (19,8)	.78 (19,8)
Panel D	N/A	.505 (12,83)	.650 (16,51)	.785 (19,94)	.506 (12,85)	.940 (23,88)	.552 (14,02)
Cutout E	N/A	.265 (6,73)	.265 (6,73)	.260 (6,60)	.400 (10,16)	.265 (6,73)	.505 (12,83)
PLUG							
Panel Mount	N/A	● 03-06-2022	● 03-06-2031	● 03-06-2041	● 03-06-2043	● 03-06-2054	● 03-06-2062
Free Hanging	● 03-06-2011	● 03-06-2023	● 03-06-2032	● 03-06-2042	● 03-06-2044	● 03-06-2055	● 03-06-2061
Dimension A	.30 (7,6)	.44 (11,2)	.59 (15,0)	.73 (18,5)	.44 (11,2)	.89 (22,6)	.45 (11,4)
B	N/A	.30 (7,6)	.30 (7,6)	.29 (7,5)	.44 (11,2)	.31 (7,9)	.60 (15,2)
C	.75 (19,1)	.78 (19,8)	.75 (19,1)	.75 (19,1)	.75 (19,1)	.75 (19,1)	.75 (19,1)
Panel D	N/A	.609 (15,47)	.754 (19,15)	.865 (21,97)	.615 (15,62)	1.044 (26,52)	.615 (15,62)
Cutout E	N/A	.318 (8,08)	.318 (8,08)	.312 (7,93)	.465 (11,80)	.318 (8,08)	.607 (15,42)

Notes: *Rating based on fully loaded housings

● U.S. Standard Product, available through Molex franchised distributors.

.062" (1,57 mm) Power Connector



Standard High Density

Inches
mm

Ordering Information (Order Terminals on Pages 14K of this catalog)

Ckt. I.D. Shown is Mating Side of Receptacle; Wire Side of Plug						
	1649	1625-9	1625-12	1625-15	1625-24	1772-36
	Series-Circuit Size	1649-8	1625-9	1625-12	1625-15	1625-24	1772-36
Amperes/Circuit (Max)* Voltage Rating (Max)*	5 250	5 250	5 250	5 250	5 250	5 250
RECEPTACLE						
Panel Mount	• 03-06-1081	• 03-06-1091	• 03-06-1121	• 03-06-1151	• 03-06-1241	• 03-06-1361
Free Hanging	N/A	• 03-06-1092	• 03-06-1122	• 03-06-1152	• 03-06-1242	• 03-06-1362
Dimension A	1.505 (38,23)	.49 (12,4)	.63 (16,1)	.77 (19,5)	.92 (23,3)	1.51 (38,2)
B	.220 (5,58)	.49 (12,4)	.49 (12,5)	.49 (12,4)	.63 (16,1)	.69 (17,5)
C	.780 (19,8)	.780 (19,8)	.78 (19,8)	.78 (19,8)	.75 (19,1)	.78 (19,8)
Panel D	1.715 (43,56)	.650 (16,51)	.795 (20,19)	.934 (23,72)	1.079 (27,41)	1.677 (42,60)
Panel Cutout E	.330 (8,38)	.552 (14,02)	.563 (14,30)	.563 (14,30)	.715 (18,16)	.707 (17,96)
PLUG						
Panel Mount	N/A	• 03-06-2091	• 03-06-2121	• 03-06-2151	• 03-06-2241	• 03-06-2361
Free Hanging	• 03-06-2081	• 03-06-2092	• 03-06-2122	• 03-06-2152	• 03-06-2242	• 03-06-2362
Dimension A	1.601 (40,67)	.59 (15,0)	.74 (18,8)	.87 (22,1)	1.02 (25,9)	1.62 (41,2)
B	.308 (7,82)	.59 (15,0)	.59 (15,0)	.59 (15,0)	.74 (18,8)	.80 (20,3)
C	.75 (19,1)	.75 (19,0)	.75 (19,1)	.75 (19,0)	.75 (19,1)	.75 (19,1)
Panel D	N/A	.752 (19,10)	.903 (22,94)	1.042 (26,47)	1.182 (30,02)	1.795 (45,59)
Panel Cutout E	N/A	.615 (15,62)	.614 (15,60)	.614 (15,60)	.765 (19,43)	.825 (20,96)

Notes: *Rating based on fully loaded housings

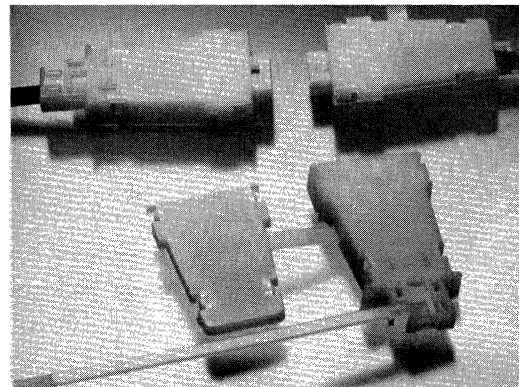
• U.S. Standard Product, available through Molex franchised distributors

K

41316 Strain Relief Ordering Information

For use with 1625 Series connectors only, with mounting ears

Strain Relief Order No.	USES PLUGS		USES RECEPTACLES	
	Eng. No.	Order No.	Eng. No.	Order No.
Contact Factory	1625-2P	03-06-2022	1625-2R	03-06-1022
15-04-0323	1625-3P	03-06-2031	1625-3R	03-06-1031
Contact Factory	1625-4P	03-06-2041	1625-4R	03-06-1041
Contact Factory	1625-5P	03-06-2054	1625-5R	03-06-1055
Contact Factory	1625-6P	03-06-2062	1625-6R	03-06-1061
15-04-0327	1625-9P	03-06-2091	1625-9R	03-06-1091 or 03-06-1094
Contact Factory	1625-12P	03-06-2121	1625-12R	03-06-1121
15-04-0329	1625-15P	03-06-2151	1625-15R	03-06-1151

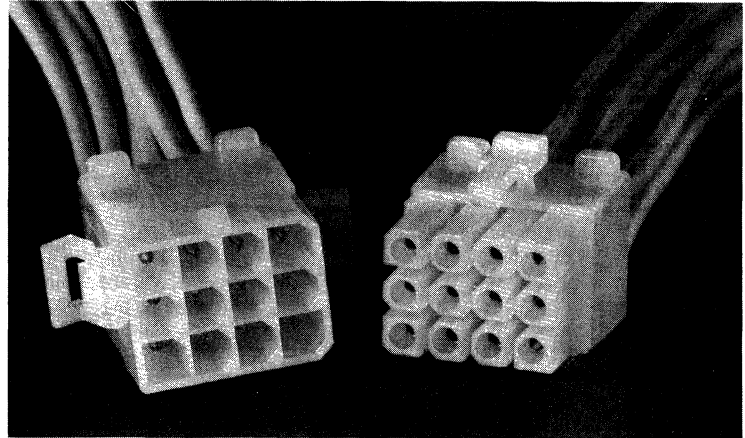


.062" (1,57 mm) Power Connector



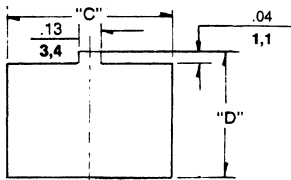
5025 International

- UL recognized, CSA certified and TUV licensed
- Up to 5 amperes per circuit*
- 600 volt rating*
- Positive lock
- Fully isolated terminals
- 2 to 15 circuit housing
- Will accept standard .062" terminals



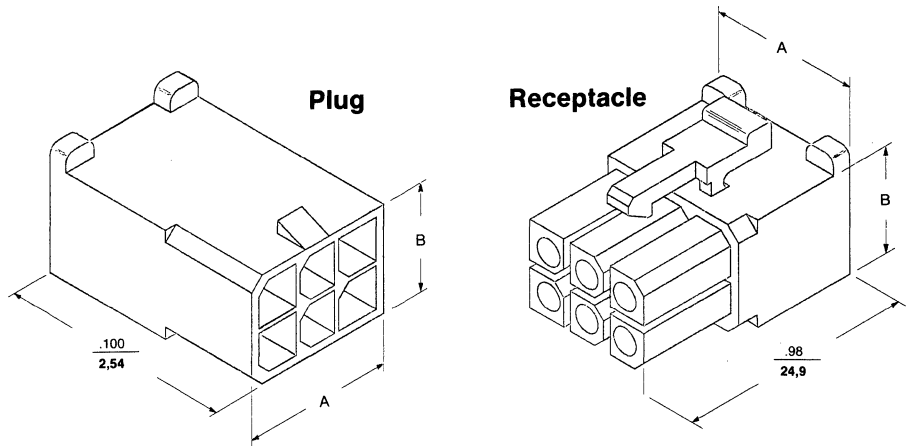
Plug

Receptacle



Mounting Hole Detail

Recommended Panel
.079 (2 mm) Max. Thickness



inches
mm

Ordering Information (Order Terminals on Page 14K of this catalog)

Ckt. I.D. Shown is Mating Side of Receptacle; Wire Side of Plug	5025-02P/P1	5025-03P/P1	5025-04P/P1	5025-06P/P1	5025-09P/P1	5025-12P/P1	5025-15P/P1
Circuit Size	5025-2	5025-3	5025-4	5025-6	5025-9	5025-12	5025-15
Amperes/Circuit (Max)*	5	5	5	5	5	5	5
Voltage Rating (Max)*	600	600	600	600	600	600	600
RECEPTACLE							
Dimension A	015-31-1022 .46 (11,6)	015-31-1032 .64 (16,4)	015-31-1042 .83 (21,2)	015-31-1062 .64 (16,4)	015-31-1092 .64 (16,4)	015-31-1122 .83 (21,2)	015-31-1152 1.02 (26,0)
Dimension B	.27 (6,8)	.27 (6,8)	.27 (6,8)	.46 (11,6)	.64 (16,4)	.64 (16,4)	.64 (16,4)
PLUG							
Panel Mount	15-31-1021	15-31-1031	15-31-1041	15-31-1061	15-31-1091	15-31-1121	15-31-1151
Free Hanging	15-31-1023	15-31-1033	15-31-1043	15-31-1063	15-31-1093	15-31-1123	15-31-1153
Dimension A	.46 (11,6)	.64 (16,4)	.83 (21,2)	.64 (16,4)	.64 (16,4)	.83 (21,2)	1.02 (26,0)
Dimension B	.27 (6,8)	.27 (6,8)	.27 (6,8)	.46 (11,6)	.64 (16,4)	.64 (16,4)	.64 (16,4)
Panel Cutout C	.62 (15,8)	.81 (20,6)	1.0 (25,4)	.81 (20,6)	.81 (20,6)	1.0 (25,4)	1.18 (30,2)
Panel Cutout D	.35 (8,9)	.35 (8,9)	.35 (8,9)	.53 (13,7)	.72 (18,5)	.72 (18,5)	.72 (18,5)

Notes: *Ratings based on fully loaded housings



.062" (1,57mm) Diameter Terminals



Electrical:

Resistance: MV voltage drop per amp on mated terminal, $\pm 10\%$; - 1st engagement 3.2 -10th engagement 3.4.

High Voltage Test: Withstands 1500 volts RMS for 60 seconds min. applied between adjacent terminals.

Temperature Rise/Operating Range: 30°C maximum for all connectors at maximum rated current.

Current Rating: Amperage rating 5 amps.

Storage Temperature Range: -40°C to 125°C

Mechanical:

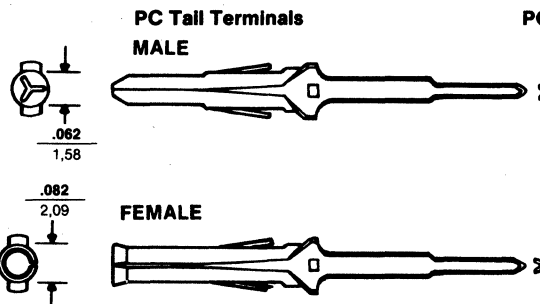
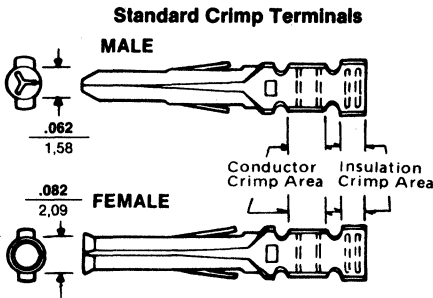
Terminal Crimp Strength: Minimum pull-out force in pounds (kilograms) for AWG wire sizes:

18—20 (9,07)	26—5 (2,27)
20—15 (6,80)	28—3 (1,36)
22—10 (4,54)	30—2 (0,91)
24— 8 (3,63)	

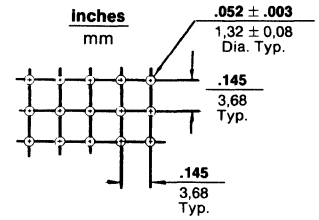
Engage/Disengage Forces: Miniature terminal of .008" (0,20mm) stock 70/30 brass. Average engage/ disengage forces in plug/receptacle connector with +30% tolerance in pounds (kilograms) by circuit:

1-circuit	2.3/ 0.8 (1,04/ 0,36)
2-circuit	4.6/ 1.6 (2,09/ 0,73)
3-circuit	6.9/ 2.4 (3,13/ 1,09)
4-circuit	9.2/ 3.2 (4,17/ 1,45)
5-circuit	11.5/ 4.0 (5,22/ 1,81)
6-circuit	13.8/ 4.8 (6,26/ 2,18)
8-circuit	18.4/ 6.4 (8,35/ 2,90)
9-circuit	20.7/ 7.2 (9,39/ 3,27)
12-circuit	27.4/ 9.6 (12,43/ 4,35)
15-circuit	34.5/12.0 (15,65/ 5,44)
24-circuit	55.2/19.2 (25,04/ 8,71)
36-circuit	82.8/28.8 (37,56/13,06)

.006 phosphor bronze stock recommended for versions 15 circuits and larger.



PCB Hole Layout for 1625 Series only



.150" usable tail length; terminal in standard housing

Crimp Wire Size	Insulation Diameter	Male/Female Series	Chain Form (a) Order Numbers		Loose Form Order Numbers		Application Tooling Order Numbers			
			Male	Female	Male	Female	Hand Tool	TM-40 Die*	Mini Mac Die*	Extraction Tool
Standard Brass .008"										
Tin Plated										
18-24	.060/.120 (1,52/3,05)	1560/1561	● 02-06-2101	● 02-06-1101	● 02-06-2103	● 02-06-1103	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	.040/.090 (1,02/2,29)	1854/1855	● 02-06-2131	● 02-06-1131	● 02-06-2132	● 02-06-1132	11-01-0037	11-40-2006	11-18-2024	11-03-0002
Select Gold (.000015" min.)										
18-24	.060/.120 (1,52/3,05)	1560/1561	● 02-06-6100	● 02-06-5100	● 02-06-6103	● 02-06-5103	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	.040/.090 (1,02/2,29)	1854/1855	● 02-06-6130	● 02-06-5130	● 02-06-6135	● 02-06-5135	11-01-0037	11-40-2006	11-18-2024	11-03-0002
Select Gold (.000030" min.)										
18-24	.060/.120 (1,52/3,05)	1560/1561	02-06-6101	02-06-5101	02-06-6102	02-06-5102	11-01-0008	11-40-2004	11-18-2107	11-03-0002
24-30	.040/.090 (1,02/2,29)	1854/1855	02-06-6138	02-06-5138	02-06-6139	02-06-5139	11-01-0037	11-40-2006	11-18-2024	11-03-0002
Select Gold (.000030" in Contact Area - Tin/Lead Crimp Area)										
18-24	.060/.120 (1,52/3,05)	1560/1561	02-06-6118	02-06-5108	02-06-6119	02-06-5109	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	.040/.090 (1,02/2,29)	1854/1855	02-06-6143	02-06-5147	02-06-6144	02-06-5148	11-01-0037	11-40-2006	11-18-2024	11-03-0002
Phos-Bronze										
.008" Tin Plated - Recommended for housings of 15 circuits and larger										
18-24	.060/.120 (1,52/3,05)	-/4529	—	● 02-06-1104	—	● 02-06-1105	11-01-0008	11-40-2106	11-18-2027	11-03-0002
24-30	.040/.090 (1,02/2,29)	-/4559	—	● 02-06-1109	—	● 02-06-1110	N/A	11-40-2006	11-18-2024	11-03-0002
.008" Tin Plated										
18-24	.060/.120 (1,52/3,05)	1786/1787	● 02-06-2201	● 02-06-1201	● 02-06-2202	● 02-06-1202	11-01-0008	11-40-2004	11-18-2017	11-03-0002
24-30	.040/.090 (1,02/2,29)	2190/2189	● 02-06-2231	● 02-06-1231	● 02-06-2232	● 02-06-1232	11-01-0037	11-40-2006	11-18-2024	11-03-0002
.008" Select Gold (.000015" min.) - Recommended for housings of 15 circuits and larger										
18-24	.060/.120 (1,52/3,05)	-/4529	—	● 02-06-5207	—	● 02-06-5208	11-01-0008	11-40-2106	11-18-2027	11-03-0002
24-30	.040/.090 (1,02/2,29)	-/4559	—	02-06-5211	—	—	N/A	11-40-2006	11-18-2024	11-03-0002
.008" Select Gold (.000015" min.)										
18-24	.060/.120 (1,52/3,05)	1786/1787	02-06-6201	02-06-5201	02-06-6202	02-06-5202	11-01-0008	11-40-2004	11-18-2017	11-03-0002
PC TAIL Brass .008"										
Tin Plated										
—	—	1778/1779	—	—	● 02-06-8103	● 02-06-7103	N/A	—	—	—
Select Gold (.000020 min./Tin Lead Tail Area)										
—	—	1778/1779	—	—	02-06-6122	02-06-7104	N/A	—	—	—
ALTERNATE TERMINALS FOR 5025 HOUSING (Can also use Std. .062" Terminals)										
14-16	.134" (3,4 max.)	5206/5205	08-70-0054	08-70-0052	08-70-0055	08-70-0053	11-26-0024	11-40-2066	N/A	11-26-7034
18-24	.118" (3,0 max.)	5006/5005	08-70-0002	08-70-0001	08-70-0043	08-70-0042	11-26-0027	11-40-2064	N/A	11-26-7034
24-28	.094" (2,4 max.)	5008/5009	08-70-0003	08-70-0004	08-70-0050	08-70-0051	11-26-0009 11-26-0025	11-40-2065	N/A	11-26-7034

(a) 7000 terminals/reel, 20,000 terminals/reel for 1854, 1855.
● U.S Standard Product, available through Molex franchised distributors.

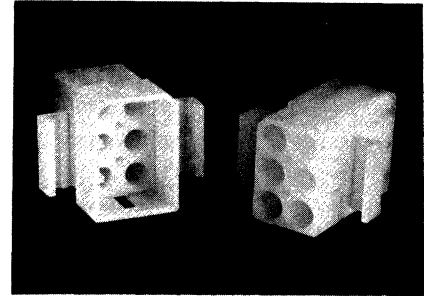
*Die only, Does not include press or spare tooling

.125" (3,18mm) Power Connector



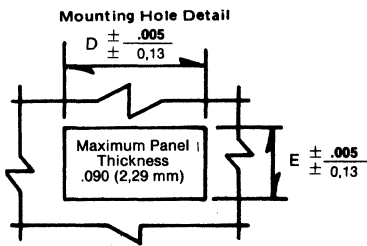
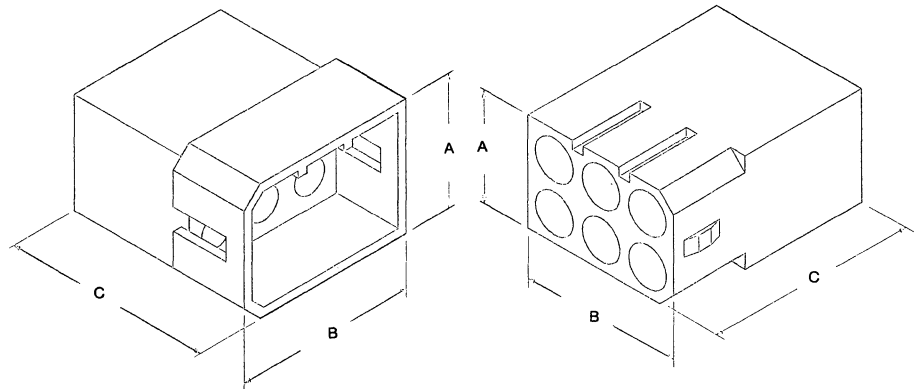
High Current

- UL recognized, CSA certified
- Up to 20 amperes per circuit
- Positive lock (2 & 12 circuit)
- 1 to 15 circuit housings
- Accommodates 10-18 AWG wire
- 250 volt rating*
- 2, 6 & 12 circuit sizes. Contact factory for other circuit sizes



Plug

Receptacle



Mounting Hole Detail

Housings

Ordering Information (Order Terminals on Page 16K of this Catalog)

	inches		mm	
Ckt. I.D. Shown is Mating Side of Receptacle; Wire Side of Plug				
	Plug	Plug	Plug	
Series-Circuit Size	4306-2	4154-6	2201-12	
Ampere/Circuit (Max)*	20	15	12	
Voltage Rating (Max)*	250	250	250	
RECEPTACLE Order No.				
Panel Mount	03-12-1021	03-12-1061	03-12-1121	
Free Hanging	03-12-1022	03-12-1062	03-12-1122	
Dimension A	.62 (15,7)	.55 (13,97)	1.20 (30,5)	
B	.30 (7,6)	.81 (20,57)	.74 (18,8)	
C	1.02 (25,9)	1.06 (26,9)	1.06 (26,9)	
Panel D	.778 (19,76)	.712 (18,08)	1.36 (34,54)	
Cutout E	.375 (9,52)	.878 (22,23)	.81 (20,57)	
PLUG Order No.				
Panel Mount	03-12-2021	03-12-2061	03-12-2121	
Free Hanging	03-12-2022	03-12-2062	03-12-2122	
Dimension A	.72 (18,2)	.91 (23,1)	1.30 (33,0)	
B	.40 (10,2)	.85 (16,5)	.84 (21,3)	
C	.98 (24,9)	1.00 (25,4)	1.00 (25,4)	
Panel D	.878 (22,30)	.815 (20,70)	1.46 (37,80)	
Cutout E	.432 (10,97)	.960 (24,38)	.855 (21,72)	

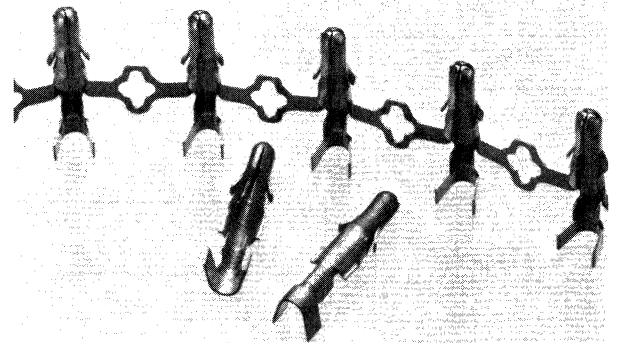
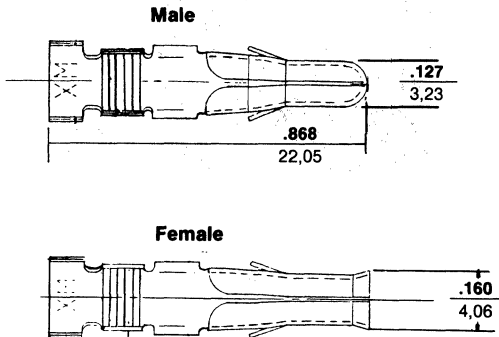
NOTES: *Rating is based on fully loaded housings



.125" (3,18 mm) Diameter Terminals



1900/1901/2046/2047 Series Standard Terminals



Dimensions and Ordering Information - Pre-Tinned Brass

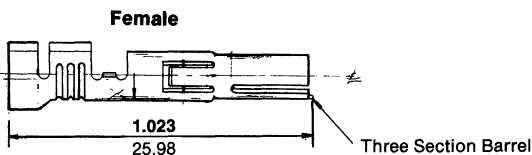
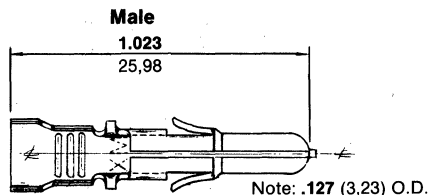
Crimp Wire Size	Insulation Diameter	Male/Female Series	Chain Form (a) Order Numbers		Loose Form Order Numbers		Application Tooling Order Numbers			
			Male	Female	Male	Female	Hand Tool	TM-40 Die*	Mini Mac Die*	Extraction Tool
10-14	.180 (4,57)	1900/1901	18-12-2601	18-12-1601	18-12-2602	18-12-1602	11-01-0040	11-40-2163	11-18-2032	11-03-0008
16-18	.120 (3,04)	2046/2047	18-12-2221	18-12-1221	18-12-2222	18-12-1222	11-01-0084	11-40-2164	11-18-2033	11-03-0008

*Die only; Does not include press or spare tooling.

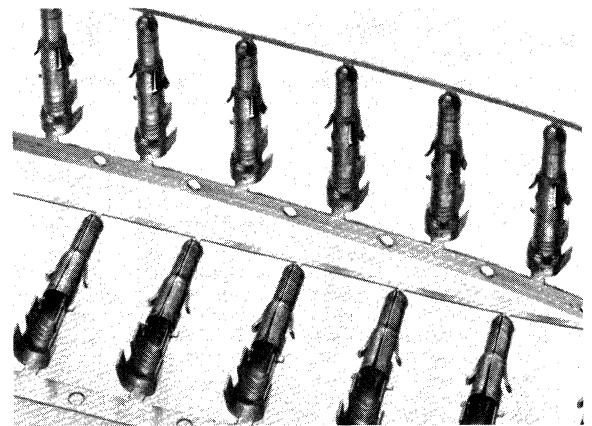
1219/1220 Series Custom Terminals

K

- For use with custom housings
- UL recognized and CSA certified
- Low engagement force
- 20 amps continuous capability
- 12-14 AWG wire
- Dual crimp capability (1-12 AWG & 1-18 AWG wire)
- .016" thick tin plated brass
- Chain form
- **Not for use with Molex 4306, 4154 or 2201 housings**



inches
mm



Ordering Information

Eng. No.	Order No.	Hand Crimp Tool Order No.
1219 Female	02-12-1401	11-01-0040
1220 Male	02-12-2401	11-01-0040

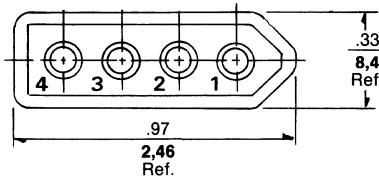
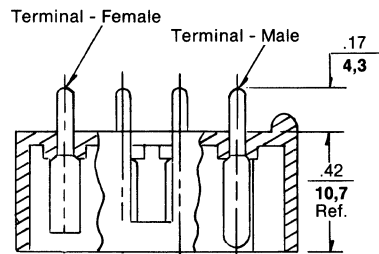
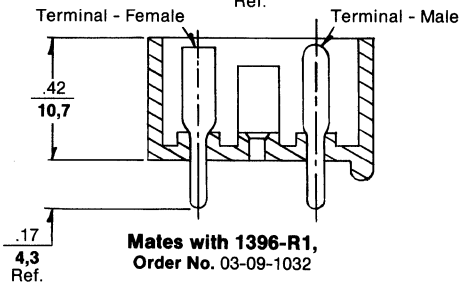
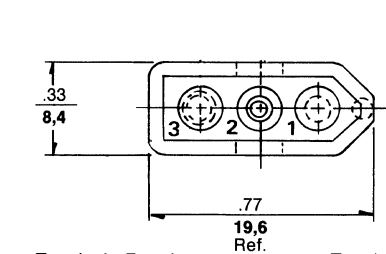
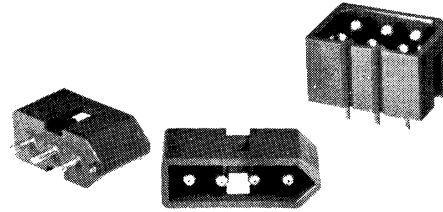
Applications: Used in custom housings in the lighting, modular office, appliance and automotive industries. Recognized under UL 1286 and 183.

Shrouded Pin and Socket Wafers

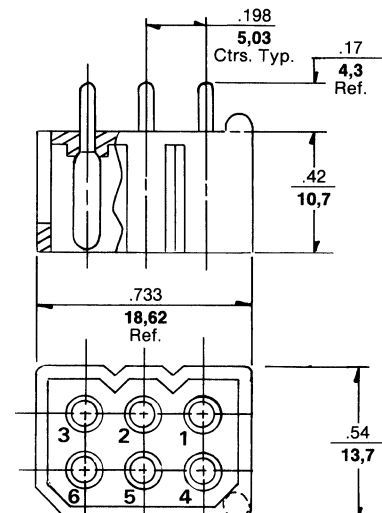


3099 Series

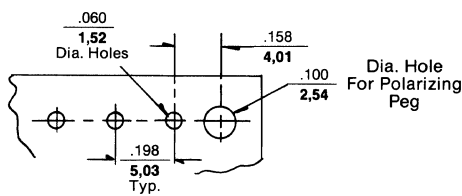
- Preassembled
- Available in 3, 4, or 6 circuits
- For 9, 12 and 15 circuits contact factory
- Intermix of male and female terminals for polarization
- UL rated 94V-0 nylon
- Mates with standard .093" (2,36mm) diameter receptacles
- Plating: electro-tin
- May be used with 1840 Header as a board-to-board connector



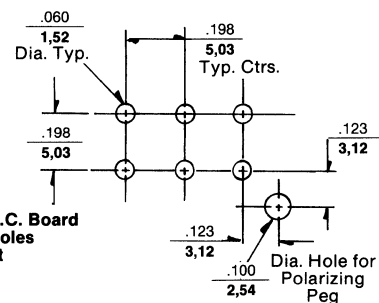
Mates with 1490-R1, Order No. 03-09-1042



Mates with 1261-R1, Order No. 03-09-1064



Recommended P.C. Board Holes 3 & 4 Circuit



Recommended P.C. Board Mounting Holes 6 Circuit

Ordering Information 3099 (Contact factory for 9, 12 and 15 circuits)

Eng. No.	Order No.	TERMINAL PATTERN						Eng. No.	Order No.	TERMINAL PATTERN					
		1	2	3	4	5	6			1	2	3	4	5	6
AE-3099P-3	10-18-1031	M	B	M	—	—	—	AE-3099P-4C	10-18-1044	M	F	F	F	—	—
AE-3099P-3-1	10-18-1032	M	M	M	—	—	—	AE-3099P-4D	10-18-1045	M	M	F	F	—	—
AE-3099P-3A	10-18-1033	F	M	M	—	—	—	AE-3099P-4E	10-18-1046	M	M	M	F	—	—
AE-3099P-3B	10-18-1034	M	F	M	—	—	—	AE-3099P-4F	10-18-1047	M	F	M	M	—	—
AE-3099P-3C	10-18-1035	M	M	F	—	—	—	AE-3099P-4H	10-18-1048	M	M	F	M	—	—
AE-3099P-3D	10-18-1036	M	F	B	—	—	—	AE-3099P-4J	10-18-1049	M	F	M	F	—	—
AE-3099P-3E	10-18-1038	F	F	F	—	—	—	AE-3099P-4K	10-18-1050	F	F	M	M	—	—
AE-3099P-3H	10-18-1037	M	F	F	—	—	—	E-3099-P-4	● 50-29-1041	B	B	B	B	—	—
E-3099-P-3	● 50-29-1031	B	B	B	—	—	—	AE-3099P-6A	10-18-1061	M	M	M	M	M	M
AE-3099P-4	10-18-1041	M	M	M	M	—	—	AE-3099P-6B	10-18-1063	M	F	M	M	F	M
AE-3099P-4A	10-18-1042	F	F	F	F	—	—	E-3099-P-6	● 50-29-1061	B	B	B	B	B	B
AE-3099P-4B	10-18-1043	F	M	M	M	—	—								

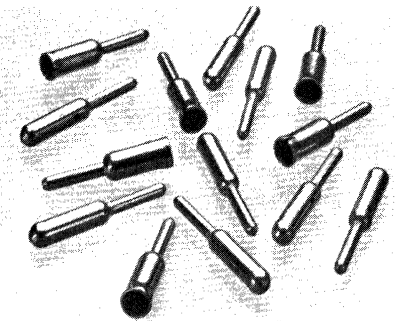
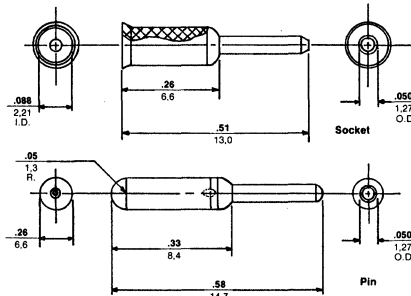
M = Male
F = Female
B = Blank
— = No Circuit Available

● U.S. Standard Product, available through Molex franchised distributors.
*No Polarizing Peg
For terminals alone, see 1840 Series

Pin and Socket Wafers and Terminals



1840 Series Used with 1840 and 3099 Series Housings Discrete Terminals



Ordering Information

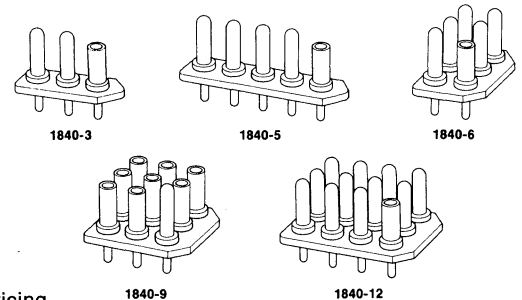
Engineering No.	Type	Tin Plating Order No.	Gold Plating Order No.
1840-A1B	Socket (Female)	• 16-06-0001	Consult Factory
1840-A2B	Pin (Male)	• 16-06-0002	Consult Factory

Wafercon® Base & Terminal Assemblies

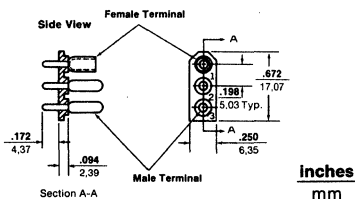
- 3, 5, 6, 9 & 12 circuits available
- Tin or gold plated terminals*
- Mates with Molex standard .093" (2,36mm) diameter standard receptacles
- Available in shrouded (in some circuit sizes) version for additional stability
- Wafers pre-assembled with male, female or voids in any pattern
- May be used with 3099 Series as a board-to-board connector

These pre-assembled wafers helps save time and labor in production, testing and servicing.

The assembly is ready to be placed on the printed circuit boards and soldered. An intermix of male and female terminals assures error-free connections and positive polarity. *Recommended .008 stock mating terminal without high pressure dimple or 7238/female terminal in mating housing.

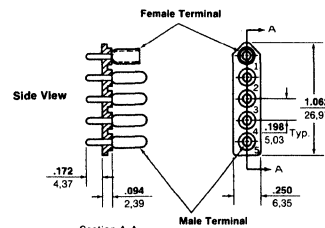


1840-3 Mates with 1396R1 Receptacle Order No. 03-09-1032



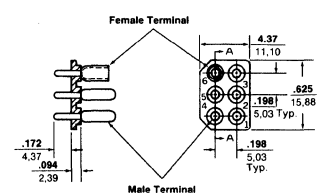
ENG. NO.	ORDER NO.	TERMINAL PATTERN*		
		1	2	3
A-1840-3-2	• 09-18-5031	F	M	M
1840-03A1A1	• 03-04-4031	B	B	B

1840-5 Mates with 1353R1 Receptacle Order No. 03-09-1052



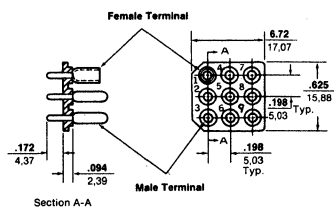
ENG. NO.	ORDER NO.	TERMINAL PATTERN*				
		1	2	3	4	5
A-1840-5-0	• 09-18-5051	F	M	M	M	M
1840-05A1A1	• 03-04-4051	B	B	B	B	B

1840-6 Mates with 1261R2 Receptacle Order No. 03-09-1063



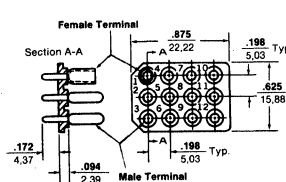
ENG. NO.	ORDER NO.	TERMINAL PATTERN*					
		1	2	3	4	5	6
A-1840-6-4	• 09-18-5061	M	M	M	M	M	M
A-1840-6-10	• 09-18-5069	F	M	M	M	M	M
1840-06A1A1	• 03-04-4061	B	B	B	B	B	B

1840-9 Mates with 1292R2 Receptacle Order No. 03-09-1092



ENG. NO.	ORDER NO.	TERMINAL PATTERN*								
		1	2	3	4	5	6	7	8	9
A-1840-9-2	• 09-18-5091	M	M	F	M	M	M	M	M	M
A-1840-9-12	• 09-18-5094	F	M	M	M	M	M	M	M	M
1840-09A2A1	• 03-04-4091	B	B	B	B	B	B	B	B	B

1840-12 Mates with 1360R1 Receptacle



ENG. NO.	ORDER NO.	TERMINAL PATTERN*											
		1	2	3	4	5	6	7	8	9	10	11	12
A-1840-12-1	• 09-18-5126	M	M	F	M	M	M	F	M	M	M	M	F
A-1840-12-2	• 09-18-5121	F	M	M	M	M	M	M	M	M	M	M	M
A-1840-12-3	• 09-18-5127	M	M	M	F	M	M	M	M	M	M	M	M
1840-12A2A1	• 03-04-4121	B	B	B	B	B	B	B	B	B	B	B	B

1840 Technical Data:

Electrical Characteristics:

Contact Resistance - 3 MV @ 1 amp

Temperature Range - -40°F to 221° F (-40° C to 105° C)

Rated Voltage, Currents - Maximum voltage: 250V ac, 5 amps per circuit. Current rating varies somewhat in the particular variations.

*M = Male terminal
F = Female terminal
B = No terminal

Polarization accomplished through intermix of male and female terminals
• U.S. Standard Product, available through Molex franchised distributors.
For other configurations, contact factory

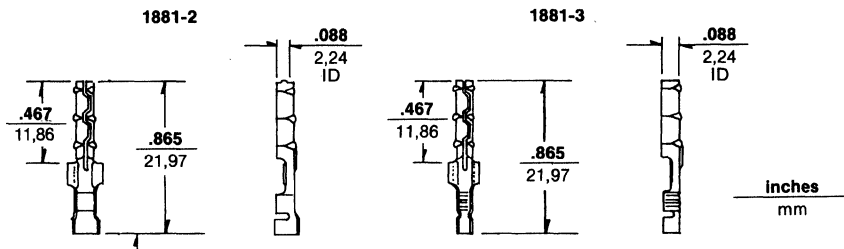
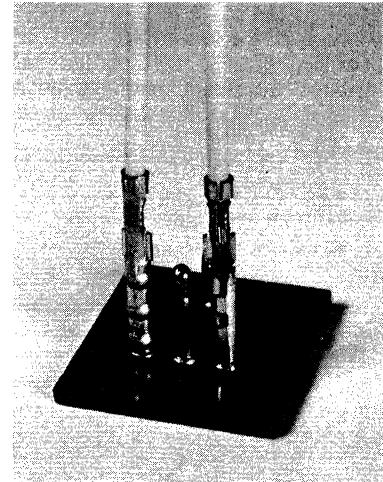
Wire-to-Board Crimp Terminal Sockets



1881 Series Claspcron™ Crimp Terminal Socket for Round Pins

Molex 1881 Claspcron crimp-type terminals are designed for a single contact connection to an .093" dia. pin which has been inserted into a P.C. board. This type of interconnection is especially useful for test set-ups or side connections which must be made on the P.C. board. Two sizes are available, depending upon specified wire size, both in tin-plated brass. Order mating .093 P.C. pin below.

□ **Current Rating: 6 Amps**



Ordering Information

Crimp Wire Size	Insulation Diameter	Eng. No.	1881 Order Number		Hand Crimp Tool Order No.	.093 P.C. Pin Ordering Information	
			Chain Form	Loose Form		Staking Length	Order No.
16-24	.138 3,50 Max.	1881-2	02-08-1101	02-08-1102	• 11-01-0002	.109 2,78	16-06-0005
24-30	.030-.060 0,76-1,52	1881-3	02-08-1103	02-08-1104	11-01-0006		

• U.S. Standard Product, available through Molex franchised distributors

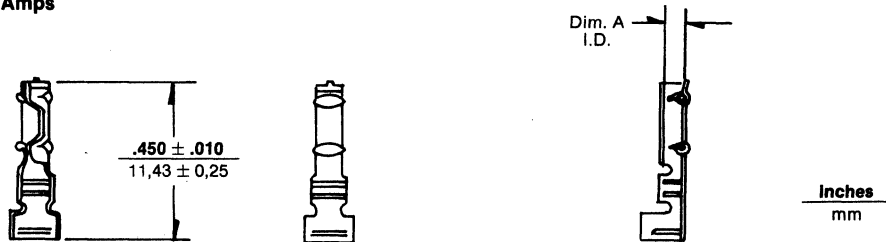
Recommended wire range assumes stranded wire

See the Application Tooling section of this catalog for presses and automatic crimping equipment, Molex Mini-Mac™ and TM-40™.

2107 Series Claspcron™ Crimp Terminal Sockets for .045" Pins

Claspcron crimp-type terminals connect to a single circuit .045" (1,14mm) wire pin. The pin may be positioned anywhere on a P.C. board, thus eliminating the need to run a circuit to the P.C. board edge. The terminal may be specified in either chain or loose form for automatic or single crimping.

□ **Current Rating: 6 Amps**



Ordering Information

.045 Pin Style	Crimp Wire Size	Insulation Diameter	Dim. A	Brass		Phosphor Bronze	
				Chain Form Order No.	Loose Form Order No.	Chain Form Order No.	Loose Form Order No.
Round	18-22	.060-.120/(1,52-3,05)	.043 1,09	02-05-1104	02-05-1105	02-05-1204	02-05-1205
				02-05-5104 (a)	02-05-5117 (a)	—	—
				02-05-5118 (b)	02-05-5119 (b)	02-05-5204 (a)	02-05-5205 (a)
Round	24-30	.030-.060/(0,76-1,52)	.043 1,09	02-05-1116	02-05-1117	02-05-1216	02-05-1217
				02-05-5115 (a)	02-05-5116 (a)	02-05-5216 (a)	02-05-5217 (a)
Square	18-22	.060-.120/(1,52-3,05)	.053 1,35	C/F	C/F	C/F	C/F
Square	24-30	.030-.060/(0,76-1,52)	.053 1,35	02-05-1115	C/F	C/F	C/F

C/F = Contact Factory
(a) Selective gold plating
(b) Overall gold plating.

Recommended wire range assumes stranded wire

See the Application Tooling section of this catalog for presses and automatic crimping equipment, Molex Mini-Mac™ and TM-40™.

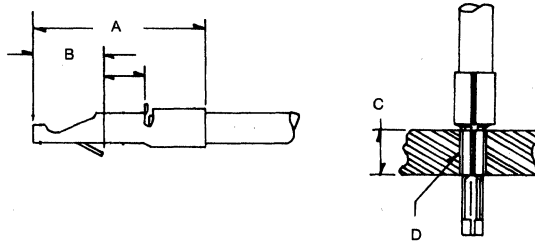
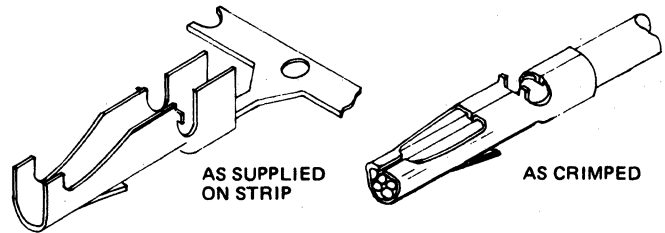


Wire-to-Board Crimp Terminals



Strain Relief P.C. Board Terminals

- Snap-lock secure wire to P.C. board before wave soldering
- No additional contact resistance
- Wire soldering directly to board
- Rapid and economical means of hand-wiring boards
- Eliminates eyelets on P.C. board



inches
mm

Dimensions

Wire Size	Max. Dia. of Insulation	Eng. No	Terminal Progression	Dim. A	Dim. B	Dim. C Max. Board Thickness	Dim. D P.C. Board Hole Size
16-18	.115 (2,92)	4706	.440	.30 (7,7)	.12 (3,1)	.070 (1,77)	.098 ± .003 (2,49 ± 0,08)
18-24	.120 (3,05)	4706	.440	.30 (7,7)	.12 (3,1)	.070 (1,77)	.075 ± .003 (1,91 ± 0,08)
22-24	.100 (2,54)	4811	.380	.32 (8,1)	.14 (3,4)	.070 (1,77)	.051 ± .002 (1,30 ± 0,05)
22-26	.060 (1,52)	4811	.380	.32 (8,1)	.14 (3,4)	.070 (1,77)	.051 ± .002 (1,30 ± 0,05)
		41817	.200	.32 (8,1)	.14 (3,4)	.070 (1,77)	.051 ± .002 (1,30 ± 0,05)
		42001	.200	.27 (6,7)	.08 (2,1)	.070 (1,77)	.051 ± .002 (1,30 ± 0,05)

Ordering Information - Chain Form

Wire Size	Eng. No.	Plating	Order No.	Application Tooling TM40					
				Die Only		Press and Die		Spare Tooling Kit	
				Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.
16-18	4706	Tin	02-09-2105	T8324A	11-40-2042	TM40D8324A	11-04-0293	K8324A	11-40-3042
18-24	4706-3	Tin/Lead	02-09-2101	T8324B	11-40-2043	TM40D8324B	11-04-0295	K8324B	11-40-3043
22-24	4811	Tin	16-02-0037	T8310A	11-40-2029	TM40D8310A	11-04-0277	K8310A	11-40-3029
22-26	4811-1	Tin	16-02-0034	T8310B	11-40-2039	TM40D8310B	11-04-0279	K8310B	11-40-3039
	41817	Tin/Lead	16-02-0118	T8353A	11-40-2120	TM40D8353A	11-04-0595	K8353A	11-40-3118
	42001	Tin/Lead	40-08-0605						

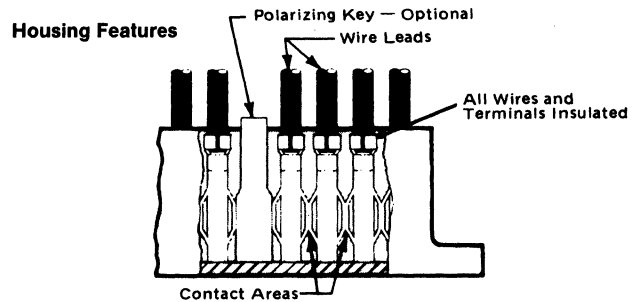
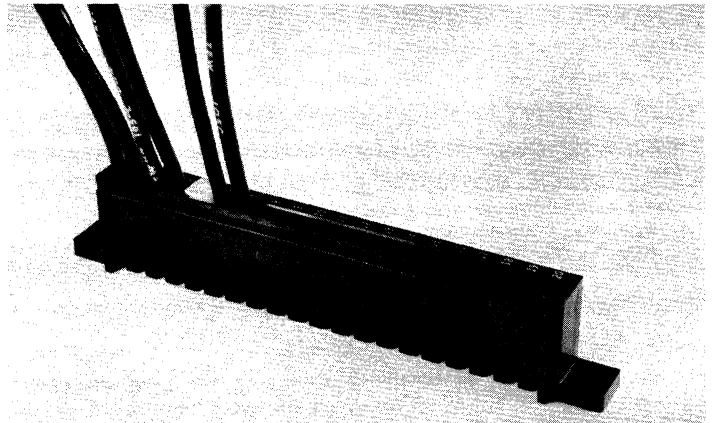
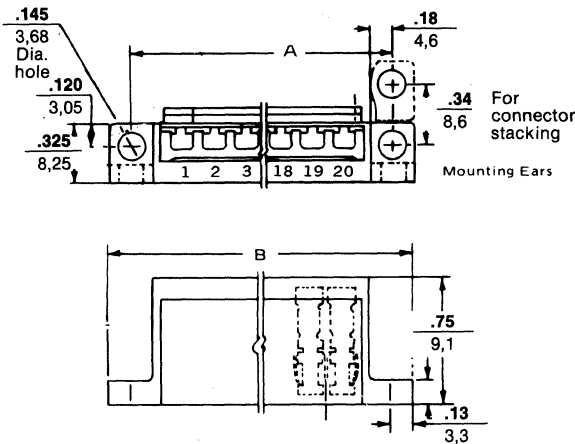
Commoning Connectors



1461 Series

- Replaces terminal blocks
- Fewer parts for inventory
- Low cost housing
- Simplified service
- Stackable side-by-side
- Polarizing keys
- Circuit number identification
- 12 Amps (14 AWG)
- UL recognized
- Order housing and terminals separately

Housing



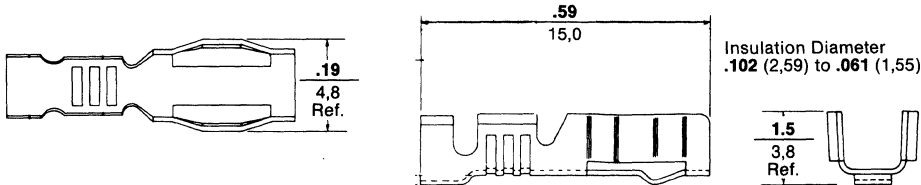
Dimensions and Ordering Information

No. of Circuits	Dim. A	Dim. B	Order No.
5	1.38 34,9	1.62 41,1	• 07-01-7051
10	2.25 57,2	2.49 63,2	• 07-01-7101
15	3.13 79,5	3.37 85,6	• 07-01-7151
20	4.00 101,6	4.24 107,7	• 07-01-7201

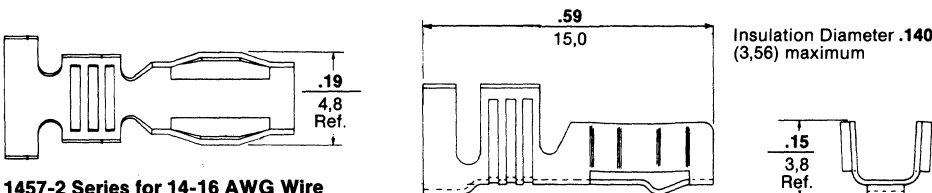
• U.S. Standard Product, available through Molex franchised distributors.

	Eng. No.	Order No.
POLARIZING KEY	1461-K	15-04-0200

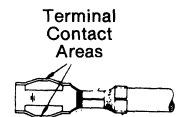
Terminals, Brass Pre-tinned



1457-1 Series for 18-22 AWG wire



1457-2 Series for 14-16 AWG Wire



inches
mm

Dimensions and Ordering Information

Eng. No.	Wire Size	Max. Ins. Dia.	Order No.		Handtool		TM 40				Insertion Tool		Extraction		
			Chain	Loose	Eng. No.	Order No.	Terminator Die Only		TM40 Press & Die		Spare Tooling				
							Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.			
1457-1	18-22	1.02 2,59	• 05-02-0047	• 05-02-0046	HTR-1031E	11-01-0084	T8307A	11-40-2009	TM40D8307A	11-04-0213	K8307A	11-40-3009	HT-1461	11-02-0007	N/A
1457-2	14-16	.140 3,6	• 05-02-0049	• 05-02-0050			T8307B	11-40-2010	TM40D8307B	11-04-0215	K8307B	11-40-3010			N/A

• U.S. Standard Product, available through Molex franchised distributors.

Recommended wire range assumes stranded wire.

For crimp tools see the Application Tooling Section of this catalog.



Disk Drive Power Connection System



8981/70156/53109/ 53113 Series

- Wire-to-board and wire-to-wire connector system
- Insulation displacement and crimp versions
- Wire connectors have end grips for easy unmating
- Detents provide firm positive fit
- U.L. listed File No. E29179; CSA listed

SPECIFICATIONS

Electrical:

Housing - 94V-2 nylon 6/6, natural color (8981-4SM high temperature material, black)
Terminal - Phosphor bronze, pre-tinned

Mechanical:

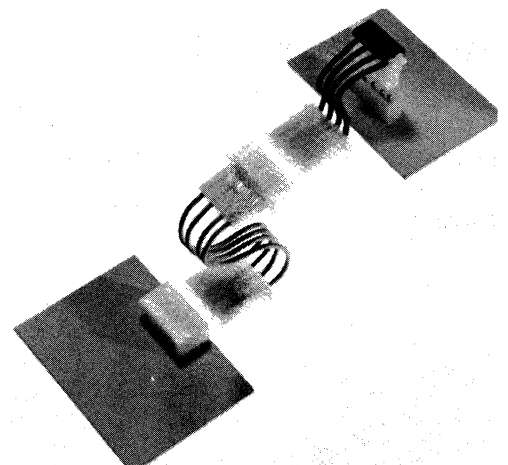
Mating Force - 4.0 lbs. max. per contact
Unmating Force - 1.5 lbs. min. per contact after 30 cycles
Contact Retention in Housing - 4.0 lbs. min.

Electrical:

Voltage - 250V AC
Current Rating -
10 amp - 70156/8981-4V/4SM
6.5 amp - 8981-4R
5 amp - 53109/53113
Contact Resistance - 20 MΩ max. (milliohms)
Insulation Resistance - 500 MΩ (megohms)
Dielectric Strength - 1500 VAC

Environmental:

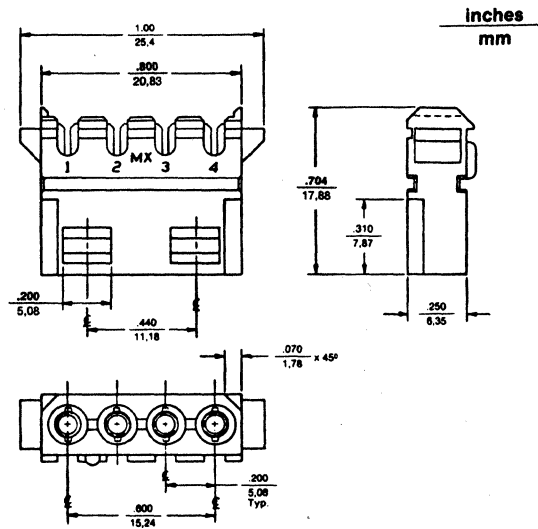
Temperature - -40°C +105°C



*Please contact factory for current product specifications for approval testing or inspection.

70156 Series Female Connector

- Low cost termination using insulation displacement method
- Mates with 8981 headers and 8981-4M connector
- Fast daisy chain assemblies eliminate double crimping
- Positive lock cover insulates termination area and acts as strain relief for wires
- Current ratings 18 AWG 8 amps; 20 AWG 7 amps; 22 AWG 6 amps
- Voltage rating 250 volts ac
- Wire accommodations - 18, 20 & 22 AWG with max. insulation diameter of .095" (2,41MM)
- See page 13M for Application Tooling



Also still available: Connectors only

Ordering Information 70156 Connectors

Order No.	Eng. No.	Color	Wire Type
• 15-24-2000	A-70156-2000	Red	18 AWG stranded, 20 AWG solid and fused
• 15-24-2001	A-70156-2001	Blue	20 AWG stranded
• 15-24-2002	A-70156-2002	Black	22 AWG solid, fused stranded and stranded

Covers also available separately.

Note: Covers MUST be used with this connector to retain wires

Ordering Information Covers

FEED TO COVER		FEED THRU COVER	
Order No.	Eng. No.	Order No.	Eng. No.
• 15-05-7012	70156-4000	• 15-05-7011	70156-3000

• U.S. Standard Product, available through Molex franchised distributors.

Available as Kit with Connectors and Covers Ordering Information

Order No.	Eng. No.	Cover Type	Color
15-24-2003	MS-70156-2300	Feed thru	Red
15-24-2004	MS-70156-2400	Feed to	
15-24-2005	MS-70156-2301	Feed thru	Blue
15-24-2006	MS-70156-2401	Feed to	
15-24-2007	MS-70156-2302	Feed thru	Black
15-24-2008	MS-70156-2402	Feed to	

This chart contains kit packaging part numbers. Kits contain 1,000 assy's + 1,000 covers per kit.



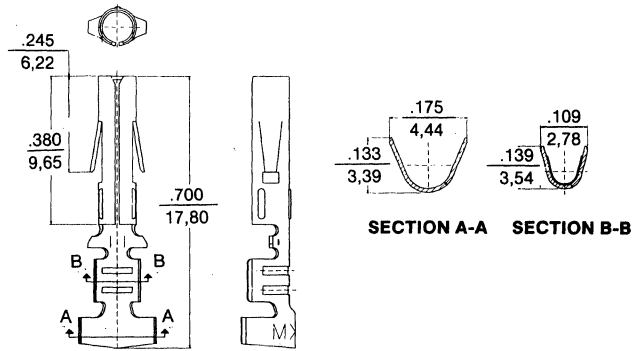
Disk Drive Power Connection System



8981-4P Crimp Terminal Housing, .084" (2,13mm) Diameter

- Mates with 8981 4V and 8981 4R1
- 94V-2 nylon material, natural color
- Crimp equivalent of 70156
- 250V AC, up to 10 amps
- Wire range 14-20 AWG and 18-22 AWG available

Terminals for 8981-4P Housing



- For use with 14-20 AWG wire
- Phosphor bronze, tin plated

Crimp Hand Tool Order No.	
11-01-0123	

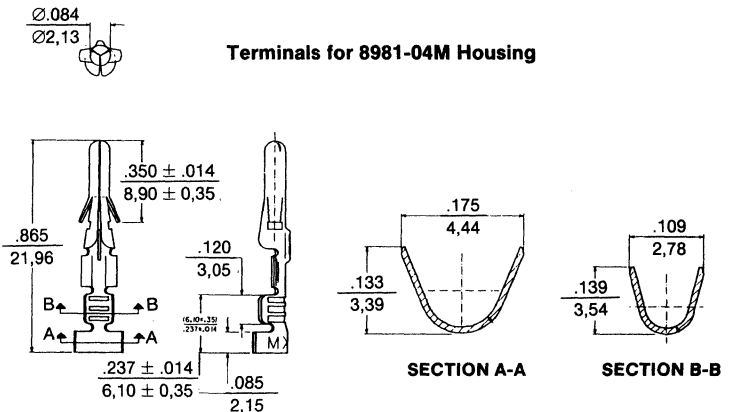
Terminal Order No.	Eng. No.	Form
02-08-1201	8980-3C	Chain
02-08-1202	8980-3L	Loose

Housing Order No.
15-24-4048

8981-04M Crimp Terminal and Housing

- Mates with 70156 IDT or 8981-4P crimp connectors
- Current rating 10 amps max.
- Voltage ratings 250 volts AC
- Wire range 14-20 AWG and 18-22 AWG available

Terminals for 8981-04M Housing



- For use with 14-20 AWG wire
- Phosphor bronze, tin plated

Crimp Hand Tool Order No.	
11-01-0123	

Terminal Order No.	Eng. No.	Form
02-08-1205	8980-4C	Chain
02-08-1206	8980-4L	Loose

Housing Order No.
15-24-4047

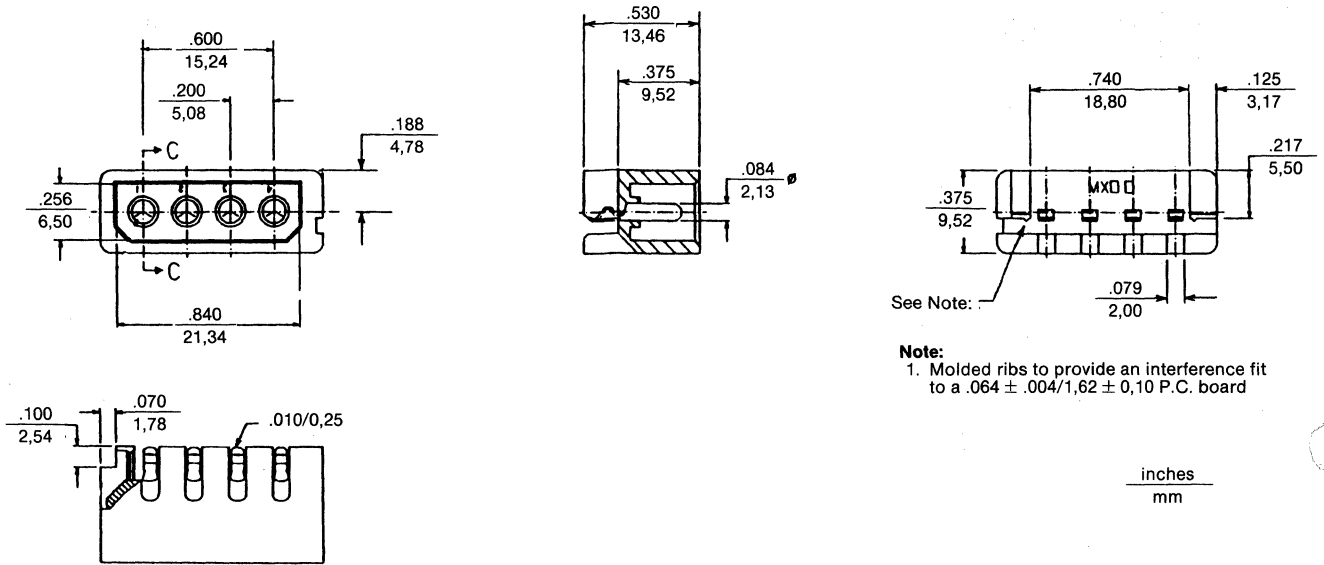
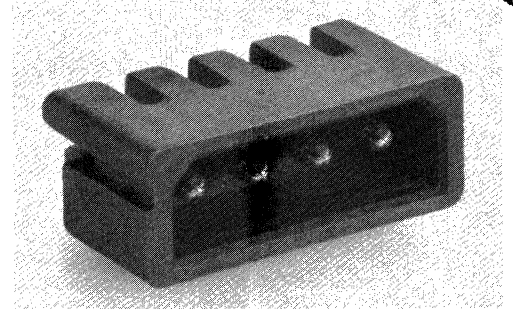


Disk Drive Power Connection System



8981-4SM Surface Mount Header

- Mates with 70156 IDT or 8981-4P crimp connectors
- Right angle
- Low profile
- Current rating 10 amps
- Voltage rating 250V AC
- Housing - 94V-0 high temperature material
- Color, black
- Vapor phase and I/R soldering
- Terminals - phosphor bronze
- Plating - tin over copper



K

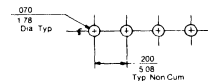
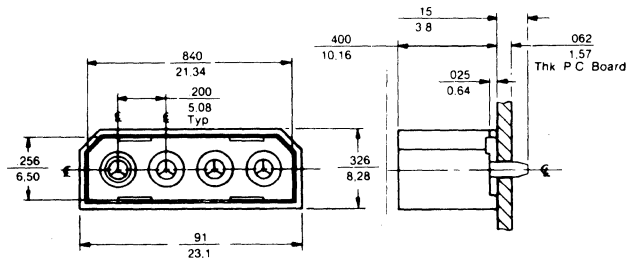
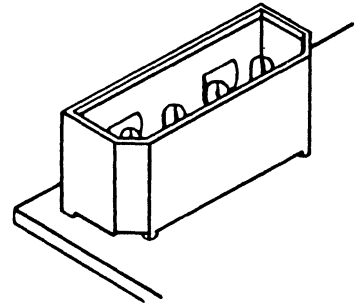
Contact Factory for Availability of Updated Version

Disk Drive Power Connection System



8981-4V Vertical Mount Header

- Mates with 70156 IDT or 8981-4P connectors
- Current rating 10 amps vertical
- Voltage rating 250 volts AC
- Terminals - phosphor bronze
- Plating - tin over copper
- Housing - 94V-2 nylon 6/6



Recommended P.C. Board Layout

Ordering Information 8981 Header

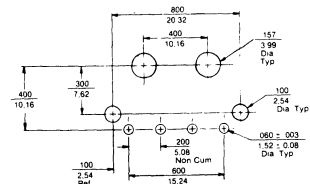
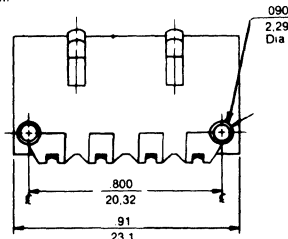
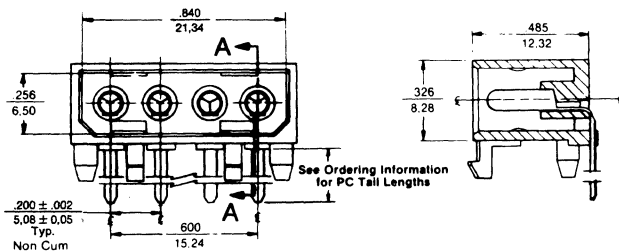
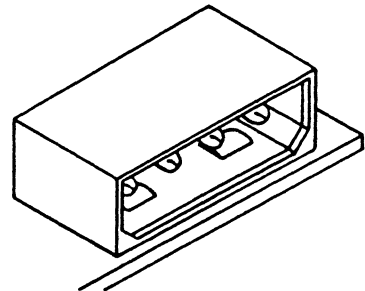
Eng. No	Order No.	P.C. Tail Length
8981-4V Vertical Mount	• 15-24-4049	.15 (3,8)

• U.S. Standard Product, available through Molex franchised distributors.

inches
mm

8981-4R Right Angle Header

- Mates with 70156 IDT or 8981-4P connectors
- Current rating 6.5 amps right angle
- Voltage rating 250 volts AC
- Terminals - phosphor bronze
- Plating - tin over copper
- Housing - 94V-2 nylon 6/6



Recommended P.C. Board Layout

Ordering Information 8981 Header

Eng. No	Order No.	P.C. Tail Length
8981-4R-1 Right Angle	• 15-24-4041	.14 (3,6)

• U.S. Standard Product, available through Molex franchised distributors.

K

Disk Drive Power Connection System

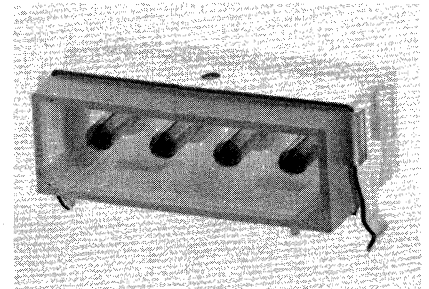
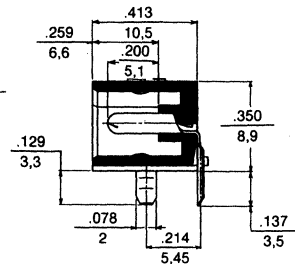
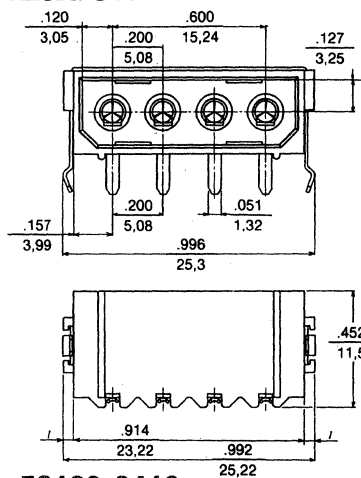


53109/53113

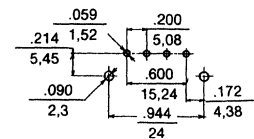
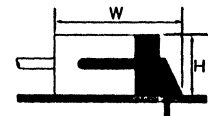
Right Angle Header with Strap

- Mates with 70156 IDT Or 8981-4P crimp connectors
- Housing - 94V-2 nylon 6/6 natural color
- Pre-assembled with metal strap
- Plating - tin over copper
- Current rating 5 amps, right angle
- Voltage rating 250 volts AC
- Terminals - phosphor bronze

53109-0410 Standard Polarization



$$H = \frac{.350}{8.9} \quad W = \frac{.783}{19.9}$$

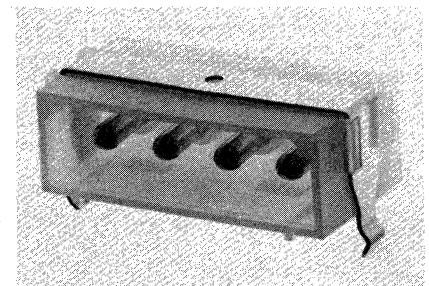
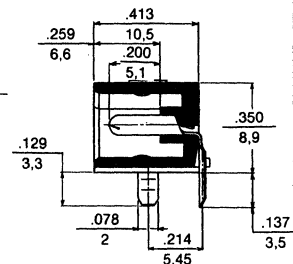
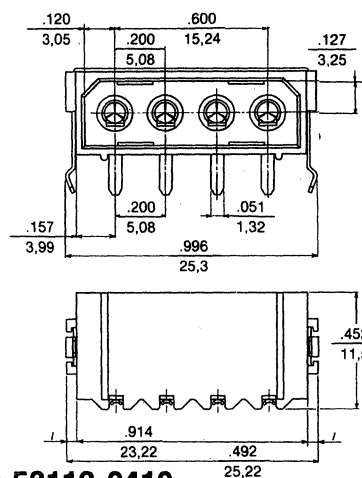


Recommended P.C. Board Layout inches mm

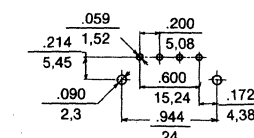
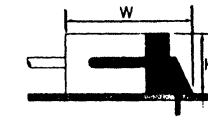
Ordering Information 53109-0410

Eng. No.	Order No.	P.C. Tail Length
53109-0410 Standard Polarization	531-09-0410	.13 (3,50)

53113-0410 Reverse Polarization



$$H = \frac{.350}{8.9} \quad W = \frac{.783}{19.9}$$



Recommended P.C. Board Layout

Ordering Information 53113-0410

Eng. No.	Order No.	P.C. Tail Length
53113-0410 Reverse Polarization	531-13-0410	.13 (3,50)

K

Industry Standard Power Supply Header



8619 Series

- .156" (3,96mm) pitch
- 6 and 12 circuit
- Break-away polarizing keys
- Rectangular pins .031" x .062" (0,79 x 1,57mm)
- Mates with 90331 Power Connector

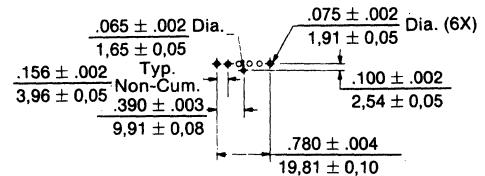
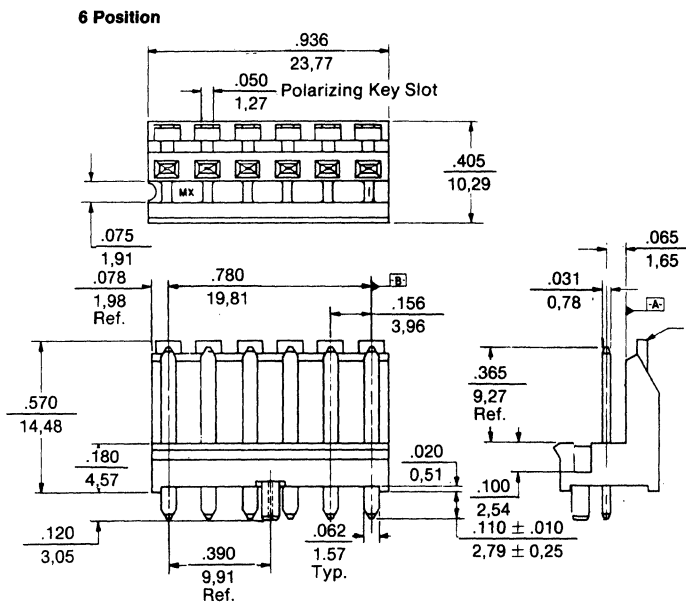
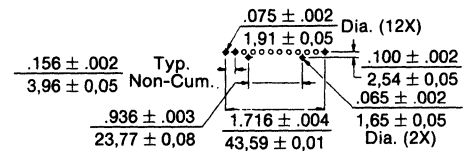
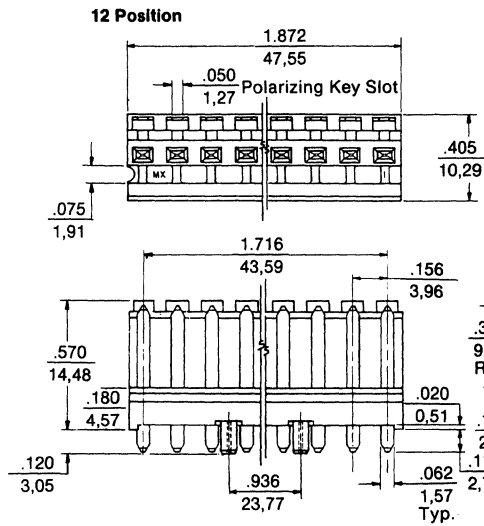
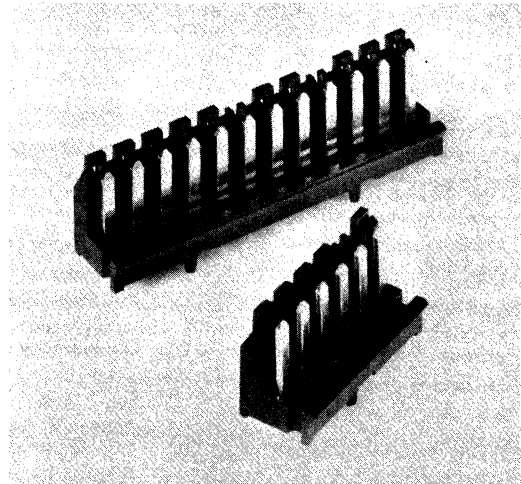
SPECIFICATIONS:

Terminal Material:
Tin plated copper alloy

Insulator Material:
Glass filled polyester
UL 94V-0, black

Current Rating:
5 amp (max.)

Voltage Rating:
250V AC



inches
mm



Ordering Information

Circuits	Eng. No.	Order No.
6	8619-0602	15-48-0406
12	8619-1202	15-48-0212

Industry Standard Power Supply Connector



90331 Series Housing 8993 Series Crimp Terminal

- .156" (3,96mm) pitch
- 6 circuit standard
- Molded latches lock on header
- Polarizing ribs
- Keying options
- Friction lock
- Mates with 8619 header
- Accepts crimp terminal 8993

SPECIFICATION

Housing Material:
Polyester UL 94V-0, white

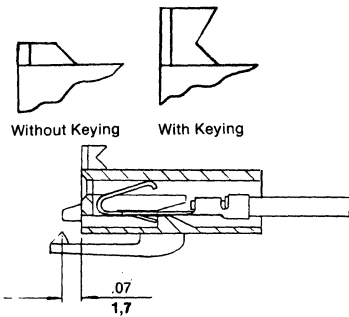
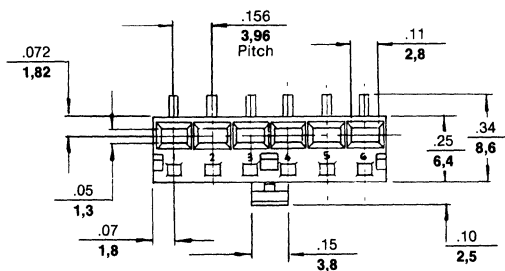
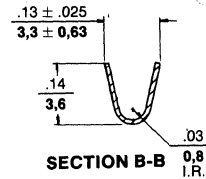
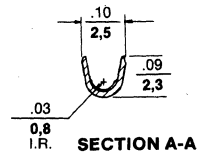
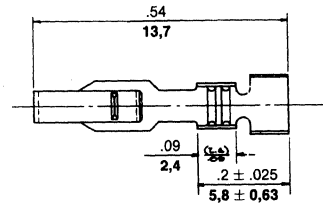
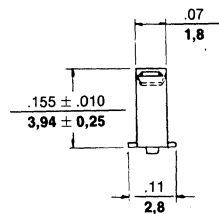
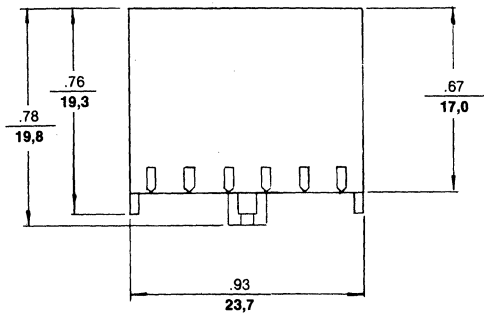
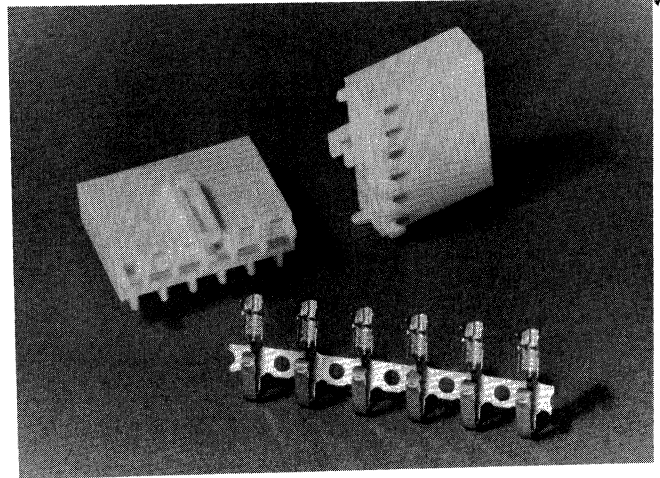
Terminal Material:
Copper alloy, tin plated

Wire Range:
AWG 18-24

Insulation Diameter:
.110" (2,79mm) max.

Current Rating:
5 amp max.

Voltage Rating:
250 VAC



inches
mm

Ordering Information

Order Number	HOUSING					
	Keying at Circuit Positions					
	1	2	3	4	5	6
90331-0001	Yes	Yes	Yes	Yes	Yes	Yes
90331-0002	Yes	No	No	No	No	No
90331-0003	No	No	No	Yes	No	No

	TERMINAL	
	Eng. No.	Order No.
Chain Form	8993-P914	08-50-0277
Loose	8993-P914L	08-50-0276

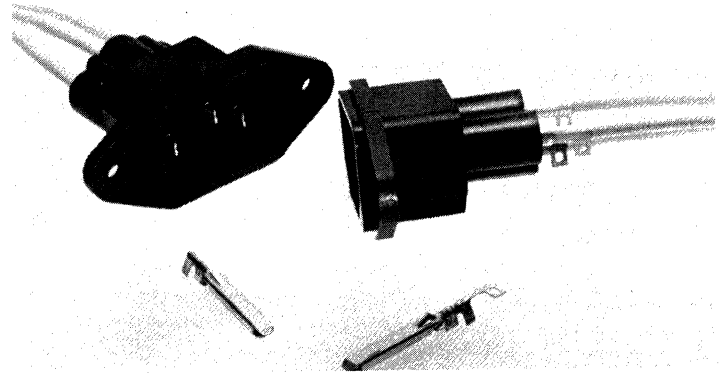
Application Tooling Ref: See page 36M, 41M, 44M

A.C. Receptacle



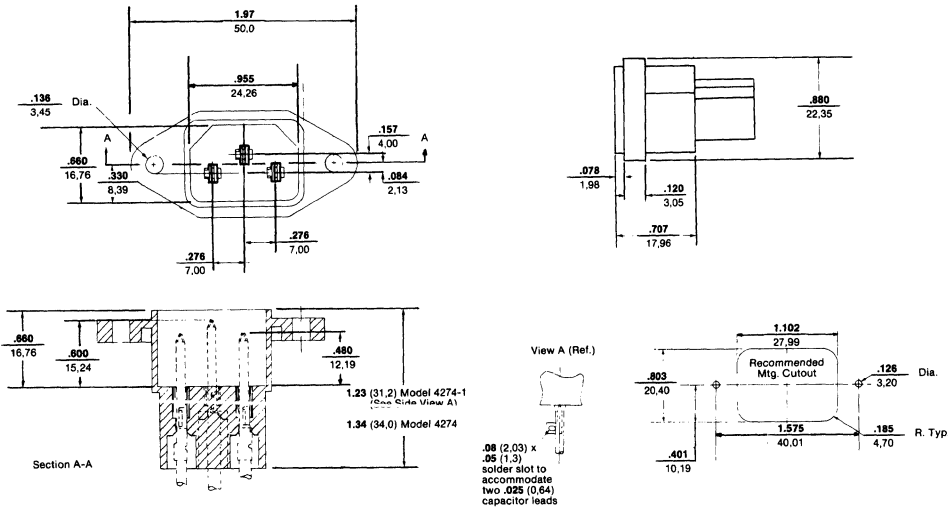
4274 Series

- Low cost
- Terminals become insulated when inserted
- Mount on either side of mounting hole
- Crimp type terminals for lower installed cost
- Excellent mating characteristics
- Seamless contact surface
- Available with solder loops on terminals for filter components
- UL recognized, CSA certified, VDE listed
- 94V-0 nylon
- 15 Amps (UL & CSA) with 16 AWG wire
- 6 Amps (VDE)
- Dual terminal locks



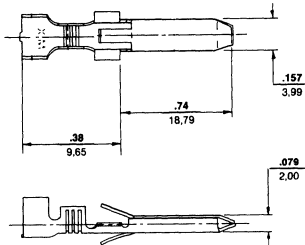
These 3 prong AC connector assemblies are designed for equipment using a power line cord which is pluggable to the equipment.

The key design feature is the crimp-type rectangular pin, Eng. No. 4296. This terminal allows the assemblies to be constructed outside the final assembly area, thus reducing applied costs

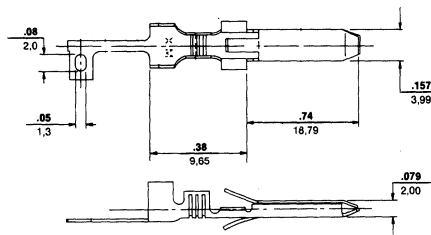


4296 Standard Terminal

Accepts 16-22 AWG Wire



Terminal with Solder Loop



inches
mm

Ordering Information

	Description				TM40 Crimp Terminating Machine									
	Standard - 3 Prong		With Solder Loops For Filter Components		Handtool		Extraction Tool		Terminator Die Only		TM40 Press and Die		Spare Tooling Kit	
	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.
Housing	4274	15-04-0703	4274-1	15-04-0603										
Chain Form Terminals*	4296	16-02-1103	4296-1	16-02-1104	HTR1031E	11-01-0084	HT-4981	11-03-0025	T8325A	11-40-2047	TM40D8325A	11-04-0310	K8325A	11-40-3047
Loose Piece Terminals	4296L	16-02-1105	4296-1L	16-02-1106										

*Terminals Pre-Tinned Brass

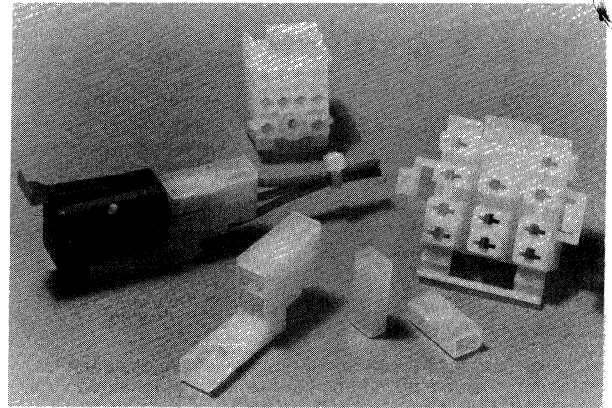
• U.S. Standard Product, available through Molex franchised distributors.

Relay and Switch Connectors

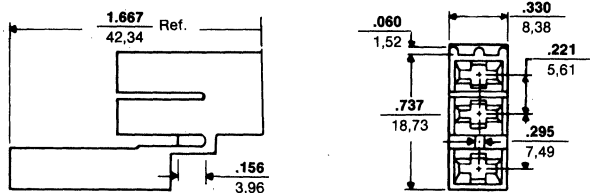


1852, 2211, 2191, 2177 Series

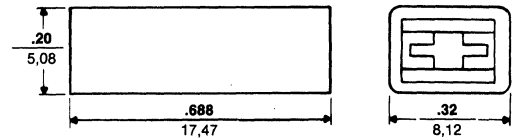
- 11 circuit standard relay version (2177)
- 14 circuit miniature relay version (1852)
- 94V-2 nylon
- 1 & 3 circuit switch connectors (2211 & 2191)
- U.L. approved
- Accepts 14 through 28 AWG
- Optional detent available for increased holding action



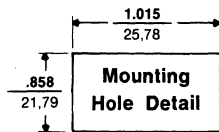
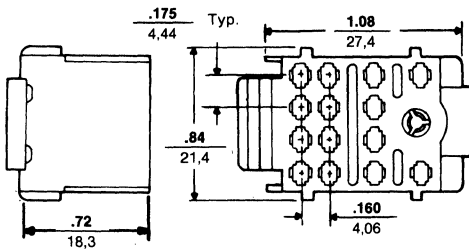
2191-3 Switch Connector



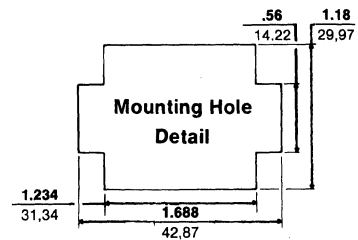
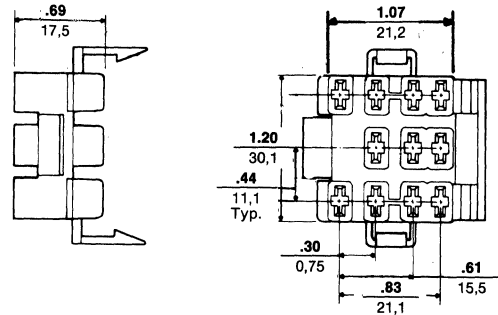
2211 Switch Connector



1852 Relay Connector



2177-1 Relay Connector



inches
mm

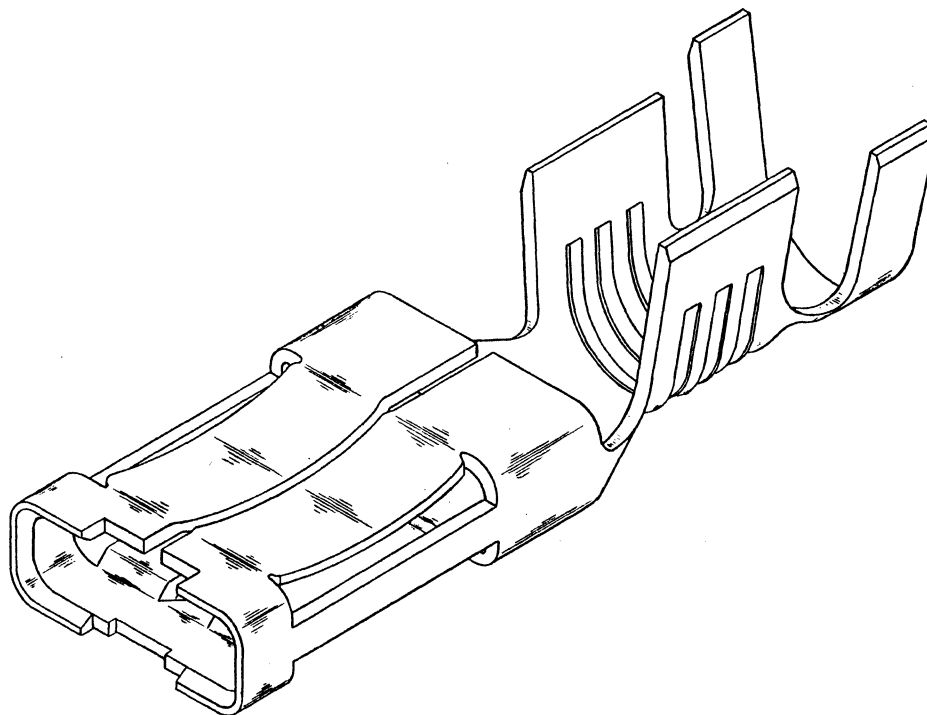
Ordering Information

No. Circuits	Max. Current Rating	Max. Voltage Rating	Mtg. Ears	Max. Panel Thickness	Eng. No.	Order No.	Uses Terminal No.
1	10	250	No	N/A	2211	06-02-3011	2176, 2328, 2576, 2698, 2799
3	10	250	No	N/A	2191	06-02-3031	2176, 2328, 2576, 2698, 2799
11	8	125	Yes	.050 (1,27)	2177-1	06-02-3111	2176, 2328, 2576, 2698, 2799
14	5	250 AC	Yes	.050 (1,27)	1852-R2	06-02-3143	1943
			Yes	.080 (2,03)	1852-R	06-02-3141	1943

Relay and Switch Terminals



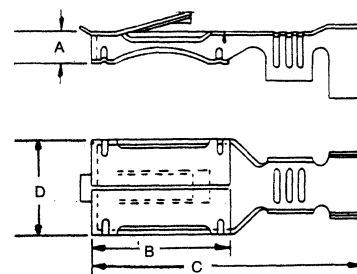
**1943, 2176, 2328, 2576,
2698, 2799, 41422 Series**



K

Dimensions

Eng. No.	1943	2176	2328	2576	2698	2799	Low Force 41422
Engagement/Disengagement Forces in Lbs.							4.5/1.5
Wire Size (AWG)	18-24 AWG	14-22 AWG	14-22 AWG	14-22 AWG	14-22 AWG	14-22 AWG	10-14 AWG
Max. Insulation Dia.	.110 2,67	.135 3,43	.125 3,18	.135 3,43	.125 3,18	.060 1,52	.190 4,83
Material Thickness	.011 0,28	.010 0,25	.010 0,25	.012 0,30	.012 0,30	.012 0,30	.016 0,41
Mating Tab Size	.100 x .020	.187 x .020	.187 x .020	.187 x .020	.187 x .020	.187 x .020	.187 x .020
Dim. A	.03 0,9	.07 1,8	.07 1,8	.08 0,9	.08 0,9	.08 0,9	.08 0,9
Dim. B	.30 7,5	.28 7,1	.28 7,1	.28 7,1	.28 7,1	.28 7,1	.46 11,7
Dim. C	.60 15,2	.61 15,5	.62 15,7	.61 15,5	.61 15,5	.61 15,5	.91 23,1
Dim. D	.13 3,3	.24 6,1	.24 6,1	.24 6,1	.24 6,1	.24 6,1	.30 7,5



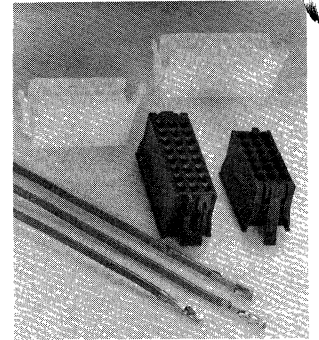
Ordering Information

Eng. No.		1943	2176	2328	2576	2698	2799	41422
Wire Size (AWG)		18-24 AWG	14-22 AWG	14-22 AWG	14-22 AWG	14-22 AWG	14-22 AWG	10-14 AWG
W/Detent	Chain Form	N/A	05-06-0301	05-06-0401	N/A	N/A	N/A	N/A
	Loose Form	N/A	05-06-0302	05-06-0403	N/A	N/A	N/A	N/A
W/O Detent	Chain Form	05-05-0200	05-06-0303	05-06-0402	05-06-0305	05-06-0405	05-06-0307	40-02-1601
	Loose Form	05-05-0201	05-06-0304	05-06-0404	05-06-0306	05-06-0406	05-06-0308	Contact Factory

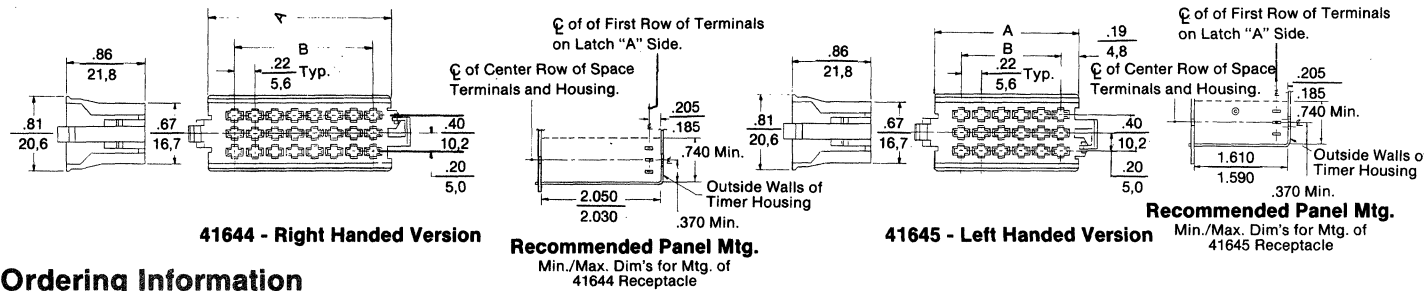
Specialty Receptacles



41644/41645 Timer Receptacle Housing



- Positive locking latches
- Fully polarized, color-coded right - (41644) and left - (41645) handed configurations
- Flared wire entry ports for double wire crimps
- Accepts standard and low force designs of 1508 Series terminal
- Material, 94V-2 nylon
- UL recognized; CSA certified



Ordering Information

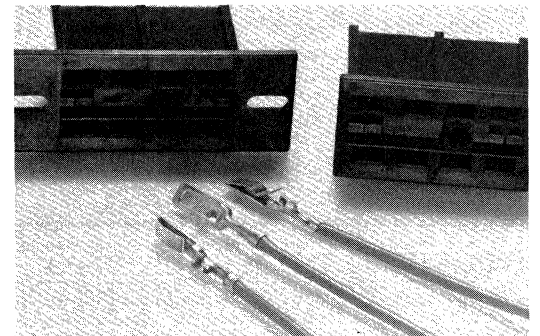
Ckt. Size	Dim. A	Dim. B	41644 Right Hand	41645 Left Hand
18	1.59 51,4	1.10 39,1	06-02-1186	06-02-1185
24	2.03 51,4	1.54 39,1	06-02-1246	06-02-1245

Terminal Ordering Information: 1508 Series - Contact Factory

45002 8 Position Coin Changer Receptacle for Vending Machines

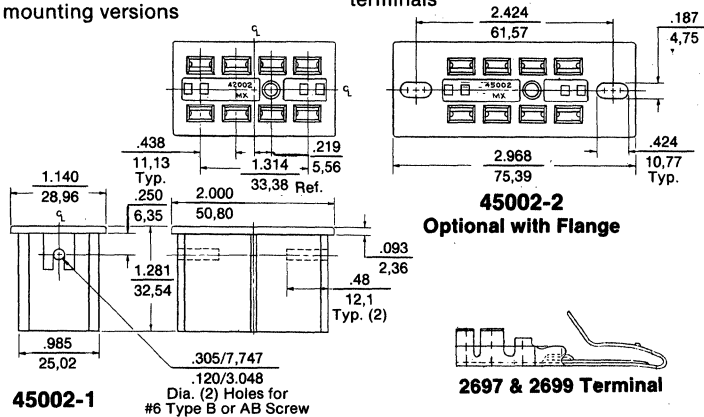
K

- Vending industry standard for single-price coin changers
- Mates with plug provided on coin changers manufactured by Mars, Coinco, and others
- Available in front and side mounting versions
- Crimp terminals eliminate fast-ons
- 94V-2 nylon housing
- UL & CSA applied for
- Uses Molex 2697 and 2699 terminals



45002-1

45002-2



Ordering Information 45002

Circuits	Flange	Eng. No.	Order No.
8	No	45002-1	15-04-0451
8	Yes	45002-2	15-04-0453

Ordering Information 2697, 2699 Terminals

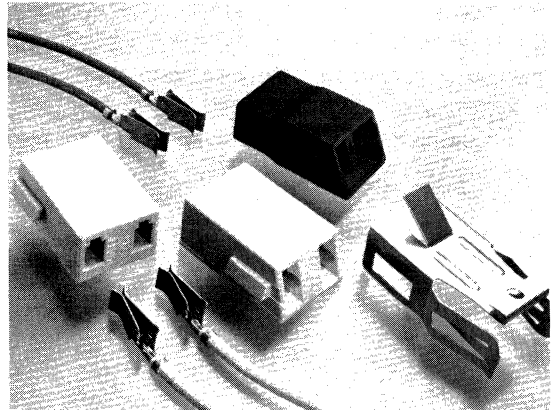
Crimp Wire Size	Insulation Diameter	Finish	Eng. No.	Chain Form Order No.	Loose Form Order No.
12-20	.188	Tin Plated	2699	05-02-0075	05-02-0076
12-20	.230	Plain Brass	2697	05-01-0064	05-01-0061

Ceramic and Phenolic Range Receptacles



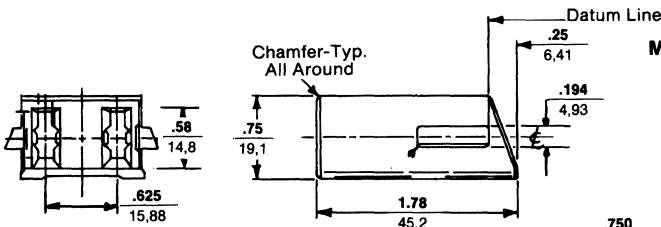
Range Receptacles, Terminals & Mounting Clips

- U.L. recognized
- CSA certification granted on individual application basis only
- Trouble free assembly
- Long product life
- Choice of mounting bracket configurations
- Receptacles provide easy disconnect from heating element on range surface
- Alternate terminals can be used in both ceramic and phenolic housings without changing termination equipment
- High density ceramic withstands high impact without shattering

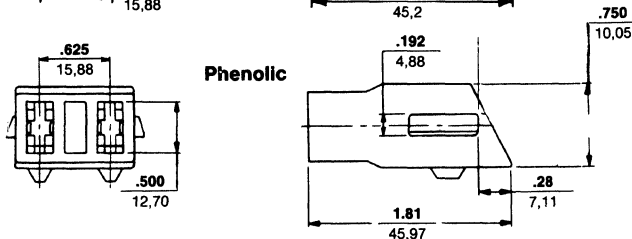


RANGE RECEPTACLES

Ceramic

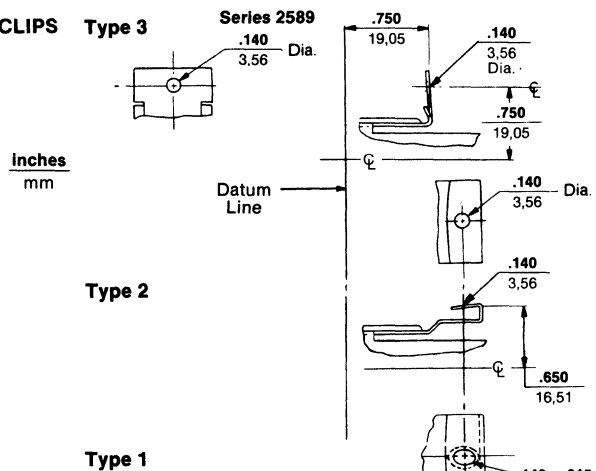


Phenolic



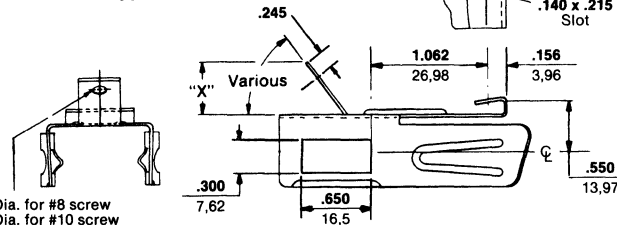
MOUNTING CLIPS

Type 3



Type 2

Type 1



Ordering Information Range Receptacles

Description	Temp. Range	Eng. No.	Order No.
Ceramic Receptacle	200°-300°C	2481-13	50-16-0283
Phenolic Receptacle	0°-200°C	2481	50-16-0281

Ordering Information Mounting Clips

Contact factory for technical assistance based on clip type, tab angle, desired "X" dimension and mounting screw size.

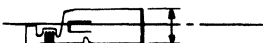
TERMINALS



Type 6482-1
2482-1



Type 6482
2482



.312
7.93

Heater Element Terminal Thickness Range

.080 (2,032) — .095 (2,413)*
.090 (2,286) — .105 (2,667)*

*Heater elements not interchangeable in same terminal.

Ordering Information Terminals

Automated application equipment can be used to crimp either terminal. Automatic and semi-automatic application tooling available, contact factory.

Wire Size	Terminal Material	Engineering No.	Order No.
14-18 AWG	Beryllium Copper Alloy	6482-2 (Chain)	05-12-1104
		6482-2L (Loose)	05-12-1105
		6482-6 (Chain)	05-12-1106
	Standard Copper Alloy	6482-6L (Loose)	05-12-1107
		6482 (Chain)	• 05-12-1100
		6482 (Loose)	• 05-12-1101
10-16 AWG	Beryllium Copper Alloy	6482-1 (Chain)	05-12-1102
		6482-1L (Loose)	05-12-1103
		2482-2 (Chain)	05-12-1006
		2482-2L (Loose)	05-12-1007
		2482-6 (Chain)	05-12-1008
	Standard Copper Alloy	2482-6L (Loose)	05-12-1009
		2482 (Chain)	05-12-1000
		2482-L (Loose)	05-12-1001
		2482-1 (Chain)	05-12-1004
		2482-1L (Loose)	05-12-1005

• U.S. Standard Product, available through Molex franchised distributors

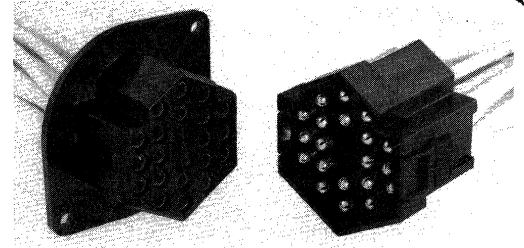


21 Position Pin & Socket Housings for Harsh Environments



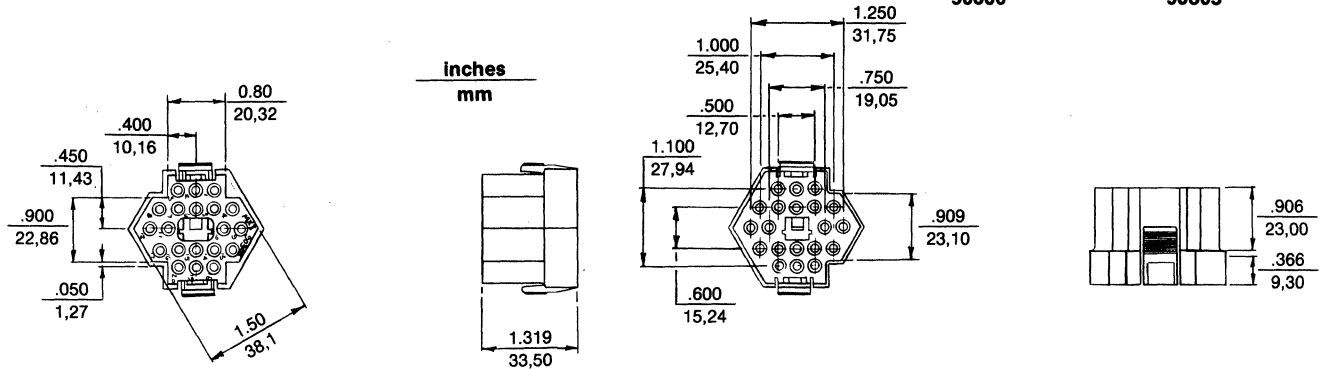
90305 Pin Housing

- Accepts twenty Molok pin contacts; order separately, see page 42K
- Also accepts 9,5mm tab contact
- Nylon 6/6, UL 94V-2, black
- Assembled housing mates with 90306 socket assembly



90306

90305



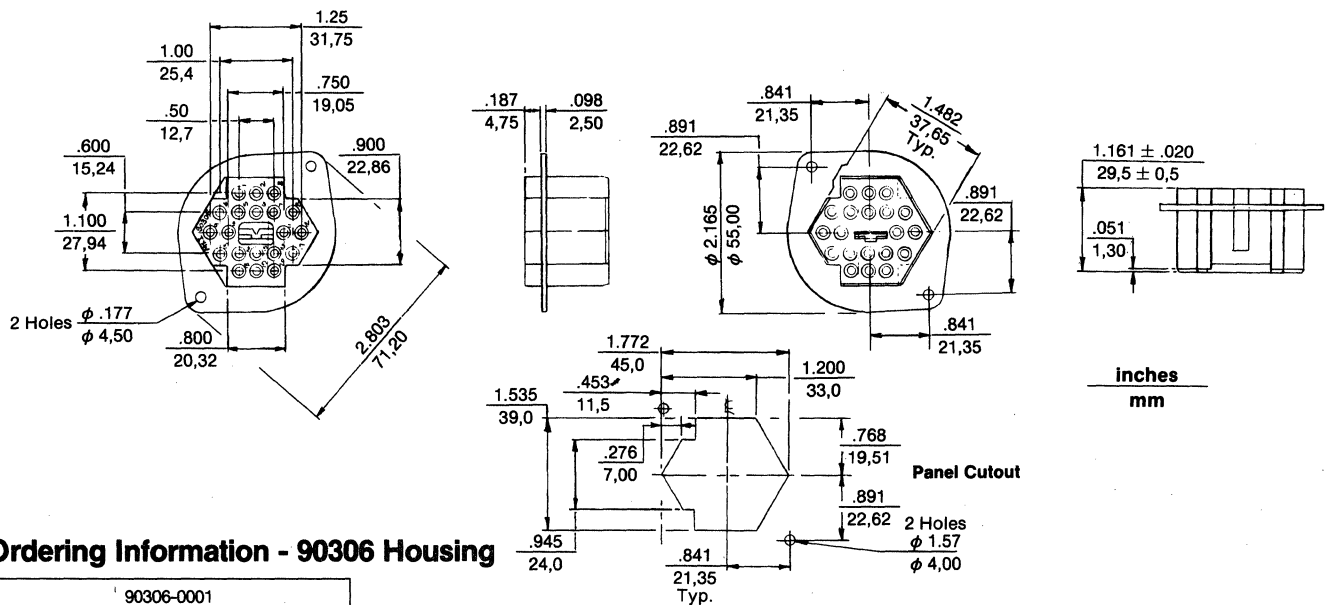
Ordering Information - 90305 Housing

90305-0001

90306 Socket Housing

- Accepts twenty Molok socket contacts; order separately, see page 42K
- Also accepts 9,5mm receptacle contact
- Nylon 6/6, UL 94V-2, black
- Assembled housing mates with 90305 pin assembly
- Panel mount

K



Ordering Information - 90306 Housing

90306-0001

Terminals for Multi-Contact Connector Housings



Technical Data

Product Description/ Page No.	Fits Tab Size	Push On Force (Per Contact)	Pull Off Force	Contact Retention Force	Current Rating	Cycles	Reel Quantity	Wire Range	Pin Diameter
90020	2,8 x 0,8 mm 2,0 x 0,8 mm	10 N max.	4 N max.	60 N min.	8A	50 min	4,000	0,5-1,5 and 1,0-2,5 mm ²	
90026 90027		20 N max.	12 N max.	60 N min.	25A	50 max.	3,000	1,0-2,5 and 2,5-4,0 mm ²	3,55 mm
90021	6,3 x 0,8 mm	18 N max. phos. bronze 8 N max. brass	4 N min.	60 N min.	16A	50	3,000	0,5-1,5 and 1,0-2,5 mm ²	
90028	6,2 x 0,8 mm with locking hole	25 N max.	25 N max.	40 N min.	25A		2,000	0,5-1,5 and 1,0-2,5 and 2,5-4,0 mm ²	
90022 90024		6 N max.	1 N min.	60 N min.	13A	200 tin 500 gold	3,000	0,5-1,5 and 1,0-2,5 mm ²	1,58 mm
90030	2,8-0,8 and 2,0-0,8 mm	10 N max.	4 N max.	60 N min.	8A	50 min.	4,000	N/A	

NOTES:

Terminals accommodate standard and thin wall cable

Current ratings based on +105° C max. operating temperature

Material and plating specifications shown with ordering information on each product page.

Cable tensile from crimp as per DIN 46249, all products.

Crimp Tooling Information

Molex provides a flexible tooling system which can easily be adapted to manufacture double-ended harnesses of different lengths and wire types with different terminals.

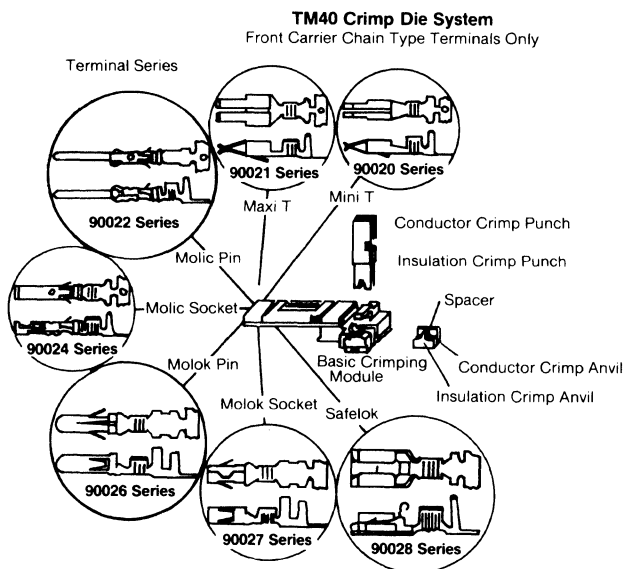
By changing small die parts on the Molex TM 40 a range of popular terminals can be accommodated.

TM40s can be mounted in pairs onto the Komax brand fully automated, doubled-ended harness assembly machines to achieve 15,000 crimps per hour.

Basic Terminator Order No. 69001-0000 without Tooling

Terminal Part No.	Terminator with Tool Kit	Spare Tool Kit
90020-01	69001-1000	69001-2001
90020-02	69001-1005	69001-2002
90020-03	69001-1001	69001-2003
90020-04	69001-1006	69001-2004
90021-01	69001-1000	69001-2001
90021-02	69001-1005	69001-2002
90021-03	69001-1001	69001-2003
90021-04		
90022-01	69001-1010	69001-2005
90022-02	69001-1011	69001-2006
90022-03	69001-1012	69001-2007
90022-04	69001-1013	69001-2008
90024-01	69001-1010	69001-2005
90024-02	69001-1011	69001-2006
90024-03	69001-1012	69001-2007
90024-04		
90028-01	69001-1002	69001-2013
90028-02	69001-1007	69001-2014
90028-03	69001-1004	69001-2015
90028-04	69001-1008	69001-2016
90028-05	69001-1003	69001-2017
90028-06	69001-1009	69001-2018

Terminal Part No.	Terminator with Tool Kit	Spare Tool Kit
90026-01	69001-1014	69001-2009
90026-02	69001-1015	69001-2010
90026-03	69001-1016	69001-2011
90026-04	69001-1017	69001-2012
90027-01	69001-1014	69001-2009
90027-02	69001-1015	69001-2010
90027-03	69001-1016	69001-2011
90027-04	69001-1017	69001-2012

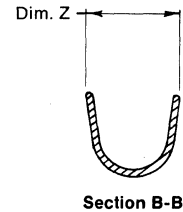
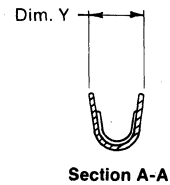
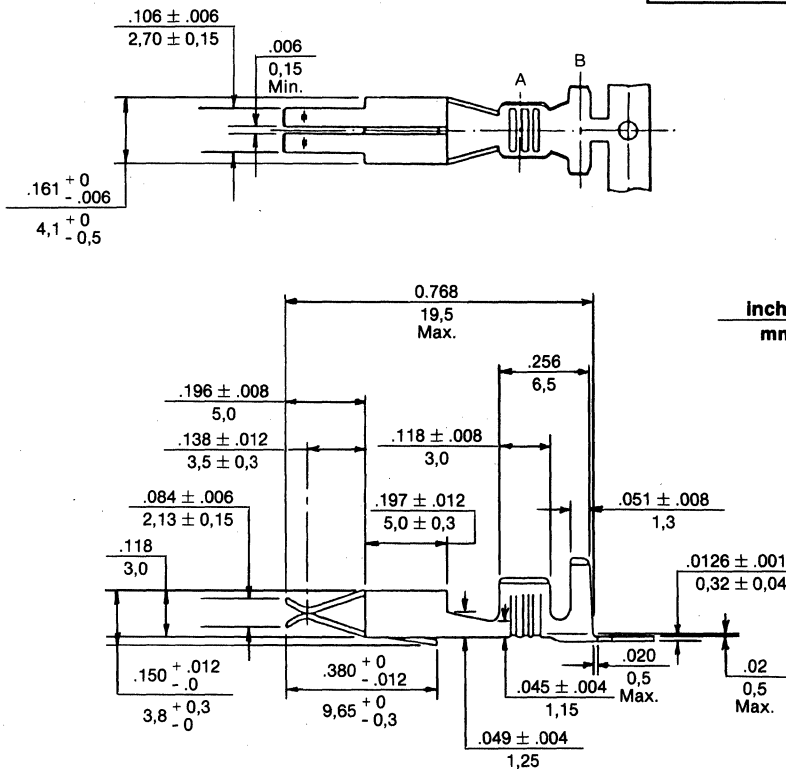
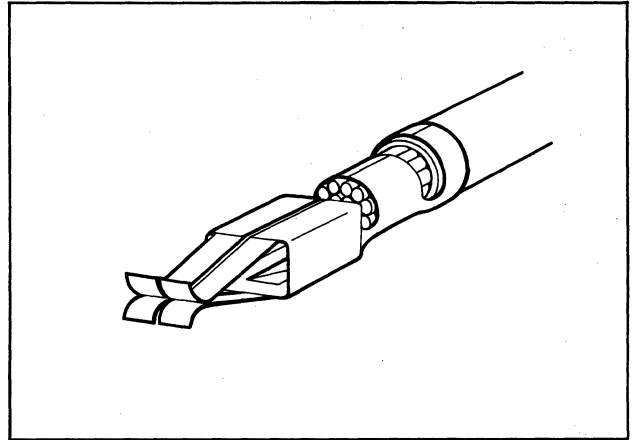


Standard Terminal for use with Multi-Contact Connector Housings



90020 Mini-T Terminal

- For input/output "black boxes" in cars and appliances
- Tulip shaped mouth for easy front entry
- Engagement and disengagement at an angle is allowed. Therefore, can be used in large multicontact configurations
- Four independent contact springs
- High resistance to vibration
- Low engagement force
- Can be applied on fully automatic equipment
- High current carrying capacity
- Contact snaps into housing



Ordering Information 90020 - Mini-T

Wire Range mm ²	Ins. Range φ mm	Material - (Plating)	
		0,32mm Brass (Hot Tin Dipped ¹)	0,32mm Phos. Bronze (Hot Tin Dipped ¹)
0,5-1,5	2,0-3,3	90020-0101	90020-0102
	1,4-2,3	90020-0201	90020-0202
1,0-2,5	2,7-4,3	90020-0301	90020-0302
	1,0-2,9	90020-0401	90020-0402

¹ 1-2,5 microns thick

Dimensional Information 90020

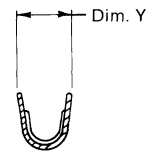
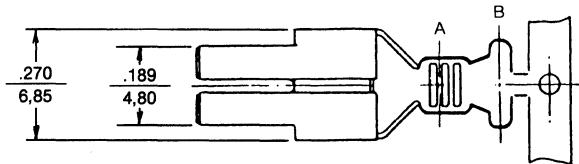
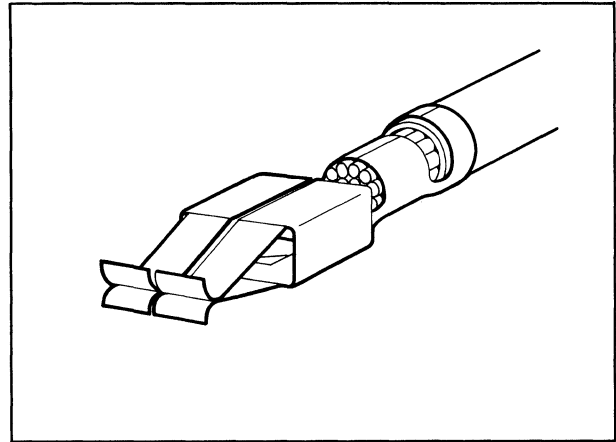
Wire Range mm ²	Ins. Range φ mm	Dim. Z	Dim. Y	Wire Range mm ²	Ins. Range φ mm	Dim. Z	Dim. Y
0,5-1,5	2,0-3,3	.157 4,0	.117 3,0	1,0-2,5	2,7-4,3	.189 4,8	.137 3,5
	1,4-2,3	.142 3,6	.117 3,0		1,8-2,9	.169 4,3	.137 3,5

Standard Terminal for Harsh Environments

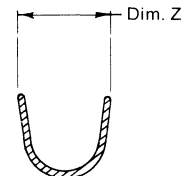
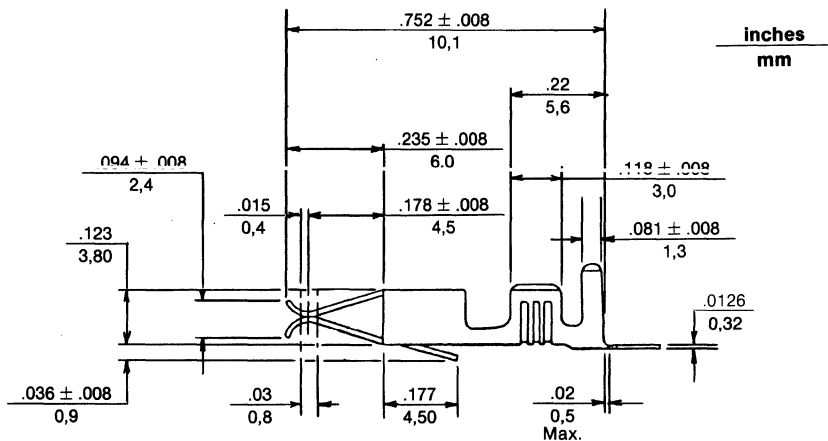


90021 Maxi-T Terminal

- Tulip shaped easy front entry
- Can be used in large multi-contact connector housings
- Four independent contact springs
- High resistance to vibration
- Low engagement force
- Can be applied on fully automatic equipment
- High current carrying capacity
- Contact snaps into housing
- Stable contact thanks to box shape of contact
- Available in copper/iron alloy for high temperature applications up to 70°C



Section A-A



Section B-B

Ordering Information 90021 - Maxi-T

Wire Range mm ²	Ins. Range φ mm	Material - (Plating)		
		0,32mm Brass (Hot Tin Dipped ¹)	0,32mm Phos. Bronze (Hot Tin Dipped ¹)	Copper/Iron
0,5-1,5	2,0-3,3	90021-0101	90021-0102	90021-0104
	1,4-2,3	90021-0201	90021-0202	90021-0204
1,0-2,5	2,7-4,3	90021-0301	90021-0302	90021-0304
	1,0-2,9	90021-0401	90021-0402	90021-0404

¹ 1-2,5 microns thick

Dimensional Information 90021

Wire Range mm ²	Ins. Range φ mm	Dim. Z	Dim. Y	Wire Range mm ²	Ins. Range φ mm	Dim. Z	Dim. Y
0,5-1,5	2,0-3,3	.157 4,0	.117 3,0	1,0-2,5	2,7-4,3	.189 4,8	.137 3,5
	1,4-2,3	.142 3,6	.117 3,0		1,8-2,9	.169 4,3	.137 3,5

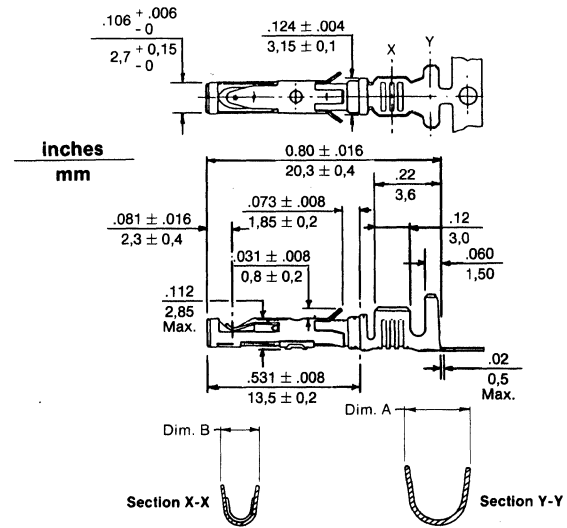
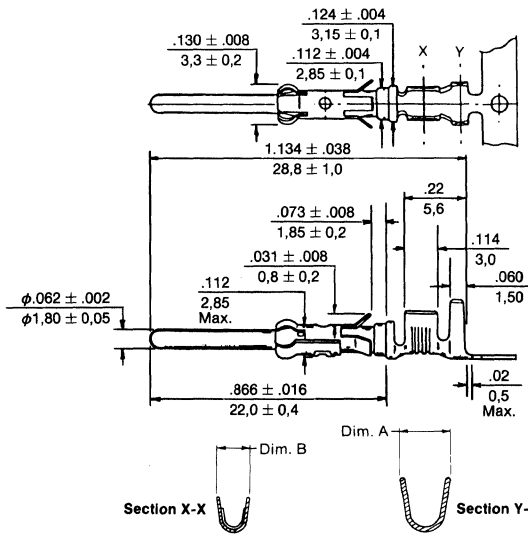
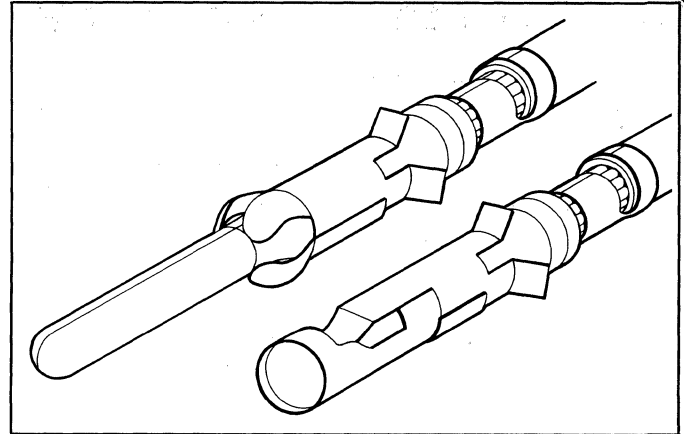


Standard Contacts for High Density Multi-Contact Connector Housings



90022 Molic Pin and 90024 Molic Socket

- Current rating 13 amps
- Bell shaped easy entry socket front
- Large wiping length area
- Self-locking
- Independent separate contact springs
- Can be used on fully automatic application tooling
- Can be supplied on reels for large production series
- Can be used in multi-contact applications
- Stabilized three point locking in connector housing
- Separate steel contact spring on the female socket



Ordering Information 90022 - Molic Pin

Wire Range mm ²	Ins. Range φ mm	Material - (Plating)	
		0,32mm Brass (Pre-Tinned ¹)	0,32mm Phos. Bronze (Pre-Tinned ¹)
0,5-1,5	2,0-3,0	90022-0101	90022-0102
	1,3-2,3	90022-0201	90022-0202
	2,4-3,7	90022-0501	90022-0502
1,0-2,5	2,4-3,7	90022-0301	90022-0302
	1,7-2,9	90022-0401	90022-0402

¹ 1-2,5 microns thick

Ordering Information 90024 - Molic Socket

Wire Range mm ²	Ins. Range φ mm	Material - (Plating)	
		0,32mm Brass (Pre-Tinned ¹)	0,32mm Phos. Bronze (Pre-Tinned ¹)
0,5-1,5	2,0-3,0	90024-0101	90024-0102
	1,3-2,3	90024-0201	90024-0202
	2,4-3,7	90024-0501	90024-0502
1,0-2,5	2,4-3,7	90024-0301	90024-0302
	1,7-2,9	90024-0401	90024-0402

Dimensional Information 90022 - 90024

¹ 1-2,5 microns thick

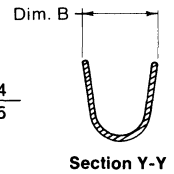
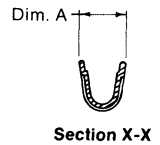
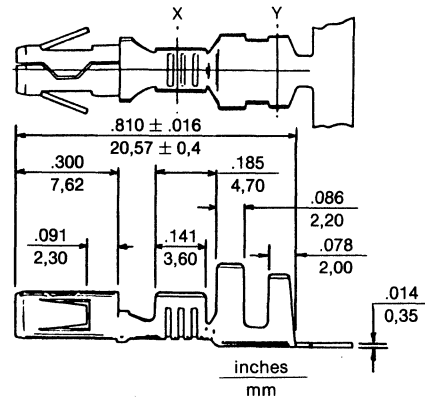
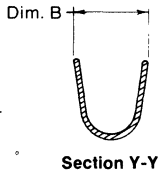
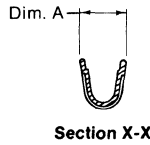
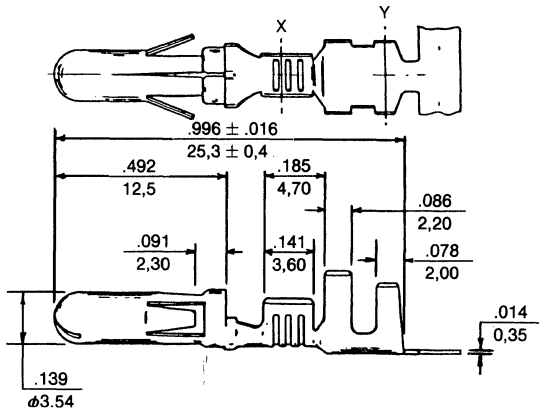
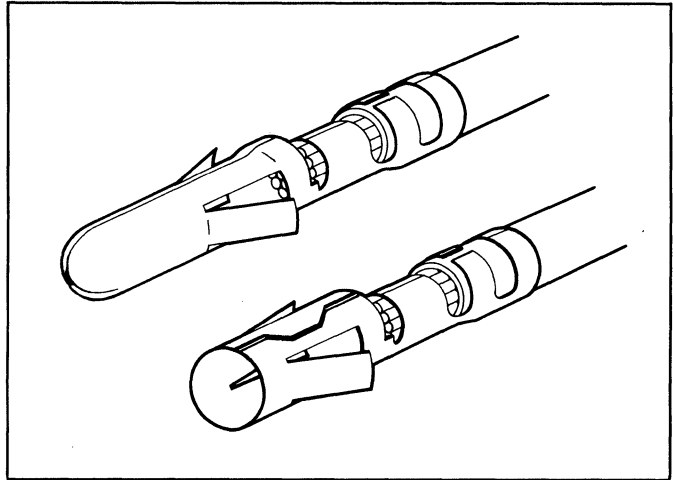
Wire Range mm ²	Ins. Range φ mm	Dim. A	Dim. B	Wire Range mm ²	Ins. Range ≥ mm	Dim. A	Dim. B
0,5-1,5	2,0-3,0	.157 4,0	.117 3,0	1,0-2,5	2,4-3,7	.189 4,8	.137 3,5
	1,3-2,3	.142 3,6	.117 3,0		1,7-2,9	.169 4,3	.137 3,5
	2,4-3,7	.189 4,0	.117 3,0				

Standard Contacts for High Current Applications



90026 Molok Pin and 90027 Molok Socket

- Current rating 25 amps
- Two stabilized locking lances, self-locking
- Easy engagement/disengagement designed for multi-contact connectors
- Robust construction
- High density application possible
- Double wire crimps possible
- The Molex system is recommended for a centerline grid of 6,0 mm
- Socket with S-shaped forming joints
- Front end of socket slightly conical to facilitate entry into contact housing



Ordering Information 90026 - Molok Pin

Wire Range mm ²	Ins. Range φ mm	Material - (Plating)	
		0,35mm Brass (Hot Tin Dip ¹)	0,35mm Phos. Bronze (Hot Tin Dip ¹)
1,0-2,5	2,4-3,7	90026-0101	90026-0102
	1,7-2,9	90026-0201	90026-0202
2,5-4,0	3,3-4,5	90026-0301	90026-0302
	2,6-3,6	90026-0401	90026-0402

¹ 1-2,5 microns thick

Ordering Information 90027 - Molok Socket

Wire Range mm ²	Ins. Range φ mm	Material - (Plating)	
		0,35mm Brass (Hot Tin Dip ¹)	0,35mm Phos. Bronze (Hot Tin Dip ¹)
1,0-2,5	2,4-3,7	90027-0101	90027-0102
	1,7-2,9	90027-0201	90027-0202
2,5-4,0	3,3-4,5	90027-0301	90027-0302
	2,6-3,6	90027-0401	90027-0402

¹ 1-2,5 microns thick

Dimensional Information 90026 - 90027

Wire Range mm ²	Ins. Range φ mm	Dim. A	Dim. B	Wire Range mm ²	Ins. Range φ mm	Dim. A	Dim. B
1,0-2,5	2,4-3,7	.14 3,55	.20 5,0	2,5-4,0	3,3-4,5	.17 4,35	.23 5,8
	1,7-2,9	.14 3,55	.20 4,4		2,6-3,6	.17 4,35	.21 5,3

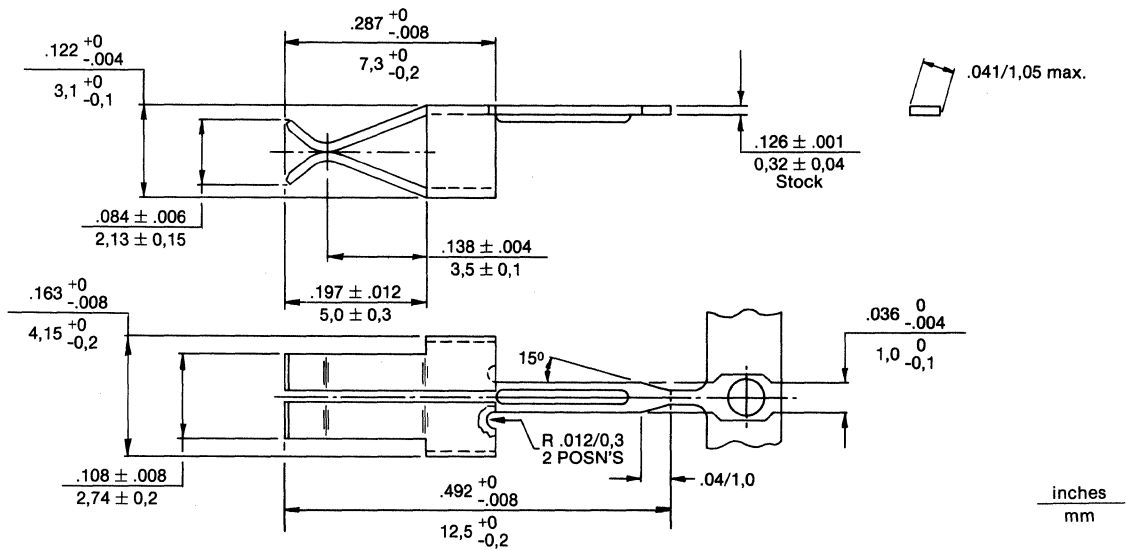
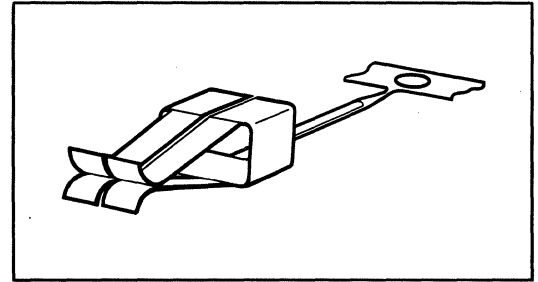


Standard Terminal with Solder Post



90030 Mini T Terminal

- For direct insertion into printed circuit board
- Tulip shaped mouth for easy front entry
- Four independent contact springs
- High resistance to vibration
- Low engagement force
- High current carrying capacity
- Phosphor bronze terminal, hot tin dip plate



Ordering Information - 90030 Solder Post Terminal

Order No.	
Chain Form	Loose Form
90030-0001	90030-1001

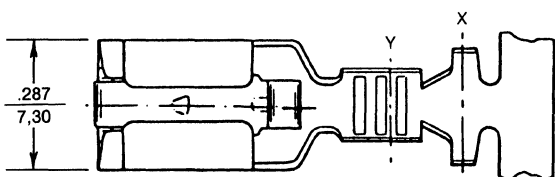
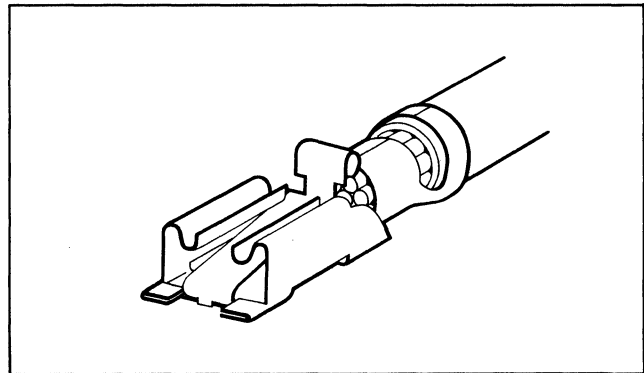
K

Push-On Terminal for High Current Applications

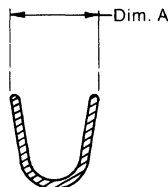
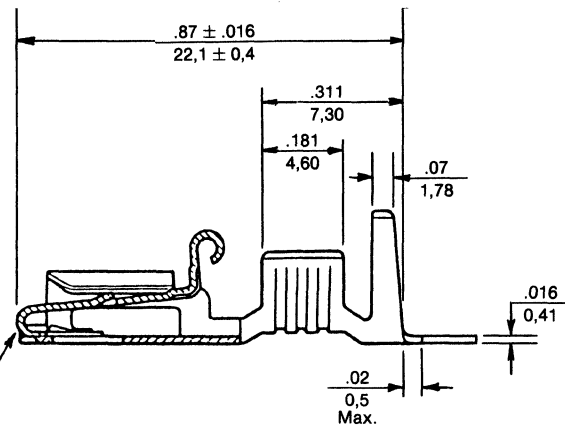


90028 Safelok

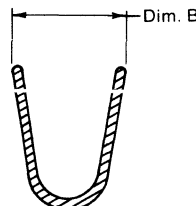
- Current rating 25 amps
- Very low engagement/disengagement forces
- Preassembled stainless steel spring which cannot corrode
- Locking dimple on spring positive locks into the tab hole
- Constant locking due to steel spring
- High current carrying capacity
- Can be applied on fully automatic equipment
- Can be used in multi-contact configuration
- Terminals can be locked into contact housings
- Fits with flat-type tab, 6,2 x 0,8mm (.244" x .031") with hole



Assembled Stainless Steel Spring



Section Y-Y



Section X-X

inches
mm



Ordering Information 90028

Wire Range mm ²	Ins. Range φ mm	Material - (Plating)			
		0,40mm Brass (Hot Tin Dip ¹)	0,40mm Phos. Bronze (Hot Tin Dip ¹)	0,40mm Brass (Unplated)	0,40mm Phos. Bronze (Unplated)
0,5-1,5	2,0-3,0	90028-0101	90028-0102	90028-0103	90028-0104
	1,3-2,3	90028-0201	90028-0202	90028-0203	90028-0204
1,0-2,5	2,4-3,7	90028-0301	90028-0302	90028-0303	90028-0304
	1,7-2,9	90028-0401	90028-0402	90028-0403	90028-0404
2,5-4,0	3,3-4,5	90028-0501	90028-0502	90028-0503	90028-0504
	2,6-3,6	90028-0601	90028-0602	90028-0603	90028-0604

¹ 1-2,5 μm thick

Dimensional Information 90028

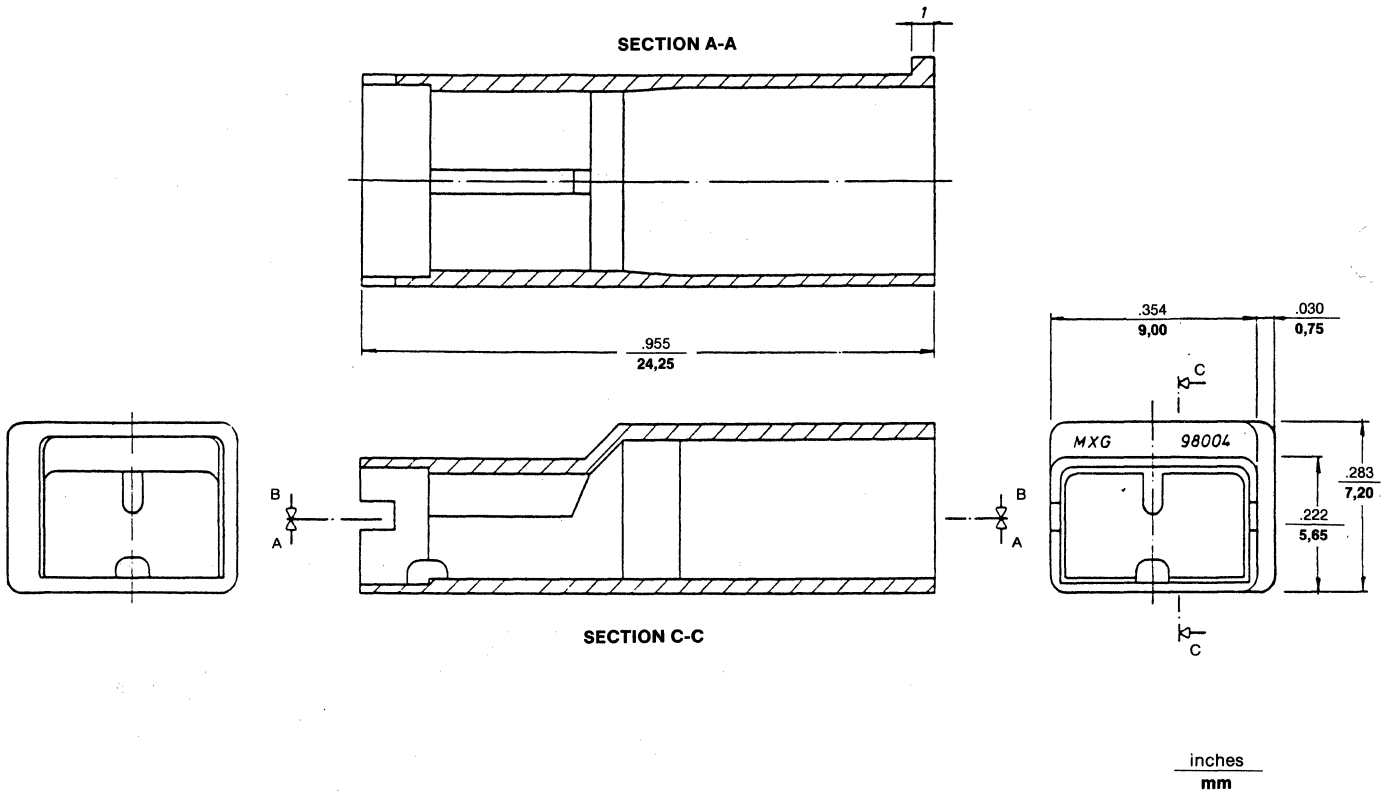
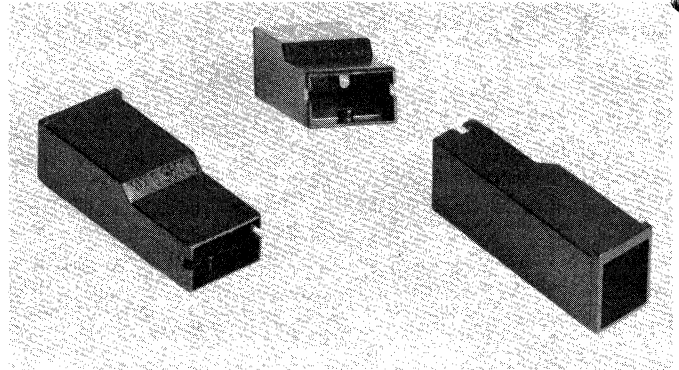
Wire Range mm ²	Ins. Range φ mm	Dim. A	Dim. B	Wire Range mm ²	Ins. Range φ mm	Dim. A	Dim. B
0,5-1,5	2,0-3,0	.12 3,0	.17 4,4	2,5-4,0	3,3-4,5	.17 4,4	.23 6,0
	1,3-2,3	.12 3,0	.145 3,7		2,6-3,6	.17 4,4	.21 5,4
1,0-2,5	2,4-3,7	.14 3,6	.20 5,1				
	1,7-2,9	.14 3,6	.17 4,5				

Safelok™ Housing



98004

- 1 circuit
- Accepts Safelok Terminal 90028
- Housing: nylon, 94V-2



Ordering Information

Order No.	Color
98004-0101	Black
98004-0102	Natural

■ Highlighted area denotes Molex European standard product, usually available within shorter leadtimes.

Contents

Female Receptacles

For 2,8 x 0,5mm Tabs	44K
For 2,8 x 0,8mm Tabs	45K
For 4,8 x 0,5mm Tabs	46K
For 4,8 x 0,8mm Tabs	47K
For 6,3 x 0,8mm Tabs	48K
For 9,5 x 1,2mm Tabs	49K
Flag Receptacle for 6,3 x 0,8mm Tabs	50K-51K
Piggy Back for 6,3 x 0,8mm Tabs	52K

Tabs

6,3 x 0,8mm	53K-54K
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Qik Snaps

Receptacles for 6,3 x 0,8mm Tabs	55K
Flag Receptacles for 7,7 x 0,8mm Tabs	56K-57K
Tab for Use in Multi-Contact Housings, 6,3 x 0,8mm	58K

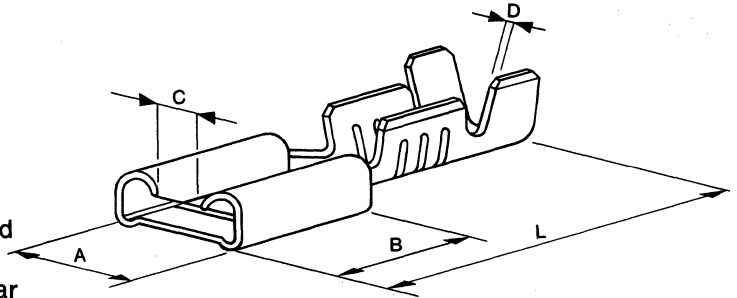
Qik Konnect Female



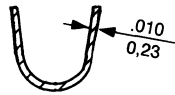
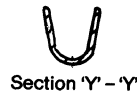
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90263 Series Qik Konnect Receptacle For 2,8 x 0,5 Tabs

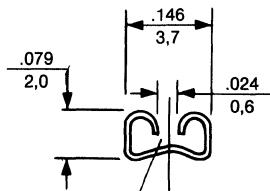
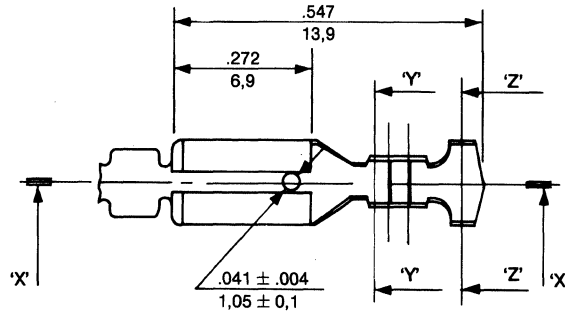
- Wire range from 0,05 - 0,15mm² to 0,5 - 1,0mm²
- Insulation range from 0,7-1,5φmm to 2,7-3,3φmm
- The product is designed to achieve a quick method of electrical connection/disconnection
- The female receptacle has opening walls at the rear to prevent over insertion of corresponding tab



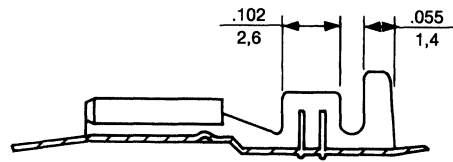
Available Primarily in Europe



Section 'Z' - 'Z'



To accept a 2,8 x 0,5 tab



Section 'X' - 'X'

Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions				
		A	B	C	D	L
0,5 - 1,0	2,0-3,3	.146 3,7	.272 6,9	.024 0,6	.010 0,25	0.547 13,9
0,25-0,5	1,0-2,0	.146 3,7	.272 6,9	.024 0,6	.010 0,25	0.547 13,9
0,05-0,15	0,7-1,5	.146 3,7	.272 6,9	.024 0,6	.010 0,25	0.547 13,9

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.				
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5 - 1,0	2,0-3,3	90263-0101	90263-0102	Contact Factory		
0,25-0,5	1,0-2,0	90263-0901	90263-0902			
0,05-0,15	0,7-1,5	90263-1001	90263-1002			

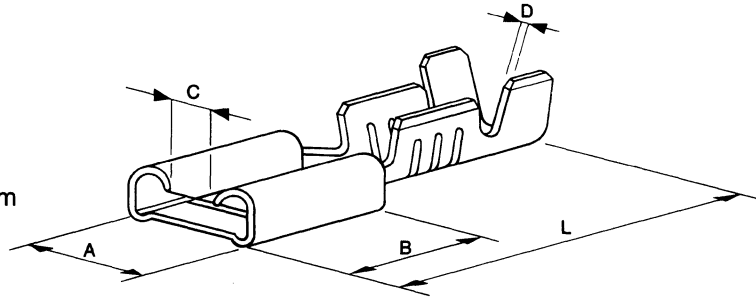
Qik Konnect Female



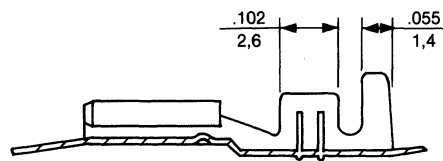
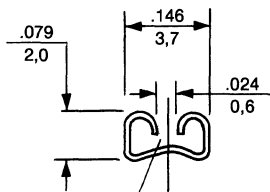
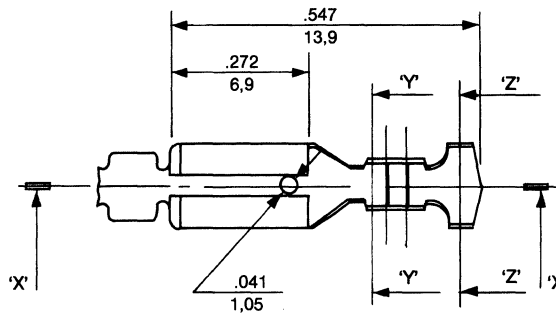
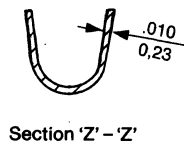
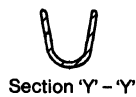
Distributed by Molex Incorporated, not Molex-ETC

90274 Series Qik Konnect Receptacle For 2,8 x 0,8 Tabs

- Wire sizes from 0,5-1,0mm² to 1,0-2,5mm²
- Insulation range from 2,0-3,3φmm to 2,7-4,3φmm



Available Primarily in Europe



Section 'X' - 'X'

To accept a 2,8 x 0,8 tab

Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions				
		A	B	C	D	L
0,5 -1,0	2,0-3,3	.146	.272	.024	.010	.547
		3,7	6,9	0,6	0,25	13,9
0,25-0,5	1,0-2,0	.146	.272	.024	.010	.547
		3,7	6,9	0,6	0,25	13,9

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.				
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5 -1,0	2,0-3,3	90274-0101	90274-0102	Contact Factory		
0,25-0,5	1,0-2,0	90274-0901	90274-0902			



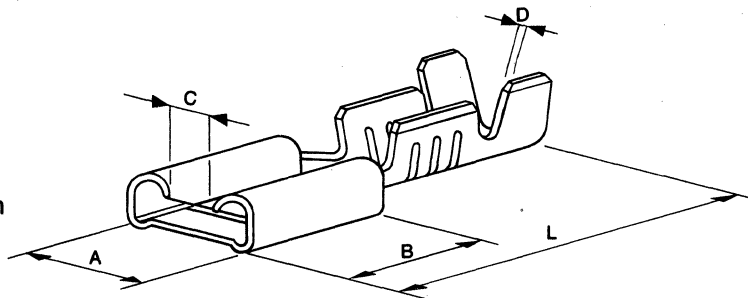
Qik Konnect Female



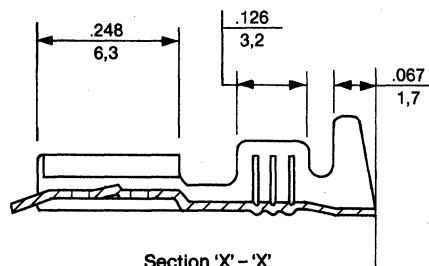
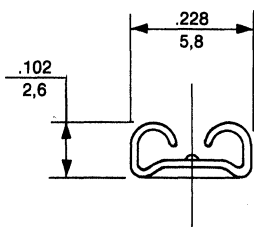
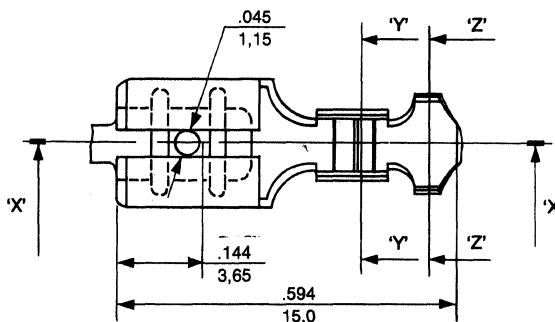
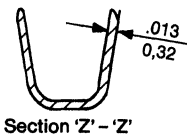
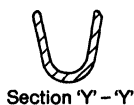
Distributed by Molex Incorporated, not Molex-ETC

90262 Series Qik Konnect Receptacle For 4,8 x 0,5 Tabs

- Wire range from 0,5-1,0mm² to 1,0-2,5mm²
- Insulation range from 2,0-3,3φmm to 2,7-4,3φmm



Available Primarily in Europe



Section 'X' - 'X'

Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions				
		A	B	C	D	L
0,5 -1,0	2,0-3,3	.146	.272	.024	.010	.547
		3,7	6,9	0,6	0,25	13,9
0,5 -1,0	1,3-2,3	.146	.272	.024	.010	.547
		3,7	6,9	0,6	0,25	13,9
1,0-2,5	2,7-4,3	.146	.272	.024	.010	.547
		3,7	6,9	0,6	0,25	13,9
1,0-2,5	1,7-2,9	.146	.272	.024	.010	.547
		3,7	6,9	0,6	0,25	13,9

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	90262-0101	90262-0102	Contact Factory			
1,0-2,5	2,7-4,3	90262-0301	90262-0302				

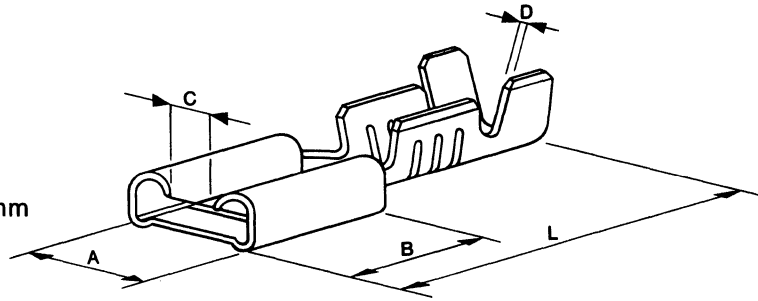
Qik Konnect Female



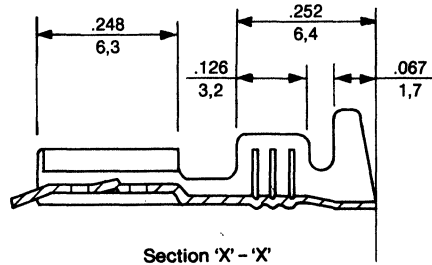
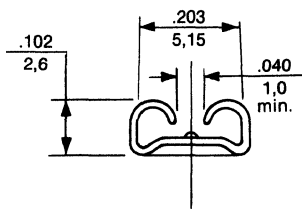
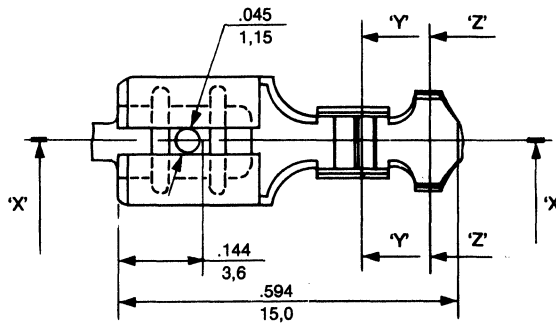
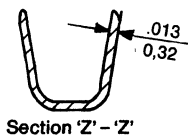
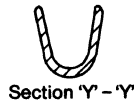
Distributed by Molex Incorporated, not Molex-ETC

90272 Series Qik Konnect Receptacle For 4,8 x 0,8 Tabs

- Wire sizes from 0,5-1,0mm² to 1,0-2,5mm²
- Insulation ranges from 2,0-3,3φmm to 2,7-4,3φmm



Available Primarily in Europe



Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions				
		A	B	C	D	L
0,5-1,0	2,0-3,3	.203	.248	.047	.013	.591
		5,15	6,3	1,2	0,32	15,0
1,0-2,5	2,7-4,3	.203	.248	.047	.013	.591
		5,15	6,3	1,2	0,32	15,0

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.				
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	90272-0101	90272-0102	Contact Factory		
1,0-2,5	2,7-4,3	90272-0301	90272-0302			



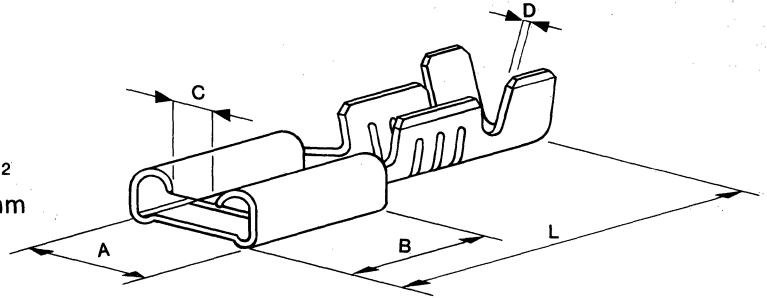
Qik Konnect Female



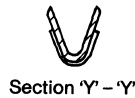
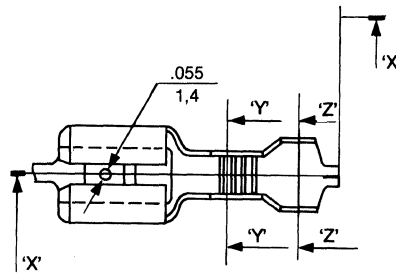
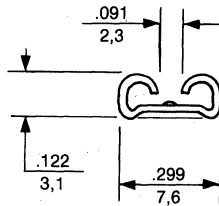
Distributed by Molex Incorporated, not Molex-ETC

90264 Series Qik Konnect Receptacle For 6,3 x 0,8 Tabs

- Wire sizes range from 0,5-1,0mm² to 4,0-6,0mm²
- Insulation range from 2,0-3,3φmm to 3,8-5,1φmm



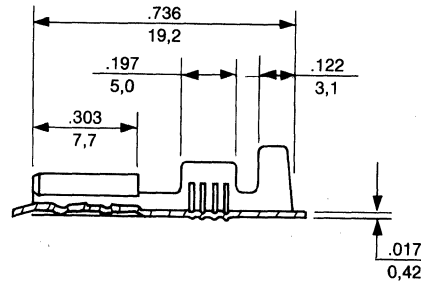
Available Primarily in Europe



Section 'Y' - 'Y'



Section 'Z' - 'Z'



Section 'X' - 'X'

Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions				
		A	B	C	D	L
0,5-1,0	2,0-3,3	.299 7,6	.303 7,7	.091 2,3	.017 0,42	.756 19,2
1,0-2,5	2,7-4,3	.299 7,6	.303 7,7	.091 2,3	.017 0,42	.756 19,2
4,0-6,0	3,8-5,1	.299 7,6	.303 7,7	.091 2,3	.017 0,42	.756 19,2

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	90264-0101	90264-0102	Contact Factory			
1,0-2,5	2,7-4,3	90264-0301	90264-0302				
4,0-6,0	3,8-5,1	90264-0701	90264-0702				

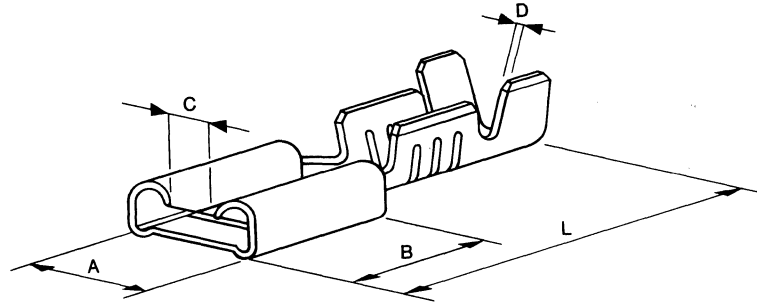
Qik Konnect Female



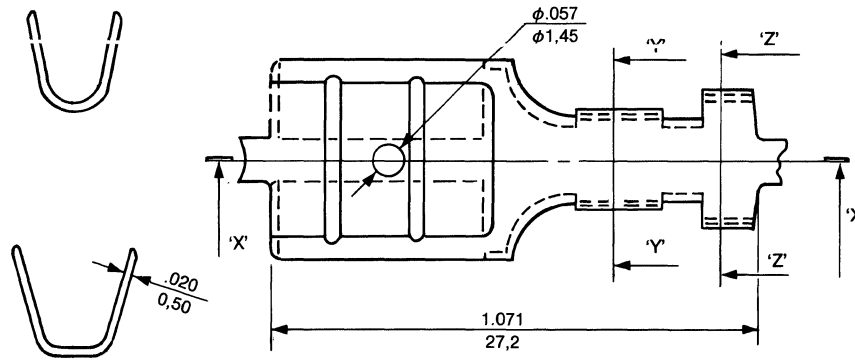
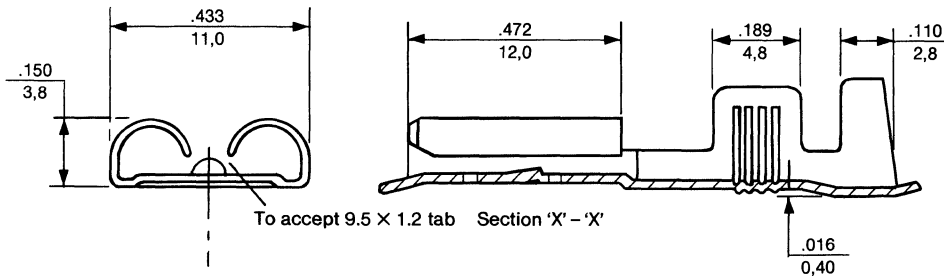
Distributed by Molex Incorporated, not Molex-ETC

90258 Series Qik Konnect Receptacle For 9,5 x 1,2 Tabs

- Wire range 4,0-6,0mm²
- Insulation range 4,0-5,1φmm



Available Primarily in Europe



Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions				
		A	B	C	D	L
4,0-6,0	2,0-3,3	.433 11,0	.472 12,0	.110 2,8	.020 0,50	1.071 27,2

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
4,0-6,0	4,0-5,1	90258-0701	90258-0702	Contact Factory			

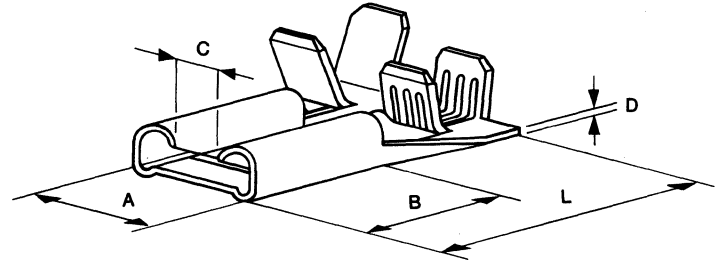
Qik Konnect Flag



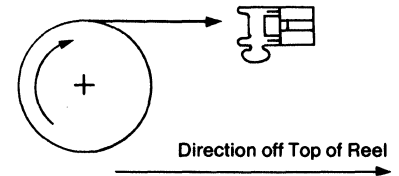
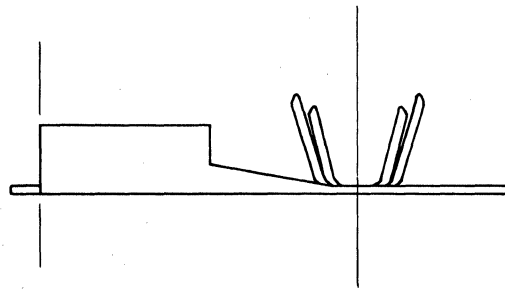
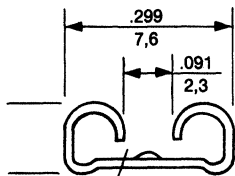
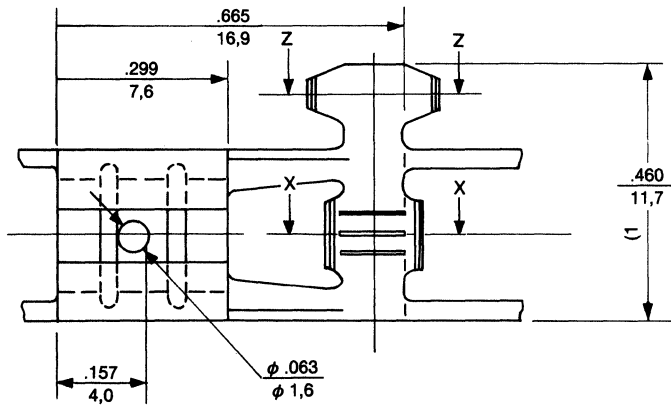
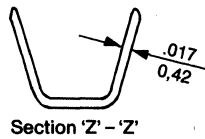
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90271 Series (left feed) Qik Konnect Flag Receptacle For 6,3 x 0,8mm Tabs

- Wire range from 0,5-1,0mm² to 1,0-2,5mm²
- Insulation range from 2,0-3,3φmm to 2,7-4,3φmm
- The product is designed to overcome problems where space is a critical factor
- Right feed version is 90266



Available Primarily in Europe



To accept a 6.3 X 0.8 tab

Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions				
		A	B	C	D	L
0,5 -1,0	2,0-3,3	.299 7,6	.303 7,7	.091 2,3	.017 0,42	.665 16,9
1,0 -2,5	2,7-4,3	.299 7,6	.303 7,7	.091 2,3	.017 0,42	.665 16,9

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.				
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	90271-0101	90271-0102	Contact Factory		
1,0-2,5	2,7-4,3	90271-0301	90271-0302			

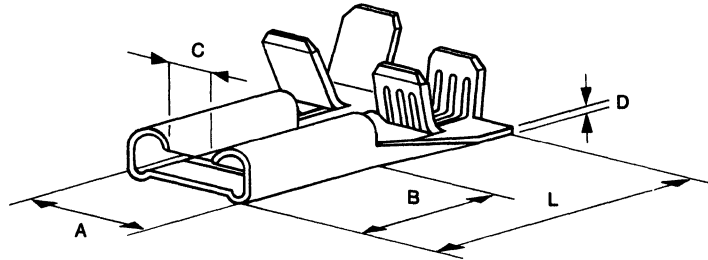
Qik Konnect Flag



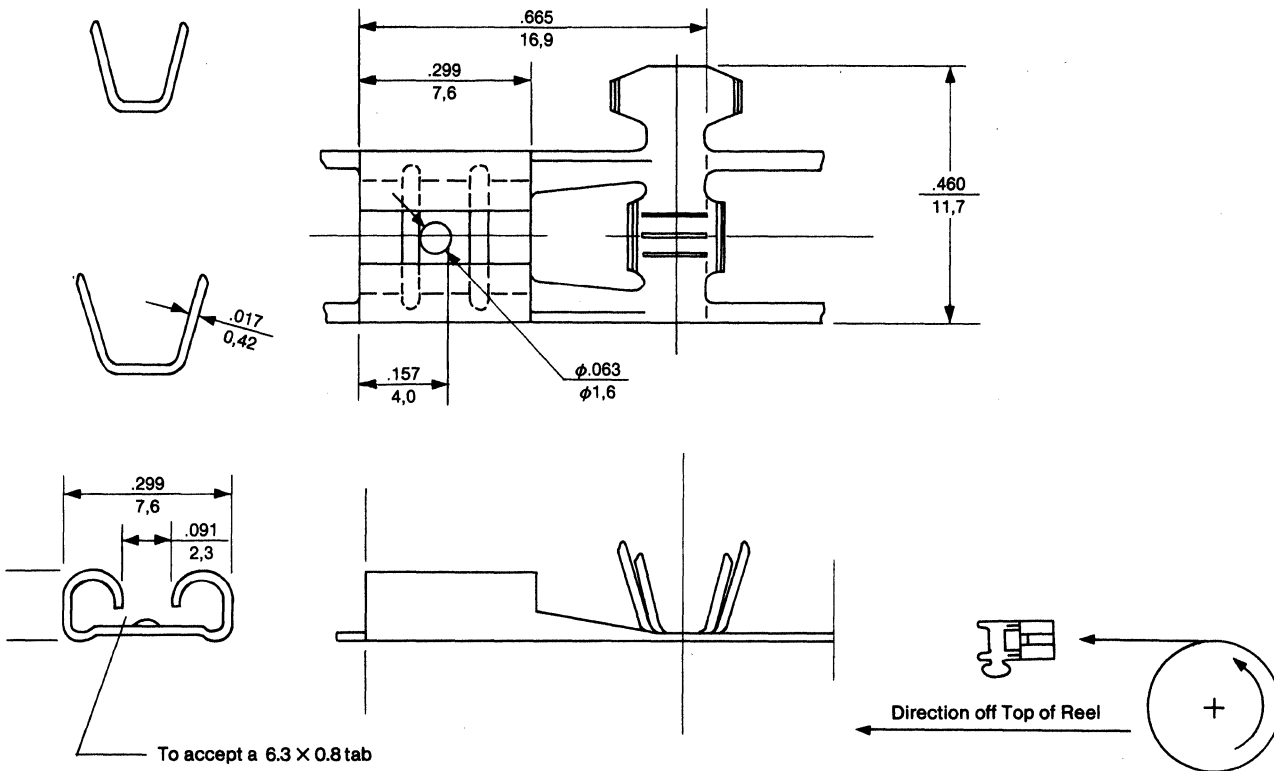
Distributed by Molex Incorporated, not Molex-ETC

90265 Series (right feed) Qik Konnect Flag Receptacle For 6,3 x 0,8mm Tabs

- Wire range from 0,5-1,0mm² to 1,0-2,5mm²
- Insulation range from 2,0-3,3φmm to 2,7-4,3φmm
- The product is designed to overcome problems where space is a critical factor
- All other features are identical to our standard Qik Konnect Straight Receptacle
- Left feed version is 90271



Available Primarily In Europe



K

Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions				
		A	B	C	D	L
0,5 -1,0	2,0-3,3	.299 7,6	.299 7,6	.091 2,3	.017 0,42	.665 16,9
1,0 -2,5	2,7-4,3	.299 7,6	.299 7,6	.091 2,3	.017 0,42	.665 16,9

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.				
		Brass/Plain	Brass/Tin	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	90265-0101	90265-0102			
1,0-2,5	2,7-4,3	90265-0301	90265-0302			

Contact Factory

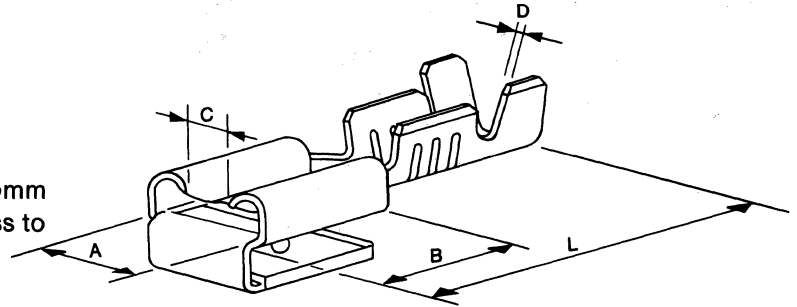
Qik Konnect Piggy Back



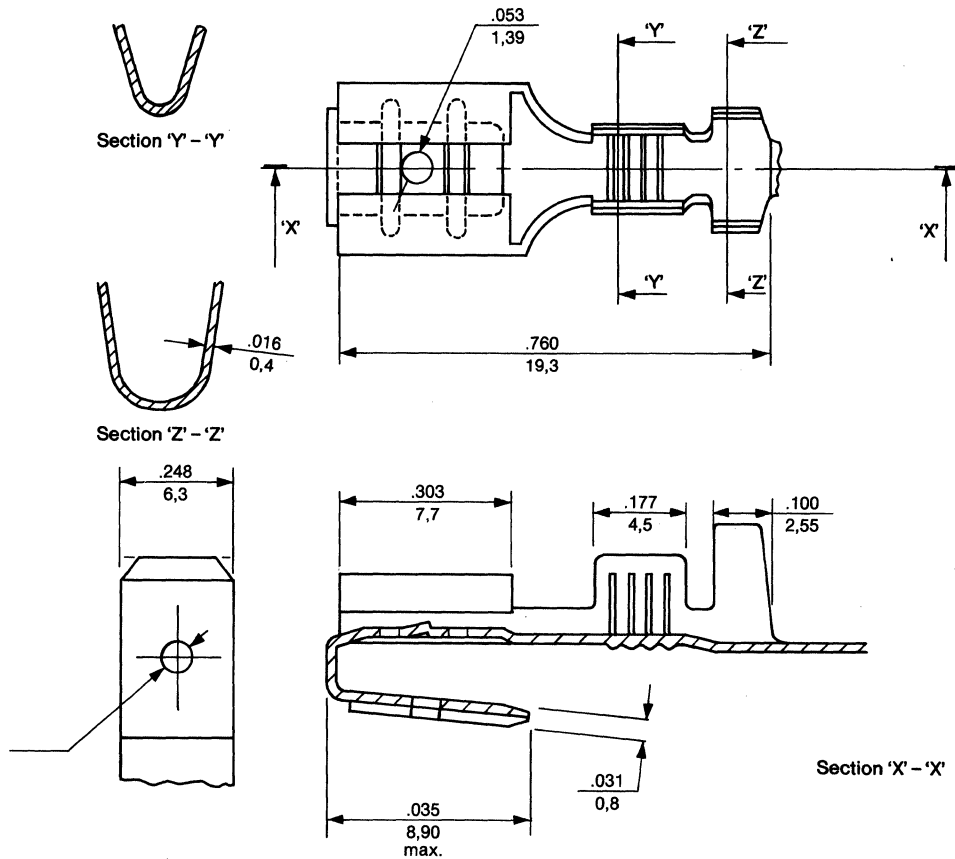
Distributed by Molex Incorporated, not Molex-ETC

90267 Series Qik Konnect Piggy Back For 6,3 x 0,8mm Tabs

- Wire sizes from 0,5-1,0mm² to 4,0-6,0mm²
- Insulation ranges from 2,0-3,3φmm to 3,8-5,1φmm
- The design of the product provides easy access to tap an additional connection



Available Primarily in Europe



Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions				
		A	B	C	D	L
0,5-1,0	2,0-3,3	.299 7,6	.303 7,7	.091 2,3	.016 0,40	.760 19,3
1,0-2,5	2,7-4,3	.299 7,6	.303 7,7	.091 2,3	.016 0,40	.760 19,3
4,0-6,0	3,8-5,1	.299 7,6	.303 7,7	.091 2,3	.016 0,40	.760 19,3

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	90267-0101	90267-0102				
1,0-2,5	2,7-4,3	90267-0301	90267-0302				
4,0-6,0	3,8-5,1	90267-0701	90267-0702				

Contact Factory

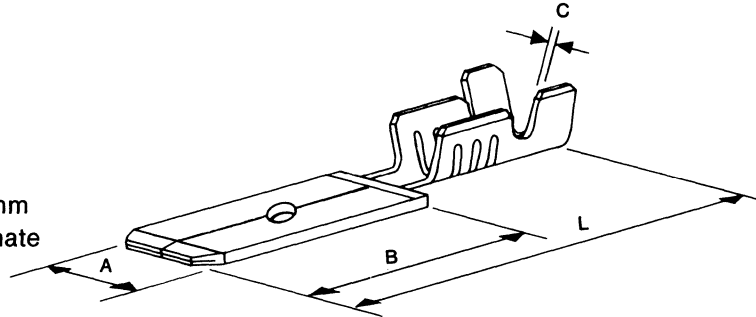
Qik Konnect Tab



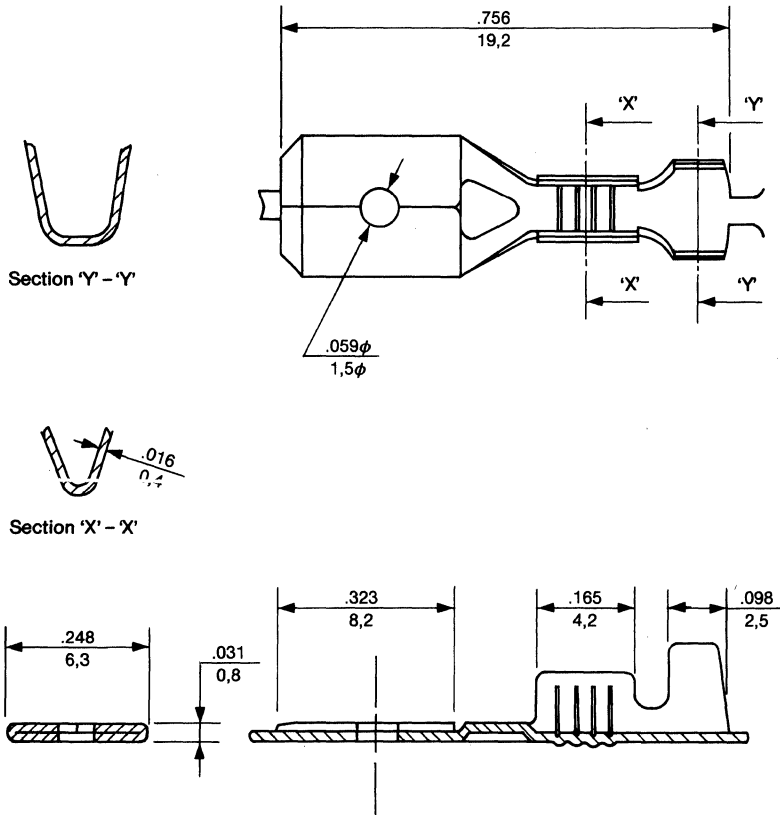
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90260 Series Qik Konnect Tab 6,3 x 0,8 mm

- Wire ranges from 0,5 - 1,0mm² to 4,0 - 6,0mm²
- Insulation ranges from 2,0-3,3φmm to 3,0-5,1φmm
- These are manufactured to a high standard to mate with our standard Qik Konnect Receptacles for optimum fit and performance



Available Primarily in Europe



Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions			
		A	B	C	L
0,5 - 1,0	2,0-3,3	.248 6,3	.323 8,2	.016 0,4	.756 19,2
1,0 - 2,5	2,7-4,3	.248 6,3	.323 8,2	.016 0,4	.756 19,2
4,0 - 6,0	3,8-5,1	.248 6,3	.323 8,2	.016 0,4	.756 19,2

Ordering Information 90260

Wire Size mm ²	Ins. Range φ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	90260-0101	90260-0102	90260-0103	Contact Factory		
1,0-2,5	2,7-4,3	90260-0301	90260-0302	90260-0303			
4,0-6,0	3,8-1,5	90260-0701	90260-0702	90260-0703			



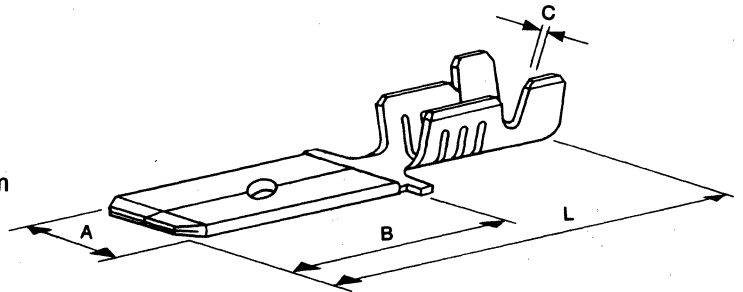
Qik Konnect Tab



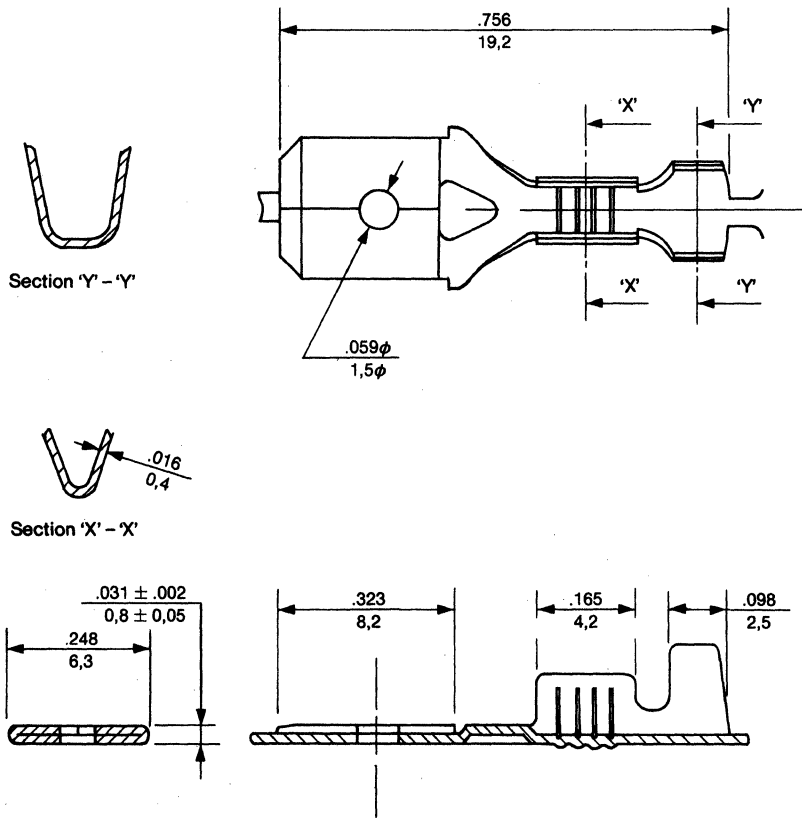
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90270 Series Qik Konnect Tab 6,3 x 0,8 mm

- Wire sizes from 0,5 - 1,0mm² to 4,0 - 6,0mm²
- Insulation ranges from 2,0-3,3φmm to 3,8-5,1φmm



Available Primarily in Europe



Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions			
		A	B	C	L
0,5 - 1,0	2,0-3,3	.264	.323	.016	.756
		6,7	8,2	0,4	19,2
1,0 - 2,5	2,7-4,3	.248	.323	.016	.756
		6,3	8,2	0,4	19,2
4,0 - 6,0	3,8-5,1	.248	.323	.016	.756
		6,3	8,2	0,4	19,2

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	90270-0101	90260-0102	Contact Factory			
1,0-2,5	2,7-4,3	90270-0301	90270-0302				
4,0-6,0	3,8-1,5	90270-0701	90270-0702				

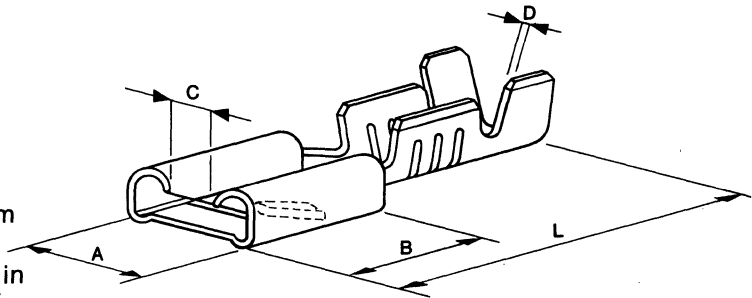
Qik Snap Female



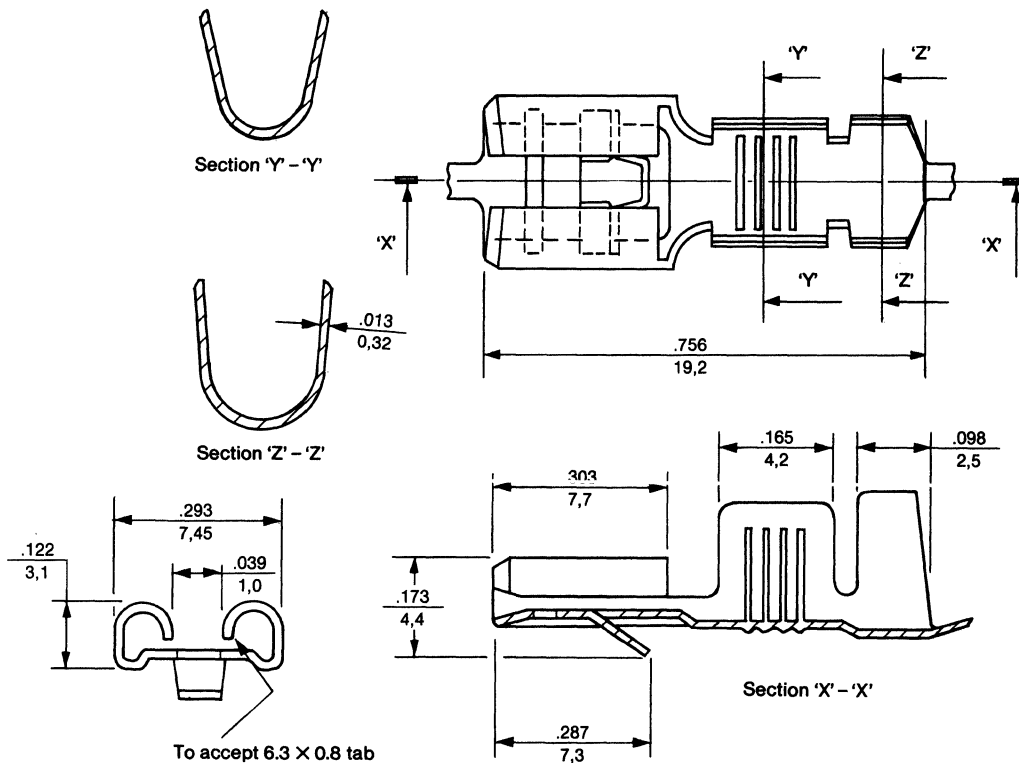
Distributed by Molex Incorporated, not Molex-ETC

90259 Series Qik Snap Receptacle For 6,3 x 0,8mm Tabs

- Wire ranges from 0,5-1,0mm² to 4,0-6,0mm²
- Insulation ranges from 2,0-3,3φmm to 3,8-5,1φmm
- This is the multi-way connector version of our standard Qik Konnect receptacle. Normally used in harness making. This provides a quick method of multi connections up to 18 ways



Available Primarily in Europe



Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions				
		A	B	C	D	L
0,5-1,0	2,0-3,3	.293	.303	.039	.013	.756
		7,45	7,7	1,0	0,32	19,2
1,0-2,5	2,7-4,3	.293	.303	.039	.013	.756
		7,45	7,7	1,0	0,32	19,2
4,0-6,0	3,8-5,1	.293	.303	.039	.013	.756
		7,45	7,7	1,0	0,32	19,2

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	90259-0101	90259-0102	90259-0303	Contact Factory		
1,0-2,5	2,7-4,3	90259-0301	90259-0302				
4,0-6,0	3,8-5,1	90259-0701	90259-0702				

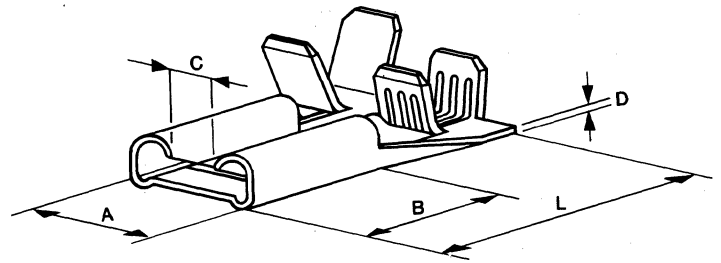
Qik Snap Flag



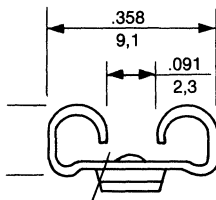
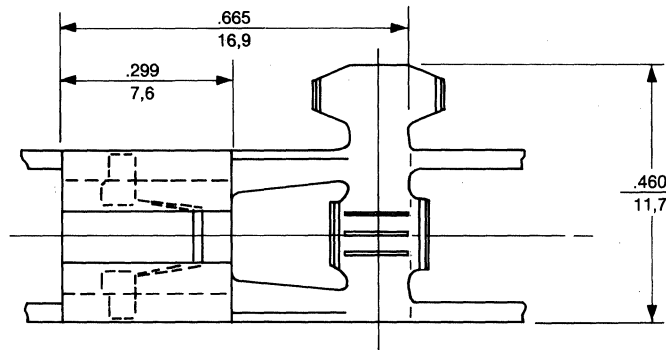
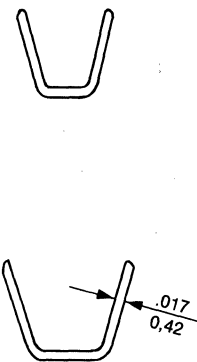
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90261 Series (left feed) Qik Snap Flag Receptacle For 7,7 x 0,8mm Tabs

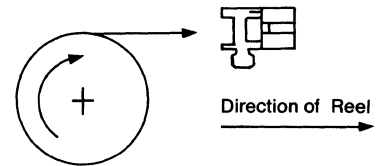
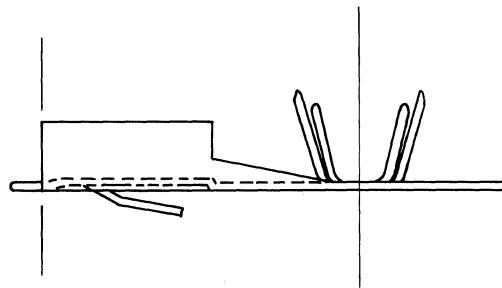
- Wire range from 0,5-1,0mm² to 4,0-6,0mm²
- Insulation range from 2,0-3,3φmm to 3,8-5,1φmm
- This is the multi-way connector version of our Qik Konnect Flag receptacle. This provides a quick method of multi-connection up to 18 ways
- Right feed version is 90266



Available Primarily in Europe



To accept a 7.7 X 0.8 tab



Direction of Reel

Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions				
		A	B	C	D	L
1,0-2,5	2,7-4,3	.358 9,1	.299 7,6	.091 2,3	.017 0,42	.665 16,9
4,0-6,0	3,8-5,1	.358 9,1	.299 7,6	.091 2,3	.017 0,42	.665 16,9

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
1,0-2,5	2,7-4,3	90261-0301	90261-0302	90261-0303	Contact Factory		
4,0-6,0	3,8-5,1	90261-0701					

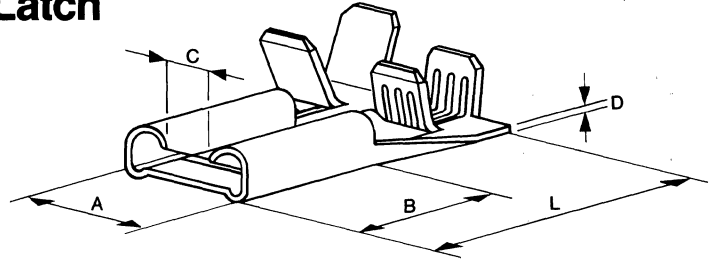
Qik Snap Flag



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90266 Series (right feed) Qik Snap Flag Receptacle with Latch For 7,7 x 0,8mm Tabs

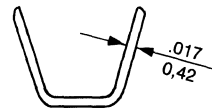
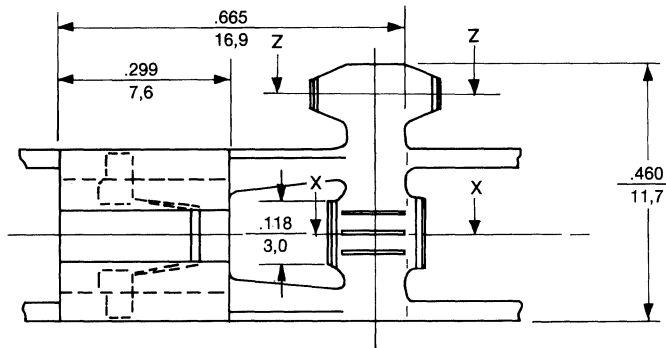
- Wire sizes from 1,0-2,5mm² to 2,0-3,3mm²
- Insulation ranges from 2,7-4,3φmm to 3,8-5,1φmm
- This is the multiway connector version of our Qik Connect Flag receptacle. This provides a quick method of multi-connection up to 18 ways
- Left feed version is 90261



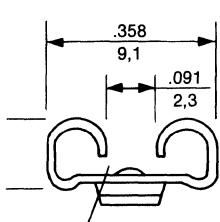
Available Primarily in Europe



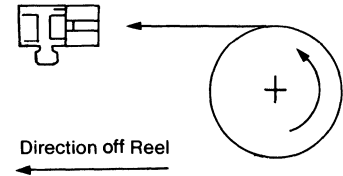
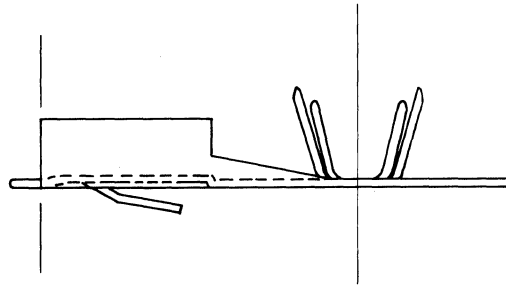
Section 'X' - 'X'



Section 'Z' - 'Z'



To accept a 7.7 X 0.8 tab



K

Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions				
		A	B	C	D	L
1,0-2,5	2,7-4,3	.358 9,1	.299 7,6	.091 2,3	.017 0,42	.665 16,9
4,0-6,0	3,8-5,1	.358 9,1	.299 7,6	.091 2,3	.017 0,42	.665 16,9

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
1,0-2,5	2,7-4,3	90266-0301	90266-0302	90266-0303	Contact Factory		
4,0-6,0	3,8-5,1	90266-0701					

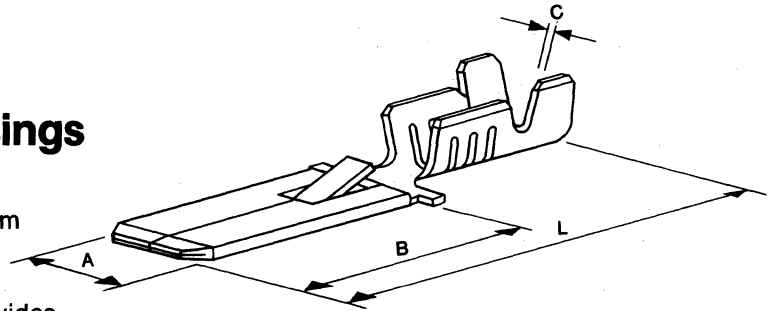
Qik Snap Tab



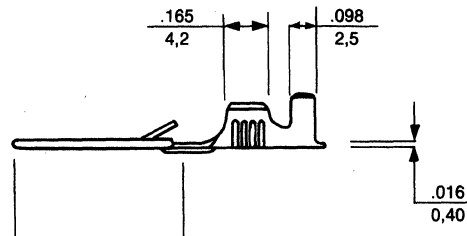
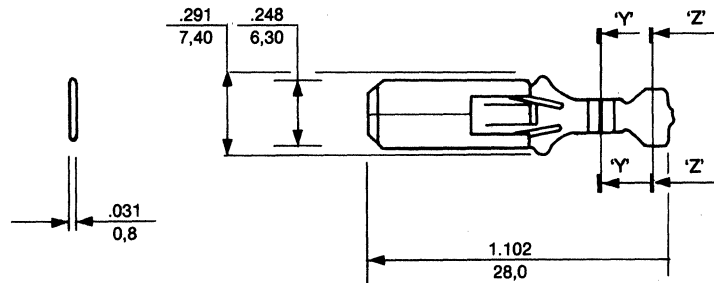
Distributed by Molex Incorporated, not Molex-ETC

90268 Series Qik Snap Tab 6,3 x 0,8 mm with Latch For use in Multi-Contact Housings

- Wire sizes from 0,5 - 1,0mm² to 4,0 - 6,0mm²
- Insulation ranges from 2,0-3,3φmm to 3,8-5,1φmm
- This is the multiway connector version of our standard Qik Konnect tab
- Normally used in harness manufacture. This provides a quick method of multi-connection up to 18 ways



Available Primarily in Europe



Dimensional Information

Wire Size mm ²	Ins. Range φ mm	Dimensions			
		A	B	C	L
0,5 -1,0	2,0-3,3	.248	.618	.016	1.102
		6,3	15,7	0,4	28,2
1,0 -2,5	2,7-4,3	.248	.618	.016	1.102
		6,3	15,7	0,4	28,2
4,0 -6,0	3,8-5,1	.248	.618	.016	1.102
		6,3	15,7	0,4	28,2

Ordering Information

Wire Size mm ²	Ins. Range φ mm	Order Nos.					
		Brass/Plain	Brass/Tin	Phos. Bronze/Plain	Phos. Bronze/Tin	Nickel Silver/Plain	Steel/Nickel
0,5-1,0	2,0-3,3	90268-0101	90268-0102	90268-0303	90268-0304	Contact Factory	
1,0-2,5	2,7-4,3	90268-0301	90268-0302				
4,0-6,0	3,8-1,5	90268-0701	90268-0702				

Contents

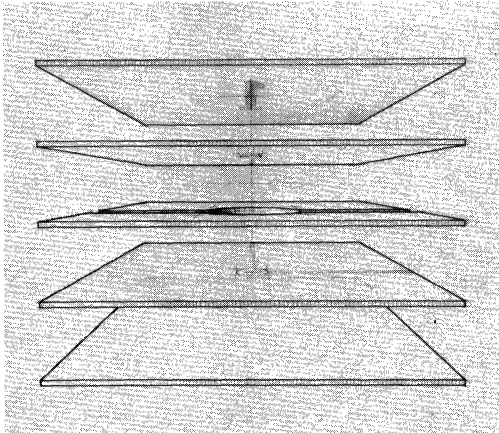


Control Panels	2L-9L
Connectors for Flexible Control Panels	10L-11L
Lighted Pushbutton Switches	12L-17L
Connectors for Lighted Pushbutton Switches	18L

Control Panel Construction Options



Standard

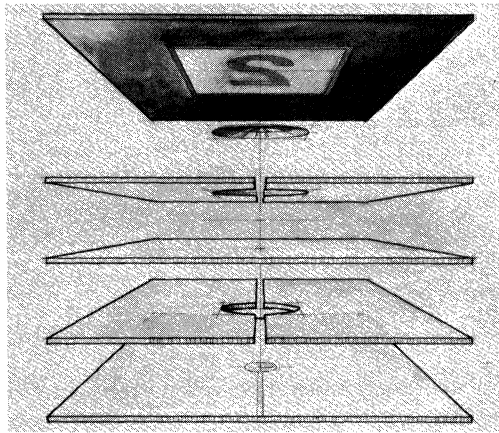


The standard construction consists of screened silver contacts and interconnections on opposite layers of thin, flexible polyester film. An insulating layer, with openings to create a contact gap, is sandwiched between the two circuit halves and sealed with adhesive.

Upon actuation, the contact gap decreases until both silver contact surfaces meet and complete the circuit.

Optional features such as a graphic overlay for aesthetic appeal, mounting adhesive for direct application to the customer's device, and flex tail covering to protect the circuit traces from abrasion and shorting, are often included.

Tactile



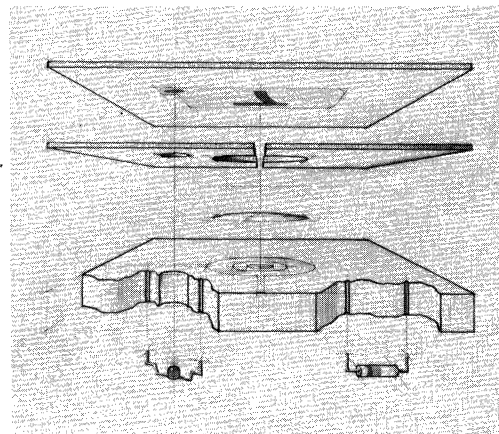
Although very similar in construction to a standard version, the tactile option includes a stainless steel snap dome for positive operator feedback when the circuit is completed.

Typical applications for this product are where audio (tone) or visual (display) feedback are not practical.

You will find the crisp response of the Molex tactile membrane switch superior to that offered by other manufacturers.

Molex offers two different dome sizes to meet your button spacing/size requirements.

Hybrid



Our hybrid construction was developed for the increasing demand of integral displays and electronic components to be included in conjunction with our membrane switches.

As opposed to the options shown above, the hybrid construction uses a printed circuit board as the lower switch circuit.

This allows us to include various L.E.D.'s, resistors, connectors, and displays by soldering them directly to the back surface of the switch assembly.

This type of construction can significantly lower your total applied costs by eliminating the need for a printed circuit board for display components.

Another advantage: Molex is your sole vendor, responsible for the entire assembly.

Specifications



Electrical

- Contact Rating* — 28 VDC, 30 mA
- Life* — 5,000,000 operations minimum at maximum rated load
- Termination Resistance* — 10/15 ohms nominal, 100 ohms maximum
- Contact Bounce* — Less than 3 milliseconds
- Switch Capacitance* — Less than 20 picofarads (without shielding option)

Mechanical

- Actuation Force* — 2 to 8 ounces
- Button Travel* — .003" to .008"
- Shock* — 50 G. (3 hits on each axis)
- Panel Thickness* — .025"/.040" (typical)

Environmental

- Temperature Range* — -40° to +70°C
- Humidity* — Per mil std. 202E, Method 103B
- Salt Fog* — 5% solution for 48 hours

Electrical

- Contact Rating* — 28 VDC, 30mA
- Life* — 1,000,000 operations minimum at maximum rated load
- Termination Resistance* — 10/15 ohms nominal, 100 ohms maximum
- Contact Bounce* — Less than 10 milliseconds
- Switch Capacitance* — Less than 20 picofarads (without shielding option)

Mechanical

- Actuation Force* — 12 ounces nominal
- Button Travel* — .015" to .025"
- Shock* — 50 G. (3 hits on each axis)
- Panel Thickness* — .030"/.050" (typical)

Environmental

- Temperature Range* — -40°C to +70°C
- Humidity* — Per mil std. 202E, Method 103B
- Salt Fog* — 5% solution for 48 hours

Electrical

- Contact Rating* — 28 VDC, 30 mA
- Life* — Tactile: 1,000,000 minimum; non-tactile: 5,000,000 minimum
- Termination Resistance* — 10/15 ohms nominal
- Contact Bounce* — Less than 10 milliseconds
- Switch Capacitance* — Less than 20 picofarads (without shielding option)

Mechanical

- Actuation Force* — 12 ounces nominal (tactile); 2 to 8 ounces (non-tactile)
- Button Travel* — .010" to .025" (depending on specific construction)
- Shock* — 50 G. (3 hits on each axis)
- Panel Thickness* — .050"/.100" (typical, excluding component heights)

Environmental

- Temperature Range* — -40°C to +70°C
- Humidity* — Per mil std. 202E, Method 103B
- Salt Fog* — 5% solution for 48 hours



How to Specify Colors:

When you want to match a painted surface or molding compound, color chips of the actual material should be submitted. We will then provide, for your approval, color chips which are representative of the actual graphics.

Pantone® and Munsell® color systems can be used for matching as well, though the Pantone system colors may not exactly match those printed on polyester or polycarbonate. (The Pantone chart is printed on paper stock.)

Coatings for Chemical and Abrasion Resistance:

In certain stringent applications, a standard polycarbonate overlay alone may not be sufficient protection against chemical and/or abrasive attack.

For this reason, Molex offers a variety of coatings that are applied to the first surface of the graphics material.

This unique process allows us to create a beautiful array of glosses, mattes, and textures as well as providing chemical/ abrasion resistance.

The most common application of this process is in a switch that requires a textured keypad surface and a transparent window area for a vacuum-fluorescent or liquid-crystal display.

Few manufacturers are able to offer this feature. At Molex - it's commonplace.

Shielding for ESD, EMI, and RFI Protection:

As CMOS technology becomes more prevalent and the F.C.C. regulations on EMI/RFI emissions more stringent, shielding requirements are increasingly being specified. We, at Molex, have engineered solutions to these problems and offer these shields as an optional feature of custom membrane switches.

Since all applications and solutions differ, we recommend that the exact shielding method be evaluated in your device, not on a bench test.

In order to provide the data you may require, our Lisle headquarters Engineering Laboratory includes a fully shielded room for shield-effectiveness testing.

Involve your Molex keyboard specialist early in the design stages of your product. His experience can eliminate costly redesigns at a later date.

Insulating the Flex Tail:

When a flex tail may come in contact with other electronic components or must enter your unit through a metal backer, we recommend the use of a covering material.

Molex offers the following options:

Screened-on — In this process, a thick film dielectric is applied to protect the conductors.

Laminated — This method employs a thin layer of polyester which is bonded to the flex tail using an acrylic adhesive.

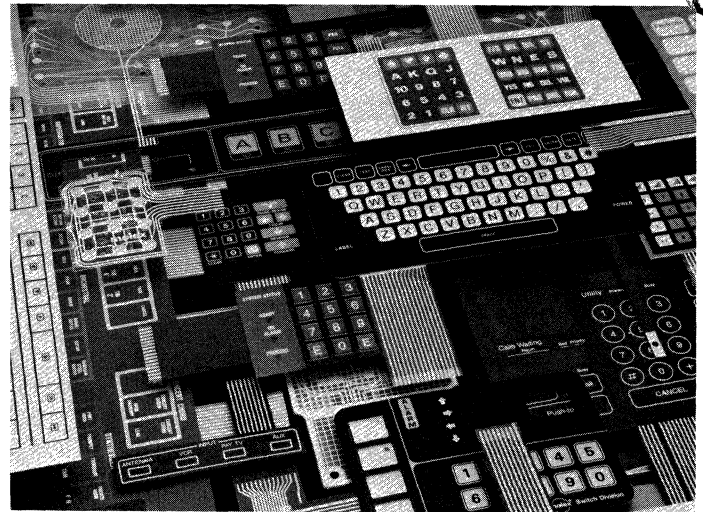
Positive Button Identification:

Quite frequently, color variation alone is not a sufficient method of guiding the user's finger to the center of a switch pad.

Understanding this, Molex offers two options to meet this requirement:

Embossing — This technique employs a two piece die to form the graphic overlay to a specific shape.

Selective texturing — Also providing positive identification, this method utilizes a selectively applied material on the front surface of the graphics.



Trimming Standard Switches for Prototyping:

Low volume and prototype applications may require a configuration not available as a standard product. These programs seldom justify tooling costs for only a few parts.

Understanding this, we have designed our standard switches to be trimmed, if necessary, to only a fraction of their original size.

That's versatility ... that's Molex!

Dead Front Legends and Windows:

This option is available for those graphics which require hidden legends or windows.

By utilizing a special screening technique, we are able to create hidden features which appear only when light is applied from behind.

This technique may also be used to differentiate lighted sections in the presence of bright ambient light.

**Molex Incorporated
Switch Products Division**

2222 Wellington Court
Lisle, Illinois 60532
(312) 969-4550



CONTROL PANEL CUSTOM DESIGN SHEET

Submitted by: _____

Company _____ Date _____

Address _____ City, State _____

Contact _____ Phone _____

Electrical Specifications:

Termination Resistance (Max.) _____ Operating Voltage _____

Operating Current _____ Shielding (EMI, RFI, ESD) _____

Switch Circuitry (XY Matrix, SPST/COM., Special) _____

Mechanical Specifications:

Switch Panel Size _____ Length of Flex-Tail _____ Insulated _____

Type of Termination _____ Special Operating Force _____

Method of Mounting _____ Is Tactile Feedback Required? _____

Environmental Specifications:

Operating Temperature (Min.) _____ (Max.) _____ Storage Temperature (Min.) _____ (Max.) _____

Humidity _____ Altitude _____ Contaminants _____

Other Environmental Conditions _____

Graphic Sheet Specifications:

Number of Colors _____ Material _____ Thickness _____

Texture _____ Embossing _____ Backlighting _____

Selective Texture _____ Chemical/Abrasion Resistant Coating _____

Quantities Required:

Estimated Annual Usage _____

Prototype Quantity _____ Date Required _____ Price Objective _____

Production Release Quantity _____ Date Required _____ Price Objective _____

Please enclose a drawing or sketch of switch (showing overall dimensions, location & length of flex tail, and schematic or truth table of circuitry).

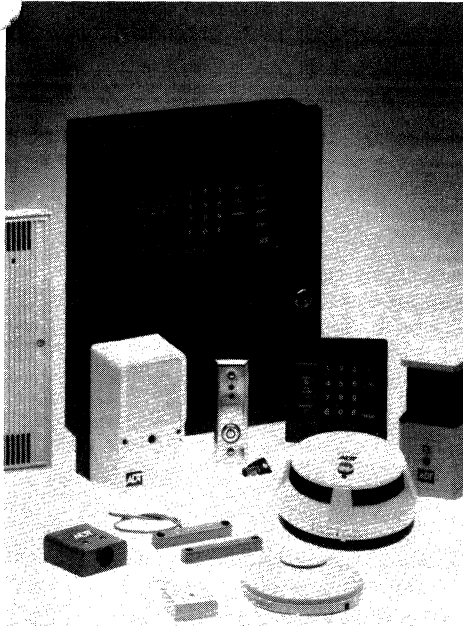
Tear
carefully



**If a print is not available,
use this area to sketch
your keyboard requirements.**

L

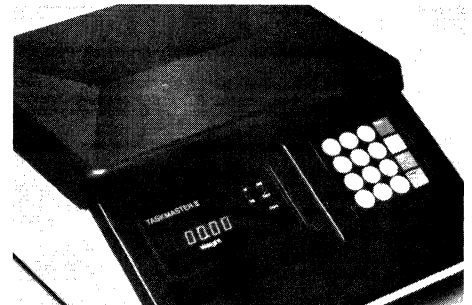
Control Panel Applications



Security Systems



Professional Music Synthesizers



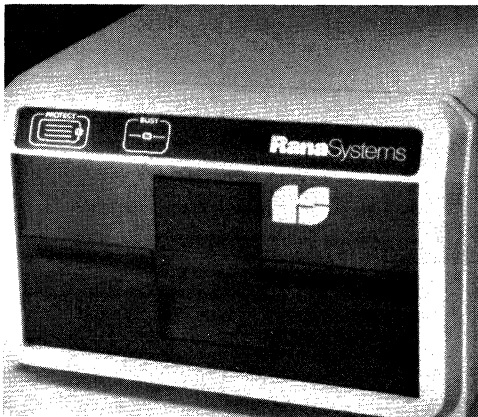
Commercial Counting Scales



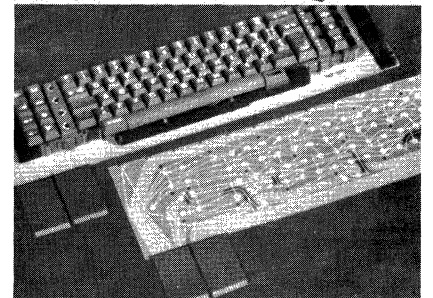
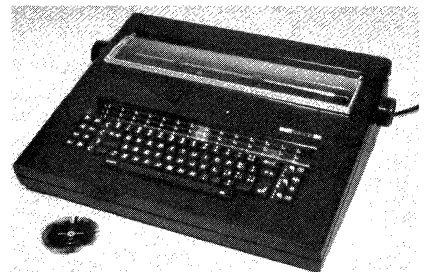
Audio-Visual Devices



Telecommunications



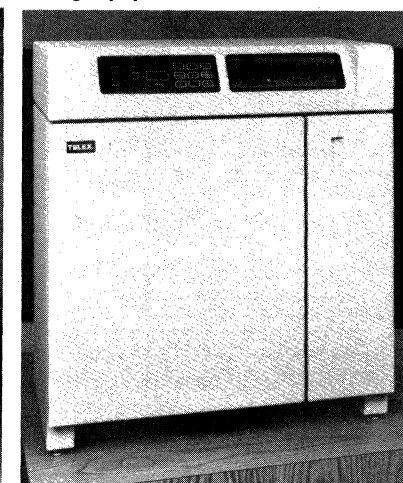
Data Processing Equipment



Electronic Typewriters



Home Entertainment



Industrial Control Systems



Electronic Organs



Standard Control Panels



Molex realizes that often times your touch panel requirements could be satisfied by a standard configuration designed to easily interface with most common digital circuits.

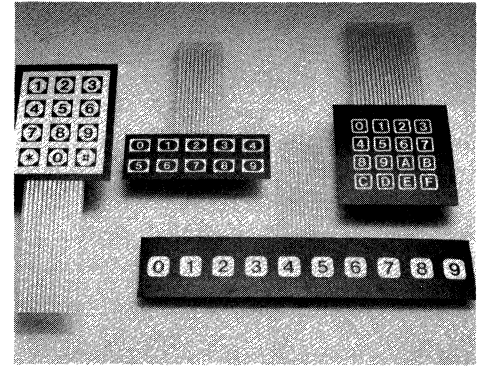
We have, therefore, established a line of readily available membrane keypads for those applications that do not justify a custom switch due to volume or timing requirements.

Two versions, the 1 x 10 and 3 x 4, are available with tactile feedback. Both designs utilize our standard .500" stainless steel domes.

The following standard switches are available from your local Molex distributor and may be purchased with or without standard graphic overlays and adhesive mounting sheets (see ordering information).

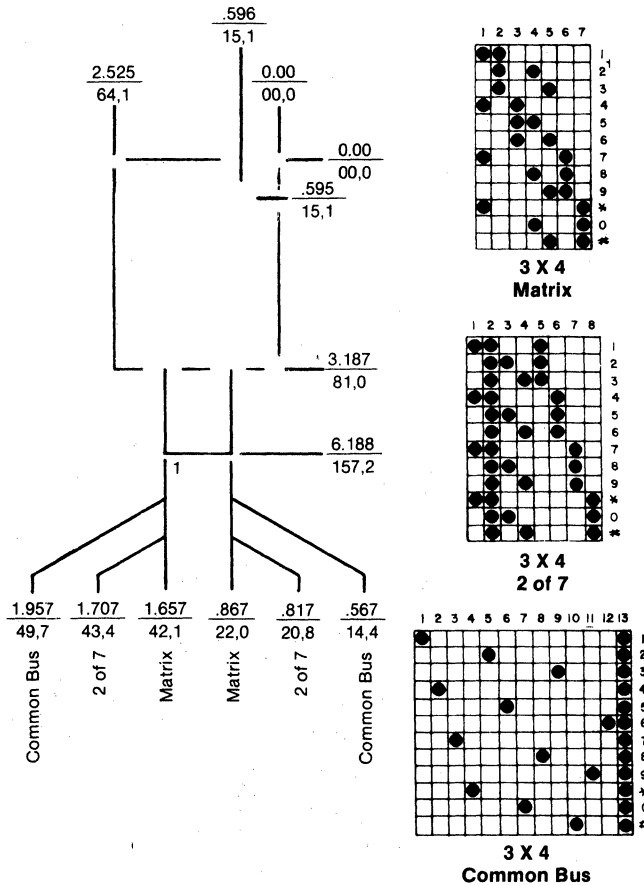
You'll find that these switches will interface easily with most common keyboard encoders and are ideal for low volume production runs and prototyping.

If a custom decorative graphic overlay is required, contact your local Molex Keyboard Specialist.

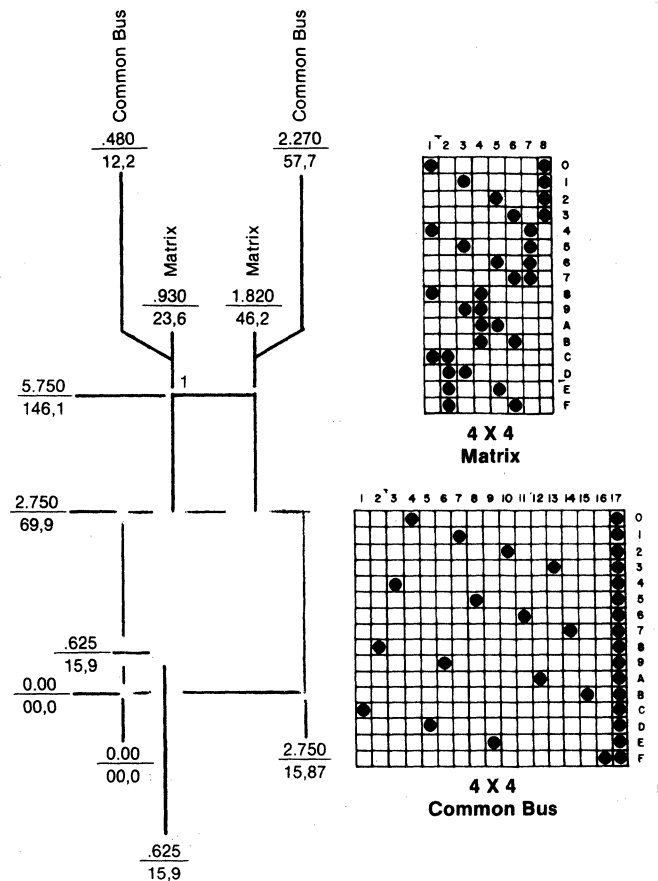


Conductive traces are printed on opposite side of tail with respect to switches as shown.

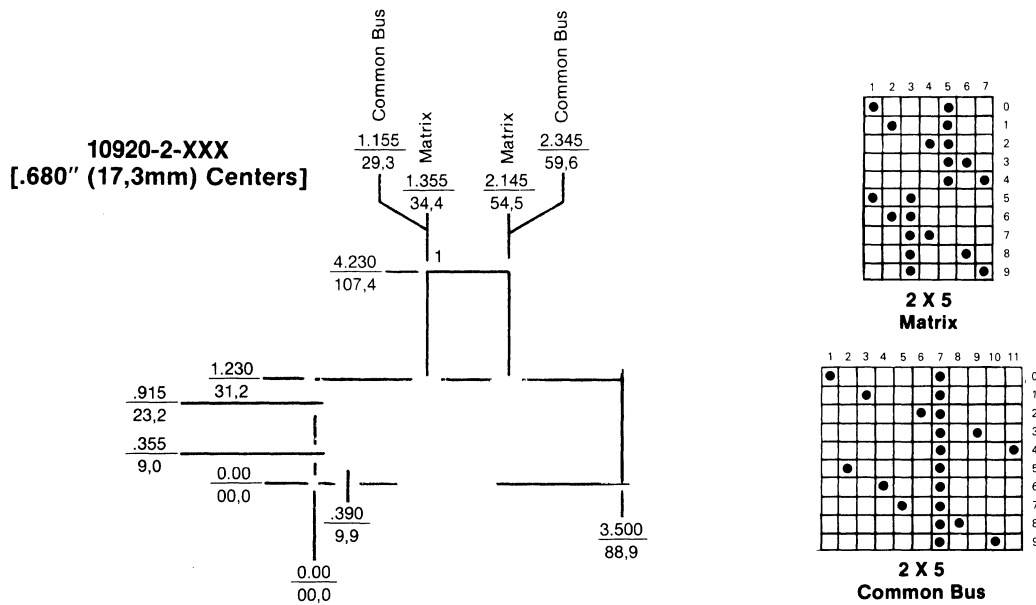
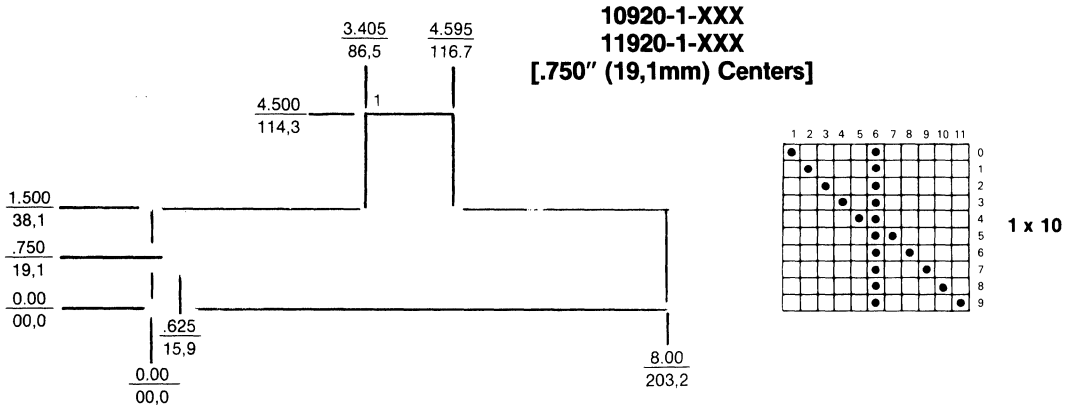
**10920-3-XXX
11920-3-XXX
[.666" (16,9mm) Centers]**



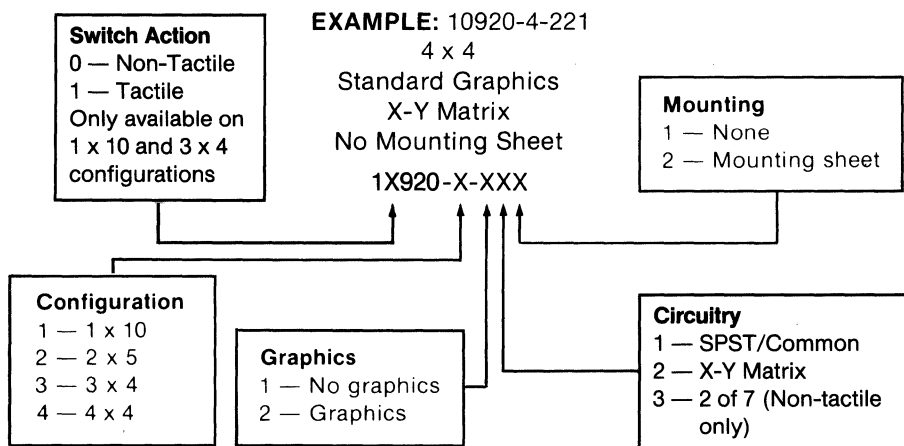
**10920-4-XXX
[.500" (12,7mm) Centers]**



Standard Control Panels



ORDERING INFORMATION for Standard Switches

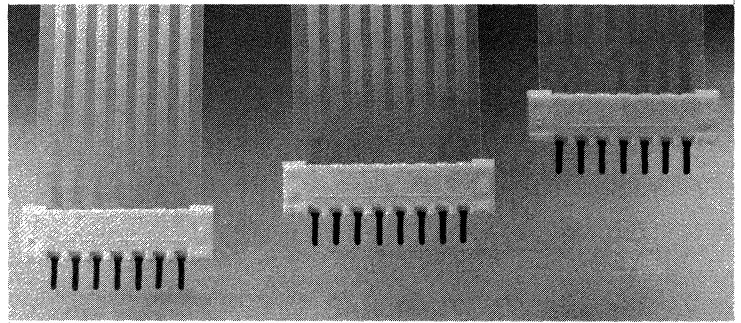


Molex Connectors For Flexible Control Panels



7583-CN

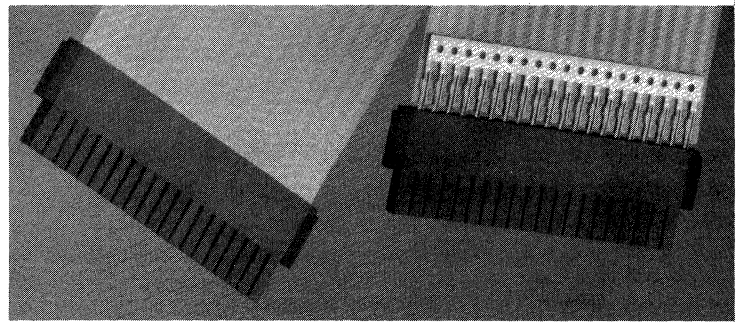
- 5-21 circuits
 - Low insertion force
 - Accepts conductors on either side of flex tail
 - Straight or right angle versions
 - Dual beam contact, copper alloy, tin plated
- Contact factory



40556

- 4-27 circuits
- Industry compatible
- Phosphor bronze box terminal
- Mass termination
- 94V-0 polyester housing

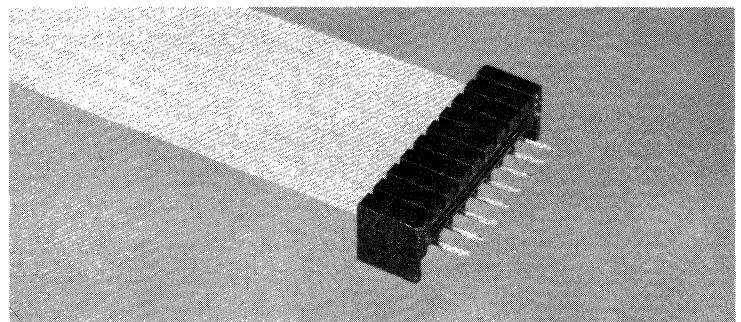
See Section G, this catalog



5229

- 3-27 circuits
- Low insertion force
- Low profile
- Pre-tinned phosphor bronze contacts
- 94V-0 glass filled polyester housing

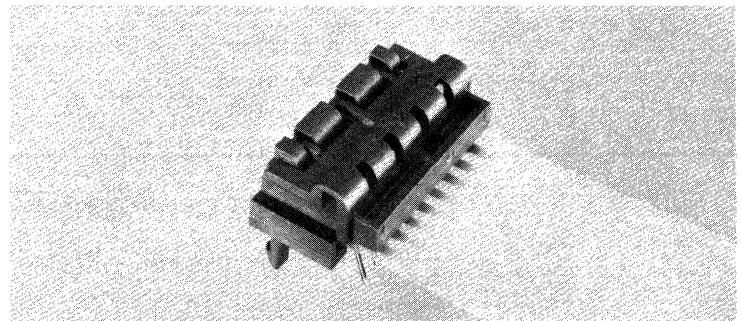
See Section G, this catalog



L

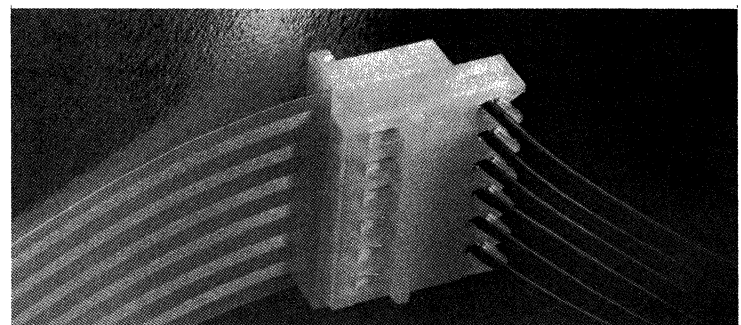
4850

- 5-25 circuits
 - Zero insertion force
 - Built-in polarized strain relief
 - Snaps into printed circuit board
 - 94V-0 glass filled polyester housing
 - Tin plated contact
- See Section G, this catalog



40922

- 2-16 circuits
 - Mates with discrete wire or .100 CL ribbon cable
 - Use to extend length of flex tail
 - 94V-0 glass filled polyester housing
 - Brass contacts, tin over copper plating
- Contact factory



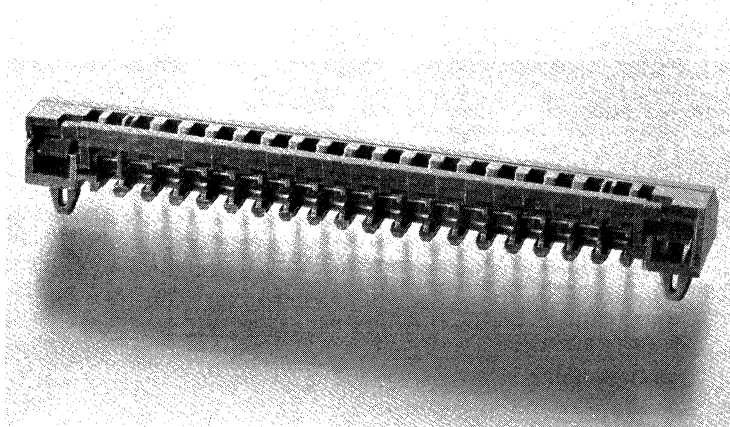
Molex Connectors For Flexible Control Panels



90067

Features/Dimensions:

- 4-20 circuits
- Zero insertion force
- For high vibration situations
- 94V-0 glass filled polyester housing
- Pre-tinned phosphor bronze contacts

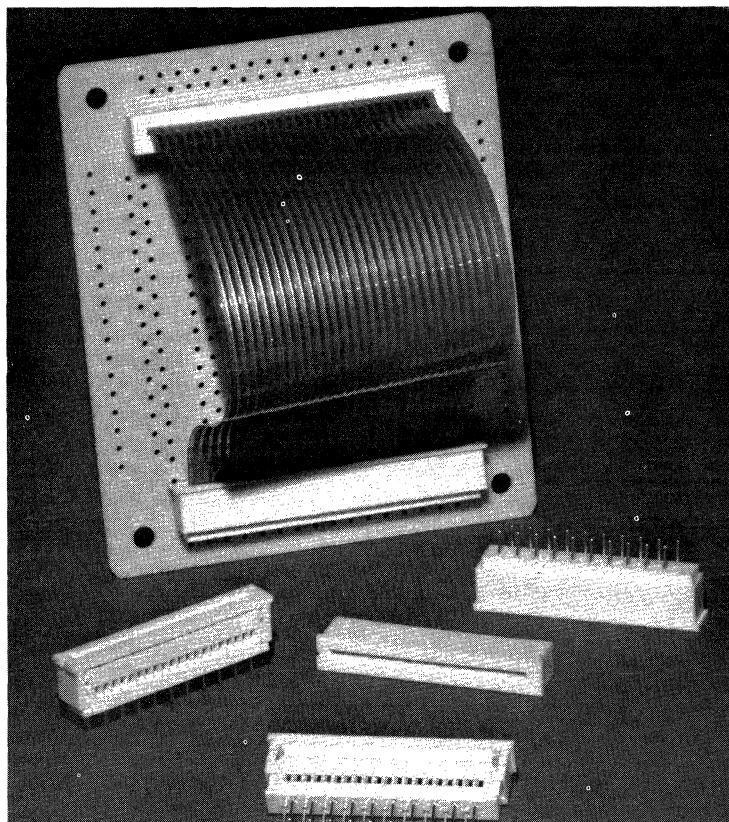


See Section G, this catalog

5597/5598

Features/Dimensions:

- 3-30 circuits
- Zero insertion force
- Straight or right angle P.C. tails
- 94V-0 polyester housing
- Tin plated phosphor bronze contacts



See Section G, this catalog



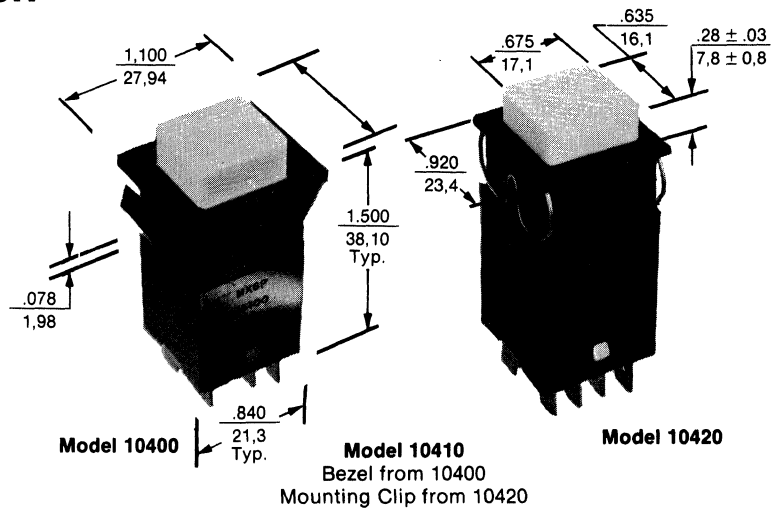
Pushbutton Switches



10400/10410/10420 Lighted Pushbutton Switch

Features/Dimensions:

- SPST, SPDT, DPST & DPDT
- Momentary, alt. action, normally open/closed versions
- Replaceable lamp
- Front panel snap mounting
- Dead front button
- Wide selection of lenses, bezels and legends
- Contact ratings of 100 milliamps, 10.1 and 15 amps
- UL & CSA listed
- Dependent or independent lamp circuitry
- Neon lamp with internal dropping resistor
- Pilot light only



Ordering Data

Complete the numerical description by placing the three-digit identification for each option in proper sequence.

104 - XXX - XXX - XXX - XXX - XXX - X

Specify color of the hot stamp for the insert.
W - White B - Black

00 Rectangular Bezel Molded Mounting Ears
10 Rectangular Bezel Wire Mounting Only
20 Square Bezel Wire Mounting Only

W White Bezel • B Black Bezel

Hot Stamping Insert	
↓ Hot Stamping Button	
610 - 600	No Hot Stamping
611 - 601	Style I
612 - 602	Style II
613 - 603	Style III
614 - 604	Style IV

Button Color	
411 White	422 Clear
412 Red	423 Green - Neon*
413 Orange	424 Red - Neon
414 Blue	425 Amber - Neon
415 Black	426 Dark Brown
416 Green	427 Clear Neon*
417 Yellow	Dead Front with Smoke Button.
418 Red - Neon*	
419 Yellow - Neon*	Insert Color
420 Amber - Neon*	431 White
421 White - Neon	432 Red
*Button with Grid	433 Yellow

100 SPST - 100MA/30VDC (Mom. N.O.)	121 DPST - 10.1A, 125/250 VAC (Mom. N.O.)
101 SPST - 100MA/30VDC (Mom. N.C.)	122 DPST - 10.1A, 125/250 VAC (Mom. N.C.)
102 SPST - 100MA/30VDC (P/P)	123 DPST - 10.1A, 125/250 VAC (Mom. N.C.-N.O.)
103 SPST - 10.1A, 125/250 VAC (Mom. N.O.)	124 DPST - 10.1A, 125/250 VAC (P/P)
104 SPST - 10.1A, 125/250 VAC (Mom. N.C.)	126 DPST - 10.1A, 125/250 VAC (P/P N.O.-N.C.)
105 SPST - 10.1A, 125/250 VAC (P/P)	127 DPST - 15 Amp/125 VAC (Mom. N.O.)
106 SPST - 15 Amp/125 VAC (Mom. N.O.)	128 DPST - 15 Amp/125 VAC (Mom. N.C.)
107 SPST - 15 Amp/125 VAC (Mom. N.C.)	129 DPST - 15 Amp/125 VAC (Mom. N.C.-N.O.)
108 SPST - 15 Amp/125 VAC (P/P)	130 DPST - 15 Amp/125 VAC (P/P)
109 SPDT - 100MA/30VDC (Mom.)	132 DPST - 15 Amp/125 VAC (P/P N.C.-N.O.)
110 SPDT - 100MA/30VDC (P/P)	133 DPDT - 100MA/30VDC (Mom.)
111 SPDT - 10.1A, 125/250 VAC (Mom.)	134 DPDT - 100MA/30VDC (P/P)
112 SPDT - 10.1A, 125/250 VAC (P/P)	135 DPDT - 10.1A, 125/250 VAC (Mom.)
113 SPDT - 15 Amp/125 VAC (Mom.)	136 DPDT - 10.1A, 125/250 VAC (P/P)
114 SPDT - 15 Amp/125 VAC (P/P)	137 DPDT - 15 Amp/125 VAC (Mom.)
115 DPST - 100MA/30VDC (Mom. N.O.)	138 DPDT - 15 Amp/125 VAC (P/P)
116 DPST - 100MA/30VDC (Mom. N.C.)	139 SPECIAL
117 DPST - 100MA/30VDC (Mom. N.O.-N.C.)	140 Pilot Light
118 DPST - 100MA/30VDC (P/P)	
120 DPST - 100MA/30VDC (P/P N.O.-N.C.)	

Mom. Momentary

Bulb - Neon	Replaceable Lamp
300 No Bulb w/light term	305 6 V Independent
301 125 V Independent	306 6 V Dependent
302 125 V Dependent	307 12 V Independent
303 250 V Independent	308 12 V Dependent
304 250 V Dependent	309 14 V Independent
	310 28 V Independent
	311 28 V Dependent
	312 SPECIAL
	313 No Bulb, no light term.
	314 14 V Dependent
	399 Non-Standard (Specify)

Connectors

Two connectors are available to use with 10400 switch line.

Pushbutton Switches



10400/10410/10420 Technical Specifications

U.L. Card Number E33149
CSA Approval 29661

Electrical Ratings:

Wiping Action - Gold Contacts Low Energy Switch

Switch Current - 100 mA
Voltage - 30 VDC
Operating Life - 75000 Min.
Contact Resistance - 10 mA initially
Dielectric Withstanding Voltage - 900 VAC

Snap-Action - Silver Contacts Power Duty Switch

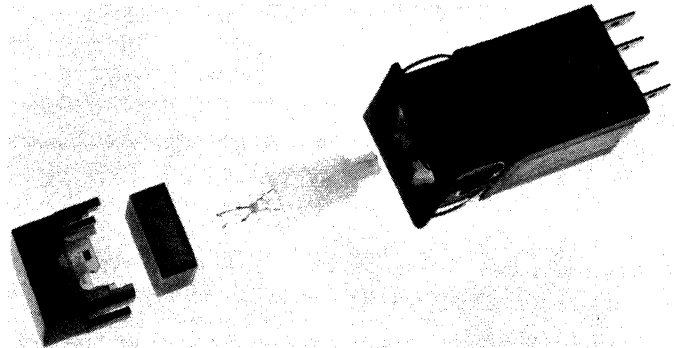
Switch Current - 10.1 Amp
Voltage (AC) - 125/250
Operating Life - 75000 Min.
Dielectric (Volts, RMS) - 900
Amperes at Overload
for 50 Cycles - 12.625
Type of Test Load - Inductive
Power Factor for Test Load - 75-80%
Endurance Test at Rated Amperes - 6,000 cycles

Snap Action - Silver Contacts Heavy Duty Switch

Switch Current - 15 Amp
Voltage - 125/250
Operating Life - 50000 Min.
Dielectric (Volts, RMS) - 900
Amperes at Overload
for 50 Cycles - 18.75
Type of Test Load - Inductive
Power Factor for Test Load - 75-80%
Endurance Test at Rated Amperes - 6,000 cycles

INCANDESCENT					
Volts	Mean Spherical Candle Power	Rated Avg. Lab Life Hrs.	Size	Amps	Commercial Designation
6.3 Max.	.40	50,000	1 $\frac{1}{2}$	.20	2181
12.0 Max.	.12	10,000	1 $\frac{1}{2}$	.04	2174
14.0 Max.	.30	10,000	1 $\frac{1}{2}$	.08	2182
28.0 Max.	.30	10,000	1 $\frac{1}{2}$	.04	2187
NEON					
125 with 30K Ω RES	.02	25,000	NE2H	.002	ASA Type LT2-20
250 with 100K Ω RES	.02	25,000	NE2H	.002	ASA Type LT2-20

NOTE: Incandescent Bulb Is Replaceable.
The Neon Lamp Is Not Replaceable.

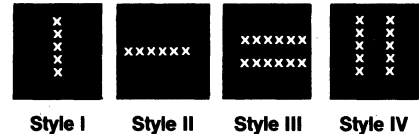


Hot Stamping of Buttons:

Words, letters, numbers and symbols can be hot stamped. Red, blue, green, smoke, brown and black buttons are stamped in white. Clear, amber, yellow and white buttons are stamped in black.

Hot Stamp Button Legend

Horizontal Legends
6 Letters Max.
Vertical Legends
5 Letters Max.
Standard Characters
MMI .100 High



Bezels:

Black or white nylon is standard. Optional colors are available on special order.

Materials:

Switch body and all plastic switch components are made from UL listed 94V-2 material with maximum usage temperature 65°C. Switch movements are precision beryllium copper with precious metal contacts.

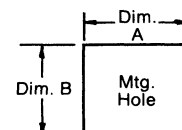
Mounting 10400:

Integrally molded snap—lock ears positive lock in panels .109 inches or less. All switches are front entry. Positive locked switches can be released for front removal by compressing mounting ears from behind panel.

Mounting to 10410 and 10420:

Wire forms to snap in panels .125 inches thick or less, and will friction fit in panels up to a maximum of 1 inch. All switches are front entry and front removal.

Switch Type	Dim. A	Dim. B	Panel Thickness
10400	1.030	.875	.030 to .109
10410	.875	.875	.030 to .125
10420	.875	.875	.030 to .125



Switch Leads

.02 x .19 x .30-inch spade terminals. (10.1 Amp and Low Energy Switch)

.032 x .25 x .40-inch spade for 15 Amp.

Pushbutton Switches



1820 RL Lighted Pushbutton Switches

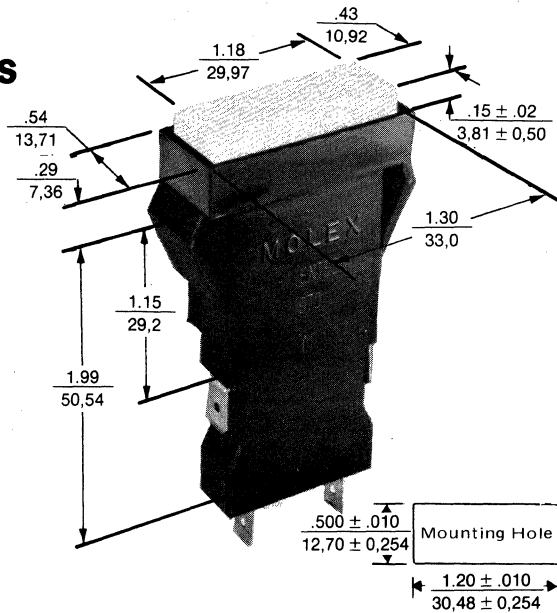
Features/Dimensions:

- Replaceable lamps
- SPST & SPDT
- 2, 6 & 9 amps
- UL and CSA listed
- 7 Button colors
- Hot stamping
- 25,000 Cycles
- Stacking versatility
- Dependent or independent lamp circuitry

1820

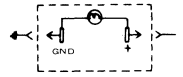
Features/Dimensions:

- Same as 1820 RL but without replacement lamp
- Neon lamp with internal dropping resistor

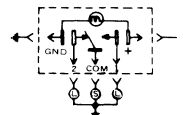


CIRCUIT DIAGRAMS

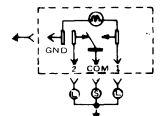
- LEGEND**
L-Load
S-Power Source
GND-Ground (Negative)
COM-Common
+-Positive



PILOT LIGHT ONLY



INDEPENDENT LIGHT



DEPENDENT LIGHT

Ordering Information 1820RL or 1820

Complete the numerical description by placing the three-digit identification for *each* option in proper sequence.

1820RL or 1820 - **XXX** - **XXX** - **XXX** - **XXX** - **XXX**

Action (125 VAC)

- 120 Pilot only - no switch
 - 121 2 amp alternate action, SPST
 - 122 2 amp alternate action, SPDT
 - 123 2 amp momentary, normally open
 - 124 2 amp momentary, normally closed
 - 125 2 amp momentary SPDT
 - 126 6 amp alternate action SPST
 - 127 6 amp alternate action SPDT
 - 128 6 amp momentary, normally open*
 - 129 6 amp momentary, normally closed*
 - 130 6 amp momentary SPDT*
 - 131 9 amp alternate action, SPST
 - 132 9 amp alternate action, SPDT
 - 133 9 amp momentary, normally open SPST
 - 134 9 amp momentary, normally closed SPST
 - 135 9 amp momentary, SPDT
- *Not UL or CSA listed

Stamping (Specify legend)

- 600 No hot stamp
- 604 Style I (vertical button, vertical legend) long
- 605 Style II (horizontal button, horizontal legend) long
- 606 Style III (vertical button, horizontal legend) long
- 699 Non-standard legend (specify)

Bezel

- 514 Black nylon (long) 1820
- 515 White nylon (long) 1820
- 516 Black nylon 1820RL
- 517 White nylon 1820 RL
- 599 Non-standard Bezel (specify)

Bulb 1820 RL

- 331 28V independent
- 332 14V independent
- 333 12V independent
- 334 6V independent
- 335 28V dependent
- 336 14V dependent
- 337 12V dependent
- 338 6V dependent
- 339 Non-standard bulb

Bulb 1820 only

- 300 No bulb - switch only
- 301 125V independent
- 302 250V independent (4.5 amps)
- 321 28V independent
- 322 14V independent
- 323 12V independent
- 324 6V independent

- 325 125V dependent
- 326 250V dependent (4.5 amps)
- 327 28V dependent
- 328 14V dependent
- 329 12V dependent
- 330 6V dependent

Button 1820

- 414 White long button
- 415 Red long button
- 416 Amber long button
- 417 Blue long button
- 418 Black long button
- 419 Green long button
- 420 Yellow long button
- 499 Non-standard color (specify)

Button 1820 RL

- 428 White
- 429 Red
- 430 Amber
- 431 Blue
- 432 Black
- 433 Green
- 434 Yellow
- 499 Non-standard color (specify)

Pushbutton Switches



1820 RL/1820 Technical Specifications

Mechanical:

Switch Action:

Alternate action: Push on-push off SPST
 Alternate action: Push on-push off SPDT
 Momentary normally open SPST
 Momentary normally closed SPST
 Momentary SPDT

- Pilot light without switch
- Switch without light

Buttons:

White, red, amber, blue, black, green, or yellow (For 125 or 250 VAC Neon Bulb applications - green, blue, and black buttons are not recommended.)

Hot Stamping of Buttons:

Words, letters, numbers and symbols can be hot stamped. Red, blue, green and black buttons are stamped in white. Amber, yellow and white buttons are stamped in black.

Standard Lettering:

.120 Inches high having .030 inches between lines.

Style I
 Two lines maximum.
 Eight letters per line.



Style II
 Two lines maximum.
 Eleven letters per line



Style III
 Eight lines maximum.
 Four letters per line.

Letters per line vary with optional type styles.

Bezels:

Black or white nylon is standard.

Materials:

Housing molded from UL listed nylon with maximum usage temperature 65°C. Switch movements are precision copper alloy stamping-Silver contacts are provided for 4.5, 6 and 9-amp usage.

Mounting:

Integrally molded snap-lock ears provide positive lock in panels of .085 (for 1820) and .120 (1820RL) inches or less, and will friction fit in panels up to a maximum thickness of 1 inch. All switches are front entry. Positive locked switches can be released for front removal by compressing mounting ears from behind panel. Friction fits do not require compression of the mounting ears for removal.

Switch Leads

.02 x .19 x .30-inch spade terminals.

Electrical:

Underwriter Listings

Card Numbers		
Switch with or without pilot light	UL E33149	CSA 29661
Pilot light only	UL E40888	CSA 29653

Switch Rating

Amperes (AC)	2	4.5	6	9
Voltage (AC)	125	250*	125	125
Dielectric (Volts, RMS)	900	900	900	900
Amperes at 150% overload for 50 cycles	3	6.75	9	13.5
Type of test load	INDUCTIVE			
Power factor for test load	75-80%			
Endurance test at rated amperes	6000 cycles			

*For 250 VAC operation use 9 amp rated switch

Bulbs (Incandescent) 1820 RL only

Volts	Mean Spherical Candle Power	Rated Avg. Lab Life Hrs.	Size	Amps	Commercial Designation
6.0	.40	50,000	1%	.20	379
12.0	.50	6,000	1%	.08	336
14.0	.30	10,000	1%	.08	386
28.0	.30	7,000	1%	.04	388

Bulbs 1820 Only

Type	Volts	Mean Spherical Candle Power	Rated Avg. Lab Life hrs.	Size	Amps	Commercial Designation
Independent	6.3	.55	5,500	1%	.20	2112
Dependent	6.3	.02	25,000	1%	.04	2180
Independent and Dependent	12.0	.10	10,000	1%	.04	2174
Dependent and Independent	14.0	.30	10,000	1%	.08	2182
Dependent	28.0	.20	10,000	1%	.04	2185
Independent	28.0	.30	7,000	1%	.04	2187
Neon with 30KΩ series resistor	125.0	.02	25,000	NE2H	.002	ASA Type LT2-20
Neon with 100KΩ series resistor	250.0	.02	25,000	NE2H	.002	ASA Type LT2-20

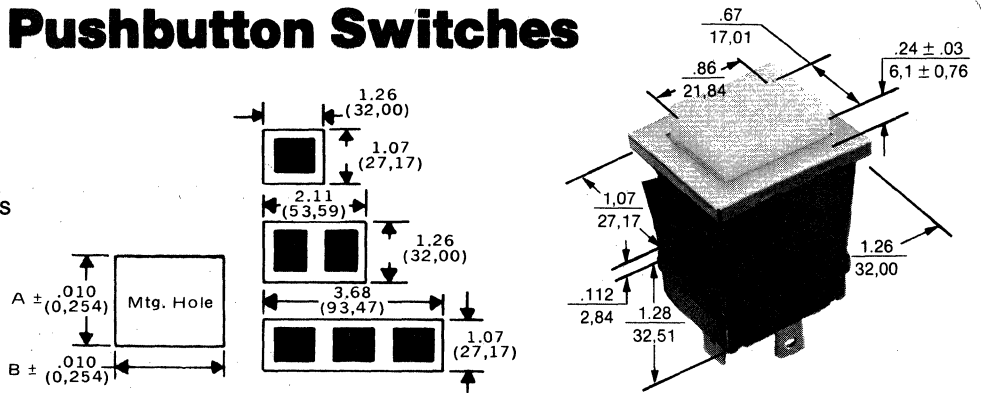
Pushbutton Switches



1175 Lighted Pushbutton Switches

Features/Dimensions:

- SPST
- 2 or 8.5 amps
- UL & CSA rated
- 1, 2 or 3 switch configurations
- 7 Button colors
- Hot stamping
- 25,000 Cycles
- Incandescent or neon bulbs
- Lead wire option



Dimensional Information

Bezel	Dim. A	Dim. B	Bezel	Dim. A	Dim. B	Bezel	Dim. A	Dim. B
Single	.915 23,24	1.115 28,32	Double	1.115 28,32	1.955 49,65	Triple	.915 23,24	3.540 89,91

Technical Specifications 1175 & 2146

Electrical:

Underwriter Listings

Card Numbers		
Switch with or without pilot light	UL E33149	CSA 29661
Pilot light only	UL E40888	CSA 29653

Switch Rating

Amperes (AC)	2	4.25	8.5
Voltage (AC)	125	250	125
Dielectric (Volts, RMS)	900	900	900
Amperes at 150% overload for 50 cycles	3	6.4	12.8
Type of test load	INDUCTIVE		
Power factor for test load	75-80%		
Endurance test at rated amperes	6000 cycles		

*For 250 VAC operation use 8.5 amp rated system.

Bulbs

Type	Volts	Mean Spherical Candle Power	Rated Avg. Lab life hrs.	Size	Amps	Commercial Designation
Incandescent	6.0	.06	3,000	1 1/4	.06	2114
Incandescent	12.0	.10	10,000	1 1/4	.04	2174
Incandescent	14.0	.30	10,000	1 1/4	.08	2182
Incandescent	28.0	.20	10,000	1 1/4	.04	2185
Neon with 30KΩ series resistor	125.0	.02	25,000	NE2H	.002	ASA Type LT2-20
Neon with 100KΩ series resistor	250.0	.02	25,000	NE2H	.022	ASA Type LT2-20

(1175 only)

Mounting Type	Panel Thickness
Standard clip - allows switch to be easily removed front of panel (pressure fit)	(912)* .031 (min.)
"Snap-in" mounting clip for positive panel locking	(910)* .031 to .109
"Snap-in" mounting clip for positive panel locking	(911)* .100 to .171

*Refer to Ordering Information

All three clip types are front entry and front removable. "Snap-in" switches can be released for front removal by compression of the clips from behind panel. Pressure fits do not require clip compression for removal.

Mounting (2146 only):

Integrally molded mounting ears "Snap-in" in panel thicknesses ranging from .031 to .125 inches, and will pressure fit in panels up to 1 inch in thickness. All switches are front entry. "Snap-in" switches can be released for front removal by compressing mounting ears from behind panel. Pressure fits do not require compression of the mounting ears for removal. (Technical specifications continued in center of next page.)

Ordering Information

Complete the numerical description by placing the three-digit identification for *each* option in proper sequence.

1175 or 2146 - **XXX** - **XXX** - **XXX** - **XXX** - **XXX** - **XXX** - **XXX** - **Mounting (1175 only)**
 910 1175-8 912 1175-8A
 911 1139-10

2146-1175

- 110-100 Pilot only - no switch
- 111-101 2 amp alternate action; Push on-push off SPST
- 112-102 2 amp momentary, normally open SPST
- 113-103 2 amp momentary, normally closed SPST
- 114-104 8 1/2 amp alternate action; Push on-push off SPST
- 115-105 8 1/2 amp momentary, normally open SPST
- 116-106 8 1/2 amp momentary, normally closed SPST

Bulb (2146 and 1175)

- 300 No bulb -
- 301 125V neon
- 302 250V neon, 4.25 amps
- 303 28V incandescent
- 304 14V incandescent
- 305 12V incandescent
- 306 6V incandescent
- 399 Non-standard bulb (specify)

Button

- 400 White
- 401 Red
- 402 Amber
- 403 Blue
- 404 Black
- 405 Green
- 406 Yellow
- 499 Non-standard color (specify)

Bezel (2146 and 1175)

- 500 Chrome
- 501 Gold
- 502 Black oxide
- 503 Black enamel
- 504 Dual bezel - chrome
- 505 Dual bezel - gold
- 506 Dual bezel - black oxide
- 507 Dual bezel - black enamel
- 508 Triple bezel - chrome
- 599 Non-standard bezel (specify)

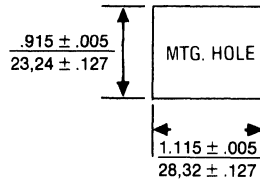
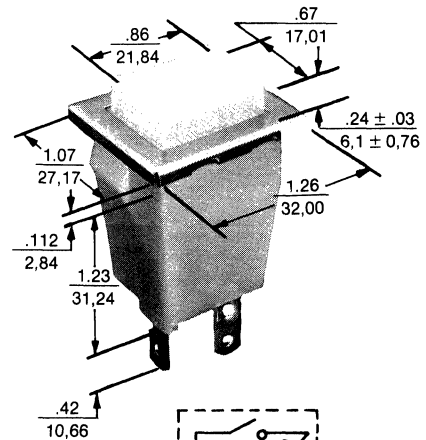
Pushbutton Switches



2146 Lighted Pushbutton Switch

Features/Dimensions:

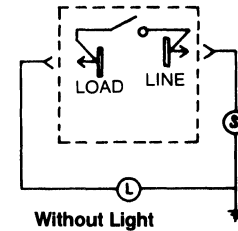
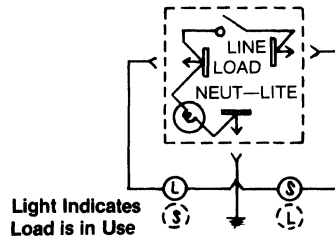
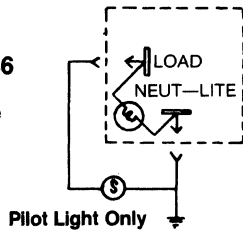
- SPST
- 2 or 8.5 amps
- UL & CSA rated
- Molded mounting ears
- 7 Button colors
- Hot stamping
- 25,000 Cycles
- Incandescent or neon bulbs
- Dust-free enclosure



Circuit Diagrams Models 1175 and 2146

Legend:

- S—Power Source
- L—Load
- NEUT—Neutral
- LITE—Bulb



Mechanical:

Switch Action:

- Alternate Action: Push on-push off SPST
- Momentary normally open SPST

Momentary normally closed SPST

- Pilot light without switch
- Switch without light

Buttons:

Style - Standard buttons are of molded nylon. Hot stamping with standard or custom legends is available for both.

Color:

White, red, amber, yellow, blue, green, or black. (For 125 and 250 VAC neon bulb application - Green, blue and black buttons are not recommended.)

Hot Stamping of Buttons:

Words, letters, numbers and symbols can be hot stamped. Red, blue, green and black buttons are stamped in white. Amber, yellow and white buttons are stamped in black.



Style I
Four lines maximum.
Five letters per line.



Style II
Three lines maximum.
Eight letters per line.



Style III
Five lines maximum.
Four letters per line.

Standard Lettering:

.120 letter height, .030 between lines. Letters per line will vary with optional type styles.

Bezels (1175 only):

Single and double metal bezels with chrome, gold, black oxide or black enamel finishes. Triple bezels available in chrome only.

Bezels (2146 only):

Single metal bezels with chrome, gold, black oxide or black enamel finishes.

Materials (2146 only):

Housing molded from UL listed nylon rated with maximum usage temperature 65°C. Switch movements are precision copper alloy stampings - Silver contacts are provided for 4.25 and 8.5 amp usage.

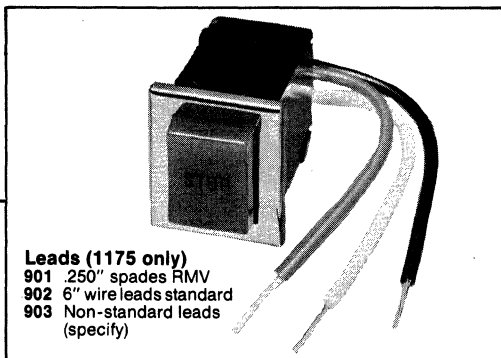
Materials:

Housing molded from general purpose black phenolic rated with maximum usage temperature 105°C. Switch movements are precision copper alloy stampings - Silver contacts are provided for 4.25 and 8.5 amps usage.

Switch Leads:

Wire - 6-inch insulated length plus .50-inch stripped 18 AWG type PVC-105°C. (1175 only)

Spade terminal - .032 x .25 x .38 standard



Leads (1175 only)

- 901 .250" spades RMV
- 902 6" wire leads standard
- 903 Non-standard leads (specify)

Stamping (Specify legend)

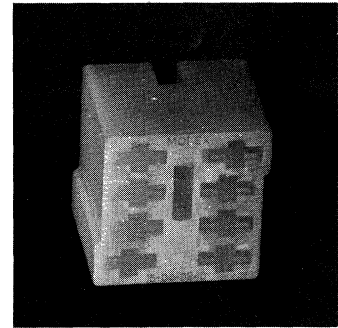
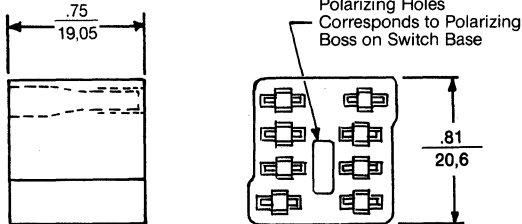
- 2146-1175 No hot stamp legend
- 575-600 No hot stamp legend
- 576-607 Style I (vertical button-vertical legend)
- 577-608 Style II (horizontal button-horizontal legend)
- 578-609 Style III (vertical button-horizontal legend)
- 599-699 Non-standard legend (specify)

Pushbutton Switch Connectors



6376

Connector for 10400 Switch Series



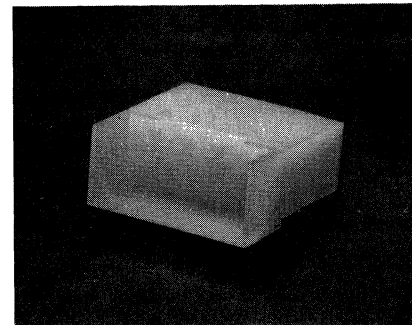
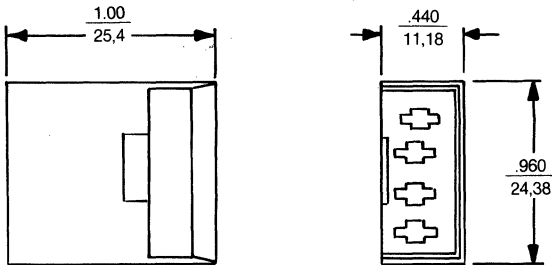
Circuits	Order No.	Electrical	
		Max. Amps	Max. Volts
8	15-04-0240	10.1	250

Uses 2176, 2328, 2576, 2698, and 2799 terminals.

6376 Connector can be used with low energy and 10.1 amp switches.

10402-063

Connector for 10400 Switch Series



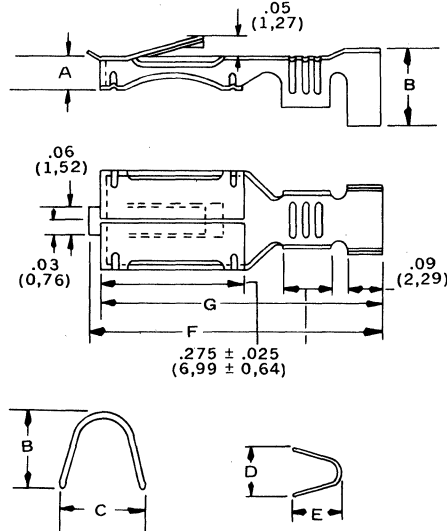
Circuits	Order No.	Electrical per Circuit	
		Max. Amps	Max. Volts
4	06-06-3063	10.1	250

Uses 2176, 2328, 2576, 2698, and 2799 terminals.

10402-063 Connector can be used with SPST or SPDT dependent incandescent lamp switches low energy or 10.1 amp.

2176, 2328, 2576, 2698, and 2799 terminals can be used with above connectors.

Dimensional Information



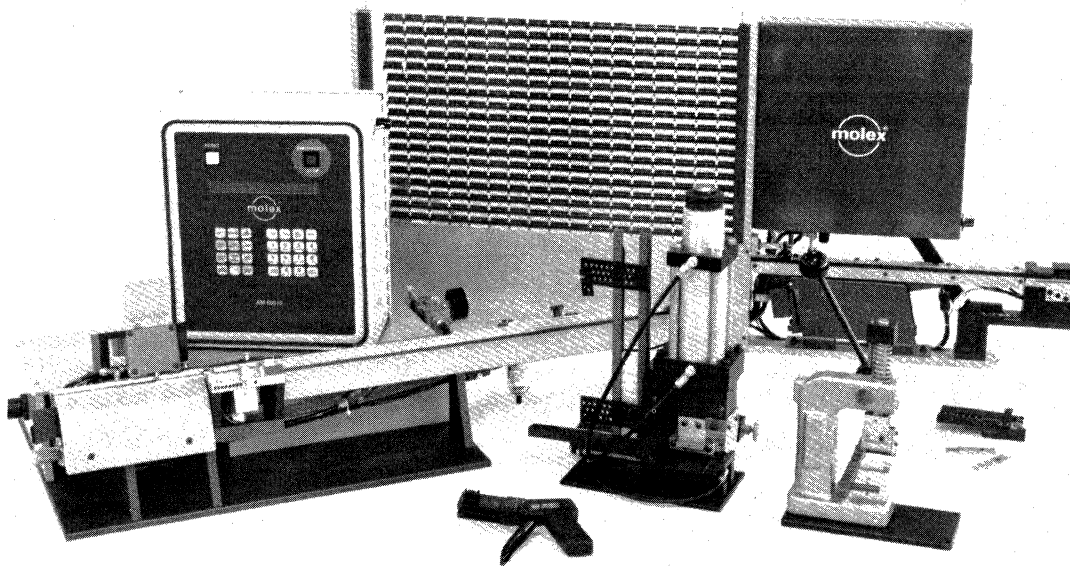
Eng. No.	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
2176	.074 1.88	.187 4.75	.210 ± .035 5.33 ± 0.09	.120 ± .025 3.05 ± 0.64	.13 3.3	.625 15.88	.610 ± .015 15.49 ± 0.38
2328	.074 1.88	.156 3.96	.165 ± .030 4.19 ± 0.76	.120 ± .025 3.05 ± 0.64	.13 3.3	.640 16.26	.620 15.75
2576	.080 2.03	.156 3.96	.210 ± .035 5.33 ± 0.09	.120 ± .025 3.05 ± 0.64	.13 3.3	.625 15.88	.610 ± .015 15.49 ± 0.38
2698	.080 2.03	.156 3.96	.165 ± .030 4.19 ± 0.76	.120 ± .025 3.05 ± 0.64	.13 3.3	.625 15.88	.610 ± .015 15.49 ± 0.38
2799	.080 2.03	.090 2.29	.100 2.54	.085 2.16	.07 1.8	.620 15.75	.610 ± .015 15.49 ± 0.38

Ordering Information

Crimp Wire Size	Insulation Diameter	Material Thickness	Eng. No.	Chain Form Order No.		Loose Form Order No.	
				W/Detent	W/O Detent	W/Detent	W/O Detent
14-22	.085 - .135	.010	2176	05-06-0301	05-06-0303	05-06-0302	05-06-0304
14-22	.085 - .125	.010	2328	05-06-0401	05-06-0402	05-06-0403	05-06-0404
14-22	.085 - .135	.012	2576	—	05-06-0305	—	05-06-0306
14-22	.085 - .125	.012	2698	—	05-06-0405	—	05-06-0406
24-28	.034 - .060	.012	2799	—	05-06-0307	—	05-06-0308

Eng. No./Reel Quantities: 1943 and 2799/6,000; 2328/4,000; 2176 and 2698/3,000; and 2576/2,500. All chain form orders rounded to the nearest full reel. All terminals are brass alloy, tin plated.

Contents



Insulation Displacement Termination Tooling

Hand Tools and Pneumatic Bench Terminator	2M
Single Wire Terminator (CAM III)	3M
Harness Board Assembly Hand Tool	4M
High Volume Assembly Equipment	5M-6M

Ribbon Cable and FFC Tooling

Cable Notcher	7M
Cable Shear	7M
Arbor Presses	7M-8M
Semi-Automatic Terminator	9M
High Volume Cable Assembly	9M
FFC Punch for 4850 Connector	9M

C-Grid SL Tooling

Insulation Displacement Tooling

Bench Mounted Discrete Wire and Ribbon Cable Terminators	10M
Discrete Wire Terminator Handgun	10M
Fully Automatic Harness Assembly Equipment (Eagle and Phoenix Series)	11M

Crimp Tooling

Hand Crimper	12M
TM40 Crimp Terminator	12M

70156 Connector Tooling	13M
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C-Grid III Tooling (Crimp and Insulation Displacement)

Not Available in the U.S.	14M-16M
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.050" (1,27mm) Center Ribbon Cable Terminators

Arbor Press and Electric Press	17M
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MX50/QF50 .050" (1,27mm) Center Ribbon Cable Terminators

Handgun	18M
Arbor Press	18M

Semi-Automatic Terminator	19M
Press and Cutter (Not Available in the U.S.)	19M
Harness Assembly Machine	20M

8878/78804 Modular IC Socket Terminator

Double Sided Manual Bench Tool	21M
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Telephone Connector Tooling

	22M-23M
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SEMCONN Tooling

Hand Operated Press	24M
Power Press	24M
Hand Tool, Arbor Press	25M

RF Coaxial Connector Crimp Tools

Hand Tool, Manual and Electric Presses	26M
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D-Subminiature Connector Tooling

	27M
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General Crimp Tooling

Hand Crimpers	28M, 33M-36M
Stripper Crimpers	28M, 45M
3BF Bench Press	28M
Molex Japan Crimp Tooling Cross Reference	37M
TM40 Crimp Terminator and Cross Reference	38M-42M
Mini-Mac Universal Crimping Die and Tooling List	43M-44M
TM7 Universal Crimping Press	46M
IDT and Crimp Wire Processors	47M-49M

Pinsetting Equipment

	50M
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Robotic Delivery Systems

Automatic Tube Magazine Unloading System	51M-52M
Automatic Carton Matrix Unloading System	53M
Automatic Welded Film Pack Unloading System	54M
Single Tube Unloading System	55M
Manual Single Tray Unloading System	56M

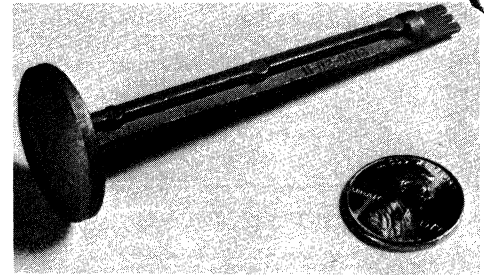


Insulation Displacement Termination Tooling



“T” Handle Discrete Wire Hand Tool

- For repair or prototype assembly of standard, harness, and edge connectors

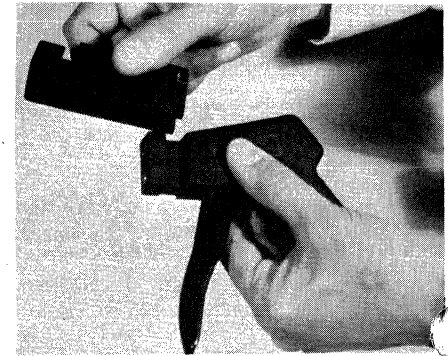


Ordering Information

Eng. No.	Order No.	Description	Eng. No.	Order No.	Description
AM8600-14	11-02-0016	For .098" (2,5mm) and .100" (2,54mm) center connectors	AM8600-13	11-02-0015	For .156" (3,96mm), .197" (5,0mm) and .200" (5,08mm) center connectors

Discrete Wire Terminator Handgun for Standard Molex IDT™ Connectors

- For low volume, prototype, field application and repair
- Snap-on modular dies for .098" (2,5mm) to .200" (5,08mm) center standard connectors
- Automatic indexing to next position after insertion of discrete wire
- See MX50 termination tooling for .050" (1,27mm) ribbon cable applications



Ordering Information (Europe)

Eng./Order No.	Description	For use with Molex Connectors
69008-0210	Pistol	
Module For		
69008-0225	.098" (2,5mm) and .100" (2,54mm) center connectors	7720, 7795, 7745, 8951, 40798, 40775, 40922
69008-0280	Special .098" (2,5mm) connector	8160
69008-0240	.156" (3,96mm) center connectors	7674, 7675, 8633, 40915, 40791, 41101, 40119, 40749
69008-0270	.197" (5,00mm) and .200" (5,08mm) connectors	7935, 7933, 7823, 6952

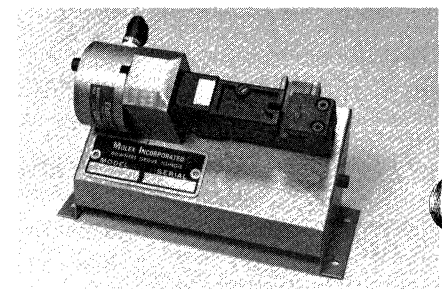
Ordering Information (U.S.)

Order No.	Description	Eng. No.	For use with Molex connectors
11-21-5194	Pistol	AM60114	
Module For			
11-21-5197	.098" (2,5mm) and .100" (2,54mm) center connectors	AM60115	7720, 7795, 7745, 8951, 40798, 40775, 40922
11-21-8365	.100" (2,54mm) center connectors	AM60519	40555
11-31-7597	.100" (2,54mm) center connectors	AM60066	70400, 70475, 90187
11-21-5196	.156" (3,96mm) center connectors	AM60116	7674, 7675, 8633, 40915, 40791, 41101, 40119, 40749
11-21-7951	.197" (5,00mm) and .200" (5,08mm) connectors	AM60517	7935, 7933, 7823, 6952



Pneumatic Bench Terminator

- For low volume users
- Utilizes modules from handgun for Molex connectors
- Includes foot pedal and filter for air supply line
- Production rate — 750 terminations per hour



Eng. No.	Order No.
AM60188-30	11-20-0739

Insulation Displacement Single Wire Terminating Machine

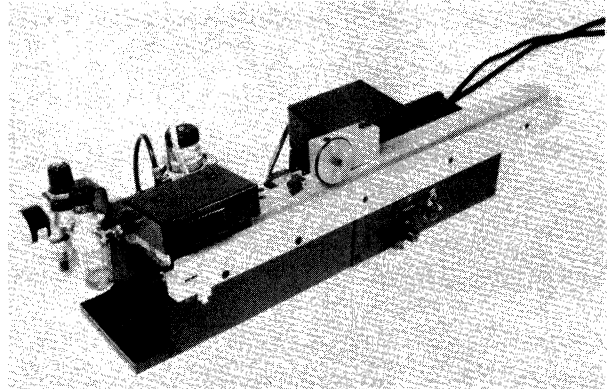


Semi-Automatic Mini Cam III™

This unique machine assembles discrete wires to insulation displacement connector bodies. The use of an air powered cylinder assures uniform and proper insertion depth. Solenoid operated units are available upon request for applications where plant air is unavailable.

Connector bodies are loaded into the belt drive magazine. Proper wire is selected and placed into a lighted target area. A foot switch is depressed, the wire is inserted, and the connector is indexed to the the next position.

- Operator controlled device
- Provides a fast, straight forward and low cost method of assembly
- Wire insertion is performed with the use of an air cylinder (standard) or electric solenoid (if air is unavailable)
- Accommodates connectors on .098" (2,50mm), .100" (2,54mm), .156" (3,96mm), .197" (5,00mm) and .200" (5,08mm) centers. Other versions available - contact factory
- 4-28 circuits with no adjustment
- Various wire lengths and colors
- Up to 1200 insertions per hour depending on operator skill and wire length
- Top loading
- Conveyor feed, belt type
- Release mechanism for stop pawl and feed finger
- Optional batch counter with certain connectors



Specifications:

Weight - 40 lbs (18,2 kg)

Electrical - 110 or 220 Volts AC at 50 or 60 Hertz, 1 ϕ only
The machine draws approximately 5 amps

Height - 8" (203mm)

Depth - 8" (203mm)

Bench Space - 24" (609mm) long

Pneumatic type requires 60-80 psi operating pressure

Air Operated Machines (Standard Version)

Eng. No.	Order No.	Description	Housing Type	Eng. No.	Order No.	Description	Housing Type
AM-60183-P-C	11-20-0952	.100" (2,54mm) centers	7745, 40775	AM-60157-P-C	11-20-0955	.200" (5,08mm) centers	6952, 7933
AM-60180-P-C	11-20-0953	.156" (3,96mm) centers	7674, 7991, 40590	AM-60185-P-C	11-20-0956	.100" (2,54mm) centers	7822
AM-60179-P-C	11-20-0954	.100" (2,54mm) centers	7720, 7795, 40555				

Electrically Operated Machines

110V				220V			
Eng. No	Order No.	Description	Housing Type	Eng. No.	Order No.	Description	Housing Type
AM-60144-1A	11-20-0580	.197" (5,0mm) centers	8657	AM-60141-1	11-20-0535	.100" (2,54mm) centers	3481
AM-60179-1A	11-20-0688	.100" (2,54mm) centers	7720, 7795, 40555	AM-60179-1	11-20-0689	.100" (2,54mm) centers	7720, 7795, 40555
AM-60183-1A	11-20-0686	.100" (2,54mm) centers	7745, 40775	AM-60183-1	11-20-0696	.100" (2,54mm) centers	7745, 40775
AM-60180-1A	11-20-0691	.156" (3,96mm) centers	7674, 7991, 40590	AM-60180-1	11-20-0692	.156" (3,96mm) centers	7674, 7991, 40590
AM-60157-1A	11-20-0694	.200" (5,08mm) centers	6952, 7933	AM-60157-1	11-20-0695	.200" (5,08mm) centers	6952, 7933
AM-60185-1A	11-20-0720	.100" (2,54mm) centers	7822	AM-60185-1	11-20-0721	.100" (2,54mm) centers	7822

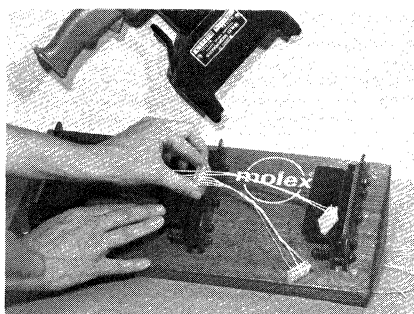
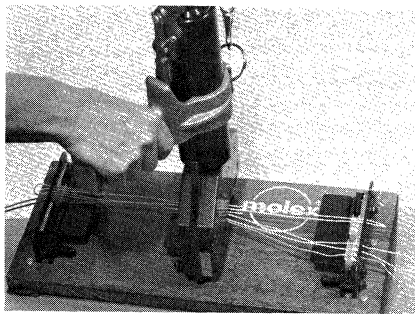
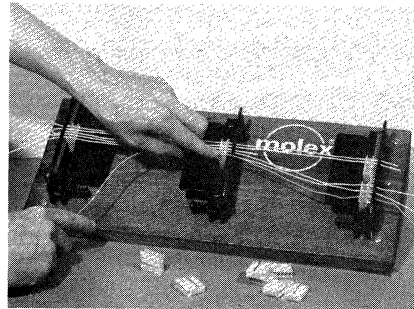
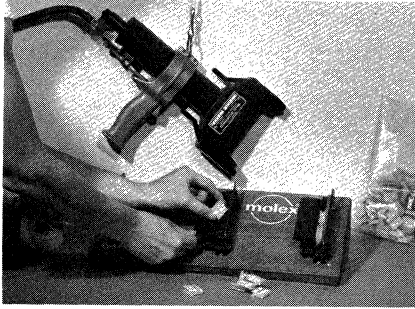


Insulation Displacement Harness Board Assembly Tool



For Discrete Wire Termination

- Hand held, counter balanced, pneumatically powered
- Locates, trims and terminates wire
- Wire can be fed thru or cut during termination
- Connector size and location on board can be varied to your application



Ordering Information

.098" (2,5mm) centers

Eng. No.	Order No.	Description	Eng. No.	Order No.	Description
AM-8630-100	11-20-0346	Hand held air terminator - 28 circuit	AM-8630-102	11-20-0348	Harness board fixture no-cut/test - 28 circuit (7790)
AM-8630-101	11-20-0347	Harness board fixture cut-off/test - 28 circuit (7790)			

.100" (2,54mm) centers

Eng. No.	Order No.	Description	Eng. No.	Order No.	Description
AM-8630-10	11-20-0295	Hand held terminator - 28 circuit	AM-8630-80	11-20-0307	Harness board fixture no/cut test - 28 circuit (7690)
AM-8630-30	11-20-0294	Harness board fixture cut/off test - 28 circuit (7690)			

.156" (3,96mm) centers

Eng. No.	Order No.	Description	Eng. No.	Order No.	Description
AM-8630-1	11-20-0280	.156" (3,96mm) 24 circuit terminator 7660/7241	AM-8630-5	11-20-0311	Harness board fixture cut/test - 24 circuit edgecard (7241)
AM-8630-3	11-20-0309	Harness board fixture cut-off/test - 24 circuit (7660)	AM-8630-52	11-20-0315	Harness board fixture no cut/test - 24 circuit, edgecard (7713)
AM-8630-2	11-20-0308	Harness board fixture no-cut/test - 24 circuit (7660)	AM-8630-53	11-20-0316	Harness board fixture with cut/test - 24 circuit, edgecard (7713)
AM-8630-4	11-20-0310	Harness board fixture no-cut/test - 24 circuit edgecard (7241)	AM-8630-60	11-20-0293	Hand held terminator for edge connectors - 24 circuit (7713)

Must be used with harness board connectors only



High Volume Insulation Displacement Tooling (Minimum EAU 10 million terminations per year)



Single Ended Multi-Discrete Wire and Cable Assembly Machine (Connector on one end of wires)

- Custom manufactured to your specifications (Lease only)
- Multiple connector loading for maximum usage of wires per cycle
- Polarization of circuits
- Magazine housing loading
- Adjustable wire length
- Wire stripped opposite connector end
- Wire length - 36" max./6" min. (91,44cm max./14,25cm min.)
- Max. wire length variation - 16" (40,64cm)
- Wire strip lengths from 0 to 1½" (0-38mm) in .124" (3,18mm) increments
- Rate up to 9000 terminations per hour

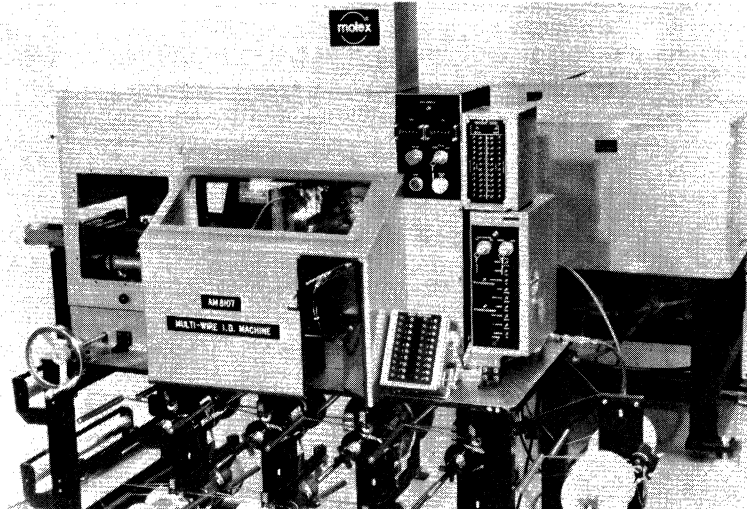
Specifications

Weight - Estimated at 1,300 lbs. (589.6 kg)

Electrical - 115 volts 60 Hertz or 220 V 50 Hertz 7 amps

Air - 80-100 psig (4,5-6,8 ATM)

Floor Space - 2.5' x 5.5' (0,76m x 1,68m) (Basic Machine)



Double Ended Multi-Discrete Wire and Cable Assembly Machine (Connector on both ends of wires)

- Custom manufactured to your specifications (Lease only)
- Automatic cycling of machine
- Automatic loading to insertion area from dual magazines that are manually loaded by operator
- I.D.T. connector at both ends of wires
- Polarization of circuits
- Multiple connectors on one end and a possible 16" (40,64cm) length differential one to the other
- Adjustable wire lengths:
Maximum - 36" (91,44cm)
Minimum - 8" (20,3cm)
- Rate up to 18,000 terminations per hour

Specifications

Weight - Estimated at 1300 lbs.

Electrical - 115 Volts, 60 Hertz or 220 volts, 50 Hertz, 7 amps

Air - 80-100 psig (4,5-6,8 ATM)

Floor Space - 2.5' x 5.5' (0,76m x 1,68m) (Basic Machine)

Optional Accessories

- Vibratory bowl feeding
- Electrical continuity testing automatically identifies defective wire in assembly and alerts operator
- Hot stamps connector housings
- Barrel feeding of wire for continuous utilization of machine time
- Chain feeding of connectors to lower labor cost

M

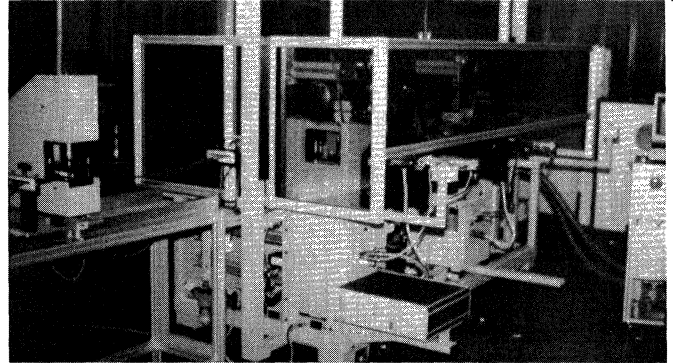
Multi-Wire Assembly Machine



(Not Available in the U.S.)

AM 81 Fully Automatic Assembly Machine

The modular-constructed AM-81 produces insulation displacement harnesses in double- or single-ended configurations. This unique system is available in fully automatic form or as an economical base machine. With the addition of option units, the operator-controlled base machine can be upgraded to become fully automatic as production requirements increase.



Standard Features include:

- Double or single ended harness capabilities without strip
- Single ended harness capabilities with strip
- Variable or single extended wire length capability for discrete wire
- Single extended wire length capability for ribbon cable
- 32 circuit maximum; 3 circuit minimum
- User friendly solid state controller
- Wire lengths from 65mm minimum to 1300mm maximum for single wire length
- Wire lengths from 165mm minimum to 2300mm maximum for variable wire length
- Cycle time from 6.0 seconds depending on wire lengths
- Modular design
- Self diagnostic
- Large variety of options

Optional Features

- Continuity testing for double-ended assemblies
- Housing Load
 - Magazine style for loose packaging
 - Single detuber for extruded tube packaging
 - Manual track for operator loading
 - Film dereeler for mylar reel packaging
- Vibratory or centrifugal bowl feeding for continuous loading
- Tape dereeler for continuous tape packaging
- Product marking:
 - Hot stamp method
- Wire dereeler systems:
 - Up to 32 reels capacity
- Missing wire detection
- Wire splice detection
- Notching for ribbon cable applications
- Data storage for recall on 3½" floppy disc
- Variable wire length capacity

Consult your Molex representatives in Europe for detailed specifications on Application Tooling.

Ribbon Cable Tooling

Bench Mounted Prep Cable Notcher

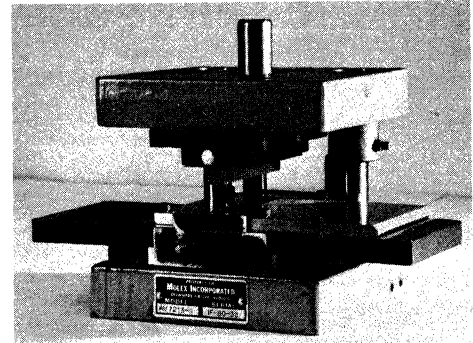
- Accommodates .156" (3,96mm) center cable up to 24 circuits and .100" (2,54mm) center cable up to 28 circuits
- Notches cable for feed thru or end termination of Molex ID connectors
- Five hundred notches per hour, both ends
- Must be used with Molex 3BF press

Specifications

Weight (with press) - 300 lbs. (135 kg) - Notcher only 45 lbs. (20.4 kg)

Electrical - 110/115 volts 60 Hertz / 220/240 volts 50 Hertz

Bench Space - Front 12" x 18" deep (30,5cm x 45,7cm)



Ordering Information

Eng. No.	Order No.	Description	Eng. No.	Order No.	Description
AM-7213-1	• 11-21-0728	.156" center cable notcher	AM-7234-75*	• 11-21-4112	.100" center cable notcher (26-30 Ga.)
AM-7560*	• 11-21-4114	.100" center cable notcher (22-24 Ga.)	AM-7234-50**	• 11-20-0464	.100" center cable notcher (26-30 Ga.)
AM-7560-50**	• 11-21-4120	.100" center cable notcher (22-24 Ga.)	AM-8160-100**	11-20-0439	.098" center cable notcher (26-28 Ga.)
AM-60053†	11-20-0944	.100 center cable notcher (24-26-28 Ga.)			

*Full notch

**Web notch

†Full notch for C-Grid SL application only

• U.S. Standard Product, available through Molex franchised distributors

NOTE: Standard pricing does not include cost of press

Bench-Style Cable Shear

- Accommodates .050" (1,27mm), .098" (2,5mm), .100" (2,54mm) or .156" (3,98mm) cable
- Table mounted hand tool for fast, accurate and low cost cable cutting
- Cable stop for cut length control
- Maximum cable width 3 7/8" (98,42mm)
- Also for flat flexible cable

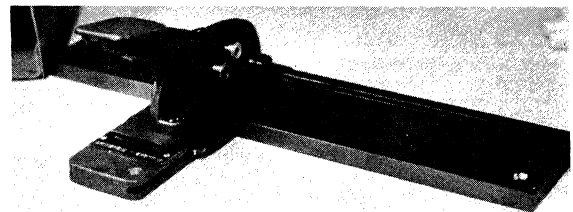
Specifications

Weight - 4 3/4 lbs. (2,13 kg)

Table Space - 20" x 10" (51cm x 25,4cm)

Height - 5" (12,7cm)

Eng. No.	Order No.
AM7213-60	11-20-0785



Arbor Press

- Accommodates .098" (2,5mm), .100" (2,54mm) and .156" (3,96mm) center cable - 2 to 16 circuits
- Feed thru or feed to assembly
- For medium volume users

Specifications

Weight - 18 lbs (8,1 kg)

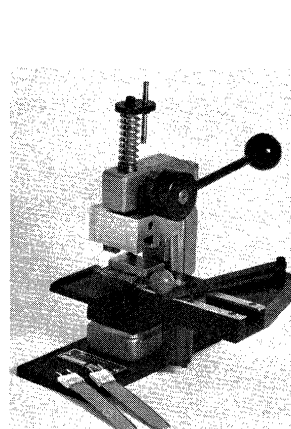
Bench Space - 6" x 12" (152,2cm x 30,5cm)

Height - 10" (25,4cm)

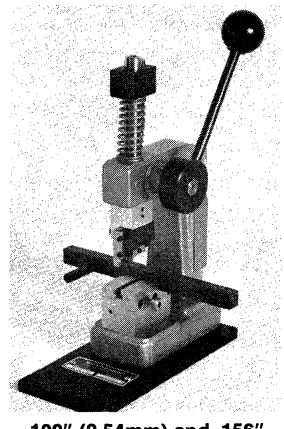
Ordering Information

Eng. No.	Order No.	Description	For Connectors
AM-7275-100	• 11-20-0179	.100" center arbor terminator	7720, 40555
AM-7223-126	• 11-20-0314	.156" center arbor terminator	7674, 7675
AM-8160-1	11-20-0436	.098" center arbor terminator for 8160 housing - up to 20 circuits - feed to only	8160
AM-7223-140	11-20-0815	.156" center arbor terminator	7660

• U.S. Standard Product, available through Molex franchised distributors.



.098" (2,5mm) Center Arbor Terminator



.100" (2,54mm) and .156" (3,96mm) Center Arbor Terminator



Ribbon Cable Tooling

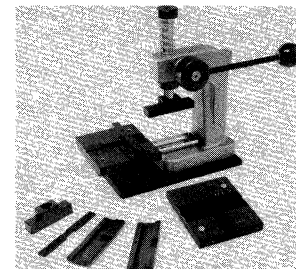


Arbor Press and Interchangeable Tool Kits

- Lightweight, portable, reliable, low-cost assembly
- Cable shearing capabilities
- Interchangeable tooling which is compatible with most competitive presses
- Feed-to or feed-thru
- Production rate — up to 110 assemblies per hour
- Annual capacity, 200,000 assemblies

Specifications

Weight - 15 lbs. (6,9 kg)
 Bench Space - 12" x 8"
 (30,5cm x 20,3cm)
 Height - 14" (36cm)



Ordering Information

Terminates Connector (Eng. No.)	Description	Tool Change Kits	
		Eng. No.	Order No.
All .050" Center Molex Connectors	Arbor Press Machine only — Eng. No. AM-4700-24 Order No. • 11-21-0679		
40312 Standard MX50 70121 Slimline MX50 71007 Edge Card	Universal Adapter Plate Assembly* Eng. No. AM-60561 Order No. 11-31-2176	AM-60552	11-31-2181
5350, 5360, 5370, 5380 Qik Flecs		AM-60555	11-31-2184
5320, 5321 Qik Flecs		AM-60566	11-31-2187
DS-50 D-Subminiature Series		AM-60567	11-31-2335
6874, 8173 Edge Card		AM-60043	11-21-9391
	Tooling Locator Plate for up to 68 Ckt. Connector	AM-6874-1	• 11-21-0678

ACCESSORIES		
Description	Eng. No.	Order No.
Cable Shear Module	AM-6800-1	• 11-10-0081
Replacement Blade for Cable Shear	AM-6800-2	11-21-1102
Replacement Cutting Plate for Cable Shear	AM-6800-3	11-21-1103

*If customer already has Universal Adapter Plate Assembly (Eng. No. AM-60561, Order No. 11-31-2176), all that is required for each above connector is the appropriate Tool Change Kit.

• U.S. Standard Product available through Molex Franchised Distributors

Customer Application Note: If application requires terminating the 71007, 70121, 40312 or 5320 connector above 60 circuits, the customer is advised to check the arbor press platen length. All new arbor presses are shipped with extended platens measuring 3.75 inches in length. However, if the customer already has an arbor press it is possible the platen length is

3.25 inches. The platen is a black aluminium "T" shaped piece located at the bottom end of the arbor press ram. If the customer expects to terminate 64 circuit connectors, the extended platen (3.75 inches) may be ordered using the following numbers: Eng. No. AM-4700-32 Order No. 11-10-1055.

Modular Euro Arbor Press

(Not Available in the U.S.)

The versatile arbor press with additional heads and plates affords a complete modular system of assembly of ribbon cable and IDT connectors for any pitch size. Comes with packing case.

Specifications

Weight - Bench - 17.2 lbs (7,80kg)
 Space - 6" x 12" (153 x 305mm)
 Height - 18" (457mm)



Arbor Press Modular System (Preferred version in Europe)

Description	Eng. No.	Order No.	For Use With:
Manual Arbor Press	ABTE 90800	11-28-0000	All equipment listed below
CABLE PREPARATION			
Cable Shear Module	ABTE 90801	11-28-0041	To shear ribbon cable of all sizes
Notching Modules	ABTE 90804-1	11-28-0144	.098" (2,50mm) cable - single notch
	ABTE 90804-2	11-28-0145	.098" (2,50mm) cable - double notch
	ABTE 90805-1	11-28-0146	.100" (2,54mm) cable - single notch
	ABTE 90805-2	11-28-0147	.100" (2,54mm) cable - double notch
	ABTE 90806	11-28-0148	.156" (3,96mm) cable - single notch
TERMINATION TOOLING			
Assembly Module	ABTE 90802	11-28-0042	Connectors 5320, 5321, 5323, 4700, 7789 & 40312
Assembly Module	ABTE 90803	11-28-0043	Connectors 5350, 5360, 5370 & 5380 QF 50
Order No.			
Termination Modules Complete with Insertion Blades	A	69020-0350	Connectors 7790 & 7795 .098" (2,50mm) centers
	B	69020-0380	Connectors 7720 & 7690 .100" (2,54mm) centers
	C	69020-0390	Connectors 7664, 7660, 7674 & 7675 .156" (3,96mm) centers
	D	69020-0420	Connectors 7933 & 7935 .197" (5,00mm) centers
	E	69020-0430	Connectors 7777, 7824, 6952 & 7823 .200" (5,08mm) centers
Conversion Kits		69020-0375	To convert B to .098" (2,50mm) center connector
		69020-0385	To convert A to .100" (2,54mm) center connector
		69020-0413	To convert D or E to .156" (3,96mm) center connector
		69020-0425	To convert C or E to .197" (5,00mm) center connector
		69020-0435	To convert C or D to .200" (5,08mm) center connector

Contact your local Molex European Representative to order



Ribbon Cable Tooling

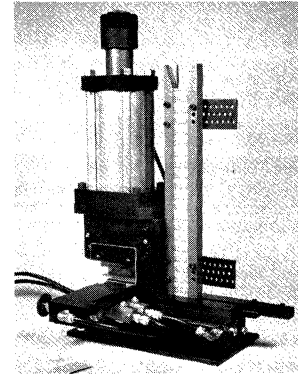


Semi Automatic Terminator

- For .156" (3,96mm) center cable - 2 to 24 circuits and .100" (2,54mm) center cable - 3-28 circuits
- Terminates pre-notched cable to pre-assembled connectors
- Bench mounted and operator controlled
- Feed thru capability
- 550 assemblies per hour

Specifications

Weight - 30 lbs. (13,5kg)
Pneumatic - 80-100 psig 5cfm (5,4-6,8 ATM @ 0,14cm)
Bench Space Height - 17"



Ordering Information

Eng. No.	Order No.	Description	Eng. No.	Order No.	Description
AM8640	• 11-20-0412	.100" center cable terminator	AM8642	• 11-20-0418	.156" center cable terminator
AM8640B	11-20-0771	.100" center cable terminator for 40555 and 7720 connectors with backwall	AM8643	11-20-0435	7795 connectors
			AM8644	11-20-0498	8160 connectors
AM8641	• 11-20-0411	.100" center cable terminator (edge card) 7822	AM8646	Contact factory	.156" center edge card

• U.S. Standard Product, available through Molex franchised distributors.

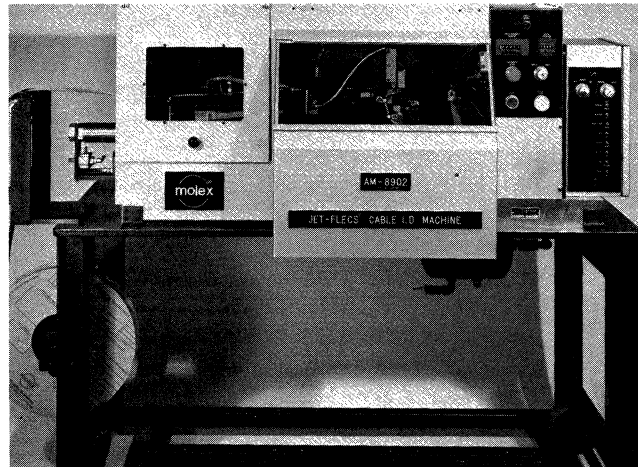
High Volume Ribbon Cable Tooling

Single- and Double-Ended Cable Assembly Machine (8902)

- Custom manufactured to your specifications
- For .100" (2,54mm) center cable
- 1" (25,4mm) min. cable length; 18" (45,72cm) max.
- Strip length 0" to ¾" (0-9,26mm) (strip and retain standard)
- Magazine load standard; feed bowl optional
- 4 circuit cable min.; 24 circuit max.
- Cycle time 4 seconds (average)

Specifications:

Weight - 1,200 lbs. (540 kg)
Electrical - 115 V 60 Hz or 220 V 50 Hz
Air - 60-80 psig (4,0-3,5 ATM)
Floor Space - 2.5' x 6' (5,4 x 1,8m)



Flat Flexible Cable Tooling

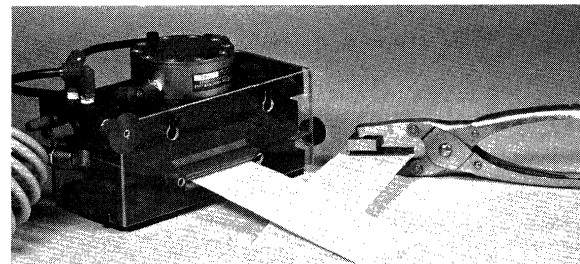


Manual and Air-Operated Punch for Molex 4850 Connector

- Air operated die set
- Adjustable punch locations
- Adjustable edge guide
- Cable end is notched between conductors to receive the 4850 locking fingers

Ordering Information

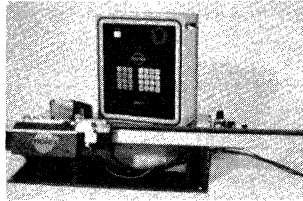
Eng. No.	Order No.	Description
AM4850-1	11-10-1043	Single hole punch hand tool
AM4850-11	11-10-1044	Multiple hole punch bench tool



Discrete Wire Terminators, Bench Mounted

AM60510

- Semi-automatic
- Connectors fed from pre-loaded tube; no manual handling
- Programmable circuit size setting
- 1,000 terminations per hour and harness assembly

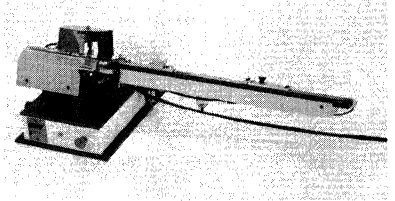


Ordering Information

Eng. No.	Order No.
AM 60510	11-20-0781

AM60520

- Pneumatic, electric
- Connectors are fed from pre-loaded tube; no manual handling
- Programmable circuit size setting
- 750-900 terminations per hour

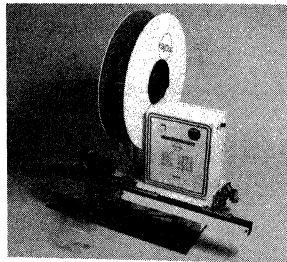


Ordering Information

Eng. No.	Order No.
AM 60520E	11-20-0949

AM 60570

- Pneumatic, electric
- Connectors are fed from reels
- Carrier removal feature
- 1,000 terminations per hour and harness assembly



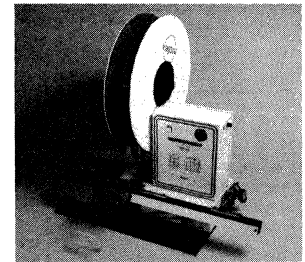
Ordering Information

Eng. No.	Order No.
AM 60570	11-20-0884

Ribbon Cable Terminators, Bench Mounted

AM 60560 AM 60550

- Pneumatic
- Carrier removal feature
- 550 terminations per hour

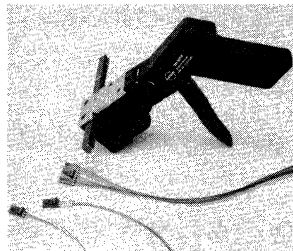


Ordering Information

Eng. No.	Order No.	
AM 60560	11-20-0908	Tube Feed
AM 60550	11-20-0939	Reel Feed

Discrete Wire Terminator Handgun

- Terminates C-Grid SL 70400 & 70475 product
- For low volume, prototype, and field repair
- Automatic indexing to next position after insertion of discrete wire
- Snaps on to standard pistol

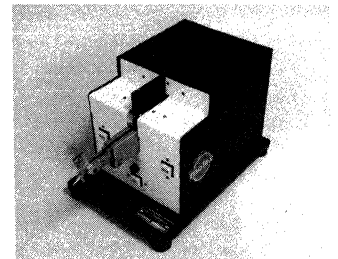


Ordering Information

Order No.	Description	Eng. No.
11-21-5194	Pistol	AM 60114
Module For		
11-31-7597	.100" center connectors 70400 & 70475	AM 60066

Electric Terminator For Dual Row 70451 Connectors

- Semi-automatic, electric
- Terminates Version A through F, 70451 Series
- Terminates two wires at once, and automatically seats terminals to complete assembly
- Voiding capabilities
- Up to 1,400 terminations per hour



Specifications

Electrical:
120 VAC, 60 Hz, grounded outlet

Weight:
48 lbs.

Dimensions:
10" wide, 10.5" high, 19" deep

Ordering Information

Eng. No.	Order No.
AM 60576	11-20-0917

M

AM 60000 Series Harness Assembly Machines

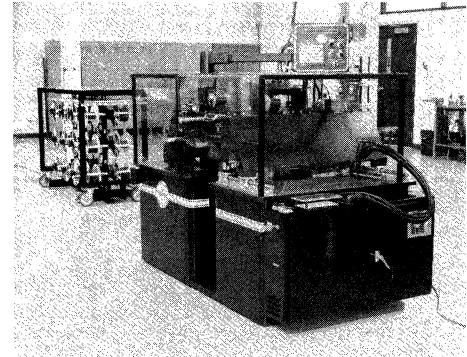
- Fully automatic mass terminators for high volume applications
- Developed from base modules for use with standard IDT and C-Grid SL connectors
- Two families of machines with advanced value-added options

Eagle Series

Contact factory to order

Standard Features include:

- Double or single ended harness capabilities without strip
- Single ended harness capabilities with strip
- Ribbon cable or discrete wire
- 32 circuit maximum; 2 circuit minimum
- User friendly solid state controller
- Wire lengths from 3" minimum to 24" maximum with all the wires the same length
- Cycle time: 4 to 8.5 seconds depending on wire length
- Modular design
- Self diagnostic
- Sturdy machine tool type construction
- Large variety of options

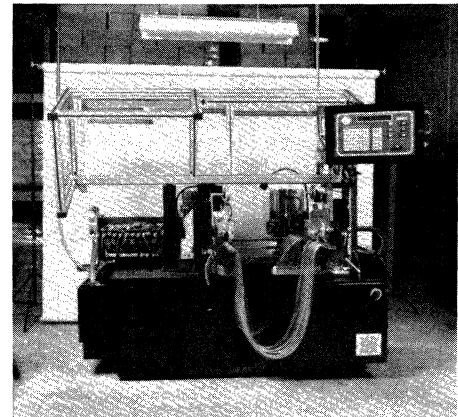


Phoenix Series

Contact factory to order

Standard Features include:

- Double or single ended harness capabilities without strip
- Single ended harness capabilities with strip
- Discrete wire or ribbon cable
- Variable or single extended wire length capability for discrete wire
- Single extended wire length capability for ribbon cable
- 32 circuit maximum; 2 circuit minimum
- User friendly solid state controller
- Wire lengths from 3" minimum to 120" maximum for single wire length & variable wire length
- Cycle time: 5.5 to 10.5 seconds depending on wire lengths
- Modular design
- Self diagnostic
- Sturdy machine tool type construction
- Large variety of options



Optional Features Eagle and Phoenix Series

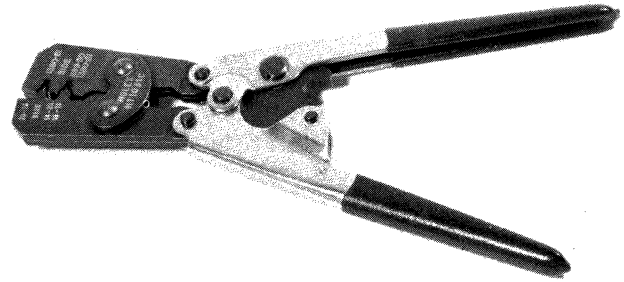
- Continuity testing for single or double ended assemblies
- Housing Load
 - Magazine style for bulk packaging
 - Single detuber for extruded tube packaging
 - Manual track for operator loading
 - Film dereeler for mylar reel packaging
 - Vibratory or centrifugal bowl feeding for continuous loading
 - Tape dereeler for continuous tape packaging
- Product marking:
 - Hot stamp method
 - Ink pad printing method
 - Automatic labeling
- Wire dereeler systems:
 - Up to 32 barrels capacity
 - Up to 32 (12") reels capacity
- Missing wire detection
- Wire splice detection
- Single or multiple notching for ribbon cable applications
- Strip and retain for discrete wire and cable
- Data storage for recall on 5 1/4" floppy disk media through a personal computer
- Variable wire length capability - 3" minimum to 36" maximum (Eagle Series)

C-Grid SL™ Crimp Tooling



HTR Series Hand Crimper

- Crimps male and female terminals 70021 and 70058
- For low volume, prototype and repair
- Ratchet hand crimpers will not open until crimp action is completed
- Adjustable eccentric allows for various insulation diameters
- Includes wire stop and terminal locator as an inter-connection aid



Ordering Information

Eng. No.	Slot	AWG	Order No.
HTR8519A	A	32-36	11-01-0107
	B	24-30	
HTR8519B	A	22-24	11-01-0118
	B	24-30	

TM 40™ Crimp Terminating Machines

- For medium- to high-volume needs
- May be adapted to the Komax® and Artos® wire processing units for completely automatic production
- Independent conductor and insulation adjustments with a position indicator
- Quick release tooling feature for fast, simple changeover
- Universal feed adjustable for all terminals
- No ram adjustment required
- Compact, space-saving design
- Utilizes plug-in T8341/8331 terminator dies (see below)

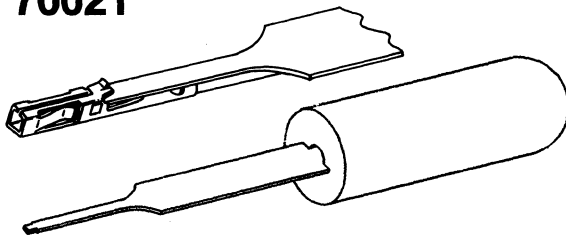


Ordering Information

TM40 PRESS ONLY - 110V 60 Hz		
	Order No.	Eng. No.
New:	11-05-0018	TM40D
Used:	11-05-0021	TM40DU

TERMINATOR DIE AND TM40 PRESS				
Terminal	Terminator Die Only		Domestic (110V 60 Hz)	
	Order No.	Eng. No.	Order No.	Eng. No.
MALE 70021				
(24-30 ga)	11-40-2085	T8341A	11-04-0400	TM40D8341A
(32-36 ga)	11-40-2086	T8341B	11-04-0402	TM40D8341B
(22-24 ga)	11-40-2087	T8341C	11-04-0404	TM40D8341C
FEMALE 70058 and 71851				
(24-36 ga)	11-40-2068	T8331A	11-04-0366	TM40D8331A
(32-36 ga)	11-40-2077	T8331B	11-04-0384	TM40D8331B
(22-24 ga)	11-40-2090	T8331C	11-04-0410	TM40D8331C

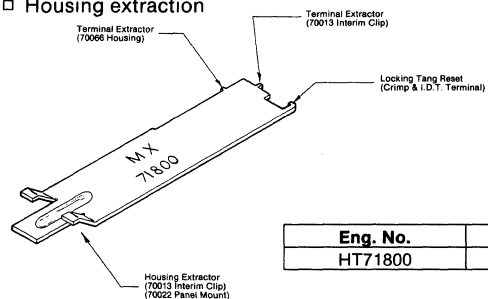
Insertion Tool for Crimp Wire Terminals 70058 and 70021



Eng. No.	Order No.
HTA-60615	11-02-0022

Multi-Purpose Extraction Tool

- For crimp and insulation displacement terminals
- Locking tang reset
- Housing extraction

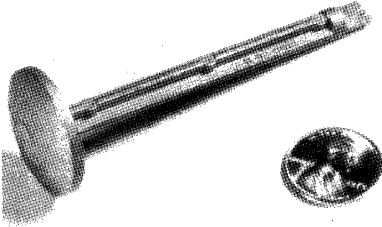


Eng. No.	Order No.
HT71800	11-03-0036

Insulation Displacement Application Tooling for 70156 Connector



"T" Handle Discrete Wire Hand Tool

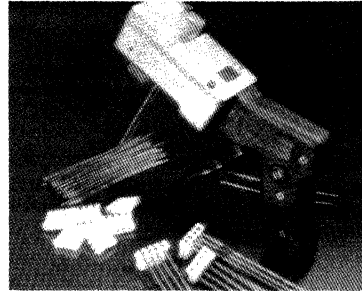


- For repair or prototype assembly

Ordering Information

Eng. No.	Order No.
AM 8600-13	11-02-0015

Terminator Handgun and Snap-on Module

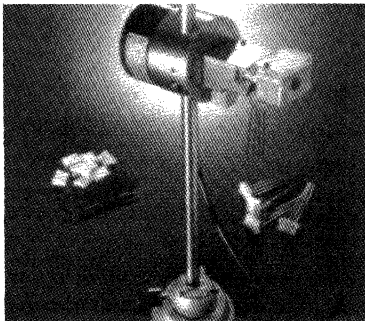


- Low volume — terminates up to four wires simultaneously

Ordering Information

Description	Eng. No.	Order No.
Pistol	AM 60114	11-21-5194
Snap-on Module	AM 60512	11-31-1551

Pneumatic Adaptor for Module

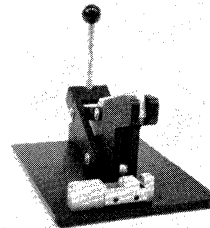


- For low to medium volume

Ordering Information

Eng. No.	Order No.
AM 60522	11-31-1570

Arbor Press



- For medium volume — terminates up to four wires simultaneously
- Feed-to and Feed-thru

Ordering Information

Eng. No.	Order No.
AM 60536	11-20-0826



C-Grid III™ Tooling



(Not Available in the U.S.)

Hand Crimper For 22-32 AWG

Molex HT-20 hand tools are used for crimping loose part terminals. Hardened steel, profiled inserts are located in a **parallel** movement frame. This series of tools have a ratchet action (to ensure crimp stroke completion) with options available for wire stops and terminal locators.



- These tools are recommended for small production, prototype, and repair work
- Insert crimp forms can be replaced in event of damage or breakage

Specifications:

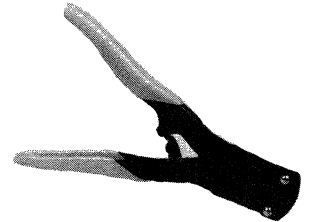
Weight: 0.8 kg
Size: 300 x 64 x 25mm

Ordering Information (Preferred Version in Europe)

Order No.	69008-0026
-----------	------------

Hand Crimper For 22-28 AWG

The Molex HT-30 hand tools are hand crimp pliers, with a **parallel** movement for crimping loose part terminals. They include a ratchet action (to ensure crimp stroke completion), with options available for wire stops and terminal locators.



- Parallel movement produces precise, high quality crimp termination.
- These tools are recommended for small production, prototype, and repair work

Specifications:

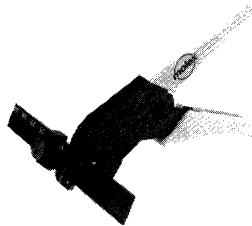
Weight: 0.6 kg
Size: 230 x 64 x 25mm

Ordering Information (Preferred Version in Europe)

Order No.	69008-0005
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Cutting Tool For C-Grid III Unshrouded Headers

- Cutting tool separates .100" (2,54mm) stick-form headers
- Incorporates a graduated slideway and stop for presetting of required header length. Maximum length of header which can be cut is 40 position

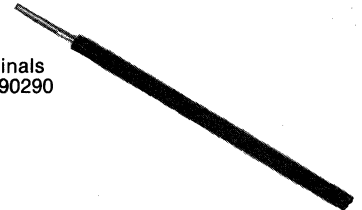


Ordering Information (Preferred Version in Europe)

Order No.	69008-0075
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Terminal Insertion Aid

- Used with C-Grid II terminals Eng. Nos. 90019, 90146, 90290



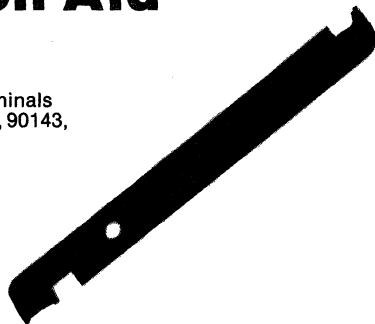
Ordering Information (Preferred Version in Europe)

Order No.	69008-0140
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M

Terminal Extraction Aid

- Used for C-Grid III terminals Eng. Nos. 90123, 90142, 90143, 90156, 90160, 90187



Ordering Information (Preferred Version in Europe)

Order No.	69008-0003
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Terminal Extraction Aid

- Used with C-Grid III terminals Eng. Series 90140, 90123, 90187

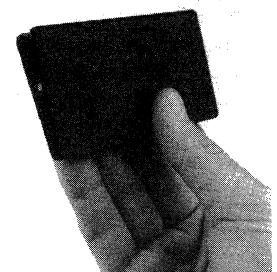
Ordering Information (Preferred Version in Europe)

Order No.	69008-0001
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- Used with C-Grid III terminal Eng. No. 90139

Ordering Information (Preferred Version in Europe)

Order No.	69008-0002
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C-Grid III™ Tooling



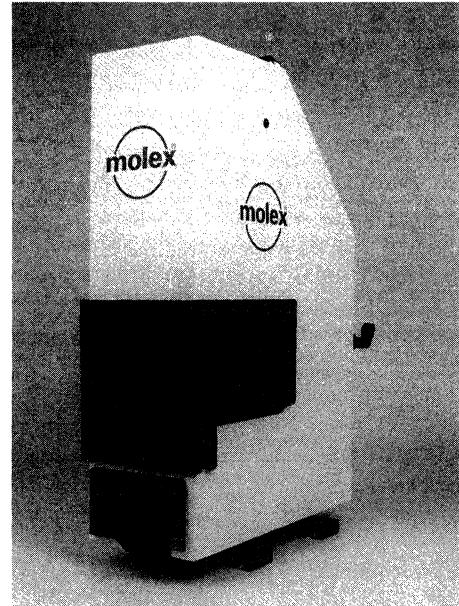
(Not Available in the U.S.)

PB12 Bench Mounted Notching Press

- No electrical supply required
- Accepts standard Arbor Press tooling
- Cycle time approx. 3 seconds
- Press stroke 9mm
- Hydro-Pneumatic Cylinder gives 1220 KG. force using 6 bar (90 psi— air supply)
- Supplied with filter/regulator and shut-off valve
- Pneumatic timer ensures completion of Cylinder stroke

Specifications

Weight: 28 Kg.
Height: 500mm
Width: 150mm
Depth: 310mm



Ordering Information (Preferred Version in Europe)

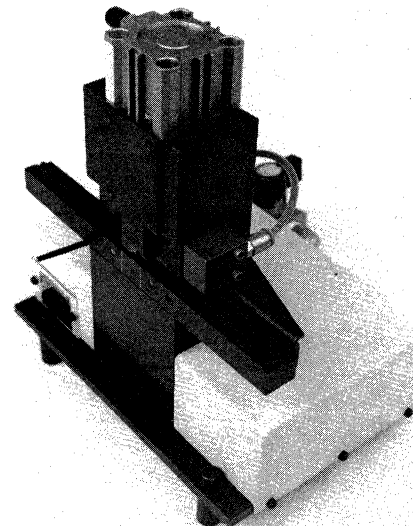
Order No.	69031-2000
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PB13 Pneumatic Terminator

- For processing hand placed wire/connectors, Eng. Nos. 90175, 90153, 90154 with discrete wire and ribbon cable
- Totally pneumatic
- Connector indexing
- Timer to ensure complete machine cycle

Specifications

Weight:
Dimensions: 250mm W x 150mm D x 215mm H
Working Air Pressure: 6. BAR



Ordering Information (Preferred Version in Europe)

Order No.	69012-0280
-----------	------------

AM110 Harness Making Machine

The AM110 Machine has been developed to produce harnesses from the simple to the complex with microprocessor based programming. A harness board on the machine can manually (or automatically) be loaded with different IDC connectors. From a rotary wire magazine, the machine automatically selects the proper wire and then lays and terminates these wires to make complete harnesses.

The AM110 Machine offers greatest flexibility and efficiency in producing various types of harnesses.

- Microprocessor control for easy programming of the X, Y and Z directional as well as other machine functions
- Simple, efficient loading and unloading of machine with removable harness boards

Specifications

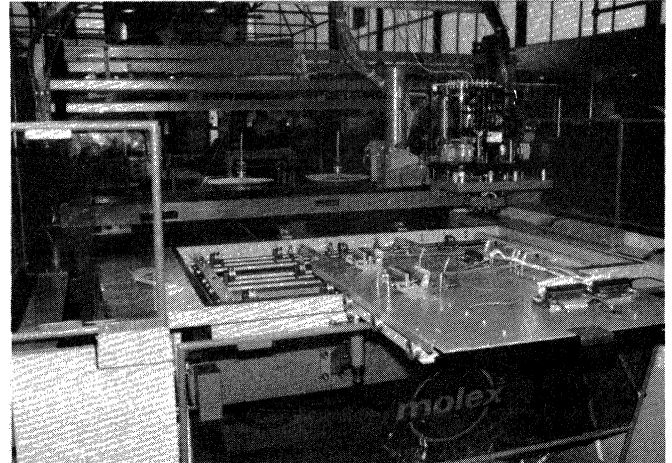
Wire Magazine:
Rotary magazine for up to 10 wires

Wire Diameter:
0,14 to 0,75 mm² (26 to 18 AWG)

Wire Feed:
Max. 6,5 m/sec (21.32 ft./sec.)

Weight:
Approx. 850 kg. (1,875 lbs.)

Dimensions:
2,200mm W x 2,600mm D x 1,675mm H (87" x 102" x 66")
Basic machine height over wire dereeling rack 2,900mm (114")



Performance

Positioning Speed: Max. 28 m/min.

Wire Processing Speed: From 6 to 12 m/min.

Options

- Printer — to register essential date of machine programming
- Various connector fixtures to accommodate the harness making requirements
- Harness boards:
900mm x 1360mm; 900mm x 660mm; 900mm x 432mm

Preferred Version in Europe

PB11 Pneumatic Terminator

- Accepts standard AM81 blades and fixtures
- Totally pneumatic
- Incorporates timer to ensure complete machine cycle
- Base unit is hand loaded. Can be adapted for magazine or auto-feed

Specifications

Weight:
21 kg.

Dimensions:
300mm x 250mm x 250mm

Press Stroke:
19mm (0.75")

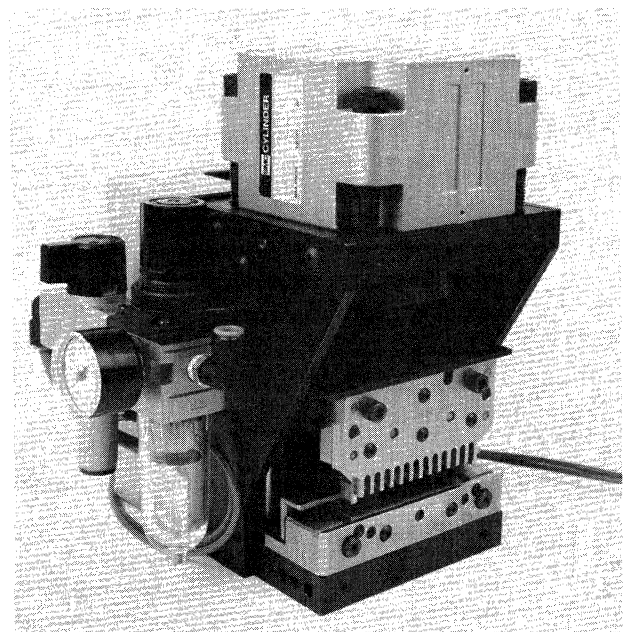
Max. Working Pressure:
10 bar (150 psi)

Press Force:
6 bar (90 psi) 385 kg. (850 psi)

Air Consumption/ M/C Cycle:
2.15 l (0.07 ft. sq.)

Ordering Information (Preferred Version in Europe)

	Order No.	
Basic Machine	69029-0100	(Chassis only)
Bench Machine	69029-0600	(100 Cyl.)
	69029-0700	(50 Cyl.)
Auto Machine	69029-0800	(100 Cyl.)
	69029-0900	(50 Cyl.)



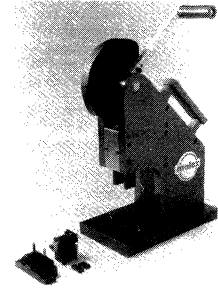
Connector Eng. No.	PB11 Order No.	Conv. Kit Order No.	Remarks	Connector Eng. No.	PB11 Order No.	Conv. Kit Order No.	Remarks
3481	69029-1003	69029-3003	Manual	90410/11/12/13 (12 Ckt.)	69029-1007	69029-3007	Manual
8160	69029-1000	69029-3000	Manual	90410/11/12/13 (2 Ckt.)	69029-1006	69029-3006	Auto
90061/62	69029-1004	69029-3004	Manual	90410/11/12/13 (2 Ckt.)	69029-1002	69029-3002	Manual
90133	69029-1008	69029-3008	Manual	90417 (12 Ckt.)	69029-1001	69029-3001	Manual
90327	69029-1009	69029-3009	Manual	90417 (8 Ckt.)	69029-1005	69029-3005	Manual

.050" (1,27 mm) Center Ribbon Cable Terminators



Basic Arbor Press and Interchangeable Tool Kits

- Modular interchangeable tooling
- Quick tooling changeovers
- Ratchet terminator assures completion of full cycle
- Lightweight, portable



Basic Manual Press and Tooling

TERMINATES CONNECTOR	Order No.	Eng. No.
71522 DL-50 Plug	11-20-1163	AM-60026A
71521 DL-50 Receptacle	11-20-1164	AM-60026B
71527, 71528, 71530 & 71531 D-Sub	11-20-1165	AM-60026C
40312 MX-50 and 70121 Slimline	11-20-1166	AM-60026D
71007 Edge Card	11-20-1167	AM-60026E
5350, 5360, 5370, 5380 Qik-Flecs	11-20-1168	AM-60026F
5320 Qik-Flecs	11-20-1169	AM-60026G

Press Tool Kits

- Only tool kits required if customer has basic press

TERMINATES CONNECTOR	Order No.	Eng. No.
71522 DL-50 Plug	11-21-9647	AM-60026A100
71521 DL-50 Receptacle	11-21-9648	AM-60026B100
71527, 71528, 71530 & 71531 D-Sub	11-21-9649	AM-60026C100
40312 MX-50 and 70121 Slimline	11-21-9650	AM-60026D100
71007 Edge Card	11-21-9651	AM-60026E100
5350, 5360, 5370, 5380 Qik-Flecs	11-21-9652	AM-60026F100
5320 Qik-Flecs	11-21-9653	AM-60026G100

Tool Change Kits

- Required to change from one product to a different product

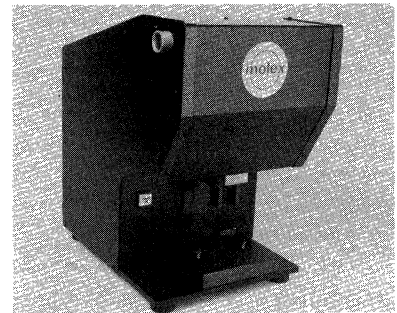
TERMINATES CONNECTOR	Order No.	Eng. No.
71522 DL-50 Plug	11-31-5557	AM-60007
71521 DL-50 Receptacle	11-31-5555	AM-60008
71527, 71528, 71530 & 71531 D-Sub	11-21-9391	AM-60043
40312 MX-50 and 70121 Slimline	11-31-2181	AM-60552
71007 Edge Card	11-31-2184	AM-60555
5350, 5360, 5370, 5380 Qik-Flecs	11-31-2187	AM-60566
5320 Qik-Flecs	11-31-2335	AM-60567

Accessories

Order No.	Description	Eng. No.
11-31-6356	Basic Manual Press	AM-60026
11-20-0947	Ribbon Cable Tooling Adapter	AM-60042
11-20-1170	Basic Press with Tooling Adapter	AM-60026Z
11-31-2176	Universal Adapter Plate	AM-60561

Electric Press and Interchangeable Tool Kits

- Modular interchangeable tooling
- Quick tooling changeovers
- Prevents operator fatigue



Electric Press and Tooling

TERMINATES CONNECTOR	Order No.	Eng. No.
71522 DL-50 Plug	11-20-1156	AM-60078A120
71521 DL-50 Receptacle	11-20-1157	AM-60078B120
71527, 71528, 71530 & 71531 D-Sub	11-20-1158	AM-60078C120
40312 MX-50 and 70121 Slimline	11-20-1159	AM-60078D120
71007 Edge Card	11-20-1160	AM-60078E120
5350, 5360, 5370, 5380 Qik-Flecs	11-20-1161	AM-60078F120
5320 Qik-Flecs	11-20-1162	AM-60078G120

Press Tool Kits

- Only tool kits required if customer has basic press

TERMINATES CONNECTOR	Order No.	Eng. No.
71522 DL-50 Plug	11-21-9647	AM-60026A100
71521 DL-50 Receptacle	11-21-9648	AM-60026B100
71527, 71528, 71530 & 71531 D-Sub	11-21-9649	AM-60026C100
40312 MX-50 and 70121 Slimline	11-21-9650	AM-60026D100
71007 Edge Card	11-21-9651	AM-60026E100
5350, 5360, 5370, 5380 Qik-Flecs	11-21-9652	AM-60026F100
5320 Qik-Flecs	11-21-9653	AM-60026G100

Tool Change Kits

- Required to change from one product to a different product

TERMINATES CONNECTOR	Order No.	Eng. No.
71522 DL-50 Plug	11-31-5557	AM-60007
71521 DL-50 Receptacle	11-31-5555	AM-60008
71527, 71528, 71530 & 71531 D-Sub	11-21-9391	AM-60043
40312 MX-50 and 70121 Slimline	11-31-2181	AM-60552
71007 Edge Card	11-31-2184	AM-60555
5350, 5360, 5370, 5380 Qik-Flecs	11-31-2187	AM-60566
5320 Qik-Flecs	11-31-2335	AM-60567

Accessories

Order No.	Description	Eng. No.
11-31-9639	Electric Press (120 volt)	AM-60078-120
11-20-0947	Ribbon Cable Tooling Adapter	AM-60042
11-20-1170	Basic Press with Tooling Adapter	AM-60078Z
11-31-2176	Universal Adapter Plate	AM-60561
11-31-9243	Electric Press (220 volt)	AM-60078-220

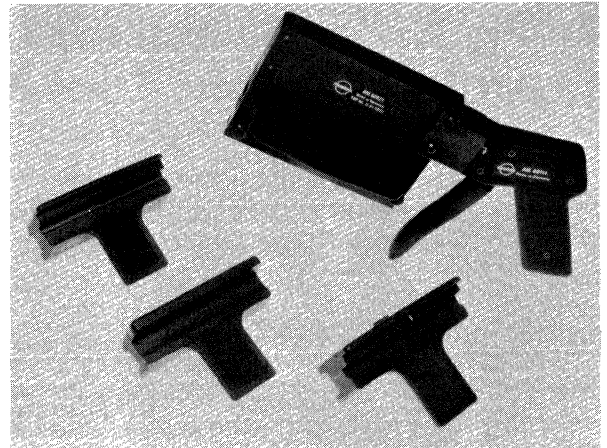


MX 50™ / Qik Flecs .050" (1,27 mm) Ribbon Cable Termination Tooling



Ribbon Cable Terminator Handgun

- For low volume, prototype and field repair
- Snap-on modular die for terminating .050" (1,27mm) center ribbon cable to MX 50 connectors 40312, 70121, and 71007



Ordering Information

Eng. No.	Description	Order No.	
AM-60114	Pistol	11-21-5194	Required for all modules and power adapter
AM-60571	Power Adapter & Table Clamp	11-31-3337	Required for all modules

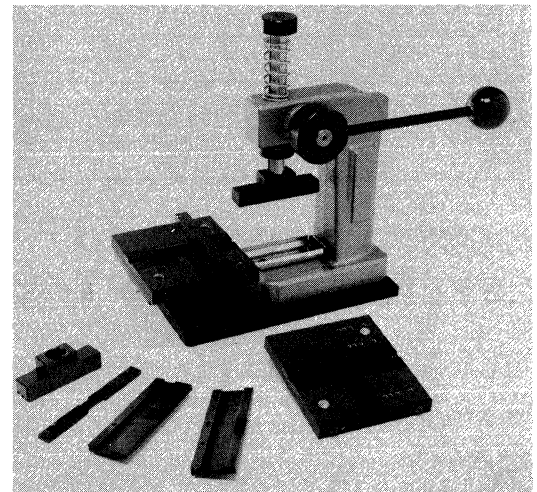
Ordering Information

Eng. No.	Description	Order No.	Use with Connectors
AM-60577	Module	11-31-4652	40312, 5320
AM-60539	Module	11-31-3339	70121
AM-60554	Module	11-31-3338	71007
AM-60575	Module	11-31-3340	Cable Shear

Arbor Press and Interchangeable Tool Kits

- Lightweight, portable, reliable, low-cost assembly
- Cable shearing capabilities
- Interchangeable tooling which is compatible with most competitive presses
- Feed-to or feed-thru
- Production rate — up to 110 assemblies per hour

Specifications
 Weight - 15 lbs. (6,9 kg)
 Bench Space - 12" x 8"
 (30,5cm x 20,3cm)
 Height - 14" (36cm)



Ordering Information

Terminates Connector (Eng. No.)	Description	Tool Change Kits	
		Eng. No.	Order No.
All .050" Center Molex Connectors	Arbor Press Machine only — Eng. No. AM-4700-24 Order No. • 11-21-0679		
40312 Standard MX50 70121 Slimline MX50	Universal Adapter Plate Assembly* Eng. No. AM-60561 Order No. 11-31-2176	AM-60552	11-31-2181
71007 Edge Card		AM-60555	11-31-2184
5350, 5360, 5370, 5380 Qik Flecs		AM-60566	11-31-2187
5320 Qik-Flecs		AM-60567	11-31-2335
6874, 8173 Edge Card	Tooling Locator Plate for up to 68 circuit connector	AM-6874-1	• 11-21-0678
ACCESSORIES			
Description	Eng. No.	Order No.	
Cable Shear Module	AM-6800-1	• 11-10-0081	
Replacement Blade for Cable Shear	AM-6800-2	11-21-1102	
Replacement Cutting Plate for Cable Shear	AM-6800-3	11-21-1103	

*If customer already has Universal Adapter Plate Assembly (Eng. No. AM-60561, Order No. 11-31-2176), all that is required for each above connector is the appropriate Tool Change Kit.

• U.S. Standard Product available through Molex Franchised Distributors

Customer Application Note: If application requires terminating the 71007, 70121, 40312 or 5320 connector above 60 circuits, the customer is advised to check the arbor press platen length. All new arbor presses are shipped with extended platens measuring 3.75 inches in length. However, if the customer already has an arbor press it is possible the platen length is 3.25 inches. The platen is a

black aluminium "T" shaped piece located at the bottom end of the arbor press ram. If the customer expects to terminate 64 circuit connectors, the extended platen (3.75 inches) may be ordered using the following numbers: Eng. No. AM-4700-32 Order No. 11-10-1055.

MX50™ / Qik-Flecs .050" (1,27mm) Ribbon Cable Termination Tooling

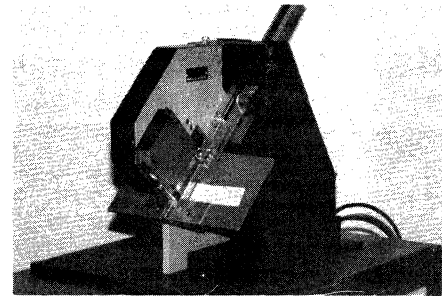


Semi-Automatic Terminator

- Pneumatic only — no electrical source required
- Tube fed
- Feed-to or feed-thru from either side
- Assembles all circuit sizes
- Production rate up to 550 single-ended assemblies per hour
- Minimum cable length 1.5" (39mm)
- Inexpensive drop in tool modules for the 71007 Edge Card; 70121 Slimline, 40312 MX 50 and 5360 Transition connectors

Specifications

Width - 18"
Length - 20"
Height - 18"
Weight - 60 lbs.



Ordering Information

Connector	Description	Eng. No.	Order No.
Requires Tool Module	Base Machine Only	AM-60556A1	11-20-0899
71007 Edge Card	Edge Card Connector Tool Module	AM-60556B1	11-31-4352
70121 MX 50 Slimline	Slimline Connector Tool Module	AM-60556D1	11-31-4236
40312 Standard MX 50	MX 50 Connector Tool Module	AM-60556C1	11-31-4361
5360 Transition Connector	Transition Connector Tool Module	AM-60556E1	11-31-7695
5320 QF50 Connector	International .050" Connector	AM-60556H1	11-21-9521

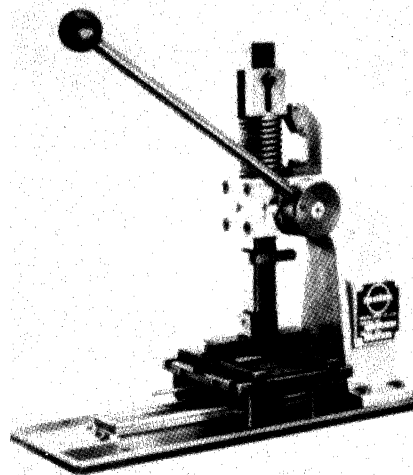
Ordering Information - Base Machine and Tool Module Assembly

Connector	Description	Eng. No.	Order No.
70121 MX50 Slimline	Combined Base Machine and Tool Module	AM60556AD1	11-20-0974
5360 Transition Connector		AM60556AE1	11-20-0975

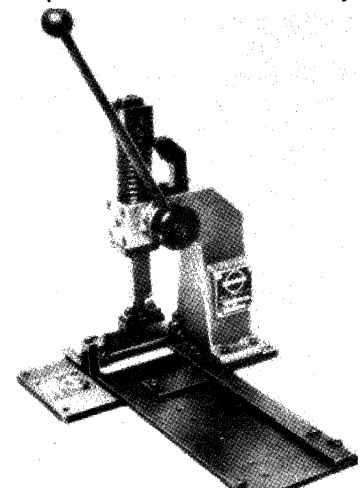
J 5930 Series Press and Cutter

- Manually operated, ratchet type

(Not Available in the U.S.)



Press



Cutter



Ordering Information (Preferred version in the Far East)

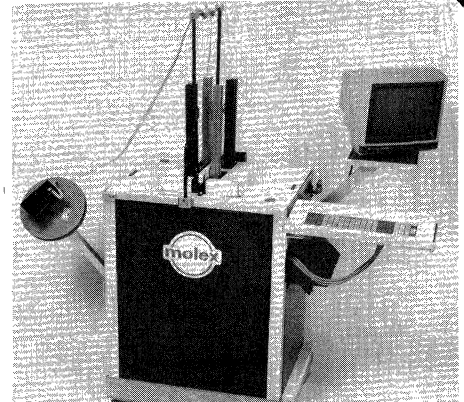
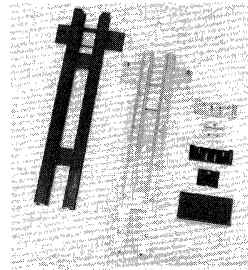
	Description	Order No.	Eng. No.
Press	Press Frame	11-26-0075	J 5930
	Base Assembly	11-26-0081	J 5936
	Kit QF Female (for 5320)	11-26-0082	J 5937
	Kit QF .100" (2,54mm) Grid (5360)	11-26-0083	J 5938
	Kit QF Staggered (5350)	11-26-0084	J 5939
	Kit QF Type .100 x .300 (5370)	11-26-0111	J 5952
	Kit QF Type .100 x .600 (5380)	11-26-0112	J 5953
Cutter	Press Frame	11-26-0075	J 5930
	Cutter	11-26-0078	J 5933

MX50™ / Qik Flecs™ .050" (1,27mm) Ribbon Cable Tooling



AM 63200 Series Harness Assembly Machine

- Fully automatic mass terminator for high volume applications



Osprey Series

- Single end style - minimum length 1" (25,4mm)
- Double end style - minimum length 0.7" (18mm) between connectors
- Daisy chain style
 - Unlimited number of connectors and cable length
 - Two connector types and up to two orientations per harness set-up
- 64 circuit maximum; 10 circuit minimum
- Accommodates #26 and #28 AWG cable
- Tests for electrical shorts
- Typical rate: 630 per hour; 12" (305mm) double end harness
- Programmable: 80 key membrane pad and 9" (230mm) CRT
- Self diagnostic

Specifications:

Weight - 20 lbs. (95 kg)

Electrical - 115V, 60 Hz (220V, 50 Hz)

Pneumatics - 110 psi, 6.5 CFM, 7 Bar, 14.2 L/min.

Floor Space - 5.5' x 2.7' (1.7 x 0.8 m)

Ordering Information

Use with the Following Connectors	Description	Eng. No.	Order No.
	Base Machine	AM 63200	11-20-1105
40312 Standard MX50	Tool Kit (One each required per station)	Consult factory for specific ordering information. (Kit designed for connector type and circuit size)	
70121 Slimline MX50			
71007 Edge Card			
5320 Qik Flecs			
5360 Qik Flecs, Trans. Type			

M

8878/78804 Modular IC Socket System Termination Tooling

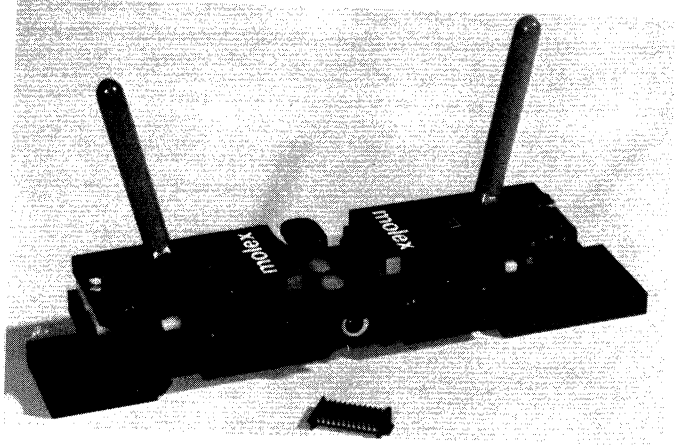
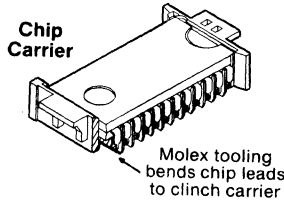


Manual Bench Tool, Double-Sided For Modular IC Socket System

- Forms both sides of IC chip to carrier in one cycle
- Interchangeable inserts for 24, 28 and 32 circuit carriers
- Compact and lightweight
- Minimal operator effort required
- Provisions for static grounding
- Hourly production rate 400 assemblies
- Annual capacity 800,000 assemblies

Specifications

Width - 4½" (114mm)
 Length - 13" (330mm)
 Height - 6½" (165mm)
 Weight - 5 lbs. (2,63 kg)



Ordering Information

IC Size	Base Machine with Tool Kit		Tool Kit Only		Base Machine Only	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
24 Ckt.	11-20-0976	AM60161-51	11-20-0662	AM60161-100	11-20-0647	AM60161
28 Ckt.	11-20-0977	AM60161-52	11-20-0663	AM60161-200	11-20-0647	AM60161
32 Ckt.	11-20-0978	AM60161-53	11-20-0951	AM60161-500	11-20-0647	AM60161

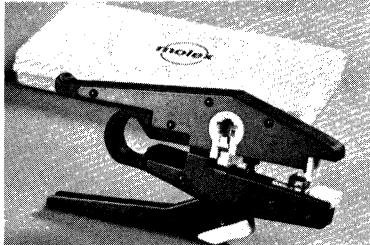


Telephone Connector Tooling



Hand Terminators HT-70 Series

□ Also strips telephone wires

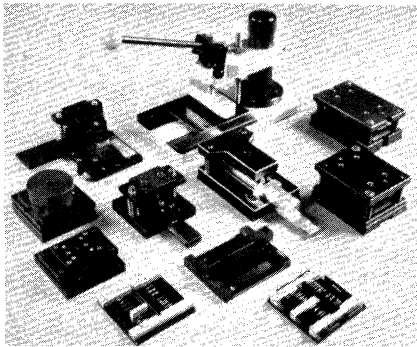


Ordering Information

DESCRIPTION OF PLUG TYPE		PLUG SIZE AND NO. CONTACTS	HAND TERMINATOR	
			ORDER NO.	ENG. NO.
Cables	4, 6, 8 Cores		69099-0500	69099-0500
90074-0002	B.T. Plug, L.H.	6/4	69099-0602	69099-0602
90074-0004	B.T. Plug, L.H.	6/6	69099-0604	69099-0604
90074-0006	B.T. Plug, R.H.	6/4	69099-0602	69099-0602
90074-0008	B.T. Plug, R.H.	6/6	69099-0604	69099-0604
90074-0018	B.T. Plug, R.H.	6/4	69099-0602	69099-0602
90075-0003	W.E. Plug, N.K.	4/4	69099-0640	69099-0640
90075-0027	W.E. Plug, N.K.	4/4	69099-0640	69099-0640
90075-0051	W.E. Plug, N.K.	4/3	69099-0640	69099-0640
90075-0055	W.E. Plug, N.K.	4/3	69099-0640	69099-0640
90075-0059	W.E. Plug, N.K.	6/2	69099-0664	69099-0664
90075-0060	W.E. Plug, Key	6/2	69099-0664	69099-0664
90075-0063	W.E. Plug, N.K.	6/3	69099-0664	69099-0664
90075-0064	W.E. Plug, Key	6/3	69099-0664	69099-0664
90075-0011	W.E. Plug, N.K.	6/4	69099-0664	69099-0664
90075-0035	W.E. Plug, Key	6/4	69099-0664	69099-0664
90075-0012	W.E. Plug, Key	6/4	69099-0664	69099-0664
90075-0036	W.E. Plug, Key	6/4	69099-0664	69099-0664
90075-0007	W.E. Plug, N.K.	6/6	69099-0666	69099-0666
90075-0031	W.E. Plug, N.K.	6/6	69099-0666	69099-0666
90075-0008	W.E. Plug, Key	6/6	69099-0666	69099-0666
90075-0032	W.E. Plug, Key	6/6	69099-0666	69099-0666

This range of handtools is for the application of loose part plugs only.

Arbor Press and Fixtures MB-10 Series



Ordering Information

DESCRIPTION OF PLUGS AND JACKS		PLUG SIZE AND NO. OF CONTACTS	FIXTURE WITH TOOLING		FIXTURE ONLY		TOOL KIT	
			ORDER NO.	ENG. NO.	ORDER NO.	ENG. NO.	ORDER NO.	ENG. NO.
90074-0002	B.T. Plug, L.H.†	6/4	90816-0000	ABTE 90816	—	—	—	—
90074-0004	B.T. Plug, L.H.†	6/6	90816-0000	ABTE 90816	—	—	—	—
90074-0006	B.T. Plug, R.H.†	6/4	90816-0000	ABTE 90816	—	—	—	—
90074-0008	B.T. Plug, R.H.†	6/6	90816-0000	ABTE 90816	—	—	—	—
90074-0018	B.T. Plug, R.H.†	6/4	90816-0000	ABTE 90816	—	—	—	—
90075-0003	W.E. Plug, N.K.†	4/4	11-28-0225	ABTE 90817	—	—	—	—
90075-0027	W.E. Plug, N.K.†	4/4	11-28-0225	ABTE 90817	—	—	—	—
90075-0051	W.E. Plug, N.K.†	4/3	11-28-0225	ABTE 90817	—	—	—	—
90075-0055	W.E. Plug, N.K.†	4/3	11-28-0225	ABTE 90817	—	—	—	—
90075-0059	W.E. Plug, N.K.†	6/2	11-28-0225	ABTE 90817	—	—	—	—
90075-0060	W.E. Plug, Key†	6/2	11-28-0225	ABTE 90817	—	—	—	—
90075-0063	W.E. Plug, N.K.†	6/3	11-28-0225	ABTE 90817	—	—	—	—
90075-0064	W.E. Plug, Key†	6/3	11-28-0225	ABTE 90817	—	—	—	—
90075-0011	W.E. Plug, N.K.†	6/4	11-28-0225	ABTE 90817	—	—	—	—
90075-0035	W.E. Plug, Key†	6/4	11-28-0225	ABTE 90817	—	—	—	—
90075-0012	W.E. Plug, Key†	6/4	11-28-0225	ABTE 90817	—	—	—	—
90075-0036	W.E. Plug, Key†	6/4	11-28-0225	ABTE 90817	—	—	—	—
90075-0007	W.E. Plug, N.K.†	6/6	11-28-0225	ABTE 90817	—	—	—	—
90075-0031	W.E. Plug, N.K.†	6/6	11-28-0225	ABTE 90817	—	—	—	—
90075-0008	W.E. Plug, Key†	6/6	11-28-0225	ABTE 90817	—	—	—	—
90075-0032	W.E. Plug, Key†	6/6	11-28-0225	ABTE 90817	—	—	—	—
90075-0019	W.E. Plug, N.K.†	8/6 L. Body	69020-0120	69020-0120	—	—	—	—
90075-0043	W.E. Plug, N.K.†	8/6 L. Body	69020-0120	69020-0120	—	—	—	—
90075-0015	W.E. Plug, N.K.†	8/8 L. Body	69020-0120	69020-0120	—	—	—	—
90075-0039	W.E. Plug, N.K.†	8/6 L. Body	69020-0120	69020-0120	—	—	—	—
90075-0128	W.E. Plug, N.K.†	8/6 S. Body	69020-0140	69020-0140	—	—	—	—
90075-0136	W.E. Plug, N.K.†	8/6 S. Body	69020-0140	69020-0140	—	—	—	—
90075-0145	W.E. Plug, N.K.†	8/6 S. Body	69020-0140	69020-0140	—	—	—	—
90075-0124	W.E. Plug, N.K.†	8/8 S. Body	69020-0140	69020-0140	—	—	—	—
90075-0132	W.E. Plug, N.K.†	8/8 S. Body	69020-0140	69020-0140	—	—	—	—
90075-0141	W.E. Plug, N.K.†	8/8 S. Body	69020-0140	69020-0140	—	—	—	—
90080-0001	Modular Jack†	4/4	69020-0645	69020-0645	69020-0630	69020-0630	69020-0624	69020-0624
90080-0003	Modular Jack†	6/4	69020-0650	69020-0650	69020-0630	69020-0630	69020-0625	69020-0625
90080-0004	Modular Jack†	6/5	69020-0650	69020-0650	69020-0630	69020-0630	69020-0625	69020-0625
90080-0002	Modular Jack†	6/6	69020-0650	69020-0650	69020-0630	69020-0630	69020-0625	69020-0625
90080-0007	Modular Jack†	8/8	69020-0620	69020-0620	69020-0600	69020-0600	69020-0621	69020-0621
90080-0006	Modular Jack†	8/6	69020-0620	69020-0620	69020-0600	69020-0600	69020-0621	69020-0621
90080-0005	Modular Jack†	8/4	69020-0620	69020-0620	69020-0600	69020-0600	69020-0621	69020-0621
90133-0001	Low Profile Jack	4/4	69020-0083	69020-0083	69020-0250	69020-0250	69020-0081	69020-0081
90133-0002	Low Profile Jack	6/6	69020-0084	69020-0084	69020-0250	69020-0250	69020-0082	69020-0082
90133-0003	Low Profile Jack	6/4	69020-0098	69020-0098	69020-0250	69020-0250	69020-0097	69020-0097
90133-0006	Low Profile Jack	8/6	69020-0105	69020-0105	69020-0250	69020-0250	69020-0102	69020-0102
90133-0007	Low Profile Jack	8/8	69020-0104	69020-0104	69020-0250	69020-0250	69020-0099	69020-0099

Note: All items marked † are terminated as loose parts only.

Base Unit Arbor Press	
Order No.	Eng. No.
11-28-0000	ABTE 90800

Telephone Connector Tooling



(Not Available in the U.S.)

Terminator Dies for Use with Euro TM40 Press TM-402 Series (To fit TM-40 Press)

DESCRIPTION OF PLUG TYPES	PLUG SIZE AND NO. OF CONTACTS	DIE WITH TOOLING		DIE PLATE ONLY		TOOL KIT ONLY		
		ORDER NO.	ENG. NO.	ORDER NO.	ENG. NO.	ORDER NO.	ENG. NO.	
90074-0001	B.T. Plug, L.H.	6/4	69017-0115	69017-0115	69017-0024	69017-0024	69017-0110	69017-0110
90074-0003	B.T. Plug, L.H.	6/6	69017-0120	69017-0120	69017-0024	69017-0024	69017-0109	69017-0109
90074-0005	B.T. Plug, R.H.	6/4	69017-0115	69017-0115	69017-0024	69017-0024	69017-0110	69017-0110
90074-0007	B.T. Plug, R.H.	6/6	69017-0120	69017-0120	69017-0024	69017-0024	69017-0109	69017-0109
90074-0017	B.T. Plug, R.H.	6/4	69017-0115	69017-0115	69017-0024	69017-0024	69017-0110	69017-0110
90075-0001	W.E. Plug, N.K.	4/4	69017-0087	69017-0087	69017-0010	69017-0010	69017-0088	69017-0088
90075-0025	W.E. Plug, N.K.	4/4	69017-0087	69017-0087	69017-0010	69017-0010	69017-0088	69017-0088
90075-0049	W.E. Plug, N.K.	4/3	69017-0087	69017-0087	69017-0010	69017-0010	69017-0088	69017-0088
90075-0053	W.E. Plug, N.K.	4/3	69017-0087	69017-0087	69017-0010	69017-0010	69017-0088	69017-0088
90075-0057	W.E. Plug, N.K.	6/2	69017-0069	69017-0069	69017-0010	69017-0010	69017-0067	69017-0067
90075-0058	W.E. Plug, Key	6/2	69017-0065	69017-0065	69017-0010	69017-0010	69017-0059	69017-0059
90075-0061	W.E. Plug, N.K.	6/3	69017-0069	69017-0069	69017-0010	69017-0010	69017-0067	69017-0067
90075-0062	W.E. Plug, Key	6/3	69017-0065	69017-0065	69017-0010	69017-0010	69017-0059	69017-0059
90075-0009	W.E. Plug, N.K.	6/4	69017-0069	69017-0069	69017-0010	69017-0010	69017-0067	69017-0067
90075-0033	W.E. Plug, N.K.	6/4	69017-0065	69017-0065	69017-0010	69017-0010	69017-0059	69017-0059
90075-0010	W.E. Plug, Key	6/4	69017-0065	69017-0065	69017-0010	69017-0010	69017-0059	69017-0059
90075-0034	W.E. Plug, Key	6/4	69017-0065	69017-0065	69017-0010	69017-0010	69017-0059	69017-0059
90075-0005	W.E. Plug, N.K.	6/6	69017-0068	69017-0068	69017-0010	69017-0010	69017-0066	69017-0066
90075-0029	W.E. Plug, N.K.	6/6	69017-0068	69017-0068	69017-0010	69017-0010	69017-0066	69017-0066
90075-0006	W.E. Plug, Key	6/6	69017-0060	69017-0060	69017-0010	69017-0010	69017-0058	69017-0058
90075-0030	W.E. Plug, Key	6/6	69017-0060	69017-0060	69017-0010	69017-0010	69017-0058	69017-0058
90075-0017	W.E. Plug, N.K.	8/6 L. Body	T.B.A.	T.B.A.	69017-0010	69017-0010	T.B.A.	T.B.A.
90075-0041	W.E. Plug, N.K.	8/6 L. Body	T.B.A.	T.B.A.	69017-0010	69017-0010	T.B.A.	T.B.A.
90075-0013	W.E. Plug, N.K.	8/8 L. Body	T.B.A.	T.B.A.	69017-0010	69017-0010	T.B.A.	T.B.A.
90075-0037	W.E. Plug, N.K.	8/6 L. Body	T.B.A.	T.B.A.	69017-0010	69017-0010	T.B.A.	T.B.A.
90075-0126	W.E. Plug, N.K.	8/6 S. Body	69017-0096	69017-0096	69017-0010	69017-0010	69017-0044	69017-0044
90075-0134	W.E. Plug, N.K.	8/6 S. Body	69017-0096	69017-0096	69017-0010	69017-0010	69017-0044	69017-0044
90075-0143	W.E. Plug, N.K.	8/6 S. Body	69017-0096	69017-0096	69017-0010	69017-0010	69017-0044	69017-0044
90075-0122	W.E. Plug, N.K.	8/8 S. Body	69017-0095	69017-0095	69017-0010	69017-0010	69017-0050	69017-0050
90075-0130	W.E. Plug, N.K.	8/8 S. Body	69017-0095	69017-0095	69017-0010	69017-0010	69017-0050	69017-0050
90075-0139	W.E. Plug, N.K.	8/8 S. Body	69017-0095	69017-0095	69017-0010	69017-0010	69017-0050	69017-0050

The TM-40 die units apply chain feed product only.

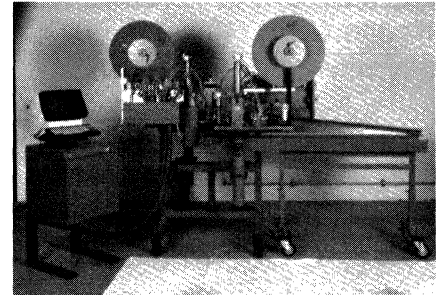
Ordering Information

Euro TM40 Base Unit Order No.	69002-1000
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AM 40 Fully Automatic Harness Assembly Machine

- Komax 40® machine attaches telephone plugs to one or both ends of multi-core telephone cable
- Uses Molex Euro TM40 press*
- Computer-controlled with V.D.U. readout
- Simple production program entry in English, German, Italian or French. (Other languages by request)
- Cable length: 50mm min. to 100 meters max.
- Production rate: Up to 3,200 telephone cables (terminated both ends) per hour, according to length

*If customer has U.S. version TM40 press, it can be modified to accommodate Euro tooling



AM-130 Series

Molex AM-130 automatic machine makes I.D.T. connector harness assemblies, using discrete wires. The machine works on the stitcher principle and is available in three forms:

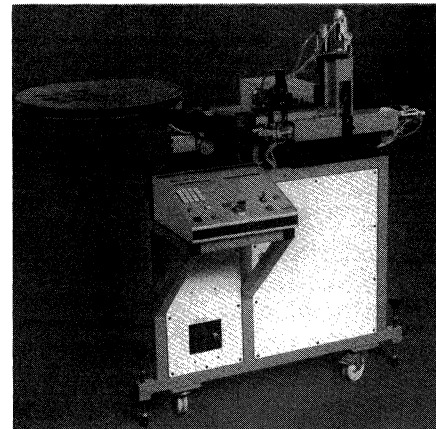
- Option A:** Automatically located connectors are terminated with hand positioned pre-cut discrete wires.
- Option B:** Automatically fed and located wires are terminated into hand fed and positioned connectors.
- Option C:** Fully automatic operation — with machine fed connector housings and wires.

A diverse I.D.T. application machine series, ideal for the production of **telephone jack harness assemblies**.

- Available in automatic or semi-automatic
- Connector housing feed system may be: taped reel, bowl feeder, reeled chain connectors or cartridge tube
- Wires can also be marked in sequence (bar marking, or alpha-numeric coding) for circuit identification
- Program selection can accommodate up to 200 wires of different length, in sequence
- Production rate: up to 7,200 wires terminated per hour, according to length (double ended)

Specifications

- Weight* — 500 kg (max. weight)
- Height* — 1,200mm
- Length* — 1,900mm
- Width* — 1,500mm
- Power* — 380 volts, 3 ph, 50 hertz. Other voltages by request
- Air* — 4.5/8.0 bars, 600 liters per min. An air filter, regulator and lubricator unit is filled as standard



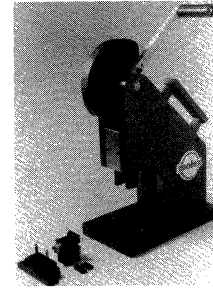
Termination Tooling — Hand Operated Press

- Modular
- Quick tooling changeovers
- Ratchet terminator assures completion of full cycle
- Lightweight, portable
- Reliable, low-cost assembly

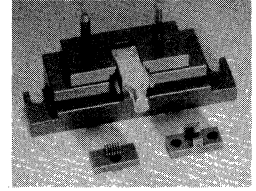
Basic Press and Plug Terminator for Round and Flat Shielded Cable Plugs

Ckt. Size	Eng. No.	Order No. ¹
4	AM60028-4	11-31-6357
6	AM60028-6	11-31-6358
8	AM60028-8	11-31-6359
16	AM60028-16	11-31-6360

¹ Order numbers are for the basic press and tooling for one circuit size.



Basic Press with Plug Terminator



Plug Change Tooling

To Change Circuit Size Order Change Tooling Only

Ckt. Size	Eng. No.	Order No. ²
4	AM60029-4	11-31-6361
6	AM60029-6	11-31-6362
8	AM60029-8	11-31-6363
16	AM60029-16	11-31-6364

² Order numbers are for change tooling for the circuit size.

Tooling Required for Plug Insert Termination

Basic Press with Plug Insert Terminator for Round Cable Plugs

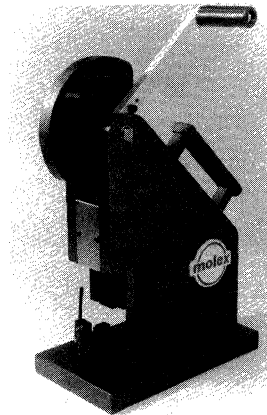
Ckt. Size	Eng. No.	Order No. ³
4	AM60035-4	11-31-6365
6	AM60035-6	11-31-6366
8	AM60035-8	11-31-6367
16	AM60035-16	11-31-6368
6/4	AM60035-46	11-31-8633
8/6	AM60035-68	11-31-8634

³ Order numbers are for the basic press and tooling for one circuit size.

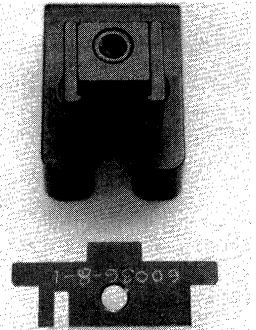
To Change Circuit Size Order Change Tooling Only

Ckt. Size	Eng. No.	Order No. ⁴
4	AM60036-4	11-31-6369
6	AM60036-6	11-31-6370
8	AM60036-8	11-31-6371
16	AM60036-16	11-31-6372
6/4	AM60036-46	11-31-8630
8/6	AM60036-68	11-31-8631

⁴ Order numbers are for change tooling for the circuit size.



Basic Press Unit with Plug Insert Terminator

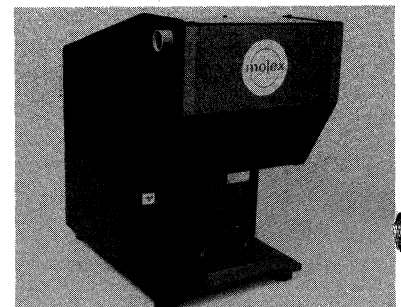


Plug Insert Change Tooling

Power Press

Ordering Information

Eng. No.	Order No.	Description
AM60078-120	11-31-9639	120V
AM60078-220	11-31-9243	220V

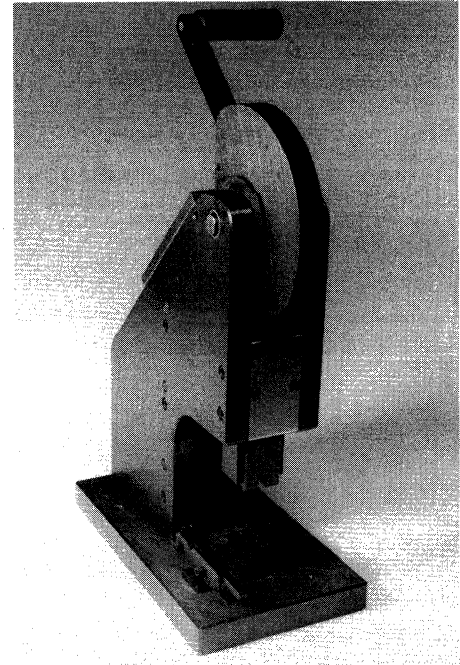


SEMCONN™ Application Tooling



Tooling Required for Round Cable Ferrule Crimping Arbor Press

Arbor Press with Fixturing

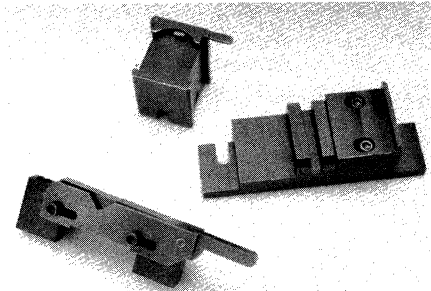


Press and Fixturing

Ordering Information - Arbor Press & Fixturing (without crimp dies)

Eng. No.	Order No.
AM60098	11-21-9507

Fixturing

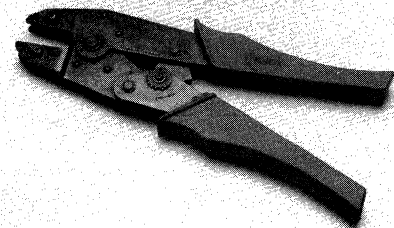


Fixturing only

Ordering Information - Fixturing only (for changeover with plug insert tooling)

Eng. No.	Order No.
AM60063	11-31-7559

Hand Tool

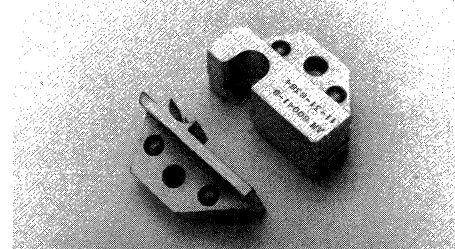


Hand Tool

Ordering Information - Hand Tool (without crimp dies)

Eng. No.	Order No.	
AM60039-6	11-31-6379	For low volume production only

Crimping Dies



Crimping Dies

Ordering Information - Crimping Dies

Circuit Size	Eng. No.	Order No.
4	AM60041-4	11-31-6382
6	AM60041-6	11-31-6383
8	AM60041-8	11-31-6384
16	AM60041-16	11-31-6385



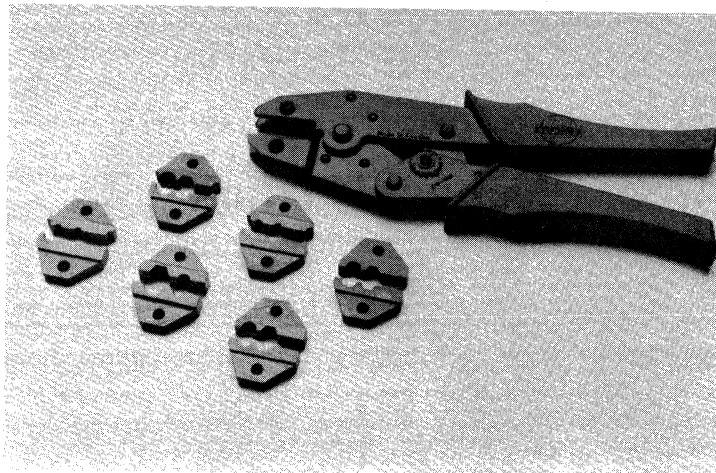
RF Coaxial Connector Crimp Tools



Molex crimp tools offer quality and durability as well as reliability.

Each tool is equipped with safety releases and is fully ratcheted to provide convenience and operating ease for every crimp.

Note: Tools are only required for crimp version connectors.



Hand Tool Ordering Information

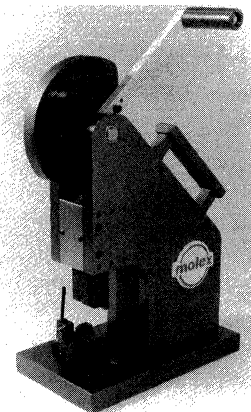
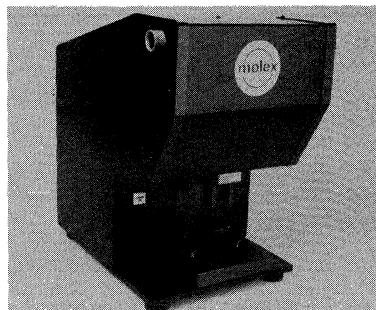
RG/U Cable	Series	Hand Tool		Dies	
		Eng. No.	Order No.	Eng. No.	Order No.
55B, 58C, 141A, 142B, 174A, 188A, 316, 223, 400	BNC, TNC, SMA	AM60039-6	11-31-6379	AM63103-1	11-31-9025
59B, 62B, 71B, 140, 210	BNC, TNC	AM60039-6	11-31-6379	AM63103-2	11-31-9026
174A, 188A, 316	SMA, SMB, SMC, MCX	AM60039-6	11-31-6379	AM63103-3	11-31-9027
178B, 196A*	SMB, SMC, MCX	AM60039-6	11-31-6379	AM63103-4	11-31-9028
Belden 8227, 9207 & IBM 7362211	TWINAX	AM60039-6	11-31-6379	AM63103-5	11-31-9029
108A	BNO, TNO	AM60039-6	11-31-6379	AM63103-6	11-31-9030

Hand tool and dies must be ordered separately.

*For part numbers 73367-142X, 73380-142X, 73384-142X, 73407-142X, 73420-142X, 73424-142X use die number 11-31-9027.

Manual & Electric Press Options

- Employs same crimp dies as hand tool (not included)



Ordering Information

Order No.	Description	Eng. No.
11-31-6356	Basic Manual Press	AM-60026
11-31-7559	Die Holder Fixture	AM-60063
11-21-9507	Basic Press & Fixture	AM-60098
11-31-9639	Electric Press (120 volt)	AM-60078-120
11-31-9243	Electric Press (220 volt)	AM-60078-220

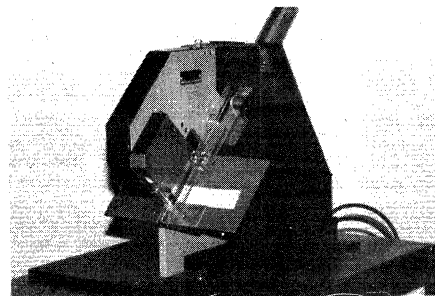
D-Subminiature Connector Tooling



DS50 Series Semi-Automatic Terminator

- Pneumatic only — no electrical source required
- Tube fed
- Feed-to or feed-thru from either side
- Assembles all circuit sizes
- Production rate up to 550 single-ended assemblies per hour
- Minimum cable length 1.5" (39mm)

Specifications
Width - 18"
Length - 20"
Height - 18"
Weight - 60 lbs.



Ordering Information

Description	Eng. No.	Order No.
Base Machine only	AM-60556A1	11-20-0899
DS50 Tool Module	AM-60556F1	11-31-9001

DS50™ Series Arbor Press for .050" (1,27mm) Ribbon Cable Assemblies

- Quick and reliable assembly of cable and connector
- Lightweight and portable
- Interchangeable tooling compatible with competitive prices
- Low cost

AM4700-24

ABTE 90800

Ordering Information

(Preferred Version in the U.S.)

Description	Eng. No.	Order No.
Assembly Press	AM-4700-24	11-21-0679
Tool Change Kit — DS-50	AM-60043	11-21-9391
Universal Adapter Plate	AM-60561	11-31-2176
Cable Shear Module	AM-6800-1	11-10-0081

(Preferred Version in Europe)

*(Not Offered in the U.S.)

Description	Eng. No.	Order No.
*Assembly Press	ABTE 90800	11-28-0000
Tool Change Kit — DS-50	AM-60043	11-21-9391
Universal Adapter Plate	AM-60561	11-31-2176
*Cable Shear Module	ABTE 90801	11-28-0041

Semi-Automatic Crimp Machines for 82024/82023 Series Contacts

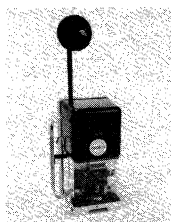
- Terminates AWG 20-28 crimp terminals to wires for D-Subminiature connectors. (See page 5P, this catalog)

Ordering Information (Preferred Version in the Americas and Europe)

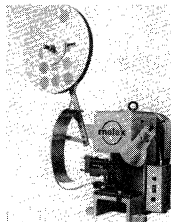
Description	Order No.		Crimp Die
	110 Volts	220 Volts	
TM40 Press	11-05-0018	69002-1000	Contact Factory

(Preferred Version in the Far East)
(Not Offered in the U.S.)

M-15A Press	11-26-0033	—	Contact Factory
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TM40 Press



M-15A Press

Hand Crimp Tools For Loose Terminals



Ordering Information
(Preferred Version in the Americas)

Eng. No.	Order No.
HTR 60675	11-01-0147

Ordering Information
(Preferred Version in Europe and the Far East)

Eng. No.	Order No.
HTR 60642	11-01-0127



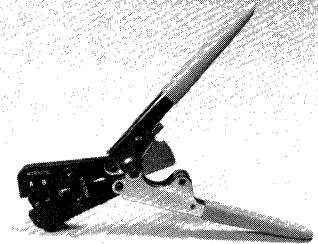
Crimp Tooling



Hand Crimpers

- Ratchet hand crimpers will not open until crimp action is completed
- Adjustable eccentric to allow for larger insulation diameters
- Special application tools available on request
- Wire stop and terminal locator option
- Hand tools available to accommodate AWG 12 to 30

See "Hand Tool Cross Reference", pages 25M-28M.



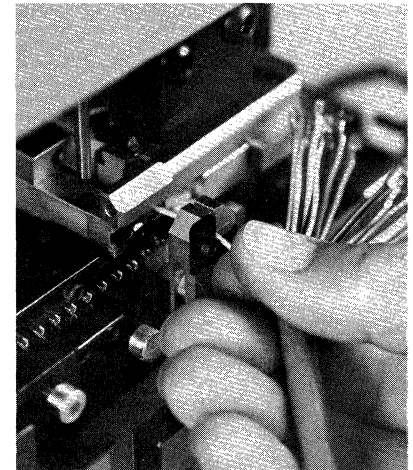
Stripper Crimper

- Adjustable from #20 through #28 AWG, with .110" (2,79mm) dia. insulation max.
- Automatic or conventional foot actuation option
- Automatic operation force 1 oz.
- Stripping unit interchangeable from die to die
- Unit hardened and ground with bearing surfaces chromed
- Heavy gauge OSHA guard with replaceable insert at point of entry
- 1,000 terminations average per hour depending on operator skill

Specifications

Weight - 300 lbs (135 kg) estimated
Electrical - 110 V, 60 Hz, 1 Std.
Size - Ht. 39" (99 cm) (with reel)
Bench Space - Front 36" x 19" deep (91,4 cm x 48 cm) (with reel)
Free Wire Length - Approximately 1 3/4" (44,5mm)
Air - 60 psig

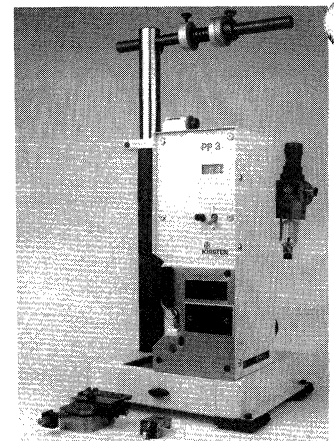
(Preferred Version in the U.S.)



Euro Stripper Crimper TM-80 Series

- Industry standard units (Kirsten, Crimp Technik, Artos brands, etc.)
- Applicators designed according to Molex specifications
- Equipment available stripper/crimper machines, crimp presses and dies
- Processes wires of less than 0.130 sq. mm cross section area

(Not Available in the U.S.)



Ordering Information (Preferred Version in Europe)

Terminal Order No.	AWG	Applicator Order No.	P.T. Kit Order No.
90119-01XX	22-24	69015-1020	69015-1025
90119-01XX	26-28	69015-1021	69015-1030
90146-01XX	22-24	69015-1035	69015-1040
90146-01XX	26-28	69015-1036	69015-1045
90100/103	28-32	69015-6000	69015-6005
90100/103	22-26	69015-6001	69015-6010
90100/103	18-20	69015-6002	69015-6015
90290	28-32	69015-6025	69015-6030
90290	22-26	69015-6026	69015-6035
90290	18-20	69015-6027	69015-6040

Molex 3BF Bench Press

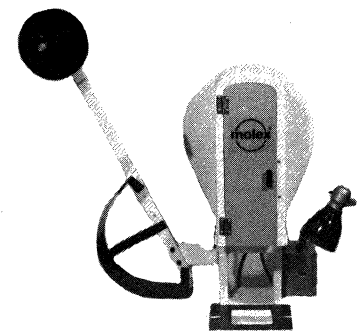
- 1,500 to 2,500 crimps per hour depending on operator speed
- Meets OSHA requirements
- Reliable consistent crimp heights
- Accommodates crimp dies, notching dies, and base unit with TM40 terminators

Specifications

Electrical - 110V AC, 60 Hz, and 200V AC, 50 Hz
Size - 12" (30cm) wide x 18" (46cm) deep x 27" (69cm) high
Weight - 250 lbs. (112,5kg)

Ordering Information

	Eng. No.	Order No.
Press Only	P4979AU	11-05-0003



Base Unit/Terminator For Use With 3BF Press



Base Unit for Use in 3BF Press

- Adapts to 3BF press to accommodate TM40 terminator
- Low cost method of achieving flexibility in terminating various contact configurations in the same press
- Wire gauge changeover time is minimal and simplified
- Adjustable conductor crimp heights in increments of .001" (0,025mm) total adjustment of .025" (0,635mm)
- Adjustable insulation crimp heights, increments of .008" (0,203mm) total adjustment of .064" (1,626mm)
- Adjustable positive feed positioning
- No press ram adjustment after initial set-up
- Utilizes standard TM-40 tooling that is readily available from the factory
- Fits many industry standard presses

Specifications

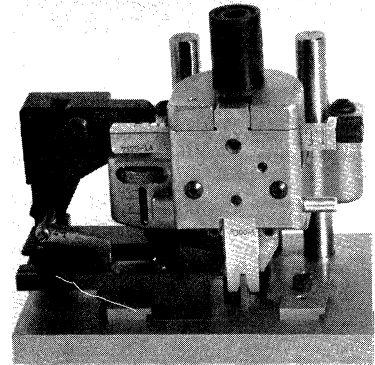
Size - 5" (12,7cm) deep x 7½" (19cm) wide x 6½" (16,5mm) high

Weight - Approx. 16 lbs. (7,2kg)

Ordering Information

Eng. No.	Order No.
BU 7179	11-19-3001

See "Base Unit Terminator Cross Reference," pages 22M-24M



Terminal	Base Unit With Terminator		Change Over Terminator Dies		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
1189-1190	11-07-3001	UT8300A	11-40-2001	T8300A	11-40-3001	K8300A
1219	N/A	STD	11-40-2165	T8369A	11-40-3157	K8369A
1220	N/A	STD	11-40-2166	T8369B	11-40-3158	K8369B
1380-1381	11-07-3002	UT8300B	11-40-2002	T8300B	11-40-3002	K8300B
1433-1434	11-07-3003	UT8300C	11-40-2003	T8300C	11-40-3003	K8300C
1450-1451	11-07-3001	UT8300A	11-40-2001	T8300A	11-40-3001	K8300A
1457-2	11-07-3010	UT8307B	11-40-2010	T8307B	11-40-3010	K8307B
1457-1	11-07-3009	UT8307B	11-40-2009	T8307A	11-40-3009	K8307A
1508-1 16-20 ga. 14-18 ga.	11-07-3087	UT8351B	11-40-2118	T8351B	11-40-3116	K8351B
	11-07-3086	UT8351A	11-40-2117	T8351A	11-40-3115	K8351A
1559	N/A	STD	DIE			N/A
1560-1561	11-07-3004	UT8302A	11-40-2004	T8302A	11-40-3004	K8302A
1589	11-07-3002	UT8300B	11-40-2002	T8300B	11-40-3002	K8300B
1590	11-07-3002	UT8300B	11-40-2002	T8300B	11-40-3002	K8300B
1786-1787	11-07-3004	UT8302A	11-40-2004	T8302A	11-40-3004	K8302A
1793						
1797	11-07-3005	UT8303A	11-40-2005	T8303A	11-40-3005	K8303A
1799	N/A	STD	DIE			N/A
1854-1855	11-07-3006	UT8302B	11-40-2006	T8302B	11-40-3006	K8302B
1881-2	11-07-3040	UT8300J	11-40-2083	T8300J	11-40-3083	K8300J
1881-3	11-07-3041	UT8300K	11-40-2084	T8300K	11-40-3084	K8300K
1900-1901	N/A	STD	11-40-2163	T8368A		N/A
1917	11-07-3005	UT8303A	11-40-2005	T8303A	11-40-3005	K8303A
1929	11-07-3014	UT8311A	11-40-2014	T8311A	11-40-3014	K8311A
1943	11-07-3035	UT8319A	11-40-2035	T8319A	11-40-3035	K8319A
1973	11-07-2048	UT8300F	11-40-2048	T8300F	11-40-3002	K8300R
2012	11-07-3005	UT8303A	11-40-2005	T8303A	11-40-3005	K8303A
2014	11-07-3011	UT8303B	11-40-2011	T8303B	11-40-3011	K8303B
2046-2047	N/A	STD	11-40-2164	T8368B		N/A
2107	11-03-3013	UT8311B	11-40-2013	T8311B	11-40-3013	K8311B
2123	11-07-3014	UT8311A	11-40-2014	T8311A	11-40-3014	K8311A
2125	11-07-3013	UT8311B	11-40-2013	T8311B	11-40-3013	K8311B
2151-2152	11-07-3002	UT8300B	11-40-2002	T8300B	11-40-3002	K8300B
2176	11-07-3015	UT8312A	11-40-2015	T8312A	11-40-3015	K8312A
2189-2190	11-07-3006	UT8302B	11-40-2006	T8302B	11-40-3006	K8302B
2192	11-07-3003	UT8300C	11-40-2003	T8300C	11-40-3003	K8300C
2236-2237	N/A	STD	DIE			N/A
2269	11-07-3001	UT8300A	11-40-2001	T8300A	11-40-3001	K8300A
2273	11-07-3002	UT8300B	11-40-2002	T8300B	11-40-3002	K8300B
2282-2283	11-07-3090	UT8354A	11-40-2121	T8354A	11-40-3119	K8354A
2328	11-07-3015	UT8312A	11-40-2015	T8312A	11-40-3015	K8312A
2477-2478	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
2482	N/A	STD	DIE			
2576	11-07-3015	UT8312A	11-40-2015	T8312A	11-40-3015	K8312A
2578	11-07-3008	UT8301BX	11-40-2097	T8301BX	11-40-3017	K8301BX
2679						
2697-1	N/A	STD	DIE			
2697-2	N/A	STD	DIE			
2698	11-07-3015	UT8312A	11-40-2006	T8302B	11-40-3015	K8312A
2699	N/A	STD	DIE			
2717	11-07-3006	UT8302B	11-40-2006	T8302B	11-40-3006	K8302B
2759	11-07-3012	UT8304AX	11-40-2100	T8304AX	11-40-3100	K8304AX
2776 16-20 ga. 14-18 ga.	11-07-3087	UT8351B	11-40-2118	T8351B	11-40-3116	K8351B
	11-07-3086	UT8351A	11-40-2117	T8351A	11-40-3115	K8351A



Base Unit/Terminator For Use With 3BF Press



Terminal	Base Unit with Terminator		Change Over Terminator Dies		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
2799		UT8312B	11-40-2154	T8312B	11-40-2154	K8312B
2855						
2870	11-07-3020	UT8300E	11-40-2020	T8300E	11-40-3020	K8300E
2878	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
2951	11-07-3021	UT8317A	11-40-2021	T8317A	11-40-3021	K8317A
3100	11-07-3011	UT8303B	11-40-2011	T8303B	11-40-3011	K8303B
3233	11-07-3022	UT8308A	11-40-2022	T8308A	11-40-3022	K8308A
3382	11-07-3044	UT3044	11-40-2103	T8305BX	11-40-3103	K8305BX
3399	11-07-3045	UT8330B	11-40-2062	T8330B	11-40-3062	K8330B
3400	11-07-3048	UT8305CX	11-40-2104	T8305CX	11-40-3104	K8305CX
3435	11-07-3049	UT8305DX	11-40-2105	T8305DX	11-40-3105	K8305DX
4018	11-07-3069	UT8301DX	11-40-2099	T8301DX	11-40-3099	K8301DX
4259	11-07-3046	UT8304BX	11-40-2101	T8304BX	11-40-3101	K8304BX
4268	11-07-3001	UT8300A	11-40-2001	T8300A	11-40-3101	K8300A
4272	11-07-3002	UT8300B	11-40-2002	T8300B	11-40-3002	K8300B
4292	11-07-3003	UT8300C	11-40-2003	T8300C	11-40-3003	K8300C
4295	11-07-3005	UT8303A	11-40-2005	T8303A	11-40-3005	K8303A
4296	11-07-3047	UT8325A	11-40-2047	T8325A	11-40-3047	K8325A
4296-1	N/A	STD	DIE			
4366	11-07-3005	UT8303A	11-40-2005	T8303A	11-40-3005	K8303A
4428-1	11-07-3026	UT8306B	11-40-2026	T8306B	11-40-3026	K8306B
4428-3						
4428-7	11-07-3025	UT8306A	11-40-2025	T8306A	11-40-3025	K8306A
4499	N/A	STD	DIE			
4529	11-07-3081	UT8302C	11-40-2106	T8302C	11-40-3107	K8302C
4548						
4549			11-40-2001	T8300A		
4550	11-07-3001	UT8300A	11-40-2001	T8300A	11-40-3001	K8300A
4559			11-40-2006	T8302B		
4563						
4573	11-07-3011	UT8303B	11-40-2011	T8303B	11-40-3001	K8303B
4578	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
4583	11-07-3050	UT8337A	11-40-2075	T8337A	11-40-3075	K8337A
4706	11-07-3051	UT8324A	11-40-2042	T8324A	11-40-3042	K8324A
4706-1	11-07-3051	UT8324A	11-40-2042	T8324A	11-40-3042	K8324A
4706-2	11-07-3051	UT8324A	11-40-2042	T8324A	11-40-3042	K8324A
4706-3	11-07-302	UT8324B	11-40-2043	T8324B	11-40-3043	K8324B
4706-3 (overlap)	11-07-3083	UT8324B	11-40-2045	T8324D	11-40-3045	K8324D
4785	11-07-3031	UT8315A	11-40-2031	T8315A	11-40-3031	K8315A
4787-1	11-07-3033	UT8316A	11-40-2033	T8316A	11-40-3033	K8316A
4787-2	11-07-3053	UT8316B	11-40-2094	T8316B	11-40-3094	K8316B
4809	11-07-3017	UT8305AX	11-40-2102	T8305AX	11-40-3102	K8305AX
4811	11-07-3029	UT8310A	11-40-2029	T8310A	11-40-3029	K8310A
4811-1	11-07-3039	UT8310B	11-40-2039	T8310B	11-40-3039	K8310B
4811-A-3	11-07-3029	UT8310A	11-40-2029	T8310A	11-40-3029	K8310A
4811A-4	11-07-3039	UT8310B	11-40-2039	T8310B	11-40-3039	K8310B
4838	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
5005	11-07-3054	UT8327A	11-40-2064	T8327A	11-40-3064	K8327A
5006	11-07-3054	UT8327A	11-40-2064	T8327A	11-40-3064	K8327A
5008	11-07-3055	UT8327B	11-40-2065	T8327B	11-40-3065	K8327B
5009	11-07-3055	UT8327B	11-40-2065	T8327B	11-40-3065	K8327B
5103	11-07-3056	UT8328A	11-40-2056	T8328A	11-40-3056	K8328A
5139	11-07-3046	T8304AX	11-40-2100	T8304AX	11-40-3100	K8304AX
5167	11-07-3109	UT8377A	11-40-2181	T8377A	11-40-3183	K8377A
5168	11-07-3110	UT8377A	11-40-2191	T8377B	11-40-3196	K8377B
5190	11-07-3039	UT8310B	11-40-2039	T8310B	11-40-3039	K8310B
5194	11-07-3057	UT8336A	11-40-2073	T8336A	11-40-3073	K8336A
5205	11-07-3058	UT8327C	11-40-2066	T8327C	11-40-3066	K8327C
5206	11-07-3058	UT8327C	11-40-2066	T8327C	11-40-3066	K327C
5225	11-07-3059	UT8336B	11-40-2074	T8336B	11-40-3074	K8336B
5230	11-07-3060	UT8332A	11-40-2069	T8332A	11-40-3069	K8332A
5241	11-07-3061	UT8329A	11-40-2063	T8329A	11-40-3063	K8329A
5263	11-07-3062	UT8324A	11-40-2089	T8342A	11-40-3056	K8328A
5294	11-07-3063	UT8333A	11-40-2070	T8333A	11-40-3070	K8333A
5298	11-07-3102	UT8350A	11-40-2115	T8350A	11-40-3113	K8350A
5378T & T2			11-40-2149	T8362A		
5394	11-07-3064	UT8334A	11-40-2071	T8334A	11-40-3071	K8334A
5479		UT8345A	11-40-2107	T8345A	11-40-3108	K8345A
5556/5558	11-07-3088	UT8342A	11-40-2119	T8352A	11-40-3117	K8352A
5556T2/5558T2	11-07-3103	UT8352B	11-40-2137	T8352B	11-40-3133	K8352B
5556T3/5558T3	11-07-3112	UT8352C	11-40-2187	T8352C	11-40-3189	K8352C
5659	11-07-3091	UT8343A	11-40-2091	T8343A	11-40-3091	K8343A
6043						



Base Unit/Terminator For Use With 3BF Press



Terminal	Base Unit with Terminator		Change Over Terminator Dies		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
6045	11-07-3065	UT8303D	11-40-2046	T8303D	11-40-3046	K8303D
6093-1						
6252						
6271						
6308	11-07-3003	UT8300C	11-40-2003	T8300C	11-40-3003	K8300C
6310	11-07-3001	UT8300A	11-40-2001	T8300A	11-40-3001	K8300A
6361						
6362						
6379	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
6438	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
6459						
6482	11-07-3113	UT8364A	11-40-2151	T8364A	11-40-3144	K8364A
6664						
6722						
6757	11-07-3066	UT8330A	11-40-2061	T8330A	11-40-3061	K8330A
6770	11-07-3004	UT8302A	11-40-2004	T8302A	11-40-3004	K8302A
6772	11-07-3004	UT8302A	11-40-2004	T8302A	11-40-3004	K8302A
6778	11-07-3067	UT8301CX	11-40-2098	T8301CX	11-40-3098	K8301CX
6796	11-07-3006	UT8302B	11-40-2006	T8302B	11-40-3006	K8302B
6838	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
6850						
6873	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
6888-2						
6893	11-07-3003	UT8300C	11-40-2003	T8300C	11-40-3003	K8300C
6894	11-07-3003	UT8300C	11-40-2003	T8300C	11-40-3003	K8300C
6937	N/A	STD	DIE			
6963-3	N/A	STD	DIE			
6963-4	N/A	STD	DIE			
7238	11-07-3098	UT8300P	11-40-2131	T8300P	11-40-3128	K8300P
7239	11-07-3098	UT8300P	11-40-2131	T8300P	11-40-3128	K8300P
7242	11-07-3050	UT8337A	11-40-2075	T8337A	11-40-3075	K8337A
7258	11-07-3008	UT8301BX	11-40-2097	T8301BX	11-40-3097	K8301BX
7283						
7291	11-07-3004	UT8302A	11-40-2004	T8302A	11-40-3004	K8302A
7293	11-07-3003	UT8300X	11-40-2003	T8300C	11-40-3003	K8300C
7319	11-07-3032	UT8315B	11-40-2032	T8315B	11-40-3032	K8315B
7423						
7430	11-07-3027	UT8309A	11-40-2027	T8309A	11-40-3027	K8309A
7457	11-07-3034	UT8318A	11-40-2034	T8318A	11-40-3034	K8318A
7486						
7499	11-07-3114	UT8307C	11-40-2172	T8307C	11-40-3200	K8307C
7511						
7676	11-07-3015	UT8312A	11-40-2015	T8312A	11-40-3015	K8312A
7762-1						
7762-2A						
7871						
7879	11-07-3037	UT8322A	11-40-2037	T8322A	11-40-3037	K8322A
8058	11-07-3020	UT8300E	11-40-2020	T8300E	11-40-3020	K8300E
8126	11-07-3115	UT8371A	11-40-2173	T8371A	11-40-3175	K8371A
8177	11-07-3068	UT8344A	11-40-2095	T8344A	11-40-3095	K8344A
8662	11-07-3036	UT8321A	11-40-2036	T8321A	11-40-3036	K8321A
8720						
8818/8918	11-07-3069	UT8301BK	11-40-2099	T8301DX	11-40-3099	K8301DX
8960	11-07-3036	UT8321A	11-40-2036	T8321A	11-40-3096	K8321A
8980-3	11-07-3082	UT8347A	11-40-2110	T8347A	11-40-3110	K8347A
30105	11-07-3116	UT8372A	11-40-2176	T8372A	11-40-3178	K8372A
30149-1	11-07-3142	UT8367A	11-40-2182	T8376A	11-40-3184	K8376A
40140	11-07-3007	UT8301AX	11-40-2096	T8301AX	11-40-3096	K8301AX
40144	11-07-3038	UT8322B	11-40-2038	T8322B	11-40-3038	K8322B
40229	11-07-3007	UT8301AX	11-40-2097	T8301BX	11-40-3097	K8301BX
40391-1 Up	11-07-3117	UT8365A	11-40-2153	T8365A	11-40-3148	K8365A
40391-2 Up	11-07-3118	UT8365B	11-40-2155	T8365B	11-40-3150	K8365B
40445	11-07-3012	UT8304AX	11-40-2100	T8304AX	11-40-3100	K8304AX
40641	11-07-3069	UT8301DX	11-40-2099	T8301DX	11-40-3099	K8301DX
40682	11-07-3070	UT8338A	11-40-2076	T8338A	11-40-3076	K8338A
40901	11-07-3071	UT8335A	11-40-2072	T8335A	11-40-3072	K8335A
41422-1	11-07-3123	UT8379A	11-40-2192	T8379A	11-40-3193	K8379A
41422-2	11-07-3124	UT8379B	11-40-2193	T8379B	11-40-3194	K8379B
41483	11-07-3125	UT8300Q	11-40-2177	T8300Q	11-40-3179	K8300Q
41817	11-07-3089	UT8353A	11-40-2120	T8353A	11-40-3118	K8343A
41951 (24-30)	11-07-3126	UT8367A	11-40-2157	T8367A	11-40-3152	K8367A



Base Unit/Terminator For Use With 3BF Press



Terminal	Base Unit with Terminator		Change Over Terminator Dies		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
41951 (32-36)	11-07-3127	UT8367B	11-40-2158	T8367B	11-40-3153	K8367B
41951 (22-24)	11-07-3128	UT8367C	11-40-2159	T8367C	11-40-3154	K8367A
42001	11-07-3129	UT8370A	11-40-2171	T8370A	11-40-3173	K8370A
42023	11-07-3130	UT8384A	11-40-2197	T8384A	11-40-3198	K8384A
42024	11-07-3131	UT8384B	11-40-2198	T8384B	11-40-3199	K8384B
42158 (24-30)	11-07-3132	UT8378A	11-40-2188	T8378A	11-40-3190	K8378A
42158 (22-24)	11-07-3133	UT8378B	11-40-2189	T8378B	11-40-3191	K8378B
42278	11-07-3134	UT8386A	11-40-2201	T8386A	11-40-3203	K8386A
50011	11-07-3135	UT8359A	11-40-2136	T8359A	11-40-3132	K8359A
50012	11-07-3136	UT8361A	11-40-2141	T8361A	11-40-3135	K8361A
50013		UT8361A	11-40-2141	T8361A	11-40-3135	K8361A
50034	11-07-3137	UT8366A	11-40-2156	T8366A	11-40-3151	K8366A
50058-8000 (28-32)	11-07-3119	UT8382A	11-40-2190	T8382A	11-40-3192	K8382A
50061-8000 (28-32)	11-07-3121	UT8383A	11-40-2194	T8383A	11-40-3195	K8383A
50079-8000 (26-28)	11-07-3120	UT8382B	11-40-2199	T8382B	11-40-3201	K8382B
50080-8000 (26-28)	11-07-3122	UT8383B	11-40-2200	T8383B	11-40-3202	K8383B
70021 (22-24)	11-07-3072	UT8341C	11-40-2087	T8341C	11-40-3087	K8341C
70021 (24-30)	11-07-3073	UT8341A	11-40-2085	T8341A	11-40-3085	K8341A
70021 (32-36)	11-07-3074	UT8341B	11-40-2086	T8341B	11-40-3086	K8341B
70058 (22-24)	11-07-3078	UT8331C	11-40-2090	T8331C	11-40-3090	K8331C
70058 (24-30)	11-07-3079	UT8331A	11-40-2068	T8331A	11-40-3068	K8331A
70058 (32-36)	11-07-3080	UT8331B	11-40-2077	T8331B	11-40-3077	K8331B
70075	11-07-3075	UT8339B	11-40-2078	T8339A	11-40-3078	K8339A
70076	11-07-3076	UT8339B	11-40-2079	T8339B	11-40-3079	K8339B
70078	11-07-3077	UT8340A	11-40-2080	T8340A	11-40-3080	K8340A
70816 (32-24)	11-07-3092	UT8331D	11-40-2109	T8331D	11-40-3109	K8331D
71851 (22-24)	11-07-3078	UT8331C	11-40-2090	T8331C	11-40-3090	K8331C
71851 (24-30)	11-07-3079	UT8331A	11-40-2068	T8331A	11-40-3068	K8331A
71851 (32-36)	11-07-3080	UT8331B	11-40-2077	T8331B	11-40-3077	K8331B
82023-0X02						
82024-0X01	11-07-3138	UT8356A	11-40-2123	T8356A	11-40-3121	K8356A
82024-0X03						
82024-0X01	11-07-3139	UT8356B	11-40-2138	T8356B	11-40-3134	K8356B
90021	11-07-3140	UT8363A	11-40-2147	T8363A	11-40-3142	K8363A
90198	11-07-3141	UT8385A	11-40-2196	T8385A	11-40-3197	K8385A

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Hand Tool Cross Reference



HAND TOOL CROSS REFERENCE - When ordering Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot (1 meter) wire sample to Molex with the order.

Terminal	Stripping Length In. (mm)	Wire Range AWG (XX)² mm	Insul. Dia. Max. In. (mm)	Hand Tool Eng. No.	Hand Tool Order No.	Extractor Eng. No.	Extractor Order No.	Insertion Eng. No.	Insertion Order No.
1189-1190	.156/.218 (3,96/5,53)	14-20 (2,00/0,50mm)²	.140 (3,55)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
1220-1219	.171/.203 (4,34/5,15)	12-14 (3,25/2,00mm)²	.165 (4,19)	HTR-4067	11-01-0040	HT-4112	11-03-0021	N/A	N/A
1380-1381	.156/.218 (3,96/5,53)	18-26 (0,80/0,12mm)²	.120 (3,04)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
1433-1434	.156/.218 (3,96/5,53)	22-30 (0,35/0,05mm)²	.060 (1,52)	HTR-2262	• 11-01-0006	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
1450-1451	.156/.218 (3,96/5,53)	14-20 (2,00/0,50mm)²	.140 (3,55)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
1457-2	.156/.218 (3,96/5,53)	14-16 (2,00/1,30mm)²	.140 (3,55)	HTR-1031-E	• 11-01-0084	N/A	N/A	HT-1461	11-02-0007
1457-1	.156/.218 (3,96/5,53)	18-22 (0,80/0,35mm)²	.102 (2,59)	HTR-1031-E	• 11-01-0084	N/A	N/A	HT-1461	11-02-0007
1508-1	.156/.218 (3,96/5,53)	14-20 (2,00/0,50mm)²	.140 (3,55)	HTR-2450A	11-01-0101	HTA-2174	• 11-03-0016	N/A	N/A
1559									
1560-1561	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm)²	.110 (2,79)	HTR-1719-C	• 11-01-0008	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001
1589	.156/.218 (3,96/5,53)	18-26 (0,80/0,12mm)²	.120 (3,04)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
1590	.156/.218 (3,96/5,53)	18-26 (0,80/0,12mm)²	.120 (3,04)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
1786-1787	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm)²	.110 (2,79)	HTR-1719-C	• 11-01-0008	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001
1793	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm)²	.110 (2,79)	HTR-1719-C	• 11-01-0008	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001
1797	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm)²	.110 (2,79)	HTR-6115	11-01-0058	HT-1884	• 11-03-0003		
1799	.125/.187 (3,17/4,74)	18-24 (0,80/0,20mm)²	.125 (3,05)	HTR-1719-C	• 11-01-0008	HT-1884	• 11-03-0003		
1854-1855	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm)²	.070 (1,77)	HTR-2262-A	• 11-01-0037	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001
1881-2	.156/.218 (3,96/5,53)	16-24 (1,30/0,20mm)²	.135 (3,42)	HTR-1031-E	• 11-01-0084	N/A	N/A	N/A	N/A
1881-3	.156/.218 (3,96/5,53)	24-30 (0,20/0,05mm)²	.060 (1,52)	HTR-2262	• 11-01-0006	N/A	N/A	N/A	N/A
1900-1901	.156/.218 (3,96/5,53)	10-14 (5,25/2,00mm)²	.180 (4,57)	HTR-4067	11-01-0040	HT-2066-A	11-03-0008	N/A	N/A
1917	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm)²	.110 (2,79)	HTR-1719-C	• 11-01-0008	HT-1884	• 11-03-0003		
1929	.125/.156 (3,17/3,96)	18-22 (0,80/0,35mm)²	.110 (2,79)	HTR-4059-A	11-01-0088	N/A	N/A		
1943	.125/.187 (3,17/4,74)	18-24 (0,80/0,20mm)²	.110 (2,79)	HTR-1719-C	• 11-01-0008	HT-2215	11-03-0010		
1973	.156/.218 (3,96/5,53)	16-22 (1,30/0,35mm)²	.120 (3,04)	HTR-1031-E	• 11-01-0084	HT-2634	11-03-0017	HT-1353	• 11-02-0003
2012	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm)²	.110 (2,79)	HTR-1719-C	• 11-01-0008	HT-1884	• 11-03-0003		
2014	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm)²	.070 (1,77)	HTR-2262	• 11-01-0006	HT-1884	• 11-03-0003		
2046-2047	.156/.218 (3,96/5,53)	16-20 (1,30/0,50mm)²	.120 (3,04)	HTR-1031-E	• 11-01-0084	HT-2066-A	11-03-0008		
2107	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm)²	.070 (1,77)	HTR-4059-A	11-01-0088	N/A	N/A		
2123	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm)²	.110 (2,79)	HTR-4059-A	11-01-0088	N/A	N/A		
2125	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm)²	.070 (1,77)	HTR-4059-A	11-01-0088	N/A	N/A		
2151-2152	.156/.218 (3,96/5,53)	18-26 (0,80/0,12mm)²	.120 (3,04)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
2176	.140/.187 (3,55/4,74)	14-22 (2,00/0,35mm)²	.140 (3,55)	HTR-2450A	11-01-0101	HTA-2174	• 11-03-0016		
2189-2190	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm)²	.070 (1,77)	HTR-2262-A	• 11-01-0037	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001
2192	.156/.218 (3,96/5,53)	24-30 (0,20/0,05mm)²	.060 (1,52)	HTR-2262	• 11-01-0006	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
2236-2237	.156/.218 (3,96/5,53)	20-22 (0,50/0,35mm)²	.060 (1,52)	HTR-1031-E	• 11-01-0084	HT-2066-A	11-03-0008	HT-1353	• 11-02-0003
2269	.156/.218 (3,96/5,53)	14-20 (0,50mm)²	.140 (3,55)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
2273	.156/.218 (3,96/5,53)	18-22 (0,80/0,35mm)²	.120 (3,04)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
2282-2283	.156/.218 (3,96/5,53)	14-18 (2,00/0,80mm)²	.140 (3,55)	HTR-1031-E	• 11-01-0084	HT-2066-A	11-03-0008	HT-1353	• 11-02-0003

• U.S. Standard Product, available through Molex franchised distributors



Hand Tool Cross Reference



HAND TOOL CROSS REFERENCE - When ordering Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot (1 meter) wire sample to Molex with the order.

Terminal	Stripping Length In. (mm)	Wire Range AWG (XX) ² mm	Insul. Dia. Max. In. (mm)	Hand Tool Eng. No.	Hand Tool Order No.	Extractor Eng. No.	Extractor Order No.	Insertion Eng. No.	Insertion Order No.
2328	.140/.187 (3,55/4,74)	14-22 (2,00/0,35mm) ²	.110 (2,79)	HTR-2450A	11-01-0101	HTA-2174	• 11-03-0016		
2477-2478	.100/.125 (2,54/3,17)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-2445-A	• 11-01-0026	HTA-2174	• 11-03-0016		
2482	.187/.218 (4,74/5,53)	12-14 (3,25/2,00mm) ²	.165 (4,19)	HTR-2843	11-01-0044	HTA-2481	11-03-0027	N/A	N/A
2576	.140/.187 (3,55/4,74)	14-22 (2,00/0,35mm) ²	.140 (3,55)	HTR-2450A	11-01-0101	HTA-2174	• 11-03-0016	N/A	N/A
2578	.100/.125 (2,54/3,17)	22-26 (0,35/0,12mm) ²	.060 (1,52)	HTR-2445-A	11-01-0026	HTA-2174	• 11-03-0016		
2679	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-1719-C	• 11-01-0008	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001
2697-1	.156/.218 (3,96/5,53)	12-20 (3,25/0,50mm) ²	.188 (4,77)	HTR-1758	11-01-0011	HT-934	11-03-0001	N/A	N/A
2697-2	.156/.218 (3,96/5,53)	12-20 (3,25/0,50mm) ²	.230 (5,84)	HTR-2266	• 11-01-1026	HT-934	11-03-0001	N/A	N/A
2698	.156/.218 (3,96/5,53)	14-22 (2,00/0,35mm) ²	.140 (3,55)	HTR-2450A	11-01-0101	HTA-2174	• 11-03-0016	N/A	N/A
2699	.156/.218 (3,96/5,53)	12-20 (3,25/0,50mm) ²	.188 (4,77)	HTR-1758	11-01-0011	HT-934	11-03-0001	N/A	N/A
2717	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm) ²	.070 (1,77)	HTR-2262-A	• 11-01-0037	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001
2759	.100/.125 (2,54/3,17)	24-30 (0,20/0,05mm) ²	.062 (1,57)	HTR-2262-A	• 11-01-0037	HT-2759	• 11-03-0022	HT-2813	11-02-0004
2776	.156/.218 (3,96/5,53)	14-20 (2,00/0,35mm) ²	.140 (3,55)	HTR-2090-A	11-01-0019	HTA-2174	• 11-03-0016	N/A	N/A
2799	.156/.218 (3,96/5,53)	22-28 (0,35/0,07mm) ²	.070 (1,77)	HTR-2262	• 11-01-0006	HTA-2174	• 11-03-0016		
2855	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-1719-C	• 11-01-0008	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001
2870-2871	.156/.218 (3,96/5,53)	22-24 (0,35/0,20mm) ²	.070 (1,77)	HTR-7176	11-01-0097	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
2878	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-2445-A	11-01-0026	HTA-2174	• 11-03-0016		
2951	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm) ²	.070 (1,77)	HTR-2262-A	• 11-01-0037				
3100	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm) ²	.070 (1,77)	HTR-2262	• 11-01-0006	HT-1884	• 11-03-0003		
3382	N/A		.053 (1,35)						
3399	N/A		.053 (1,35)						
3400	N/A		.039 (0,99)						
3435	N/A								
4018	.100/.125 (2,54/3,17)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-2445-A	11-01-0026	HTA-2174	• 11-03-0016		
4259	.100/.125 (2,54/3,17)	22-30 (0,35/0,05mm) ²	.070 (1,77)	HTR-7051	11-01-0072				
4268	.156/.218 (3,96/5,53)	14-20 (0,50mm) ²	.140 (3,55)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
4272	.156/.218 (3,96/5,53)	18-22 (0,80/0,35mm) ²	.120 (3,04)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
4292	.156/.218 (3,96/5,53)	22-30 (0,35/0,05mm) ²	.060 (1,52)	HTR-2262	• 11-01-0006	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
4295	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-1719-C	• 11-01-0008	HT-1884	• 11-03-0003		
4296	.156/.218 (3,96/5,53)	16-22 (1,30/0,35mm) ²	.120 (3,04)	HTR-1031-E	• 11-01-0084	HT-4981	11-03-0025	N/A	N/A
4296-1	.156/.218 (3,96/5,53)	16-22 (1,30/0,35mm) ²	.120 (3,04)	HTR-1031-E	• 11-01-0084	HT-4981	11-03-0025	N/A	N/A
4366	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-6115	11-01-0058	HT-1884	• 11-03-0003	N/A	N/A
4428-1	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-2445-A	11-01-0026				
4428-3	.125/.156 (3,17/3,96)	22-26 (0,35/0,12mm) ²	.062 (1,57)	HTR-2445-A	11-01-0026				
4499	.125/.187 (3,17/4,74)	18-24 (0,80/0,20mm) ²	.125 (3,05)	HTR-1719-C	• 11-01-0008	HT-1884	• 11-03-0003		
4529	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-1719-C	• 11-01-0008	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001
4548	.100/.125 (2,54/3,17)	24-30 (0,20/0,05mm) ²	.062 (1,57)	HTR-2262-A	• 11-01-0037	HT-2759	11-03-0022	N/A	N/A
4549	.156/.218 (3,96/5,53)	14-20 (2,00/0,50mm) ²	.140 (3,55)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
4550	.156/.218 (3,96/5,53)	14-20 (2,00/0,50mm) ²	.140 (3,55)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003

• U.S. Standard Product, available through Molex franchised distributors



Hand Tool Cross Reference



HAND TOOL CROSS REFERENCE - When ordering Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot (1 meter) wire sample to Molex with the order.

Terminal	Stripping Length In. (mm)	Wire Range AWG (XX) ² mm	Insul. Dia. Max. In. (mm)	Hand Tool Eng. No.	Hand Tool Order No.	Extractor Eng. No.	Extractor Order No.	Insertion Eng. No.	Insertion Order No.
4559	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm) ²	.070 (1,77)	HTR-2262-A	• 11-01-0037	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001
4563	.156/.218 (3,96/5,53)	18-26 (0,80/0,12mm) ²	.120 (3,04)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
4573	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm) ²	.070 (1,77)	HTR-6115	11-01-0058	HT-1884	• 11-03-0003	N/A	N/A
4578	.100/.125 (2,54/3,17)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-2445-A	11-01-0026	HTA-2174	• 11-03-0016		
4583	.125/.156 (3,17/3,96)	22-30 (0,35/0,05mm) ²	.060 (1,52)	HTR-2445-A	11-01-0026	HTA-2174	• 11-03-0016		
4706	.234/.250 (5,94/6,35)	18-22 Std. Cr. (0,80/0,35mm) ²	.118 (2,99)	HTR-4971-A	11-01-0065	N/A	N/A	N/A	N/A
4706-1	.234/.250 (5,94/6,35)	18 Std Cr. (0,80mm) ²	.118 (2,99)	HTR-4971-B	11-01-0066	N/A	N/A	N/A	N/A
4706-2	.234/.250 (5,94/6,35)	18-22 Std. Cr. (0,80/0,35mm) ²	.118 (2,99)	HTR-4971-C	11-01-0067	N/A	N/A	N/A	N/A
4706-3	.234/.250 (5,94/6,35)	18-22 Std. Cr. (0,80/0,35mm) ²	.110 (2,79)	HTR-4971-D	11-01-0068	N/A	N/A	N/A	N/A
4809	.100/.125 (2,54/3,17)	22-30 (0,35/0,05mm) ²	.062 (1,57)	HTR-2262-A	• 11-01-0037	HT-2759	11-03-0022	N/A	N/A
4811	.234/.250 (5,94/6,35)	22-24 (0,35/0,20mm) ²	.100 (2,54)	HTR-4971-F	11-01-0086	N/A	N/A	N/A	N/A
4811-1	.234/.250 (5,94/6,35)	22-26 (0,35/0,12mm) ²	.060 (1,52)	HTR-4971-E	11-01-0085	N/A	N/A	N/A	N/A
4811A-3	.234/.250 (5,94/6,35)	22-24 (0,35/0,20mm) ²	.100 (2,54)						
4811A-4	.234/.250 (5,94/6,35)	22-26 (0,35/0,12mm) ²	.060 (1,52)						
4838	.100/.125 (2,54/3,17)	20-22 (0,50/0,35mm) ²	.095 (2,41)	HTR-2445-A	11-01-0026	HTA-2174	• 11-03-0016	N/A	N/A
5033	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm) ²	.070 (1,77)			N/A	N/A	N/A	N/A
5103									
5139	.100/.125 (2,54/3,17)	24-30 (0,20/0,05mm) ²	.062 (1,57)	HTR-2262-A	• 11-01-0037	HT-2759	11-03-0022	HT-2813	11-02-0004
5167	.100/.125 (2,54/3,17)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-2445-A	11-01-0026	HTA-2174	• 11-03-0016		
5241									
5556/5558		18-24 (0,80/0,20mm) ²	.051-.118 (1,3-3)	HTR-60622	11-01-0122	HT-60630A	11-03-0038		
		22-28 (0,35/0,04mm) ²	.035-.071 (0,9-1,8)	HTR-60639	11-01-0125	HT-60630A	11-03-0038		
		16 (1,30mm)	.071-.122 (1,8-3,1)	HTR-60670	11-01-0145	HT-60630A	11-03-0038		
6043	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm) ²	.070 (1,77)	HTR-2262	• 11-01-0006	HT-1884	• 11-03-0003		
6045	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-6115	11-01-0058	HT-1884	• 11-03-0003	N/A	N/A
6093-1	.100/.125 (0,35)	22 (0,35/0,20mm) ²	.095 (2,41)	HTR-6177	11-01-0096			N/A	N/A
6252	.100/.125 (2,54/3,17)	22-26 (0,35/0,12mm) ²	.065 (1,65)	HTR-2445-A	11-01-0026	HTA-2174	• 11-03-0016		
6271	.156/.218 (3,96/5,53)	18-22 (0,80/0,35mm) ²	.120 (3,04)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
6308	.156/.218 (3,96/5,53)	22-30 (0,35/0,05mm) ²	.060 (1,52)	HTR-2262	• 11-01-0006	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
6310	.156/.218 (3,96/5,53)	14-20 (2,00/0,50mm) ²	.140 (3,55)	HTR-1031-E	• 11-01-0084	HT-2038	• 11-03-0006	HT-1353	• 11-02-0003
6438	.100/.125 (2,54/3,17)	20-22 (0,50/0,35mm) ²	.095 (2,41)	HTR-2445-A	11-01-0026	HTA-2174	• 11-03-0016	N/A	N/A
6459	.100/.125 (2,54/3,17)	24-30 (0,20/0,05mm) ²	.062 (1,57)	HTR-2262-A	• 11-01-0037	HT-2759	11-03-0022	N/A	N/A
6482	.187/.218 (4,74/5,53)	14-18 (2,00/0,80mm) ²	.140 (3,55)			HT-2481	11-03-0027	N/A	N/A
6722	.156/.218 (3,91/5,53)	12-14 (3,25/2,00mm) ²	.155 (3,94)			HT-7012	11-03-0030	HT-7011	11-02-0010
6757	N/A	#38 AWG (0,0009mm) ²	.039 (1,00)						
6770	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-1719-C	• 11-01-0008	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001
6772	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-1719-C	• 11-01-0008	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001
6778	.100/.125 (2,54/3,17)	24-30 (0,20/0,05mm) ²	.062 (1,57)	HTR-7174	11-01-0093	HTA-2174	• 11-03-0016		
6796	.125/.156 (3,17/3,96)	24-30 (0,20/0,05mm) ²	.070 (1,77)	HTR-2262-A	• 11-01-0037	HT-2285	• 11-03-0002	HT-1807	• 11-02-0001

• U.S. Standard Product, available through Molex franchised distributors



Hand Tool Cross Reference



HAND TOOL CROSS REFERENCE - When ordering Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot (1 meter) wire sample to Molex with the order.

Terminal	Stripping Length In. (mm)	Wire Range AWG (XX) ² mm	Insul. Dia. Max. In. (mm)	Hand Tool Eng. No.	Hand Tool Order No.	Extractor Eng. No.	Extractor Order No.	Insertion Eng. No.	Insertion Order No.
6838	.100/.125 (2,54/3,17)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-2445-A	11-01-0026	HTA-2174	● 11-03-0016		
6850	.156/.218 (3,96/5,53)	16-18 (1,30/0,80mm) ²	.135 (3,42)	HTR-1031-E	● 11-01-0084	HT-2066-A	11-03-0008		
6888-2	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.084 (2,13)	HTR-7052	11-01-0074				
6893	.156/.218 (3,96/5,53)	22-30 (0,35/0,05mm) ²	.060 (1,52)	HTR-2262	● 11-01-0006	HT-2038	● 11-03-0006	HT-1353	● 11-02-0003
6894	.156/.218 (3,96/5,53)	22-30 (0,35/0,05mm) ²	.060 (1,52)	HTR-2262	● 11-01-0006	HT-2038	● 11-03-0006	HT-1353	● 11-02-0003
6937	.125/.156 (3,17/3,96)	20-24 (0,50/0,20mm) ²	N/A	HTR-7064					
6963-3	.156/.187 (3,96/4,74)	14 (2,00mm) ²	N/A						
6963-4	.156/.187 (3,96/4,74)	14 (2,00mm) ²	N/A						
7238-7239	.156/.218 (3,96/5,53)	14-20 (2,00/0,50mm) ²	.140 (3,55)	HTR-1031-E	● 11-01-0084	HT-2038	● 11-03-0006	HT-1353	● 11-02-0003
7242	.125/.156 (3,17/3,96)	22-30 (0,35/0,05mm) ²	.060 (1,52)	HTR-2445-A	11-01-0026	HTA-2174	● 11-03-0016		
7258	.100/.125 (2,54/3,17)	22-26 (0,35/0,12mm) ²	.060 (1,52)	HTR-2445-A	11-01-0026	HTA-2174	● 11-03-0016	N/A	N/A
7291	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-1719-C	● 11-01-0008	HT-2285	● 11-03-0002	HT-1807	● 11-02-0001
7293	.156/.218 (3,96/5,53)	22-30 (0,35/0,05mm) ²	.060 (1,52)	HTR-2262	● 11-01-0006	HT-2038	● 11-03-0006	HT-1353	● 11-02-0003
7423	.156/.218 (3,96/5,53)	16-22 (1,30/0,35mm) ²	.120 (3,04)	HTR-1031-E	● 11-01-0084	HT-2634	11-03-0017	HT-1353	● 11-02-0003
7486	.125/.156 (3,17/3,96)	22-24 (0,35/0,20mm) ²	.050 (1,27)						
7499	.125/.140 (3,17/3,96)	24-30 (0,20/0,05mm) ²	.050 (1,27)						
7511	.125/.156 (3,17/3,96)	(2) 22 or (2) 24 (0,35/0,20mm) ²	.050 (1,27) ea.						
7676	.140/.187 (3,55/4,74)	14-22 (2,00/0,35mm) ²	.140 (3,55)	HTR-2450A	11-01-0101	HTA-2174	● 11-03-0016		
7879-1	.125/.140 (3,17/3,55)	24-30 (0,20/0,05mm) ²	.060 (1,52)						
8058	.156/.218 (3,96/5,53)	18-22 (0,80/0,35mm) ²	.110 (2,79)						
8177	.100/.125 (2,54/3,17)	26-27 (0,13/0,10mm) ²	.060 (1,52)						
8662	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)						
8720	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)						
8818	.100/.125 (2,54/3,17)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-2445-A	11-01-0026	HTA-2174	● 11-03-0016		
8960	.125/.156 (3,17/3,96)	18-24 (0,80/0,20mm) ²	.110 (2,79)						
8993	.100/.125 (2,54/3,17)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-2445-A	11-01-0026	HTA-2174	● 11-03-0016		
40140	.100/.125 (2,54/3,17)	18-24 (0,80/0,20mm) ²	.110 (2,79)	HTR-2445-A	11-01-0026	HTA-2174	● 11-03-0016		
40144	.125/.140 (3,17/3,55)	32-36 (0,03/0,01mm) ²	.025 (0,64)	HTR-8500	11-01-0103				
40229	.100/.125 (2,54/3,17)	22-26 (0,35/0,12mm) ²	.060 (1,52)	HTR-2445-A	11-01-0026	HTA-2174	● 11-03-0016		
40445	.100/.125 (2,54/3,17)	24-30 (0,20/0,05mm) ²	.062 (1,57)	HTR-2262-A	● 11-01-0037	HT-2759	11-03-0022	HT-2813	11-02-0004
40682	.110/.140 (2,79/3,55)	22-26 (0,35-0,12mm) ²	.060 (1,52)	HTR-8532-A	11-01-0110				
41050	.125/.156 (3,17/3,96)	22-26 (0,35/0,20mm) ²	.110 (2,79)	HTR-8558-A	11-01-0177				
41051	.125/.156 (3,17/3,96)	18-22 (0,80-0,35mm) ²	.090-.140 (2,28-3,55)	HTR-8558-A	11-01-0177				
70021	.100/.125 (2,54/3,17)	22-24 (0,35-0,20mm) ²	.060 (1,52)	HTR-8519-B	11-01-0118				
70021	.100/.125 (2,54/3,17)	24-36 (0,20/0,01mm) ²	.60 (1,52)	HTR-8519-A	11-01-0107				
70058	.100/.125 (2,54/3,17)	22-24 (0,35-0,20mm) ²	.060 (1,52)	HTR-8519-B	11-01-0118				
70058	.100/.125 (2,54/3,17)	24-36 (0,20-0,01mm) ²	.060 (1,52)	HTR-8519-A	11-01-0107				
70075	.187/.218 (4,74/5,53)	14-18 (2,00-0,80mm) ²	.140 (3,55)	HTR-6143	11-01-0062				
70076	.187/.218 (4,74/5,53)	18-22 (0,80-0,35mm) ²	.110 (2,79)	HTR-7093	11-01-0082				
70078	.156/.187 (3,96/4,74)	18-22 (0,80-0,35mm) ²	.110 (2,79)	HTR-8543	11-01-0111				

● U.S. Standard Product, available through Molex franchised distributors



Molex Japan Crimp Tooling Cross Reference



(Preferred Tooling in Far East)

Crimp Terminal	SOLD AND SUPPORTED IN FAR EAST				SOLD AND SUPPORTED WORLDWIDE					
	Modular Crimp Die		Crimp Die		Hand Tool		Extraction Tool		Insertion Tool	
	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.
1189-1190	JM5866A	11-26-0069	CDJ1487	11-26-0011	JHTR1031C	11-26-0006	J5800-003	11-26-0029		
1380-1381	JM5866A	11-26-0069	CDJ1487	11-26-0011	JHTR1031C	11-26-0006	J5800-003	11-26-0029		
1433-1434	JM5866A	11-26-0069	CDJ1487	11-26-0011	JHTR2262	11-26-0008	J5800-003	11-26-0029		
1560-1561	JM5867A	11-26-0072	CDJ1739	11-26-0012	JHTR1719C	11-26-0007	J5800-002	11-26-7034		
1854	JM5867A	11-26-0072	CDJ1739	11-26-0012	JHTR2262A	11-26-0009	J5800-002	11-26-7034		
1855	JM5867A	11-26-0072	CDJ1739	11-26-0012	JHTR2262J	11-26-0025	J5800-002	11-26-7034		
1881-2	JM5866A	11-26-0069	CDJ1487	11-26-0011						
2107-1B5N 2107-1B6N			CDJ2061	11-26-0057						
2151-2152	JM5866A	11-26-0069	CDJ1487	11-26-0011	JHTR1031C	11-26-0006	J5800-003	11-26-0029		
2273	JM5866A	11-26-0069	CDJ1487	11-26-0011						
2478-2578	JM5868A	11-26-0092	CDJ2442	11-26-0014	JHTR2445A	11-26-0010	J5800-004	11-26-0059		
2579	JM5858A	11-26-0107	CDJ2810 CDJ5259	11-26-0013 11-26-0016	JHTR2262A JHTR2262J	11-26-0009 11-26-0025				
4706-3			CDJ4997	11-26-0030						
5005-5006	JM5861A	11-26-0034	CDJ5850	11-26-0019	JHTR1719C	11-26-0007	J5800-002	11-26-7034	J5800-001	11-26-0005
5008 5009	JM5861A	11-26-0034	CDJ5850	11-26-0019	JHTR2262A JHTR2262J	11-26-0009 11-26-0025	J5800-002	11-26-7034	J5800-001	11-26-0005
5017			CDJ2442	11-26-0014						
5033-2 5033-4			CDJ5033	11-26-0015						
5103	JM5857A	11-26-0023	CDJ5851	11-26-0022	JHTR5907	11-26-0095				
5139	JM5858A	11-26-0107	CDJ5259	11-26-0016	JHTR2262A JHTR2262J	11-26-0009 11-26-0025	J5800-004	11-26-0059		
5159	JM5858A	11-26-0107	CDJ5259	11-26-0016	JHTR2262A JHTR2262J	11-26-0009 11-26-0025	J5800-004	11-26-0059		
5167-5168	JM5868A	11-26-0092	CDJ2442	11-26-0014	JHTR2445A	11-26-0010	J5800-004	11-26-0059		
5175	JM5869A	11-26-0090	CDJ5175	11-26-0003	JHTR1031C	11-26-0006				
5190-01	JM5865A	11-26-0093	CDJ6164	11-26-0020						
5194	JM5859A	11-26-0028			JHTR5904	11-26-0058	J5800-009	11-26-0100		
5205-5206	JM5861A	11-26-0034	CDJ5850	11-26-0019	JHTR5902	11-26-0024	J5800-002	11-26-7034		
5225	JM5859A	11-26-0028			JHTR5906	11-26-0089	J5800-009	11-26-0100		
5230	JM5864A	11-26-0056			JHTR5905	11-26-0070	J5800-008	11-26-7074		
5241	JM5860A	11-26-0050			JHTR2262A JHTR2262J	11-26-0009 11-26-0025	J5800-005	11-26-0060		
5259	JM5858A	11-26-0107	CDJ5259	11-26-0016	JHTR2262A JHTR2262J	11-26-0009 11-26-0025	J5800-004	11-26-0059		
5263	JM5996A	11-26-0117			JHTR5974	11-26-0167				
5266	JM5868A	11-26-0092	CDJ5175	11-26-0003	JHTR5908 JHTR5971	11-26-0115 11-26-0118				
5294	JM5999A	11-26-0097			JHTR5911	11-26-0101	J5800-009	11-26-0100		
5298	JM5998A	11-26-0104	CDJ4997	11-26-0030						
5378		57007-3000				57050-5000				
5394	JM5997A	11-26-0108			JHTR5973	11-26-0119				
5394T2		57025-3000				57029-5000				
5400	JM5995A	11-26-0169			JHTR5975	11-26-0170				
5479	JM5993A	11-26-0179				57005-5000		57005-6000		57005-6000
5479PBT2		57034-3000				57035-5000		57005-6000		57005-6000
5556 5558		57022-3000				57026-5000 57027-5000		57031-6000		
5556T2 5558T2		57038-3000						57031-6000		
5659	JM5857A	11-26-0023	CDJ5659	11-26-0018	JHTR5972	11-26-0110				
41050		57009-3000								
41051		57010-3000								
50011		57030-3000				57032-5000				
50012-50013		57045-3000				57046-5000				
50031		57047-3000								
70021-0006		57014-3000				57036-5000 57037-5000		57033-6000		57033-6000
70021-0022		57017-3000				57036-5000		57033-6000		57033-6000
70058-0006		57014-3000				57036-5000 57037-5000		57033-6000		57033-6000
70058-0022		57014-3000				57036-5000		57033-6000		57033-6000

Crimp Machine

Eng. No.	Description
M15A	For Modular Crimp Die
M15	For Crimp Die

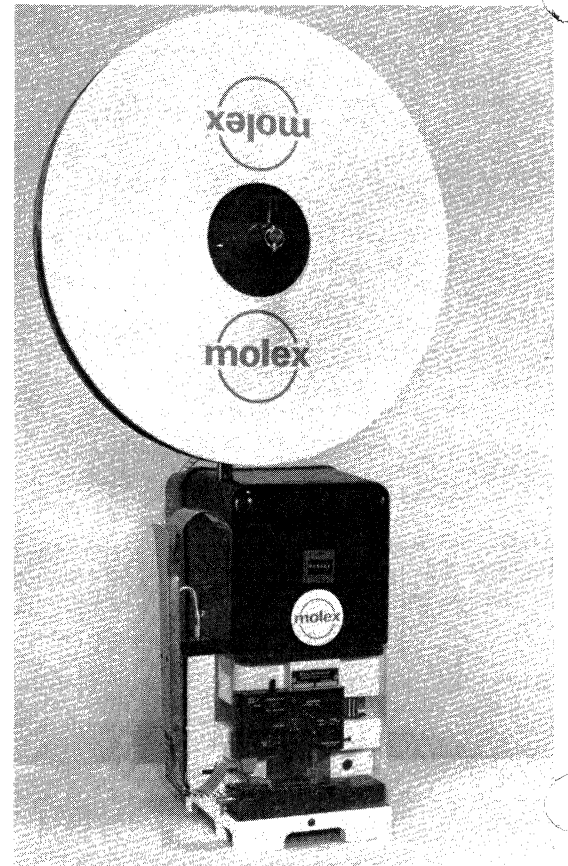


TM40™ Crimp Terminating Machines

- Utilizes "plug in" terminator dies (approx. 2½" x 5")
- Independent conductor and insulation adjustments, with position indicator
- Quick release tooling feature for fast, simple changeover
- Universal feed adjustable to all Molex terminals
- 1" stroke, no ram adjustment required
- No lubrication required
- Rams guided by precision ball bushings and demountable leader pins for positive alignment
- Roller bearing throughout
- Smooth, quiet spring wrap clutch
- Totally enclosed for operator safety
- 12V in-press work light
- Long life 24V solenoid
- Compact, space saving design
- Solid state control box

Specifications:

Weight - 190 lbs. (86,2 kg) approx.
Electrical - 110V 60 Hz/220 V 50 Hz
Height - 45" (114,3 cm) (with reel)
Bench Space - Front 21" x 13" (53,3cm x 33,0cm) deep (with reel)



TM40 Press & Die Tooling Cross Reference

TM40 PRESS ONLY	Eng. No.	Order No.
New:	TM40D	11-05-0018
Used:	TM40DU	11-05-0021

When ordering Crimp Dies, Machines or Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot (1 meter) wire sample to Molex with the order.

Terminal	Terminator Die Only		TM40 Press & Die (110V-80Hz)		Spare Tooling Kit		
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	
1189-1190	11-40-2001	T8300A	11-04-0197	TM40D8300A	11-40-3001	K8300A	
1219	11-40-2165	T8369A	11-04-0640	TM40D8369A	11-40-3157	K8369A	
1220	11-40-2166	T8369B	11-04-0641	TM40D8369B	11-40-3158	K8369B	
1380-1381	11-40-2002	T8300B	11-04-0199	TM40D8300B	11-40-3002	K8300B	
1433-1434	11-40-2003	T8300C	11-04-0201	TM40D8300C	11-40-3003	K8300C	
1450-1451	11-40-2001	T8300A	11-04-0197	TM40D8300A	11-40-3001	K8300A	
1457-2	11-40-2010	T8307B	11-04-0215	TM40D8307B	11-40-3010	K8307B	
1457-1	11-40-2009	T8307A	11-04-0213	TM40D8307A	11-40-3009	K8307A	
1508-1	16-20 ga.	11-40-2118	T8351B	11-04-0588	TM40D8351B	11-40-3116	K8351B
	14-18 ga.	11-40-2117	T8351A	11-04-0586	TM40D8351A	11-40-3115	K8351A
1560-1561	11-40-2004	T8302A	11-04-0203	TM40D8302A	11-40-3004	K8302A	
1589	11-40-2002	T8300B	11-04-0199	TM40D8300B	11-40-3002	K8300B	
1590	11-40-2002	T8300B	11-04-0199	TM40D8300B	11-40-3002	K8300B	
1786-1787	11-40-2004	T8302A	11-04-0203	TM40D8302A	11-40-3004	K8302A	
1793	11-40-2004	T8302A	11-04-0203	TM40D8302A	11-40-3004	K8302A	
1797	11-40-2005	T8303A	11-04-0205	TM40D8303A	11-40-3005	K8303A	
1799	N/A	STD	DIE			N/A	
1854-1855	11-40-2006	T8302B	11-04-0207	TM40D8302B	11-40-3006	K8302B	
1881-2	11-40-2083	T8300J	11-04-0396	TM40D8300J	11-40-3083	K8300J	
1881-3	11-40-2084	T8300K	11-04-0398	TM40D8300K	11-40-3084	K8300K	
1900-1901	11-40-2163	T8368A	11-04-0626	TM40D8368A	11-40-3155	K8368A	
1917	11-40-2005	T8303A	11-04-0205	TM40D8303A	11-40-3005	K8303A	
1929	11-40-2014	T8311A	11-04-0223	TM40D8311A	11-40-3014	K8311A	
1943	11-40-2035	T8319A	11-04-0356	TM40D8319A	11-40-3035	K8319A	
1973	11-40-2048	T8300F	11-04-0314	TM40D8300F	11-40-3002	K8300B	
2012	11-40-2005	T8303A	11-04-0205	TM40D8303A	11-40-3005	K8303A	



TM40 Press & Die Tooling Cross Reference



When ordering Crimp Dies, Machines or Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot (1 meter) wire sample to Molex with the order.

Terminal	Terminator Die Only		TM40 Press & Die (110V-80Hz)		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
2014	11-40-2011	T8303B	11-04-0217	TM40D8303B	11-40-3011	K8303B
2046-2047	11-40-2164	T8368B	11-04-0639	TM40D8368B	11-40-3156	K8368B
2107	11-40-2014 18-24 ga. 24-30 ga.	T8311A T8311B	11-04-0221	TM40D8311B	11-40-3013	K8311B
2123	11-40-2014	T8311A	11-04-0223	TM40D8311A	11-40-3014	K8311A
2125	11-40-2013	T8311B	11-04-0221	TM40D8311B	11-40-3013	K8311B
2151-2152	11-40-2002	T8300B	11-04-0199	TM40D8300B	11-40-3002	K8300B
2176	11-40-2015	T8312A	11-04-0226	TM40D8312A	11-40-3015	K8312A
2189-2190	11-40-2006	T8302B	11-04-0207	TM40D8302B	11-40-3006	K8302B
2192	11-40-2003	T8300C	11-04-0201	TM40D8300C	11-40-3003	K8300C
2236-2237	N/A	STD	DIE			N/A
2269	11-40-2001	T8300A	11-04-0197	TM40D8300A	11-40-3001	K8300A
2273	11-40-2002	T8300B	11-04-0199	TM40D8300B	11-40-3002	K8300B
2282-2283	11-40-2121	T8354A	11-04-0598	TM40D8354A	11-40-3119	K8354A
2328	11-40-2015	T8312A	11-04-0226	TM40D8312A	11-40-3015	K8312A
2477-2478	11-40-2096	T8301AX	11-04-0418	TM40D8301AX	11-40-3096	K8301AX
2482	N/A	STD	DIE			N/A
2576	11-40-2015	T8312A	11-04-0226	TM40D8312A	11-40-3015	K8312A
2578	11-40-2097	T8301BX	11-04-0420	TM40D8301BX	11-40-3017	K8301BX
2679						
2697-1	N/A	STD	DIE			N/A
2697-2	N/A	STD	DIE			N/A
2698	11-40-2006	T8302B	11-04-0226	TM40D8312A	11-40-3015	K8312A
2699	N/A	STD	DIE			N/A
2717	11-40-2006	T8302B	11-04-0207	TM40D8302B	11-40-3006	K8302B
2759	11-40-2100	T8304AX	11-04-0426	TM40D8304AX	11-40-3100	K8304AX
2776	11-40-2118 16-20 ga. 14-18 ga.	T8351B T8351A	11-04-0588 11-04-0586	TM40D8351B TM40D8351A	11-40-3116 11-40-3115	K8351B K8351A
2799	11-40-2154	T8312B	11-04-0629	TM40D8312B	11-40-3154	K8312B
2855						
2870-2871	11-40-2020	T8300E	11-04-0237	TM40D8300E	11-40-3020	K8300E
2878	11-40-2096	T8301AX	11-04-0418	TM40D8301AX	11-40-3096	K8301AX
2951	11-40-2021	T8317A	11-04-0239	TM40D8317A	11-40-3021	K8317A
3100	11-40-2011	T8303B	11-04-0217	TM40D8303B	11-40-3011	K8303B
3233	11-40-2022	T8308A	11-04-0241	TM40D8308A	11-40-3022	K8308A
3382	11-40-2103	T8305BX	11-04-0432	TM40D8305BX	11-40-3103	K8305BX
3399	11-40-2062	T8330B	11-04-0352	TM40D8330B	11-40-3062	K8330B
3400	11-40-2104	T8305CX	11-04-0434	TM40D8305CX	11-40-3104	K8305CX
3435	11-40-2105	T8305DX	11-04-0436	TM40D8305DX	11-40-3105	K8305DX
4018	11-40-2099	T8301DX	11-04-0424	TM40D8301DX	11-40-3099	K8301DX
4259	11-40-2101	T8304BX	11-04-0428	TM40D8304BX	11-40-3101	K8304BX
4268	11-40-2001	T8300A	11-04-0197	TM40D8300A	11-40-3001	K8300A
4272	11-40-2002	T8300B	11-04-0199	TM40D8300B	11-40-3002	K8300B
4292	11-40-2003	T8300C	11-04-0201	TM40D8300C	11-40-3003	K8300C
4295	11-40-2005	T8303A	11-04-0205	TM40D8303A	11-40-3005	K8303A
4296	11-40-2047	T8325A	11-04-0310	TM40D8325A	11-40-3047	K8325A
4296-1	N/A	STD	DIE			N/A
4366	11-40-2005	T8303A	11-04-0205	TM40D8303A	11-40-3005	K8303A
4428-1	11-40-2026	T8306B	11-04-0406	TM40D8306B	11-40-3026	K8306B
4428-3						
4428-7	11-40-2025	T8306A	11-04-0250	TM40D8306A	11-40-3025	K8306A
4499	N/A	STD	DIE			N/A
4529	11-40-2106	T8302C	11-04-0438	TM40D8302C	11-40-3107	K8302C
4548						
4549	11-40-2001	T8300A	11-04-0197	TM40D8300A	11-40-3001	K8300A
4550	11-40-2001	T8300A	11-04-0197	TM40D8300A	11-40-3001	K8300A
4559	11-40-2006	T8302B	11-04-0207	TM40D8302B	11-40-3006	K8302B
4563						
4573	11-40-2011	T8303B	11-04-0217	TM40D8303B	11-40-3001	K8303B
4578	11-40-2096	T8301AX	11-04-0418	TM40D8301AX	11-40-3096	K8301AX
4583	11-40-2075	T8337A	11-04-0380	TM40D8337A	11-40-3075	K8337A
4706	11-40-2042	T8324A	11-04-0293	TM40D8324A	11-40-3042	K8324A
4706-1	11-40-2042	T8324A	11-04-0293	TM40D8324A	11-40-3042	K8324A
4706-2	11-40-2042	T8324A	11-04-0293	TM40D8324A	11-40-3042	K8324A
4706-3	11-40-2043	T8324B	11-04-0295	TM40D8324B	11-40-3043	K8324B
4785	11-40-2031	T8315A	11-04-0301	TM40D8315A	11-40-3031	K8315A
4787-1	11-40-2033	T8316A	11-04-0306	TM40D8316A	11-40-3033	K8316A
4787-2	11-40-2094	T8316B	11-04-0414	TM40D8316B	11-40-3094	K8316B



TM40 Press & Die Tooling Cross Reference



When ordering Crimp Dies, Machines or Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot (1 meter) wire sample to Molex with the order.

Terminal	Terminator Die Only		TM40 Press & Die (110V-60Hz)		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
4809	11-40-2102	T8305AX	11-04-0430	TM40D8305AX	11-40-3102	K8305AX
4811	11-40-2029	T8310A	11-04-0277	TM40D8310A	11-40-3029	K8310A
4811-1	11-40-2039	T8310B	11-04-0279	TM40D8310B	11-40-3039	K8310B
4811A-3	11-40-2029	T8310A	11-04-0277	TM40D8310A	11-40-3029	K8310A
4811A-4	11-40-2039	T8310B	11-04-0279	TM40D8310B	11-40-3039	K8310B
4838	11-40-2096	T8301AX	11-04-0418	TM40D8301AX	11-40-3096	K8301AX
5005	11-40-2064	T8327A	11-04-0358	TM40D8327A	11-40-3064	K8327A
5006	11-40-2064	T8327A	11-04-0358	TM40D8327A	11-40-3064	K8327A
5008	11-40-2065	T8327B	11-04-0360	TM40D8327B	11-40-3065	K8327B
5009	11-40-2065	T8327B	11-04-0360	TM40D8327B	11-40-3065	K8327B
5103	11-40-2056	T8328A	11-04-0316	TM40D8328A	11-40-3056	K8328A
5139	11-40-2100	T8304AX	11-04-0426	TM40D8304AX	11-40-3100	K8304AX
5167	11-40-2181	T8377A	11-04-0667	TM40D8377A	11-40-3183	K8377A
5168	11-40-2191	T8377-B	11-04-0668	TM40D8377B	11-40-3196	K8377B
5190	11-40-2039	T8310B	11-04-0279	TM40D8310B	11-40-3039	K8310B
5194	11-40-2073	T8336A	11-04-0376	TM40D8336A	11-40-3073	K8336A
5205	11-40-2066	T8327C	11-04-0362	TM40D8327C	11-40-3066	K8327C
5206	11-40-2066	T8327C	11-04-0362	TM40D8327C	11-40-3066	K8327C
5225	11-40-2074	T8336B	11-04-0378	TM40D8336B	11-40-3074	K8336B
5230	11-40-2069	T8332A	11-04-0368	TM40D8332A	11-40-3069	K8332A
5241	11-40-2063	T8329A	11-04-0354	TM40D8329A	11-40-3063	K8329A
5263	11-40-2089	T8342A	11-04-0408	TM40D8342A	11-40-3056	K8328A
5294	11-40-2070	T8333A	11-04-0370	TM40D8333A	11-40-3070	K8333A
5298	11-40-2115	T8350A	11-04-0450	TM40D8350A	11-40-3113	K8350A
5378T & T2	11-40-2149	T8362A	11-04-0627	TM40D8362A	11-40-3143	K8362A
5394	11-40-2071	T8334A	11-04-0372	TM40D8334A	11-40-3071	K8334A
5479	11-40-2107	T8345A	11-04-0440	TM40D8345A	11-40-3108	K8345A
5556/5558 18-24 ga.	11-40-2119	T8352A	11-04-0594	TM40D8352A	11-40-3117	K8352A
5556/5558 22-28 ga.	11-40-2137	T8352B	11-04-0616	TM40D8352B	11-40-3133	K8352B
5556/5558 16 ga.	11-40-2187	T8352C	11-04-0659	TM40D8352C	11-40-3189	K8352C
5659	11-40-2091	T8343A	11-04-0412	TM40D8343A	11-40-3091	K8343A
6043						
6045	11-40-2046	T8303D	11-04-0308	TM40D8303D	11-40-3046	K8303D
6093-1						
6252						
6271						
6308	11-40-2003	T8300C	11-04-0201	TM40D8300C	11-40-3003	K8300C
6310	11-40-2001	T8300A	11-04-0197	TM40D8300A	11-40-3001	K8300A
6361						
6362						
6379	11-40-2096	T8301AX	11-04-0418	TM40D8301AX	11-40-3096	K8301AX
6438	11-40-2096	T8301AX	11-04-0418	TM40D8301AX	11-40-3096	K8301AX
6459						
6482	11-40-2151	T8364A	11-04-0632	TM40D8364A	11-40-3144	K8364A
6664						
6722						
6757	11-40-2061	T8330A	11-04-0350	TM40D8330A	11-40-3061	K8330A
6770	11-40-2004	T8302A	11-04-0203	TM40D8302A	11-40-3004	K8302A
6772	11-40-2004	T8302A	11-04-0203	TM40D8302A	11-40-3004	K8302A
6778	11-40-2098	T8301CX	11-04-0422	TM40D8301CX	11-40-3098	K8301CX
6796	11-40-2006	T8302B	11-04-0207	TM40D8302B	11-40-3006	K8302B
6838	11-40-2096	T8301AX	11-04-0418	TM40D8301AX	11-40-3096	K8301AX
6850						
6873	11-40-2096	T8301AX	11-04-0418	TM40D8301AX	11-40-3096	K8301AX
6888-2						
6893	11-40-2003	T8300C	11-04-0201	TM40D8300C	11-40-3003	K8300C
6894	11-40-2003	T8300C	11-04-0201	TM40D8300C	11-40-3003	K8300C
6937	N/A	STD	DIE			N/A
6963-3	N/A	STD	DIE			N/A
6963-4	N/A	STD	DIE			N/A
7238	11-40-2131	T8300P	11-04-0608	TM40D8300P	11-40-3128	K8300P
7239	11-40-2131	T8300P	11-04-0608	TM40D8300P	11-40-3128	K8300P
7242	11-40-2075	T8337A	11-04-0380	TM40D8337A	11-40-3075	K8337A
7258	11-40-2097	T8301BX	11-04-0420	TM40D8301BX	11-40-3097	K8301BX
7283						
7291	11-40-2004	T8302A	11-04-0203	TM40D8302A	11-40-3004	K8302A
7293	11-40-2003	T8300C	11-04-0201	TM40D8300C	11-40-3003	K8300C
7319	11-40-2032	T8315B	11-04-0303	TM40D8315B	11-40-3032	K8315B
7423	11-40-2048	T8300F	11-04-0314	TM40D8300F	11-40-3002	K8300B



TM40 Press & Die Tooling Cross Reference



When ordering Crimp Dies, Machines or Hand Crimp Tools, include terminal number to be crimped, wire size, insulation and send a 3 foot (1 meter) wire sample to Molex with the order.

Terminal	Terminator Die Only		TM40 Press & Die (110V-60Hz)		Spare Tooling Kit	
	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.
7430	11-40-2027	T8309A			11-40-3027	K8309A
7457	11-40-2034	T8318A	11-04-0312	TM40D8318A	11-40-3034	K8318A
7486						
7499	11-40-2172	T8307C	11-04-0669	TM40D8307C	11-40-3174	K8307C
7511						
7676	11-40-2015	T8312A	11-04-0226	TM40D8312A	11-40-3015	K8312A
7762-1						
7762-2A						
7871						
7879	11-40-2037	T8322A	11-04-0273	TM40D8322A	11-40-3037	K8322A
8058	11-40-2020	T8300E	11-04-0237	TM40D8300E	11-40-3020	K8300E
8126	11-40-2173	T8371A	11-04-0670	TM40D8371A	11-40-3175	K8371A
8177	11-40-2095	T8344A	11-04-0416	TM40D8344A	11-40-3095	K8344A
8662	11-40-2036	T8321A	11-04-0269	TM40D8321A	11-40-3036	K8321A
8720						
8818/8918	11-40-2099	T8301DX	11-04-0424	TM40D8301DX	11-40-3099	K8301DX
8960	11-40-2036	T8321A	11-04-0269	TM40D8321A	11-40-3036	K8301DX
8980-3	11-40-2110	T8347A	11-04-0444	TM40D8347A	11-40-3110	K8347A
8993	11-40-2096	T8301AX	11-04-0418	TM40D8301AX	11-40-3096	K8301AX
30105	11-40-2176	T8372A	11-04-0671	TM40D8372A	11-40-3178	K8372A
30149-1	11-40-2182	T8376A	11-04-0672	TM40D8376A	11-40-3184	K8376A
40140	11-40-2096	T8301AX	11-04-0418	TM40D8301AX	11-40-3096	K8301AX
40144	11-40-2038	T8322B	11-04-0275	TM40D8322B	11-40-3038	K8322B
40228						
40229	11-40-2097	T8301BX	11-04-0420	TM40D8301BX	11-40-3097	K8301BX
40391 1 Up	11-40-2153	T8365A	11-04-0633	TM40D8365A	11-40-3148	K8365A
40391 2 Up	11-40-2155	T8365B	11-04-0634	TM40D8365B	11-40-3150	K8365B
40445	11-40-2100	T8304AX	11-04-0426	TM40D8304AX	11-40-3100	K8304AX
40641	11-40-2099	T8301DX	11-04-0424	TM40D8301DX	11-40-3099	K8301DX
40682	11-40-2076	T8338A	11-04-0382	TM40D8338A	11-40-3076	K8338A
40901	11-40-2072	T8335A	11-04-0374	TM40D8335A	11-40-3072	K8335A
41422-1	11-40-2192	T8379A	11-04-0663	TM40D8379A	11-40-3193	K8379A
41422-2	11-40-2193	T8379B	11-04-0677	TM40D8379B	11-40-3194	K8379B
41483	11-40-2177	T8300Q	11-04-0678	TM40D8300Q	11-40-3179	K8300Q
41817	11-40-2120	T8353A	11-04-0595	TM40D8353A	11-40-3118	K8353A
41951 (24-30)	11-40-2157	T8367A	11-04-0636	TM40D8367A	11-40-3152	K8367A
41951 (32-36)	11-40-2158	T8367B	11-04-0637	TM40D8367B	11-40-3153	K8367B
41951 (22-24)	11-40-2159	T8367C	11-04-0638	TM40D8367C	11-40-3154	K8367C
42001	11-40-2171	T8370A	11-04-0679	TM40D8370A	11-40-3173	K8370A
42023	11-40-2197	T8384A	11-04-0680	TM40D8384A	11-40-3198	K8384A
42024	11-40-2198	T8384B	11-04-0681	TM40D8384B	11-40-3199	K8384B
42158 (24-30)	11-40-2188	T8378A	11-04-0682	TM40D8378A	11-40-3190	K8378A
42158 (22-24)	11-40-2189	T8378B	11-04-0683	TM40D8378B	11-40-3191	K8378B
42278-1	11-40-2201	T8386A	11-04-0684	TM40D8386A	11-40-3203	K8386A
50011	11-40-2136	T8359A		TM40D8359A	11-40-3132	K8359A
50012	11-40-2141	T8361A		TM40D8361A	11-40-3135	K8361A
50013	11-40-2141	T8361A		TM40D8361A	11-40-3135	K8361A
50034	11-40-2156	T8366A	11-04-0635	TM40D8366A	11-40-3151	K8366A
50058-8000 (28-32)	11-40-2190	T8382A	11-04-0673	TM40D8382A	11-40-3192	K8382A
50061-8000 (28-32)	11-40-2194	T8383A	11-04-0675	TM40D8383A	11-40-3195	K8383A
50079-8000 (26-28)	11-40-2199	T8382B	11-04-0674	TM40D8382B	11-40-3201	K8382B
50080-8000 (26-28)	11-40-2200	T8383B	11-04-0676	TM40D8383B	11-40-3202	K8383B
70021 (22-24)	11-40-2087	T8341C	11-04-0404	TM40D8341C	11-40-3087	K8341C
70021 (24-30)	11-40-2085	T8341A	11-04-0400	TM40D8341A	11-40-3085	K8341A
70021 (32-36)	11-40-2086	T8341B	11-04-0402	TM40D8341B	11-40-3086	K8341B
70058 (22-24)	11-40-2090	T8331C	11-04-0410	TM40D8331C	11-40-3090	K8331C
70058 (24-30)	11-40-2068	T8331A	11-04-0366	TM40D8331A	11-40-3068	K8331A
70058 (32-36)	11-40-2077	T8331B	11-04-0384	TM40D8331B	11-40-3077	K8331B
70075	11-40-2078	T8339A	11-04-0386	TM40D8339A	11-40-3078	K8339A
70076	11-40-2079	T8339B	11-04-0388	TM40D8339B	11-40-3079	K8339B
70078	11-40-2080	T8340A	11-04-0390	TM40D8340A	11-40-3080	K8340A
70816 (32-34)	11-40-2109	T8331D	11-04-0442	TM40D8331D	11-40-3109	K8331D
71851 (22-24)	11-40-2090	T8331C	11-04-0410	TM40D8331C	11-40-3090	K8331C
71851 (24-30)	11-40-2068	T8331A	11-04-0366	TM40D8331A	11-40-3068	K8331A
71851 (32-36)	11-40-2077	T8331B	11-04-0384	TM40D8331B	11-40-3077	K8331B
82023-0X02						
82024-0X01	11-40-2123	T8356A	11-04-0685	TM40D8356A	11-40-3121	K8356A
82024-0X03						
82023-0X04	11-40-2138	T8356B	11-04-0686	TM40D8356B	11-40-3134	K8356B
90021	11-40-2147	T8363A	11-04-0631	TM40D8363A	11-40-3142	K8363
90198	11-40-2196	T8385A	11-04-0687	TM40D8385A	11-40-3197	K8385A



TM40 Press & Die Tooling Cross Reference



Euro TM402 Series

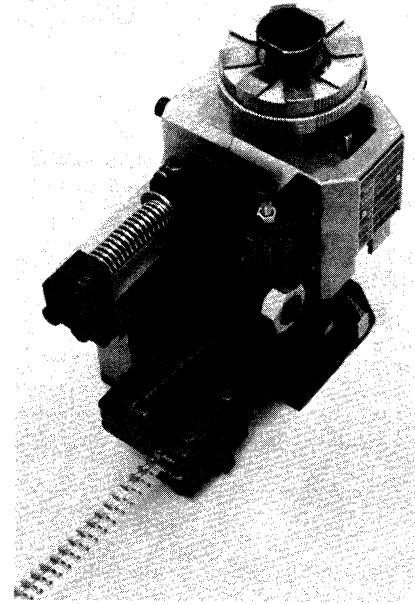
(Not Available in the U.S.)

Terminal	Terminator Order No.	Tool Kit Order No.	Terminal	Terminator Order No.	Tool Kit Order No.
90020/21-01XX	69001-1000	69001-2001	90028-05XX	69001-1003	69001-2017
90020/21-02XX	69001-1005	69001-2002	90028-06XX	69001-1009	69001-2018
90020/21-03XX	69001-1001	69001-2003	90119-009/10/11	69001-1018	69001-2020
90020/21-04XX	69001-1006	69001-2004	90119-0020/21/22	69001-1019	69001-2021
90022/24-01XX	69001-1010	69001-2005	90119-0109/10/11	69001-1042	69001-2020
90022/24-02XX	69001-1011	69001-2006	90119-0120/21/22	69001-1043	69001-2021
90022/24-03XX	69001-1012	69001-2007	90146-0110/11/12	69001-1021	69001-2020
90022/24-04XX	69001-1013	69001-2008	90146-0118/19/20	69001-1021	69001-2020
90026/27-01XX	69001-1014	69001-2009	90146-0114/15/16	69001-1022	69001-2021
90026/27-02XX	69001-1015	69001-2010	90146-0122/23/24	69001-1022	69001-2021
90026/27-03XX	69001-1016	69001-2011	90197-01XX	69001-1040	69001-2013
90026/27-04XX	69001-1017	69001-2012	90197-03XX	69001-1041	69001-2015
90028-01XX	69001-1002	69001-2013	90198-0001	69001-1024	69001-2025
90028-02XX	69001-1007	69001-2014	90350-01XX	69001-1025	69001-2026
90028-03XX	69001-1004	69001-2015	90416-0111	69001-1027	69001-2028
90028-04XX	69001-1008	69001-2016			

NOTE: No Press & Die Combination Number exists in Europe

Mini-Mac Universal Crimping Die

- Designed to run Molex-brand terminals
- Direct retrofit into competitive 'K' bench presses and 'T' presses on automatic wire processing machine
- Compatible with OEM presses offered by major producers (e.g. Artos, Filomat, Mecal, Osawa, Toyo, Jamco). Minor modifications may be required
- Available on lease basis only



Mini-Mac Tooling List

When ordering Mini-Mac Applicators include terminal number to be crimped, wire size, insulation and send a one foot (1 metre) wire sample to Molex with order.

Terminal	MINI-MAC		SPARE TOOLING KIT		Terminal	MINI-MAC		SPARE TOOLING KIT	
	Order No.	Eng. No.	Order No.	Eng. No.		Order No.	Eng. No.	Order No.	Eng. No.
1189-1190	11-18-2005	MA-60706-A	11-18-3005	K-60706-A	2717	11-18-2024	MA-60707-B	11-18-3024	K-60707-B
1219	11-18-2072	MA-60723-B	11-18-3068	K-60723-B	2759	11-18-2001	MA-60703-A	11-18-3001	K-60703-A
1220	11-18-2071	MA-60723-A	11-18-3067	K-60723-A	2776 (14-18 AWG)	11-18-2046	MA-60717-A	11-18-3046	K-60717-A
1380-1381	11-18-2006	MA-60706-B	11-18-3006	K-60706-B	2776 (16-20 AWG0)	11-18-2047	MA-60717-B	11-18-3047	K-60717-B
1380-1381 Tight Ins.	11-18-2007	MA-60706-C	11-18-3007	K-60706-C	2799	11-18-2041	MA-60711-B	11-18-3042	K-60711-B
1433-1434	11-18-2008	MA-60706-D	11-18-3008	K-60706-D	2870-2871	11-18-2012	MA-60706-H	11-18-3012	K-60706-H
1450-1451	11-18-2005	MA-60706-A	11-18-3005	K-60706-A	2878	11-18-2021	MA-60712-A	11-18-3023	K-60712-A
1457-1	11-18-2056	MA-60719-A	11-18-3052	K-60719-A	4018	11-18-2023	MA-60712-C	11-18-3022	K-60712-C
1457-2	11-18-2057	MA-60719-B	11-18-3053	K-60719-B	4268	11-18-2005	MA-60706-A	11-18-3005	K-60706-A
1508-1, 1508-5	11-18-2004	MA-60705-A	11-18-3027	K-60705-A	4272	11-18-2006	MA-60706-B	11-18-3006	K-60706-B
1560-1561	11-18-2017	MA-60707-A	11-18-3017	K-60707-A	4292	11-18-2008	MA-60706-D	11-18-3008	K-60706-D
1589-1590	11-18-2006	MA-60706-B	11-18-3006	K-60706-B	4295	11-18-2051	MA-60720-A	11-18-3051	K-60720-A
1786-1787	11-18-2017	MA-60707-A	11-18-3017	K-60707-A	4366	11-18-2051	MA-60720-A	11-18-3051	K-60720-A
1793	11-18-2017	MA-60707-A	11-18-3017	K-60707-A	4529	11-18-2027	MA-60707-E	11-18-3027	K-60707-E
1797	11-18-2051	MA-60720-A	11-18-3051	K-60720-A	4549-4550	11-18-2005	MA-60706-A	11-18-3005	K-60706-A
1854-1855	11-18-2024	MA-60707-B	11-18-3024	K-60707-B	4559	11-18-2024	MA-60707-B	11-18-3024	K-60707-B
1881-2	11-18-2010	MA-60706-F	11-18-3010	K-60706-F	4578	11-18-2021	MA-60712-A	11-18-3023	K-60712-A
1900-1901	11-18-2032	MA-60708-A	11-18-3032	K-60708-A	4706, 4706-1, 4706-2	11-18-2042	MA-60714-A	11-18-3042	K-60714-A
1917	11-18-2051	MA-60720-A	11-18-3051	K-60720-A	4706-3	11-18-2043	MA-60714-B	11-18-3043	K-60714-B
1929	11-18-2025	MA-60707-C	11-18-3025	K-60707-C	4811-1	11-18-2049	MA-60702-B	11-18-3049	K-60702-B
1973	11-18-2011	MA-60706-G	11-18-3011	K-60706-G	4811-A4	11-18-2048	MA-60702-A	11-18-3048	K-60702-A
2012	11-18-2051	MA-60720-A	11-18-3051	K-60720-A	4838	11-18-2021	MA-60712-A	11-18-3023	K-60712-A
2046-2047	11-18-2033	MA-60708-B	11-18-3033	K-60708-B	5167	11-18-2084	MA-60712-E	11-18-3079	K-60712-E
2107	11-18-2026	MA-60707-D	11-18-3026	K-60707-D	5194	11-18-2044	MA-60716-A	11-18-3044	K-60716-A
2123	11-18-2025	MA-60707-C	11-18-3025	K-60707-C	5225	11-18-2045	MA-60716-B	11-18-3045	K-60716-B
2125	11-18-2026	MA-60707-D	11-18-3026	K-60707-D	5230	11-18-2085	MA-60737	11-18-3080	K-60737
2151-2152	11-18-2006	MA-60706-B	11-18-3006	K-60706-B	5241	11-18-2083	MA-60738	11-18-3078	K-60738
2176	11-18-2040	MA-60711-A	11-18-3040	K-60711-A	5263	11-18-2062	MA-60722-A	11-18-3058	K-60722-A
2189-2190	11-18-2024	MA-60707-B	11-18-3024	K-60707-B	5294	11-18-2076	MA-60731	11-18-3071	K-60731
2192	11-18-2008	MA-60706-D	11-18-3008	K-60706-D	529*	11-18-2073	MA-60730	11-18-3069	K-60730
2269	11-18-2005	MA-60706-A	11-18-3005	K-60706-A	5394	11-18-2070	MA-60728-A	11-18-3066	K-60728
2273	11-18-2006	MA-60706-B	11-18-3006	K-60706-B	5479	11-18-2077	MA-60732	11-18-3072	K-60732
2328	11-18-2040	MA-60711-A	11-18-3040	K-60711-A	5556/5558 (18-24 ga.)	11-18-2002	MA-60704-A	11-18-3002	K-60704-A
2477-2478	11-18-2021	MA-60712-A	11-18-3023	K-60712-A	5556T2/5558T2 (22-28 ga.)	11-18-2003	MA-60704-B	11-18-3003	K-60704-B
2482 (10-16 AWG)	11-18-2058	MA-60718-B	11-18-3054	K-60718-B	5556T3/5558T3 (16 ga.)	11-18-2069	MA-60704-C	11-18-3065	K-60704-C
2576	11-18-2040	MA-60711-A	11-18-3040	K-60711-A	6308	11-18-2008	MA-60706-D	11-18-3008	K-60706-D
2578	11-18-2022	MA-60712-B	11-18-3021	K-60712-B	6310	11-18-2005	MA-60706-A	11-18-3005	K-60706-A



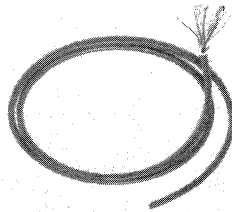
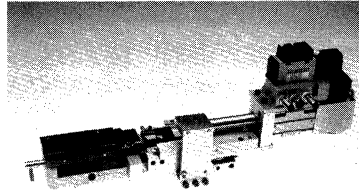
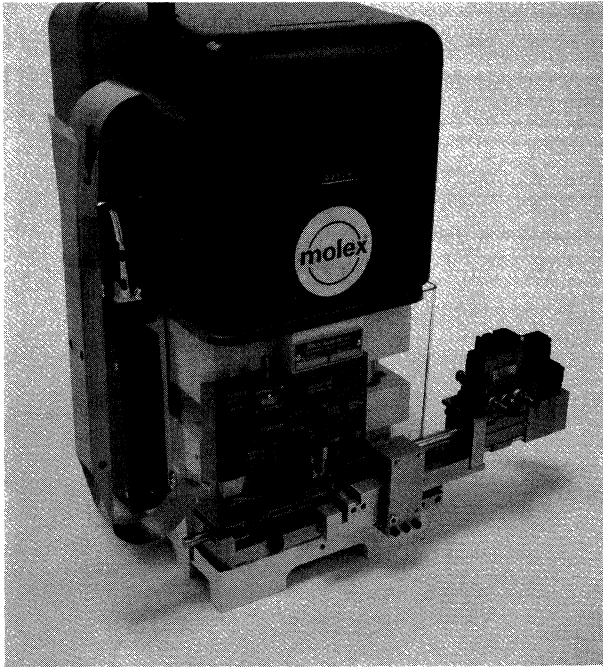
Mini-Mac Tooling List

When ordering Mini-Mac Applicators include terminal number to be crimped, wire size, insulation and send a one foot (1 metre) wire sample to Molex with order.

Terminal	MINI-MAC		SPARE TOOLING KIT		Terminal	MINI-MAC		SPARE TOOLING KIT	
	Order No.	Eng. No.	Order No.	Eng. No.		Order No.	Eng. No.	Order No.	Eng. No.
6379	11-18-2021	MA-60712-A	11-18-3023	K-60712-A	40445	11-18-2001	MA-60703-A	11-18-3001	K-60703-A
6438	11-18-2021	MA-60712-A	11-18-3023	K-60712-A	41422 (10-14)	11-18-2080	MA-60739-A	11-18-3075	K-60739-A
6482	11-18-2036	MA-60718-A	11-18-3036	K-60718-A	41422 (16-20)	11-18-2081	MA-60739-B	11-18-3076	K-60739-B
6770	11-18-2017	MA-60707-A	11-18-3017	K-60707-A	41483 (.180 ins.)	11-18-2086	MA-60706-L	11-18-3081	K-60706-L
6772	11-18-2017	MA-60707-A	11-18-3017	K-60707-A	41483 (.140 ins.)	11-18-2061	MA-60706-K	11-18-3057	K-60706-K
6796	11-18-2024	MA-60707-B	11-18-3024	K-60707-B	41951	11-18-2068	MA-60727-A	11-18-3016	K-60727-A
6838	11-18-2021	MA-60712-A	11-18-3023	K-60712-A	42138 (.140 ins.)	11-18-2061	MA-60706-K	11-18-3057	K-60706-K
6873	11-18-2021	MA-60712-A	11-18-3023	K-60712-A	42138 (.180 ins.)	11-18-2086	MA-60706-L	11-18-3081	K-60706-L
6893	11-18-2008	MA-60706-D	11-18-3008	K-60706-D	70021 (24-30 AWG)	11-18-2014	MA-60710-A	11-18-3014	K-60710-A
6894	11-18-2008	MA-60706-D	11-18-3008	K-60706-D	70021 (32-36 AWG)	11-18-2015	MA-60710-B	11-18-3015	K-60710-B
7238/7239	11-18-2013	MA-60706-J	11-18-3013	K60706-J	70021 (22-24 AWG)	11-18-2016	MA-60710-C	11-18-3016	K-60710-C
7258	11-18-2022	MA-60712-B	11-18-3021	K-60712-B	70058 (24-30 AWG)	11-18-2018	MA-60709-A	11-18-3018	K-60709-A
7291	11-18-2017	MA-60707-A	11-18-3017	K-60707-A	70058 (22-24 AWG)	11-18-2019	MA-60709-B	11-18-3019	K-60709-B
7293	11-18-2008	MA-60706-D	11-18-3008	K-60706-D	70058 (32-36 AWG)	11-18-2020	MA-60709-C	11-18-3020	K-60709-C
7676	11-18-2040	MA-60711-A	11-18-3040	K-60711-A	71815 (24-30 AWG)	11-18-2014	MA-60710-A	11-18-3014	K-60710-A
7879	11-18-2038	MA-60713-A	11-18-3038	K-60713-A	71815 (32-36 AWG)	11-18-2015	MA-60710-B	11-18-3015	K-60710-B
7879 Special .055 Set Up	11-18-2037	MA-60713-C	11-18-3037	K-60713-C	71815 (22-24 AWG)	11-18-2016	MA-60710-C	11-18-3016	K-60710-C
8058	11-18-2012	MA-60706-H	11-18-3012	K-60706-H	82023/0X01 / 82024/0X02	11-18-2029	MA-60715-A	11-18-3029	K-60715-A
8818-8819	11-18-2023	MA-60712-C	11-18-3022	K-60712-C	82023/0X03 / 82024/0X04	11-18-2028	MA-60715-B	11-18-3028	K-60715-B
8993	11-18-2021	MA-60712-A	11-18-3023	K-60712-A	90100-0007	11-18-2079	MA-60729-A	11-18-3074	K-60729-A
40140	11-18-2021	MA-60712-A	11-18-3023	K-60712-A	90100-008/0011	11-18-2074	MA-60729-B	11-18-3070	K-60729-B
40144	11-18-2039	MA-60713-B	11-18-3039	K-60713-B	90100-0009	11-18-2078	MA-60729-C	11-18-3073	K-60729-C
40229	11-18-2022	MA-60712-B	11-18-3021	K-60712-B					



TM140 Stripper Crimper



The Molex TM-140 Stripper Crimper Termination Machine is a variant of the TM40 Bench Press. The basic TM40 is the main termination nucleus with additional equipment added enabling the machine to strip insulation and crimp terminals in a one-cycle operation. Prepared harness forms and multi-conductor cables can be easily processed by this machine. When the crimp cycle is needed for terminating pre-stripped discrete wire, the stripping cycle can be easily turned off by throwing a toggle switch and attaching a foot switch to the control section. In most cases the stripping blade adjustment will range from 28 AWG to 20 AWG without changing blades. Easy adjustment of wire and insulation crimp height is comparable to the TM40 Terminator.

The stripping unit can be retrofitted to your existing TM40 by Molex technicians in our Molex facility or the complete TM140 Stripper Crimper can be ordered. A three to four meter length of your wire or cable is requested for the initial set up of the machine.

- Adaptable to existing Molex TM40 terminating machines
- Adjustable from #20 through #28 AWG with .110" (2,99mm) dia. insulation max.
- Automatic operation force 1 oz.
- 1,000 terminations average per hour, depending on operator skill
- Stripping unit interchangeable from terminating die to terminating die
- Unit hardened and ground with bearing surfaces chromed
- Independent conductor and insulation adjustment with position indicator
- Universal feed adjustable to all Molex terminals within wire AWG range
- Totally enclosed for operator safety

Specifications:

Electrical:
120V/60Hz std.

Bench Space:
Front 21" x 13" (53,3 cm x 33,0 cm)
deep (with reel)

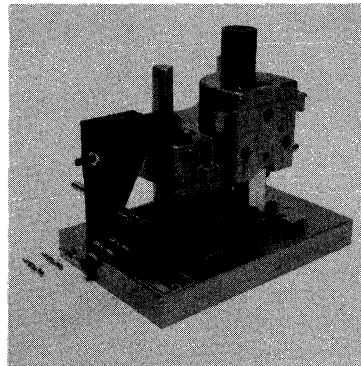
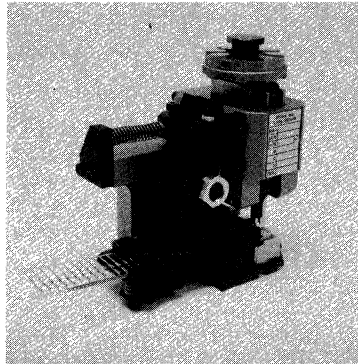
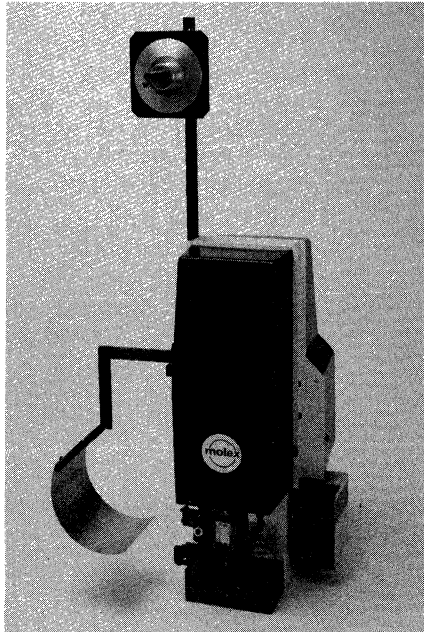
Air:
60 PSIG

Free Wire Length:
Approximately 1-3/4" (44,5mm)



Contact your local Molex Representative or
Consult the Factory for Ordering Information

TM7 Universal Crimping Press



The TM7 press is a versatile terminating unit which can accommodate both the Mini-Mac Applicator and the Base Unit with TM40 terminator die. Both applications can be quickly removed for simple changeovers without press ram adjustment. The TM7 can be coupled with the Molex KM40S wire processing system and also can be bench mounted for hand-fed wire crimping which includes a foot trip switch with shield. This versatility allows you to choose the type of application to suit your production needs.

- Utilizes the Molex Mini Mac applicator
- Utilizes the Base Unit with Molex TM40 terminators
- Industry standard stroke, no adjustment needed
- 2,500 to 3,000 crimps per hour depending on operator speed
- Easily adaptable to the KM40S wire processor
- Totally enclosed for operator safety

Specifications:

Weight:
290 lbs. (94 kg) approx.

Electrical:
110V 60 Hz

Height:
52" (132cm) with reel

Bench Space:
Front 24" x 18" (60,9cm x 45,7cm) deep
(with reel)

Ordering Information

Eng. No.	Order No.	For Use With
TM7-MM	11-05-0043	Mini-Mac Dies
TM7-UT	11-05-0044	Base Units

IDT/Crimp Wire Processing Equipment



(Not Available in the U.S.)

AM-50 Series Computer Controlled

The AM-50 automatic wire processing machine (Filomat ASM 1000 brand) offers high production flexibility. It can be programmed to measure up to 200 different wire lengths in a sequence, attach a crimp terminal to one end, and sequentially terminate them into IDT housings. Wire lengths range from 50mm to 100 meters.

- Simple, fully programmable computer system with V.D.U. readout, setting facility for number of wires per batch and number of batches required
- Termination presses are mounted on separate frame units using press mounting adapter plates, to allow fast change to other terminal variations. (1-2 minutes change time)
- Production rate: up to 3,600 wires per hour according to length (both ends terminated), i.e. 7,200 terminations per hour
- Wire can also be marked in sequence (bar marking, or alpha-numeric coding) for circuit identification

Specifications

- Weight:**
300 kg (basic machine)
- Height:**
1,900mm (excluding presses)
- Length:**
3,000mm
- Width:**
1,500mm
- Power:**
110 volts, 1 ph, 60 hertz or 220/240 volts,
1 ph, 50 hertz
- Air:**
4.5/8.0 bars, 200 liters per min. An air filter regulator and lubricator unit is fitted as standard

Preferred Version in Europe

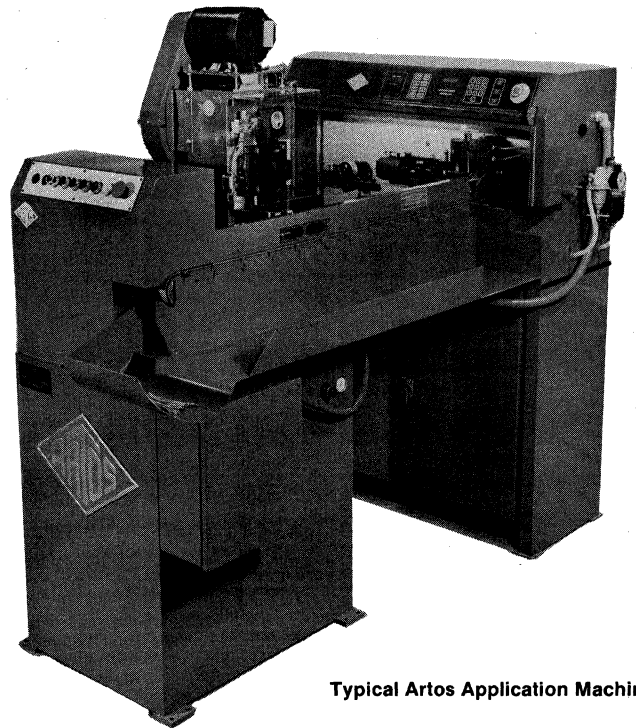
Contact Factory for Ordering Information

M

Artos® Brand Wire Stripping and Terminating Equipment



- High speed, linear feed, electronically-controlled unit measures, cuts and strips up to 13,500 wire leads per hour
- Handles almost any wire - one or two at a time, depending on wire type. It even can be converted to process most ribbon wire up to 2" (50,8mm) wide
- Batching and totaling counters are standard equipment
- Change wire length at the touch of a button as simple as operating an electronic calculator. Set desired quantity of leads the same way and leave the counting to the electronics
- Many Artos wire processing machines have been in continuous productive service for over 40 years - a testimonial to the supreme quality that goes into each and every machine
- Full illumination within machine and electrically interlocked clear plastic guards, which stop machine when opened, provide maximum operator safety
- **Optional equipment** is available for processing different types of wire. Wire marking, pre-slitting, pre-notching and special collecting devices also are available



Typical Artos Application Machine

Molex Combined Capabilities with Artos Wire Stripping and Terminating Equipment

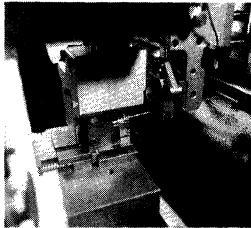
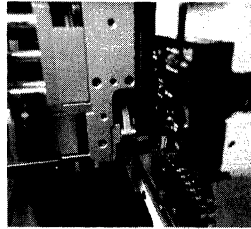
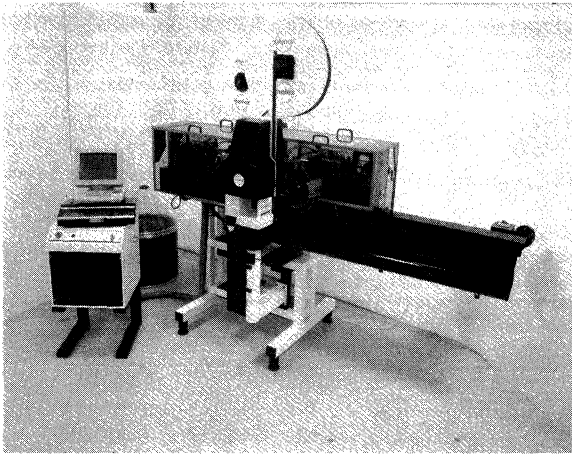
GENERAL MACHINE SPECIFICATIONS								
Artos Model Numbers	Wire Range	Wire "L" Range	Strip "L" Range	Max. Speed	Terminates		Floor Space	Molex Bench Equipment Adaptable with Modifications
					1 End	Both Ends		
CS-6/CTU Machine Equipped with 2 Artos Die Units and 2 Presses	Nos. 24 — 14 gauge	3½" — 15"	1/8" — 1½"	6000	X		108" x 108"	(Yes)
CS-9-AT Machine Equipped with 2 Artos Die Units and 2 Presses	Nos. 24 — 14 gauge	7½" — 50"	3/16" — 1½"	4000	X	X	90" x 150"	(Yes)
CS-9-ST Machine Equipped with 1 Artos Double Die Unit and Press	Nos. 24 — 14 gauge	4" — 50"	3/16" — 3/4"	8000	X		49" x 150"	(No)
CS-14-AT Machine Equipped with 2 Artos Die Units and 2 Presses	Nos. 28 — 14 gauge	1½" — 20"	1/8" — 1"	3000	X	X	56" x 144"	(No)
TA-20-S Machine Equipped with 1 Artos Double Die Unit and Press	Nos. 26 — 14 gauge	2" — 20"	1/8" — 1"	6000	X		44" x 128"	(No)
CS-26A Machine Equipped with Soft-Grip Conveyor™ 1	Nos. 28 — 8 gauge	2" — 328"	1/8" — 1½"	13,500	X	X	40" x 72"	(Yes)

Specifications, descriptions and photographs this page courtesy of Artos® Corporation.

Crimp Termination System



KM40S Automatic Wire Processing Machine



The Molex Fully Automatic Wire Cutting, Stripping and Crimping System is intended for high volume requirements in attaching Molex terminals to one or both ends of solid or stranded discrete wire. The basic machine accepts all styles of Molex presses by means of individual adapter plates. The unit also processes both open and/or closed barrel terminals through the use of electro-pneumatic robots which ensures optimum quality.

- Pre-selected lengths 1.57"-328' (40mm-100m)
- Strip lengths: .100"-.400" (2,5mm - 10mm) in .020" (0,5mm) increments
- Wire sizes: 10-26 AWG (.14mm² - 6mm²) stranded; 16-26 AWG (.14mm² - 1.5mm²) solid
- Production rate: Approx. 3700-2" pcs./hr.
- Sturdy welded base with precision pedestals for mounting and positioning presses
- Standard deposit tray up to 6.56' (2m)
- Dual integrated microprocessor control
- CRT control with keyboard
- Safety shields and interlocks

Specifications:

Electrical - 110V/400VA, 60 Hz

Pneumatic - 80-90 psi; 6.8-10.8 L free air per cycle

Floor Space - 6.56' x 5.9' (2.0 x 1.8m) with presses

Weight - 1166 lbs. (530 kg.) without presses

Set-up Time - Change of length or quantity: 10-20 sec.; Change of crimp tooling: 3-5 min. each press; Change of strip tooling: 1-2 min.

Contact Factory for Ordering Information

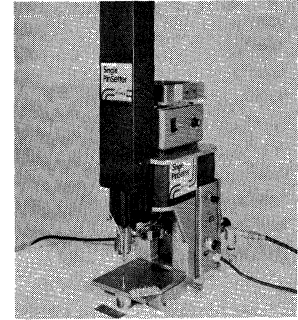
M

Single PinSetter®

- Sets up to 3,600 pins per hour into PC boards
- Accommodates .020" (0,51mm) through .045" (1,14mm) square or round wire pins with simple changeover
- Reliable pin feed
- Meets OSHA requirements
- Optional X-Y table

Specifications

Height - 32" (81 cm)
Width - 12" (30 cm)
Depth - 18" (46 cm)
Air - 80 psi 15 cfm (5,4 ATM @ 0,4 CMM)
Electrical - 110 VAC 5 amps 60 Hertz and 220 VAC 3 amps 50 Hertz



Multi-Directional X-Y Table Accessory for Single PinSetter®

- Designed to increase productivity
- Minimizes operator fatigue
- Bench mountable
- No air or electric required for slide
- Maintains pin orientation

Specifications

Max. Board Size - 23" x 10½"
 (58 cm x 26,7 cm)

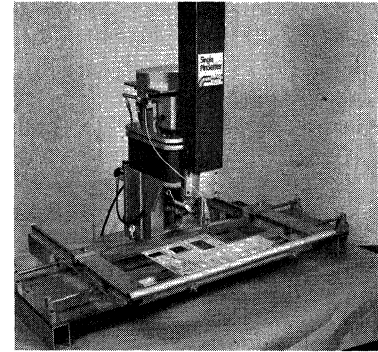
Max. Board Area that can be Pinned - 10" x 15" (25,4 cm x 38 cm)

Min. Distance Board Edge to Pin Location - ⅜" (9,5mm)

Board Thickness - .062" (1,57mm) non-standard thickness available on request

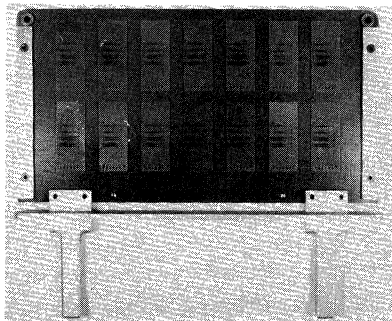
Slide Weight - 70 lbs. (31,5 kg)

Bench Area - 24" x 48" (61 cm x 122 cm)

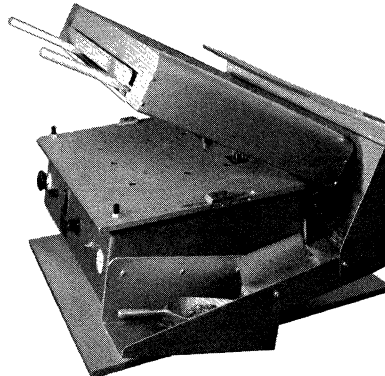


Custom Multi-PinSetter®

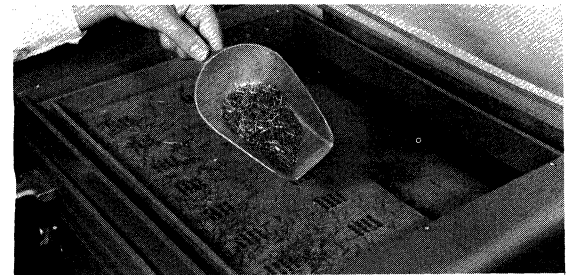
- Vibrator, press and template designed around your PC board pin requirements



1. Boards are loaded onto honeycomb template.



2. Template is placed in vibrator.

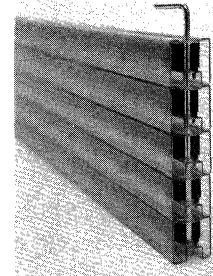
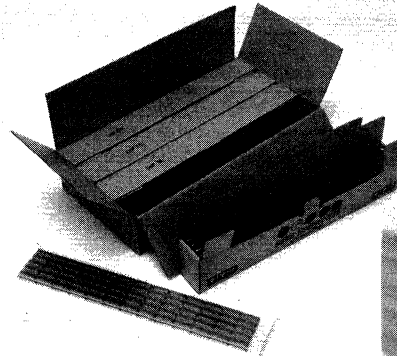
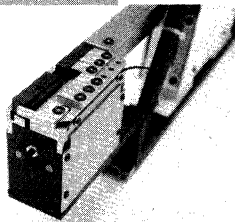
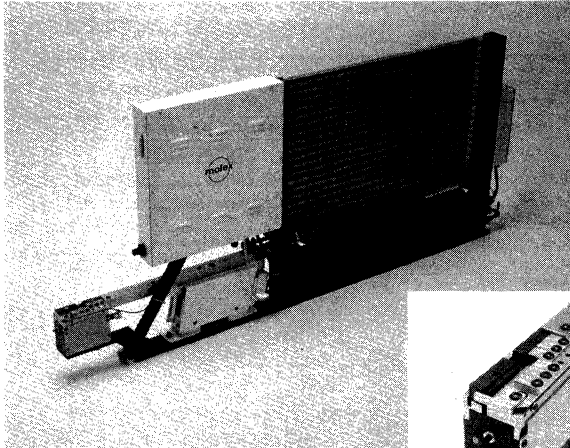


3. Vibrator is turned on and loaded (above) with pins. After a 15 - 30 second cycle 99.9% of the holes are filled. (100% fill is common.)

Robotic Delivery System



Molex Automatic Tube Magazine Unloading System



The Molex Tube Magazine Delivery System will automatically unload thru-hole and SMT board mounted connectors from tubes and accurately locate them for pickup by an industrial robot. Tubes have been a widely accepted means of packaging connectors due to their superior protection. This protection is necessary to an automated assembly process to preserve the features and lead tolerances that Molex designs into its connectors. The Molex tubes come packed in magazines which are held in a stack by two end-closure rods. An operator simply places a magazine of tubes into the delivery system, pulls out the two end-closure rods, and within minutes 480 one inch connectors can be loaded. The tube delivery system will automatically unload the bottom tube until empty. This tube is then cycled into an empty collection bin and a new fully-loaded tube is dropped in place.

After unloading, the connectors are gently vibrated to a precision positioning end block. They are then positioned by the leads and escaped forward to provide robotic pickup on all four sides of the connector.

- **Quality** — Tubes offer superior protection in an easy-to-handle magazine.
- **Compact** — 2-1/2" width makes efficient use of a robot's limited work envelope.
- **Automatic** — PLC controlled for continuous operation. Full communication capabilities with most robot I/O ports.
- **Adjustability** — End tooling can easily adjust to variable circuit size.
- **Flexibility** — Can be adapted to most connector types with a simple change part kit.
- **Accuracy** — Parts are precisely located and escaped forward for pickup on all four sides.
- **Productivity** — The unit is capable of holding a large volume of parts and can deliver on a 2-second cycle.
- **Continuous** — A "low part signal" allows a new magazine of parts to be loaded while the unit is running.
- **Reliability** — Years of proven installed operation with an attractive field service policy.
- **Mountability** — Unit is supplied with precision mounting feet to preserve pickup location upon removal and reinstallation.



Ordering Information - R-8432 Molex Automatic Tube Magazine Unloading System

Connector Eng. No.	Ckt. Size	CHANGE PARTS KIT			ASSEMBLIES — BASE UNIT & CHANGE PARTS KIT					
		Kit Eng. No.	Kit Order No.	Mag. Cap.*		110VAC 50/60 HZ		220VAC 50/60 HZ		
				Min.	Max.	Eng. No.	Order No.	Eng. No.	Order No.	
70373	2-25	R8432-230	11-31-8810	1520	180	R8432-251	11-20-1034	R8432-272	11-20-1066	
70374	2-25	R8432-231	11-31-8811	1520	180	R8432-252	11-20-1045	R8432-273	11-20-1067	
70389	2-25	R8432-132	11-31-6289	940	180	R8432-131	11-20-0936	R8432-274	11-20-1068	
70389	2-25	R8432-132	11-31-6289	940	160	R8432-131	11-20-0936	R8432-274	11-20-1068	
70390	2-25	R8432-232	11-31-8812	940	160	R8432-253	11-20-1046	R8432-275	11-20-1-69	
70375	2-25	R8432-233	11-31-8813	1520	180	R8432-254	11-20-1047	R8432-276	11-20-1070	
70376	2-25	R8432-234	11-31-8814	1520	180	R8432-255	11-20-1048	R8432-277	11-20-1071	
70391	2-25	R8432-2	11-31-2260	1420	180	R8432-8	11-31-2266	R8432-278	11-20-1072	
70392	2-25	R8432-235	11-31-8815	1420	180	R8432-256	11-20-1049	R8432-279	11-20-1073	
70379	4-25	R8432-236	11-31-8816	840	180	R8432-257	11-20-1050	R8432-280	11-20-1074	
70380	4-25	R8432-237	11-31-8817	840	180	R8432-258	11-20-1051	R8432-281	11-20-1075	
70393	4-25	R8432-5	11-31-2263	620	160	R8432-11	11-31-2269	R8432-282	11-20-1076	
70394	4-25	R8432-238	11-31-8818	620	160	R8432-259	11-20-1052	R8432-283	11-20-1077	

*Typical Magazine Qty. 20 Tubes

Molex Automatic Tube Magazine Unloading System

Ordering Information - R-8432 Molex Automatic Tube Magazine Unloading System

Connector Eng. No.	CHANGE PARTS KIT				ASSEMBLIES — BASE UNIT & CHANGE PARTS KIT					
	Ckt. Size	Kit Eng. No.	Kit Order No.	Mag. Cap.*		110VAC 50/60 HZ		220VAC 50/60 HZ		
				Min.	Max.	Eng. No.	Order No.	Eng. No.	Order No.	
70377	4-25	R8432-239	11-31-8819	840	180	R8432-260	11-20-1053	R8432-284	11-20-1078	
70378	4-25	R8432-240	11-31-8820	840	180	R8432-261	11-20-1054	R8432-285	11-20-1079	
70395	4-25	R8432-3	11-31-2261	780	160	R8432-9	11-31-2267	R8432-286	11-20-1080	
70396	4-25	R8432-241	11-31-8821	780	160	R8432-262	11-20-1055	R8432-287	11-20-1081	
5360	10-60	R8432-242	11-31-8822	680	140	R8432-263	11-20-1056	R8432-288	11-20-1082	
8619	6-12	R8432-126	11-31-4750	500	240	R8432-125	11-20-0906	R8432-289	11-20-1083	
71255	4-26	R8432-243	11-31-8823	440	220	R8432-264	11-20-1057	R8432-290	11-20-1084	
70343	2-40	R8432-244	11-31-8824	2320	100	R8432-265	11-20-1058	R8432-291	11-20-1085	
8624	6-80	R8432-245	11-31-8825	1580	120	R8432-266	11-20-1059	R8432-292	11-20-1086	
70390	2-25	R8432-232	11-31-8812	940	160	R8432-253	11-20-1046	R8432-275	11-20-1069	
71325	15	R8432-246	11-31-8826	380	—	R8432-267	11-20-1060	R8432-293	11-20-1087	
71395	6-80	R8432-247	11-31-8827	1580	120	R8432-268	11-20-1061	R8432-294	11-20-1088	
4455-CC	2-25	R8432-30	11-31-8828	1200	180	R8432-129	11-20-0933	R8432-295	11-20-1089	
7478	2-28	R8432-248	11-31-8829	2560	160	R8432-269	11-20-1062	R8432-296	11-20-1090	
7832	2-28	R8432-249	11-31-8830	2560	160	R8432-270	11-20-1063	R8432-297	11-20-1091	
6373	2-28	R8432-128	11-31-4763	2560	160	R8432-127	11-20-0907	R8432-298	11-20-1092	
52011	2-12	R8432-137-35	11-31-9401	1500	400	R8432-137	11-20-0948	R8432-299	11-20-1093	
70229	6-72	R8432-152	11-31-7716	1820	120	R8432-153	11-20-1064	R8432-300	11-20-1094	
70227	6-72	R8432-117	11-31-3708	820	120	R8432-116	11-20-0893	R8432-301	11-20-1095	
4455-AC	4-28	R8432-250	11-31-8831	1200	160	R8432-271	11-20-1065	R8432-302	11-20-1096	
41396	2-28	R8432-323	11-20-9647	2560	160	R8432-332	11-20-1127	R8432-341	11-20-1136	
70287	4-80	R8432-324	11-31-9648	2440	120	R8432-333	11-20-1128	R8432-342	11-20-1137	
41461	2-16	R8432-325	11-31-9649	2560	320	R8432-334	11-20-1129	R8432-343	11-20-1138	
41548	2-28	R8432-326	11-31-9650	2560	160	R8432-335	11-20-1130	R8432-344	11-20-1139	
71308	4-80	R8432-327	11-31-9651	2440	120	R8432-336	11-20-1131	R8432-345	11-20-1140	
42080	2-28	R8432-328	11-31-9652	2560	160	R8432-337	11-20-1132	R8432-346	11-20-1141	
42135	2-28	R8432-350	11-31-9656	2560	160	R8432-351	11-20-1146	R8432-352	11-20-1145	
42189	2-28	R8432-329	11-31-9653	2560	160	R8432-338	11-20-1133	R8432-347	11-20-1142	
41894	14-20	R8432-330	11-31-9654	340	240	R8432-339	11-20-1134	R8432-348	11-20-1143	
42102	5	R8432-331	11-31-9655	560	—	R8432-340	11-20-1135	R8432-349	11-20-1144	

*Typical Magazine Qty. 20 Tubes

Application Note:

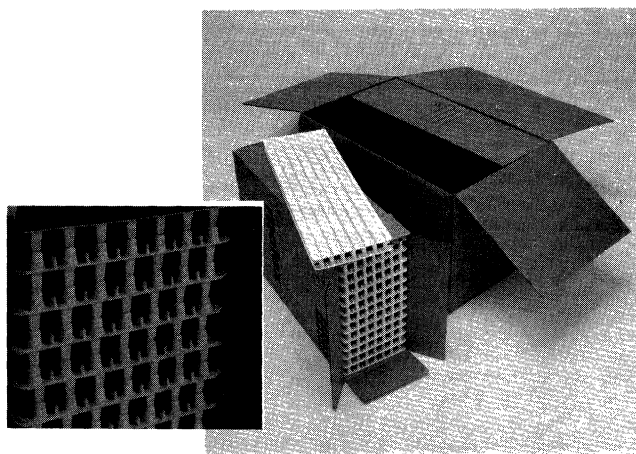
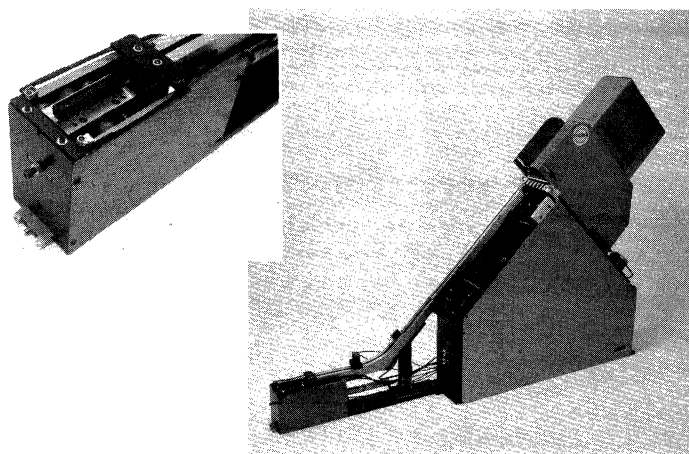
If the application requires products not listed in the table above, the factory must be consulted to determine if the connector is available in tubes. Also, a tool change kit may need to be developed for the proposed application. Tool kits can be developed within the 10 week lead time.



Robotic Delivery Systems



Molex Automatic Carton Matrix Unloading System



The Molex Carton Matrix Delivery System will automatically unload thru hole and SMT board mounted connectors from trays and accurately locate them for pickup by an industrial robot. The tray concept was developed as a cost effective alternative to tubes without sacrificing the superior protection. This protection is necessary to an automated assembly process to preserve the features and lead tolerances that Molex designs into its connectors. The compact size of the carton allows it to fit easily into most automated warehousing and supply systems. An operator simply removes the end of the carton, loads it into the receiver bin and tilts up the receiver and within minutes 1,080 one inch connectors can be loaded.

The connectors are unloaded a row at a time without concern with matrix spacings. The connectors are then fed through single track to a precision positioning end block. They are then positioned by the leads and escaped forward to provide robotic pickup on all four sides of the connector.

- **Quality** — The carton offers superior protection in an easy-to-handle and easy-to-warehouse package.
- **Automatic** — PLC controlled for continuous operation. Full communication capabilities with most robot I/O ports.
- **Adjustability** — End tooling can easily adjust to variable circuit size.
- **Accuracy** — Parts are precisely located and escaped forward for pickup on all four sides.
- **Flexibility** — Can be adapted to most connector types with a simple change part kit. Unit can be ordered in both left hand and right hand versions.
- **Productivity** — The unit is capable of holding a large volume of parts and delivering them on a 2-second cycle.
- **Continuous** — A "low part signal" allows a new carton of parts to be loaded while the unit is running.
- **Reliability** — This unit is designed for years of operation and is backed by an attractive field service policy.
- **Mountability** — Unit is supplied with precision mounting feet to preserve pickup location upon removal and reinstallation.



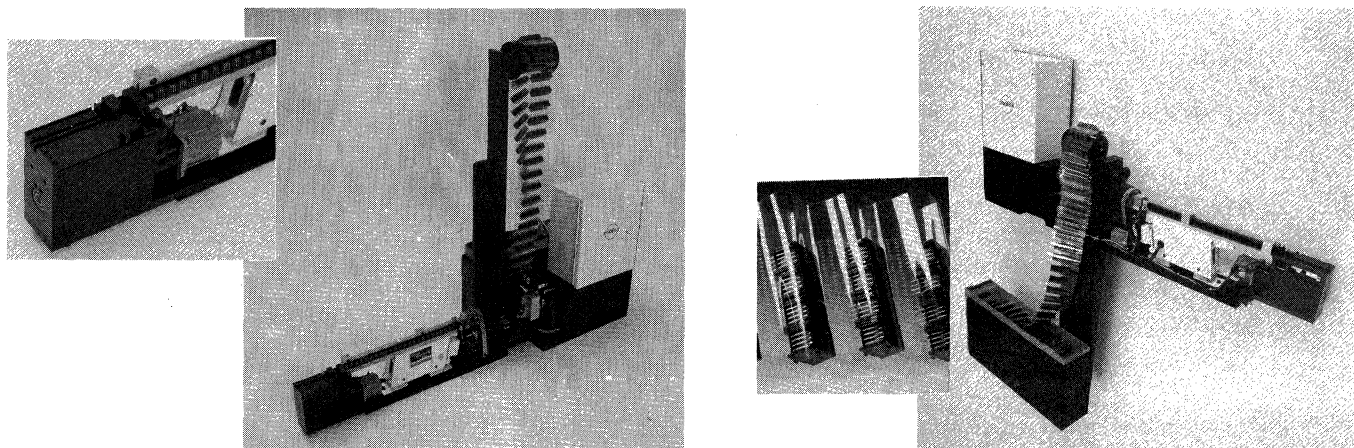
Ordering Information - AM-60586 Automatic Carton Matrix Unloading System

CHANGE PARTS KIT					Left Hand Assy. Base Unit & Change Parts Kit				Right Hand Assy. - Base Unit & Change Parts Kit				
Connector Eng. No.	Ckt. Size	Kit Eng. No.	Kit Order No.	Qty. Parts Ckts.		110VAC 50/60 HZ		220VAC 50/60 HZ		110VAC 50/60 HZ		220VAC 50/60 HZ	
				Min.	Max.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.
78816	60	AM60586-F1	11-31-5489	300	—	AM60586-16	11-20-1013	AM60586-24	11-20-1021	AM60586-1	11-20-1029	AM60586-8	11-20-1037
78824	60	AM60586-F2	11-31-8805	280	—	AM60586-17	11-20-1014	AM60586-25	11-20-1022	AM60586-3	11-20-1030	AM60586-9	11-20-1038
78830	30	AM60586-F3	11-31-8806	550	—	AM60586-18	11-20-1015	AM60586-26	11-20-1023	AM60586-4	11-20-1031	AM60586-10	11-20-1039
71355	4-16	AM60586-F4	11-31-8807	952	616	AM60586-19	11-20-1016	AM60586-27	11-20-1024	AM60586-5	11-20-1032	AM60586-11	11-20-1040
71006	20-62	AM60586-G1	11-31-5490	1008	360	AM60586-20	11-20-1017	AM60586-28	11-20-1025	AM60586-2	11-20-1033	AM60586-12	11-20-1041
6777	12-62	AM60586-G1	11-31-5490	1008	360	AM60586-20	11-20-1017	AM60586-28	11-20-1025	AM60586-2	11-20-1033	AM60586-12	11-20-1041
70227	6-72	AM60586-F5	11-31-8808	2880	360	AM60586-22	11-20-1019	AM60586-30	11-20-1027	AM60586-6	11-20-1035	AM60586-14	11-20-1043
70229	6-72	AM60586-F6	11-31-8809	3072	384	AM60586-23	11-20-1020	AM60586-31	11-20-1028	AM60586-7	11-20-1036	AM60586-15	11-20-1044
71003	20-62	AM60586-G1	11-31-5490	1008	360	AM60586-20	11-20-1017	AM60586-28	11-20-1025	AM60586-2	11-20-1033	AM60586-12	11-20-1011
95009	4-8	AM60586-F7	11-31-9657	1872	1404	AM60586-35	11-20-1124	AM60586-34	11-20-1125	AM60586-33	11-20-1126	AM60586-32	11-20-1097

Application Note:

If the application requires products not listed in the table above, the factory must be consulted to determine if the connector is available in trays. Also, a tool change kit may need to be developed for the proposed application. Tool kits can be developed within the 10 week lead time.

Molex Automatic Welded Film Pack Unloading System



The Molex Welded Film Unloader was developed to fill the need for a low cost method of delivering a large number of components to industrial robots. Welded Film Pack packages connectors between two films of mylar which are bonded between parts to form containments. Parts are held in the containments by film tension and ejected by the delivery system. The standard film width is 4" and each containment is filled with as many parts as it will hold. A standard Ammo Pack will typically hold a minimum of 800 parts but can hold up to 4000 parts (depending on circuit size). The delivery system will automatically remove parts from the package and position them by the leads, (or pegs on SMT versions) awaiting pickup by a robot or placement machine.

After unloading, the connectors are gently vibrated to a precision positioning end block. They are then positioned by the leads and escaped forward to provide robotic pickup on all four sides of the connector.

- Quality** — The welded film offers good protection in an easy-to-handle package.
- Compact** — 6-1/2" wide unit makes efficient use of a robot's limited work envelope. (Note: for table top feeding the unit is 10-1/2" wide).
- Automatic** — PLC controlled for continuous operation. Full communication capabilities with most robot I/O ports.
- Flexibility** — Can be adapted to most Molex connector styles with a simple change part kit.
- Accuracy** — Parts are precisely located and escaped forward for pick up on all four sides.
- Packaging Location** — There are two versions available. The Ammo Pack can be located above the table top or beneath the unit.
- Productivity** — The unit is capable of a large volume of parts and can deliver them on a 2 second cycle.
- Continuous** — A 'low part signal' allows a new Ammo pack of parts to be loaded while the unit is running.
- Reliability** — This unit is designed for years of operation and is backed by the standard Molex field service policy.
- Installation** — Unit is supplied with precision mounting feet to preserve pickup location upon removal and reinstallation.
- Loading** — The unit is loaded similar to a movie projector. A single door is opened, the film is inserted and the door is closed.
- Adjustability** — End tooling can easily adjust to variable circuit size.

M

Ordering Information - AM60585 Automatic Welded Film Pack Unloading System

CHANGE PARTS KIT					ASSEMBLIES - BASE UNIT & CHANGE PARTS KIT							
Connector Eng. No.	Ckt. Size	Kit Order No.	Eng. No.	Package Capacity	Table Top Feed 110VAC 50/60 HZ		Below Table Feed 110VAC 50/60 HZ		Table Top Feed 220VAC 50/60 HZ		Below Table Feed 220VAC 50/60 HZ	
					Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.	Eng. No.	Order No.
41369	4, 6, 8	11-31-8226	AM60585-32	1000	AM60585-6	11-20-0997	AM60585-5	11-20-0996	AM60585-8	11-20-0999	AM60585-7	11-20-0998
95001	4, 6, 8	11-31-8756	AM60585-34	1000	AM60585-10	11-20-1011	AM60585-9	11-20-1000	AM60585-12	11-20-1003	AM60585-11	11-20-1002
41314	4, 6, 8	11-31-8803	AM60585-35	1000	AM60585-14	11-20-1005	AM60585-13	11-20-1006	AM60585-16	11-20-1008	AM60585-15	11-20-1007
41687	4, 6, 8	11-31-8804	AM60585-36	1000	AM60585-20	11-20-1010	AM60585-19	11-20-1009	AM60585-22	11-20-1012	AM60585-21	11-20-1001

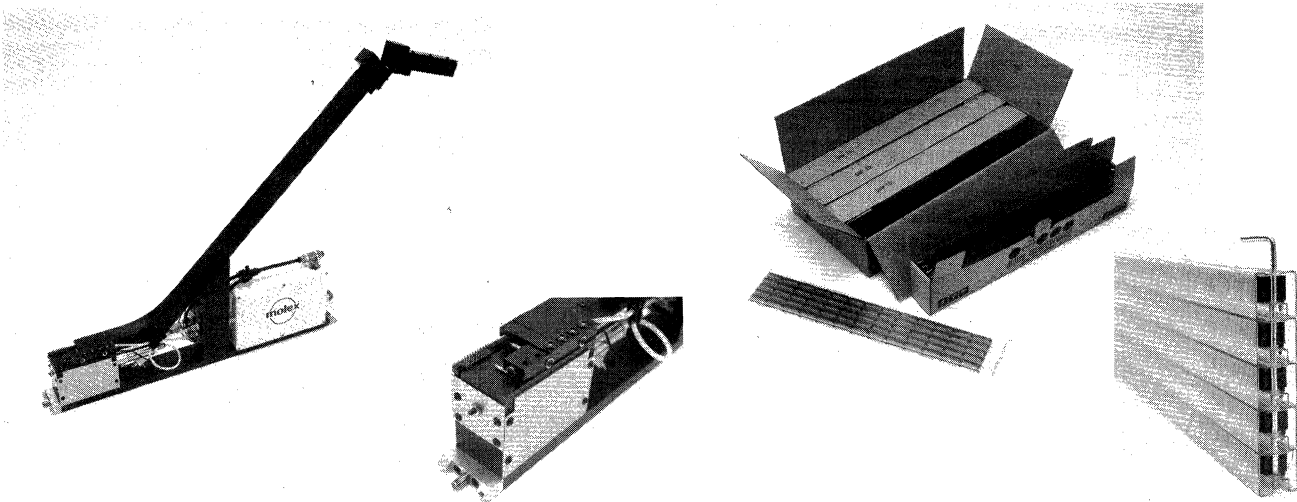
Application Note:

If the application requires products not listed in the table above, the factory must be consulted to determine if the connector is available in trays. Also, a tool change kit may need to be developed for the proposed application. Tool kits can be developed within the 10 week lead time.

Robotic Delivery Systems



Molex Single Tube Unloading System



The Molex Single Tube Delivery System will unload thru hole and SMT board mounted connectors from a tube and accurately locate them for pickup by an industrial robot. This unit was developed to support our customer whose volume does not warrant the tube magazine delivery system. Tubes have been a widely accepted means of packaging connectors due to their superior protection. This protection is necessary to an automated assembly process to preserve the features and lead tolerances that Molex designs into its connectors. The Molex tubes come packed in a magazine of tubes which are held in a stack by two end-closure rods. An operator simply removes one tube from the magazine, pivots down the tube receptacle, loads the tube and pivots up to supply 48" of on-line product.

The parts are then gravity fed to a precision end block. They are then positioned by the leads and escaped forward to provide robotic pickup on all four sides of the connector.

- **Quality** — Tubes offer superior protection in an easy-to-handle magazine.
- **Compact** — 2-1/2" width makes efficient use of a robot's limited work envelope.
- **Automatic** — Self-contained controls for continuous operation. Full communication capabilities with most robot I/O ports.
- **Adjustability** — End tooling can easily adjust to variable circuit size.
- **Accuracy** — Parts are precisely located and escaped forward for pickup on all four sides. This end positioner is the same as on the tube magazine unloader.
- **Affordability** — Allows a customer to automate with lower volume levels. As volume increases a customer can upgrade to the automatic tube magazine unloader without changes in space or communication requirements.
- **Productivity** — The unit will supply connectors on a 2-second cycle and contains a buffer of parts. The viewing window allows a new tube to be loaded without breaking continuity.
- **Reliability** — This unit is designed for years of operation and is backed by an attractive field service policy.
- **Mountability** — Unit is supplied with precision mounting feet to preserve pickup location upon removal and reinstallation.

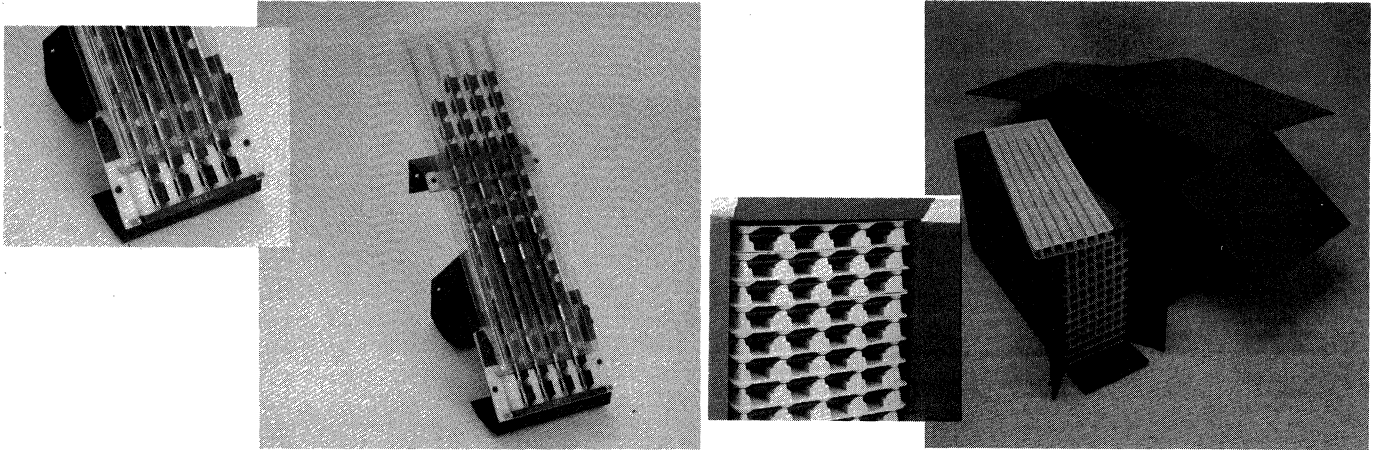


Contact Factory for Ordering Information

Manual Assembly Delivery Systems



Molex Manual Single Tray Unloading System



The Molex Manual Single Tray Unloader delivers thru hole or SMT board mounted connectors for manual pickup by an operator. The tray concept was developed as a cost effective alternative to tubes without sacrificing the superior protection. This unloader allows an operator to unload, pick and place oriented components without damaging their leads.

An operator simply places a tray in the unit, pulls the end closure straw from the tray and allows the connectors to fall into a pickup track. The components are present, properly positioned for manual pickup.

- **Productivity** — Increases operator productivity over picking and orienting loose parts from topless tray. This unit presents connectors in the same orientation (connector leads down) as their placement position.
- **Quality** — Molex trays offer superior protection in an easy-to-handle package.
- **Adjustability** — Can be adjusted to 3 different pick heights at 5 different angles.
- **Flexibility** — Can be adjusted for any circuit size in a connector type.
- **Mountability** — Adaptable for table top, wall mounting or can hang on most commercial assembly conveyor systems.
- **Automation** — The tray pack can be further automated using Molex Carton Matrix Unit #AM60586 for use in robotic component placement systems.

M

Ordering Information - AM-60083 Manual Assembly Delivery Systems

Connector Eng. No.	Ckt. Size	Tray Quantities		Eng. No	Order No.
		Min. Ckt.	Max. Ckt.		
78816	60	20	—	AM60083-13	11-31-8699
78824	60	20	—	AM60083-15	11-20-1098
78830	30	40	—	AM60083-16	11-20-1099
71355	4-16	68	44	AM60083-2	11-31-8628
71006	20-134	84	12	AM60083-17	11-20-1100
6777	12-142	72	12	AM60083-17	11-20-1100
70227	6-72	192	24	AM60083-18	11-20-1102
70229	6-72	192	24	AM60083-19	11-20-1101
71003	20-100	84	18	AM60083-17	11-20-1100
95009	4-8	144	108	AM60083-21	11-20-1123

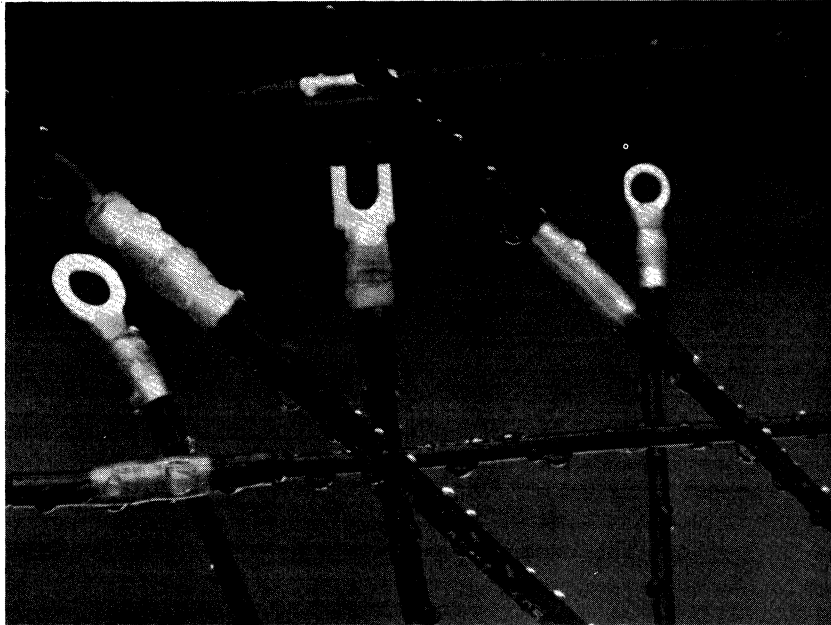
Application Note:

If the application requires products not listed in the table above, the factory must be consulted to determine if the connector is available in trays.

Solderless Terminals, Splices, Quick Connects, Cable Ties and Crimping Tools



Contents



Terminals and Splices

Basic termination construction features	2N-4N
26-24 AWG (0,1-0,3mm ²) range terminals	5N
22-18 AWG (0,25-1,3mm ²) range terminals, splices	6N-11N
16-14 AWG (1,0-2,6mm ²) range terminals, splices	12N-19A
14-12 AWG (1,65-4,2mm ²) range terminals	19N
12-10 AWG (2,6-6,6mm ²) range terminals, splices	20N-22N
8 AWG (6,6-10,5mm ²) range terminals, splices	23N
6 AWG (10,5-16,8mm ²) range terminals, splices	24N
4 AWG (16,8-26,6mm ²) range terminals, splices	25N
2 AWG (26,6-42,4mm ²) range terminals, splices	26N
1/0, 2/0* AWG (42,4-76,2mm ²) terminals, splices	27N
3/0, 4/0* AWG (76,2-117,0mm ²) terminals, splices	28N
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Heat sealable nylon splice (PERMA-SEAL)	34N-35N
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Quick Disconnects

Introduction	39N
Fully Insulated Quick Disconnects	40N
Strip receptacles	41N
Tape-fed and loose-piece QD receptacles	42N
Terminal Block Hardware	43N-48N

Cable Ties

Cable Ties	49N-51N
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Crimping Tools

Crimping Tools	52N-54N
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Crimping Tool Die-Set Cross Reference Charts

Crimping Tool Die-Set Cross Reference Charts	55N
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Design Engineer Technical Data

Design Engineer Technical Data	56N
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Conversion Tables, Stud Size Chart	57N
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Molex-ETC OEM Electronic Distributors

Molex-ETC OEM Electronic Distributors	58N
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Part Number Key

Molex-ETC part numbers describe the part. To find the one you're looking for, use this handy key:

(C)228-10X first letter denotes wire range	C(2)28-10X first number denotes barrel style.
M = 26-24 (0,1-0,3mm ²) = Yellow	1 = KRIMPTITE®
A = 22-18 (0,25-1,3mm ²) = Red	2 = INSULKRIMP®
B = 16-14 (1,0-2,6mm ²) = Blue	3 = VERSAKRIMP®
P = 14-12 (1,65-4,2mm ²) = Yellow	4 = VIBRAKRIMP®
C = 12-10 (2,7-6,6mm ²) = Yellow	5 = AVIKRIMP®
D = 8 (6,6-10,5mm ²) = Red	6 = INSULKRIMP®
E = 6 (10,5-16,8mm ²) = Blue	7 = NYLAKRIMP®
F = 4 (16,8-26,6mm ²) = Yellow	8 = AVIKRIMP®
G = 2 (26,6-42,4mm ²) = Red	
H = 1/0 (42,4-60,5mm ²) = Blue	
J = 2/0 (60,5-76,2mm ²) = Yellow	
K = 3/0 (76,2-96,3mm ²) = Red	
L = 4/0 (96,3-117,0mm ²) = Blue	

Above color code is used on terminal insulation.

The following are trademarks of Molex-ETC, Incorporated: OCTAKRIMP, TEMP-TERMS, KRIMPTITE, VERSAKRIMP, INSULKRIMP, VIBRAKRIMP, AVIKRIMP, NYLAKRIMP, PDQ, SELECTAKRIMP, RAPID-PUMP, PUTT-PUMP.

MOLEX-ETC INCORPORATED, 4820 Park Boulevard, Pinellas Park, FL 34665, Phone: 813-541-4651, TOLL FREE: 1-800-237-8905
A DIVISION OF: MOLEX INCORPORATED, 2222 Wellington Court, Lisle, IL 60532, Phone: 312-969-4550

C-2(28)-10X second and third numbers are factory numbers, and designate tongue type and basic dimensions.

FUNNEL INDICATORS

INSULKRIMP:

C-228-10X "X" denotes funnel wire entry in 22-10 AWG terminals.

AVIKRIMP:

C-(8)28-10— "8" denotes funnel ferrule wire part in 22-10 AWG terminals.

VIBRAKRIMP:

AA-(4)21-10— "4" indicates funnel ferrule wire part in short barrel 22-14 AWG, 12-10 AWG terminals, and 16-14HD AWG terminals.

QUICK DISCONNECTS:

Funnel wire entry in Insulkrimp, funnel ferrule wire entry in Avikrimp in 22-14 AWG quick disconnects.

NON-FUNNEL

C-228-10(XX) "XX" indicates extra-expanded sleeves.
 C-(8)28-10(X) — "8X" denotes expanded sleeve (non-funnel)
 (Only available in Avikrimp 12-10 AWG and 16-14 HD AWG)
 A-421-10-long barrel 22-14 AWG Vibrakrimp.



Molex-ETC Precision-Engineered Terminals



1. ANNEALED AND PLATED. The terminals are made of electrolytic copper for highest conductivity (MIL QQ576) and annealed to flow freely under crimping pressure for the best connection. They are then electroplated with tin for the greatest corrosion resistance, in accordance with the highest standards of the electrical industry and MIL-T-10727 (Ord.).

2. QUICK IDENTIFICATION. The wire range is clearly stamped on the tongue perimeters of all terminals and splices, rather than the gusset area in order to maintain the overall construction integrity.

3. BEST CONTACT AND GRIP. All of our 26 through 10 AWG (0,1-0,3mm²) terminals and splices have multiple, deep V-notches which securely grip the wire providing maximum contact and holding power over the widest possible area.

4. FUNNELED FOR SPEED. The chamfered edge allows faster, smoother wire insertion. The funnel action actually gathers frayed strands thereby increasing crimping rates and wire termination reliability.

5. EXTRA STRENGTH. The tin-plated brass sleeve adds extra barrel strength and permanently anchors the wire insulation to the terminal. It also protects against stress and high vibration.

6. ADDED INSULATION. An extruded nylon insulating sleeve extends beyond the metal support sleeve so that no extra insulation is necessary.

7. ENGINEERED FOR DURABILITY. Sturdy gussets reinforce the terminal where the flat tongue has been formed into a round barrel.

8. BARREL LENGTHS. Terminals with industry standard 5/32" (4,45mm) barrels are available in both the 22-18 AWG (0,25-1,33mm²) and 16-14 AWG (1,0-2,6mm²) wire ranges, providing crimping reliability in a lightweight, space-saving part.

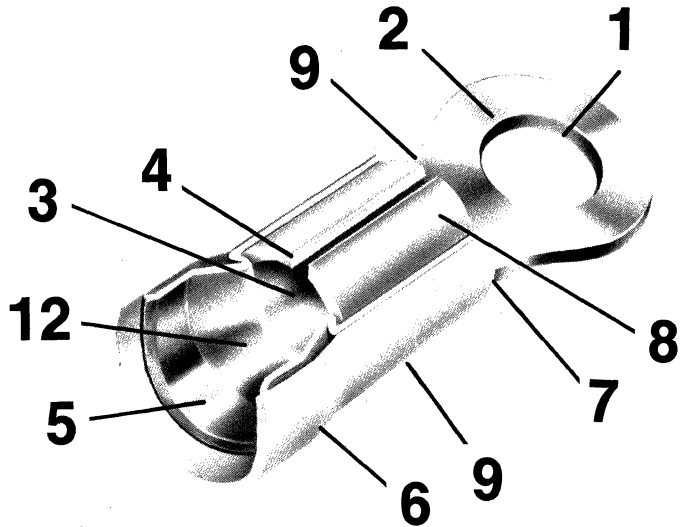
9. RAPID INSPECTION. The Molex-ETC open-end design permits a quick visual inspection of the wire location before and after the crimping operation.

10. ACCURATE CRIMPING. The funneled entrance into the electrical barrel eliminates wire strand "hang-up", increases the crimping rates and the reliability of the wire termination. (INSULKRIMP)

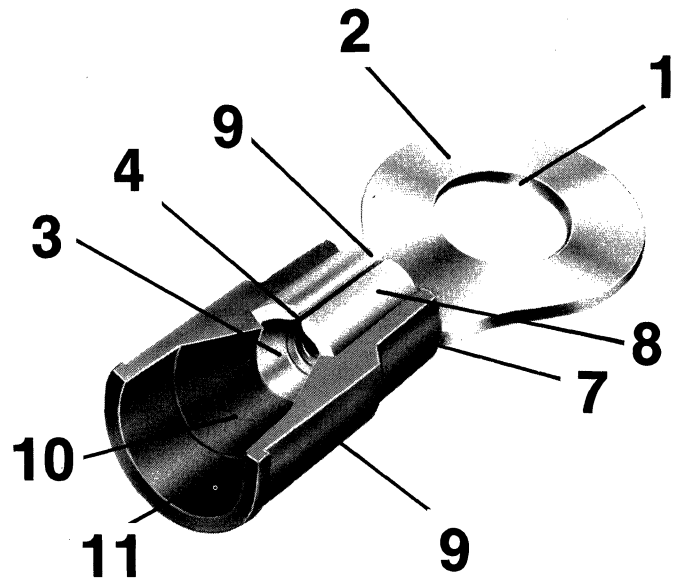
11. FLEX PROTECTION. The PVC insulation overhang cuts down dramatically on potential damage caused by wire flex and vibration.

12. TERMINATION RELIABILITY. The funnel ferrule wire entrance into the electrical barrel eliminates wire strand "hang up", increases crimping rates and wire termination reliability. (AVIKRIMP)

All Molex-ETC terminals have been designed and engineered to help you increase your crimping rates, for greater cost-effectiveness and profitability, and to ensure the overall quality of the end-product: your application.



AVIKRIMP
Funnel Ferrule wire entry



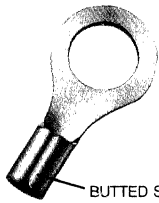
INSULKRIMP
Funnel entry

N

Molex-ETC Precision-Engineered Terminals



Barrel Styles



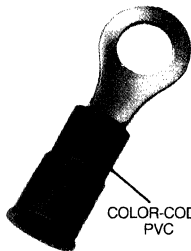
BUTTED SEAM

KRIMPTITE® This is the basic Molex-ETC barrel style. It is non-insulated and features a quality, one-piece design. It is also the most economical style and has the greatest variety of uses where special features are not required. The KRIMPTITE is available in wire range 26-10 AWG (0,1-6,6mm²).



BRAZED SEAM

VERSAKRIMP™ When the butted-seam KRIMPTITE barrel is bonded with a special brazing alloy, it becomes a VERSAKRIMP barrel. These brazed-seam barrel terminals and splices will not open under conditions of stress or wire pull. As versatile as it is tough, it can be crimped under most adverse conditions by many types of tooling. The VERSAKRIMP is ideal for hard-to-crimp solid and standard wires. It is available in wire range 22-4/0 AWG (0,25-117,0mm²).



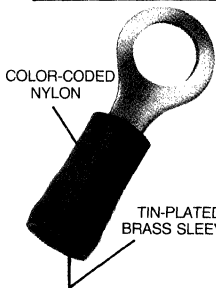
COLOR-CODED PVC

INSULKRIMP® These terminals and splices feature a rigid insulation sleeve of polyvinyl chloride (PVC) affixed permanently to the KRIMPTITE barrel (in 22-10 AWG) or the brazed-seam VERSAKRIMP barrel (in 22-2/0 AWG). It attaches to the wire with one quick crimp and the insulation sleeve protects against vibration damage by preventing wire flex at the crimp point. The funnel-entrance into the electrical barrel eliminates wire strand "hang up", increases crimping rates and enhances wire termination reliability. The INSULKRIMP has a continuous-duty, operating temperature range from -40°F to 194°F (-40°C to 90°C). Available in wire range 22-2 AWG (0,25-42,4mm²).



TIN-PLATED BRASS SLEEVE

VIBRAKRIMP® You need to specify these terminals anytime heavy vibration is anticipated in an installation or application. The VIBRAKRIMP terminals are formed by adding a seamless, tin-plated, brass sleeve to the basic KRIMPTITE barrel. This gives even greater strength to the barrel. The sleeve extends beyond the inner barrel to grasp the wire insulation securely, thereby preventing wire flex near the crimp point. A funnel ferrule wire entrance into the electrical barrel eliminates wire strand "hang up" for increased crimping rates and wire termination reliability in the standard barrel length. The VIBRAKRIMP is available in wire range 22-10 AWG (0,25-6,6mm²).



COLOR-CODED NYLON

TIN-PLATED BRASS SLEEVE

AVIKRIMP® This color-coded barrel style offers you the ultimate in high-performance terminal design and rugged construction. The tin-plated brass sleeve strengthens the barrel and secures the wire to protect against stress and high vibration. The permanently-attached, color-coded nylon insulating sleeve extends beyond the metal support sleeve. A funnel ferrule wire entrance into the electrical barrel prevents wire strand "hang up" for increased crimping rates and added wire termination reliability in the standard barrel length. The AVIKRIMP has a continuous-duty operating temperature range from -67°F to 221°F (-55°C to 105°C) and is available in wire range 26-10 AWG (0,1-6,6mm²).



COLOR-CODED NYLON

NYLAKRIMP™ This terminal was designed specifically for larger wire applications where both high temperatures and vibration levels are expected. The color-coded barrel is formed by affixing a permanent, rigid, overhanging nylon insulating sleeve to a barrel. The NYLAKRIMP withstands continuous-duty operating temperatures of -67°F to 221°F (-55°C to 105°C). The color-coded nylon sleeve won't slide, fracture or unravel and lets you quickly identify the wire range from 8-4/0 AWG (6,7-117,0mm²).

Tongue Styles



RING

The basic tongue type. It is the safest and most reliable since it cannot be disconnected unless the screw is completely removed.



SPADE

The open end allows easier insertion and extraction since the mounting screw doesn't have to be removed completely. The straight edges lock securely between terminal block barriers.



SNAP SPADE

The spring-like tongue snaps around the screw like a Quick-Disconnect and the terminal is locked into place until the mounting screw can be tightened down.



FLANGED SPADE

The turned up edges give this spade more safety and reliability. The flanges also give both a location and locking action that aids greatly in installation.



RECTANGULAR

This style has all the security and safety of the ring tongue plus the added feature of parallel, straight edges which secure the terminal firmly between the raised barriers of terminal blocks.



HOOK

This tongue type combines the security advantage of the ring with the easy-handling characteristics of the spade.



Molex-ETC Precision-Engineered Terminals

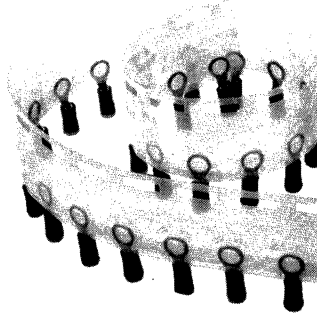


Carrier Styles

For high-speed, volume-production crimping, many companies in a wide range of industries have come to rely on Molex-ETC's Tape-mounted and Continuous Molded Strip terminals and automatic crimping presses to give them the highest-quality end-product at the lowest applied cost.

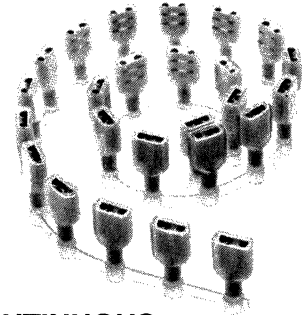
NOTE: Most Molex-ETC part numbers are available on tape. When ordering these parts, specify by adding the proper suffix to the part number from the chart below.

REEL SIZE	CRIMPING PRESS
14"	ATP-100; ATP-101; ETP-200; AND 3-TON PRESSES Suffix: "T"
24"	PDQ CONTINUOUS MOLDED STRIPS Suffix: "C"



MYLAR TAPE CARRIERS

Most Molex-ETC terminals in the 26 thru 4 AWG wire range and PDQ Quick-Disconnect receptacles can be tape-mounted and, when used with one of our air powered, automatic tape crimping presses, can deliver up to 3,600 crimps per hour.



CONTINUOUS MOLDED STRIPS

The fully-insulated line of PDQ® Quick-Disconnect Receptacles are also available in easy-to-identify, color-coded, continuous molded nylon strips. When used with the Molex-ETC ATP-101C air powered crimping press, you can make up to 3,600 crimps per hour, greatly reducing your overall applied costs.

Splices

Molex-ETC offers standard and special splices for nearly every type of wiring need.



BUTT SPLICE

Stripped wires are inserted from each end and "butt" in the center. Then a crimp at each end secures the connection.



NYLON CLOSED-END CONNECTOR

Used in a wide variety of situations to "pigtail" or tie together two or more wires.

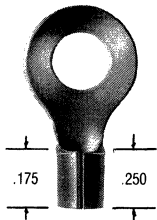


PARALLEL SPLICE

Stripped wires lie side by side in the splice and are secured by a single crimp in the middle.

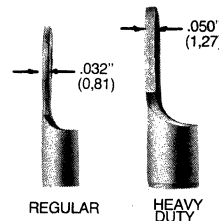
Problem Solvers

Molex-ETC offers a number of products with special, added features to solve practically any wiring problem.



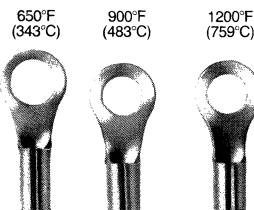
BARREL LENGTHS

Molex-ETC makes the industry standard 5/32" (4,45) barrel. Also available in a 1/4" (6,35) long barrel terminal.



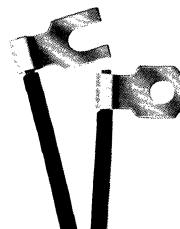
HEAVY DUTY TERMINALS

Terminals in the 16-14 AWG (1,0-2,6mm²) range are formed from heavier stock to resist the excessive vibration found in some applications that could fracture standard terminals.



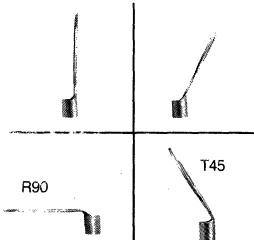
TEMP TERMS™

Molex-ETC offers a full range of styles and sizes to provide reliable circuitry in three high ambient temperature ranges up to 1,200°F (759°C).



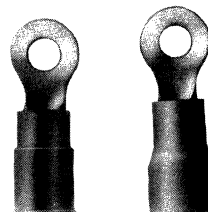
FLAG TERMINALS

These terminals have barrels at a right angle to the tongue to facilitate certain high-density application situations. They are available in both spade and elongated ring tongue styles.



BENT-TONGUE TERMINALS

As the name implies, the tongue can be bent in any desired angle to accommodate your particular application. For a 90° bend away from the barrel, add the suffix "R90" to the part number. For a 90° bend toward the barrel add the suffix "T90". Use the same procedure to specify other angles. Available in 8-4/0 AWG (6,7-117,0mm²) terminals.



EXTRA-EXPANDED SLEEVES

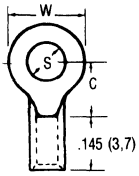
These terminals have inside diameter expanded to accommodate unusually large wire insulation sizes. They are available in many Molex-ETC terminal styles and can be identified by the part numbers with the "XX" suffixes.

N

26-24 Wire Range



Ring Tongue Terminals



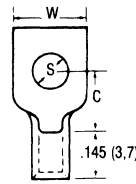
0.18 (0,4) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		AVIKRIMP®	
			Part Number	Max. Length L	.075 (1,9) Max. Wire Insulation Diameter	Max. Length L
0 (1,5)	.150 (3,8)	.121 (3,1)	M-1122-00	.366 (9,3)	M-8122-00	.512 (13,0)
2 (2)	.150 (3,8)	.121 (3,1)	M-1122-02	.366 (9,3)	M-8122-02	.512 (13,0)
	.213 (5,4)	.215 (5,5)	M-1113-02	.492 (12,5)	M-8113-02	.645 (16,3)
4 (2,6)	.150 (3,8)	.215 (5,5)	M-1114-02	.460 (11,7)	M-8114-02	.615 (15,6)
	.213 (5,4)	.215 (5,5)	M-1113-04	.492 (12,5)	M-8113-04	.645 (16,3)
6 (3,5)	.213 (5,4)	.215 (5,5)	M-1113-06	.492 (12,5)	M-8113-06	.645 (16,3)
	.260 (6,6)	.290 (7,4)	M-1118-06	.590 (15,0)	M-8118-06	.736 (18,7)
8 (4)	.260 (6,6)	.290 (7,4)	M-1118-08	.590 (15,0)	M-8118-08	.736 (18,7)
	.260 (6,6)	.290 (7,4)	M-1118-10	.590 (15,0)	M-8118-10	.736 (18,7)

Rectangular Tongue Terminals

Commercial 26-22
Circular Mil Area 254-642
0,13-0,24mm²

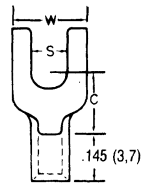


0.18 (0,4) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		AVIKRIMP®	
			Part Number	Max. Length L	.075 (1,9) Max. Wire Insulation Diameter	Max. Length L
2 (2)	.192 (4,9)	.215 (5,5)	M-1115-02	.496 (12,6)	M-8115-02	.666 (16,9)
6 (3,5)	.322 (8,2)	.290 (7,4)	M-1119-06	.652 (16,6)	M-8119-06	.827 (21,0)
8 (4)	.322 (8,2)	.290 (7,4)	M-1119-08	.652 (16,6)	M-8119-08	.827 (21,0)
10 (-)	.322 (8,2)	.290 (7,4)	M-1119-10	.652 (16,6)	M-8119-10	.827 (21,0)

Spade Tongue Terminals

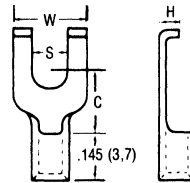


0.18 (0,4) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		AVIKRIMP®	
			Part Number	Max. Length L	.075 (1,9) Max. Wire Insulation Diameter	Max. Length L
0 (1,5)	.135 (3,4)	.121 (3,1)	M-1123-00	.362 (9,2)	M-8123-00	.537 (13,6)
2 (2)	.192 (4,9)	.215 (5,5)	M-1116-02	.496 (12,6)	M-8116-02	.671 (17,0)
4 (2,6)	.213 (5,4)	.215 (5,5)	M-1121-04	.487 (12,4)	M-8121-04	.650 (16,5)

Flanged Spade Terminals

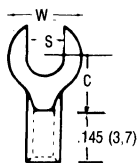


0.18 (0,4) Stock

H = 1/16
Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		AVIKRIMP®	
			Part Number	Max. Length L	.075 (1,9) Max. Wire Insulation Diameter	Max. Length L
2 (2)	.192 (4,9)	.215 (5,5)	M-1117-02	.496 (12,6)	M-8117-02	.655 (16,6)

Slotted Ring Tongue



0.18 (0,4) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		AVIKRIMP®	
			Part Number	Max. Length L	.075 (1,9) Max. Wire Insulation Diameter	Max. Length L
6 (3,5)	.260 (6,6)	.290 (7,4)	M-1120-06	.590 (15,0)	M-8120-06	.765 (19,4)

The part numbers in the shaded areas indicate standard/preferred products.

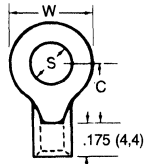


22-18 Wire Range

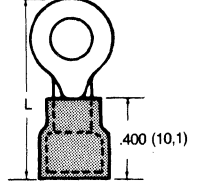
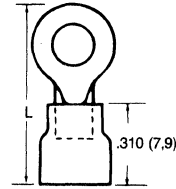
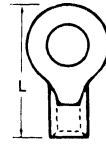
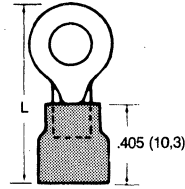
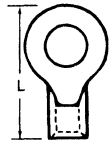


Commercial 22-16
Circular Mil Area 509—2,600
0,32-0,96mm²

Ring Tongue Terminals

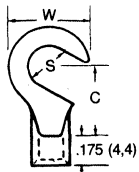


.028 (0,7) Stock
*.032 (0,8)
Basic Dimensions

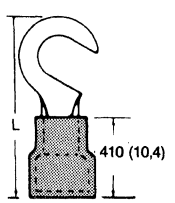
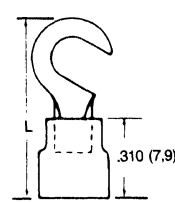
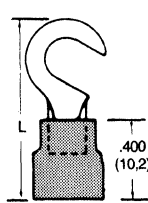


Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®*		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.145 (3,7) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L
1-2 (2)	.197 (5,0)	.173 (4,4)	AA-1111-02*	.490 (12,4)	AA-2111-02X*	.715 (18,2)	AA-3111-02*	.490 (12,4)	AA-4111-02*	.700 (17,8)	AA-8111-02*	.715 (18,2)
	.235 (6,0)	.157 (3,9)	AA-120-02	.484 (12,3)	AA-220-02X	.709 (18,0)	AA-320-02	.484 (12,3)	AA-420-02	.694 (17,6)	AA-820-02	.709 (18,0)
3-4 (2,6)	.197 (5,0)	.173 (4,4)	AA-1111-04*	.490 (12,4)	AA-2111-04X*	.715 (18,2)	AA-3111-04*	.490 (12,4)	AA-4111-04*	.700 (17,8)	AA-8111-04*	.715 (18,2)
	.235 (6,0)	.157 (3,9)	AA-120-04	.484 (12,3)	AA-220-04X	.709 (18,0)	AA-320-04	.484 (12,3)	AA-420-04	.694 (17,6)	AA-820-04	.709 (18,0)
5-6 (3-3,5)	.264 (6,7)	.240 (6,1)	AA-132-04	.582 (14,8)	AA-232-04X	.807 (20,5)	AA-332-04	.582 (14,8)	AA-432-04	.792 (20,1)	AA-832-04	.807 (20,5)
	.235 (6,0)	.157 (3,9)	AA-120-06	.484 (12,3)	AA-220-06X	.709 (18,0)	AA-320-06	.484 (12,3)	AA-420-06	.694 (17,6)	AA-820-06	.709 (18,0)
8 (4)	.264 (6,7)	.240 (6,1)	AA-132-06	.582 (14,8)	AA-232-06X	.807 (20,5)	AA-332-06	.582 (14,8)	AA-432-06	.792 (20,1)	AA-832-06	.807 (20,5)
	.322 (8,2)	.270 (6,7)	AA-121-06	.641 (16,3)	AA-221-06X	.866 (22,0)	AA-321-06	.641 (16,3)	AA-421-06	.851 (21,6)	AA-821-06	.866 (22,0)
10(-)	.264 (6,7)	.240 (6,1)	AA-132-08	.582 (14,8)	AA-232-08X	.807 (20,5)	AA-332-08	.582 (14,8)	AA-432-08	.792 (20,1)	AA-832-08	.807 (20,5)
	.322 (8,2)	.270 (6,7)	AA-121-08	.641 (16,3)	AA-221-08X	.866 (22,0)	AA-321-08	.641 (16,3)	AA-421-08	.851 (21,6)	AA-821-08	.866 (22,0)
1/4 (6)	.283 (7,2)	.240 (6,1)	AA-133-10	.591 (15,0)	AA-233-10X	.816 (20,7)	AA-333-10	.591 (15,0)	AA-433-10	.801 (20,3)	AA-833-10	.816 (20,7)
	.477 (12,1)	.386 (9,8)	AA-122-10	.835 (21,2)	AA-222-10X	1.060 (26,9)	AA-322-10	.835 (21,2)	AA-422-10	1.045 (26,5)	AA-822-10	1.060 (26,9)
5/16 (8)	.477 (12,1)	.386 (9,8)	AA-122-14	.835 (21,2)	AA-222-14X	1.060 (26,9)	AA-322-14	.835 (21,2)	AA-422-14	1.045 (26,5)	AA-822-14	1.060 (26,9)
	.544 (13,8)	.552 (14,0)	AA-126-14*	1.034 (26,3)	AA-226-14X*	1.259 (31,9)	AA-326-14*	1.034 (26,3)	AA-426-14*	1.244 (31,6)	AA-826-14*	1.259 (31,9)
3/8 (9)	.477 (12,1)	.386 (9,8)	AA-122-56	.835 (21,2)	AA-222-56X	1.060 (26,9)	AA-322-56	.835 (21,2)	AA-422-56	1.045 (26,5)	AA-822-56	1.060 (26,9)
	.544 (13,8)	.552 (14,0)	AA-126-56*	1.034 (26,3)	AA-226-56X*	1.259 (31,9)	AA-326-56*	1.034 (26,3)	AA-426-56*	1.244 (31,6)	AA-826-56*	1.259 (31,9)
3/8 (9)	.544 (13,8)	.552 (14,0)	AA-126-38*	1.034 (26,3)	AA-226-38X*	1.259 (31,9)	AA-326-38*	1.034 (26,3)	AA-426-38*	1.244 (31,6)	AA-826-38*	1.259 (31,9)

Hook Tongue Terminals



.032 (0,8) Stock
Basic Dimensions



Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®*		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.145 (3,7) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L
5-6 (3-3,5)	.320 (8,1)	.303 (7,7)	AA-110-06	.695 (17,6)	AA-210-06X	.920 (23,3)	AA-310-06	.695 (17,6)	AA-410-06	.868 (22,0)	AA-810-06	.920 (23,4)
8 (4)	.320 (8,1)	.303 (7,7)	AA-110-08	.695 (17,6)	AA-210-08X	.920 (23,3)	AA-310-08	.695 (17,6)	AA-410-08	.868 (22,0)	AA-810-08	.920 (23,4)
10 (-)	.320 (8,1)	.303 (7,7)	AA-110-10	.695 (17,6)	AA-210-10X	.920 (23,3)	AA-310-10	.695 (17,6)	AA-410-10	.868 (22,0)	AA-810-10	.920 (23,4)

*INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6".
EXAMPLE: Change AA-220-02X to AA-620-02X.

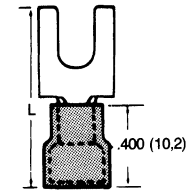
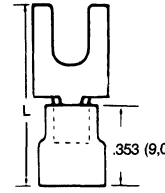
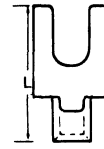
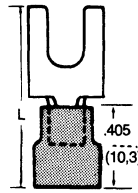
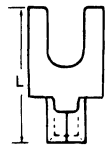
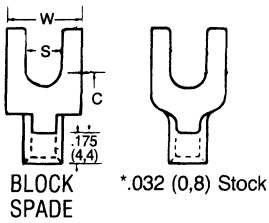
The part numbers in the shaded areas indicate standard/preferred products.

22-18 Wire Range



Spade Tongue Terminals

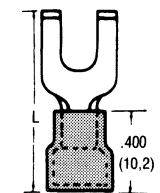
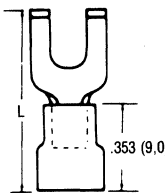
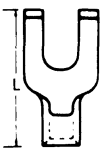
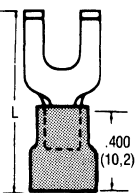
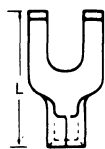
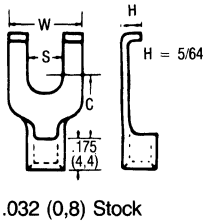
Commercial 22-16
Circular Mil Area 509—2,600
0,32-0,96mm²



Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.145 (3,7) Max Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L
1-2 (2)	.197 (5,0)	.183 (4,6)	AA-1109-02	.502 (12,8)	AA-2109-02X	.727 (18,4)	AA-3109-02	.502 (12,8)	AA-4109-02	.675 (17,1)	AA-8109-02	.727 (18,4)
3-4 (2,6)	.197 (5,0)	.183 (4,6)	AA-1109-04	.502 (12,8)	AA-2109-04X	.727 (18,4)	AA-3109-04	.502 (12,8)	AA-4109-04	.675 (17,1)	AA-8109-04	.727 (18,4)
	.255 (6,5)	.207 (5,3)	AA-138-04	.560 (14,2)	AA-238-04X	.785 (19,9)	AA-338-04	.560 (14,2)	AA-438-04	.733 (18,6)	AA-838-04	.785 (19,9)
	.301 (7,6)	.207 (5,3)	AA-134-04	.560 (14,2)	AA-234-04X	.785 (19,9)	AA-334-04	.560 (14,2)	AA-434-04	.733 (18,6)	AA-834-04	.785 (19,9)
	.335 (8,5)	.235 (6,0)	AA-197-04	.640 (16,2)	AA-297-04X	.865 (21,9)	AA-397-04	.640 (16,2)	AA-497-04	.813 (20,6)	AA-897-04	.865 (21,9)
5-6 (3-3,5)	.255 (6,5)	.207 (5,3)	AA-138-06	.560 (14,2)	AA-238-06X	.785 (19,9)	AA-338-06	.560 (14,2)	AA-438-06	.733 (18,6)	AA-838-06	.785 (19,9)
	.301 (7,6)	.207 (5,3)	AA-134-06	.560 (14,2)	AA-234-06X	.785 (19,9)	AA-334-06	.560 (14,2)	AA-434-06	.733 (18,6)	AA-834-06	.785 (19,9)
	.326 (8,3)	.303 (7,7)	AA-135-06*	.690 (17,5)	AA-235-06X*	.915 (23,2)	AA-335-06*	.690 (17,5)	AA-435-06*	.863 (21,9)	AA-835-06*	.915 (23,2)
	.335 (8,5)	.235 (6,0)	AA-197-06	.640 (16,2)	AA-297-06X	.868 (22,0)	AA-397-06	.640 (16,2)	AA-497-06	.813 (20,6)	AA-897-06	.868 (22,0)
	.385 (9,8)	.235 (6,0)	AA-194-06	.643 (16,3)	AA-294-06X	.868 (22,0)	AA-394-06	.643 (16,3)	AA-494-06	.816 (20,7)	AA-894-06	.868 (22,0)
	.430 (10,9)	.235 (6,0)	AA-191-06	.640 (16,2)	AA-291-06X*	.868 (21,9)	AA-391-06	.640 (16,2)	AA-491-06	.813 (20,6)	AA-891-06	.868 (21,9)
8 (4)	.301 (7,6)	.207 (5,3)	AA-134-08	.560 (14,2)	AA-234-08X	.785 (19,9)	AA-334-08	.560 (14,2)	AA-434-08	.733 (18,6)	AA-834-08	.785 (19,9)
	.326 (8,3)	.303 (7,7)	AA-135-08*	.690 (17,5)	AA-235-08X*	.915 (23,2)	AA-335-08*	.690 (17,5)	AA-435-08*	.863 (21,9)	AA-835-08*	.915 (23,2)
	.335 (8,5)	.235 (6,0)	AA-197-08	.640 (16,2)	AA-297-08X	.868 (22,0)	AA-397-08	.640 (16,2)	AA-497-08	.813 (20,6)	AA-897-08	.868 (22,0)
	.385 (9,8)	.235 (6,0)	AA-194-08	.643 (16,3)	AA-294-08X	.868 (22,0)	AA-394-08	.643 (16,3)	AA-494-08	.816 (20,7)	AA-894-08	.868 (22,0)
	.430 (10,9)	.235 (6,0)	AA-191-08	.640 (16,2)	AA-291-08X	.865 (21,9)	AA-391-08	.640 (16,2)	AA-491-08	.813 (20,6)	AA-891-08	.865 (21,9)
	10 (-)	.326 (8,3)	.303 (8,0)	AA-135-10*	.690 (17,5)	AA-235-10X*	.915 (23,2)	AA-335-10*	.690 (17,5)	AA-435-10*	.863 (21,9)	AA-835-10*	.915 (23,2)
.385 (9,8)		.235 (6,0)	AA-194-10	.643 (16,3)	AA-294-10X	.868 (22,0)	AA-394-10	.643 (16,3)	AA-494-10	.816 (20,7)	AA-894-10	.868 (22,0)
.430 (10,9)		.235 (6,0)	AA-191-10	.640 (16,2)	AA-291-10X	.865 (21,9)	AA-391-10	.640 (16,2)	AA-491-10	.813 (20,6)	AA-891-10	.865 (21,9)

Flanged Spade Terminals



Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®		
			Part Number	Max. Length L	.145 (3,7) Max Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L	
1-2 (2)	.197 (5,0)	.178 (4,5)	AA-1108-02	.502 (12,8)	AA-2108-02X	.727 (18,5)	AA-3108-02	.502 (12,8)	AA-4108-02	.675 (17,2)	AA-8108-02	.727 (18,5)	
3-4 (2,6)	.197 (5,0)	.178 (4,5)	AA-1108-04	.502 (12,8)	AA-2108-04X	.727 (18,5)	AA-3108-04	.502 (12,8)	AA-4108-04	.675 (17,2)	AA-8108-04	.727 (18,5)	
	.301 (7,6)	.207 (5,3)	AA-115-04	.556 (14,1)	AA-215-04X	.781 (19,8)	AA-315-04	.556 (14,1)	AA-415-04	.729 (18,5)	AA-815-04	.781 (19,8)	
	.335 (8,5)	.235 (5,9)	AA-196-04	.640 (16,2)	AA-296-04X	.865 (21,9)	AA-396-04	.640 (16,2)	AA-496-04	.813 (20,7)	AA-896-04	.865 (21,9)	
	5-6 (3-3,5)	.301 (7,6)	.207 (5,3)	AA-115-06	.556 (14,1)	AA-215-06X	.781 (19,8)	AA-315-06	.556 (14,1)	AA-415-06	.729 (18,5)	AA-815-06	.781 (19,8)
.335 (8,5)		.235 (5,9)	AA-196-06	.640 (16,2)	AA-296-06X	.865 (21,9)	AA-396-06	.640 (16,2)	AA-496-06	.813 (20,7)	AA-896-06	.865 (21,9)	
.385 (9,8)		.235 (5,9)	AA-193-06	.640 (16,2)	AA-293-06X	.865 (21,9)	AA-393-06	.640 (16,2)	AA-493-06	.813 (20,7)	AA-893-06	.865 (21,9)	
.430 (10,9)		.235 (5,9)	AA-190-06	.640 (16,2)	AA-290-06X	.865 (21,9)	AA-390-06	.640 (16,2)	AA-490-06	.813 (20,7)	AA-890-06	.865 (21,9)	
8 (4)		.301 (7,6)	.207 (5,3)	AA-115-08	.556 (14,1)	AA-215-08X	.781 (19,8)	AA-315-08	.556 (14,1)	AA-415-08	.729 (18,5)	AA-815-08	.781 (19,8)
		.335 (8,5)	.235 (5,9)	AA-196-08	.640 (16,2)	AA-296-08X	.865 (21,9)	AA-396-08	.640 (16,2)	AA-496-08	.813 (20,7)	AA-896-08	.865 (21,9)
	.385 (9,8)	.235 (5,9)	AA-193-08	.640 (16,2)	AA-293-08X	.865 (21,9)	AA-393-08	.640 (16,2)	AA-493-08	.813 (20,7)	AA-893-08	.865 (21,9)	
	.430 (10,9)	.235 (5,9)	AA-190-08	.640 (16,2)	AA-290-08X	.865 (21,9)	AA-390-08	.640 (16,2)	AA-490-08	.813 (20,7)	AA-890-08	.865 (21,9)	
10 (-)	.385 (9,8)	.235 (5,9)	AA-193-10	.640 (16,2)	AA-293-10X	.865 (21,9)	AA-393-10	.640 (16,2)	AA-493-10	.813 (20,7)	AA-893-10	.865 (21,9)	
	.430 (10,9)	.235 (5,9)	AA-190-10	.640 (16,2)	AA-290-10X	.865 (21,9)	AA-390-10	.640 (16,2)	AA-490-10	.813 (20,7)	AA-890-10	.865 (21,9)	

**INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6".
EXAMPLE: Change AA-220-02X to AA-620-02X.

The part numbers in the shaded areas indicate standard/preferred products.

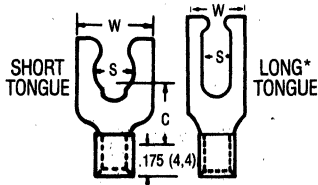


22-18 Wire Range



Commercial 22-16
Circular Mil Area 509—2,600
0,32-0,96mm²

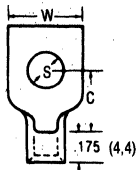
Snap Spade Terminals



.032 (0,8) Stock
Basic Dimensions

Stud Size S	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.145 (3,7) Max. Wire Insulation Diameter	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L
5 (3)	.260 (6,6) .270 (6,8)	.230 (5,8) .235 (6,0)	AA-1704-05	.585 (14,8)	AA-2704-05X	.810 (20,6)	AA-4704-05	.758 (19,3) .818 (20,8)	AA-8704-05	.810 (20,6)
5-6 (3-3,5)	.260 (6,6) .270 (6,8)	.230 (5,8) .235 (6,0)	AA-1704-06 AA-1190-06*	.585 (14,8) .645 (16,4)	AA-2704-06X AA-2190-06X*	.810 (20,6) .870 (22,1)	AA-4704-06 AA-4190-06*	.758 (19,3) .818 (20,8)	AA-8704-06 AA-8190-06*	.810 (20,6) .870 (22,1)
8 (4)	.300 (7,6) .320 (8,1)	.235 (6,0) .261 (6,6)	AA-1191-08* AA-1714-08	.855 (16,6) .646 (16,4)	AA-2191-08X* AA-2714-08X	.880 (22,4) .871 (22,1)	AA-4191-08* AA-4714-08	.828 (21,0) .819 (20,8)	AA-8191-08* AA-8714-08	.880 (22,4) .871 (22,1)
10 (-)	.338 (8,6) .340 (8,6)	.235 (6,0) .261 (6,6)	AA-1192-10* AA-1715-10	.705 (17,9) .694 (17,6)	AA-2192-10X* AA-2715-10X	.930 (23,6) .919 (23,3)	AA-4192-10* AA-4715-10	.878 (22,3) .867 (22,0)	AA-8192-10* AA-8715-10	.930 (23,6) .919 (23,3)

Rectangular Tongue Terminals



.032 (0,8) Stock
Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.145 (3,7) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L
1-2 (2)	.197 (5,0)	.173 (4,4)	AA-1110-02	.507 (12,9)	AA-2110-02X	.732 (18,6)	AA-3110-02	.507 (12,9)	AA-4110-02	.680 (17,3)	AA-8110-02	.732 (18,6)
3-4 (2,6)	.197 (5,0) .306 (7,8) .335 (8,5)	.173 (4,4) .207 (5,3) .235 (6,0)	AA-1110-04 AA-114-04 AA-198-04	.507 (12,9) .560 (14,2) .640 (16,2)	AA-2110-04X AA-214-04X AA-298-04	.732 (18,6) .785 (19,9) .865 (22,0)	AA-3110-04 AA-314-04 AA-398-04	.507 (12,9) .560 (14,2) .640 (16,2)	AA-4110-04 AA-414-04 AA-498-04	.680 (17,3) .733 (18,6) .813 (20,7)	AA-8110-04 AA-814-04 AA-898-04*	.732 (18,6) .785 (19,9) .865 (22,0)
5-6 (3-3,5)	.306 (7,8) .335 (8,5) .385 (9,8) .430 (10,9)	.207 (5,3) .235 (6,0) .235 (6,0) .235 (6,0)	AA-114-06 AA-198-06 AA-195-06 AA-192-06	.560 (14,2) .640 (16,2) .640 (16,2) .640 (16,2)	AA-214-06X AA-298-06X AA-295-06X AA-292-06X	.785 (19,9) .865 (22,0) .865 (22,0) .865 (22,0)	AA-314-06 AA-398-06 AA-395-06 AA-392-06	.560 (14,2) .640 (16,2) .640 (16,2) .640 (16,2)	AA-414-06 AA-498-06 AA-495-06 AA-492-06	.733 (18,6) .813 (20,7) .813 (20,7) .813 (20,7)	AA-814-06 AA-898-06 AA-895-06 AA-892-06	.785 (19,9) .865 (22,0) .865 (22,0) .865 (22,0)
8 (4)	.306 (7,8) .335 (8,5) .385 (9,8) .430 (10,9)	.207 (5,3) .235 (6,0) .235 (6,0) .235 (6,0)	AA-114-08 AA-198-08 AA-195-08 AA-192-08	.560 (14,2) .640 (16,2) .640 (16,2) .640 (16,2)	AA-214-08X AA-298-08X AA-295-08X AA-292-08X	.785 (19,9) .865 (22,0) .865 (22,0) .865 (22,0)	AA-314-08 AA-398-08 AA-395-08 AA-392-08	.560 (14,2) .640 (16,2) .640 (16,2) .640 (16,2)	AA-414-08 AA-498-08 AA-495-08* AA-492-08	.733 (18,6) .813 (20,7) .813 (20,7) .813 (20,7)	AA-814-08 AA-898-08 AA-895-08 AA-892-08	.785 (19,9) .865 (22,0) .865 (22,0) .865 (22,0)
10 (-)	.335 (8,5) .385 (9,8) .430 (10,9)	.235 (6,0) .235 (6,0) .235 (6,0)	AA-198-10 AA-195-10 AA-192-10	.640 (16,2) .640 (16,2) .640 (16,2)	AA-298-10X AA-295-10X AA-292-10X	.865 (22,0) .865 (22,0) .865 (22,0)	AA-398-10 AA-395-10 AA-392-10	.640 (16,2) .640 (16,2) .640 (16,2)	AA-498-10 AA-495-10 AA-492-10	.813 (20,7) .813 (20,7) .813 (20,7)	AA-898-10 AA-895-10 AA-892-10	.865 (22,0) .865 (22,0) .865 (22,0)

**INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6".
EXAMPLE: Change AA-220-02X to AA-620-02X.

The part numbers in the shaded areas indicate standard/preferred products.

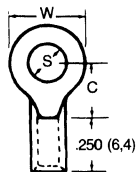


22-18 Wire Range



Commercial 22-16
Circular Mil Area 509—2,600
0,32-0,96mm²

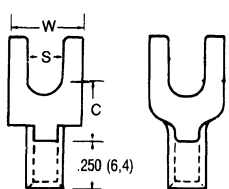
Ring Tongue Terminals — Long Barrel



.028 (0,7) Stock
*.032 (0,8) Stock
Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.145 (3,7) Max Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L
1-2	.235 (6,0)	.157 (4,0)	A-120-02	.563 (14,3)	A-220-02X	.759 (19,3)	A-320-02	.563 (14,3)	A-420-02	.707 (18,0)	A-520-02	.757 (19,2)
3-4 (2,6)	.235 (6,0)	.157 (4,0)	A-120-04	.563 (14,3)	A-220-04X	.759 (19,3)	A-320-04	.563 (14,3)	A-420-04	.707 (18,0)	A-520-04	.757 (19,2)
	.264 (6,7)	.240 (6,1)	A-132-04	.660 (16,8)	A-232-04X	.857 (21,8)	A-332-04	.660 (16,8)	A-432-04	.805 (20,5)	A-532-04	.855 (21,7)
5-6 (3,3-5)	.235 (6,0)	.157 (4,0)	A-120-06	.563 (14,3)	A-220-06X	.759 (19,3)	A-320-06	.563 (14,3)	A-420-06	.707 (18,0)	A-520-06	.757 (19,2)
	.264 (6,7)	.240 (6,1)	A-132-06	.660 (16,8)	A-232-06X	.857 (21,8)	A-332-06	.660 (16,8)	A-432-06	.805 (20,5)	A-532-06	.855 (21,7)
	.322 (8,2)	.270 (6,9)	A-121-06	.720 (18,3)	A-221-06X	.916 (23,3)	A-321-06	.720 (18,3)	A-421-06	.864 (22,0)	A-521-06	.914 (23,2)
8 (4)	.264 (6,7)	.240 (6,1)	A-132-08	.660 (16,8)	A-232-08X	.857 (21,8)	A-332-08	.660 (16,8)	A-432-08	.805 (20,5)	A-532-08	.855 (21,7)
	.322 (8,2)	.270 (6,9)	A-121-08	.720 (18,3)	A-221-08X	.916 (23,3)	A-321-08	.720 (18,3)	A-421-08	.864 (22,0)	A-521-08	.914 (23,2)
10 (-)	.283 (7,2)	.240 (6,1)	A-133-10	.670 (17,0)	A-233-10X	.866 (22,0)	A-333-10	.670 (17,0)	A-433-10	.814 (20,7)	A-533-10	.864 (21,9)
	.322 (8,2)	.270 (6,9)	A-121-10	.720 (18,3)	A-221-10X	.916 (23,3)	A-321-10	.720 (18,3)	A-421-10	.864 (22,0)	A-521-10	.914 (23,2)
	.477 (12,1)	.386 (9,8)	A-122-10	.914 (23,2)	A-222-10X	1.110 (28,2)	A-322-10	.914 (23,2)	A-422-10	1.058 (26,9)	A-522-10	1.108 (28,1)
	.544 (13,8)	.552 (14,0)	A-126-10*	1.113 (28,3)	A-226-10*	1.309 (33,3)	A-326-10*	1.113 (28,3)	A-426-10*	1.257 (31,9)	A-526-10*	1.307 (33,2)
1/4 (6)	.477 (12,1)	.386 (9,8)	A-122-14	.914 (23,2)	A-222-14X	1.110 (28,2)	A-322-14	.914 (23,2)	A-422-14	1.058 (26,9)	A-522-14	1.108 (28,1)
	.544 (13,8)	.552 (14,0)	A-126-14*	1.113 (28,3)	A-226-14*	1.309 (33,3)	A-326-14*	1.113 (28,3)	A-426-14*	1.257 (31,9)	A-526-14*	1.307 (33,2)
5/16 (8)	.477 (12,1)	.386 (9,8)	A-122-56	.914 (23,2)	A-222-56X	1.110 (28,2)	A-322-56	.914 (23,2)	A-422-56	1.058 (26,9)	A-522-56	1.108 (28,1)
	.544 (13,8)	.552 (14,0)	A-126-56*	1.113 (28,3)	A-226-56*	1.309 (33,3)	A-326-56*	1.113 (28,3)	A-426-56*	1.257 (31,9)	A-526-56*	1.307 (33,2)
3/8 (9)	.544 (13,8)	.552 (14,0)	A-126-38*	1.113 (28,3)	A-226-38*	1.309 (33,3)	A-326-38*	1.113 (28,3)	A-426-38*	1.257 (31,9)	A-526-38*	1.307 (33,2)

Spade Tongue Terminals — Long Barrel



BLOCK SPADE
*.032 (0,8) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.145 (3,7) Max Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L
3-4 (2,6)	.255 (6,5)	.207 (5,3)	A-138-04	.639 (16,2)	A-238-04X	.835 (21,2)	A-338-04	.639 (16,2)	A-438-04	.783 (19,9)	A-538-04	.833 (21,2)
	.301 (7,6)	.207 (5,3)	A-134-04	.639 (16,2)	A-234-04X	.835 (21,2)	A-334-04	.639 (16,2)	A-434-04	.783 (19,9)	A-534-04	.833 (21,2)
	.335 (8,5)	.235 (6,0)	A-197-04	.740 (18,8)	A-297-04X	.936 (23,8)	A-397-04	.740 (18,8)	A-497-04	.884 (22,5)	A-597-04	.934 (23,7)
5-6 (3,3-5)	.255 (6,5)	.207 (5,3)	A-138-06	.639 (16,2)	A-238-06X	.835 (21,2)	A-338-06	.639 (16,2)	A-438-06	.783 (19,9)	A-538-06	.833 (21,2)
	.301 (7,6)	.207 (5,3)	A-134-06	.639 (16,2)	A-234-06X	.835 (21,2)	A-334-06	.639 (16,2)	A-434-06	.783 (19,9)	A-534-06	.833 (21,2)
	.326 (8,3)	.303 (7,7)	A-135-06*	.778 (19,8)	A-235-06*	.974 (24,7)	A-335-06*	.778 (19,8)	A-435-06*	.922 (23,4)	A-535-06*	.972 (24,7)
	.335 (8,5)	.235 (6,0)	A-197-06	.740 (18,8)	A-297-06X	.936 (23,8)	A-397-06	.740 (18,8)	A-497-06	.884 (22,5)	A-597-06	.934 (23,7)
	.385 (9,8)	.235 (6,0)	A-194-06	.740 (18,8)	A-294-06X	.936 (23,8)	A-394-06	.740 (18,8)	A-494-06	.884 (22,5)	A-594-06	.934 (23,7)
	.430 (10,9)	.235 (6,0)	A-191-06	.738 (18,7)	A-291-06X	.934 (23,7)	A-391-06	.738 (18,7)	A-491-06	.882 (22,4)	A-591-06	.932 (23,7)
8 (4)	.301 (7,6)	.207 (5,3)	A-134-08	.639 (16,2)	A-234-08X	.835 (21,2)	A-334-08	.639 (16,2)	A-434-08	.783 (19,9)	A-534-08	.833 (21,2)
	.326 (8,3)	.303 (7,7)	A-135-08*	.778 (19,8)	A-235-08*	.974 (24,7)	A-335-08*	.778 (19,8)	A-435-08*	.922 (23,4)	A-535-08*	.972 (24,7)
	.335 (8,5)	.235 (6,0)	A-197-08	.740 (18,8)	A-297-08X	.936 (23,8)	A-397-08	.740 (18,8)	A-497-08	.884 (22,5)	A-597-08	.934 (23,7)
	.385 (9,8)	.235 (6,0)	A-194-08	.740 (18,8)	A-294-08X	.936 (23,8)	A-394-08	.740 (18,8)	A-494-08	.884 (22,5)	A-594-08	.934 (23,7)
	.430 (10,9)	.235 (6,0)	A-191-08	.738 (18,7)	A-291-08X	.934 (23,7)	A-391-08	.738 (18,7)	A-491-08	.882 (22,4)	A-591-08	.932 (23,7)
	10 (-)	.326 (8,3)	.303 (7,7)	A-135-10*	.778 (19,8)	A-235-10*	.974 (24,7)	A-335-10*	.778 (19,8)	A-435-10*	.922 (23,4)	A-535-10*	.972 (24,7)
.385 (9,8)		.235 (6,0)	A-194-10	.740 (18,8)	A-294-10X	.936 (23,8)	A-394-10	.740 (18,8)	A-494-10	.884 (22,5)	A-594-10	.934 (23,7)
.430 (10,9)		.235 (6,0)	A-191-10	.738 (18,7)	A-291-10X	.934 (23,7)	A-391-10	.738 (18,7)	A-491-10	.882 (22,4)	A-591-10	.932 (23,7)

**INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6". EXAMPLE: Change A-220-02X to A-620-02X.

The part numbers in the shaded areas indicate standard/preferred products.

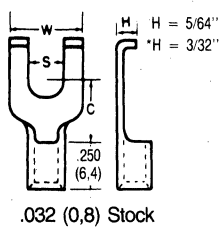


22-18 Wire Range



Flanged Spade Terminals — Long Barrel

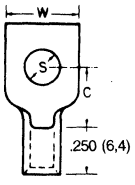
Commercial 22-18
Circular Mil Area 509—2,600
0,32-0,96mm²



Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®***		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.145 (3,7) Max Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L
3-4 (2,6)	.301 (7,6)	.207 (5,3)	A-115-04	635 (16,1)	A-215-04X	831 (21,1)	A-315-04	635 (16,1)	A-415-04	.779 (19,8)	A-515-04	829 (21,1)
	.335 (8,5)	.235 (6,0)	A-196-04*	725 (18,4)	A-296-04X*	921 (23,4)	A-396-04*	725 (18,4)	A-496-04*	869 (22,1)	A-596-04*	919 (23,3)
5-6 (3-3,5)	.301 (7,6)	.207 (5,3)	A-115-06	635 (16,1)	A-215-06X	831 (21,1)	A-315-06	635 (16,1)	A-415-06	.779 (19,8)	A-515-06	829 (21,1)
	.335 (8,5)	.235 (6,0)	A-196-06*	725 (18,4)	A-296-06X*	921 (23,4)	A-396-06*	725 (18,4)	A-496-06*	869 (22,1)	A-596-06*	919 (23,3)
	.385 (9,8)	.235 (6,0)	A-193-06	727 (18,5)	A-293-06X	923 (23,4)	A-393-06	727 (18,5)	A-493-06	871 (22,1)	A-593-06	921 (23,4)
	.430 (10,9)	.235 (6,0)	A-190-06	718 (18,2)	A-290-06X	914 (23,2)	A-390-06	718 (18,2)	A-490-06	862 (21,9)	A-590-06	912 (23,2)
8 (4)	.301 (7,6)	.207 (5,3)	A-115-08	635 (16,1)	A-215-08X	831 (21,1)	A-315-08	635 (16,1)	A-415-08	.779 (19,8)	A-515-08	829 (21,1)
	.335 (8,5)	.235 (6,0)	A-196-08*	725 (18,4)	A-296-08X*	921 (23,4)	A-396-08*	725 (18,4)	A-496-08*	869 (22,1)	A-596-08*	919 (23,3)
	.385 (9,8)	.235 (6,0)	A-193-08	727 (18,5)	A-293-08X	923 (23,4)	A-393-08	727 (18,5)	A-493-08	871 (22,1)	A-593-08	921 (23,4)
	.430 (10,9)	.235 (6,0)	A-190-08	718 (18,2)	A-290-08X	914 (23,2)	A-390-08	718 (18,2)	A-490-08	862 (21,9)	A-590-08	912 (23,2)
10 (-)	.385 (9,8)	.235 (6,0)	A-193-10	727 (18,5)	A-293-10X	923 (23,4)	A-393-10	727 (18,5)	A-493-10	871 (22,1)	A-593-10	921 (23,4)
	.430 (10,9)	.235 (6,0)	A-190-10	718 (18,2)	A-290-10X	914 (23,2)	A-390-10	718 (18,2)	A-490-10	862 (21,9)	A-590-10	912 (23,2)
	.301 (7,6)	.207 (5,3)	A-115-10	635 (16,1)	A-215-10X	831 (21,1)	A-315-10	635 (16,1)	A-415-10	.779 (19,8)	A-515-10	829 (21,1)

Rectangular Tongue Terminals — Long Barrel



Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®***		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.145 (3,7) Max Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L
3-4 (2,6)	.255 (6,5)	.207 (5,3)	A-105-04	639 (16,2)	A-205-04X	835 (21,2)	A-305-04	639 (16,2)	A-405-04	.783 (19,9)	A-505-04	833 (21,2)
	.306 (7,8)	.207 (5,3)	A-114-04	639 (16,2)	A-214-04X	835 (21,2)	A-314-04	639 (16,2)	A-414-04	.783 (19,9)	A-514-04	833 (21,2)
	.335 (8,5)	.235 (6,0)	A-198-04	735 (18,7)	A-298-04X	931 (23,7)	A-398-04	735 (18,7)	A-498-04	879 (22,3)	A-598-04	929 (23,6)
5-6 (3-3,5)	.255 (6,5)	.207 (5,3)	A-105-06	639 (16,2)	A-205-06X	835 (21,2)	A-305-06	639 (16,2)	A-405-06	.783 (19,9)	A-505-06	833 (21,2)
	.306 (7,8)	.207 (5,3)	A-114-06	639 (16,2)	A-214-06X	835 (21,2)	A-314-06	639 (16,2)	A-414-06	.783 (19,9)	A-514-06	833 (21,2)
	.325 (8,2)	.303 (7,7)	A-106-06	775 (19,7)	A-206-06X	971 (24,7)	A-306-06	775 (19,7)	A-406-06	.919 (23,3)	A-506-06	969 (24,6)
	.335 (8,5)	.235 (6,0)	A-198-06	735 (18,7)	A-298-06X	931 (23,7)	A-398-06	735 (18,7)	A-498-06	879 (22,3)	A-598-06	929 (23,6)
	.385 (9,8)	.235 (6,0)	A-195-06	740 (18,8)	A-295-06X	936 (23,8)	A-395-06	740 (18,8)	A-495-06	884 (22,5)	A-595-06	934 (23,7)
	.430 (10,9)	.235 (6,0)	A-192-06	738 (18,7)	A-292-06X	934 (23,7)	A-392-06	738 (18,7)	A-492-06	882 (22,4)	A-592-06	932 (23,7)
8 (4)	.306 (7,8)	.207 (5,3)	A-114-08	639 (16,2)	A-214-08X	835 (21,2)	A-314-08	639 (16,2)	A-414-08	.783 (19,9)	A-514-08	833 (21,2)
	.325 (8,2)	.303 (7,7)	A-106-08	775 (19,7)	A-206-08X	971 (24,7)	A-306-08	775 (19,7)	A-406-08	.919 (23,3)	A-506-08	969 (24,6)
	.335 (8,5)	.235 (6,0)	A-198-08	735 (18,7)	A-298-08X	931 (23,7)	A-398-08	735 (18,7)	A-498-08	879 (22,3)	A-598-08	929 (23,6)
	.385 (9,8)	.235 (6,0)	A-195-08	740 (18,8)	A-295-08X	936 (23,8)	A-395-08	740 (18,8)	A-495-08	884 (22,5)	A-595-08	934 (23,7)
	.430 (10,9)	.235 (6,0)	A-192-08	738 (18,7)	A-292-08X	934 (23,7)	A-392-08	738 (18,7)	A-492-08	882 (22,4)	A-592-08	932 (23,7)
	10 (-)	.325 (8,2)	.303 (7,7)	A-106-10	775 (19,7)	A-206-10X	971 (24,7)	A-306-10	775 (19,7)	A-406-10	.919 (23,3)	A-506-10	969 (24,6)
.335 (8,5)		.235 (6,0)	A-198-10	735 (18,7)	A-298-10X	931 (23,7)	A-398-10	735 (18,7)	A-498-10	879 (22,3)	A-598-10	929 (23,6)
.385 (9,8)		.235 (6,0)	A-195-10	740 (18,8)	A-295-10X	936 (23,8)	A-395-10	740 (18,8)	A-495-10	884 (22,5)	A-595-10	934 (23,7)
.430 (10,9)		.235 (6,0)	A-192-10	738 (18,7)	A-292-10X	934 (23,7)	A-392-10	738 (18,7)	A-492-10	882 (22,4)	A-592-10	932 (23,7)

*INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED INSULKRIMP Terminals, replace first digit "2" in part number with "6". EXAMPLE: Change A-215-04X to A-615-04X.

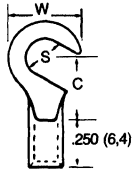
The part numbers in the shaded areas indicate standard/preferred products.

22-18 Wire Range



Hook Tongue Terminals — Long Barrel

Commercial 22-16
Circular Mil Area 509—2,600
0,32-0,96mm²

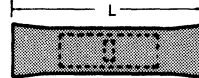
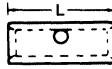
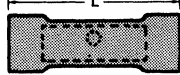
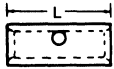


.032 (0,8) Stock

Basic Dimensions

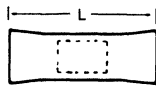
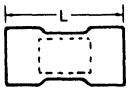
Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®*		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.145 (3,7) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L	.140 (3,6) Max. Wire Insulation Diameter	Max. Length L
5-6 (3-3,5)	.320 (8,1)	.303 (7,7)	A-110-06	.755 (19,2)	A-210-06X	.951 (24,2)	A-310-06	.755 (19,2)	A-410-06	.899 (22,8)	A-510-06	.949 (24,1)
8 (4)	.320 (8,1)	.303 (7,7)	A-110-08	.755 (19,2)	A-210-08X	.951 (24,2)	A-310-08	.755 (19,2)	A-410-08	.899 (22,8)	A-510-08	.949 (24,1)
10 (-)	.320 (8,1)	.303 (7,7)	A-110-10	.755 (19,2)	A-210-10X	.951 (24,2)	A-310-10	.755 (19,2)	A-410-10	.899 (22,8)	A-510-10	.949 (24,1)

Butt Splices



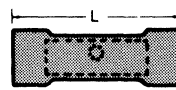
KRIMPTITE®				INSULKRIMP®*		VERSAKRIMP™				NYLAKRIMP®	
Part Number	I.D. Min.	O.D. Max.	Max. L	.145 (3,7) Max. Wire Insulation Diameter	Max. Length L	Part Number	I.D. Min.	O.D. Max.	Max. L	.125 (3,2) Max. Wire Insulation Diameter	Max. Length L
A-145	.056 (1,4)	.130 (3,3)	.580 (14,7)	A-245X	.955 (24,3)	†AS-345	.059 (1,5)	.130 (3,3)	.675 (17,1)	†AS-N-345	1.035 (26,3)
A-L145	.056 (1,4)	.130 (3,3)	.668 (17,0)	A-L245X	1.035 (26,3)						
				†AS-V-345X	1.035 (26,3)						

Parallel Splices

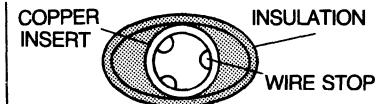


VERSAKRIMP™				INSULKRIMP®*		NYLAKRIMP®	
Part Number	I.D. Min.	O.D. Max.	Max. L	.145 (3,7) Max. Wire Insulation Diameter	Max. Length L	.120 (3,0) Max. Wire Insulation Diameter	Max. Length L
†AS-302	.060 (1,5)	.130 (3,3)	.330 (8,4)	†AS-V-302X	.732 (18,6)	†AS-N-302	.670 (17,0)

Oval Butt



INSULKRIMP®	OVAL
.090 x .180 (2,3 x 4,6)	Max. Length L
Max. Wire Insulation Diameter	
A-2450V	.950 (24,1)



END VIEW OF OVAL BUTT SPlice

The extra-wide diameter of the oval-shaped configuration allows two or more wires to be placed side by side.

All Dimensions are Nominal



†Part has seamless barrel

*INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6".
EXAMPLE: Change A-210-06X to A-610-06X.

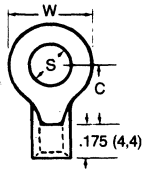
The part numbers in the shaded areas indicate standard/preferred products.

16-14 Wire Range



Circular Mil Area 2,050—5,180
1,2-1,95mm

Ring Tongue Terminals

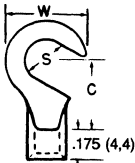


.032 (0,8) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPITITE®		INSULKRIMP®*		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.175 (4,4) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L
1-2 (2)	.260 (6,6) .322 (8,2)	.209 (5,3)	BB-123-02	.560 (14,2)	BB-223-02X	.800 (20,3)	BB-323-02	.560 (14,2)	BB-423-02	.655 (16,6)	BB-823-02	.770 (19,6)
3-4 (2,6)	.260 (6,6) .322 (8,2)	.209 (5,3) .285 (7,2)	BB-123-04 BB-137-04	.560 (14,2) .645 (16,4)	BB-223-04X BB-237-04X	.800 (20,3) .890 (22,6)	BB-323-04 BB-337-04	.560 (14,2) .645 (16,4)	BB-423-04 BB-437-04	.655 (16,6) .775 (19,7)	BB-823-04 BB-837-04	.770 (19,6) .890 (22,6)
5-6 (3-3,5)	.260 (6,6) .322 (8,2) .352 (8,9)	.209 (5,3) .285 (7,2) .310 (7,9)	BB-123-06 BB-137-06 BB-139-06	.560 (14,2) .645 (16,4) .696 (17,7)	BB-223-06X BB-237-06X BB-239-06X	.800 (20,3) .890 (22,6) .940 (23,9)	BB-323-06 BB-337-06 BB-339-06	.560 (14,2) .645 (16,4) .696 (17,7)	BB-423-06 BB-437-06 BB-439-06	.655 (16,6) .775 (19,7) .825 (21,0)	BB-823-06 BB-837-06 BB-839-06	.770 (19,6) .890 (22,6) .940 (23,9)
8 (4)	.260 (6,6) .322 (8,2) .352 (8,9)	.209 (5,3) .285 (7,2) .310 (7,9)	BB-123-08 BB-137-08 BB-139-08	.560 (14,2) .645 (16,4) .696 (17,7)	BB-223-08X BB-237-08X BB-239-08X	.800 (20,3) .890 (22,6) .940 (23,9)	BB-323-08 BB-337-08 BB-339-08	.560 (14,2) .645 (16,4) .696 (17,7)	BB-423-08 BB-437-08 BB-439-08	.655 (16,6) .775 (19,7) .825 (21,0)	BB-823-08 BB-837-08 BB-839-08	.770 (19,6) .890 (22,6) .940 (23,9)
10 (-)	.322 (8,2) .352 (8,9) .477 (12,1)	.285 (7,2) .310 (7,9) .388 (9,9)	BB-137-10 BB-139-10 BB-125-10	.645 (16,4) .696 (17,7) .837 (21,2)	BB-237-10X BB-239-10X BB-225-10X	.890 (22,6) .940 (23,9) 1.080 (27,4)	BB-337-10 BB-339-10 BB-325-10	.645 (16,4) .696 (17,7) .837 (21,2)	BB-437-10 BB-439-10 BB-425-10	.775 (19,7) .825 (21,0) .965 (24,5)	BB-837-10 BB-839-10 BB-825-10	.890 (22,6) .940 (23,9) 1.080 (27,4)
1/4 (6)	.477 (12,1) .544 (13,8)	.388 (9,9) .554 (14,1)	BB-125-14 BB-118-14	.837 (21,2) 1.036 (26,3)	BB-225-14X BB-218-14X	1.080 (27,4) 1.290 (32,8)	BB-325-14 BB-318-14	.837 (21,2) 1.036 (26,3)	BB-425-14 BB-418-14	.965 (24,5) 1.231 (31,3)	BB-825-14 BB-818-14	1.080 (27,4) 1.230 (31,2)
5/16 (8)	.477 (12,1) .544 (13,8)	.388 (9,9) .554 (14,1)	BB-125-56 BB-118-56	.837 (21,2) 1.036 (26,3)	BB-225-56X BB-218-56X	1.080 (27,4) 1.290 (32,8)	BB-325-56 BB-318-56	.837 (21,2) 1.036 (26,3)	BB-425-56 BB-418-56	.965 (24,5) 1.231 (31,3)	BB-825-56 BB-818-56	1.080 (27,4) 1.230 (31,2)
3/8 (9)	.544 (13,8)	.554 (14,1)	BB-118-38	1.036 (26,3)	BB-218-38X	1.290 (32,8)	BB-318-38	1.036 (26,3)	BB-418-38	1.231 (31,3)	BB-818-38	1.230 (31,2)

Hook Tongue Terminals



.032 (0,8) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPITITE®		INSULKRIMP®*		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.175 (4,4) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.175 (4,5) Max. Wire Insulation Diameter	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L
5-6 (3-3,5)	.360 (9,1)	.271 (6,9)	BB-119-06	.677 (17,2)	BB-219-06X	.902 (22,9)	BB-319-06	.677 (17,2)	BB-419-06	.872 (22,2)	BB-819-06	.917 (23,3)
8 (4)	.360 (9,1)	.271 (6,9)	BB-119-08	.677 (17,2)	BB-219-08X	.902 (22,9)	BB-319-08	.677 (17,2)	BB-419-08	.872 (22,2)	BB-819-08	.917 (23,3)
10 (-)	.360 (9,1)	.271 (6,9)	BB-119-10	.677 (17,2)	BB-219-10X	.902 (22,9)	BB-319-10	.677 (17,2)	BB-419-10	.872 (22,2)	BB-819-10	.917 (23,3)

*INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6".
EXAMPLE: Change BB-223-02X to BB-623-02X.

The part numbers in the shaded areas indicate standard/preferred products.

16-14 Wire Range



Circular Mil Area 2,050—5,180
1,2-1,95mm²

Spade Tongue Terminals

Basic Dimensions			KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
Stud Size	Max. Width W	Min. Clearance C	Part Number	Max. Length L	.175 (4,4) Max Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L
3-4 (2,6)	.255 (6,5)	.209 (5,3)	BB-107-04	.565 (14,4)	BB-207-04X	.790 (20,1)	BB-307-04	.565 (14,4)	BB-407-04	.760 (19,3)	BB-807-04	.805 (20,5)
	.305 (7,7)	.211 (5,4)	BB-124-04	.564 (14,3)	BB-224-04X	.789 (20,0)	BB-324-04	.564 (14,3)	BB-424-04	.759 (19,3)	BB-824-04	.804 (20,4)
	.335 (8,5)	.235 (6,0)	BB-187-04*	.643 (16,3)	BB-287-04X*	.868 (22,1)	BB-387-04*	.643 (16,3)	BB-487-04*	.838 (21,3)	BB-887-04*	.883 (22,4)
5-6 (3-3,5)	.255 (6,5)	.209 (5,3)	BB-107-06	.565 (14,4)	BB-207-06X	.790 (20,1)	BB-307-06	.565 (14,4)	BB-407-06	.760 (19,3)	BB-807-06	.805 (20,5)
	.305 (7,7)	.211 (5,4)	BB-124-06	.564 (14,3)	BB-224-06X	.789 (20,0)	BB-324-06	.564 (14,3)	BB-424-06	.759 (19,3)	BB-824-06	.804 (20,4)
	.335 (8,5)	.235 (6,0)	BB-187-06*	.643 (16,3)	BB-287-06X*	.868 (22,1)	BB-387-06*	.643 (16,3)	BB-487-06*	.838 (21,3)	BB-887-06*	.883 (22,4)
	.372 (9,4)	.269 (6,8)	BB-127-06	.687 (17,4)	BB-227-06X	.912 (23,2)	BB-327-06	.687 (17,4)	BB-427-06	.882 (22,4)	BB-827-06	.927 (23,6)
	.385 (9,8)	.235 (6,0)	BB-184-06*	.645 (16,4)	BB-284-06X*	.870 (22,1)	BB-384-06*	.645 (16,4)	BB-484-06*	.840 (21,3)	BB-884-06*	.885 (22,5)
.430 (10,9)	.235 (6,0)	BB-181-06*	.650 (16,5)	BB-281-06X*	.875 (22,2)	BB-381-06*	.650 (16,5)	BB-481-06*	.845 (21,5)	BB-881-06*	.890 (22,6)	
8 (4)	.305 (7,7)	.211 (5,4)	BB-124-08	.564 (14,3)	BB-224-08X	.789 (20,0)	BB-324-08	.564 (14,3)	BB-424-08	.759 (19,3)	BB-824-08	.804 (20,4)
	.335 (8,5)	.235 (6,0)	BB-187-08*	.643 (16,3)	BB-287-08X	.868 (22,1)	BB-387-08*	.643 (16,3)	BB-487-08*	.838 (21,3)	BB-887-08*	.883 (22,4)
	.372 (9,4)	.269 (6,8)	BB-127-08	.687 (17,4)	BB-227-08X	.912 (23,2)	BB-327-08	.687 (17,4)	BB-427-08	.882 (22,4)	BB-827-08	.927 (23,6)
	.385 (9,8)	.235 (6,0)	BB-184-08*	.645 (16,4)	BB-284-08X*	.870 (22,1)	BB-384-08*	.645 (16,4)	BB-484-08*	.840 (21,3)	BB-884-08*	.885 (22,5)
.430 (10,9)	.235 (6,0)	BB-181-08*	.650 (16,5)	BB-281-08X*	.875 (22,2)	BB-381-08*	.650 (16,5)	BB-481-08*	.845 (21,5)	BB-881-08*	.890 (22,6)	
10 (-)	.372 (9,4)	.269 (6,8)	BB-127-10	.687 (17,4)	BB-227-10X	.912 (23,2)	BB-327-10	.687 (17,4)	BB-427-10	.882 (22,4)	BB-827-10	.927 (23,6)
	.385 (9,8)	.235 (6,0)	BB-184-10*	.645 (16,4)	BB-284-10X*	.870 (22,1)	BB-384-10*	.645 (16,4)	BB-484-10*	.840 (21,3)	BB-884-10*	.885 (22,5)
	.430 (10,9)	.235 (6,0)	BB-181-10*	.650 (16,5)	BB-281-10X*	.875 (22,2)	BB-381-10*	.650 (16,5)	BB-481-10*	.845 (21,5)	BB-881-10*	.890 (22,6)

*Indicates block spade style.

Flanged Spade Terminals

Basic Dimensions			KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
Stud Size	Max. Width W	Min. Clearance C	Part Number	Max. Length L	.175 (4,4) Max Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L
3-4 (2,6)	.301 (7,6)	.209 (5,3)	BB-116-04	.570 (14,5)	BB-216-04X	.795 (20,2)	BB-316-04	.570 (14,5)	BB-416-04	.765 (19,4)	BB-816-04	.810 (20,6)
	.335 (8,5)	.235 (6,0)	BB-186-04	.632 (16,0)	BB-286-04X	.857 (21,8)	BB-386-04	.632 (16,0)	BB-486-04	.827 (21,0)	BB-886-04	.872 (22,1)
5-6 (3-3,5)	.301 (7,6)	.209 (5,3)	BB-116-06	.570 (14,5)	BB-216-06X	.795 (20,2)	BB-316-06	.570 (14,5)	BB-416-06	.765 (19,4)	BB-816-06	.810 (20,6)
	.335 (8,5)	.235 (6,0)	BB-186-06	.632 (16,0)	BB-286-06X	.857 (21,8)	BB-386-06	.632 (16,0)	BB-486-06	.827 (21,0)	BB-886-06	.872 (22,1)
	.385 (9,8)	.235 (6,0)	BB-183-06	.633 (16,1)	BB-283-06X	.858 (21,8)	BB-383-06	.633 (16,1)	BB-483-06	.828 (21,0)	BB-883-06	.873 (22,2)
	.430 (10,9)	.235 (6,0)	BB-180-06	.633 (16,1)	BB-280-06X	.858 (21,8)	BB-380-06	.633 (16,1)	BB-480-06	.828 (21,0)	BB-880-06	.873 (22,2)
8 (4)	.301 (7,6)	.209 (5,3)	BB-116-08	.570 (14,5)	BB-216-08X	.795 (20,2)	BB-316-08	.570 (14,5)	BB-416-08	.765 (19,4)	BB-816-08	.810 (20,6)
	.335 (8,5)	.235 (6,0)	BB-186-08	.632 (16,0)	BB-286-08X	.857 (21,8)	BB-386-08	.632 (16,0)	BB-486-08	.827 (21,0)	BB-886-08	.872 (22,1)
	.385 (9,8)	.235 (6,0)	BB-183-08	.633 (16,1)	BB-283-08X	.858 (21,8)	BB-383-08	.633 (16,1)	BB-483-08	.828 (21,0)	BB-883-08	.873 (22,2)
	.430 (10,9)	.235 (6,0)	BB-180-08	.633 (16,1)	BB-280-08X	.858 (21,8)	BB-380-08	.633 (16,1)	BB-480-08	.828 (21,0)	BB-880-08	.873 (22,2)
10 (-)	.385 (9,8)	.235 (6,0)	BB-183-10	.633 (16,1)	BB-283-10X	.858 (21,8)	BB-383-10	.633 (16,1)	BB-483-10	.828 (21,0)	BB-883-10	.873 (22,2)
	.430 (10,9)	.235 (6,0)	BB-180-10	.633 (16,1)	BB-280-10X	.858 (21,8)	BB-380-10	.633 (16,1)	BB-480-10	.828 (21,0)	BB-880-10	.873 (22,2)

**INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6".
EXAMPLE: Change BB-207-04 X to BB-607-04X.

The part numbers in the shaded areas indicate standard/preferred products.

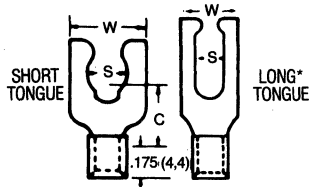


16-14 Wire Range



Circular Mil Area 2,050—5,187
1,2-1,95mm

Snap Spade Terminals

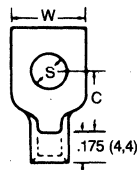


.032 (0,8) Stock

Basic Dimensions

Stud Size S	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.175 (4,4) Max. Wire Insulation Diameter	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L
5 (3)	.260 (6,6)	.230 (5,8)	BB-1707-05	.585 (14,8)	BB-2707-05X	.810 (20,6)	BB-4707-05	.780 (19,8)	BB-8707-05	.825 (21,0)
5-6 (3-3,5)	.260 (6,6)	.230 (5,8)	BB-1707-06	.585 (14,8)	BB-2707-06X	.810 (20,6)	BB-4707-06	.780 (19,8)	BB-8707-06	.825 (21,0)
	.270 (6,8)	.235 (6,0)	BB-1193-06*	.645 (16,4)	BB-2193-06X*	.870 (22,1)	BB-4193-06*	.840 (21,3)	BB-8193-06*	.885 (22,5)
8 (4)	.300 (7,6)	.235 (6,0)	BB-1194-08*	.655 (16,6)	BB-2194-08X*	.880 (22,4)	BB-4194-08*	.850 (21,6)	BB-8194-08*	.895 (22,7)
	.320 (8,1)	.261 (6,6)	BB-1716-08	.646 (16,4)	BB-2716-08X	.871 (22,1)	BB-4716-08	.841 (21,4)	BB-8716-08	.886 (22,5)
10 (-)	.338 (8,6)	.235 (6,0)	BB-1195-10*	.705 (17,9)	BB-2195-10X*	.930 (23,6)	BB-4195-10*	.900 (22,9)	BB-8195-10*	.945 (24,0)
	.340 (8,6)	.261 (6,6)	BB-1717-10	.694 (17,6)	BB-2717-10X	.919 (23,3)	BB-4717-10	.889 (22,6)	BB-8717-10	.934 (23,7)

Rectangular Tongue Terminals



.032 (0,8) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.175 (4,4) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L	Max. Wire Insulation Diameter	Max. Length L
3-4 (2,6)	.305 (7,7)	.211 (5,4)	BB-113-04	.564 (14,3)	BB-213-04X	.789 (20,0)	BB-313-04	.564 (14,3)	BB-413-04	.759 (19,3)	BB-813-04	.804 (20,4)
	.335 (8,5)	.235 (6,0)	BB-188-04	.643 (16,3)	BB-288-04X	.868 (22,1)	BB-388-04	.643 (16,3)	BB-488-04	.838 (21,3)	BB-888-04	.883 (22,4)
5-6 (3-3,5)	.305 (7,7)	.211 (5,4)	BB-113-06	.564 (14,3)	BB-213-06X	.789 (20,0)	BB-313-06	.564 (14,3)	BB-413-06	.759 (19,3)	BB-813-06	.804 (20,4)
	.335 (8,5)	.235 (6,0)	BB-188-06	.643 (16,3)	BB-288-06X	.868 (22,1)	BB-388-06	.643 (16,3)	BB-488-06	.838 (21,3)	BB-888-06	.883 (22,4)
	.385 (9,8)	.235 (6,0)	BB-185-06	.638 (16,2)	BB-285-06X	.863 (21,9)	BB-385-06	.638 (16,2)	BB-485-06	.833 (21,2)	BB-885-06	.878 (22,3)
	.430 (10,9)	.235 (6,0)	BB-182-06	.645 (16,4)	BB-282-06X	.870 (22,1)	BB-382-06	.645 (16,4)	BB-482-06	.840 (21,3)	BB-882-06	.885 (22,5)
8 (4)	.305 (7,7)	.211 (5,4)	BB-113-08	.564 (14,3)	BB-213-08X	.789 (20,0)	BB-313-08	.564 (14,3)	BB-413-08	.759 (19,3)	BB-813-08	.804 (20,4)
	.335 (8,5)	.235 (6,0)	BB-188-08	.643 (16,3)	BB-288-08X	.868 (22,1)	BB-388-08	.643 (16,3)	BB-488-08	.838 (21,3)	BB-888-08	.883 (22,4)
	.385 (9,8)	.235 (6,0)	BB-185-08	.638 (16,2)	BB-285-08X	.863 (21,9)	BB-385-08	.638 (16,2)	BB-485-08	.833 (21,2)	BB-885-08	.878 (22,3)
	.430 (10,9)	.235 (6,0)	BB-182-08	.645 (16,4)	BB-282-08X	.870 (22,1)	BB-382-08	.645 (16,4)	BB-482-08	.840 (21,3)	BB-882-08	.885 (22,5)
10 (-)	.335 (8,5)	.235 (6,0)	BB-188-10	.643 (16,3)	BB-288-10X	.868 (22,1)	BB-388-10	.643 (16,3)	BB-488-10	.838 (21,3)	BB-888-10	.883 (22,4)
	.385 (9,8)	.235 (6,0)	BB-185-10	.638 (16,2)	BB-285-10X	.863 (21,9)	BB-385-10	.638 (16,2)	BB-485-10	.833 (21,2)	BB-885-10	.878 (22,3)
	.430 (10,9)	.235 (6,0)	BB-182-10	.645 (16,4)	BB-282-10X	.870 (22,1)	BB-382-10	.645 (16,4)	BB-482-10	.840 (21,3)	BB-882-10	.885 (22,5)

**INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6".
EXAMPLE: Change BB-213-04X to BB-613-04X.

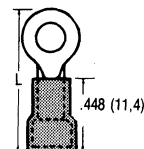
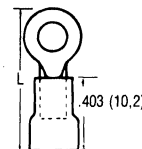
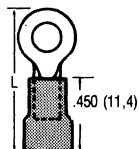
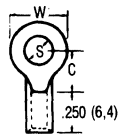
The part numbers in the shaded areas indicate standard/preferred products.

16-14 Wire Range



Circular Mil Area 2,050—5,180
1,2-1,95mm²

Ring Tongue Terminals — Long Barrel

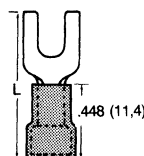
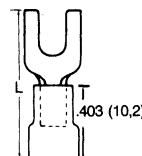
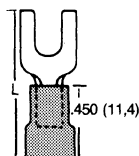
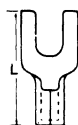
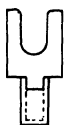
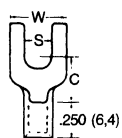


.032 (0,8) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.175 (4,4) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L
1-2 (2)	.260 (6,6)	.209 (5,3)	B-123-02	.639 (16,2)	B-223-02X	.835 (21,2)	B-323-02	.639 (16,2)	B-423-02	.783 (19,9)	B-523-02	.833 (21,2)
3-4 (2,6)	.260 (6,6)	.209 (5,3)	B-123-04	.639 (16,2)	B-223-04X	.835 (21,2)	B-323-04	.639 (16,2)	B-423-04	.783 (19,9)	B-523-04	.833 (21,2)
	.322 (8,2)	.285 (7,2)	B-137-04	.730 (18,5)	B-237-04X	.926 (23,5)	B-337-04	.730 (18,5)	B-437-04	.874 (22,2)	B-537-04	.924 (23,5)
	.352 (8,9)	.310 (7,9)	B-139-04	.775 (19,7)	B-239-04X	.971 (24,7)	B-339-04	.775 (19,7)	B-439-04	.919 (23,2)	B-539-04	.969 (24,6)
5-6 (3-5,5)	.260 (6,6)	.209 (5,3)	B-123-06	.639 (16,2)	B-223-06X	.835 (21,2)	B-323-06	.639 (16,2)	B-423-06	.783 (19,9)	B-523-06	.833 (21,2)
	.322 (8,2)	.285 (7,2)	B-137-06	.730 (18,5)	B-237-06X	.926 (23,5)	B-337-06	.730 (18,5)	B-437-06	.874 (22,2)	B-537-06	.924 (23,5)
	.352 (8,9)	.310 (7,9)	B-139-06	.775 (19,7)	B-239-06X	.971 (24,7)	B-339-06	.775 (19,7)	B-439-06	.919 (23,4)	B-539-06	.969 (24,6)
8 (4)	.260 (6,6)	.209 (5,3)	B-123-08	.639 (16,2)	B-223-08X	.835 (21,2)	B-323-08	.639 (16,2)	B-423-08	.783 (19,9)	B-523-08	.833 (21,2)
	.322 (8,2)	.285 (7,2)	B-137-08	.730 (18,5)	B-237-08X	.926 (23,5)	B-337-08	.730 (18,5)	B-437-08	.874 (22,2)	B-537-08	.924 (23,5)
	.352 (8,9)	.310 (7,9)	B-139-08	.775 (19,7)	B-239-08X	.971 (24,7)	B-339-08	.775 (19,7)	B-439-08	.919 (23,4)	B-539-08	.969 (24,6)
10 (1)	.322 (8,2)	.285 (7,2)	B-137-10	.730 (18,5)	B-237-10X	.926 (23,5)	B-337-10	.730 (18,5)	B-437-10	.874 (22,2)	B-537-10	.924 (23,5)
	.352 (8,9)	.310 (7,9)	B-139-10	.775 (19,7)	B-239-10X	.971 (24,7)	B-339-10	.775 (19,7)	B-439-10	.919 (23,4)	B-539-10	.969 (24,6)
	.477 (12,1)	.388 (9,9)	B-125-10	.916 (23,3)	B-225-10X	1.112 (28,2)	B-325-10	.916 (23,3)	B-425-10	1.060 (26,9)	B-525-10	1.110 (28,2)
	.544 (13,8)	.554 (14,1)	B-118-10	1.115 (28,3)	B-218-10X	1.311 (33,3)	B-318-10	1.115 (28,3)	B-418-10	1.259 (32,0)	B-518-10	1.309 (33,2)
1/4 (6)	.477 (12,1)	.388 (9,9)	B-125-14	.916 (23,3)	B-225-14X	1.112 (28,2)	B-325-14	.916 (23,3)	B-425-14	1.060 (26,9)	B-525-14	1.110 (28,2)
	.544 (13,8)	.554 (14,1)	B-118-14	1.115 (28,3)	B-218-14X	1.311 (33,3)	B-318-14	1.115 (28,3)	B-418-14	1.259 (32,0)	B-518-14	1.309 (33,2)
5/16 (8)	.477 (12,1)	.388 (9,9)	B-125-56	.916 (23,3)	B-225-56X	1.112 (28,2)	B-325-56	.916 (23,3)	B-425-56	1.060 (26,9)	B-525-56	1.110 (28,2)
	.544 (13,8)	.554 (14,1)	B-118-56	1.115 (28,3)	B-218-56X	1.311 (33,3)	B-318-56	1.115 (28,3)	B-418-56	1.259 (32,0)	B-518-56	1.309 (33,2)
3/8 (9)	.544 (13,8)	.554 (14,1)	B-118-38	1.115 (28,3)	B-218-38X	1.311 (33,3)	B-318-38	1.115 (28,3)	B-418-38	1.259 (32,0)	B-518-38	1.309 (33,2)

Spade Tongue Terminals — Long Barrel



.032 (0,8) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.175 (4,4) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L
3-4 (2,6)	.255 (6,3)	.209 (5,3)	B-107-04	.638 (16,2)	B-207-04X	.834 (21,2)	B-307-04	.638 (16,2)	B-407-04	.782 (19,9)	B-507-04	.832 (21,2)
	.305 (7,7)	.211 (5,4)	B-124-04	.635 (16,1)	B-224-04X	.831 (21,1)	B-324-04	.635 (16,1)	B-424-04	.779 (19,8)	B-524-04	.829 (21,0)
	.335 (8,5)	.235 (6,0)	B-187-04*	.728 (18,5)	B-287-04X*	.924 (23,5)	B-387-04*	.728 (18,5)	B-487-04*	.872 (22,1)	B-587-04*	.922 (23,4)
5-6 (3-3,5)	.255 (6,5)	.209 (5,3)	B-107-06	.638 (16,2)	B-207-06X	.834 (21,2)	B-307-06	.638 (16,2)	B-407-06	.782 (19,9)	B-507-06	.832 (21,2)
	.305 (7,7)	.211 (5,4)	B-124-06	.635 (16,1)	B-224-06X	.831 (21,1)	B-324-06	.635 (16,1)	B-424-06	.779 (19,8)	B-524-06	.829 (21,0)
	.335 (8,5)	.235 (6,0)	B-187-06*	.728 (18,5)	B-287-06X*	.924 (23,5)	B-387-06*	.728 (18,5)	B-487-06*	.872 (22,1)	B-587-06*	.922 (23,4)
	.372 (9,4)	.269 (6,8)	B-127-06	.770 (19,6)	B-227-06X	.966 (24,5)	B-327-06	.770 (19,6)	B-427-06	.914 (23,2)	B-527-06	.964 (24,5)
	.385 (9,8)	.235 (6,0)	B-184-06*	.728 (18,5)	B-284-06X*	.924 (23,5)	B-384-06*	.728 (18,5)	B-484-06*	.872 (22,1)	B-584-06*	.922 (23,4)
.430 (10,9)	.235 (6,0)	B-181-06*	.728 (18,5)	B-281-06X*	.924 (23,5)	B-381-06*	.728 (18,5)	B-481-06*	.872 (22,1)	B-581-06*	.922 (23,4)	
8 (4)	.305 (7,7)	.211 (5,4)	B-124-08	.635 (16,1)	B-224-08X	.831 (21,1)	B-324-08	.635 (16,1)	B-424-08	.779 (19,8)	B-524-08	.829 (21,0)
	.335 (8,5)	.235 (6,0)	B-187-08*	.728 (18,5)	B-287-08X*	.924 (23,5)	B-387-08*	.728 (18,5)	B-487-08*	.872 (22,1)	B-587-08*	.922 (23,4)
	.372 (9,4)	.269 (6,8)	B-127-08	.770 (19,6)	B-227-08X	.966 (24,5)	B-327-08	.770 (19,6)	B-427-08	.914 (23,2)	B-527-08	.964 (24,5)
	.385 (9,8)	.235 (6,0)	B-184-08*	.728 (18,5)	B-284-08X*	.924 (23,5)	B-384-08*	.728 (18,5)	B-484-08*	.872 (22,1)	B-584-08*	.922 (23,4)
	.430 (10,9)	.235 (6,0)	B-181-08*	.728 (18,5)	B-281-08X*	.924 (23,5)	B-381-08*	.728 (18,5)	B-481-08*	.872 (22,1)	B-581-08*	.922 (23,4)
10 (-)	.372 (9,4)	.269 (6,8)	B-127-10	.770 (19,6)	B-227-10X	.966 (24,5)	B-327-10	.770 (19,6)	B-427-10	.914 (23,2)	B-527-10	.964 (24,5)
	.385 (9,8)	.235 (6,0)	B-184-10*	.728 (18,5)	B-284-10X*	.924 (23,5)	B-384-10*	.728 (18,5)	B-484-10*	.872 (22,1)	B-584-10*	.922 (23,4)
	.430 (10,9)	.235 (6,0)	B-181-10*	.728 (18,5)	B-281-10X*	.924 (23,5)	B-381-10*	.728 (18,5)	B-481-10*	.872 (22,1)	B-581-10*	.922 (23,4)

**INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6". EXAMPLE: Change B-223-02X to B-623-02X.

The part numbers in the shaded areas indicate standard/preferred products.

*Indicates block spade style.

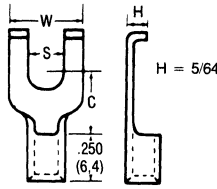


16-14 Wire Range



Circular Mil Area 2,050—5,180
1,2-1,95mm²

Flanged Spade Terminals — Long Barrel

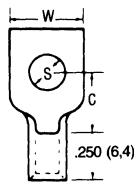


.032 (0,8) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.175 (4,4) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L
3-4 (2,6)	.301 (7,6)	.209 (5,3)	B-116-04	649 (16,5)	B-216-04X	845 (21,5)	B-316-04	649 (16,5)	B-416-04	793 (20,1)	B-516-04	843 (21,4)
	.335 (8,5)	.235 (6,0)	B-186-04	727 (18,5)	B-286-04X	923 (23,4)	B-386-04	727 (18,5)	B-486-04	871 (22,1)	B-586-04	921 (23,4)
5-6 (3-3,5)	.301 (7,6)	.209 (5,3)	B-116-06	649 (16,5)	B-216-06X	845 (21,5)	B-316-06	649 (16,5)	B-416-06	793 (20,1)	B-516-06	843 (21,4)
	.385 (9,8)	.235 (6,0)	B-183-06	713 (18,1)	B-283-06X	909 (23,1)	B-383-06	713 (18,1)	B-483-06	857 (21,8)	B-583-06	907 (23,0)
	.335 (8,5)	.235 (6,0)	B-186-06	727 (18,5)	B-286-06X	923 (23,4)	B-386-06	727 (18,5)	B-486-06	871 (22,1)	B-586-06	921 (23,4)
	.430 (10,9)	.235 (6,0)	B-180-06	716 (18,2)	B-280-06X	912 (23,2)	B-380-06	716 (18,2)	B-480-06	860 (21,8)	B-580-06	910 (23,1)
8 (4)	.301 (7,6)	.209 (5,3)	B-116-08	649 (16,5)	B-216-08X	845 (21,5)	B-316-08	649 (16,5)	B-416-08	793 (20,1)	B-516-08	843 (21,4)
	.335 (8,5)	.235 (6,0)	B-186-08	727 (18,5)	B-286-08X	923 (23,4)	B-386-08	727 (18,5)	B-486-08	871 (22,1)	B-586-08	921 (23,4)
	.385 (9,8)	.235 (6,0)	B-183-08	713 (18,1)	B-283-08X	909 (23,1)	B-383-08	713 (18,1)	B-483-08	857 (21,8)	B-583-08	907 (23,0)
	.430 (10,9)	.235 (6,0)	B-180-08	716 (18,2)	B-280-08X	912 (23,2)	B-380-08	716 (18,2)	B-480-08	860 (21,8)	B-580-08	910 (23,1)
10 (-)	.385 (9,8)	.235 (6,0)	B-183-10	713 (18,1)	B-283-10X	909 (23,1)	B-383-10	713 (18,1)	B-483-10	857 (21,8)	B-583-10	907 (23,0)
	.430 (10,9)	.235 (6,0)	B-180-10	716 (18,2)	B-280-10X	912 (23,2)	B-380-10	716 (18,2)	B-480-10	860 (21,8)	B-580-10	910 (23,1)
	.301 (7,6)	.235 (6,0)	B-116-10	649 (16,5)	B-216-10X	845 (21,5)	B-316-10	649 (16,5)	B-416-10	793 (20,1)	B-516-10	843 (21,4)

Rectangular Tongue Terminals — Long Barrel



.032 (0,8) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®		
			Part Number	Max. Length L	.175 (4,4) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.140 (4,3) Max. Wire Insulation Diameter	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L	
3-4 (2,6)	.255 (6,5)	.209 (5,3)	B-108-04	638 (16,2)	B-208-04X	834 (21,2)	B-308-04	638 (16,2)	B-408-04	782 (19,9)	B-508-04	832 (21,1)	
	.305 (7,7)	.211 (5,4)	B-113-04	643 (16,3)	B-213-04X	839 (21,3)	B-313-04	643 (16,3)	B-413-04	787 (20,0)	B-513-04	837 (21,2)	
	.335 (8,5)	.235 (6,0)	B-118-04	728 (18,5)	B-288-04X	924 (23,5)	B-388-04	728 (18,5)	B-488-04	872 (22,2)	B-588-04	922 (23,4)	
5-6 (3-5,3)	.255 (6,5)	.209 (5,3)	B-108-06	638 (16,2)	B-208-06X	834 (21,2)	B-308-06	638 (16,2)	B-408-06	782 (19,9)	B-508-06	832 (21,1)	
	.305 (7,7)	.211 (5,4)	B-113-06	643 (16,3)	B-213-06X	839 (21,3)	B-313-06	643 (16,3)	B-413-06	787 (20,0)	B-513-06	837 (21,2)	
	.335 (8,5)	.235 (6,0)	B-188-06	728 (18,5)	B-288-06X	924 (23,5)	B-388-06	728 (18,5)	B-488-06	872 (22,2)	B-588-06	922 (23,4)	
	.376 (9,6)	.271 (6,9)	B-109-06	775 (19,7)	B-209-06X	971 (24,7)	B-309-06	775 (19,7)	B-409-06	919 (23,3)	B-509-06	969 (24,6)	
	.385 (9,8)	.235 (6,0)	B-185-06	732 (18,6)	B-285-06X	928 (23,6)	B-385-06	732 (18,6)	B-485-06	876 (22,3)	B-585-06	926 (23,5)	
	.430 (10,9)	.235 (6,0)	B-182-06	728 (18,5)	B-282-06X	924 (23,5)	B-382-06	728 (18,5)	B-482-06	872 (22,2)	B-582-06	922 (23,4)	
	8 (4)	.305 (7,7)	.211 (5,4)	B-113-08	643 (16,3)	B-213-08X	839 (21,3)	B-313-08	643 (16,3)	B-413-08	787 (20,0)	B-513-08	837 (21,2)
		.335 (8,5)	.235 (6,0)	B-188-08	728 (18,5)	B-288-08X	924 (23,5)	B-388-08	728 (18,5)	B-488-08	872 (22,2)	B-588-08	922 (23,4)
.376 (9,6)		.271 (6,9)	B-109-08	775 (19,7)	B-209-08X	971 (24,7)	B-309-08	775 (19,7)	B-409-08	919 (23,3)	B-509-08	969 (24,6)	
.385 (9,8)		.235 (6,0)	B-185-08	732 (18,6)	B-285-08X	928 (23,6)	B-385-08	732 (18,6)	B-485-08	876 (22,3)	B-585-08	926 (23,5)	
10 (-)	.430 (10,9)	.235 (6,0)	B-182-08	728 (18,5)	B-282-08X	924 (23,5)	B-382-08	728 (18,5)	B-482-08	872 (22,2)	B-582-08	922 (23,4)	
	.335 (8,5)	.235 (6,0)	B-188-10	728 (18,5)	B-288-10X	924 (23,5)	B-388-10	728 (18,5)	B-488-10	872 (22,2)	B-588-10	922 (23,4)	
	.376 (9,6)	.271 (6,9)	B-109-10	775 (19,7)	B-209-10X	971 (24,7)	B-309-10	775 (19,7)	B-409-10	919 (23,3)	B-509-10	969 (24,6)	
	.385 (9,8)	.235 (6,0)	B-185-10	732 (18,6)	B-285-10X	928 (23,6)	B-385-10	732 (18,6)	B-485-10	876 (22,3)	B-585-10	926 (23,5)	

**INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6".
EXAMPLE: Change B-216-04X to B-616-04X.

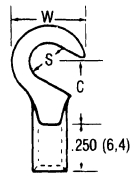
The part numbers in the shaded areas indicate standard/preferred products.

16-14 Wire Range



Circular Mil Area 2,050—5,180
1,2-1,95mm²

Hook Tongue Terminals — Long Barrel



.032 (0,8) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®*		VERSAKRIMP™		VIBRAKRIMP®		AVIKRIMP®	
			Part Number	Max. Length L	.175 (4,4) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L	.170 (4,3) Max. Wire Insulation Diameter	Max. Length L
5-6 (3-3,5)	.360 (9,1)	.271 (6,9)	B-119-06	.752 (19,1)	B-219-06X	.948 (24,1)	B-319-06	.752 (19,1)	B-419-06	.896 (22,3)	B-519-06	.946 (24,0)
8 (4)	.360 (9,1)	.271 (6,9)	B-119-08	.752 (19,1)	B-219-08X	.948 (24,1)	B-319-08	.752 (19,1)	B-419-08	.896 (22,3)	B-519-08	.946 (24,0)
10 (-)	.360 (9,1)	.271 (6,9)	B-119-10	.752 (19,1)	B-219-10X	.948 (24,1)	B-319-10	.752 (19,1)	B-419-10	.896 (22,3)	B-519-10	.946 (24,0)

Butt Splices

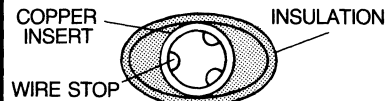


Part Number	I.D.	O.D. Max.	L Max.	INSULKRIMP®		Part Number	I.D. Min.	O.D. Max.	L Max.	.150 (3,8) Max. Wire Insulation Diameter	Max. Length L
				.175 (4,4) Max. Wire Insulation Diameter	Max. Length L						
B-131	.083 (2,1)	.158 (4,0)	.563 (14,3)	B-231X	1.020 (25,9)	†BS-331	.091 (2,3)	.160 (4,1)	.675 (17,1)	†BS-N-331	1.080 (27,4)
B-L131			.668 (17,0)	B-231-X	1.080 (27,4)						
				BS-V-331X†	1.080 (27,4)						

Oval Butt



INSULKRIMP® OVAL*	
.140 x .250 (3,6 X 6,4)	Max. Length L
Max. Wire Insulation Diameter	Max. Length L
B-231-0V	.970 (24,6)



END VIEW OF OVAL BUTT SPLICE

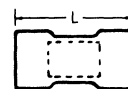
The extra-wide diameter of the oval-shaped configuration allows two or more wires to be placed side by side.

Parallel Splices



Part Number	I.D.	O.D. Max.	L Max.	INSULKRIMP®		Part Number	I.D. Min.	O.D. Max.	L Max.	.150 (3,8) Max. Wire Insulation Diameter	Max. Length L
				.175 (4,4) Max. Wire Insulation Diameter	Max. Length L						
B-104	.084 (2,1)	.165 (4,2)	.340 (8,6)	B-204X	.735 (18,7)	†BS-304	.091 (2,3)	.160 (4,1)	.330 (8,4)	†BS-N-304	.645 (16,4)

Oval Parallel



INSULKRIMP® OVAL*	
.140 x .250 (3,6 X 6,4)	Max. Length L
Max. Wire Insulation Diameter	Max. Length L
B-204-0V	.757 (19,2)

†Part has seamless barrel instead of butted seam.

*INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6".
EXAMPLE: Change B-219-06X to B-619-06X.

The part numbers in the shaded areas indicate standard/preferred products.

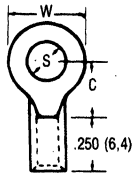


16-14 Heavy Duty Wire Range



Heavy duty use 12-10 tooling
Also Suitable for 12 AWG
Circular Mil Area 2,050—9,030
1,2-3,3mm²

Ring Tongue Terminals



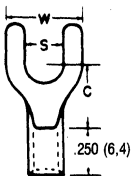
.050 (1,27) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®				INSULKRIMP®**				VIBRAKRIMP®				AVIKRIMP®			
			Part Number	Max. Length L	250 (6.4) Max. Wire Insulation Diameter	Max. Length L	225 (5,7) Max. Wire Insulation Diameter	.255 (6,5) Max. Wire Insulation Diameter	Max. Length L	225 (5,7) Max. Wire Insulation Diameter	.255 (6,5) Max. Wire Insulation Diameter	Max. Length L	225 (5,7) Max. Wire Insulation Diameter	.255 (6,5) Max. Wire Insulation Diameter	Max. Length L			
3-4 (2,6)	.292 (7,4)	.306 (7,8)	B-136-04HD	.741 (18,8)	B-236-04HDX	1.032 (26,2)	B-436-04HD	B-436-04HDX	.992 (25,2)	B-836-04HD*	B-836-04HDX	1.047 (26,6)						
	.385 (9,8)	.303 (7,7)	B-128-04HD	.785 (19,9)	B-228-04HDX	1.076 (27,3)	B-428-04HD	B-428-04HDX	1.036 (26,3)	B-828-04HD*	B-828-04HDX	1.091 (27,7)						
5-6 (3-3,5)	.292 (7,4)	.306 (7,8)	B-136-06HD	.741 (18,8)	B-236-06HDX	1.032 (26,2)	B-436-06HD	B-436-06HDX	.992 (25,2)	B-836-06HD*	B-836-06HDX	1.047 (26,6)						
	.385 (9,8)	.303 (7,7)	B-128-06HD	.785 (19,9)	B-228-06HDX	1.076 (27,3)	B-428-06HD	B-428-06HDX	1.036 (26,3)	B-828-06HD*	B-828-06HDX	1.091 (27,7)						
8 (4)	.292 (7,4)	.306 (7,8)	B-136-08HD	.741 (18,8)	B-236-08HDX	1.032 (26,2)	B-436-08HD	B-436-08HDX	.992 (25,2)	B-836-08HD*	B-836-08HDX	1.047 (26,6)						
	.385 (9,8)	.303 (7,7)	B-128-08HD	.785 (19,9)	B-228-08HDX	1.076 (27,3)	B-428-08HD	B-428-08HDX	1.036 (26,3)	B-828-08HD*	B-828-08HDX	1.091 (27,7)						
10 (-)	.385 (9,8)	.303 (7,7)	B-128-10HD	.785 (19,9)	B-228-10HDX	1.076 (27,3)	B-428-10HD	B-428-10HDX	1.036 (26,3)	B-828-10HD*	B-828-10HDX	1.091 (27,7)						
	.540 (13,7)	.393 (10,0)	B-130-10HD	.952 (24,2)	B-230-10HDX	1.243 (31,6)	B-430-10HD	B-430-10HDX	1.203 (30,1)	B-830-10HD*	B-830-10HDX	1.258 (32,0)						
	.602 (15,3)	.466 (11,8)	B-140-10HD	1.056 (26,8)	B-240-10HDX	1.347 (34,2)	B-440-10HD	B-440-10HDX	1.307 (33,2)	B-840-10HD*	B-840-10HDX	1.362 (34,6)						
1/4 (6)	.540 (13,7)	.393 (10,0)	B-130-14HD	.952 (24,2)	B-230-14HDX	1.243 (31,6)	B-430-14HD	B-430-14HDX	1.203 (30,1)	B-830-14HD*	B-830-14HDX	1.258 (32,0)						
	.602 (15,3)	.466 (11,8)	B-140-14HD	1.056 (26,8)	B-240-14HDX	1.347 (34,2)	B-440-14HD	B-440-14HDX	1.307 (33,2)	B-840-14HD*	B-840-14HDX	1.362 (34,6)						
	.760 (19,3)	.611 (15,5)	B-101-14HD	1.280 (32,5)	B-201-14HDX	1.571 (39,9)	B-401-14HD	B-401-14HDX	1.531 (38,9)	B-801-14HD*	B-801-14HDX	1.586 (40,3)						
5/16 (8)	.540 (13,7)	.393 (10,0)	B-130-56HD	.952 (24,2)	B-230-56HDX	1.243 (31,6)	B-430-56HD	B-430-56HDX	1.203 (30,1)	B-830-56HD*	B-830-56HDX	1.258 (32,0)						
	.602 (15,3)	.466 (11,8)	B-140-56HD	1.056 (26,8)	B-240-56HDX	1.347 (34,2)	B-440-56HD	B-440-56HDX	1.307 (33,2)	B-840-56HD*	B-840-56HDX	1.362 (34,6)						
	.760 (19,3)	.611 (15,5)	B-101-56HD	1.280 (32,5)	B-201-56HDX	1.571 (39,9)	B-401-56HD	B-401-56HDX	1.531 (38,9)	B-801-56HD*	B-801-56HDX	1.586 (40,3)						
3/8 (9)	.602 (15,3)	.466 (11,8)	B-140-38HD	1.056 (26,8)	B-240-38HDX	1.347 (34,2)	B-440-38HD	B-440-38HDX	1.307 (33,2)	B-840-38HD*	B-840-38HDX	1.362 (34,6)						
	.760 (19,3)	.611 (15,5)	B-101-38HD	1.280 (32,5)	B-201-38HDX	1.571 (39,9)	B-401-38HD	B-401-38HDX	1.531 (38,9)	B-801-38HD*	B-801-38HDX	1.586 (40,3)						
7/16 (11)	.760 (19,3)	.611 (15,5)	B-101-76HD	1.280 (32,5)	B-201-76HDX	1.571 (39,9)	B-401-76HD	B-401-76HDX	1.531 (38,9)	B-801-76HD*	B-801-76HDX	1.586 (40,3)						
1/2 (12)	.760 (19,3)	.611 (15,5)	B-101-12HD	1.280 (32,5)	B-201-12HDX	1.571 (39,9)	B-401-12HD	B-401-12HDX	1.531 (38,9)	B-801-12HD*	B-801-12HDX	1.586 (40,3)						

*To order molded funnel ferrule nylon sleeves substitute 5 for 8. EXAMPLE: change B-836-08HD to B-546-08HD.

Spade Tongue Terminals



.050 (1,27) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®				INSULKRIMP®**				VIBRAKRIMP®				AVIKRIMP®			
			Part Number	Max. Length L	250 (6,4) Max. Wire Insulation Diameter	Max. Length L	225 (5,7) Max. Wire Insulation Diameter	.255 (6,5) Max. Wire Insulation Diameter	Max. Length L	225 (5,7) Max. Wire Insulation Diameter	.255 (6,5) Max. Wire Insulation Diameter	Max. Length L	225 (5,7) Max. Wire Insulation Diameter	.255 (6,5) Max. Wire Insulation Diameter	Max. Length L			
5-6 (3-3,5)	.385 (9,8)	.301 (7,7)	B-141-06HD	.812 (20,6)	B-241-06HDX	1.103 (28,0)	B-441-06HD	B-441-06HDX	1.063 (27,0)	B-841-06HD*	B-841-06HDX	1.118 (28,4)						
	.385 (9,8)	.301 (7,7)	B-141-08HD	.812 (20,6)	B-241-08HDX	1.103 (28,0)	B-441-08HD	B-441-08HDX	1.063 (27,0)	B-841-08HD*	B-841-08HDX	1.118 (28,4)						
10 (-)	.385 (9,8)	.301 (7,7)	B-141-10HD	.812 (20,6)	B-241-10HDX	1.103 (28,0)	B-441-10HD	B-441-10HDX	1.063 (27,0)	B-841-10HD*	B-841-10HDX	1.118 (28,4)						
	.543 (13,8)	.393 (10,0)	B-168-10HD	.965 (24,5)	B-268-10HDX	1.256 (31,9)	B-468-10HD	B-468-10HDX	1.216 (30,1)	B-868-10HD*	B-868-10HDX	1.271 (32,3)						
1/4 (6)	.543 (13,8)	.393 (10,0)	B-168-14HD	.965 (24,5)	B-268-14HDX	1.256 (31,9)	B-468-14HD	B-468-14HDX	1.216 (30,1)	B-868-14HD*	B-868-14HDX	1.271 (32,3)						
	.543 (13,8)	.393 (10,0)	B-168-56HD	.965 (24,5)	B-268-56HDX	1.256 (31,9)	B-468-56HD	B-468-56HDX	1.216 (30,1)	B-868-56HD*	B-868-56HDX	1.271 (32,3)						

**INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6". EXAMPLE: Change B-236-04HDX to B-636-04HDX.

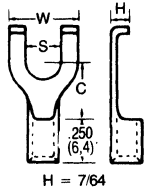
The part numbers in the shaded areas indicate standard/preferred products.

16-14 Heavy Duty Wire Range



Flanged Spade Terminals

Heavy duty use 12-10 tooling
Also Suitable for 12 AWG
Circular Mil Area 2,050—9,030
1,2-3,3mm²



.050 (1,27) Stock

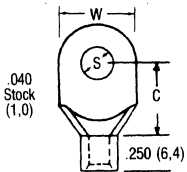
Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VIBRAKRIMP®			AVIKRIMP®		
			Part Number	Max. Length L	.250 (6,4) Max. Wire Insulation Diameter	Max. Length L	.225 (5,7) Max. Wire Insulation Diameter	.255 (6,5) Max. Wire Insulation Diameter	Max. Length L	.225 (5,7) Max. Wire Insulation Diameter	.255 (6,5) Max. Wire Insulation Diameter	Max. Length L
5-6 (3-3,5)	.385 (9,8)	.301 (7,7)	B-117-06HD	.770 (19,6)	B-217-06HDX	1.061 (27,0)	B-417-06HD	B-417-06HDX	1.021 (25,9)	B-817-06HD*	B-817-06HDX	1.076 (27,3)
8 (4)	.385 (9,8)	.301 (7,7)	B-117-08HD	.770 (19,6)	B-217-08HDX	1.061 (27,0)	B-417-08HD	B-417-08HDX	1.021 (25,9)	B-817-08HD*	B-817-08HDX	1.076 (27,3)
10 (-)	.385 (9,8)	.301 (7,7)	B-117-10HD	.770 (19,6)	B-217-10HDX	1.061 (27,0)	B-417-10HD	B-417-10HDX	1.021 (25,9)	B-817-10HD*	B-817-10HDX	1.076 (27,3)

Use 14-12 Tooling
Commercial 14-12
Circular Mil Area 3,260-8,230
1,65-4,2mm²

14-12 Wire Range

Ring Tongue Elongated

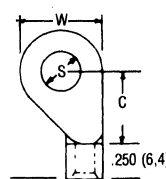


.040 (1,0) Stock

Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		VERSAKRIMP®	
			Part Number	Max. Length L	Part Max	Max. Length L
8 (4)	.425 (10,8)	.370 (9,4)	P-1127-08	.804 (20,4)	P-3127-08	.804 (20,4)
10 (-)	.425 (10,8)	.370 (9,4)	P-1127-10	.804 (20,4)	P-3127-10	.804 (20,4)
1/4 (6)	.425 (10,8)	.370 (9,4)	P-1127-14	.804 (20,4)	P-3127-14	.804 (20,4)

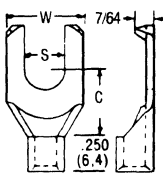
Offset Ring Tongue



Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		VERSAKRIMP®	
			Part Number	Max. Length L	Part Number	Max. Length L
10 (-)	.425 (10,8)	.370 (9,4)	P-1128-10	.804 (20,4)	P-3128-10	.804 (20,4)
1/4 (6)	.425 (10,8)	.370 (9,4)	P-1128-14	.804 (20,4)	P-3128-14	.804 (20,4)

Flanged Spade Tongue



Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		VERSAKRIMP®	
			Part Number	Max. Length L	.075 (1,9) Max. Wire Insulation Diameter	Max. Length L
10 (-)	.425 (10,8)	.370 (9,4)	P-1129-10	.816 (20,7)	P-3129-10	.816 (20,7)

14-12 series: Please consult factory for min. order quantity.

Ring Tongue



.045 (1,14) STOCK
BASIC DIMENSIONS
(see pg. 19)

Use 12-10 Tooling

- 14-12 AWG regular ring terminals are available in KRIMPTITE, VERSAKRIMP and AVIKRIMP styles.
- See 12-10 Ring terminals (pg. 19) for Dimensions.
- To order 14-12 Ring Terminals, Replace P/N prefix letter "C" with "P". EXAMPLE: Change C-836-04 to P-836-04.
- 14-12 AVIKRIMP Ring Terminal insulation color GREEN.
- Consult factory for minimum order quantity.



For VERSAKRIMP barrel style (brazed seam) change first figure in KRIMPTITE Part Number form "1" to "3."

*To order model funnel ferrule nylon sleeves, substitute 5 for 8. EXAMPLE: change B-817-06HD to B-517-06HD.

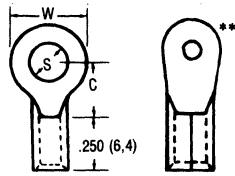
**INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6". EXAMPLE: Change B-217-06HDX to B-617-06HDX.

12-10 Wire Range



Circular Mii Area 5,180—13,100
3,1-5,2mm²

Ring Tongue Terminals

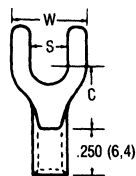


.040 (1,0)
Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®			AVIKRIMP®			
			Part Number	Max. Length L	.250 (6.4) Max. Wire Insulation Diameter	Min. Length L	Part Number	Max. Length L	.225 (5.7) Max. Wire Insulation Diameter	.255 (6.5) Max. Wire Insulation Diameter	Max. Length L	.225 (5.7) Max. Wire Insulation Diameter	.255 (6.5) Max. Wire Insulation Diameter	Max. Length L	
3-4 (2,6)	.292 (7,4) .385 (9,8)	.306 (7,8) .303 (7,7)	C-136-04** C-128-04	.741 (18,8) .785 (19,9)	C-236-04X** C-228-04X	1.032 (26,2) 1.076 (27,3)	C-336-04** C-328-04	.741 (18,8) .785 (19,8)	C-436-04** C-428-04	.992 (25,2) 1.036 (26,3)	C-436-04X** C-428-04X	.992 (25,2) 1.036 (26,3)	C-836-04** C-828-04*	C-836-04X** C-828-04X	1.047 (27,0) 1.091 (27,7)
5-6 (3-3,5)	.292 (7,4) .385 (9,8)	.306 (7,8) .303 (7,7)	C-136-06** C-128-06	.741 (18,8) .785 (19,9)	C-236-06X** C-228-06X	1.032 (26,2) 1.076 (27,3)	C-336-06** C-328-06	.741 (18,8) .785 (19,9)	C-436-06** C-428-06	.992 (25,2) 1.036 (26,3)	C-436-06X** C-428-06X	.992 (25,2) 1.036 (26,3)	C-836-06** C-828-06*	C-836-06X** C-828-06X	1.047 (27,0) 1.091 (27,7)
8 (4)	.292 (7,4) .385 (9,8)	.306 (7,8) .303 (7,7)	C-136-08** C-128-08	.741 (18,8) .785 (19,9)	C-236-08X** C-228-08X	1.032 (26,2) 1.076 (27,3)	C-336-08** C-328-08	.741 (18,8) .785 (19,9)	C-436-08** C-428-08	.992 (25,2) 1.036 (26,3)	C-436-08X** C-428-08X	.992 (25,2) 1.036 (26,3)	C-836-08** C-828-08*	C-836-08X** C-828-08X	1.047 (27,0) 1.091 (27,7)
10 (-)	.385 (9,8) .540 (13,7) .602 (15,3)	.303 (7,7) .393 (10,0) .468 (11,9)	C-128-10 C-130-10 C-140-10	.785 (19,9) .952 (24,2) 1.056 (26,8)	C-228-10X C-230-10X C-240-10X	1.076 (27,3) 1.243 (31,6) 1.347 (34,2)	C-328-10 C-330-10 C-340-10	.785 (19,9) .952 (24,2) 1.056 (26,8)	C-428-10 C-430-10 C-440-10	1.036 (26,3) 1.203 (30,1) 1.307 (33,2)	C-428-10X C-430-10X C-440-10X	1.036 (26,3) 1.203 (30,1) 1.307 (33,2)	C-828-10* C-830-10* C-840-10*	C-828-10X C-830-10X C-840-10X	1.091 (27,7) 1.258 (32,0) 1.362 (34,6)
1/4 (6)	.540 (13,7) .602 (15,3) .760 (19,3)	.393 (10,0) .468 (11,9) .611 (15,5)	C-130-14 C-140-14 C-101-14	.952 (24,2) 1.056 (26,8) 1.280 (32,5)	C-230-14X C-240-14X C-201-14X	1.243 (31,6) 1.347 (34,2) 1.571 (39,9)	C-330-14 C-340-14 C-301-14	.952 (24,2) 1.056 (26,8) 1.280 (32,5)	C-430-14 C-440-14 C-401-14	1.203 (30,1) 1.307 (33,2) 1.531 (38,9)	C-430-14X C-440-14X C-401-14X	1.203 (30,1) 1.307 (33,2) 1.531 (38,9)	C-830-14* C-840-14* C-801-14*	C-830-14X C-840-14X C-801-14X	1.258 (32,0) 1.362 (34,6) 1.536 (39,0)
5/16 (8)	.540 (13,7) .602 (15,3) .760 (19,3)	.393 (10,0) .468 (11,9) .611 (15,5)	C-130-56 C-140-56 C-101-56	.952 (24,2) 1.056 (26,8) 1.280 (32,5)	C-230-56X C-240-56X C-201-56X	1.243 (31,6) 1.347 (34,2) 1.571 (39,9)	C-330-56 C-340-56 C-301-56	.952 (24,2) 1.056 (26,8) 1.280 (32,5)	C-430-56 C-440-56 C-401-56	1.203 (30,1) 1.307 (33,2) 1.531 (38,9)	C-430-56X C-440-56X C-401-56X	1.203 (30,1) 1.307 (33,2) 1.531 (38,9)	C-830-56* C-840-56* C-801-56*	C-830-56X C-840-56X C-801-56X	1.258 (32,0) 1.362 (34,6) 1.536 (39,0)
3/8 (9)	.602 (15,3) .760 (19,3)	.468 (11,9) .611 (15,5)	C-140-38 C-101-38	1.056 (26,8) 1.280 (32,5)	C-240-38X C-201-38X	1.347 (34,2) 1.571 (39,9)	C-340-38 C-301-38	1.056 (26,8) 1.280 (32,5)	C-440-38 C-401-38	1.307 (33,2) 1.531 (38,9)	C-440-38X C-401-38X	1.307 (33,2) 1.531 (38,9)	C-840-38* C-801-38*	C-840-38X C-801-38X	1.362 (34,6) 1.536 (39,0)
7/16 (11)	.760 (19,3)	.611 (15,5)	C-101-76	1.280 (32,5)	C-201-76X	1.571 (39,9)	C-301-76	1.280 (32,5)	C-401-76	1.531 (38,9)	C-401-76X	1.531 (38,9)	C-801-76*	C-801-76X	1.536 (39,0)
1/2 (12)	.760 (19,3)	.611 (15,5)	C-101-12	1.280 (32,5)	C-201-12X	1.571 (39,9)	C-301-12	1.280 (32,5)	C-401-12	1.531 (38,9)	C-401-12X	1.531 (38,9)	C-801-12*	C-801-12X	1.536 (39,0)

*To order molded funnel ferrule nylon sleeves, substitute "5" for "8"

Spade Tongue Terminals



.040 (1,0) Stock
Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®			AVIKRIMP®			
			Part Number	Max. Length L	.250 (6.4) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	.225 (5,7) Max. Wire Insulation Diameter	.255 (6,5) Max. Wire Insulation Diameter	Max. Length L	.225 (5,7) Max. Wire Insulation Diameter	.255 (6,5) Max. Wire Insulation Diameter	Max. Length L	
5-6 (3-3,5)	.330 (8,4) .385 (9,8)	.305 (7,8) .301 (7,6)	C-1105-06 C-141-06	.784 (19,9) .812 (20,6)	C-2105-06X C-241-06X	1.075 (27,3) 1.103 (28,0)	C-3105-06 C-341-06	.784 (19,9) .812 (20,6)	C-4105-06 C-441-06	1.035 (26,3) 1.063 (27,0)	C-4105-06X C-441-06X	1.035 (26,3) 1.063 (27,0)	C-8105-06* C-841-06*	C-8105-06X C-841-06X	1.090 (27,7) 1.118 (28,4)
8 (4)	.385 (9,8) .425 (10,8)	.301 (7,6) .305 (7,8)	C-141-08 C-1102-08	.812 (20,6) .784 (19,9)	C-241-08X C-2102-08X	1.103 (28,0) 1.075 (27,3)	C-341-08 C-3102-08	.812 (20,6) .784 (19,9)	C-441-08 C-4102-08	1.063 (27,0) 1.035 (26,3)	C-441-08X C-4102-08X	1.063 (27,0) 1.035 (26,3)	C-841-08* C-8102-08*	C-841-08X C-8102-08X	1.118 (28,4) 1.090 (27,7)
10 (-)	.385 (9,8) .543 (13,8)	.301 (7,6) .393 (10,0)	C-141-10 C-168-10	.812 (20,6) .965 (24,5)	C-241-10X C-268-10X	1.103 (28,0) 1.256 (31,9)	C-341-10 C-368-10	.812 (20,6) .965 (24,5)	C-441-10 C-468-10	1.063 (27,0) 1.216 (30,9)	C-441-10X C-468-10X	1.063 (27,0) 1.216 (30,9)	C-841-10* C-868-10*	C-841-10X C-868-10X	1.118 (28,4) 1.271 (32,3)
1/4 (6)	.543 (13,8)	.393 (10,0)	C-168-14	.965 (24,5)	C-268-14X	1.256 (31,9)	C-368-14	.965 (24,5)	C-468-14	1.216 (30,9)	C-468-14X	1.216 (30,9)	C-868-14*	C-868-14X	1.271 (32,3)
5/15 (8)	.543 (13,8)	.393 (10,0)	C-168-56	.965 (24,5)	C-268-56X	1.256 (31,9)	C-368-56	.965 (24,5)	C-468-56	1.216 (30,9)	C-468-56X	1.216 (30,9)	C-868-56*	C-868-56X	1.271 (32,3)

**INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6". EXAMPLE: Change C-236-04X to C-636-04X.

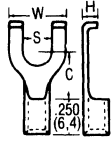
The part numbers in the shaded areas indicate standard/preferred products.

12-10 Wire Range



Circular Mil Area 5,180—13,100
3,1-5,2mm²

Flanged Spade Terminals

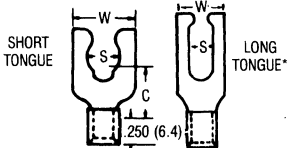


.040 (1,0) Stock
H = 7/64
Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®			AVIKRIMP®			
			Part Number	Max. Length L	.250 (6.4) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	225 (5.7) Max. Wire Insulation Diameter	255 (6.5) Max. Wire Insulation Diameter	Max. Length L	225 (5.7) Max. Wire Insulation Diameter	255 (6.5) Max. Wire Insulation Diameter	Max. Length L	
5-6 (3-3.5)	.330 (8.4) .385 (9.8)	.305 (7.8) .301 (7.7)	C-1104-06 C-117-06	.784 (19.9) .770 (19.6)	C-2104-06X C-217-06X	1.075 (27.3) 1.061 (27.0)	C-3104-06 C-317-06	.784 (19.9) .770 (19.6)	C-4104-06 C-417-06	1.035 (26.3) 1.021 (25.9)	C-4104-06X C-417-06X	1.035 (26.3) 1.021 (25.9)	C-8104-06* C-817-06*	C-8104-06X C-817-06X	1.090 (27.7) 1.076 (27.3)
8 (4)	.425 (10.8) .385 (9.8)	.305 (7.8) .301 (7.7)	C-1101-08 C-117-08	.784 (19.9) .770 (19.6)	C-2101-08X C-217-08X	1.075 (27.3) 1.061 (27.0)	C-3101-08 C-317-08	.784 (19.9) .770 (19.6)	C-4101-08 C-417-08	1.035 (26.3) 1.021 (25.9)	C-4101-08X C-417-08X	1.035 (26.3) 1.021 (25.9)	C-8101-08* C-817-08*	C-8101-08X C-817-08X	1.090 (27.7) 1.076 (27.3)
10 (-)	.385 (9.8)	.301 (7.7)	C-117-10	.770 (19.6)	C-217-10X	1.061 (27.0)	C-317-10	.770 (19.6)	C-417-10	1.021 (25.9)	C-417-10X	1.021 (25.9)	C-817-10*	C-817-10X	1.076 (27.3)

*To order molded funnel ferrule nylon sleeves, substitute "5" for "8". EXAMPLE: change C-817-08 to C-517-08.

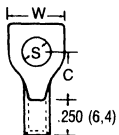
Snap Spade Terminals



.040 (1,0) Stock
Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®		VIBRAKRIMP®			AVIKRIMP®	
			Part Number	Max. Length L	.250 (6.4) Max. Wire Insulation Diameter	Max. Length L	225 (5.7) Max. Wire Insulation Diameter	255 (6.5) Max. Wire Insulation Diameter	Max. Length L	225 (5.7) Max. Wire Insulation Diameter	Max. Length L
5 (3)	.260 (6.6)	.230 (5.8)	C-1710-05	.664 (16.9)	C-2710-05X	.995 (24.3)	C-4710-05	C-4710-05X	.915 (23.2)	C-8710-05	.970 (24.6)
5-6 (3-3.5)	.260 (6.6) .300 (7.6)	.230 (5.8) .305 (7.8)	C-1710-06 C-1196-06	.664 (16.9) .806 (20.5)	C-2710-06X C-2196-06X*	.955 (24.3) 1.097 (27.9)	C-4710-06 C-4196-06	C-4710-06X C-4196-06X	.915 (23.2) 1.057 (26.9)	C-8710-06 C-8196-06*	.970 (24.6) 1.112 (28.2)
8 (4)	.330 (8.4) .320 (8.1)	.305 (7.8) .261 (6.6)	C-1197-08* C-1718-08	.834 (21.2) .725 (18.4)	C-2197-08X* C-2718-08X	1.016 (25.8) 1.106 (25.8)	C-4718-08 C-4718-08	C-4718-08X C-4718-08X	1.085 (27.8) .976 (24.8)	C-8197-08 C-8718-08	1.140 (29.0) 1.031 (26.2)
10 (-)	.330 (8.4) .340 (8.6)	.305 (7.8) .261 (6.6)	C-1198-10* C-1719-10	.854 (21.7) .773 (19.6)	C-2198-10X* C-2719-10X	1.145 (29.1) 1.064 (27.0)	C-4198-10* C-4719-10	C-4198-10X C-4719-08X	1.105 (28.1) 1.024 (26.0)	C-8198-10* C-8719-10	1.160 (29.5) 1.079 (27.4)
1/4 (6)	.425 (10.8)	.375 (9.5)	C-1199-14*	.980 (24.9)	C-2199-14X*	1.271 (32.3)	C-4199-14*	C-4199-14X	1.231 (31.3)	C-8199-14*	1.286 (32.3)

Rectangular Tongue Terminals



.040 (1,0) Stock
Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®		INSULKRIMP®**		VERSAKRIMP™		VIBRAKRIMP®			AVIKRIMP®			
			Part Number	Max. Length L	.250 (6.4) Max. Wire Insulation Diameter	Max. Length L	Part Number	Max. Length L	225 (5.7) Max. Wire Insulation Diameter	255 (6.5) Max. Wire Insulation Diameter	Max. Length L	225 (5.7) Max. Wire Insulation Diameter	255 (6.5) Max. Wire Insulation Diameter	Max. Length L	
5-6 (3-3.5)	.330 (8.4) .385 (9.8)	.305 (7.8) .301 (7.7)	C-1106-06 C-112-06	.784 (19.9) .805 (20.4)	C-2106-06X C-212-06X	1.075 (27.3) 1.096 (27.8)	C-3106-06 C-312-06	.784 (19.9) .805 (20.4)	C-4106-06 C-412-06	1.035 (26.3) 1.056 (26.8)	C-4106-06X C-412-06X	1.035 (26.3) 1.056 (26.8)	C-8106-06* C-812-06*	C-8106-06X C-812-06X	1.090 (27.7) 1.111 (28.2)
8 (4)	.385 (9.8) .425 (10.8)	.301 (7.7) .305 (7.8)	C-112-08 C-1103-08	.805 (20.4) .784 (19.9)	C-212-08X C-2103-08X	1.096 (27.8) 1.075 (27.3)	C-312-08 C-3103-08	.805 (20.4) .784 (19.9)	C-412-08 C-4103-08	1.056 (26.8) 1.035 (26.3)	C-412-08X C-4103-08X	1.056 (26.8) 1.035 (26.3)	C-812-08* C-8103-08*	C-812-08X C-8103-08X	1.111 (28.2) 1.090 (27.7)
10 (-)	.385 (9.8)	.301 (7.7)	C-112-10	.805 (20.4)	C-212-10X	1.096 (27.8)	C-312-10	.805 (20.4)	C-412-10	1.056 (26.8)	C-412-10X	1.056 (26.8)	C-812-10*	C-812-10X	1.111 (28.2)

The part numbers in the shaded areas indicate standard/preferred products.

*To order molded nylon sleeves, substitute 5 for 8. EXAMPLE: change C-817-08 to C-517-08.

**INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6". EXAMPLE: change C-211-06X to C-611-06X.

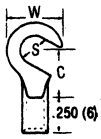


12-10 Wire Range



Circular Mil Area 5,180—13,100
3,1-5,2mm²

Hook Tongue Terminals

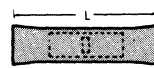
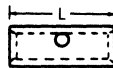
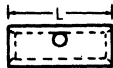


.040 (1,0) Stock
Basic Dimensions

Stud Size	Max. Width W	Min. Clearance C	KRIMPTITE®			INSULKRIMP®**			VERSAKRIMP™			VIBRAKRIMP®			AVIKRIMP®			
			Part Number	Max. Length L	Max. Wire Insulation Diameter	Part Number	Max. Length L	Max. Wire Insulation Diameter	Part Number	Max. Length L	Max. Wire Insulation Diameter	Part Number	Max. Length L	Max. Wire Insulation Diameter	Part Number	Max. Length L	Max. Wire Insulation Diameter	
5-6 (3-3,5)	.382 (9,7)	.303 (7,7)	C-111-06	.775 (19,7)	.250 (6,4)	C-211-06X	1.066 (27,1)	.225 (5,7)	C-311-06	.775 (19,7)	.255 (6,5)	C-411-06	1.026 (26,1)	.225 (5,7)	C-811-06*	.255 (6,5)	C-811-06X	1.081 (27,5)
8 (4)	.382 (9,7)	.303 (7,7)	C-111-08	.775 (19,7)	.250 (6,4)	C-211-08X	1.066 (27,1)	.225 (5,7)	C-311-08	.775 (19,7)	.255 (6,5)	C-411-08	1.026 (26,1)	.225 (5,7)	C-811-08*	.255 (6,5)	C-811-08X	1.081 (27,5)
10 (-)	.382 (9,7)	.303 (7,7)	C-111-10	.775 (19,7)	.250 (6,4)	C-211-10X	1.066 (27,1)	.225 (5,7)	C-311-10	.775 (19,7)	.255 (6,5)	C-411-10	1.026 (26,1)	.225 (5,7)	C-811-10*	.255 (6,5)	C-811-10X	1.081 (27,5)
1/4 (6)	.543 (13,8)	.393 (10,0)	C-199-14	.953 (24,2)	1.244 (31,6)	C-299-14X	1.244 (31,6)	1.204 (30,1)	C-399-14	.953 (24,2)	1.204 (30,1)	C-499-14	1.204 (30,1)	1.204 (30,1)	C-899-14*	1.259 (32,0)	C-899-14X	1.259 (32,0)
5/16 (8)	.543 (13,8)	.393 (10,0)	C-199-56	.953 (24,2)	1.244 (31,6)	C-299-56X	1.244 (31,6)	1.204 (30,1)	C-399-45	.953 (24,2)	1.204 (30,1)	C-499-56	1.204 (30,1)	1.204 (30,1)	C-899-56*	1.259 (32,0)	C-899-56X	1.259 (32,0)

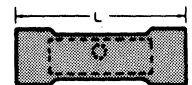
*To order molded funnel ferrule nylon sleeves, substitute "5" for "8". EXAMPLE: change C-811-06 to C-511-06.

Butt Splices



Part Number	I.D. Min.	O.D. Max.	L Max.	KRIMPTITE®		INSULKRIMP®		VERSAKRIMP™		NYLAKRIMP®	
				Part Number	Max. Length L	Part Number	Max. Length L	Part Number	Max. Length L	Part Number	Max. Length L
C-146	.129 (3,3)	.220 (5,6)	.575 (14,6)	C-246X	1.135 (28,8)	CS-346†	1.138 (3,5)	.223 (5,7)	.827 (21,0)	CS-N-346†	1.300 (33,0)
C-L146	.129 (3,3)	.220 (5,6)	.670 (17,0)	C-L246X	1.260 (32,0)						
				CS-V-346X†	1.305 (33,1)						

Oval Butt



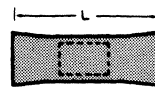
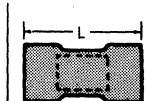
INSULKRIMP®	
.155 x .295 (3,9 X 7,5)	Max. Length L
C-203-OV	.826 (21,0)



END VIEW OF OVAL BUTT SPlice

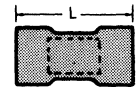
The extra-wide diameter of the oval-shaped configuration allows two or more wires to be placed side by side.

Parallel Splices



Part Number	I.D. Min.	O.D. Max.	L Max.	KRIMPTITE®		INSULKRIMP®		VERSAKRIMP™		NYLAKRIMP®	
				Part Number	Max. Length L	Part Number	Max. Length L	Part Number	Max. Length L	Part Number	Max. Length L
C-103	.128 (3,3)	.230 (5,8)	.303 (8,4)	C-203X	.831 (21,1)	CS-303†	.138 (3,5)	.225 (5,7)	.330 (8,4)	CS-303†	.688 (17,5)
				CS-V-303X†	.815 (20,7)						

Oval Parallel



INSULKRIMP®	
.155 x .295 (3,9 X 7,5)	Max. Length L
C-246-OV	1.131 (28,7)

†Part has seamless barrel instead of butted seam.

**INSULKRIMP® style is available with brazed crimp barrel seam. To order BRAZED-INSULKRIMP Terminals, replace first digit "2" in part number with "6". EXAMPLE: change C-211-06X to C-611-06X.

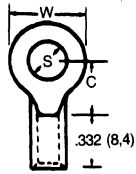
The part numbers in the shaded areas indicate standard/preferred products.

8 Wire Range



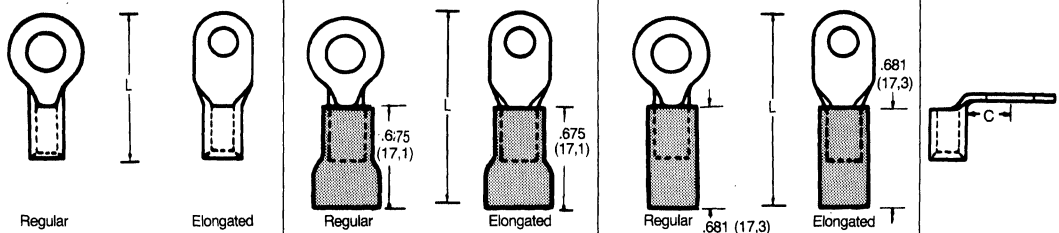
Circular MII Area
6,6-10,5mm²

Ring Tongue Terminals



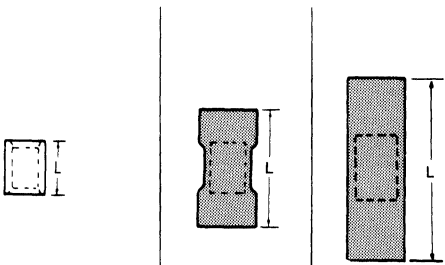
.050 (1,3) Stock

Basic Dimensions



Stud Size	Width W	Clearance C	VERSAKRIMP™		INSULKRIMP®		NYLAKRIMP®		* Bent 90° Clearance C			
			Regular Part Number	Max Length L	Elongated Part Number	.385 (9,8) Max. Wire Insulation Diameter	Max Length L	.385 (9,8) Max. Wire Insulation Diameter		.265 (6,7) Max. Wire Insulation Diameter	Max Length L	.265 (6,7) Max. Wire Insulation Diameter
6 (3-3,5)	.468 (11,9) 374 (9,5)	.388 (9,9) .388 (9,9)	D-350-06	1.007 (25,6) .960 (24,4)	D-356-06	D-650-06X	1.306 (33,2) 1.265 (32,1)	D-656-06X	D-750-06	1.269 (32,2) 1.364 (34,6)	D-756-06	.296 (7,5)
8 (4)	.468 (11,9) 374 (9,5)	.388 (9,9) .388 (9,9)	D-350-08	1.007 (25,6) .960 (24,4)	D-356-08	D-650-08X	1.306 (33,2) 1.265 (32,1)	D-656-08X	D-750-08	1.269 (32,2) 1.364 (34,6)	D-750-08	.296 (7,5)
10 (-)	.468 (11,9) 583 (14,8) 810 (20,5) 374 (9,5)	.388 (9,9) 453 (11,5) 636 (16,2) .388 (9,9)	D-350-10 D-351-10 D-352-10	1.007 (25,6) 1.136 (28,9) 1.432 (36,4)	D-356-10	D-650-10X D-651-10X D-652-10X	1.306 (33,2) 1.427 (36,2) 1.726 (43,8)	D-656-10X	D-750-10 D-751-10 D-752-10	1.269 (32,2) 1.395 (35,4) 1.717 (43,6)	D-756-10	.296 (7,5) 359 (9,1) 562 (14,3)
1/4 (6)	.468 (11,9) 583 (14,8) 810 (20,5) 1.125 (28,6) 374 (9,5)	.388 (9,9) 453 (11,5) 636 (16,2) 1.013 (25,7) .388 (9,9)	D-350-14 D-351-14 D-352-14 D-353-14	1.007 (25,6) 1.136 (28,9) 1.432 (36,4) 1.972 (50,1)	D-356-14	D-650-14X D-651-14X D-652-14X D-653-14X	1.306 (33,2) 1.427 (36,2) 1.726 (43,8) 2.278 (57,9)	D-656-14X	D-750-14 D-751-14 D-752-14 D-753-14	1.269 (32,2) 1.395 (35,4) 1.717 (43,6) 2.236 (56,8)	D-756-14	.296 (7,5) 359 (9,1) 562 (14,3) 937 (23,8)
5/16 (8)	.468 (11,9) 583 (14,8) 810 (20,5) 1.125 (28,6)	.388 (9,9) 453 (11,5) 636 (16,2) 1.013 (25,7)	D-350-56 D-351-56 D-352-56 D-353-56	1.007 (25,6) 1.136 (28,9) 1.432 (36,4) 1.972 (50,1)		D-650-56X D-651-56X D-652-56X D-653-56X	1.306 (33,2) 1.427 (36,2) 1.726 (43,8) 2.278 (57,9)		D-750-56 D-751-56 D-752-56 D-753-56	1.269 (32,2) 1.395 (35,4) 1.717 (43,6) 2.236 (56,8)		.296 (7,5) 359 (9,1) 562 (14,3) 937 (23,8)
3/8 (9)	.583 (14,8) 810 (20,5) 1.125 (28,6)	.453 (11,5) 636 (16,2) 1.013 (25,7)	D-351-38 D-352-38 D-353-38	1.136 (28,9) 1.432 (36,4) 1.972 (50,1)		D-651-38X D-652-38X D-653-38X	1.427 (36,2) 1.726 (43,8) 2.278 (57,9)		D-751-38 D-752-38 D-753-38	1.395 (35,4) 1.717 (43,6) 2.236 (56,8)		.359 (9,1) 562 (14,3) 937 (23,8)
7/16 (11)	.583 (14,8) 810 (20,5) 1.125 (28,6)	.453 (11,5) 636 (16,2) 1.013 (25,7)	D-351-76 D-352-76 D-353-76	1.136 (28,9) 1.432 (36,4) 1.972 (50,1)		D-651-76X D-652-76X D-653-76X	1.427 (36,2) 1.726 (43,8) 2.278 (57,9)		D-751-76 D-752-76 D-753-76	1.395 (35,4) 1.717 (43,6) 2.236 (56,8)		.359 (9,1) 562 (14,3) 927 (23,8)
1/2 (2)	.810 (20,5) 1.125 (28,6)	.636 (16,2) 1.013 (25,7)	D-352-12 D-353-12	1.432 (36,4) 1.972 (50,1)		D-652-12X D-653-12X	1.726 (43,8) 2.278 (57,9)		D-752-12 D-753-12	1.717 (43,6) 2.236 (56,8)		.562 (14,3) 937 (23,8)
5/8 (16)	.810 (20,5) 1.125 (28,6)	.636 (16,2) 1.013 (25,7)	D-352-58 D-353-58	1.432 (36,4) 1.972 (50,1)		D-652-58X D-653-58X	1.726 (43,8) 2.278 (57,9)		D-752-58 D-753-58	1.717 (43,6) 2.236 (56,8)		.562 (14,3) 937 (23,8)
3/4 (18)	1.125 (28,6)	1.013 (25,7)	D-353-34	1.972 (50,1)		D-653-34X	2.278 (57,9)		D-753-34	2.236 (56,8)		.937 (23,8)

Parallel Splices



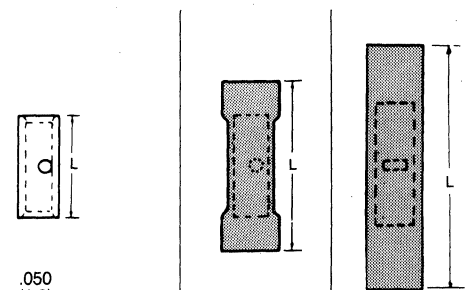
Wire Combinations

Part No. (6,6-10,5mm ²)	Wire Size			
	16	14	12	10
D-655X	6			
	5	1		
	4	2		
	4	1		
	3	2		
	3	1		
	3		1	
	3			1
	2	3		
	2	2		
	2		2	
	2			1
	4			
	1		2	
	1			1
	3	1		
	2	1		
	2		1	
	1	2		
	1			1

*Solid wire combination only

Part Number	VERSAKRIMP™			INSULKRIMP®		NYLAKRIMP®	
	I.D. Min.	O.D. Max.	L Max	.385 (9,8) Max. Wire Insulation Diameter	Length L	.265 (6,7) Max. Wire Insulation Diameter	Length L
D-355	165 (4,2)	295 (7,5)	408 (10,4)	D-655X	1.045 (26,5)	D-755	1.000 (25,4)

Butt Splices



Part Number	VERSAKRIMP™			INSULKRIMP®		NYLAKRIMP®	
	I.D. Min.	O.D. Max.	L Max	.385 (9,8) Max. Wire Insulation Diameter	Length L	.265 (6,7) Max. Wire Insulation Diameter	Length L
D-354	165 (4,2)	245 (6,2)	854 (21,2)	D-654X	1460 (37,1)	D-754	1.459 (37,1)

*Bent Tongue dimensions pertain to VERSAKRIMP (uninsulated) parts. To order Bent Tongue Terminals, insulated or uninsulated, see "Bent Tongues" on Page 4N.

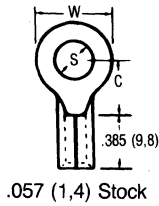
The part numbers in the shaded areas indicate standard/preferred products. Barrels can be oval for rectangular wire. Consult Factory for dimensions. All Dimensions are Nominal

6 Wire Range

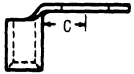
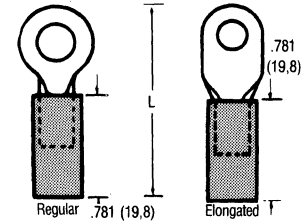
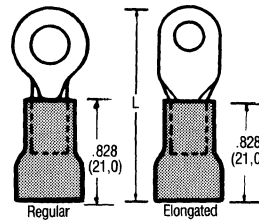
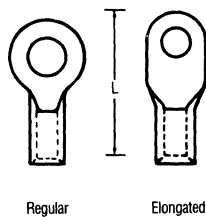


Circular Mil Area 20,800-33,100
10,5-16,8mm²

Ring Tongue Terminals



Basic Dimensions

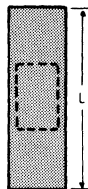
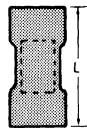


Stud Size	Width W	Clearance C	VERSAKRIMP™			INSULKRIMP®			NYLAKRIMP®			*Bent 90° Clearance C
			Regular Part Number	Max Length L	Elongated Part Number	440 (11,2) Max. Wire Insulation Diameter	Max. Length L	440 (11,2) Max. Wire Insulation Diameter	.345 (8,8) Max. Wire Insulation Diameter	Max. Length L	.345 (8,8) Max. Wire Insulation Diameter	
8 (4)	.643 (16,3) .480 (12,2)	.511 (13,0) .511 (13,0)	E-357-08	1.296 (32,5) 1.215 (30,9)	E-360-08	E-657-08X	1.667 (42,3) 1.596 (40,5)	E-660-08X	E-757-08	1.796 (45,6) 1.703 (43,3)	E-760-08	406 (10,3)
10 (-)	.643 (16,3) .825 (20,9) .480 (12,2)	.511 (13,0) .603 (15,3) .511 (13,0)	E-357-10 E-358-10	1.296 (32,5) 1.479 (37,6) 1.215 (30,9)	E-360-10	E-657-10X E-658-10X	1.667 (42,3) 1.874 (47,6) 1.596 (40,5)	E-660-10X	E-757-10 E-758-10	1.796 (45,6) 1.838 (46,7) 1.703 (43,3)	E-760-10	406 (10,3) 500 (12,7) 875 (22,2)
1/4 (6)	.643 (16,3) .825 (20,9) 1.133 (28,7) .480 (12,2)	.511 (13,0) .603 (15,3) .984 (25,0) .511 (13,0)	E-357-14 E-358-14 E-359-14	1.296 (32,5) 1.479 (37,6) 2.026 (51,5) 1.215 (30,9)	E-360-14	E-657-14X E-658-14X E-659-14X	1.667 (42,3) 1.874 (47,6) 2.405 (61,1) 1.596 (40,5)	E-660-14X	E-757-14 E-758-14 E-759-14	1.796 (45,6) 1.838 (46,7) 2.367 (60,1) 1.703 (43,3)	E-760-14	406 (10,3) 500 (12,7) 875 (22,2)
5/16 (8)	.643 (16,3) .825 (20,9) 1.133 (28,7) .480 (12,2)	.511 (13,0) .603 (15,3) .984 (25,0) .511 (13,0)	E-357-56 E-358-56 E-359-56	1.296 (32,5) 1.479 (37,6) 2.026 (51,5) 1.215 (30,9)	E-360-56	E-657-56X E-658-56X E-659-56X	1.667 (42,3) 1.874 (47,6) 2.405 (61,1) 1.596 (40,5)	E-660-56X	E-757-56 E-358-56 E-759-56	1.796 (45,6) 1.838 (46,7) 2.367 (60,1) 1.703 (43,3)	E-760-56	406 (10,3) 500 (12,7) 875 (22,2)
3/8 (9)	.643 (16,3) .825 (20,9) 1.133 (28,7)	.511 (13,0) .603 (15,3) .984 (25,0)	E-357-38 E-358-38 E-359-38	1.296 (32,5) 1.479 (37,6) 2.026 (51,5)		E-657-38X E-658-38X E-659-38X	1.667 (42,3) 1.874 (47,6) 2.405 (61,1)		E-757-38 E-758-38 E-759-38	1.796 (45,6) 1.838 (46,7) 2.367 (60,1)		406 (10,3) 500 (12,7) 875 (22,2)
7/16 (11)	.643 (16,3) .825 (20,9) 1.133 (28,7)	.511 (13,0) .603 (15,3) .984 (25,0)	E-357-76 E-358-76 E-359-76	1.296 (32,5) 1.479 (37,6) 2.026 (51,5)		E-657-76X E-658-76X E-659-76X	1.667 (42,3) 1.874 (47,6) 2.405 (61,1)		E-757-76 E-758-76 E-759-76	1.796 (45,6) 1.838 (46,7) 2.367 (60,1)		406 (10,3) 500 (12,7) 875 (22,2)
1/2 (12)	.825 (20,9) 1.113 (28,7)	.603 (15,3) .984 (25,0)	E-358-12 E-359-12	1.479 (37,6) 2.026 (51,5)		E-658-12X E-659-12X	1.874 (47,6) 2.405 (61,1)		E-758-12 E-759-12	1.838 (46,7) 2.367 (60,1)		500 (12,7) 875 (22,2)
5/8 (16)	.825 (20,9) 1.133 (28,7)	.603 (15,3) .984 (25,0)	E-358-58 E-359-58	1.479 (37,6) 2.026 (51,5)		E-658-58X E-659-58X	1.874 (47,6) 2.405 (61,1)		E-758-58 E-759-58	1.838 (46,7) 2.367 (60,1)		500 (12,7) 875 (22,2)
3/4 (18)	.1133 (28,7)	.984 (25,0)	E-359-34	2.026 (51,5)		E-659-76X	2.405 (61,1)		E-759-34	2.367 (60,1)		875 (22,2)

Parallel Splices



.057 (1,4) Stock

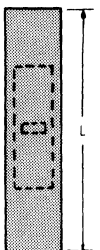
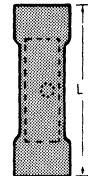


VERSAKRIMP™				INSULKRIMP®		NYLAKRIMP®	
Part Number	I.D. Min.	O.D. Max.	L Max	440 (11,2) Max. Wire Insulation Diameter	Length L	.343 (11,2) Max. Wire Insulation Diameter	Length L
E-361	.222 (5,6)	.375 (9,5)	.471 (12,0)	E-661X	1.274 (32,4)	E-761	1.190 (30,2)

Butt Splices



.057 (1,4) Stock



VERSAKRIMP™				INSULKRIMP®		NYLAKRIMP®	
Part Number	I.D. Min.	O.D. Max.	L Max	440 (11,2) Max. Wire Insulation Diameter	Length L	.343 (11,2) Max. Wire Insulation Diameter	Length L
E-362	.222 (5,6)	.375 (9,5)	1.045 (26,5)	E-662X	1.840 (46,7)	E-762	1.780 (45,2)

*Bent Tongue dimensions pertain to VERSAKRIMP (uninsulated) parts. To order Bent Tongue Terminals, insulated or uninsulated, see "Bent Tongues" on Page 4N.

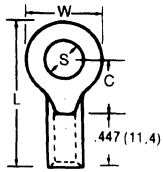
The part numbers in the shaded areas indicate standard/preferred products.
All Dimensions are Nominal

4 Wire Range



Circular Mil Area 33,100-52,600
16,8-26,6mm²

Ring Tongue Terminals



.075 (1,9) Stock

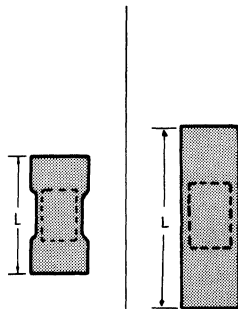
Basic Dimensions

Stud Size	Width W	Clearance C	VERSAKRIMP™			INSULKRIMP®			NYLAKRIMP®			*Bent 90° Clearance C
			Regular Part Number	Max Length L	Elongated Part Number	515 (13.1) Max. Wire Insulation Diameter	Max Length L	515 (13.1) Max. Wire Insulation Diameter	.430 (10.9) Max. Wire Insulation Diameter	Max Length L	.430 (10.9) Max. Wire Insulation Diameter	
10 (-)	.665 (16.9) .475 (12.1)	.547 (13.9) .547 (13.9)	F-366-10	1.385 (35.2) 1.288 (32.7)	F-367-10	F-666-10X	1.846 (46.9) 1.756 (44.6)	F-667-10X	F-766-10	1.825 (46.4) 1.735 (44.1)	F-767-10	.406 (10.3)
1/4 (6)	.665 (16.9)	.547 (13.9)	F-366-14	1.385 (35.2)	F-367-14	F-666-14X	1.846 (46.9)	F-667-14X	F-766-14	1.825 (46.4)	F-767-14	.406 (10.3)
	.475 (12.1)	.547 (13.9)	F-369-14	1.288 (32.7)		F-669-14X	1.756 (44.6)		F-769-14	1.735 (44.1)		.859 (21.8)
	.885 (22.5) 1.260 (32.0)	1.016 (25.8) 1.016 (25.8)	F-370-14	1.970 (50.0) 2.158 (54.8)		F-669-14X F-670-14X	2.412 (61.3) 2.599 (66.0)		F-769-14 F-770-14	2.392 (60.8) 2.549 (64.7)		.859 (21.8)
5/16 (8)	.665 (16.9)	.547 (13.9)	F-366-56	1.385 (35.2)	F-367-56	F-666-56X	1.846 (46.9)	F-667-56X	F-766-56	1.825 (46.4)	F-767-56	.406 (10.3)
	.475 (12.1)	.547 (13.9)	F-369-56	1.288 (32.7)		F-669-56X	1.756 (44.6)		F-769-56	1.735 (44.1)		.859 (21.8)
	.885 (22.5) 1.260 (32.0)	1.016 (25.8) 1.016 (25.8)	F-370-56	1.970 (50.0) 2.158 (54.8)		F-669-56X F-670-56X	2.412 (61.3) 2.599 (66.0)		F-769-56 F-770-56	2.392 (60.8) 2.549 (64.7)		.859 (21.8)
3/8 (9)	.665 (16.9)	.547 (13.9)	F-366-38	1.385 (35.2)	F-367-38	F-666-38X	1.846 (46.9)	F-667-38X	F-766-38	1.825 (46.4)	F-767-38	.406 (10.3)
	.885 (22.5)	1.016 (25.8)	F-369-38	1.288 (32.7)		F-669-38X	1.756 (44.6)		F-769-38	1.735 (44.1)		.859 (21.8)
	1.260 (32.0)	1.016 (25.8)	F-370-38	1.970 (50.0) 2.158 (54.8)		F-669-38X F-670-38X	2.412 (61.3) 2.599 (66.0)		F-769-38 F-770-38	2.392 (60.8) 2.549 (64.7)		.859 (21.8)
7/16 (11)	.665 (16.9)	.547 (13.9)	F-366-76	1.385 (35.2)	F-367-76	F-666-76X	1.846 (46.9)	F-667-76X	F-766-76	1.825 (46.4)	F-767-76	.406 (10.3)
	.885 (22.5)	1.016 (25.8)	F-369-76	1.288 (32.7)		F-669-76X	1.756 (44.6)		F-769-76	1.735 (44.1)		.859 (21.8)
	1.260 (32.0)	1.016 (25.8)	F-370-76	1.970 (50.0) 2.158 (54.8)		F-669-76X F-670-76X	2.412 (61.3) 2.599 (66.0)		F-769-76 F-770-76	2.392 (60.8) 2.549 (64.7)		.859 (21.8)
1/2 (12)	.665 (16.9)	.547 (13.9)	F-366-12	1.385 (35.2)	F-367-12	F-666-12X	1.846 (46.9)	F-667-12X	F-766-12	1.825 (46.4)	F-767-12	.406 (10.3)
	.885 (22.5)	1.016 (25.8)	F-369-12	1.288 (32.7)		F-669-12X	1.756 (44.6)		F-769-12	1.735 (44.1)		.859 (21.8)
	1.260 (32.0)	1.016 (25.8)	F-370-12	1.970 (50.0) 2.158 (54.8)		F-669-12X F-670-12X	2.412 (61.3) 2.599 (66.0)		F-769-12 F-770-12	2.392 (60.8) 2.549 (64.7)		.859 (21.8)
5/8 (16)	.885 (22.5)	1.016 (25.8)	F-369-58	1.970 (50.0)	F-370-58	F-669-58X	2.412 (61.3)	F-670-58X	F-769-58	2.392 (60.8)	F-770-58	.859 (21.8)
	1.260 (32.0)	1.016 (25.8)	F-370-58	2.158 (54.8)		F-669-58X F-670-58X	2.599 (66.0)		F-769-58 F-770-58	2.549 (64.7)		.859 (21.8)
3/4 (18)	1.260 (32.0)	1.016 (25.8)	F-370-34	2.158 (54.8)		F-670-34X	2.599 (66.0)		F-770-34	2.549 (64.7)		.859 (21.8)

Parallel Splices

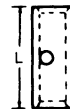


.075
Stock
(1,9)

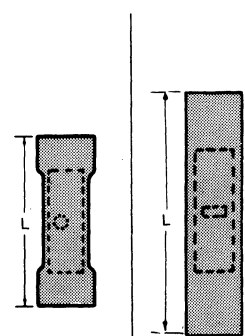


VERSAKRIMP™				INSULKRIMP®		NYLAKRIMP®	
Part Number	I.D. Min.	O.D. Max.	L Max	.515 (13.1) Max. Wire Insulation Diameter	Length L	.430 (10.9) Max. Wire Insulation Diameter	Length L
F-365	.270 (6.9)	.460 (11.7)	.560 (14.2)	F-665X	1.370 (34.8)	F-765	1.410 (35.8)

Butt Splices



.075
Stock
(1,9)



VERSAKRIMP™				INSULKRIMP®		NYLAKRIMP®	
Part Number	I.D. Min.	O.D. Max.	L Max	.515 (13.1) Max. Wire Insulation Diameter	Length L	.430 (10.9) Max. Wire Insulation Diameter	Length L
F-364	.270 (6.9)	.460 (11.7)	1.125 (28.6)	F-664X	2.016 (51.2)	F-764	2.020 (51.3)

The part numbers in the shaded areas indicate standard/preferred products.

Barrels can be oveled for rectangular wire. Consult Factory for dimensions.

*Bent Tongue dimensions pertain to VERSAKRIMP (uninsulated) parts. To order Bent Tongue terminals, insulated or uninsulated, see "Bent Tongues" on Page 4N.

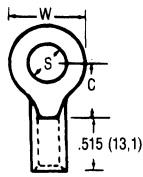
All Dimensions are Nominal

2 Wire Range



Circular Mil Area 52,600-83,700
26,6-42,4mm²

Ring Tongue Terminals



.075 (1,9) Stock

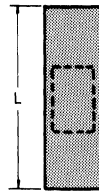
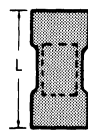
Basic Dimensions

Stud Size	Width W	Clearance C	VERSAKRIMP™			INSULKRIMP®			NYLAKRIMP®			*Bent 90° Clearance C
			Regular Part Number	Max Length L	Elongated Part Number	.650 (16,5) Max. Wire Insulation Diameter	Max Length L	.650 (16,5) Max. Wire Insulation Diameter	.510 (12,9) Max. Wire Insulation Diameter	Max Length L	.526 (13,4) Max. Wire Insulation Diameter	
10 (-)	.630 (16,0)	.703 (17,9)		1.578 (40,1)	G-375-10		2.110 (53,6)	G-675-10X		2.077 (52,8)	G-775-10	
1/4 (6)	.864 (21,9)	.703 (17,9)	G-374-14	1.695 (43,1)		G-674-14X	2.234 (56,7)		G-774-14	2.240 (56,9)		.515 (13,1)
	.630 (16,0)	.703 (17,9)		1.578 (40,1)	G-375-14		2.110 (53,6)	G-675-14X		2.077 (52,8)	G-775-14	.796 (20,2)
	.880 (22,4)	.990 (25,1)	G-376-14	1.990 (50,5)		G-676-14X	2.527 (64,2)		G-776-14	2.516 (63,9)		.812 (20,6)
	1.255 (31,9)	.990 (25,1)	G-377-14	2.178 (55,3)		G-677-14X	2.685 (68,2)		G-777-14	2.683 (68,1)		
5/16 (8)	.864 (21,9)	.703 (17,9)	G-374-56	1.695 (43,1)		G-674-56X	2.234 (56,7)		G-774-56	2.240 (56,9)		.515 (13,1)
	.630 (16,0)	.703 (17,9)		1.578 (40,1)	G-375-56		2.110 (53,6)	G-675-56X		2.077 (52,8)	G-775-56	.796 (20,2)
	.880 (22,4)	.990 (25,1)	G-376-56	1.990 (50,5)		G-676-56X	2.527 (64,2)		G-776-56	2.516 (63,9)		.812 (20,6)
	1.255 (31,9)	.990 (25,1)	G-377-56	2.178 (55,3)		G-677-56X	2.685 (68,2)		G-777-56	2.683 (68,1)		
3/8 (9)	.864 (21,9)	.703 (17,9)	G-374-38	1.695 (43,1)		G-674-38X	2.234 (56,7)		G-774-38	2.240 (56,9)		.515 (13,1)
	.630 (16,0)	.703 (17,9)		1.578 (40,1)	G-375-38		2.110 (53,6)	G-675-38X		2.077 (52,8)	G-775-38	.796 (20,2)
	.880 (22,4)	.990 (25,1)	G-376-38	1.990 (50,5)		G-676-38X	2.527 (64,2)		G-776-38	2.516 (63,9)		.812 (20,6)
	1.255 (31,9)	.990 (25,1)	G-377-38	2.178 (55,3)		G-677-38X	2.685 (68,2)		G-777-38	2.683 (68,1)		
7/16 (11)	.864 (21,9)	.703 (17,9)	G-374-76	1.695 (43,1)		G-674-76X	2.234 (56,7)		G-774-76	2.240 (56,9)		.515 (13,1)
	.880 (22,4)	.703 (17,9)	G-376-76	1.990 (50,5)		G-676-76X	2.527 (64,2)		G-776-76	2.516 (63,9)		.796 (20,2)
	1.255 (31,9)	.990 (25,1)	G-377-76	2.178 (55,3)		G-677-76X	2.685 (68,2)		G-777-76	2.683 (68,1)		.812 (20,6)
1/2 (12)	.864 (21,9)	.703 (17,9)	G-374-12	1.695 (43,1)		G-674-12X	2.234 (56,7)		G-774-12	2.240 (56,9)		.515 (13,1)
	.880 (22,4)	.703 (17,9)	G-376-12	1.990 (50,5)		G-676-12X	2.527 (64,2)		G-776-12	2.516 (63,9)		.796 (20,2)
	1.255 (31,9)	.990 (25,1)	G-377-12	2.178 (55,3)		G-677-12X	2.685 (68,2)		G-777-12	2.683 (68,1)		.812 (20,6)
5/8 (16)	.864 (21,9)	.703 (17,9)	G-374-58	1.695 (43,1)		G-674-58X	2.234 (56,7)		G-774-58	2.240 (56,9)		.515 (13,1)
	.880 (22,4)	.703 (17,9)	G-376-58	1.990 (50,5)		G-676-58X	2.527 (64,2)		G-776-58	2.516 (63,9)		.796 (20,2)
	1.255 (31,9)	.990 (25,1)	G-377-58	2.178 (55,3)		G-677-58X	2.685 (68,2)		G-777-58	2.683 (68,1)		.812 (20,6)
3/4 (18)	1.255 (31,9)	.990 (25,1)	G-377-34	2.178 (55,3)		G-677-34X	2.685 (68,2)		G-777-34	2.683 (68,1)		.812 (20,6)

Parallel Splices



.075 Stock (1,9)

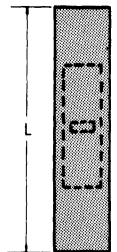
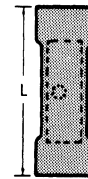


VERSAKRIMP™				INSULKRIMP®		NYLAKRIMP®	
Part Number	I.D. Min.	O.D. Max.	L Max	.650 (16,5) Max. Wire Insulation Diameter	Length L	.510 (12,9) Max. Wire Insulation Diameter	Length L
G-373	.355 (9,0)	.540 (13,7)	.685 (17,4)	G-673X	1.633 (41,5)	G-773	1.605 (40,8)

Butt Splices



.075 Stock (1,9)



VERSAKRIMP™				INSULKRIMP®		NYLAKRIMP®	
Part Number	I.D. Min.	O.D. Max.	L Max	.650 (16,5) Max. Wire Insulation Diameter	Length L	.510 (12,9) Max. Wire Insulation Diameter	Length L
G-372	.355 (9,0)	.540 (13,7)	1.125 (28,6)	G-672X	2.257 (57,3)	G-772	2.255 (57,3)

The part numbers in the shaded areas indicate standard/preferred products. Barrels can be oval for rectangular wire. Consult Factory for dimensions.

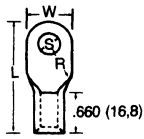
*Bent Tongue dimensions pertain to VERSAKRIMP (uninsulated) parts. To order Bent Tongue terminals, insulated or uninsulated, see "Bent Tongues" on Page 4N.

1/0 and 2/0 Wire Range



Circular Mil Area 83,700-119,500
42,4-60,5mm²

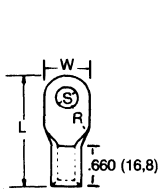
1/0 Wire Range Ring Tongue Terminals



.075 (1,9) Stock

Basic Dimensions

Stud Size S	Width W	Washer Radius R. Max.	Max Length L	Regular Part Number	Elongated Part Number	*Bent 90° Clearance C
1/4 (6)	.820 (20,8)	.770 (19,6)	1.949 (49,5)	H-381-14		.546 (13,9)
5/16 (8)	.820 (20,8)	.770 (19,6)	1.949 (49,5)	H-381-56		.546 (13,9)
3/8 (9)	.820 (20,8)	.770 (19,6)	1.949 (49,5)	H-381-38		.546 (13,9)
	.882 (22,4)	.770 (19,6)	1.980 (50,3)	H-380-38	H-382-38	.562 (14,3)
7/16 (11)	.882 (22,4)	.770 (19,6)	1.980 (50,3)	H-380-76		.562 (14,3)
	1.257 (31,9)	1.302 (33,1)	2.700 (68,6)	H-380-12	H-382-12	1.078 (27,4)
1/2 (12)	.882 (22,4)	.770 (19,6)	1.980 (50,3)			.562 (14,3)
	1.257 (31,9)	1.302 (33,1)	2.700 (68,6)			1.078 (27,4)
5/8 (16)	1.257 (31,9)	1.302 (33,1)	2.700 (68,6)		H-382-58	1.078 (27,4)
3/4 (18)	1.257 (31,9)	1.302 (33,1)	2.700 (68,6)		H-382-34	1.078 (27,4)
7/8 (20)	1.257 (31,9)	1.302 (33,1)	2.700 (68,6)		H-382-78	1.078 (27,4)



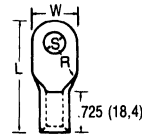
.075 (1,9) Stock

Basic Dimensions

Stud Size S	Width W	Washer Radius R. Max.	Max Length L	Regular Part Number	Elongated Part Number	*Bent 90° Clearance C
1/4 (6)	.820 (20,8)	.770 (19,6)	2.539 (64,5)	H-781-14		.546 (13,9)
5/16 (8)	.820 (20,8)	.770 (19,6)	2.539 (64,5)	H-781-56		.546 (13,9)
3/8 (9)	.820 (20,8)	.770 (19,6)	2.539 (64,5)	H-781-38		.546 (13,9)
	.882 (22,4)	.770 (19,6)	2.581 (65,6)	H-780-38	H-782-38	1.078 (27,4)
7/16 (11)	.882 (22,4)	.770 (19,6)	2.581 (65,6)	H-780-76		.562 (14,3)
	1.257 (31,9)	1.302 (33,1)	3.300 (83,8)	H-780-12	H-782-12	1.078 (27,4)
1/2 (12)	.882 (22,4)	.770 (19,6)	2.581 (65,6)			.562 (14,3)
	1.257 (31,9)	1.302 (33,1)	3.300 (83,8)			1.078 (27,4)
5/8 (16)	1.257 (31,9)	1.302 (33,1)	3.300 (83,8)		H-782-58	1.078 (27,4)
3/4 (18)	1.257 (31,9)	1.302 (33,1)	3.300 (83,8)		H-782-34	1.078 (27,4)
7/8 (20)	1.257 (31,9)	1.302 (33,1)	3.300 (83,8)		H-782-78	1.078 (27,4)

Circular Mil Area 119,500-150,500
60,5-76,2mm²

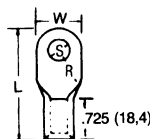
2/0 Wire Range Ring Tongue Terminals



.083 (2,1) Stock

Basic Dimensions

Stud Size S	Width W	Washer Radius R. Max.	Max Length L	Regular Part Number	Elongated Part Number	*Bent 90° Clearance C
1/4 (6)	.928 (23,6)	.760 (19,3)	2.048 (52,0)	J-385-14		.531 (13,5)
5/16 (8)	.928 (23,6)	.760 (19,3)	2.048 (52,0)	J-385-56		.531 (13,5)
3/8 (9)	.928 (23,6)	.760 (19,3)	2.048 (52,0)	J-385-38		.531 (13,5)
	.928 (23,6)	.760 (19,3)	2.048 (52,0)	J-385-76		.531 (13,5)
1/2 (12)	.928 (23,6)	.760 (19,3)	2.048 (52,0)	J-385-12		.531 (13,5)
	1.255 (31,9)	1.267 (32,2)	2.714 (68,9)		J-387-12	1.093 (27,8)
5/8 (16)	1.255 (31,9)	1.267 (32,2)	2.714 (68,9)		J-387-58	1.093 (27,8)
3/4 (18)	1.255 (31,9)	1.267 (32,2)	2.714 (68,9)		J-382-34	1.093 (27,8)
7/8 (20)	1.255 (31,9)	1.267 (32,2)	2.714 (68,9)		J-387-78	1.093 (27,8)



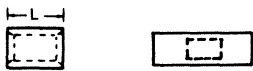
.083 (2,1) Stock

Basic Dimensions

Stud Size S	Width W	Washer Radius R. Max.	Max Length L	Regular Part Number	Elongated Part Number	*Bent 90° Clearance C
1/4 (6)	.928 (23,6)	.790 (20,1)	2.665 (67,7)	J-785-14		.531 (13,5)
5/16 (8)	.928 (23,6)	.790 (20,1)	2.665 (67,7)	J-785-56		.531 (13,5)
3/8 (9)	.928 (23,6)	.790 (20,1)	2.665 (67,7)	J-785-38		.531 (13,5)
	.928 (23,6)	.790 (20,1)	2.665 (67,7)	J-785-76		.531 (13,5)
1/2 (12)	.928 (23,6)	.790 (20,1)	2.665 (67,7)	J-785-12		.531 (13,5)
	1.255 (31,9)	1.295 (32,9)	3.335 (84,7)		J-787-12	1.093 (27,8)
5/8 (16)	1.255 (31,9)	1.295 (32,9)	3.335 (84,7)		J-787-58	1.093 (27,8)
3/4 (18)	1.255 (31,9)	1.295 (32,9)	3.335 (84,7)		J-787-34	1.093 (27,8)
7/8 (20)	1.255 (31,9)	1.295 (32,9)	3.335 (84,7)		J-787-78	1.093 (27,8)

Parallel Splices

Butt Splices



.075 Stock (1,9)



.075 Stock (1,9)

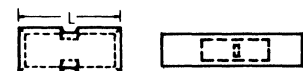
VERSAKRIMP™			NYLAKRIMP®			VERSAKRIMP™			NYLAKRIMP®		
Part Number	I.D.	Max. Length L	Part Number	I.D.	Max. Length L	Part Number	I.D.	Max. Length L	Part Number	I.D.	Max. Length L
†H-384	.449 (11,4)	.591 (15,0)	H-784	1.948 (49,5)		†H-383	.449 (11,4)	.591 (15,0)	H-783	2.653 (67,4)	

Parallel Splices

Butt Splices



.083 Stock (2,1)



.083 Stock (2,1)

VERSAKRIMP™			NYLAKRIMP®			VERSAKRIMP™			NYLAKRIMP®		
Part Number	I.D.	Max. Length L	Part Number	I.D.	Max. Length L	Part Number	I.D.	Max. Length L	Part Number	I.D.	Max. Length L
†J-389	.524 (13,3)	.674 (17,1)	J-789	1.965 (49,9)		†J-388	.524 (13,3)	.674 (17,1)	J-788	2.687 (68,2)	

*Bent Tongue dimensions pertain to VERSAKRIMP (uninsulated) parts. To order Bent Tongue terminals, insulated or uninsulated, see "Bent Tongues" on Page 4N.

All Dimensions are Nominal

†Seamless barrel I.D. - O.D. dimensions denote averages.

To find Wire Range needed for Parallel Splices, compute the total Circular Mil Area of wires involved and consult Conversion and Wire Combination Charts at back of Catalog.

The part numbers in the shaded areas indicate standard/preferred products.



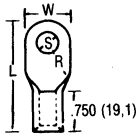
3/0 and 4/0 Wire Range



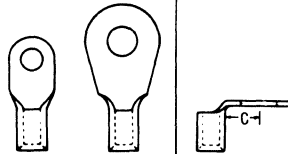
Circular Mil Area 150,500-190,000
76,2-96,3mm²

Circular Mil Area 190,000-231,000
96,3-117,0mm²

3/0 Wire Range Ring Tongue Terminals



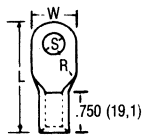
.095 (2,4) Stock



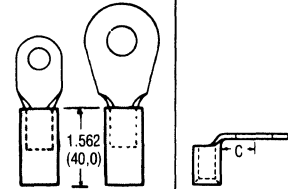
Regular Elongated

Basic Dimensions

Stud Size S	Width W	Washer Radius R. Max.	Max Length L	VERSAKRIMP™		*Bent 90° Clearance C
				Part Number	Part Number	
5/16 (8)	1.047 (26,6)	.825 (21,0)	2.180 (55,4)	K-390-56		.625 (15,9)
3/8 (9)	1.047 (26,6)	.825 (21,0)	2.180 (55,4)	K-390-38		.625 (15,9)
7/16 (11)	1.047 (26,6)	.825 (21,0)	2.180 (55,4)	K-390-76		.625 (15,9)
1/2 (12)	1.047 (26,6)	.825 (21,0)	2.180 (55,4)	K-390-12		.625 (15,9)
5/8 (16)	1.047 (26,6)	.825 (21,0)	2.180 (55,4)	K-390-58	K-392-58	.625 (15,9)
	1.240 (31,5)	1.294 (32,9)	2.746 (69,7)			1.062 (27,0)
3/4 (18)	1.047 (26,6)	.825 (21,0)	2.180 (55,4)	K-390-34	K-392-34	.625 (15,9)
	1.240 (31,5)	1.294 (32,9)	2.746 (69,7)			1.062 (27,0)
7/8 (20)	1.240 (31,5)	1.294 (32,9)	2.746 (69,7)		K-392-78	1.062 (27,0)



.095 (2,4) Stock

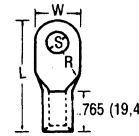


Regular Elongated

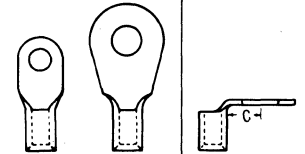
Basic Dimensions

Stud Size S	Width W	Washer Radius R. Max.	Max Length L	NYLAKRIMP®		*Bent 90° Clearance C
				.733 (18,6) Max. Wire Insulation Diameter Part Number	Part Number	
5/16 (8)	1.047 (26,6)	.825 (21,0)	2.917 (74,1)	K-790-56		.625 (15,9)
3/8 (9)	1.047 (26,6)	.825 (21,0)	2.917 (74,1)	K-790-38		.625 (15,9)
7/16 (11)	1.047 (26,6)	.825 (21,0)	2.917 (74,1)	K-790-76		.625 (15,9)
1/2 (12)	1.047 (26,6)	.825 (21,0)	2.917 (74,1)	K-790-12		.625 (15,9)
5/8 (16)	1.047 (26,6)	.825 (21,0)	2.917 (74,1)	K-790-58	K-792-58	.625 (15,9)
	1.240 (31,5)	1.294 (32,9)	3.440 (87,4)			1.062 (27,0)
3/4 (18)	1.047 (26,6)	.825 (21,0)	2.917 (74,1)	K-790-34	K-792-34	6.25 (15,9)
	1.240 (31,5)	1.294 (32,9)	3.440 (87,4)			1.062 (27,0)
7/8 (20)	1.240 (31,5)	1.294 (32,9)	2.917 (74,1)		K-792-78	1.062 (27,0)

4/0 Wire Range Ring Tongue Terminals



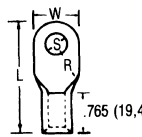
.105 (2,7) Stock



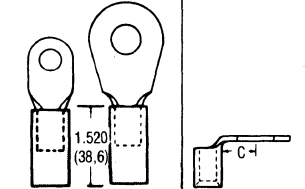
Regular Elongated

Basic Dimensions

Stud Size S	Width W	Washer Radius R. Max.	Max Length L	VERSAKRIMP™		*Bent 90° Clearance C
				Part Number	Part Number	
3/8 (9)	1.115 (28,3)	.850 (21,6)	2.242 (56,9)	L-395-38		.562 (14,3)
7/16 (11)	1.115 (28,3)	.850 (21,6)	2.242 (56,9)	L-395-76		.562 (14,3)
1/2 (12)	1.115 (28,3)	.850 (21,6)	2.242 (56,9)	L-395-12		.562 (14,3)
5/8 (16)	1.115 (28,3)	.850 (21,6)	2.242 (56,9)	L-395-58	L-398-58	.562 (14,3)
	1.240 (31,5)	1.320 (33,5)	2.765 (70,2)			1.078 (27,4)
3/4 (18)	1.240 (31,5)	1.320 (33,5)	2.765 (70,2)		L-398-34	1.078 (27,4)
7/8 (20)	1.240 (31,5)	1.320 (33,5)	2.765 (70,2)		L-398-78	1.078 (27,4)



.105 (2,7) Stock



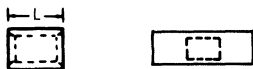
Regular Elongated

Basic Dimensions

Stud Size S	Width W	Washer Radius R. Max.	Max Length L	NYLAKRIMP®		*Bent 90° Clearance C
				.833 (21,0) Max. Wire Insulation Diameter	Part Number	
3/8 (9)	1.115 (28,3)	.850 (21,6)	3.001 (76,2)	L-795-38		.562 (14,3)
7/16 (11)	1.115 (28,3)	.850 (21,6)	3.001 (76,2)	L-795-76		.562 (14,3)
1/2 (12)	1.115 (28,3)	.850 (21,6)	3.001 (76,2)	L-795-12		.562 (14,3)
5/8 (16)	1.115 (28,3)	.850 (21,6)	3.001 (76,2)	L-795-58	L-798-58	.562 (14,3)
	1.240 (31,5)	1.320 (33,5)	3.501 (88,9)			1.078 (27,4)
3/4 (18)	1.240 (31,5)	1.320 (33,5)	3.501 (88,9)		L-798-34	1.078 (27,4)
7/8 (20)	1.240 (31,5)	1.320 (33,5)	3.501 (88,9)		L-798-78	1.078 (27,4)

N

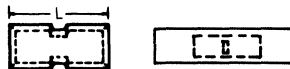
Parallel Splices



.095 Stock (2,4)

VERSAKRIMP™			NYLAKRIMP®			VERSAKRIMP™			NYLAKRIMP®			
Part Number	I.D.	O.D.	Part Number	I.D.	O.D.	Part Number	I.D.	O.D.	Part Number	I.D.	O.D.	
†K-394	.571	.752	.768	K-794	2.280	2.280	2.280	2.280	†K-393	.571	.752	1.496
	(14,5)	(19,1)	(19,5)		(57,9)					(14,5)	(19,1)	(38,0)
									K-793			3.020
												(76,7)

Butt Splices



.093 Stock (2,4)

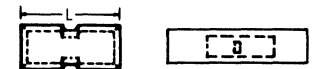
Parallel Splices



.105 Stock (2,7)

VERSAKRIMP™			NYLAKRIMP®			VERSAKRIMP™			NYLAKRIMP®			
Part Number	I.D.	O.D.	Part Number	I.D.	O.D.	Part Number	I.D.	O.D.	Part Number	I.D.	O.D.	
†L-379	.646	.851	.787	L-779	2.310	2.310	2.310	2.310	†L-378	.646	.851	1.496
	(16,4)	(21,6)	(20,0)		(58,7)					(16,4)	(21,6)	(38,0)
												2.985
												(75,8)

Butt Splices



.105 Stock (2,7)

*Bent Tongue dimensions pertain to VERSAKRIMP (uninsulated) parts. To order Bent Tongue terminals, insulated or uninsulated, see "Bent Tongues" on Page 4N.
All Dimensions Are Nominal

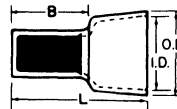
†Seamless barrel I.D.-O.D. dimensions denote averages.

Permanent Connectors



Nylon-insulated, Closed-End Connectors

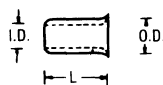
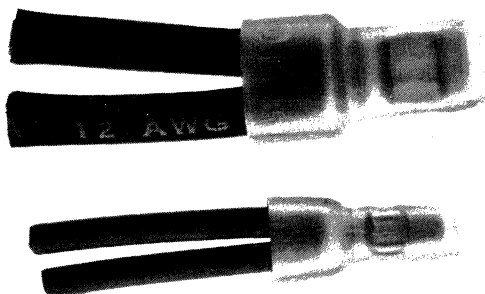
Molex-ETC nylon, closed-end connectors feature two-piece construction. A translucent nylon molded insulation is adhered to the metal connector insert. The connector's insert is annealed, tin-plated, seamless, pure electrolytic, tough pitch copper. Individual design and performance requirements dictate the use of copper inserts. These connectors are both UL and CSA temperature-rated for 105°C maximum. The NC-2214 is rated for a maximum of 600 volts in building wire and 1,000 volts inside a sign or fixture while the NC-1610 is rated to 300 volts maximum in both types of applications.



Wire Range	Part Number	Outside Diameter O.D.	Overall Length L	Barrel Length B	Inside Diameter I.D.	Circular Mil Area
22-14 (0.25-2.6mm ²)	NC-2214	.311 (7.9)	.607 (15.4)	.343 (8.7)	.259 (6.6)	600 - 5,180
16-10 (1.0-6.6mm ²)	NC-1610	.440 (11.2)	.722 (18.3)	.342 (8.7)	.384 (9.8)	2,400 - 13,100

Connector Inserts

Molex-ETC connector inserts are the same annealed, tin-plated, seamless pieces used in the nylon-insulated, closed-end connectors above. These inserts are used in applications where insulation is not essential.



Wire Range	Part Number	Outside Diameter O.D.	Overall Length L	Inside Diameter I.D.	Circular Mil Area
22-14 (0.25-2.6mm ²)	CE-2214	.126 (3.2)	.327 (8.3)	.092 (2.3)	600 - 5,180
16-10 (1.0-6.6mm ²)	CE-1610	.203 (5.2)	.337 (8.6)	.153 (3.9)	2,400-13,100

Common Wire Combinations

The table below shows the most common combinations of wires used in both nylon-insulated, closed-end connectors and standard connector inserts.

Number of Wires							
NC2214				NC1610			
Wire Size, AWG No.				Wire Size, AWG No.			
22	20	18	16	18	16	14	12
7				5			
1	4				3		
	4			1	3		
2	3				2		
4	2			3	2		
3	2			2	2		
6	1			1	2		
		3		4	1		
		2		3	1		
	1	2		2	1		
1		2		1	1		
5		1				2	
4		1		1	1	1	
	3	1		3		1	
3			1	2		1	
2			1	1		1	
1			1		2	1	
	2				1	1	
	1		1	2			1
				1			1
					1		1

NOTE: This table is applicable for standard conductors only. Consult your Molex-ETC Customer Service Representative for solid wire applications. This table is intended only as a guide. Circular Mil area of conductors may vary.



Military Specifications

Mil-T-7928

Molex-ETC solderless terminals and splices have long contributed to our nation's defense, as high-quality components in a wide variety of weapons systems and defense equipment.

MIL-T-7928 is the specification most commonly used by the various government agencies, military prime and ordnance contractors and many original-equipment-manufacturers (OEM) as well as the aircraft and aerospace industries. This specification encompasses and governs several military standards: MS-20659, Uninsulated Ring Terminals; MS-25036, Insulated Ring Terminals; MS-21004, Uninsulated Rectangular Terminals; MS-17143, Insulated Rectangular Terminals.

The following quick-reference charts indicate some of the more popular Molex-ETC military terminals and splices which are manufactured to meet or exceed military specifications and performance standards.

QUALIFIED PRODUCTS LIST (QPL) APPROVALS

Class 1 approved terminals and splices conform to all dimensional requirements and meet all performance standards of the military specification, when crimped with QPL-approved crimping tools.

Class 2 approved terminals and splices meet all performance standards of the military specification when crimped with the manufacturer's QPL-recognized crimping tools.

Types I and II further classify military terminals and splices as non-insulated and insulated. Type I indicates "uninsulated" while Type II refers to "insulated" terminals and splices.

See pages 42 and 43 for details on all Molex-ETC crimping tools. Consult your Molex-ETC Customer Service Representative for additional information and military cross-references.

Ring Tongue Terminals

MS-20659 Type I non-insulated

MS-20659 Dash No.	Molex-ETC Part No.	Stud Size	Class	MS-20659 Dash No.	Molex-ETC Part No.	Stud Size	Class	MS-20659 Dash No.	Molex-ETC Part No.	Stud Size	Class
22-18 WIRE RANGE				6 WIRE RANGE				1/0 WIRE RANGE			
-138	AA-420-04	4 (2,6)	2	-130	E-360-10	10 (-)	2	-117	H-381-14	1/4 (6)	2
-101	AA-420-06	6 (3-3,5)	2	-109	E-360-14	1/4 (6)	2	-151	H-381-56	5/16 (8)	2
-102	AA-421-10	10 (-)	2	-131	E-357-56	5/16 (8)	2	-118	H-381-38	3/8 (9)	2
-161	AA-426-56	5/16 (8)	2	-110	E-357-38	3/8 (9)	2	-152	H-380-76	7/16 (11)	2
-125	AA-426-38	3/8 (9)	2	-143	E-358-12	1/2 (12)	2	-135	H-380-12	1/2 (12)	2
16-14 WIRE RANGE				4 WIRE RANGE				2/0 WIRE RANGE			
-139	BB-423-04	4 (2,6)	2	-144	F-367-10	10 (-)	2	-153	J-385-14	1/4 (6)	2
-126	BB-423-06	6 (3-3,5)	2	-111	F-367-14	1/4 (6)	2	-119	J-385-56	5/16 (8)	2
-103	BB-437-06	6 (3-3,5)	2	-132	F-366-56	5/16 (8)	2	-120	J-385-38	3/8 (9)	2
-104	BB-437-10	10 (-)	2	-112	F-366-38	3/8 (9)	2	-154	J-385-76	7/16 (11)	2
-163	BB-418-56	5/16 (8)	2	-145	F-369-12	1/2 (12)	2	-136	J-385-12	1/2 (12)	2
-127	BB-418-38	3/8 (9)	2	2 WIRE RANGE				3/0 WIRE RANGE			
12-10 WIRE RANGE				146 ASG				155 ASG			
-165	C-336-06	6 (3-3,5)	2	-113	G-375-10	10 (-)	2	-121	K-390-38	3/8 (9)	2
-105	C-328-10	10 (-)	1 & 2	-147	G-375-14	1/4 (6)	2	-156	K-390-76	7/16 (11)	2
-106	C-330-56	5/16 (8)	1 & 2	-114	G-375-38	3/8 (9)	2	-122	K-390-12	1/2 (12)	2
-128	C-340-38	3/8 (9)	1 & 2	-148	G-374-76	7/16 (11)	2	4/0 WIRE RANGE			
-166	C-301-12	1/2 (12)	2	-133	G-374-12	1/2 (12)	2	123 ASG			
8 WIRE RANGE				1 WIRE RANGE*				158			
-140	D-356-08	8 (4)	2	-115	H-381-14	1/4 (6)	2	-124	L-395-12	1/2 (12)	2
-107	D-356-10	10 (-)	2	-149	H-381-56	5/16 (8)	2	-159	L-395-56	5/8 (16)	2
-141	D-350-14	1/4 (6)	2	-116	H-381-38	3/8 (9)	2	-160	L-398-34	3/4 (18)	2
-108	D-351-56	5/16 (8)	2	-150	H-380-76	7/16 (11)	2	-137	L-398-78	7/8 (20)	2
-129	D-351-38	3/8 (9)	2	-134	H-380-12	1/2 (2)	2				
-142	D-352-12	1/2 (12)	2								

MS-25036 Type II insulated

MS-25036 Dash No.	Molex-ETC Part No.	Stud Size	Class	MS-25036 Dash No.	Molex-ETC Part No.	Stud Size	Class	MS-25036 Dash No.	Molex-ETC Part No.	Stud Size	Class
26-24 WIRE RANGE				12-10 WIRE RANGE				1 WIRE RANGE*			
-143 ASG	M-8122-02	2 (2)	2	-111	C-828-06	6 (3-3,5)	1 & 2	-129**	H-781-14	1/4 (6)	2
-143	M-8114-02	2 (2)	2	-156	C-828-08	8 (4)	1 & 2	-130**	H-781-38	3/8 (9)	2
-144	M-8113-04	4 (2,6)	2	-112	C-828-10	10 (-)	1 & 2	-131**	H-780-12	1/2 (12)	2
-145	M-8118-06	6 (3-3,5)	2	-157	C-830-14	1/4 (6)	1 & 2	1/0 WIRE RANGE			
-146	M-8118-08	8 (4)	2	-113	C-830-56	5/16 (8)	1 & 2	-132	H-781-14	1/4 (6)	2
-147	M-8118-10	10 (-)	2	-114	C-840-38	3/8 (9)	1 & 2	-133	H-781-38	3/8 (9)	2
22-18 WIRE RANGE				8 WIRE RANGE				2/0 WIRE RANGE			
-148	AA-820-04	4 (2,6)	1 & 2	-115 ASG	D-750-10	10 (-)	2	-134	H-780-12	1/2 (12)	2
-101	AA-820-06	6 (3-3,5)	1 & 2	-116	D-750-14	1/4 (6)	2	-135	J-785-14	1/4 (6)	2
-102	AA-832-06	6 (3-3,5)	1 & 2	-117	D-751-56	5/16 (8)	2	-136	J-785-38	3/8 (9)	2
-149	AA-821-08	8 (4)	1 & 2	-118	D-751-38	3/8 (9)	2	-137	J-785-12	1/2 (12)	2
-103	AA-821-10	10 (-)	1 & 2	6 WIRE RANGE				3/0 WIRE RANGE			
-150	AA-822-14	1/4 (6)	1 & 2	-119	E-760-10	10 (-)	2	-138	K-790-38	3/8 (9)	2
-104	AA-822-56	5/16 (8)	1 & 2	-120	E-760-14	1/4 (6)	2	-139	K-790-12	1/2 (12)	2
-105	AA-826-38	3/8 (9)	1 & 2	-121	E-757-56	5/16 (8)	2	4/0 WIRE RANGE			
16-14 WIRE RANGE				4 WIRE RANGE				140			
-152	BB-823-04	4 (2,6)	1 & 2	-122	E-757-38	3/8 (9)	2	-141	L-795-38	3/8 (9)	2
-106	BB-823-06	6 (3-3,5)	1 & 2	-123	F-767-14	1/4 (6)	2		L-795-12	1/2 (12)	2
-107	BB-837-06	6 (3-3,5)	1 & 2	-124	F-766-56	5/16 (8)	2				
-153	BB-837-08	8 (4)	1 & 2	-125	F-766-38	3/8 (9)	2				
-108	BB-837-10	10 (-)	1 & 2	2 WIRE RANGE				141			
-154	BB-825-14	1/4 (6)	1 & 2	-126	G-775-14	1/4 (6)	2				
-109	BB-825-56	5/16 (8)	1 & 2	-127	G-775-38	3/8 (9)	2				
-110	BB-818-38	3/8 (9)	1 & 2	-128	G-774-12	1/2 (12)	2				

** Please refer to MS number when ordering for clear to white insulation.

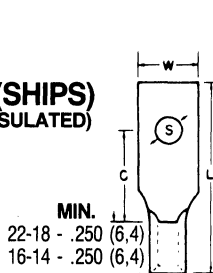
*Molex-ETC recommends 1/0 terminals for applications for #1 AWG terminals.

Military Specifications

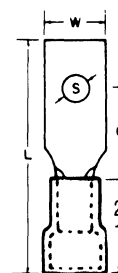
Rectangular Tongue Terminals/MIL-T-7928

MS-21004 (SHIPS) covers non-insulated, brazed-barrel, rectangular tongue terminals. Insulated versions of these terminals are covered by MS-17143 (SHIPS). Since Navy and AWG wire sizes, tongue width, clearance and stud size are the same for both specifications, these common basic dimensions are in the center section of the chart below. The left and right sections of the chart list the individual military specification, the Molex-ETC part number, length and the maximum wire insulation diameter (for MS-17143).

**MS-21004 (SHIPS)
TYPE I (NON-INSULATED)**



**MS-17143 (SHIPS)
TYPE II (INSULATED)**



Common Basic Dimensions

MIL-E-16366 Tongue Shape Number	Molex-ETC Part Number	Max. Length L	Navy Wire Size	AWG Wire Size	Stud Size S	Max. Width W	Min. Clearance C	Max. Length L	Max. Wire Insulation Diameter	Molex-ETC Part Number	MS-17143 Dash Nos.	Class
L-80	A-L80-08	1.256 (31.9)	1-2	22-18 (0.25-1.3mm ²)	8 (4)	.395 (10.0)	.625 (15.9)	1.359 (33.9)	.140 (3.6)	AA-880-1	-1	1 & 2
L-81	A-L81-06	1.005 (25.5)	1-2	22-18 (0.25-1.3mm ²)	6 (3-3.5)	.307 (7.8)	.468 (11.9)	1.109 (28.2)	.140 (3.6)	AA-881-1	-4	1 & 2
L-82	A-L82-08	1.005 (25.5)	1-2	22-18 (0.25-1.3mm ²)	8 (4)	.307 (7.8)	.468 (11.9)	1.109 (28.2)	.140 (3.6)	AA-882-1	-7	1 & 2
L-83	A-L83-05	.734 (18.6)	1-2	22-18 (0.25-1.3mm ²)	5 (3-3.5)	.282 (7.2)	.281 (7.1)	.855 (21.7)	.140 (3.6)	AA-883-1	-10	1 & 2
L-84	A-L84-06	.911 (23.1)	1-2	22-18 (0.25-1.3mm ²)	6 (3-3.5)	.242 (6.1)	.406 (10.3)	1.015 (25.8)	.140 (3.6)	AA-884-1	-13	1 & 2
L-85	A-L85-04	.911 (23.1)	1-2	22-18 (0.25-1.3mm ²)	4 (2.6)	.242 (6.1)	.406 (10.3)	1.015 (25.8)	.140 (3.6)	AA-885-1	-16	1 & 2
L-86	A-L86-04	.703 (17.9)	1-2	22-18 (0.25-1.3mm ²)	4 (2.6)	.242 (6.1)	.250 (6.3)	.796 (20.2)	.140 (3.6)	AA-886-1	-19	1 & 2
L-80	B-L80-08	1.258 (32.0)	2-1/2-4	16-14 (1.0-2.6mm ²)	8 (4)	.395 (10.0)	.625 (15.9)	1.359 (33.9)	.170 (4.3)	BB-880-2	-2	1 & 2
L-81	B-L81-06	1.007 (25.6)	2-1/2-4	16-14 (1.0-2.6mm ²)	6 (3-3.5)	.307 (7.8)	.468 (11.9)	1.109 (28.2)	.170 (4.3)	BB-881-2	-5	1 & 2
L-82	B-L82-08	1.007 (25.6)	1-1/2-4	16-14 (1.0-2.6mm ²)	8 (4)	.307 (7.8)	.468 (11.9)	1.109 (28.2)	.170 (4.3)	BB-882-2	-8	1 & 2
L-83	B-L83-05	.734 (18.6)	2-1/2-4	16-14 (1.0-2.6mm ²)	5 (3-3.5)	.282 (7.2)	.281 (7.1)	.855 (21.7)	.170 (4.3)	BB-883-2	-11	1 & 2
L-84	B-L84-06	.913 (23.2)	2-1/2-4	16-14 (1.0-2.5mm ²)	6 (3-3.5)	.242 (6.1)	.406 (10.3)	1.105 (25.8)	.170 (4.3)	BB-884-2	-14	1 & 2
L-85	B-L85-04	.913 (23.2)	1-1/2-4	16-14 (1.0-2.6mm ²)	4 (2.6)	.242 (6.1)	.406 (10.3)	1.105 (25.8)	.170 (4.3)	BB-885-2	-17	1 & 2
L-86	B-L86-04	.785 (17.9)	2-1/2-4	16-14 (1.0-2.6mm ²)	4 (2.6)	.242 (6.1)	.250 (6.3)	.796 (20.2)	.170 (4.3)	BB-886-2	-20	1 & 2

Molex-ETC is not currently QPL on MS21004. This chart is for reference only.

NOTE: All actual insulated parts are color-coded RED, BLUE or YELLOW to military Standard.

MS-21004

(REPLACES MIL-E-16366) TYPE I NON-INSULATED
(SEE BASIC DIMENSIONS CHART AND NOTE ABOVE)

Military Type P/N	(MIL-E-16366) Tongue Shape	Military Wire Range	Navy (SHIPS) Wire Range	Stud Size	Molex-ETC Part Number
MS-21004-1	L-86	22-18 AWG	1-2	4	A-L86-04
2	L-83	"	"	5	A-L83-05
-3	L-82	"	"	8	A-L82-08
-4	L-81	"	"	6	A-L81-06
-5	L-85	"	"	4	A-L85-04
-6	L-84	"	"	6	A-L84-06
-7	L-80	"	"	8	A-L80-08
MS-21004-8	L-86	16-14 AWG	2-1/2-4	4	B-L86-04
-9	L-83	"	"	5	B-L83-05
-10	L-82	"	"	6	B-L81-06
-11	L-81	"	"	6	B-L82-06
-12	L-85	"	"	4	B-L85-04
-13	L-84	"	"	6	B-L84-06
-14	L-80	"	"	8	B-L80-08



Reliable terminations for high-temperature applications.

Extreme thermal environments for electrical and electronic circuitry demand Molex-ETC TEMP-TERMS. Their consistent, high quality and rugged reliability assure your product's proper performance even at temperatures up to 1200°F (759°C).

TEMP-TERMS are designed and value-engineered for three different high ambient temperature ranges: 650°F, 900°F and 1200°F (343°C, 483°C and 759°C, respectively). The terminals and splices in each range are fabricated from different materials to obtain maximum thermal performance at optimum initial and installed costs.

TEMP-TERMS are available only on special order. Call your Molex-ETC Customer Service Representative for prices and delivery.

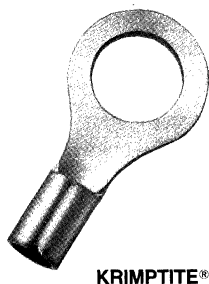
650° Temp-Terms (343°C)



Operating conditions in this maximum temperature range calls for Molex-ETC's 650° TEMP-TERMS terminals and splices. Both terminals and splices are constructed of nickel plated, silver bearing copper. The terminals are available in two barrel styles: the brazed barrel seam VERSAKRIMP and the wire insulation support VIBRAKRIMP. The VIBRAKRIMP insulation support sleeve is made of brass with a bright nickel plating and the terminal barrel is also brazed for added strength. The butt and parallel splices are of the seamless VERSAKRIMP design.

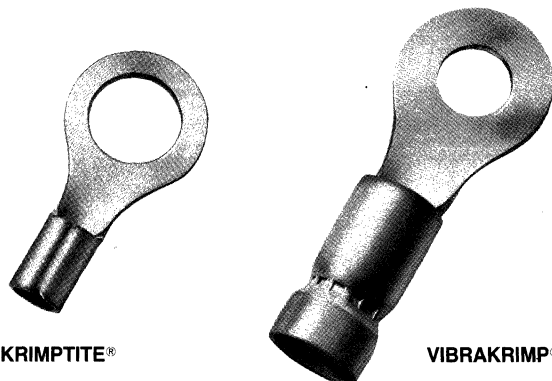
IMPORTANT: The 650° TEMP-TERMS cataloged on the following page represent only the more popular terminals and splices in the 22 through 10 AWG wire ranges. Other 650° TEMP-TERMS are available. Contact your Molex-ETC Customer Service Representative for more information.

900° Temp-Terms (484°C)



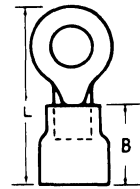
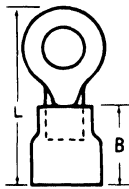
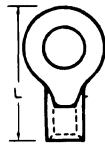
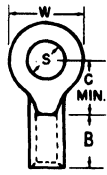
Molex-ETC also offers a line of terminals designed to perform satisfactorily in ambient operating temperature ranges up to 900°F (483°C). These nickel-plated, steel alloy products are available in the butted seam, KRIMPTITE barrel style. Ring tongue terminals cover the 22 through 10 AWG wire ranges to provide reliable performance time after time even in these hostile temperature environments.

1200° Temp-Terms (759°C)



The ultimate in thermal reliability is afforded by the Molex-ETC 1200° TEMP-TERMS. The ring tongue terminals, which are fabricated from pure nickel, cover the 22 through 10 AWG wire range. The terminals have either the butted seam KRIMPTITE barrel or the VIBRAKRIMP barrel style that utilizes a nickel-silver sleeve for wire insulation support.

Ring Tongue Terminals



650°
(343°C)

900°
(483°C)

1200°
(759°C)

Basic Dimensions

Wire Size	Stud Size	Max. Width W	Min. Clearance C	VERSAKRIMP™		VIBRAKRIMP®		KRIMPTITE®		KRIMPTITE®		VIBRAKRIMP®	
				Part Number	Max. Length L	Part Number	Max. Length L	Part Number	Max. Length L	Part Number	Max. Length L	Part Number	Max. Length L
22-18 (0.25-1.3mm ²)	5-6 (3-3.5)	.264 (6.7)	.250 (6.4)	AA-T-332-06	.582 (14.8)	AA-T-432-06	.792 (20.1)	A-S-132-06	660 (16.8)	AA-U-132-06	.582 (14.8)	AA-U-432-06	.644 (16.4)
	8 (4)	.264 (6.7)	.250 (6.4)	AA-T-332-08	.582 (14.8)	AA-T-432-08	.792 (20.1)	A-S-132-08	660 (16.8)	AA-U-132-08	.582 (14.8)	AA-U-432-08	.747 (19.0)
	10 (-)	.283 (7.2)	.250 (6.4)	AA-T-333-10	.591 (15.0)	AA-T-433-10	.801 (20.3)	A-S-133-10	670 (17.0)	AA-U-133-10	.591 (15.0)	AA-U-433-10	.751 (19.1)
	1/4 (6)	.477 (12.1)	.396 (10.0)	AA-T-322-14	.835 (21.2)	AA-T-422-14	1.045 (26.5)	A-S-122-14	914 (23.2)	AA-U-122-14	835 (21.2)	AA-U-422-14	.995 (25.3)
16-14 (1.0-2.6mm ²)	5/16 (8)	.477 (12.1)	.396 (10.0)	AA-T-322-56	.835 (21.2)	AA-T-422-56	1.045 (26.5)	A-S-122-56	914 (23.2)	AA-U-122-56	835 (21.2)	AA-U-422-56	.995 (25.3)
	3/8 (9)	.544 (13.8)	.562 (14.3)	AA-T-326-38	1.034 (26.3)	AA-T-426-38	1.244 (31.6)	A-S-126-38	1.113 (28.3)	AA-U-126-38	1.034 (26.3)	AA-U-426-38	1.194 (30.3)
	5-6 (3-3.5)	.260 (6.6)	.219 (5.6)	BB-T-323-06	.560 (14.2)	BB-T-423-06	.770 (19.6)	B-S-123-06	639 (16.2)	BB-U-123-06	.560 (14.2)	BB-U-423-06	.705 (17.9)
	8 (4)	.322 (8.2)	.295 (7.5)	BB-T-337-06	.645 (16.4)	BB-T-437-06	.855 (21.7)	B-S-137-06	730 (18.5)	BB-U-137-06	.645 (16.4)	BB-U-437-06	.800 (20.3)
12-10 (2.6-6.6mm ²)	10 (-)	.322 (8.2)	.295 (7.5)	BB-T-337-10	.645 (16.4)	BB-T-437-10	.855 (21.7)	B-S-137-10	730 (18.5)	BB-U-137-10	.645 (16.4)	BB-U-437-10	.800 (20.3)
	1/4 (6)	.447 (12.1)	.398 (10.1)	BB-T-325-14	.837 (21.2)	BB-T-425-14	1.047 (26.6)	B-S-125-14	916 (23.3)	BB-U-125-14	837 (21.2)	BB-U-425-14	.992 (25.2)
	5/16 (8)	.447 (12.1)	.398 (10.1)	BB-T-325-56	.837 (21.2)	BB-T-425-56	1.047 (26.6)	B-S-125-56	916 (23.3)	BB-U-125-56	837 (21.2)	BB-U-425-56	.922 (25.2)
	3/8 (9)	.544 (13.8)	.564 (14.3)	BB-T-318-38	1.036 (26.3)	BB-T-418-38	1.246 (31.6)	B-S-118-38	1.115 (28.3)	BB-U-118-38	1.036 (26.3)	BB-U-418-38	1.191 (30.3)
12-10 (2.6-6.6mm ²)	5-16 (8)	.385 (9.8)	.313 (8.0)	C-T-328-06	.785 (19.9)	C-T-428-06	1.056 (26.8)	C-S-128-06	785 (19.9)	C-U-128-06	785 (19.9)	C-U-428-06	1.046 (26.6)
	8 (4)	.385 (9.8)	.313 (8.0)	C-T-328-08	.785 (19.9)	C-T-428-08	1.056 (26.8)	C-S-128-08	785 (19.9)	C-U-128-08	785 (19.9)	C-U-428-08	1.046 (26.6)
	10 (-)	.385 (9.8)	.313 (8.0)	C-T-328-10	.785 (19.9)	C-T-428-10	1.056 (26.8)	C-S-128-10	785 (19.9)	C-U-128-10	785 (19.9)	C-U-428-10	1.046 (26.6)
	1/4 (6)	.540 (13.7)	.403 (10.2)	C-T-330-14	.952 (24.2)	C-T-430-14	1.223 (31.1)	C-S-130-14	952 (24.2)	C-U-130-14	952 (24.2)	C-U-430-14	1.213 (30.8)
Barrel Length B	#22-18 (0.25-1.3mm ²)			.175 (4.4)		.375 (9.5)		250 (6.4)		.175 (4.4)		.360 (9.1)	
	#16-14 (1.0-2.6mm ²)			.175 (4.4)		.375 (9.5)		250 (6.4)		.175 (4.4)		.360 (9.1)	
	#12-10 (2.6-6.6mm ²)			.250 (6.4)		.515 (13.1)		250 (6.4)		.250 (6.4)		.540 (13.9)	
				.250 (6.4)		.515 (13.1)		250 (6.4)		.250 (6.4)		.540 (13.9)	

Temp-Terms: Consult Factory for order quantity requirements and deliveries.

Maximum wire diameter for Vibrakrimp Terminals 22-18 Range (AA) = .140 — 16-14 Range (BB) = .170 — 12-10 Range (C) = .225

Parallel Splices

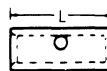


650° (343°C)

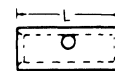
Wire Range	Part Number	I.D. Min.	O.D. Max.	L Max	Stock Thickness
22-18 (0.25-1.3mm ²)	A-T-302	.060 (1.5)	.130 (3.3)	.330 (8.4)	.032 (0.8)
16-14 (1.0-2.6mm ²)	B-T-304	.091 (2.3)	.160 (4.1)	.330 (8.4)	.032 (0.8)
12-10 (2.6-6.6mm ²)	C-T-303	.138 (3.5)	.255 (5.7)	.330 (8.4)	.040 (1.0)

Butt Splices

650° (343°C)



900° (343°C)



Wire Range	Part Number	Length L	VERSAKRIMP™			KRIMPTITE®		
			Part Number	Length L	Stock Thickness	Part Number	Length L	Stock Thickness
22-18 (0.25-1.3mm ²)	A-T-345	675 (17.1)	A-S45	.570 (14.5)	.032 (0.8)			
16-14 (1.0-2.6mm ²)	B-T-331	675 (17.1)	B-S31	.567 (14.4)	.032 (0.8)			
12-10 (2.6-6.6mm ²)	C-T-346	827 (21.0)	C-S46	.562 (14.3)	.040 (1.0)			

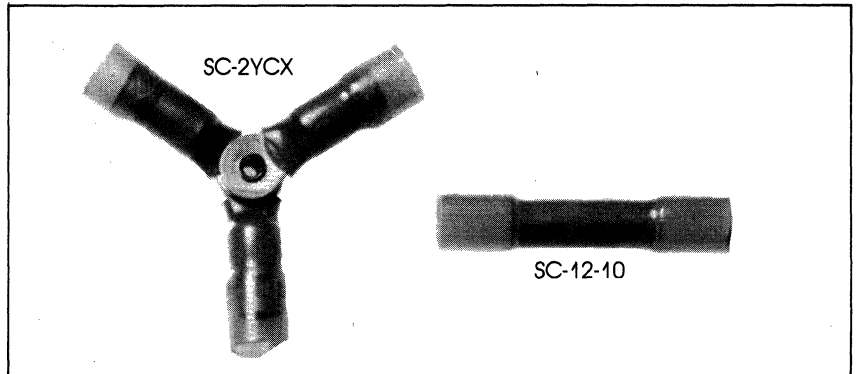
All Dimensions are Nominal



The all-weather, heat-sealable NYLON splice

12-10 WIRE RANGE

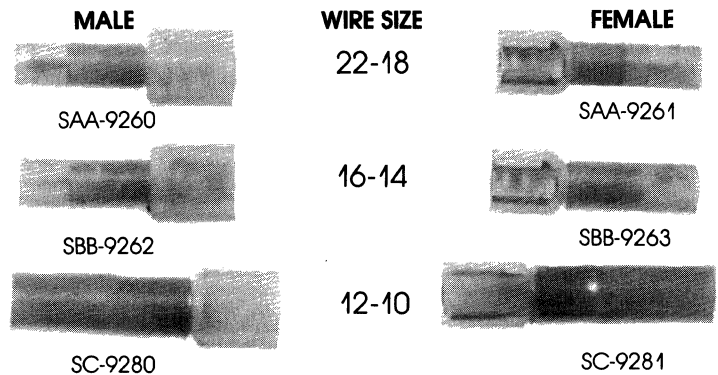
STUD SIZE	PART NO.
6	SC-228-06
8	SC-228-08
10	SC-230-10
1/4	SC-230-14
5/16	SC-230-56
3/8	SC-240-38
1/2	SC-201-12
6	SC-241-06
8	SC-241-08
10	SC-268-10
1/4	SC-268-14



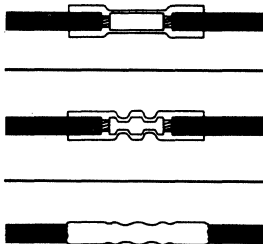
QUICK DISCONNECTS FOR .250 x .032 TABS



QUICK DISCONNECT COUPLERS



SIMPLE INSTALLATION



Select the correct splice size for the wire gauge. Strip the wires 0.3" (7.6mm) from the end and insert into the crimp barrel.

Making sure the wire end is properly seated, make the crimp connection using a tool designed for insulated splices.

Apply heat directly to the splice, working from the center out to the edges, using a hot air gun or other heat source, until the tubing recovers and the adhesive flows. Allow to cool before inspecting splice and checking integrity.

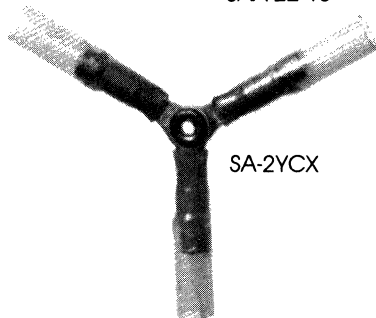


N

The all-weather, heat-sealable NYLON splice

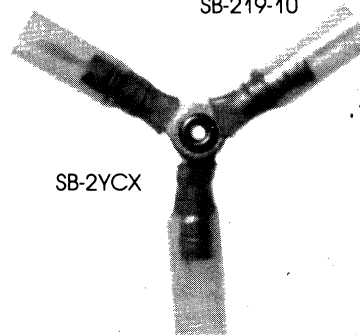
22-18 WIRE RANGE

STUD SIZE	PART NO.
6	SA-221-06
8	SA-221-08
10	SA-221-10
1/4	SA-222-14
3/8	SA-226-38
6	SA-235-06
8	SA-235-08
10	SA-235-10
	SAA-22-18

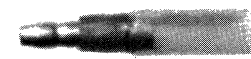


16-14 WIRE RANGE

STUD SIZE	PART NO.
6	SB-237-06
8	SB-237-08
10	SB-237-10
1/4	SB-225-14
5/16	SB-225-56
3/8	SB-218-38
6	SB-227-06
8	SB-227-08
10	SB-227-10
10	SB-219-10



.157

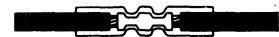


SIMPLE INSTALLATION

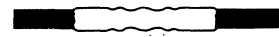
Select the correct splice size for the wire gauge. Strip the wires 0.3" (7.6mm) from the end and insert into the crimp barrel.



Making sure the wire end is properly seated, make the crimp connection using a tool designed for insulated splices.

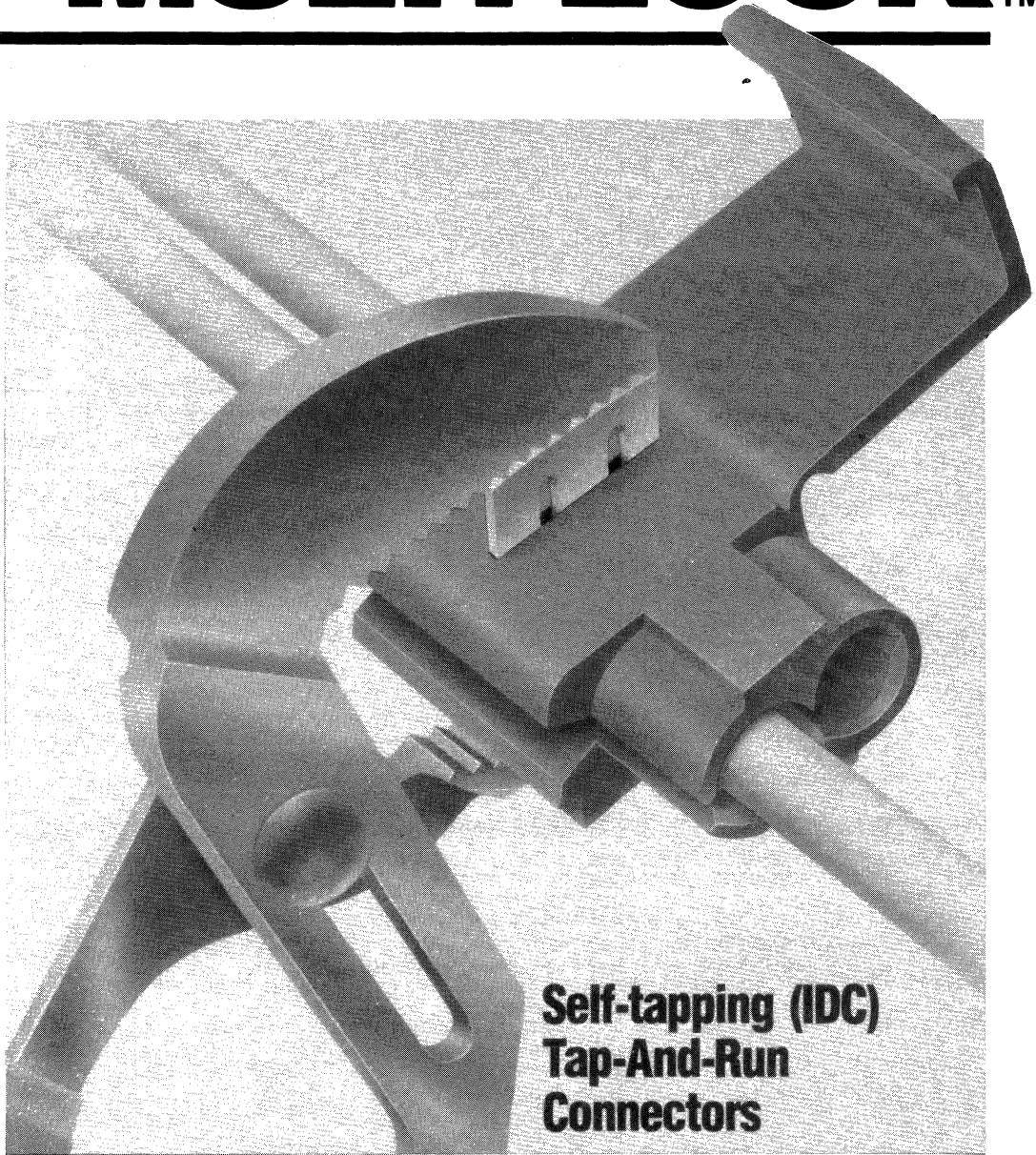


Apply heat directly to the splice, working from the center out to the edges, using a hot air gun or other heat source, until the tubing recovers and the adhesive flows. Allow to cool before inspecting splice and checking integrity.



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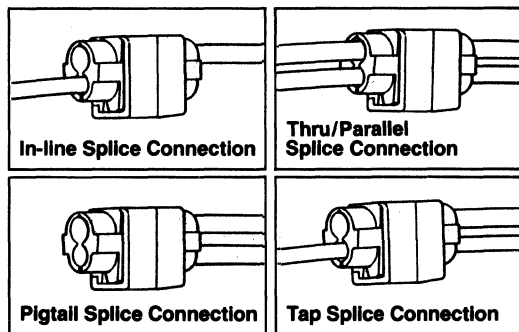
MULTI-LOCK™



N

Applications

These connectors find their widest use in automotive and marine wiring applications. They offer a quick and easy way to make tap-splices, in-line splices, pass-through connections and pigtail splices, using thin walled hook-up and signal wire. All that is needed is a pair of ordinary channel-lock pliers.

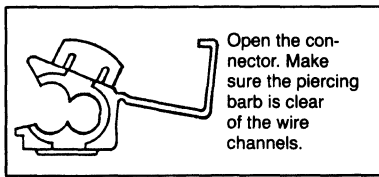


Multi-Lock

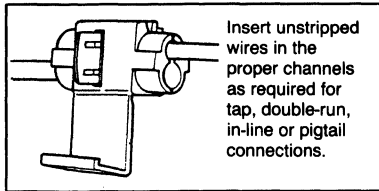


Simple Installation

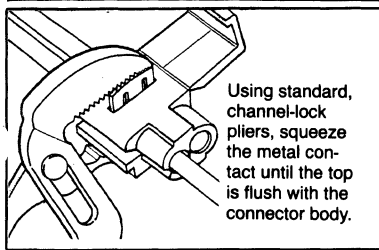
Quality connections in less than a minute. No wire stripping necessary. No special tools needed. To make quick and easy tap-splices, in-line splices, pass-through connections and pigtail connections, using only a pair of channel-lock pliers, follow the simple steps outlined below.



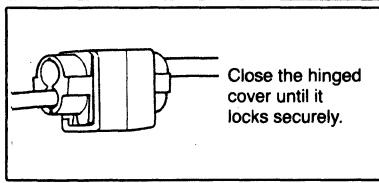
Open the connector. Make sure the piercing barb is clear of the wire channels.



Insert unstripped wires in the proper channels as required for tap, double-run, in-line or pigtail connections.



Using standard, channel-lock pliers, squeeze the metal contact until the top is flush with the connector body.



Close the hinged cover until it locks securely.

Specifications

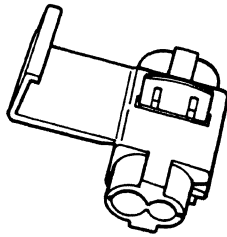
The connector housing is made of polypropylene (2029) with a 94V2 FLAME RETARDANCE rating.

The I.D.C. piercing barb is 86% copper zinc alloy which greatly exceeds all cracking in mercurous nitrate tests under AST-M-B145-8.

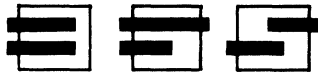
Important Notice

The seller's and manufacturer's only obligation shall be to replace any quantity of the product that proves to be defective. The seller disclaims any implied warranties of merchantability or of fitness for any particular purpose. Before using, user shall determine the suitability of the product for his intended use and the user assumes all risk and liability. Consult factory for specific lists and U.L. applications.

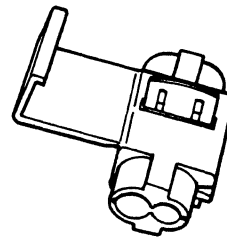
ML-2218



22/18 AWG



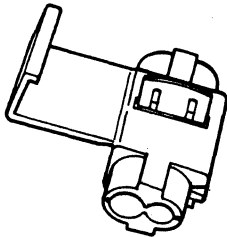
ML-1614



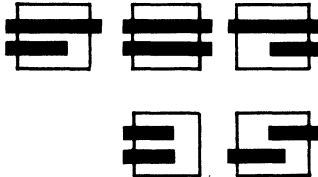
18/14 AWG



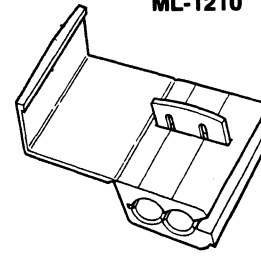
ML-1814



18/14 AWG



ML-1210



12/10 AWG



These quick, convenient Multi-Lock connectors have many uses.

Using only ordinary channel-lock pliers, these color-coded connectors make quick, reliable, pre-insulated splices without stripping, twisting, soldering or the need for special tools.

They will tap-splice, pigtail-splice, parallel-splice or in-line splice insulated copper wire conductors for a wide range of applications.

AUTOMOTIVE: Automobile, bus, truck and trailer wiring for lights, horns, gauges, speakers, etc.

MOBILE: Boat wiring systems, trailer wiring, mobile homes and recreational vehicles such as campers and ATV's.

IN THE HOME AND OFFICE: Intercoms, tape decks, VCRs, stereo and quadraphonic systems, shop equipment, burglar and fire alarms.

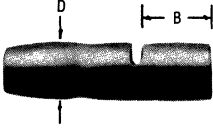


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FAX: 813-541-4505

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Snap Plugs & Receptacles

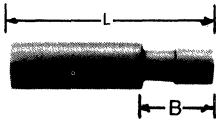


032 (0,8) Stock

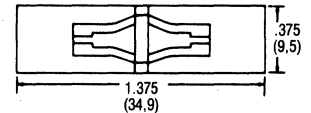
Basic Dimensions

AWG Wire Range	Barrel Length B	Diameter D	KRIMPTITE®		INSULKRIMP®		VIBRAKRIMP®		AVIKRIMP®		
			Part Number	Length L	.175 (4,4) Max. Wire Insulation Diameter	Max. Length L	.125 (3,2) Max. Wire Insulation Diameter	Max. Length L	.125 (3,2) Max. Wire Insulation Diameter	.170 (4,4) Max. Wire Insulation Diameter	Max. Length L
22-18		.157 (4,0)							A-869		.865 (21,9)
16-14	.187 (4,7)	.176 (4,5)	B-179	.531 (13,5)	B-279X	.855 (21,7)	B-479	.823 (20,9)		B-579	.865 (21,9)
16-14	.187 (4,7)	.157 (4,0)	B-189	.593 (15,1)	B-289X	.855 (21,7)	B-489	.823 (20,9)		B-589	.865 (21,9)

AVIKRIMP SNAP PLUG RECEPTACLES .157 (4,0)



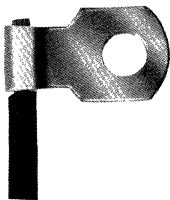
Part Number	AWG Wire Range	Max. Wire Insulation Diameter	Max Length L	Barrel Length B	Mating Snap Plug
SLC-22	22-16	.125 (3,2)	1.035 (26,2)	.410 (10,4)	A-869
SLC-16	16-14	.150 (3,8)	1.075 (27,3)	.438 (11,1)	B-589



PART NO. PR-1
 Mates with A-869, B-289X and B-589 Snap Plugs.

Flag Terminals - Elongated Ring and Spade

The barrel of a flag terminal is at right angles to the tongue, rather than being "in line". Therefore, a flag terminal fits on its wire like a flag on a flagpole.



Basic Dimensions					KRIMPTITE®-RING		KRIMPTITE® SPADE	
AWG Wire Range mm ²	Stud Size S	Maximum Width W	Clearance C	Stock Thickness	Part Number	Length L	Part Number	Length L
22-16 (0,25-1,6)	5-6 (3-3,5)	.380 (9,7)	.318 (8,1)	.032 (0,8)	A-142-06	.635 (16,1)	A-147-06	.652 (16,6)
	8 (4)	.380 (9,7)	.318 (8,1)	.032 (0,8)	A-142-08	.635 (16,1)	A-147-08	.652 (16,6)
	10 (-)	.380 (9,7)	.318 (8,1)	.032 (0,8)	A-142-10	.635 (16,1)	A-147-10	.652 (16,6)
16-14 (1,0-2,6)	5-6 (3-3,5)	.380 (9,7)	.318 (8,1)	.032 (0,8)	B-143-06	.666 (16,9)	B-148-06	.666 (16,9)
	8 (4)	.380 (9,7)	.318 (8,1)	.032 (0,8)	B-143-08	.666 (16,9)	B-148-08	.666 (16,9)
	10 (-)	.380 (9,7)	.318 (8,1)	.032 (0,8)	B-143-10	.666 (16,9)	B-148-10	.666 (16,9)
12-10 (2,7-6,6)	5-6 (3-3,5)	.380 (9,7)	.460 (10,3)	.040 (1,0)	C-144-06	.725 (18,4)	C-149-06	.718 (18,2)
	8 (4)	.380 (9,7)	.460 (10,3)	.040 (1,0)	C-144-08	.725 (18,4)	C-149-08	.718 (18,2)
	10 (-)	.380 (9,7)	.460 (10,3)	.040 (1,0)	C-144-10	.725 (18,4)	C-149-10	.718 (18,2)

Quick Disconnects



How do you make a quick connect quicker, more reliable and still keep the cost competitive?

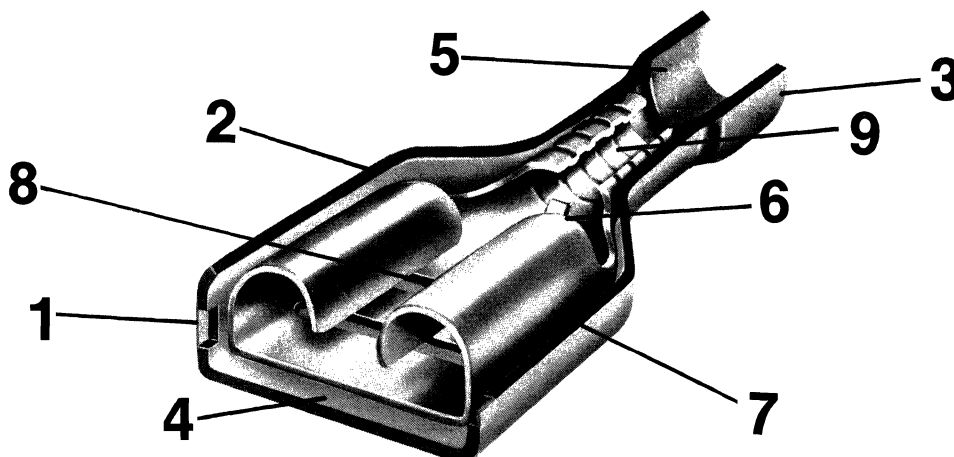
The answer is the Molex-ETC Quick-Disconnect receptacle.

This unique family of QD receptacles in loose piece and tape-mounted formats, as well as our line of continuously molded, fully-insulated terminals, is available in a wide selection of wire ranges and tab sizes to meet a variety of application requirements for a number of different industries; business

machines, industrial equipment and power supplies to name but a few.

In addition to a product line that meets or exceeds all industry standards for performance, Molex-ETC offers you some other very attractive advantages: lower applied costs through high-volume, automatic termination processes; and wide product availability through a national sales and distribution network.

Features and Benefits



1. Designed for dense packaging requirements. The profile height is reduced substantially from previous designs to accommodate the most compact application design.

2. Easy terminal-size identification. The insulator is color-coded to designate the wire gauge: red = 22-18 AWG and blue = 16-14 AWG. The wire size is also identified with a stamped marking on the terminal which is easily visible through the insulator on the fully insulated PDQ's.

3. Fast, on-line quality inspection. With the fully-insulated PDQ's translucent molded nylon insulator, the integrity of the wire termination can be checked visually.

4. Crimp die coding identification. During the crimping operation, a crimp code is indented into the housing for quick-and-easy Q.C. inspection.

5. Designed for increased crimping rates. With our vinyl insulated receptacles, the funnel entrance into the terminal speeds insertion of the wire into the crimp section and prevents wire strand "hang up". Our nylon insulated terminals feature a funnel ferrule design to achieve the same goal.

6. Fault-proof design. The wire stop stamped into the crimp barrel prevents the insertion of over-stripped wires.

7. High-tension spring grip. High retention forces keep the tab securely in place and wipe away oxidation during insertion.

8. Meets N.E.M.A. requirements. The PDQ design, including the tab detent location and performance parameters, conform to the standards of the National Electrical Manufacturer's Association.

9. Reliable electrical contact. Deep, wire-grip serrations in the stress-relieved barrel remove oxidation during crimping and help to grip the conductor more securely. The result is a reliable, void-free, gas-tight electromechanical connection.

10. Assured performance. The PDQ meets UL 310 specifications for wire security, operating temperature, tensile strength, dielectric parameters and insertion/extraction forces. UL and CSA approved.

11. Full range of termination equipment. Molex-ETC markets a full range of application tooling to meet high-volume production needs from 3,900 terminations per hour to low-volume prototype construction.

N

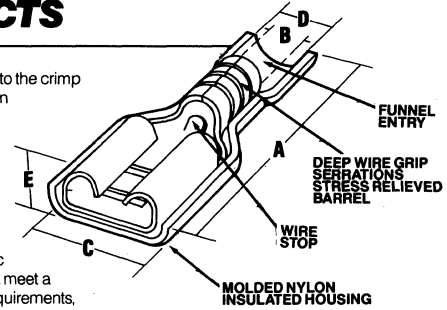
Fully Insulated Quick-Disconnects



FULLY-INSULATED QUICK-DISCONNECTS

- Designed for dense packaging requirements, the profile height is lower than other competing products on the market.
- Integrity of mechanical/electrical performance is assured for wire secureness, operating temperatures, tensile strength, dielectric parameters and insertion/extraction forces by meeting UL 310 standards. (Approved under UL File E 79133.)
- Color-coded translucent insulator allows easy identification of terminal size and wire gauge: RED for 22-18 AWG, BLUE for 16-14 AWG and YELLOW for both 26-24 AWG and 12/10 AWG. (Wire size is also stamped on the terminal and visible through the insulator.)
- Translucent "see-through" insulator provides fast, on-line Quality Control inspection by allowing a quick visual check of the wire/terminal assembly.
- Terminal's funnel entrance is designed for increased crimping rates by speeding wire delivery into the crimp section and eliminating wire strand stubbing.

- A wire stop stamped into the crimp barrel prevents insertion of over-stripped wires.
- During crimping, a die identification code is stamped into the housing to facilitate Quality Control inspection.
- MOLEX-ETC automatic terminating equipment meet a full range of volume requirements, from 3600 terminations per hour to low-volume prototype applications.



FULLY-INSULATED QUICK-DISCONNECTS EXPANDED FLARE

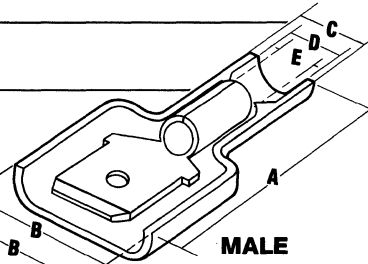
ETC PART NO.	WIRE SIZE	TAB	COLOR	STOCK	A MAX.	B MIN.	C MAX.	D MWID	E MIN.
AA-2201X	22-18 AWG	250 x .032	RED	.016	.935	.060	.380	.230	.170
	25-15 MM ²								
AA-2202X	22-18 AWG	.187 x .020	RED	.016	.860	.060	.316	.230	.150
	25-15 MM ²								
AA-2203X	22-18 AWG	.187 x .032	RED	.016	.860	.060	.316	.230	.150
	25-15 MM ²								
AA-2204X	22-18 AWG	.110 x .020	RED	.012	.860	.063	.230	.230	.137
	25-15 MM ²								
AA-2205X	22-18 AWG	.110 x .032	RED	.012	.860	.063	.230	.230	.137
	25-15 MM ²								
BB-2206X	16-14 AWG	250 x .032	BLUE	.016	.935	.084	.380	.260	.170
	1.0-2.5 MM ²								
BB-2207X	16-14 AWG	.187 x .020	BLUE	.016	.860	.084	.316	.260	.157
	1.0-2.5 MM ²								
BB-2208X	16-14 AWG	.187 x .032	BLUE	.016	.860	.084	.316	.260	.157
	1.0-2.5 MM ²								

FULLY-INSULATED QUICK-DISCONNECTS STANDARD

ETC PART NO.	WIRE SIZE	TAB	COLOR	STOCK	A MAX.	B MIN.	C MAX.	D MWID	E MAX.
M-2212	26-24 AWG	250 x .032	YELLOW	.016	.860	.030	.380	.075	.180
	14-35 MM ²								
M-2211	26-24 AWG	.187 x .032	YELLOW	.016	.780	.030	.316	.075	.160
	14-35 MM ²								
M-2210	26-24 AWG	.187 x .020	YELLOW	.016	.780	.030	.316	.075	.160
	14-35 MM ²								
AA-2201	22-18 AWG	250 x .032	RED	.016	.860	.063	.380	.135	.180
	25-15 MM ²								
AA-2202	22-18 AWG	.187 x .020	RED	.016	.780	.063	.316	.135	.160
	25-15 MM ²								
AA-2203	22-18 AWG	.187 x .032	RED	.016	.780	.063	.316	.135	.160
	25-15 MM ²								
AA-2204	22-18 AWG	.110 x .020	RED	.012	.780	.063	.230	.135	.150
	25-15 MM ²								
AA-2205	22-18 AWG	.110 x .032	RED	.012	.780	.063	.230	.135	.150
	25-15 MM ²								
BB-2206	16-14 AWG	250 x .032	BLUE	.016	.860	.083	.380	.145	.180
	1.0-2.5 MM ²								
BB-2207	16-14 AWG	.187 x .020	BLUE	.016	.780	.083	.316	.160	.170
	1.0-2.5 MM ²								
BB-2208	16-14 AWG	.187 x .032	BLUE	.016	.780	.083	.316	.160	.170
	1.0-2.5 MM ²								

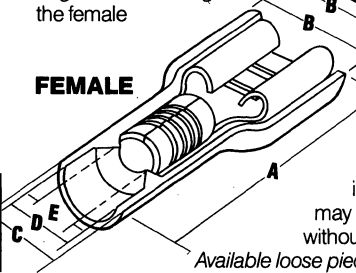
COUPLERS

These parts are available in 22/18AWG and 16/14AWG. These fully-insulated nylon couplers are precision engineered allowing the female



MALE

FEMALE



terminal to fit precisely into the corresponding male housing allowing a fully-insulated in-line splice. This splice may be connected and disconnected without damage to the nylon insulation. Available loose piece and Mylar Tape mounted only.

FULLY-INSULATED MALE COUPLER

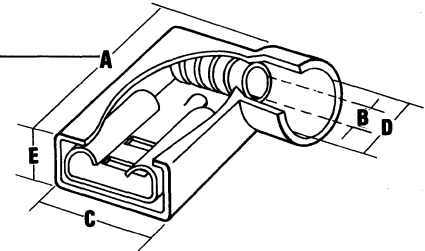
ETC PART NO.	WIRE SIZE	TAB	COLOR	STOCK	A MAX.	B MAX.	C MAX.DIA.	D MWID	E MIN.
AA-2260	22-18-AWG	250 x .032	RED	.031	.97	.45	.23	.145	.060
	25-15 MM ²								
BB-2262	16-14 AWG	250 x .032	BLUE	.031	.97	.45	.23	.170	.083
	1.0-2.5 MM ²								
C-2264	12-10 AWG	250 x .032	YELLOW	.031	1.05	.47	.305	.250	.150
	4.0-6.0 MM ²								

FULLY-INSULATED FEMALE COUPLER

ETC PART NO.	WIRE SIZE	TAB	COLOR	STOCK	A MAX.	B MAX.	C MAX.DIA.	D MWID	E MIN.
AA-2261	22-18-AWG	250 x .032	RED	.018	.89	.38	.23	.165	.083
	25-15 MM ²								
BB-2263	16-14 AWG	250 x .032	BLUE	.018	.89	.38	.23	.165	.083
	1.0-2.5 MM ²								
C-2265	12-10 AWG	250 x .032	YELLOW	.018	.99	.39	.305	.250	.165
	4.0-6.0 MM ²								

FLAGS

This right angle nylon, fully-insulated quick disconnect terminal provides space saving design.



FULLY-INSULATED FLAG QUICK-DISCONNECTS

ETC PART NO.	WIRE SIZE	TAB	COLOR	STOCK	A MAX.	B MIN.	C MAX.	D MWID	E MIN.
AAZ-2220	22-18 AWG	250 x .032	RED	.016	.63	.067	.38	.175	.20
	25-15 MM ²								
BBZ-2221	16-14 AWG	250 x .032	BLUE	.016	.63	.089	.38	.200	.20
	1.0-2.5 MM ²								

FULLY-INSULATED FLAG QUICK DISCONNECTS EXPANDED FLARE

ETC PART NO.	WIRE SIZE	TAB	COLOR	STOCK	A MAX.	B MIN.	C MAX.	D MWID	E MIN.
AAZ-2220X	22-18 AWG	250 x .032	RED	.016	.66	.067	.38	.240	.20
	25-15 MM ²								
BBZ-2221X	16-14 AWG	250 x .032	BLUE	.016	.66	.089	.38	.265	.20
	1.0-2.5 MM ²								

WHEN ORDERING: All part numbers listed are LOOSE PIECE. If you require parts on mylar tape add "T" at the end of part number. If you require continuously molded parts add "C" at the end of part number.

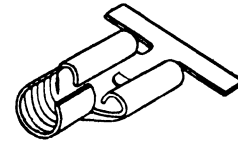
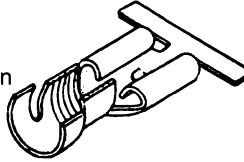
Tensile pull outs meet or exceed UL minimum requirements.

Strip Receptacles



Strip Receptacle Terminals can boost your production rates to as high as 3,600 finished terminations per hour. Their "T" shape carrier, linking each terminal, automatically delivers them into crimping press dies. All your operator does is feed-in wires and pull-out crimped terminations. Added speed is afforded by the larger target area of the open barrels on non-insulated VIBRAKRIMPS and KRIMP TITES.

Number of terminals per reel varies from 4,000 to 10,000 depending on terminal size. Reel capacities are given in the Price List. If quantity is not in stock minimum order is 25,000 pieces (or more, depending on quantity of terminals per reel).



Wire Range		Common Dimensions		VIBRAKRIMP® VIBRATION SUPPORT				KRIMP TITE® BUTTED SEAM		
				Brass		Tin-Plated Brass		Brass		Tin-Plated Brass
AWG	MM ²	Max. Width W	Grip G	Maximum Wire Insulation Diameter	Max. Length L	Part Number	Part Number	Max. Length L	Part Number	Part Number
250 SERIES										
.250 x .032 tab (6,3 x 0,8)										
22-18	(0,25-1,3)	.301 (7,6)	.310 (7,9)	.060/.125 (1,5/3,2)	.777 (19,7)	AAZ-0153	AAZ-4153	.658 (16,7)	AAZ-0163	AAZ-1163
16-14	(1,0-2,6)	.301 (7,6)	.310 (7,9)	.085/.145 (2,1/3,7)	.777 (19,7)	BBZ-0154	BBZ-4154	.658 (16,7)	BBZ-0164	BBZ-1164
14-12	(1,65-4,2)	.301 (7,6)	.310 (7,9)	.100/.175 (2,5/4,4)	.777 (19,7)	PZ-0155	PZ-4155	.658 (16,7)	PZ-0165	PZ-1165
187 SERIES										
.187 x .020 tab (4,7 x 0,5)										
26-24	(0,1-0,3)	.238 (6,0)	.250 (6,3)	.040/.095 (1,0/2,4)	.665 (16,9)	MZ-0149	MZ-4149			
22-18	(0,25-1,3)	.238 (6,0)	.250 (6,3)	.060/.125 (1,5/3,2)	.692 (17,6)	AAZ-0150	AAZ-4150	.573 (14,6)	AAZ-0160	AAZ-1160
16-14	(1,0-2,6)	.238 (6,0)	.250 (6,3)	.085/.145 (2,2/3,7)	.692 (17,6)	BBZ-0151	BBZ-4151	.573 (14,6)	BBZ-0161	BBZ-1161
14-12	(1,65-4,2)	.238 (6,0)	.250 (6,3)	.100/.175 (2,5/4,4)	.692 (17,6)	PZ-0152	PZ-4152	.573 (14,6)	PZ-0162	PZ-1162

Tape-Fed and Loose Piece Receptacles



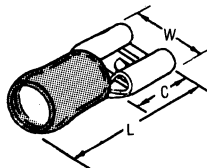
You can order the Receptacle Terminals charted here in either loose-piece or tape-mounted form. Loose-piece versions are individually fed into the dies of manual and powered hand crimping tools. Tape-fed versions are the same terminals mounted on belts of mylar tape for automatic feeding into air or electric powered bench crimping presses. You can crimp at rates up to 3,600 finished terminations per hour with tape-feds. And, the press operator's hands are left free to do nothing but feed wires into terminal barrels. Tape-fed receptacles are ideal for applications where there are too many terminals for hand tool crimping — too few for strip press crimping.

All loose-piece and tape fed terminals are of fully tin-plated brass construction with closed electrical barrels.

Tape-fed terminals are supplied 1,500 per reel with some exceptions, consult your price list.

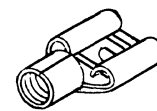
You can find complete data on the powered and manual crimping application tools in the last pages of this catalog.

Remember to write for evaluation samples and specification drawings for your standards engineers. Samples, drawings and tooling demonstrations come to you completely free.



Wire Range		Common Dimensions		AVIKRIMP® NYLON-INSULATED VIBRATION SUPPORT			INSULKRIMP® PVC INSULATED			
				Maximum Wire Insulation Diameter	Max. Length L	Part Number	Maximum Wire Insulation Diameter	Max. Length L	Part Number	
AWG	MM ²	Max. Width W	Grip G							
250 SERIES										
.250 x .032 tab (6.3 x 0.8)		22-18 (0.25-1.3)	.301 (7.6)	.310 (7.9)	.125 (3.2)	.865 (22.0)	AA-8140	.135 (3.4)	.865 (22.0)	AA-2140
		16-14 (1.0-2.6)	.301 (7.6)	.310 (7.9)	.142 (3.6)	.865 (22.0)	BB-8141	.145 (3.7)	.865 (22.0)	BB-2141
		14-12 (1.65-4.2)	.301 (7.6)	.310 (7.9)	.170 (4.3)	.865 (22.0)	P-8142	.175 (4.4)	.865 (22.0)	P-2142
		12-10 (2.6-6.6)	.305 (7.7)	.310 (7.9)	.220 (5.6)	1.000 (25.4)	C-8143*	.220 (5.6)	1.000 (25.4)	C-2143
187 SERIES										
.187 x .020 tab (4.7 x 0.5)		26-24 (0.1-0.3)	.238 (6.0)	.250 (6.3)	.072 (1.8)	.674 (17.1)	M-8136			
		22-18 (0.25-1.3)	.238 (6.0)	.250 (6.3)	.125 (3.2)	.765 (19.4)	AA-8137	.135 (3.4)	.765 (19.4)	AA-2137
		16-14 (1.0-2.6)	.238 (6.0)	.250 (6.3)	.142 (3.6)	.765 (19.4)	BB-8138	.145 (3.7)	.765 (19.4)	BB-2138
		14-12 (1.65-4.2)	.238 (6.0)	.250 (6.3)	.170 (4.3)	.765 (19.4)	P-8139	.175 (4.4)	.765 (19.4)	P-2139
110 SERIES										
.110 x .032 tab (2.8 x 0.8)		26-24 (0.1-0.3)	.163 (4.1)	.250 (6.3)	.072 (1.8)	.674 (17.1)	M-8133			
		22-18 (0.25-1.3)	.163 (4.1)	.250 (6.3)	.125 (3.2)	.765 (19.4)	AA-8134	.135 (3.4)	.765 (19.4)	AA-2134
		16-14 (1.0-2.6)	.163 (4.1)	.250 (6.3)	.142 (3.6)	.765 (19.4)	BB-8135	.145 (3.7)	.765 (19.4)	BB-2135
110 SERIES										
.110 x .020 tab (2.8 x 0.5)		26-24 (0.1-0.3)	.163 (4.1)	.250 (6.3)	.072 (1.8)	.674 (17.1)	M-8130			
		22-18 (0.25-1.3)	.163 (4.1)	.250 (6.3)	.125 (3.2)	.765 (19.4)	AA-8131	.135 (3.4)	.765 (19.4)	AA-2131
		16-14 (1.0-2.6)	.163 (4.1)	.250 (6.3)	.142 (3.6)	.765 (19.4)	BB-8132	.147 (3.7)	.765 (19.4)	BB-2132

*Non-funnel



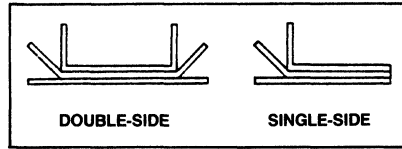
Wire Range		Common Dimensions		VIBRAKRIMP® VIBRATION SUPPORT			KRIMPTITE® BUTTED SEAM		
				Maximum Wire Insulation Diameter	Max. Length L	Part Number	Maximum Wire Insulation Diameter	Max. Length L	Part Number
AWG	MM ²	Max. Width W	Grip G						
250 SERIES									
.250 x .032 tab (6.3x0.8)		22-18 (0.25-1.3)	.301 (7.6)	.310 (7.9)	.060/.125 (1.5/3.2)	.777 (19.7)	AA-4176	.658 (16.7)	AA-1140
		16-14 (1.0-2.6)	.301 (7.6)	.310 (7.9)	.085/.145 (2.1/3.7)	.777 (19.7)	BB-4177	.658 (16.7)	BB-1141
		14-12 (1.65-4.2)	.301 (7.6)	.310 (7.9)	.100/.175 (2.5/4.4)	.777 (19.7)	P-4178	.658 (16.7)	P-1142
		12-10 (2.6-6.6)	.305 (7.7)	.310 (7.9)				.700 (17.8)	C-1143
187 SERIES									
.187x.020 tab (4.7x0.5)		26-24 (0.1-0.3)	.238 (6.0)	.250 (6.3)	.040/.095 (1.0/2.4)	.665 (16.9)	M-4172	.550 (13.9)	M-1136
		22-18 (0.25-1.3)	.238 (6.0)	.250 (6.3)	.060/.125 (1.5/3.2)	.692 (17.6)	AA-4173	.573 (14.6)	AA-1137
		16-14 (1.0-2.6)	.238 (6.0)	.250 (6.3)	.085.145 (2.2/3.7)	.692 (17.6)	BB-4174	.573 (14.6)	BB-1138
		14-12 (1.65-4.2)	.238 (6.0)	.250 (6.3)	.100/.175 (2.5/4.4)	.692 (17.6)	P-4175	.573 (14.6)	P-1139
110 SERIES									
.110 x .032 tab (2.8 x 0.8)		26-24 (0.1-0.3)	.163 (4.1)	.250 (6.3)				.535 (13.5)	M-1133
		22-18 (0.25-1.3)	.163 (4.1)	.250 (6.3)				.552 (14.0)	AA-1134
		16-14 (1.0-2.6)	.163 (4.1)	.250 (6.3)				.552 (14.0)	BB-1135
110 SERIES									
.110 x .020 tab (2.8 x 0.5)		26-24 (0.1-0.3)	.163 (4.1)	.250 (6.3)				.535 (13.5)	M-1130
		22-18 (0.25-1.3)	.163 (4.1)	.250 (6.3)				.552 (14.0)	AA-1131
		16-14 (1.0-2.6)	.163 (4.1)	.250 (6.3)				.552 (14.0)	BB-1132

The part numbers in the shaded areas indicate standard/preferred products.

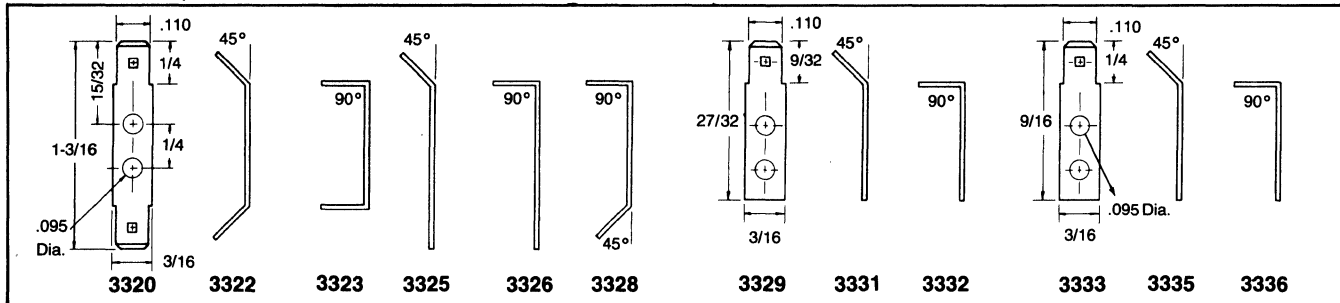
Quick Disconnect Terminal Block Tabs



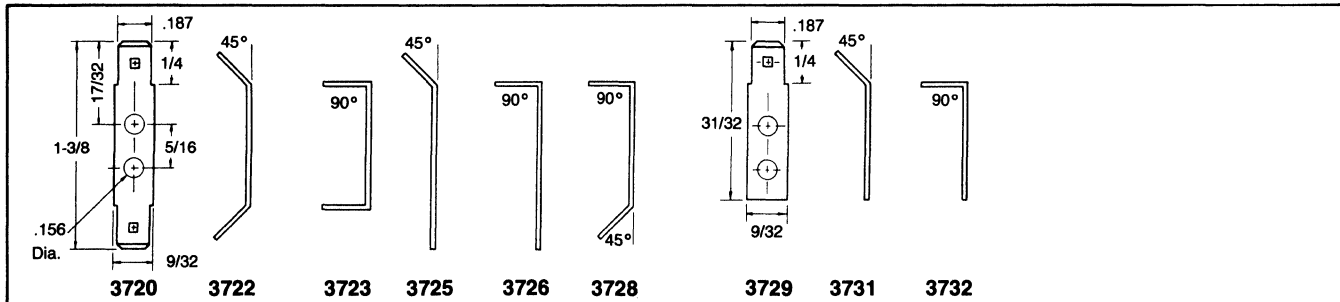
Quick Disconnect tab widths come in .110, .187 and .250 inches. Tabs are available either single- or double-sided at 30°, 45°, 90° or 180° angles. All can be be stacked in combination with each other and used with a variety of terminal blocks.



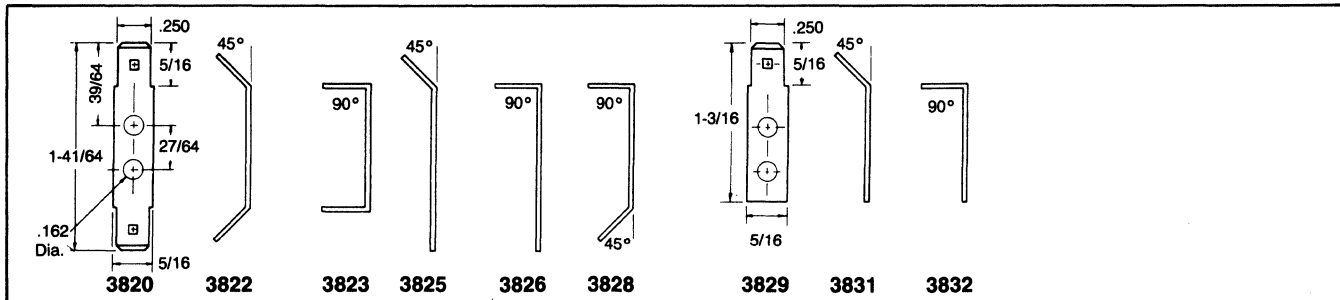
3300 SERIES • .110 X .020 TAB



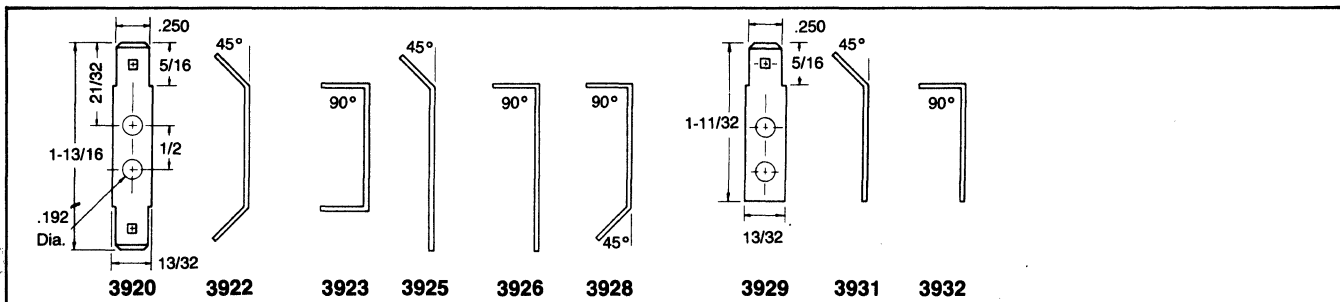
3700 SERIES • .187 X .020 TAB



3800 SERIES • .250 X .032 TAB



3900 SERIES • .250 X .032 TAB



PLATING: All QD Tabs are bright, electro-tin plated.

NOTE: 30° angles are available on some items. Please consult factory for part numbers.

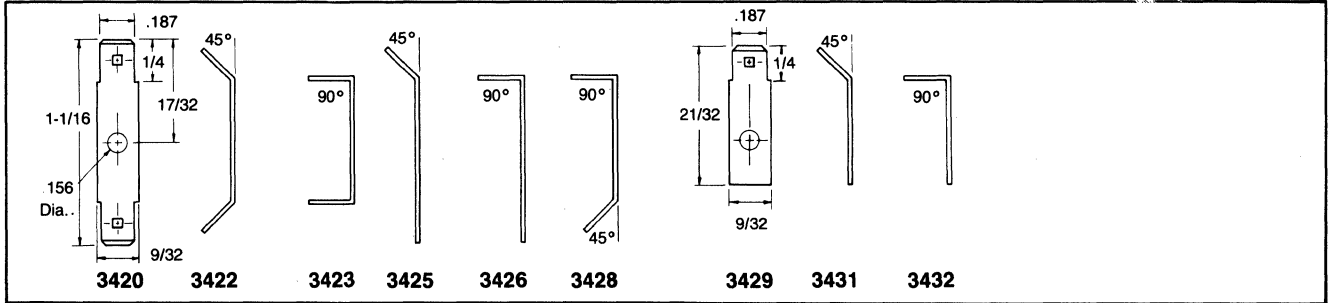


Quick Disconnect Terminal Block Tabs

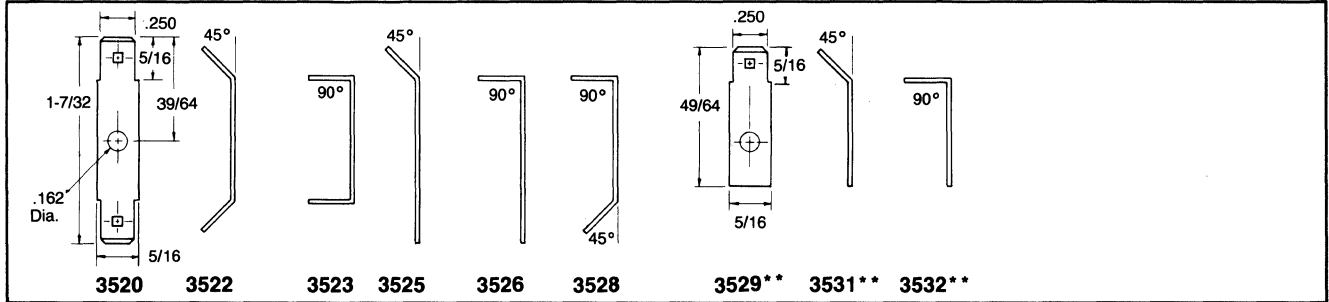


SINGLE SCREW HOLE

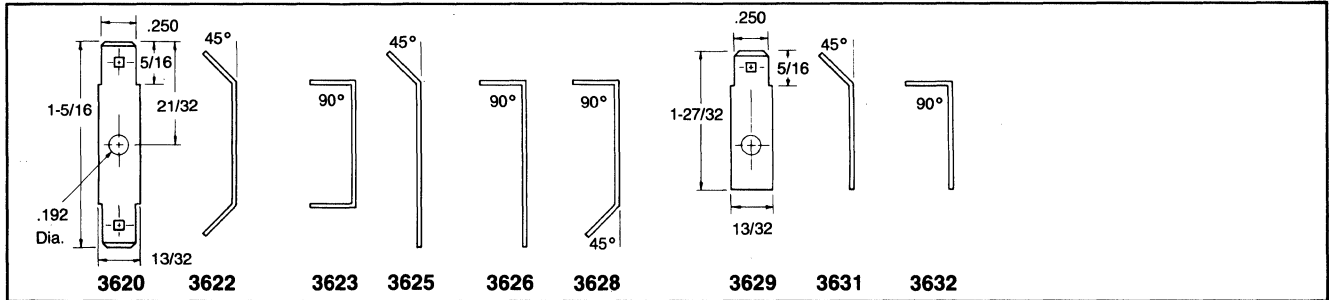
3400 SERIES • .187 X .020 TAB*



3500 SERIES • .250 X .032 TAB



3600 SERIES • .250 X .032 TAB



*.177 dia. stud hole is available. Add -2 to number.

** .198 dia. stud hole is available. Add -1 to number.

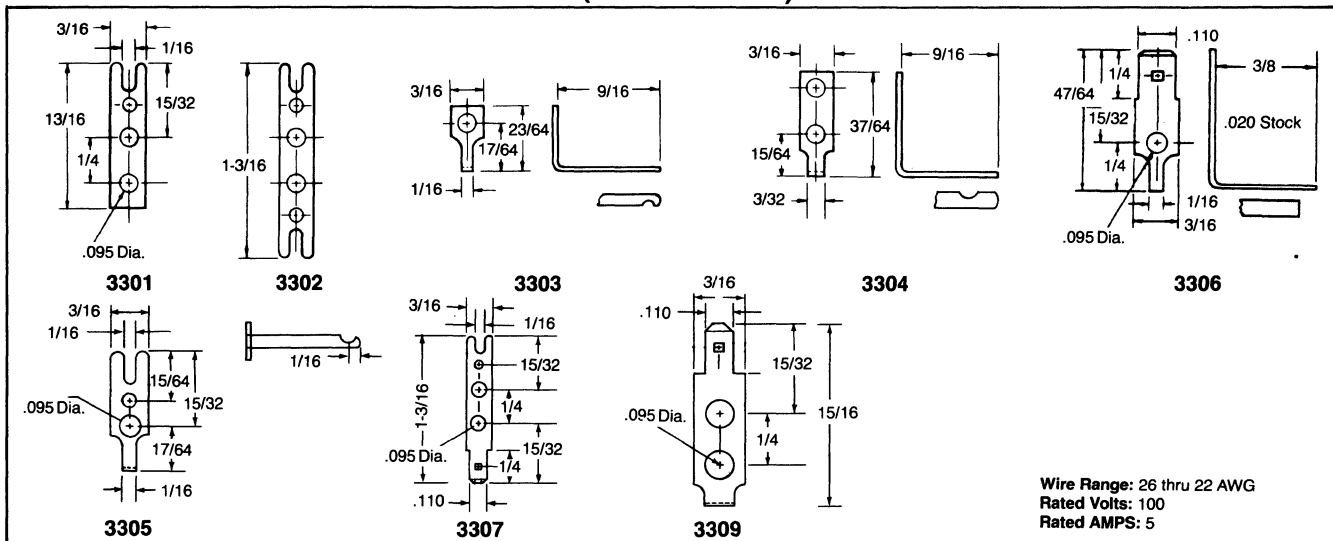
N

Terminal Block Solder Lugs

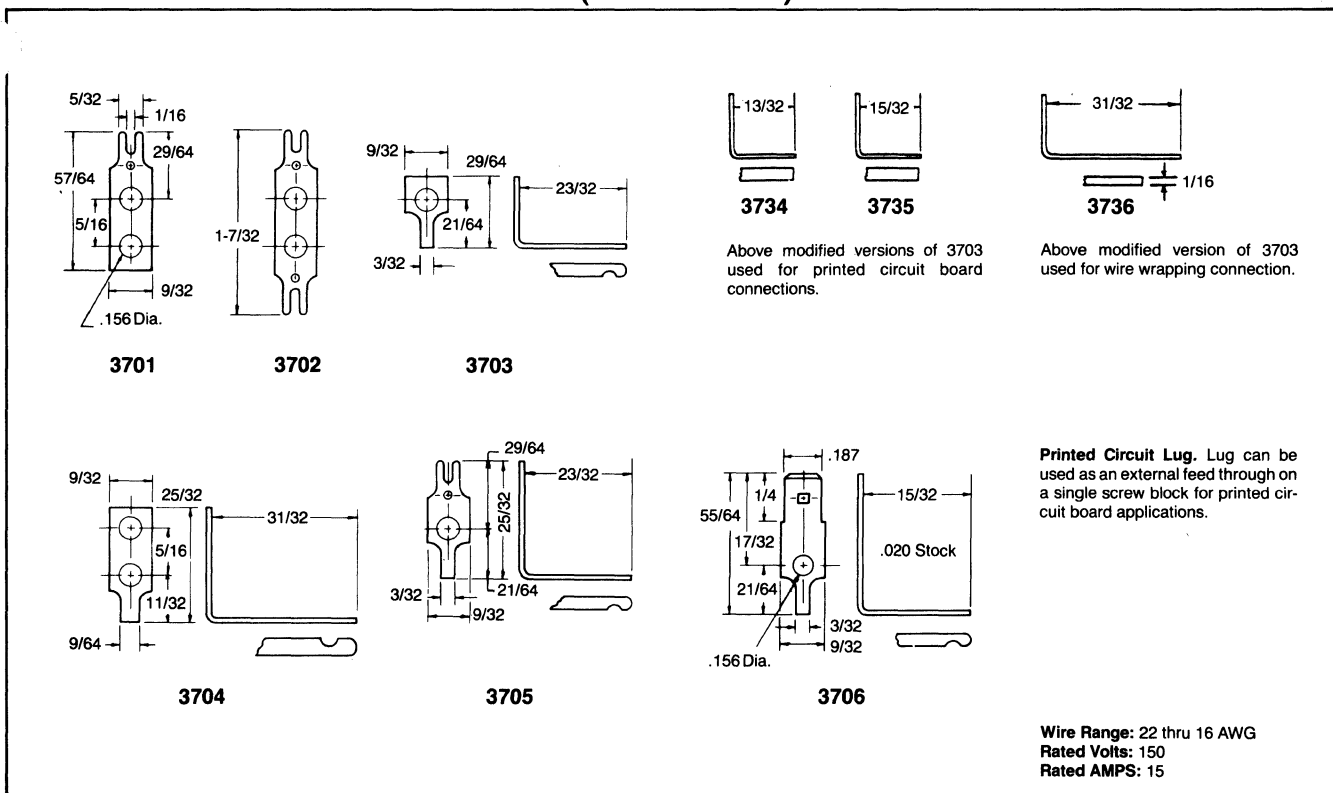


All Molex-ETC solder lugs for open- and closed-back terminal blocks are illustrated and dimensioned. The solder lugs are bright, electro-tin plated over a copper flash for excellent solderability.

3300 SERIES - TWIN SCREW (.032 Stock)



3700 SERIES - TWIN SCREW (.032 Stock)

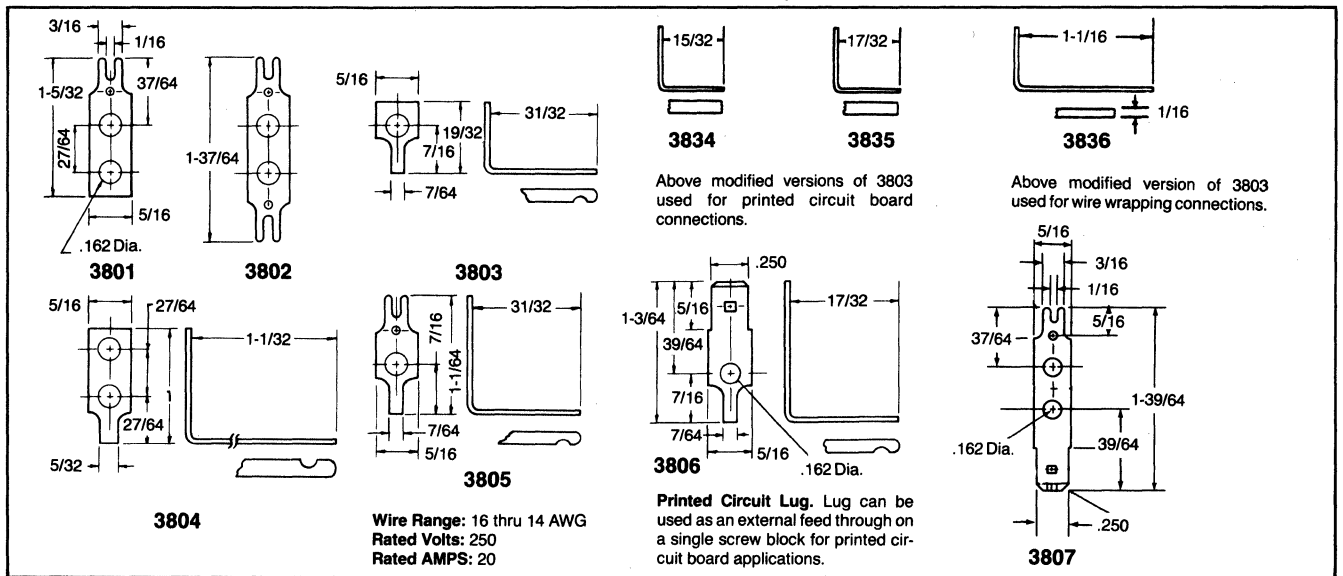


MATERIAL: Brass.

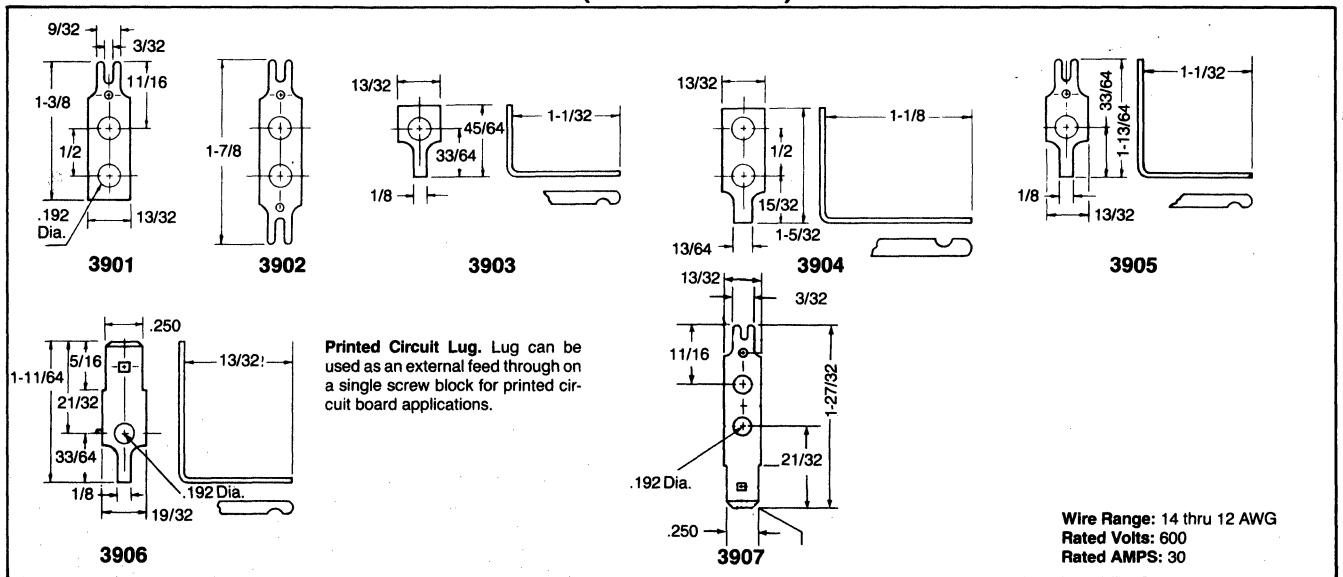


Terminal Block Solder Lugs

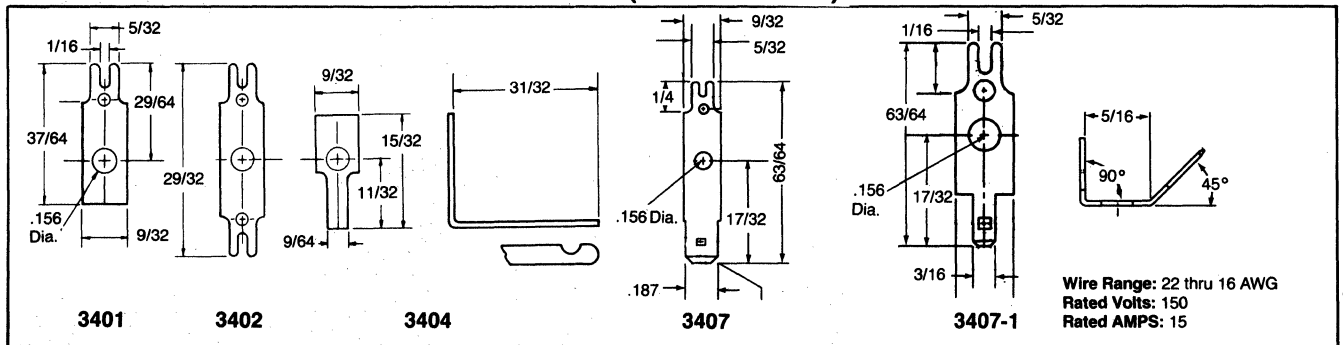
3800 SERIES - TWIN SCREW (.032 Stock)



3900 SERIES - TWIN SCREW (.032 Stock)



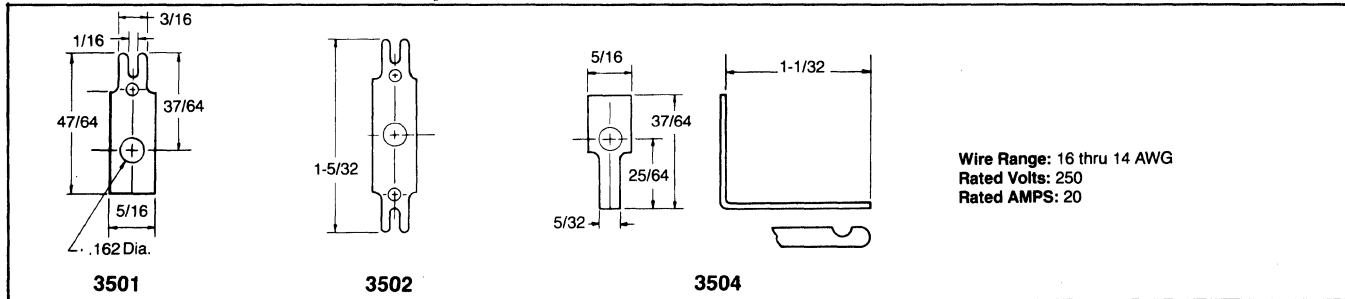
3400 SERIES : SINGLE SCREW (.032 Stock)



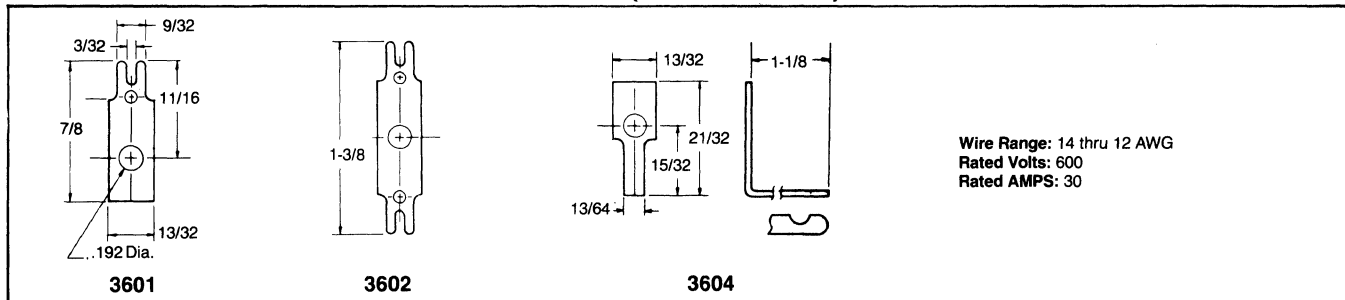
Terminal Block Solder Lugs



3500 SERIES - SINGLE SCREW (.032 Stock)



3600 SERIES - SINGLE SCREW (.032 Stock)



Male Tab Pairs

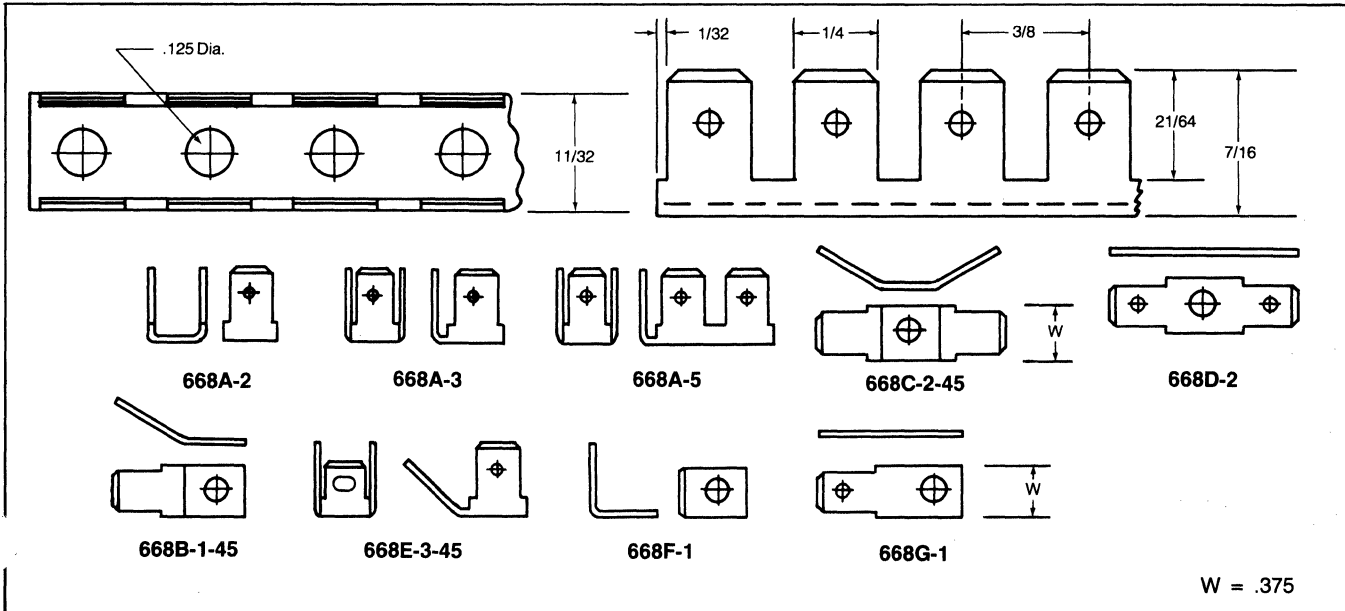
668 A, C, D Series available up to 10 pair long. First dash number after letter indicates the number of .250 tabs.

668 B, C, E Series available in 30° and 45° angles. Second dash number indicates 30° or 45° if applicable.

Example: 668C-10 (5 pairs, 10 .250 total tabs)

Example: 668C-2-30 (1 pair, 2 .250 total 30° tabs)

668 SERIES .250 X .032 MALE TAB PAIRS



PLATING: Bright, Electro-tin.

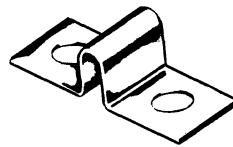
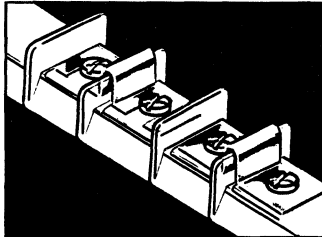


Over-the-Barrier Jumpers

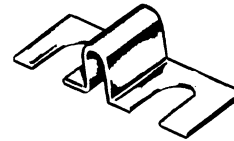


ETC's Over-the-Barrier Jumpers expand electrical circuits by bridging adjacent terminal block sections separated by a barrier.

Fits all Block Series. Nickel-plated for corrosion resistance. Choose secure Ring or fast-mounting Spade style.

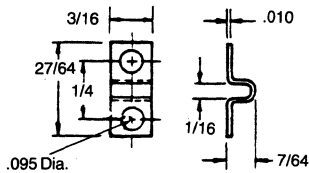


RING STYLE



SPADE STYLE

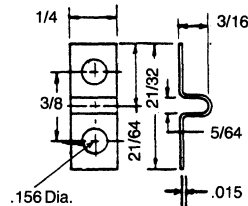
3300 SERIES



3310 (Ring)

3312 (Spade)

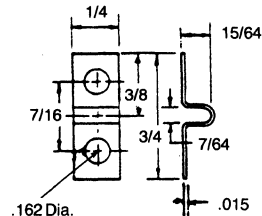
3400/3700 SERIES



3710 (Ring)

3712 (Spade)

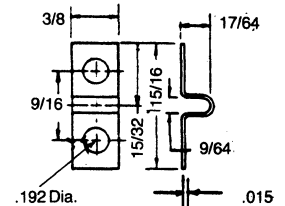
3500/3800 SERIES



3810 (Ring)

3812 (Spade)

3600/3900 SERIES



3910 (Ring)

3912 (Spade)

PLATING: Bright nickel.

N

Cable Ties



Standard Cable Ties

Molex-ETC Stock No.	Government Designation	Minimum Tensile Unlocking Strength MIL-S-23190D (Type I Class I)	Maximum Bundle Diameter	Approx. Length	Approx. Width	Std. Pkg. Qty.	Bulk Pkg. Qty.
N-4-D	MS3367-4	18 lbs.	3/4"	4"	.10"	100	1000
N-5-A	MS3367-4	18 lbs.	1 1/4"	5 3/4"	.10"	100	1000
N-8-A	MS3367-4	18 lbs.	2"	8"	.10"	100	1000
N-5-C	MS3367-5	30 lbs.	1 1/4"	6"	.14"	100	1000
N-8-D	MS3367-1	40 lbs.	2"	8 1/2"	.15"	100	1000
N-11-C	MS3367-7	40 lbs.	3"	11 1/2"	.15"	100	1000
N-14-C	MS3367-2	40 lbs.	4"	14 1/2"	.15"	100	1000
N-7-B	MS3367-1	50 lbs.	1 3/4"	8"	.18"	100	1000
N-11-B	MS3367-7	50 lbs.	3"	12"	.18"	100	1000
N-14-B	MS3367-2	50 lbs.	4"	15 1/2"	.18"	100	1000
N-14-A	MS3367-3	120 lbs.	4"	15 1/4"	.30"	50	500

Mounting Cable Ties

MOUNTING TIES . . . ETC-Molex one piece, all plastic ties for quick, simple cable mounting. Bundling and mounting are done with one unit.

Molex-ETC Stock No.	Minimum Tensile Unlocking Strength	Maximum Bundle Diameter	Approx. Length	Approx. Width	Std. Pkg. Qty.	Bulk Pkg. Qty.	
N-4-MD	#4 Screwhole	18 lbs.	3/4"	4 1/4"	.10"	100	1000
N-5-ML	#8 Screwhole	30 lbs.	1 1/4"	6 1/4"	.14"	100	1000
N-7-MB	#10 Screwhole	50 lbs.	1 3/4"	8 1/2"	.18"	100	1000
N-14-MB	#10 Screwhole	50 lbs.	4"	16"	.18"	100	1000
N-14-MA	1/4" Screwhole	120 lbs.	4"	16 1/4"	.30"	50	500

Identification Cable Ties

IDENTIFICATION TIES . . . Tie and identify bundles of cable in one operation. Large flat area for imprinting or writing the required information.

Molex-ETC Stock No. Government Designation	Minimum Tensile Unlocking Strength MIL-S-23190D (Type II Class I)	Maximum Bundle Diameter	Approx. Length	Marking Pad Size	Std. Pkg. Qty.	Bulk Pkg. Qty.
ITN-4-D MS3368-5-E	18 lbs.	3/4"	4"	1" x 19/64"	100	1000
ITN-8-B MS3368-1-A	50 lbs.	1 3/4"	8"	1" x 7/16"	100	1000
ITN-4-FL	18 lbs.	3/4"	4 1/4"	13/16" x 5/16"	100	1000



Cable Ties



Releasable Cable Ties

RELEASABLE TIES . . . Perfect for prototype construction and service requiring the addition of wires on existing harnesses.

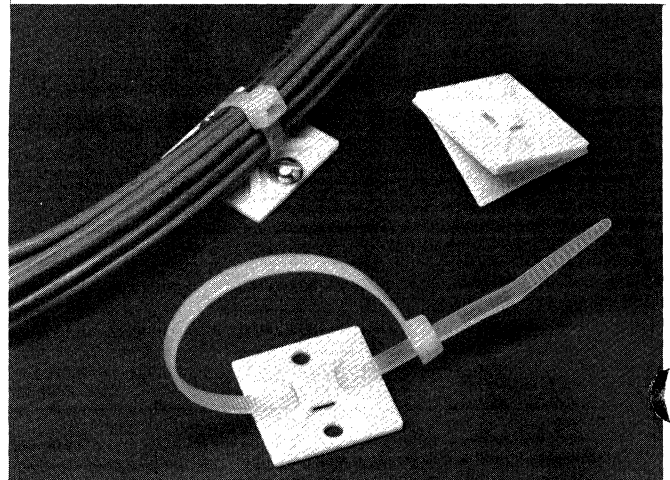
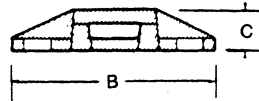
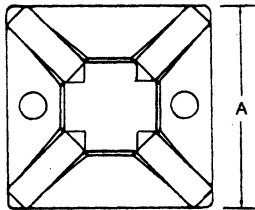
Molex-ETC Stock No.	Minimum Tensile Unlocking Strength	Maximum Bundle Diameter	Approx. Length	Approx. Width	Std. Pkg. Qty.	Bulk Pkg. Qty.
ETC40R	40 lbs.	2"	8½"	.15"	100	1000
ETC50R*	50 lbs.	1½"	5½"	.29"	100	1000
ETC50L*	50 lbs.	2½"	9¾"	.29"	100	1000

*Weather resistant black

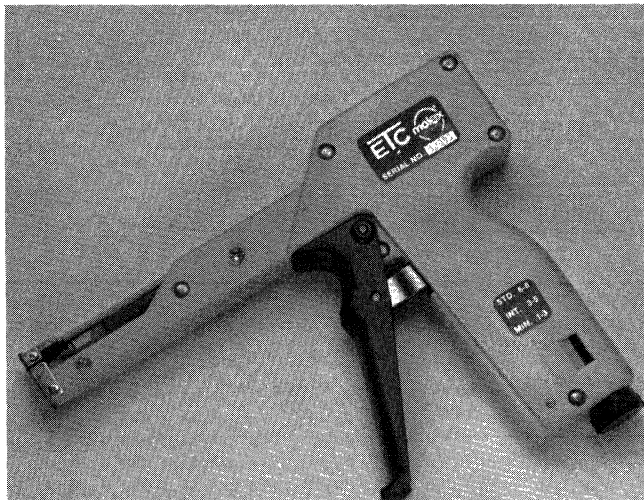
Cable Tie Mounting Base

The acrylic adhesive backing on these mounts has a tensile strength of six pounds per square inch. This rating applies in temperatures from -50°F (-45°C) to 180°F (82°C). For best performance, mounts should be applied to a smooth, clean, dry, and oil-free surface.

Molex-ETC STOCK NO.	CABLE TIE SERIES	MOUNTING	DIMENSIONS-IN.			STD. PKG.	BULK PKG.
			A	B	C		
MB-4A	T18 thru T50	Adhesive*	1.125	1.125	.190	100	500



Application Tools



ETC-5 Hand Tensioning Tools

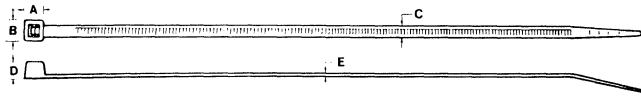
Are made in a polycarbonate material and feature a short-squeeze stroke. The positive cut-off feature ensures a consistently flush burr-free edge. Conforms to MS90387. Part No. ETC-5.



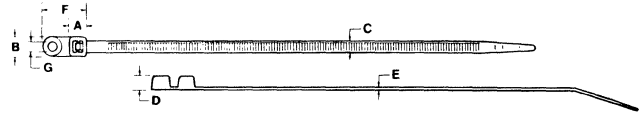
Cable Tie Tools

Are lightweight, economical tools that fit into your pocket. Installer-controlled tensioning and cut-off offers speed and efficiency. Part No. ETC-1.

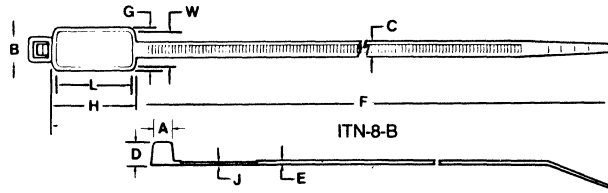
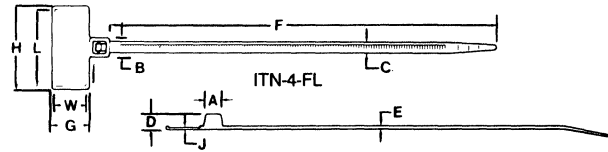
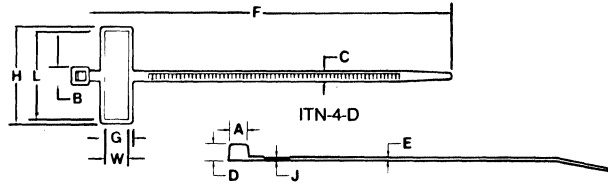
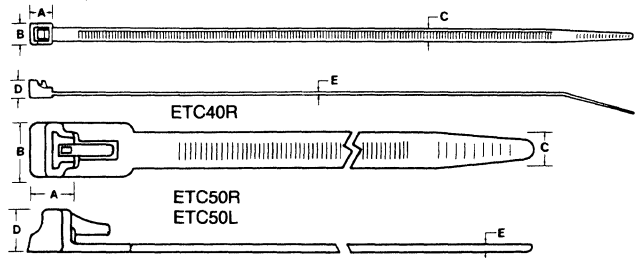
Dimensional Chart of Wire and Cable Ties



Standard Cable Ties



Cable Mounting Ties



Releasable Cable Ties

Identification Cable Ties

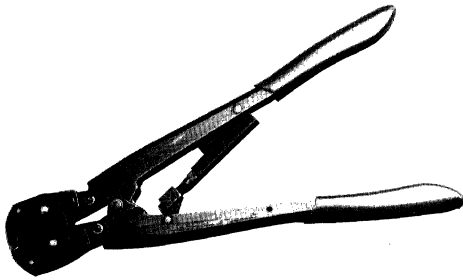
Stock Number	Unit of Measure	A	B	C	D	E	F	G	H	J	L	W	Length Overall	Max. Cable Dia.	Min. Tensile Strength
N-4-D	in. mm.	.175 4.45	.169 4.29	.096 2.44	.151 3.84	.037 .94	—	—	—	—	—	—	4.07 103.	.75 19.1	18 lbs. 8.165 kg.
N-5-A	in. mm.	.185 4.70	.180 4.57	.098 2.49	.163 4.14	.045 1.14	—	—	—	—	—	—	5.73 146.	1.25 31.75	18 lbs. 8.165 kg.
N-8-A	in. mm.	.181 4.60	.170 4.32	.100 2.54	.164 4.17	.045 1.14	—	—	—	—	—	—	7.96 202.	2.0 50.8	18 lbs. 8.165 kg.
N-5-C	in. mm.	.220 5.59	.235 5.97	.140 3.56	.199 5.05	.045 1.14	—	—	—	—	—	—	6.106 155.	1.25 31.75	30 lbs. 13.608 kg.
N-8-D	in. mm.	.254 6.45	.254 6.45	.157 3.99	.203 5.17	.049 1.24	—	—	—	—	—	—	8.46 215.	2.0 50.8	40 lbs. 18.144 kg.
N-11-C	in. mm.	.255 6.48	.255 6.48	.156 3.96	.203 5.16	.050 1.27	—	—	—	—	—	—	11.54 293.	3.0 76.2	40 lbs. 18.144 kg.
N-14-C	in. mm.	.256 6.50	.256 6.50	.158 4.01	.202 5.13	.055 1.40	—	—	—	—	—	—	14.49 368.	4.0 101.6	40 lbs. 18.144 kg.
N-7-B	in. mm.	.285 7.24	.294 7.47	.184 4.67	.236 5.99	.047 1.19	—	—	—	—	—	—	8.02 204.	1.75 44.45	50 lbs. 22.68 kg.
N-11-B	in. mm.	.275 6.99	.295 7.49	.183 4.65	.237 6.02	.051 1.30	—	—	—	—	—	—	11.83 300.	3.0 76.2	50 lbs. 22.68 kg.
N-14-B	in. mm.	.290 7.37	.298 7.57	.184 4.67	.240 6.10	.055 1.40	—	—	—	—	—	—	15.43 392.	4.0 101.6	50 lbs. 22.68 kg.
N-14-A	in. mm.	.375 9.53	.496 12.6	.303 7.7	.325 8.26	.078 1.98	—	—	—	—	—	—	15.36 390.	5.0 101.6	120 lbs. 54.43 kg.
N-4-MD	in. mm.	—	.230 5.84	.099 2.52	.161 4.09	.042 1.07	.529 13.44	.123 3.12	—	—	—	—	4.36 111.	.75 19.1	18 lbs. 8.165 kg.
N-5-ML	in. mm.	—	.285 7.24	.142 3.61	.198 5.03	.046 1.17	.534 13.56	.170 4.32	—	—	—	—	6.37 162.	1.25 31.75	30 lbs. 13.608 kg.
N-7-MB*	in. mm.	—	.346 8.79	.188 4.78	.242 6.15	.049 1.24	.787 19.99	.212 5.38	—	—	—	—	8.48 215.	1.75 44.45	50 lbs. 22.68 kg.
N-14-MB	in. mm.	—	.348 8.84	.187 4.75	.239 6.07	.055 1.40	.788 20.02	.212 5.38	—	—	—	—	16.06 408.	4.0 101.6	50 lbs. 22.68 kg.
N-14-MA	in. mm.	—	.520 13.21	.307 7.80	.323 8.20	.080 2.03	1.081 27.46	.256 6.50	—	—	—	—	16.24 413.	4.0 101.6	120 lbs. 54.43 kg.
ETC40R	in. mm.	.307 7.80	.265 6.73	.157 3.99	.224 5.69	.049 1.24	—	—	—	—	—	—	8.52 216.	2.0 50.8	40 lbs. 18.144 kg.
ETC50R	in. mm.	.395 10.03	.478 12.14	.337 8.56	.310 7.87	.050 1.27	—	—	—	—	—	—	5.52 140.	1.30 33.02	50 lbs. 22.68 kg.
ETC50L	in. mm.	.391 9.93	.481 12.22	.340 8.64	.309 7.85	.051 1.30	—	—	—	—	—	—	10.07 256.	2.75 69.85	50 lbs. 22.68 kg.
ITN-4-D	in. mm.	.180 4.57	.170 4.32	.098 2.49	.165 4.19	.041 1.04	3.844 97.64	.320 8.13	.990 25.15	.033 .84	.952 24.18	.290 7.37	4.04 103.	.75 19.1	18 lbs. 8.165 kg.
ITN-4-FL	in. mm.	.180 4.57	.168 4.27	.097 2.46	.149 3.78	.037 .94	3.915 99.44	.364 9.25	.810 20.57	.033 .84	.736 18.69	.307 7.80	4.44 112.73	.75 19.1	18 lbs. 8.165 kg.
ITN-8-B	in. mm.	.284 7.21	.288 7.32	.185 4.70	.235 5.97	.046 1.17	7.684 195.17	.502 12.75	1.042 26.47	.033 .84	.966 24.54	.435 11.05	7.98 203.	1.75 44.45	50 lbs. 22.68 kg.

*Standard #10 Screwhole.



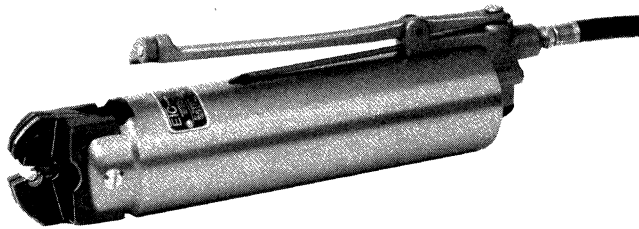
Application Tooling

Ratchet Hand Tool



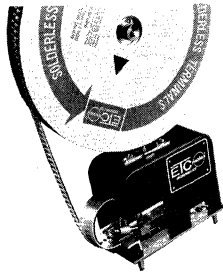
- Crimp action must be completed before ratchets will release, assuring proper crimp for maximum pull-test
- Color-coded handles coincide with terminal color code.
- Terminal locator optional
- Minimum operator fatigue because of longer crimping plier handles

Air-Powered Hand Tool



- AT-200 is a hand-held pneumatic tool weighing less than two pounds
- Higher volume output with less operator fatigue
- Consistent, high-quality crimped terminals
- Operated on standard shop air (85-95 PSI)
- Die changeover for wire gauge in less than two minutes
- Optional terminal locator

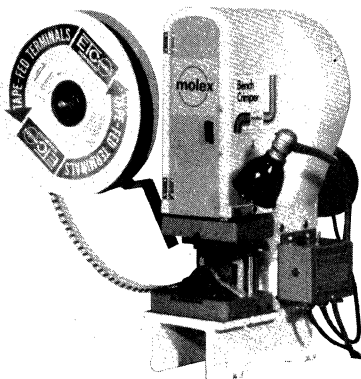
Air-Powered Crimp Press



- The ATP-100 series is an air-powered crimping press designed to accommodate mylar tape mounted terminals
- Portable, weighs approximately 30 pounds
- Operator-controlled, foot pedal activation
- Up to 3,600 crimps per hour
- Wire gauge changeover in less than a minute
- Changeover from tape to strip terminals in less than 15 minutes

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Benchmaster with MTA-100 Applicator

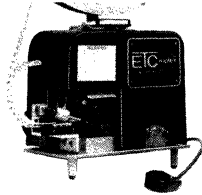


- MTA-100 is a die unit that is adaptable to a standard 3-ton press that is being offered by many terminal manufacturers
- Requires no press modifications to run the Molex-ETC tape terminals, other than changing the die set.
- MCM-200 is a die kit that will interchange with the MTA-100 to enable the end user to crimp continuously molded products in the 3-ton press
- No pneumatics required

Application Tooling

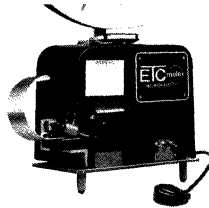


ATP-101C Air-Powered Crimp Press for Continuous Molded Terminals



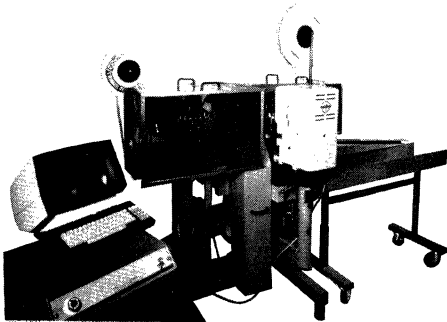
- Designed specifically for continuously molded PDQ terminals.
- Completely portable; weighs approximately 30 pounds
- Operator controlled, foot pedal operation
- Up to 3600 crimps per hour
- Changeover from strip to tape terminals in only 10-12 minutes

Air-Powered Strip Press



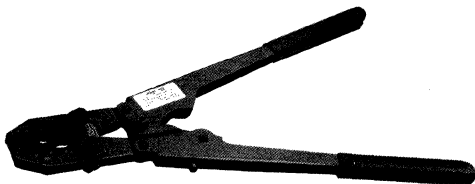
- ASP Series is an air-powered crimping press for insulated and non-insulated strip quick disconnects
- Completely portable, weighs only 30 pounds
- Operator controlled. Safe, efficient foot pedal activation
- Up to 3600 crimps per hour

KOMAX® Machines



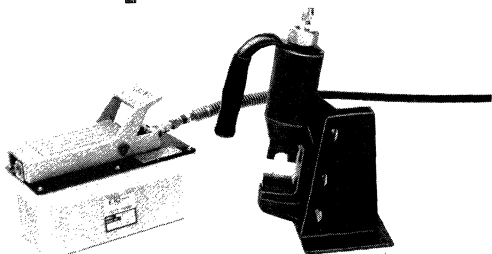
- For microprocessor controlled, fully automatic crimping of one or both ends of a wire
- Accommodates wire gauges of 10-26 stranded and 16-26 solid
- Make wire length changes in 10-20 seconds
- Complete tooling change in 3-5 minutes
- Length capacity 1½" to 328 ft. maximum
- Consult factory for additional specifications

MagnaCrimp, Heavy-Duty Cable Crimping Tool



- The MCT-8200 handles the same jobs as expensive crimping tools at half the price
- Hardened jaws crimp the conductor insulation precisely
- Handles insulated and non-insulated terminals in wire sizes 8-2 AWG
- Optional ratchet feature assures a complete crimp cycle before release
- Comfort-designed grip for prolonged usage

Putt-Pump Air-Powered, Hydraulic Crimper



- Small and lightweight (only 20 lbs); portable enough to be moved easily between job sites
- Heavy-duty performance; puts long-lasting crimps in 8 through 1/0 AWG insulated and uninsulated terminals and splices
- Crimping dies easily and quickly interchanged
- Foot-treadle activation permits safe, efficient, two-handed operation
- Operates on standard 85 psi shop air pressure
- Bench-mount adapter available

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Application Tooling Charts



Ratchet Hand Tools and Accessories

	Wire Range	Barrel	Tool Number
AVIKRIMP INSULKRIMP Terminals, Splices	26-24 22-18 22-18 16-14 16-14 12-10	Long (A) Standard (AA) Long (B) Standard (BB) Standard (C)	RHT-5756 RHT-2000 RHT-2050 RHT-2100 RHT-2150 RHT-2200
AVIKRIMP Quick Connect Terminals	26-24 22-18 16-14 14-12 12-10		RHT-5756 RHT-5757 RHT-5758 RHT-5759 RHT-2210
INSULKRIMP and Fully Insulated Quick Connect Terminals	22-18 16-14 14-12 12-10	Standard (C) Fully Ins.	RHT-5757 RHT-2758 RHT-2759 RHT-2143 RHT-2251
VIBRAKRIMP Terminals and Splices	22-18 22-18 16-14 16-14 12-10	Long (A) Standard (AA) Long (B) Standard (BB) Standard (C)	RHT-4000** RHT-4050** RHT-4100** RHT-4150** RHT-4200**
VIBRAKRIMP Quick Connect Terminals	26-24 22-18 16-14 14-12		RHT-4753 RHT-4754 RHT-4754, RHT-4755 RHT-4755

	Wire Range	Barrel	Tool Number
KRIMPTITE VERSAKRIMP Terminals, Splices	26-24 22-10 22-10 14-12	Long (A,B,C) Standard (AA, BB)	RHT-1753 RHT-1000** RHT-1050** RHT-1412
KRIMPTITE Quick Connect Terminals	26-24 22-18 16-14 16-14 16-14 14-12 14-12 12-10	A-174 Flag FFT-1 Flag B-175 Flag	RHT-1753 RHT-1751 RHT-1751, RHT-1752 RHT-FFQD RHT-FFQD RHT-1752 RHT-B175 RHT-1752
NYLAKRIMP Splices	22-18 16-14 12-10		RHT-8100 RHT-8200 RHT-9100
SNAP PLUG	16-14		RHT-8200
NYLON CLOSED-END CONNECTORS	22-10		RHT-7000
FLAG TERMINALS	22-18 16-14 12-10		Consult Factory

AT-200 Crimping Dies and Accessories

	Wire Range	Barrel	Die Number
AVIKRIMP INSULKRIMP Terminals, Splices, Snap Plugs	26-24 22-18 22-18 16-14 16-14 12-10	Long (A) Standard (AA) Long (B) Standard (BB) Standard (C)	AT-5756 AT-2000 AT-2050 AT-2100 AT-2150 AT-2200
AVIKRIMP Quick Connect Terminals	26-24 22-18 16-14 14-12		AT-5756 AT-5757 AT-5758 AT-5759
INSULKRIMP and Fully Insulated Quick Connect Terminals	22-18 16-14 14-12		AT-5757 AT-2758 AT-2759
VIBRAKRIMP Terminals and Splices	22-18 22-18 16-14 16-14 12-10	Long (A) Standard (AA) Long (B) Standard (BB) Standard (C)	AT-4000** AT-4050** AT-4100** AT-4150** AT-4200**
VIBRAKRIMP Quick Connect Terminals	26-24 22-18 16-14 14-12		AT-4753 AT-4754 AT-4754, AT-4755 AT-4755

	Wire Range	Barrel	Die Number
KRIMPTITE VERSAKRIMP Terminals, Splices	26-24 22-10 22-10 14-12	Long (A,B,C) Long (A,B,C) Standard (AA, BB)	AT-1753 AT-1000** AT-1050** AT-1412 AT-1080* AT-1060*
KRIMPTITE Quick Connect Terminals	26-24 22-18 16-14 14-12		AT-1753 AT-1751 AT-1751, AT-1752 AT-1752
NYLAKRIMP Splices	22-18 16-14 12-10		AT-8100 AT-8200 AT-9100
SNAP PLUG	16-14		AT-8200
NYLON CLOSED-END CONNECTORS	22-10		AT-7000
BENCH ADAPTER			ATBA-2
FILTER- LUBRICATOR- REGULATOR			FLR
AIR HOSE	10 ft. x 3/16		AH-1

**Available with extra-hard chrome-plated dies for crimping Temp Terms (high temperature terminals). To order, suffix "H" to tool part number. Example: RHT-1000-H.
United States & Foreign Patents and/or Patents Pending

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Application Tooling Charts

ATP-100, ATP-101, and Benchmaster with MTA-100 Applicator

	Wire Range	Barrel	Tool Number
AVIKRIMP INSULKRIMP Terminals, Splices	26-24	Long (A) Standard (AA) Long (B) Standard (BB) Standard (C) Avikrimp Standard (C) Insulkrimp Standard (D) Standard (E)	ATP-M-575-1
	22-18		ATP-A-510-1
	22-18		ATP-AA-510-1
	16-14		ATP-B-520-1
	16-14		ATP-BB-520-1
	12-10		ATP-C-530-1*
	12-10		ATP-C-530-2*
*also crimps Heavy Duty Terminals for 16-14 wires			
AVIKRIMP Quick Connect Terminals	26-24		ATP-M-575-1
	22-18		ATP-AA-575-1
	16-14		ATP-BB-575-1
	14-12		ATP-P-575-1
	12-10		ATP-C-532-1
INSULKRIMP and Fully Insulated Quick Connect Terminals	22-18	(Fully Insulated)	ATP-AA-575-1
	16-14		ATP-BB-275-1
	14-12		ATP-P-275-1
	12-10		ATP-C-600-1
	12-10		ATP-C-532-1
NYLAKRIMP Terminals, Splices, End Connectors	22-14	End Connectors	ATP-NC-2214-1
	22-18	End Connectors	ATP-A-710-1
	16-10		ATP-NC-1610-1
	16-14		ATP-B-720-1
	12-10		ATP-C-730-1
			ATP-D-540-1
			ATP-E-550-1

**Stranded wire only

	Wire Range	Barrel	Tool Number
VIBRAKRIMP Terminals	22-18	Long (A) Standard (AA) Long (B) Standard (BB) Standard (C)	ATP-A-410-1
	22-18		ATP-AA-410-1
	16-14		ATP-B-420-1
	16-14		ATP-BB-420-1
	12-10		ATP-C-430-1*
*also crimps Heavy Duty Terminals for 16-14 wires			
VIBRAKRIMP Quick Connect Terminals	26-24		ATP-M-475-1
	22-18		ATP-AA-475-1
	16-14		ATP-BB-475-1
	14-12		ATP-P-475-1
KRIMPTITE, VERSAKRIMP Terminals, Splices	26-24	Long (A) Standard (AA) Long (B) Standard (BB) Standard (C) Standard (D) Standard (E) Standard (F)	ATP-M-175-1
	22-18		ATP-A-110-1
	22-18		ATP-AA-110-1
	16-14		ATP-B-120-1
	16-14		ATP-BB-120-1
	12-10		ATP-C-130-2*
	12-10		ATP-D-140-1
*also crimps Heavy Duty Terminals for 16-14 wires			
KRIMPTITE Quick Connect Terminals	22-18		ATP-AA-175-1
	16-14		ATP-BB-175-1
	14-12		ATP-P-175-1
WIRE GUIDE	22-18		ATP-2218
	16-14		ATP-1614
	10 ft. x 1/4" Air Hose		AH-2
Filter-Lubricator Regulator			FLR

ASP-200 Series Crimping Dies and Accessories

	Wire Range	Die Set Number
AVIKRIMP Quick Connect Terminals	26-24	ASP-M-500-1
	22-18	ASP-AA-500-1
	16-14	ASP-BB-500-1
	14-12	ASP-P-500-1
INSULKRIMP Quick Connect Terminals	22-18	ASP-AA-200-1
	16-14	ASP-BB-200-1
	14-12	ASP-P-200-1

	Wire Range	Die Set Number
VIBRAKRIMP Quick Connect Terminals	26-24	ASP-M-400-1
	22-18	ASP-AA-400-1
	16-14	ASP-BB-400-1
	14-12	ASP-P-400-1
KRIMPTITE Quick Connect Terminals	22-18	ASP-AA-100-1
	16-14	ASP-BB-100-1
	14-12	ASP-P-100-1
CONVERSION SPACER	.250 Receptacles	ASP-QDA

Putt-Pump Crimping Dies

	Wire Range	Die Set Number	
		Small Hyd. Head	Large Hyd. Head
VERSAKRIMP Terminals and Splices	8	HHS-D-110-1	HHL-D-110-1
	6	HHS-E-120-1	HHL-E-120-1
	4	HHS-F-130-1	HHL-F-130-1
	2	HHS-G-140-1	HHL-G-140-1
	1/0	HHS-H-150-1	HHL-H-150-1
	2/0		HHL-J-160-1
	3/0		HHL-K-170-1
	4/0		HHL-L-180-1
NYLAKRIMP INSULKRIMP Terminals and Splices	8	HHS-D-710-1	HHL-D-710-1
	6	HHS-E-720-1	HHL-E-720-1
	4	HHS-F-730-1	HHL-F-730-1
	2	HHS-G-740-1	HHL-G-740-1
	1/0		HHL-H-750-1
	2/0		HHL-J-760-1
	3/0		HHL-K-770-1
	4/0		HHL-L-780-1

Accessories	Part No.
Pump	PP-6
8' Hydraulic Hose	HH-1
10'x1/4" Air Hose	AH-2
Small Hydraulic Head	HHS-1
Large Hydraulic Head	HHL-1
HHS-1 Head Handle Only	HAN-1
HHL-1 Head Handle Only	HAN-1
Filter, Lubricator, Regulator	FLR-1
Bench Adapter	HH-BA
Appropriate Crimping Dies	

8 foot hydraulic hose included when PP-6 and hydraulic crimping heads are ordered as a unit.

United States & Foreign Patent and/or Patents Pending

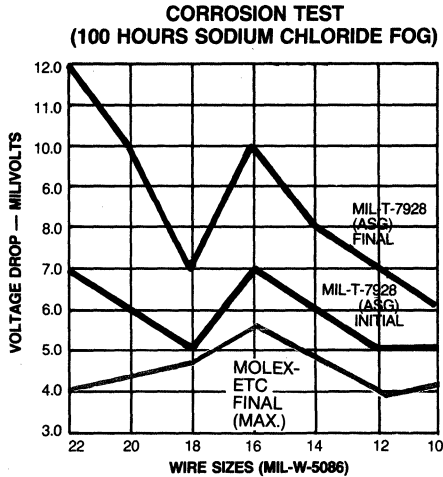
*CAUTION: if you employ a Molex-ETC hydraulic head imprinted with "HHS-1" or "HHL-1", order dies listed above, if imprint does not have "-1" suffix, order dies with suffix "-old". This procedure MUST be followed or damage to dies will occur.



Corrosion Resistance

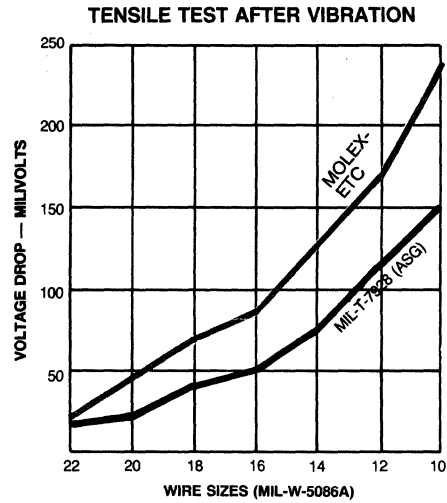
Corrosion resistance of a solderless crimp-type termination is quantitatively assessed by voltage drop and tensile strength performance data after being subjected to corrosion testing, according to Method 101 of Standard MIL-STD-202, for 100 hours.

Due to the intimate nature of the Molex-ETC crimp upon the terminal or splice, corrosion test readings are stable throughout the wire ranges and always are lower than the applicable military standard.



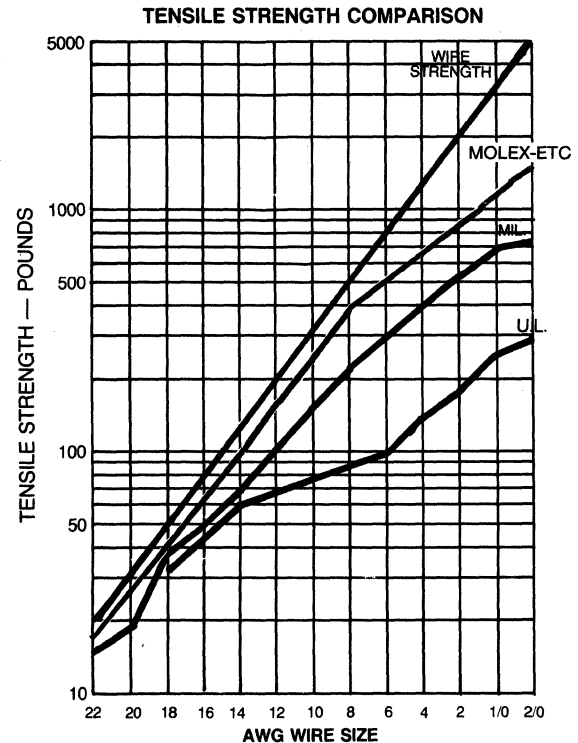
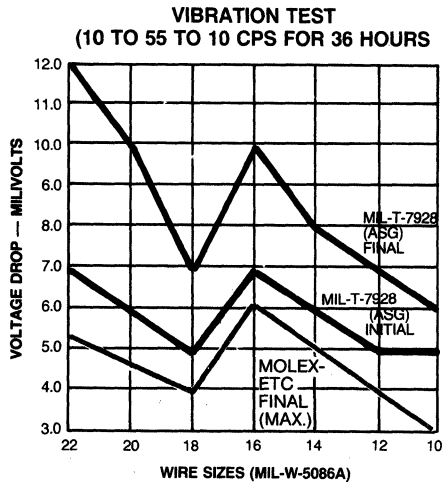
Tensile Strength

It is essential that the terminal or splice barrel be produced from a material of adequate ductility both to withstand the effects of cold working without fracture, and also to insure that the work-hardened material does not relax throughout the life of the termination. Molex-ETC crimps are designed to approach but never exceed the ultimate tensile strength of the conductor. An "over-crimp" will reduce the cross sectional area of the conductor, weakening the termination, and "undercrimping" causes higher electrical resistance values.



Vibration Resistance

In addition to the required millivolt-drop readings, after vibration testing of from 10 to 55 CPS for 36 hours, tensile testing is also conducted to insure proper mechanical strength after this severe environmental condition. Both initial and final values for millivolt-drop readings show the ability of Molex-ETC terminals and splices to withstand this unusual stress with almost no increase in resistance characteristics.



Tensile performance of Molex-ETC terminals and connectors, compared with U.L. military standards, and maximum wire strength data (ASTM designation: B-58, adopted 1958.)

Charts and Conversion Scales



Wire Gauge Conversion to Decimal Equivalents

Decimal / Inches / mm							
1/32	.0312	11/64	.2656	17/32	.5312	29/64	.4531
1/16	.0625	3/8	.3750	1/2	.5000	31/64	.4844
3/32	.0937	7/16	.4375	5/8	.6250	33/64	.5156
1/8	.1250	1/2	.5000	3/4	.7500	35/64	.5469
3/16	.1875	5/8	.6250	7/8	.8750	37/64	.5781
1/4	.2500	3/4	.7500	1	1.0000	39/64	.6094
5/16	.3125	7/8	.8750			41/64	.6406
3/8	.3750	1	1.0000			43/64	.6719
7/16	.4375					45/64	.7031
1/2	.5000					47/64	.7344
5/8	.6250					49/64	.7656
3/4	.7500					51/64	.7969
						53/64	.8281
						55/64	.8594
						57/64	.8906
						59/64	.9219
						61/64	.9531
						63/64	.9844
						64	1.0000

Move decimal point three places to right to read mils

AWG	Diameter Inches	CMA	AWG	Diameter Inches	CMA
4/0	.460	212,000	12	.081	6,530
3/0	.410	168,000	13	.072	5,180
2/0	.365	133,000	14	.064	4,110
1/0	.325	106,000	15	.057	3,260
1	.289	83,700	16	.051	2,580
2	.258	66,400	17	.045	2,050
3	.229	52,600	18	.040	1,620
4	.204	41,700	19	.036	1,290
5	.182	33,100	20	.032	1,020
6	.162	26,300	21	.0285	810
7	.144	20,800	22	.0253	642
8	.128	16,500	23	.0226	509
9	.114	13,100	24	.0201	404
10	.102	10,400	25	.0179	320
11	.091	8,230	26	.0159	254

AWG	mm ²	Standard wires mm ²			
26-22	0.1-0.4	0.14	0.20	0.25	0.35
22-16	0.25-1.6	0.25	0.35	0.50	0.75 1.0 1.5
16-14	1.0-2.6	1.0	1.5	2.5	
12-10	2.7-6.6	4.0	6.0		
8	6.6-10.5	10			
6	10.5-16.8	16			
4	16.8-26.6	2.5			
2	26.6-42.4	35			
1/0	42.4-60.5	50			
2/0	60.5-76.2	70			
3/0	76.2-96.3	95			
4/0	96.3-117.0	120			

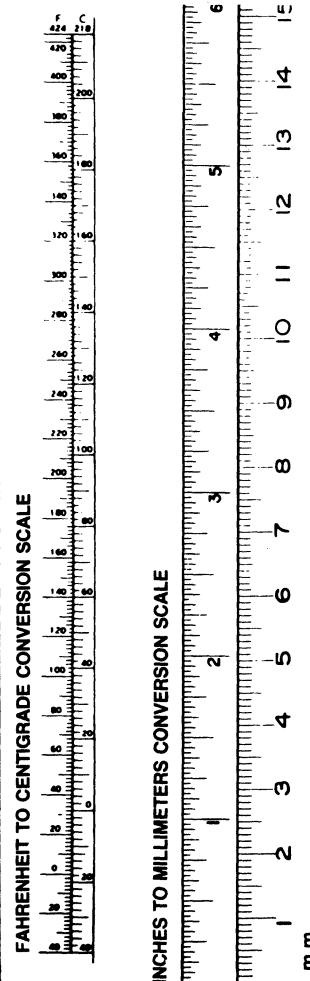
Stud Size with Molex-ETC Hole Sizes

STANDARD STUD SIZE	SCREW DIA. (")	ETC HOLE DIA. INCH/mm	DIN.	STANDARD STUD SIZE	SCREW DIA. (")	ETC HOLE DIA. INCH (mm)	DIN.
#0	.060	.094 (2,39)	M1,7-2,2		1/2"	.500	33/64 (13,10) M12
#1	.073						
#2	.086						
#3	.099	.120 (3,05)	M2,6		5/8"	.625	21/32 (16,67) M16
#4	.112						
#5	.125	.146 (3,71)	M3-3,5		3/4"	.750	25/32 (19,84) M18
#6	.138						
#8	.164	.173 (4,39)	M4		7/8"	.875	29/32 (23,02) M20
#10	.190	.198 (5,03)	—				
#12	.216	17/64 (6,75)	M6		1"	1.000	1-1/32 (26,19) M25
#14	.242						
1/4"	.250						
5/16"	.312	21/64 (8,33)	M8				
3/8"	.375	25/64 (9,92)	M9				
7/16"	.437	29/64 (11,51)	M11				

Molex-ETC Hole Diameters #10 and 3/8 are available in Metric REF.

#10	.190	.209 (5,31)	M5
3/8"	.375	.413 (10,5)	M9-10

*All decimals plus or minus .003". Fractions plus or minus .055".



Molex-ETC OEM Electronic Distributors



Molex-ETC Inc., 4820 Park Boulevard, Pinellas Park, Florida 34665 Phone (813) 541-4651 Toll Free Outside Florida 1-800-237-8905

(See Section N this catalog, Solderless Terminals, Splices, Quick Connects and Crimping Tools)

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Mequon, WI 53092
414/377-8250

CANADA
Molex Electronic Ltd.
85 Select Avenue
Scarborough, Ontario
Canada M1V 3K5
416/292-1444



Shielded Electromagnetic-Compatible Interconnection System

Contents



Introduction, SEMCONN™ I/O Connector System	2 0
Plug Assembly for Shielded Round Cable	3 0-4 0
Plug Assembly for .050" Center Shielded Flat Cable	5 0-6 0
Shielded Receptacle Assembly with Panel Ground	7 0
Shielded Receptacle Assembly with PCB Ground	8 0
Surface Mount Shielded Receptacle Assembly	9 0
Shielded Receptacle Options, Packaging and Delivery System	10 0

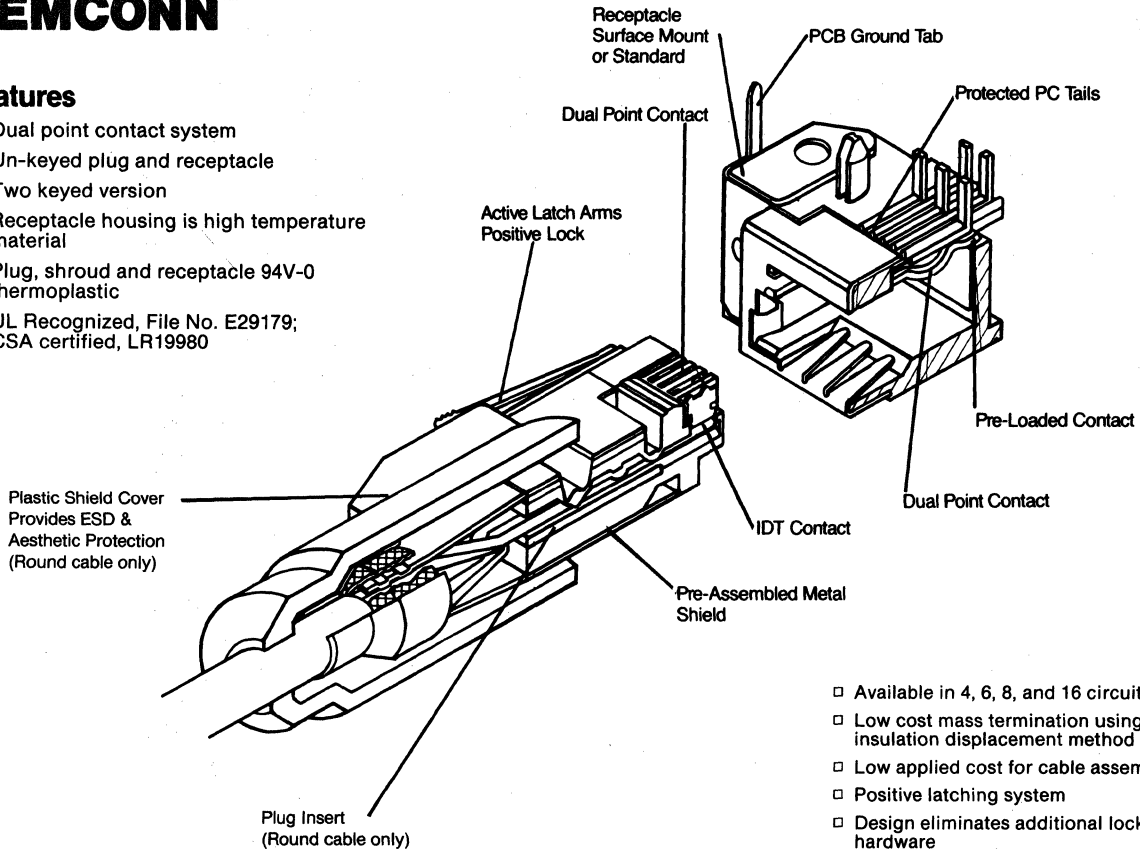
Shielded I/O Connector System



SEMCONN™

Features

- Dual point contact system
- Un-keyed plug and receptacle
- Two keyed version
- Receptacle housing is high temperature material
- Plug, shroud and receptacle 94V-0 thermoplastic
- UL Recognized, File No. E29179; CSA certified, LR19980



- Available in 4, 6, 8, and 16 circuits
- Low cost mass termination using insulation displacement method
- Low applied cost for cable assembly
- Positive latching system
- Design eliminates additional locking hardware
- High cyclability - 500 minimum

The patented two-piece Molex SEMCONN System is fully shielded against EMI/RFI for high speed data busing.

Positive-locking plugs feature redundant **gold plated dual point contacts**. Made of clear polycarbonate and shielded with tin plated brass, the plugs are available to **terminate both flat and round shielded cables**.

The molded receptacle is a right angle style with optional top flange and features optional grounding, achieved through face mounting or PC board solder tails. Through-hole versions feature the **industry standard dual-row .050" x .100" footprint; the surface mount version has a single row .050" footprint**.

With the market demand for higher density I/O systems and smaller pin counts SEMCONN replaces existing I/O connectors in keyboard, graphics tablets, modems, bar code readers and medical instrumentation.

SEMCONN is less labor-intensive than D-subminiature or circular DIN connectors.

Specifications

Housings — Plug and plug insert - clear thermoplastic alloy, 94V-0

Round cable shroud - black thermoplastic, 94V-0

Receptacle - black thermoplastic, 94V-0

Shields — Brass with tin-over-nickel plate

Contacts — Plug - Phosphor bronze with select gold in contact area, tin/lead in insulation displacement section, both over nickel plate.

Receptacle - Phosphor bronze with select gold in contact area, tin/lead on solder tails, both over nickel plate

Wire — Compatible with #24-28 AWG foil shielded flat, round and retractile cable

Strength of Cable Strain Relief — 30 lbs. min.

Preload Force of Receptacle Contact — 20 grams minimum

Insertion/Extraction Force — 1.4 lbs./1.3 lbs. (8 ckt.)

Plug to Socket Latch Strength — 18-20 lbs. (8 ckt.)

Operating Temperature — -20°C to 80°C

Durability — 500 cycles min.

Contact Normal Force — 100 grams min.

Rated Voltage, Current — 30 Vac at 1.5 amps

Contact Resistance — 10 milliohms max.

Electrostatic Discharge Protection — 20 kV min.

Dielectric Strength — 1000 Vac (rms)

Insulation Resistance — 500 megohms min.

Temperature Rise vs. Current — 30°C max. at rated current

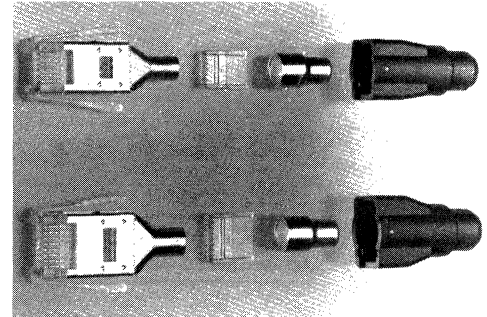
Shielding Effectiveness — 30 to 500 mHz - 20 dB min. 500 mHz to 1 GHz - 10 dB min.

SEMCONN™ Shielded Plugs

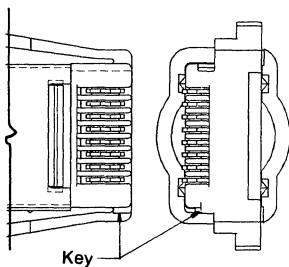
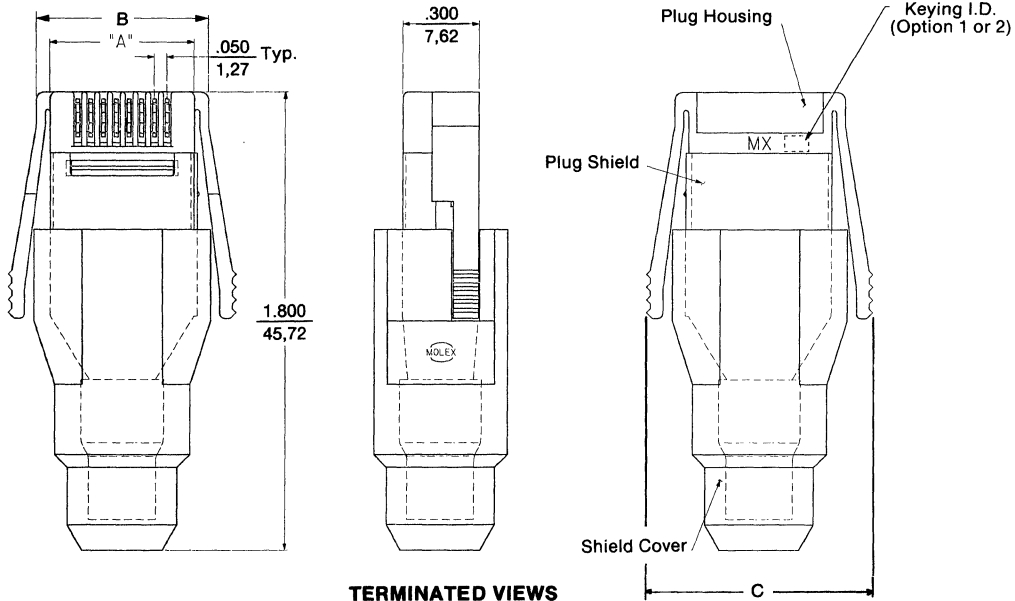


Plug Assembly for Shielded Round Cable

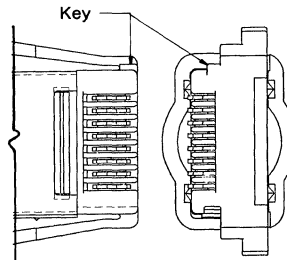
- Pre-assembled one-piece shield
- Non-metallic shield cover provided
- Three strain reliefs
- Wire management plug insert provided
- Molex Product Specification PS-71350A
- Application Specification PS-71310
- Packaging Specification PK-70873-0053



6 and 8 circuit versions shown. Left to right; plug assembly, plug insert, crimp ferrule, shield cover



KEYING OPTION 1



KEYING OPTION 2

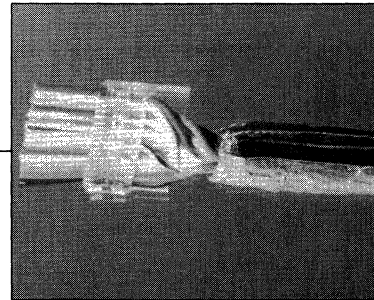
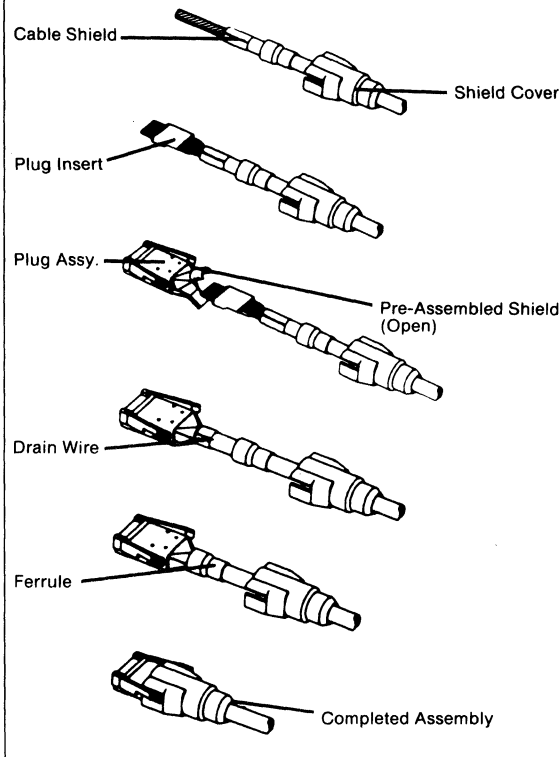
Ckt. Size	NON-KEYED VERSION	KEYING OPTION 1	KEYING OPTION 2	Dim. A	Dim. B	Dim. C
	Order Number	Order Number	Order Number			
4	15-83-0504*	15-83-0534	15-83-0554	.366 9,30	.475 12,07	.696 17,68
6	15-83-0506*	15-83-0536	15-83-0556	.466 11,84	.575 14,61	.796 20,22
8	15-83-0508*	15-83-0538	15-83-0558	.566 14,38	.675 17,15	.896 22,76
16	15-83-0516*	15-83-0546	15-83-0566	.966 24,54	1,075 27,31	1,296 32,92

*Industry compatible

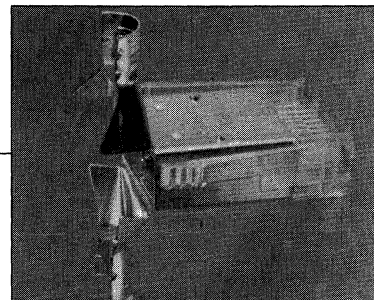


Round Cable Plug System

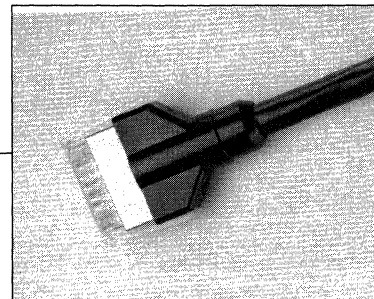
Round Cable Plug Components and Wire Termination Sequence



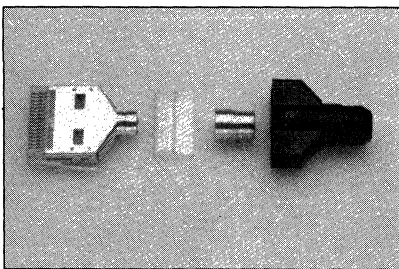
Plug Insert



Shield Open 90°



Final Product

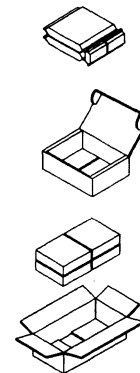


0

Features

- Pre-assembled shield to plug
- Plug insert for wire management
- Components (4) ordered under one part number
- Shield cover for aesthetics and ESD protection
- Low applied cost for cable assembly
- Clear polycarbonate housing

Packaging Specifications, Round Cable Plug Kits



Notes:

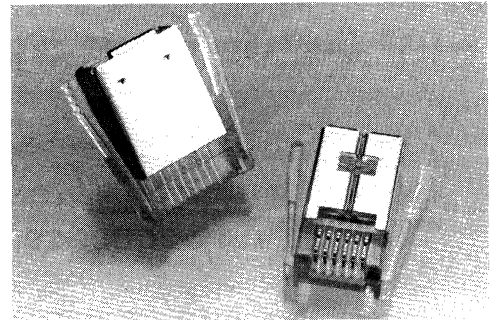
1. Packaging quantities vary by circuit size. See PK-70873-0053
2. Plugs for round cable are packaged in kits, each containing four components; 1 plug housing/shield, 1 crimp ferrule, 1 plug insert, and 1 shield cover

SEMCONN™ Shielded Plugs

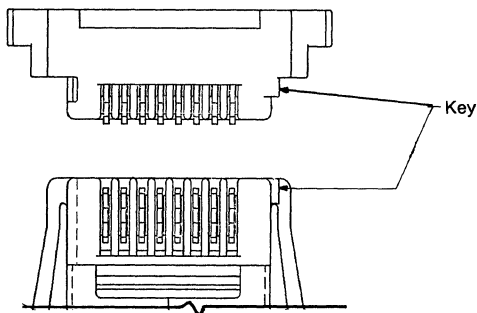
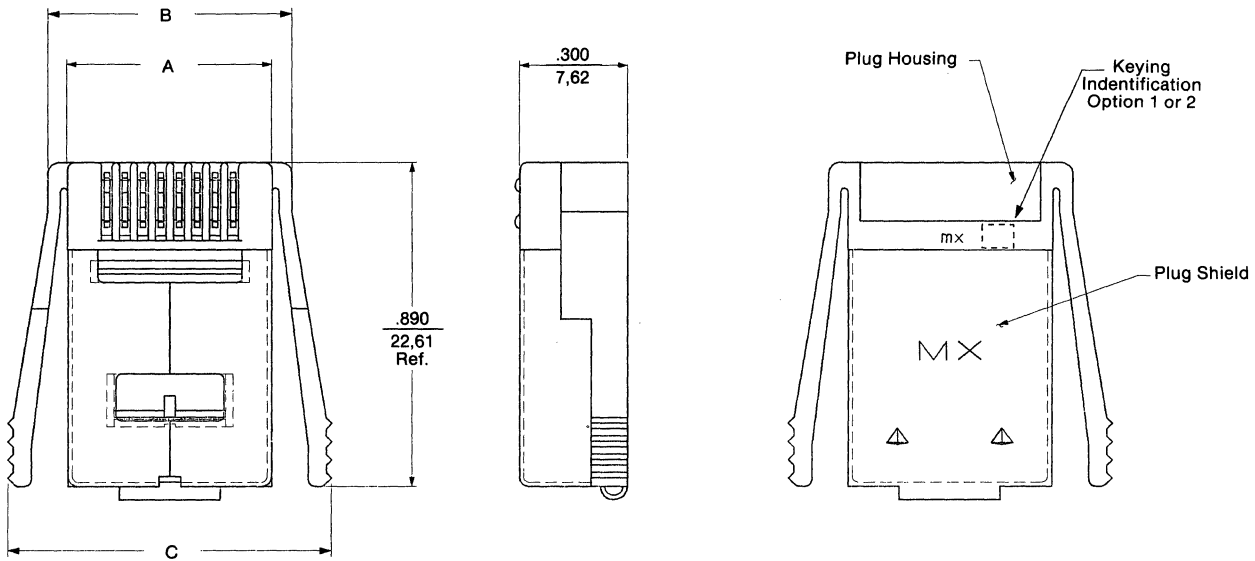


Plug Assembly for .050 Center Shielded Flat Cable

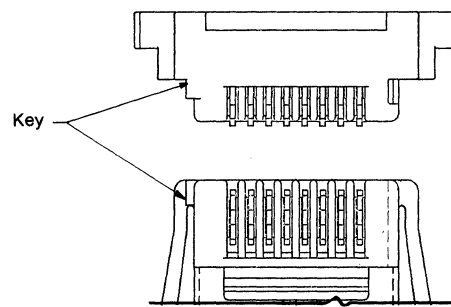
- Coined shield seam
- Two strain reliefs
- Molex Product Specification PS-71350A
- Application Specification PS-71350
- Packaging Specification PK-70873-0054



6 circuit shown



KEYING OPTION 1



KEYING OPTION 2

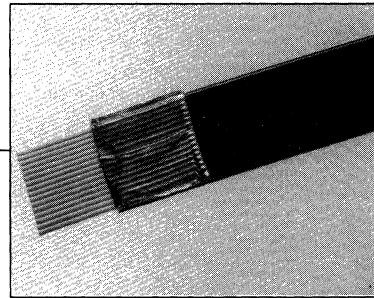
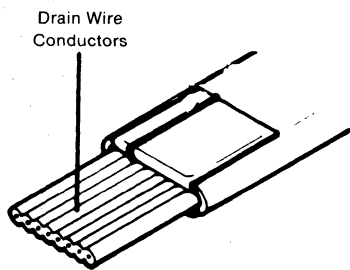
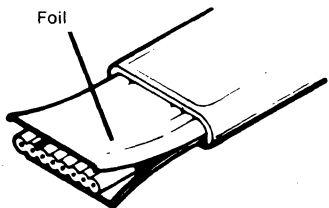
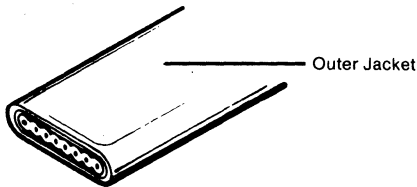
Ckt. Size	NON-KEYED VERSION	KEYING OPTION 1	KEYING OPTION 2	Dim. A	Dim. B	Dim. C
	Order Number	Order Number	Order Number			
4	15-83-0604*	15-83-0634	15-83-0654	.366 9,30	.475 12,06	.696 17,68
6	15-83-0606*	15-83-0636	15-83-0656	.466 11,84	.575 14,60	.796 20,22
8	15-83-0608*	15-83-0638	15-83-0658	.566 14,38	.675 17,14	.896 22,76
16	15-83-0616*	15-83-0646	15-83-0666	.966 24,54	1.075 27,30	1.296 32,92

*Industry compatible

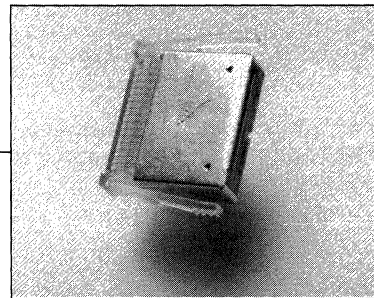


Flat Cable Plug System

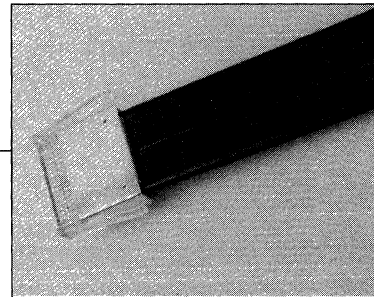
Flat Cable Plug Components and Wire Termination Sequence



Cable Preparation



Flat Cable Plug

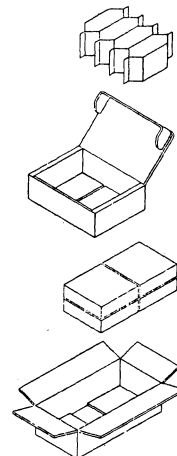


Final Product

Features

- Pre-assembled shield
- Plug shield covered at seam
- Low applied cost for cable assembly
- Clear polycarbonate housing

Packaging Specifications, Flat Cable Plug Kits



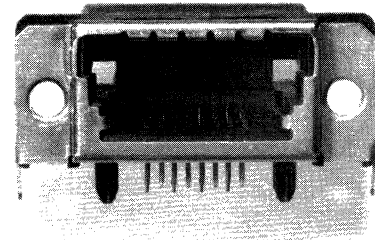
Notes:
1. Packaging quantities vary by circuit size. See PK-70873-0053

SEMCONN™ Shielded Receptacle

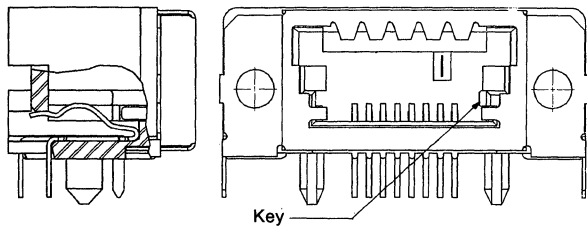
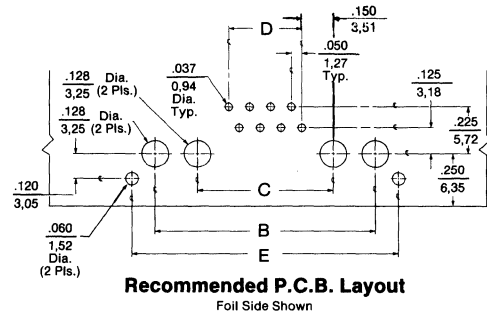
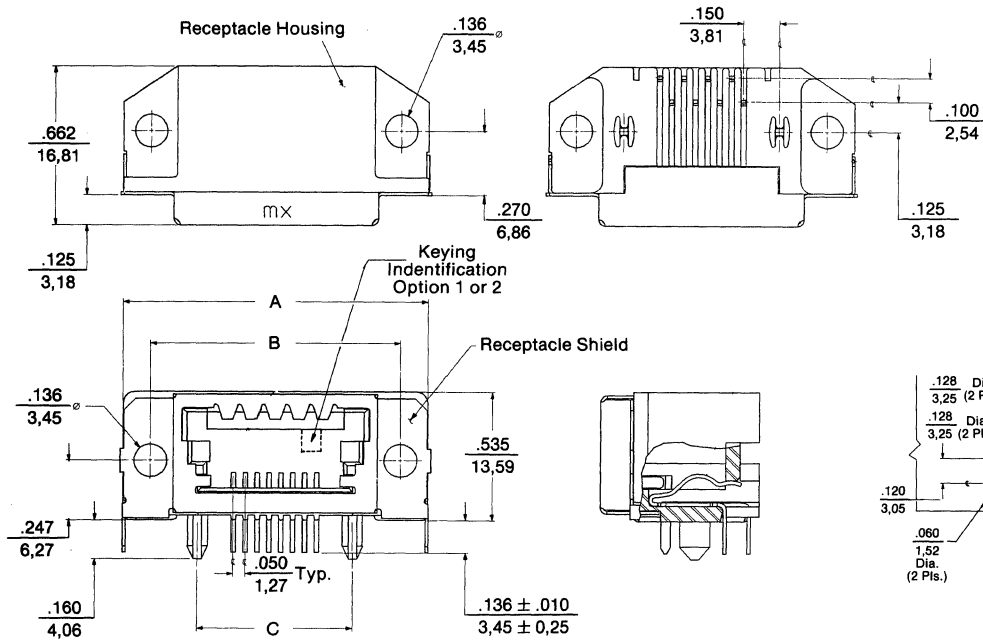


Shielded Receptacle Assembly with PCB Ground

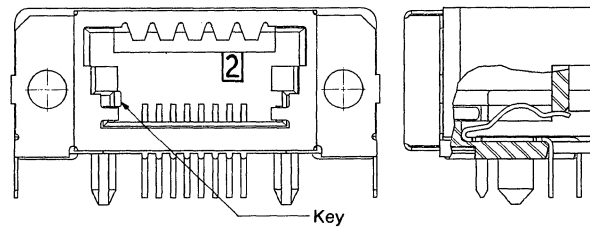
- Pre-loaded contact located at specified height
- Low insertion force-to-normal force ratio
- Reduced contamination during soldering operation
- Molex Product Specification PS-71350A
- Application Specification PS-71355
- High temperature plastic housing



8 Ckt. Shown



KEYING OPTION 1



KEYING OPTION 2

Ckt. Size	NON-KEYED VERSION	KEYING OPTION 1	KEYING OPTION 2	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E
	Order Number	Order Number	Order Number					
4	15-83-0304*	15-83-0334	15-83-0354	1.080 27,43	.850 21,59	.450 11,43	.150 3,81	1.073 27,25
6	15-83-0306*	15-83-0336	15-83-0356	1.180 29,97	.950 24,13	.550 13,97	.250 6,35	1.173 29,79
8	15-83-0308*	15-83-0338	15-83-0358	1.280 32,51	1.050 26,67	.650 16,51	.350 8,89	1.273 32,33
16	15-83-0316*	15-83-0346	15-83-0366	1.680 42,67	1.450 36,83	1.050 26,67	.750 19,05	1.673 42,49

*Industry compatible

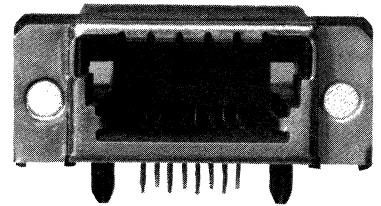


SEMCONN™ Shielded Receptacle

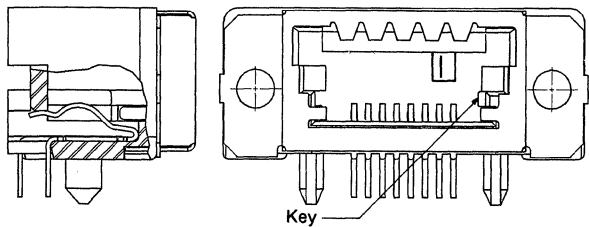
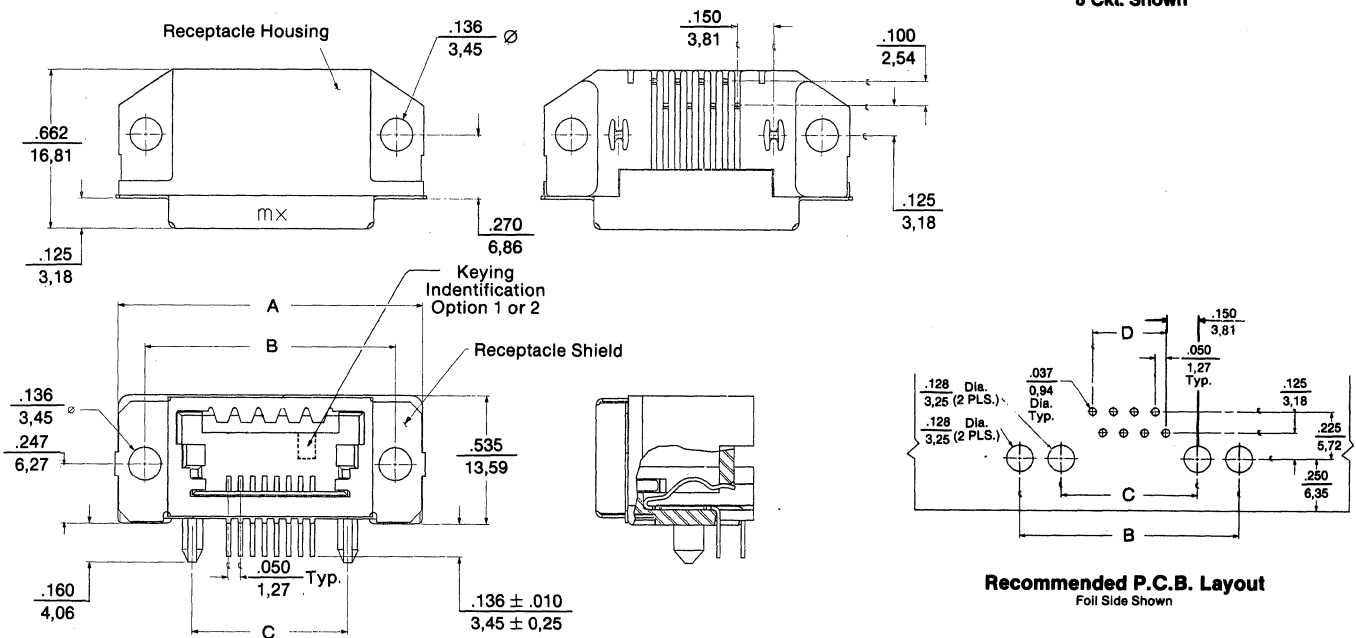


Shielded Receptacle Assembly with Panel Ground

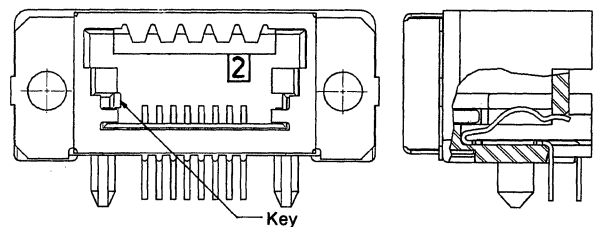
- Pre-loaded contact located at specified height
- Low insertion force-to-normal force ratio
- Reduced contamination potential during soldering operation
- Molex Product Specification PS-71350A
- Application Specification PS-71355
- High temperature plastic housing



8 Ckt. Shown



KEYING OPTION 1



KEYING OPTION 2

Ckt. Size	NON-KEYED VERSION	KEYING OPTION 1	KEYING OPTION 2	Dim. A	Dim. B	Dim. C	Dim. D
	Order Number	Order Number	Order Number				
4	15-83-0004*	15-83-0034	15-83-0054	1.080 27,43	.850 21,59	.450 11,43	.150 3,81
6	15-83-0006*	15-83-0036	15-83-0056	1.180 29,97	.950 24,13	.550 13,97	.250 6,35
8	15-83-0008*	15-83-0038	15-83-0058	1.280 32,51	1.050 26,67	.650 16,51	.350 8,89
16	15-83-0016*	15-83-0046	15-83-0066	1.680 42,67	1.450 36,83	1.050 26,67	.750 19,05

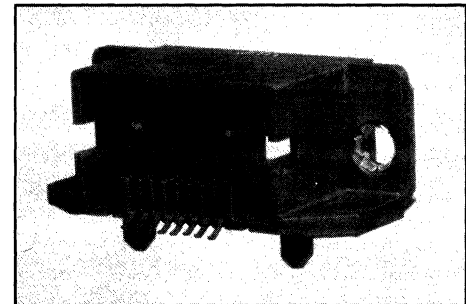
*Industry compatible

Surface Mount Shielded Receptacle

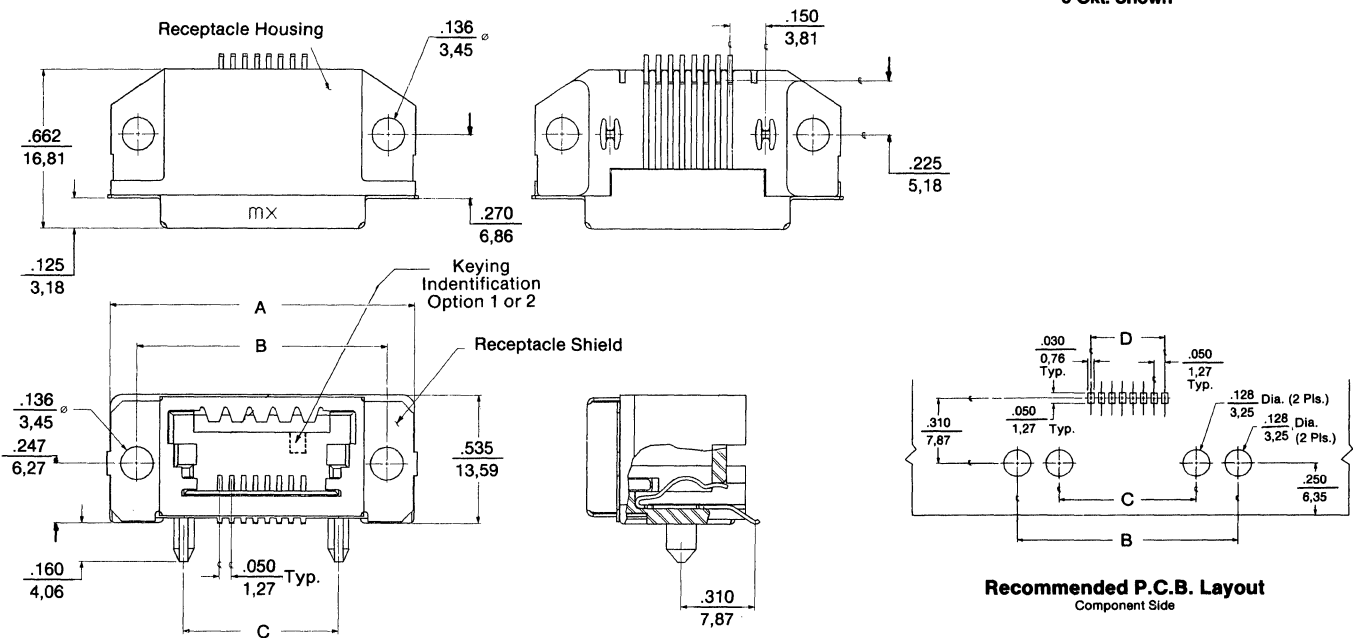


Surface Mount Shielded Receptacle Assembly

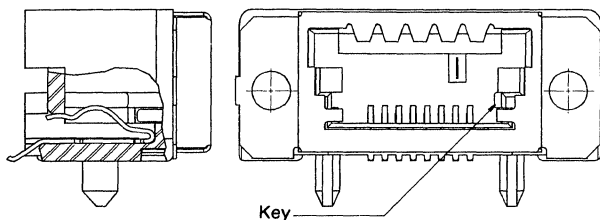
- Pre-loaded contact located at specified height
- Low insertion force to normal force ratio
- With panel ground
- Molex Product Specification PS-71350A
- Application Specification PS-71355
- High temperature plastic housing



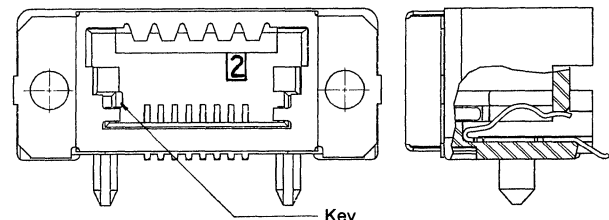
8 Ckt. Shown



Recommended P.C.B. Layout
Component Side



KEYING OPTION 1



KEYING OPTION 2

Ckt. Size	NON-KEYED VERSION	KEYING OPTION 1	KEYING OPTION 2	Dim. A	Dim. B	Dim. C	Dim. D
	Order Number	Order Number	Order Number				
4	15-83-0204*	15-83-0234	15-83-0254	1.080 27,43	.850 21,59	.450 11,43	.150 3,81
6	15-83-0206*	15-83-0236	15-83-0256	1.180 29,97	.950 24,13	.550 13,97	.250 6,35
8	15-83-0208*	15-83-0238	15-83-0258	1.280 32,51	1.050 26,67	.650 16,51	.350 8,89
16	15-83-0216*	15-83-0246	15-83-0266	1.680 42,67	1.450 36,83	1.050 26,67	.750 19,05

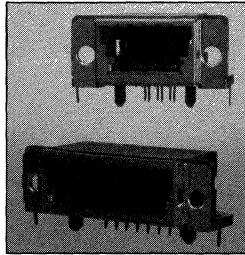
*Industry compatible



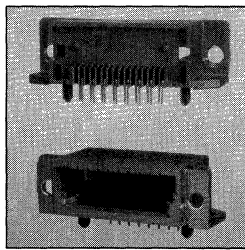
Shielded Receptacle

Options

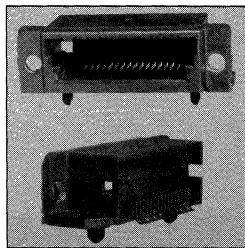
1. PCB ground



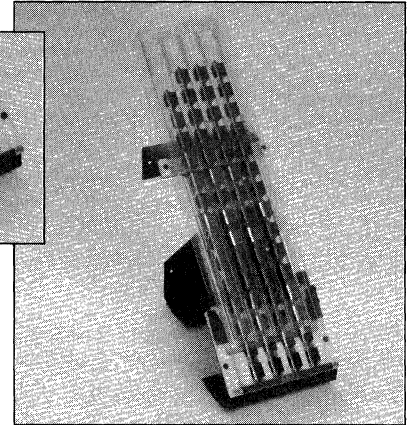
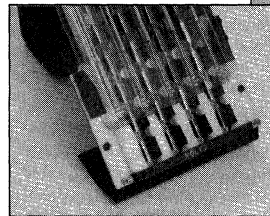
2. Panel ground



3. Surface mount



Manual Receptacle Un-Loader



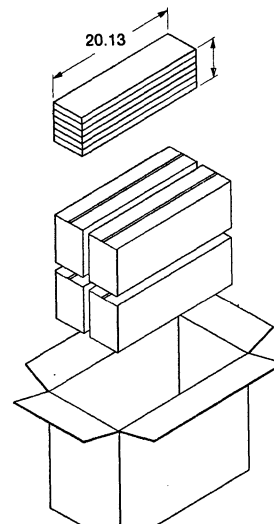
The Molex Manual Single Tray Unloader delivers thru hole or SMT board mounted connectors for manual pickup by an operator. The tray concept was developed as a cost effective alternative to tubes without sacrificing the superior protection. This unloader allows an operator to unload, pick and place oriented components without damaging their leads.

An operator simply places a tray in the unit, pulls the end closure straw from the tray and allows the connectors to fall into a pickup track. The components are presented properly positioned for manual pickup.

Features

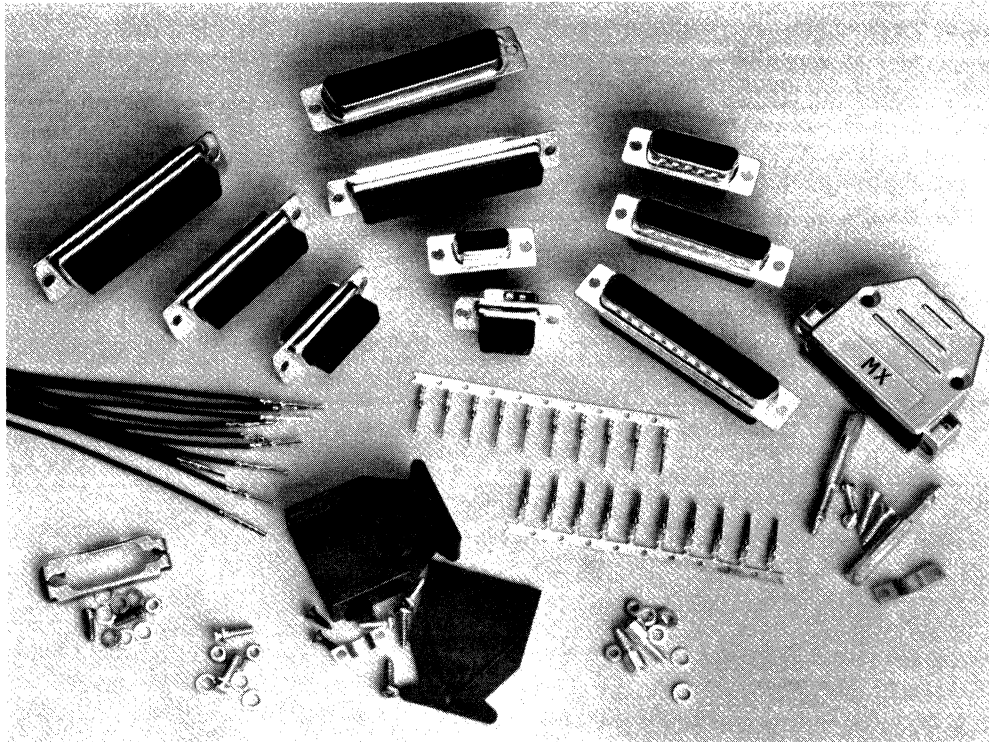
- High temperature plastic housing
- Surface mount version
- Pre-loaded contact system
- Contacts covered on bottom of housing
- Flanged version available
- Printed circuit board or panel ground options

Shielded Receptacle Packaging



1. Packaging quantities vary by circuit size. See PK-70873-008

Contents



D-Subminiature Connectors with Crimp Removable Contacts	
Introduction, Specifications	2P
Receptacle Housing	3P
Plug Housing	4P
Contacts	5P
Accessories	6P-10P
D-Subminiature Right Angle PCB Mount Receptacles, .318" (8,08mm) Foot Print	
Introduction	11P
Specifications	11P
Plastic Shell	12P
Metal Shell	13P
DS50™ Panel Mount D-Subminiature Plugs & Receptacles for .050" (1,27mm) Center Ribbon Cable	
Introduction	14P
Plug, Metal Shell	15P
Receptacle, Metal Shell	16P
Plug, Plastic Shell	17P
Receptacle, Plastic Shell	18P

D-Subminiature Connectors With Crimp Removable Contacts



Introduction

Molex D-Subminiature connectors with crimp removable contacts are designed to meet industry standards for I/O applications. The connectors mate with other manufacturers' headers and connectors that meet the prevailing standards.

Available in 9 through 50 circuits, our connectors accept wire gauges 20 through 28 and are usable with all standard accessories.

They are UL recognized and CSA certified. **UL File No. E29179, CSA File No. LR55960-8.**

We offer our connectors either loose piece with hand tools for prototyping, or on reels for use with high speed semi-automatic crimping equipment. The contacts feature insulation supports and are available with various plating options. All standard products are selectively gold plated in the contact area.

Specifications

Contact Current Rating (20 AWG):
7.5 amps

Dielectric Withstanding Voltage:
1,000 VAC

Contact Resistance:
5 milliohms

Insulation Resistance:
5,000 megohms

Contact Retention:
10 lbs.

Insulator Material:
Black UL 94V-0 glass filled nylon

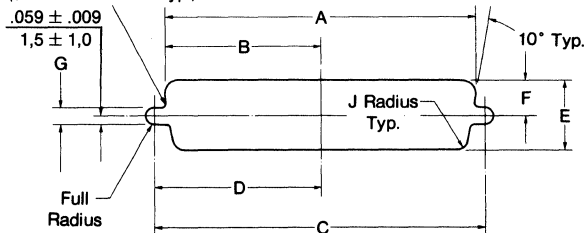
Shells:
Steel, with bright tin or zinc plating with yellow chromate

Terminals:
Copper alloy

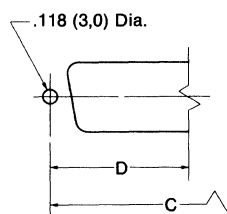
Contact Area Plating Options:
4 microinches (0,10 microns) min. gold
15 microinches (0,38 microns) min. gold
30 microinches (0,76 microns) min. gold
All terminals are underplated with 50 microinches (1,27 microns) nickel, and overplated with gold flash

Panel Cutouts

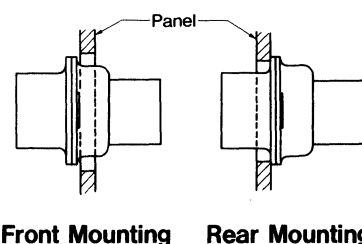
0.032 Radius Max. Typ.
(0.81 Radius Max. Typ.)



Optional (for rear mounting)



Standard Cutout

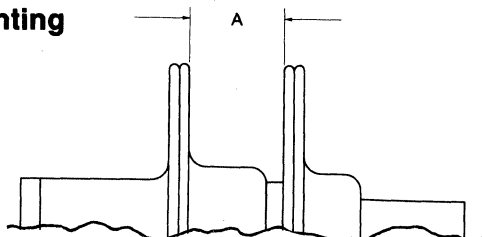


Dimensions

Ckt Size	Mtg. Method	A	B	C	D	E	F
9	Front	0.874 (22.2)	0.437 (11.1)	0.984 (25.0)	0.492 (12.5)	0.512 (13.0)	0.256 (6.5)
	Rear	0.807 (20.5)	0.402 (10.2)	0.984 (25.0)	0.492 (12.5)	0.449 (11.4)	0.224 (5.7)
15	Front	1.201 (30.5)	0.602 (15.3)	1.312 (33.3)	0.656 (16.7)	0.152 (13.0)	0.256 (6.5)
	Rear	1.134 (28.8)	0.567 (14.4)	1.312 (33.3)	0.656 (16.7)	0.449 (11.4)	0.224 (5.7)
25	Front	1.744 (44.3)	0.870 (22.1)	1.852 (47.0)	0.926 (23.5)	0.512 (13.0)	0.256 (6.5)
	Rear	1.673 (42.5)	0.839 (21.3)	1.852 (47.0)	0.926 (23.5)	0.449 (11.4)	0.224 (5.7)
37	Front	2.390 (60.7)	1.197 (30.4)	2.500 (63.5)	1.248 (31.7)	0.512 (13.0)	0.256 (6.5)
	Rear	2.327 (59.1)	1.161 (29.5)	2.500 (63.5)	1.248 (31.7)	0.449 (11.4)	0.224 (5.7)
50	Front	2.295 (58.3)	1.150 (29.2)	2.406 (61.1)	1.205 (30.6)	0.622 (15.8)	0.311 (7.9)
	Rear	2.217 (56.3)	1.110 (28.2)	2.406 (61.1)	1.205 (30.6)	0.555 (14.1)	0.280 (7.1)

Tolerances : ±.008(±0.2) Except Notes

Panel Mounting



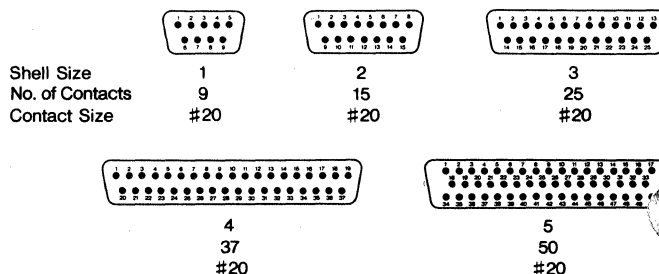
Dimensions

Pin Count	Dim. A +0.030/-0 (+0,76/-0)
9, 15	0.250 (6,35)
25, 37, 50	0.250 (6,35)

Either connector half can be mounted from the rear or from the front of the panel. To assure proper electrical mating, dimension A (see above) must be within the critical limits shown.

Contact Arrangements

Face View, Pin Side

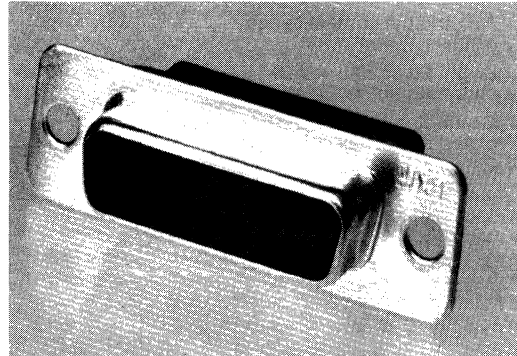


D-Subminiature Connectors with Crimp Removable Contacts

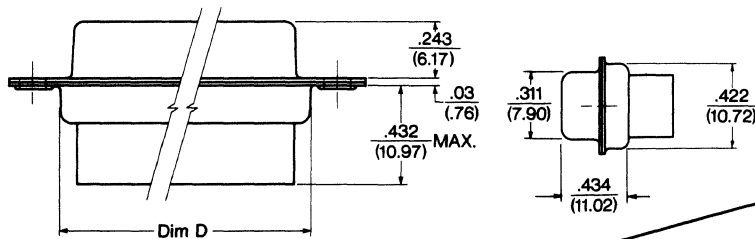
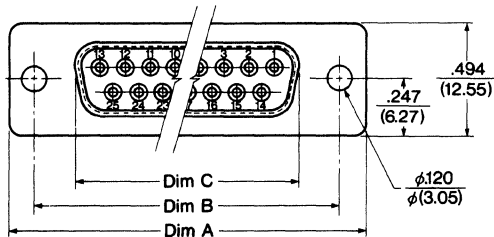


82033 Series Receptacle Housing

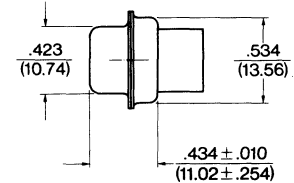
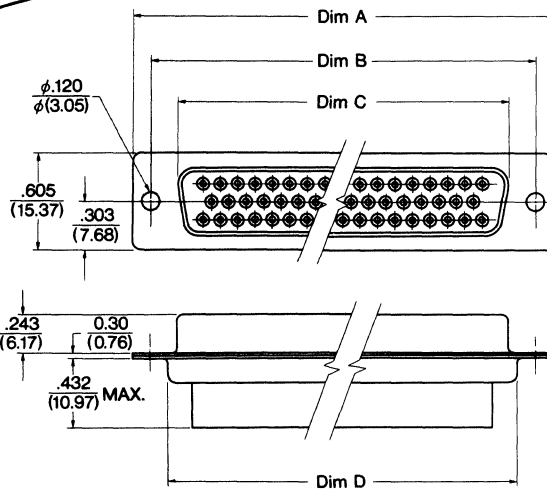
- Accepts socket contact Series 82023
- Bright tin or zinc yellow chromate finish
- .120" (3.05mm) diameter mounting hole



9, 15, 25, 37
Circuits



50 Circuits



Ordering Information

inch(mm)

Circuit Size	Finish	Order Number	Dim A	Dim B	Dim C	Dim D
9	TIN	82033-0000	1.224	0.984	0.645	0.746
	ZINC	82033-0010	(31.09)	(24.99)	(16.38)	(18.95)
15	TIN	82033-0100	1.552	1.312	0.973	1.073
	ZINC	82033-0110	(39.42)	(33.32)	(24.71)	(27.25)
25	TIN	82033-0300	2.091	1.852	1.511	1.618
	ZINC	82033-0310	(53.11)	(47.04)	(38.38)	(41.10)
37	TIN	82033-0400	2.738	2.500	2.161	2.272
	ZINC	82033-0410	(69.55)	(63.50)	(54.89)	(57.71)
50	TIN	82033-0500	2.635	2.406	2.064	2.178
	ZINC	82033-0510	(66.93)	(61.11)	(52.43)	(55.32)

*See Accessories Section for mounting hardware and backshells.

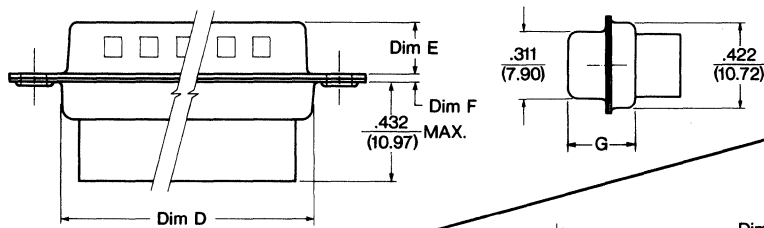
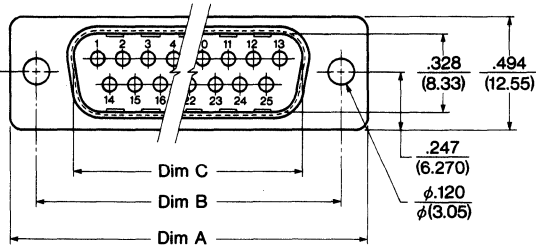
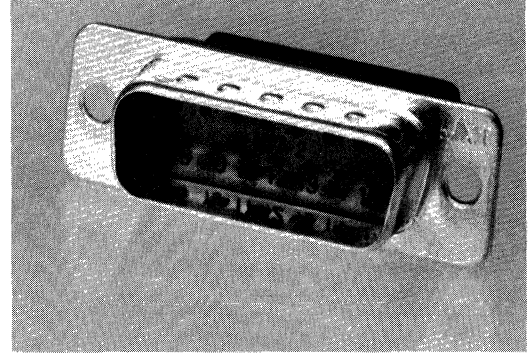


D-Subminiature Connectors with Crimp Removable Contacts

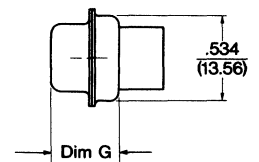
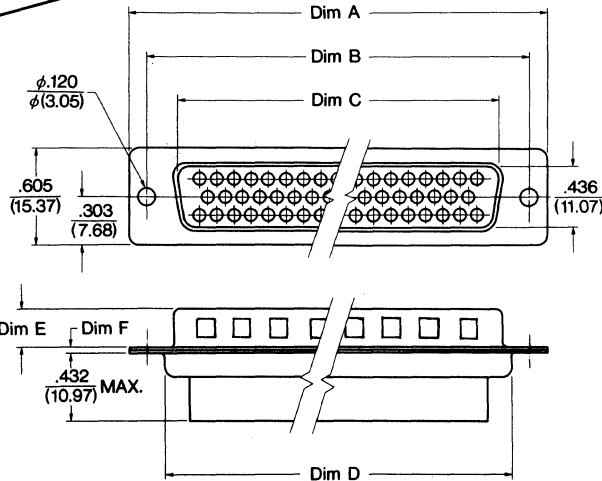


82034 Series Plug Housing

- Accepts pin contact series 82024
- Bright tin or zinc yellow chromate finish
- Grounding indents on tin plated steel shell only
- No indents on zinc yellow chromate version
- .120" (3.05mm) diameter mounting hole



50 Circuits



Ordering Information

Circuit Size	Finish	Order No.	Dim A	Dim B	Dim C	Dim D	Dim E	Dim F	Dim G
9	TIN ZINC	82034-0000 82034-0010	1.224 (31.09)	0.984 (24.99)	0.666 (16.92)	0.746 (18.95)	0.235 (5.97)	0.030 (0.76)	0.422 (10.72)
15	TIN ZINC	82034-0100 82034-0110	1.552 (39.42)	1.312 (33.32)	0.994 (25.25)	1.073 (27.25)	0.235 (5.97)	0.030 (0.76)	0.422 (10.72)
25	TIN ZINC	82034-0300 82034-0310	2.091 (53.11)	1.852 (47.04)	1.534 (38.96)	1.618 (41.10)	0.230 (5.84)	0.039 (0.99)	0.426 (10.82)
37	TIN ZINC	82034-0400 82034-0410	2.738 (69.55)	2.500 (63.50)	2.183 (55.45)	2.272 (57.71)	0.230 (5.84)	0.039 (0.99)	0.426 (10.82)
50	TIN ZINC	82034-0500 82034-0510	2.635 (66.93)	2.406 (61.11)	2.020 (51.31)	2.178 (55.32)	0.230 (5.84)	0.039 (0.99)	0.426 (10.82)

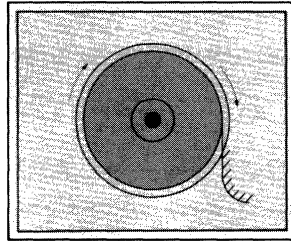
*See Accessories Section for mounting hardware and backshells.

D-Subminiature Connectors with Crimp Removable Contacts

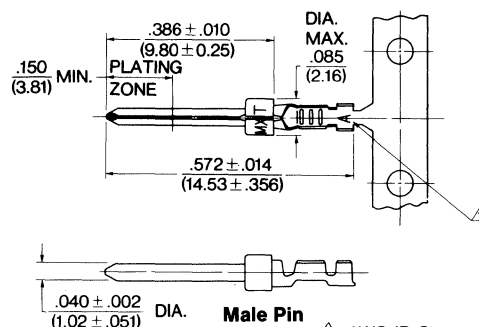
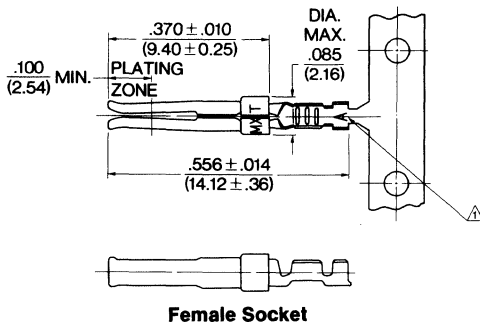
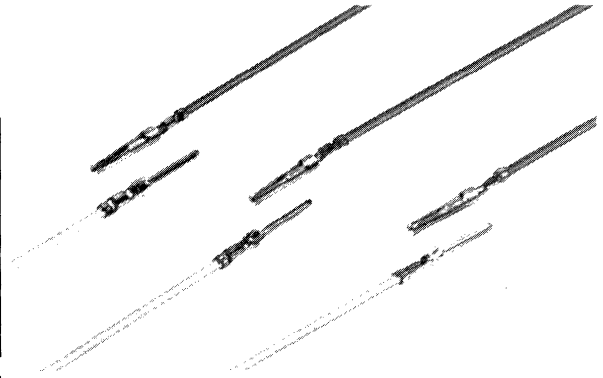


Female and Male Contacts

- Selective gold plating in contact area
- Insulation support as standard
- Two crimp section options
 - For 20, 22, 24 AWG
 - For 24, 26, 28 AWG



Terminals dereel as shown.



▲ AWG ID Stamped In this Area.
A = 24/28 AWG
C = 20/24 AWG

Ordering Information

Contacts	AWG	Max. Ins. Diameter	Gold Plating In Contact Area	Male Pin Order No.	Female Socket Order No.
LOOSE	20/24	.06 (1,52)	4 microinch (0,1 micron)	82024-0602	82023-0602
		.06 (1,52)	15 microinch (0,38 micron)	82024-0402	82023-0402
		.06 (1,52)	20 microinch (0,76 micron)	82024-0502	82023-0502
	24/28	.04 (1,02)	4 microinch (0,1 micron)	82024-0604	82023-0604
		.04 (1,02)	15 microinch (0,38 micron)	82024-0404	82023-0404
		.04 (1,02)	30 microinch (0,76 micron)	82024-0504	82023-0504
REELS OF 12,000	20/24	.06 (1,52)	4 microinch (0,1 micron)	82024-0601	82023-0601
		.06 (1,52)	15 microinch (0,38 micron)	82024-0401	82023-0401
		.06 (1,52)	30 microinch (0,76 micron)	82024-0501	82023-0501
	24/28	.04 (1,02)	4 microinch (0,1 micron)	82024-0603	82023-0603
		.04 (1,02)	15 microinch (0,38 micron)	82024-0403	82023-0403
		.04 (1,02)	30 microinch (0,76 micron)	82024-0503	82023-0503

See Application Tooling
Section M of this catalog
for Crimp Tooling



Plastic Cable Clamp Hood with Screw Locks

- With black thermoplastic or metallized covers
- Straight wire exit

Contents per set:

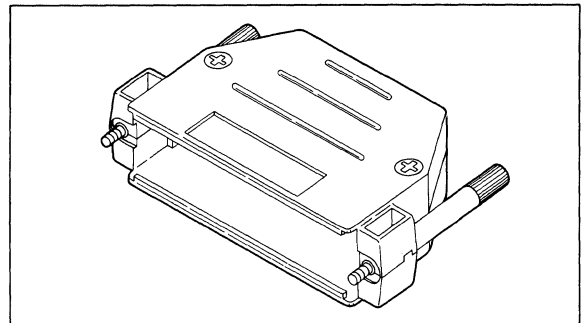
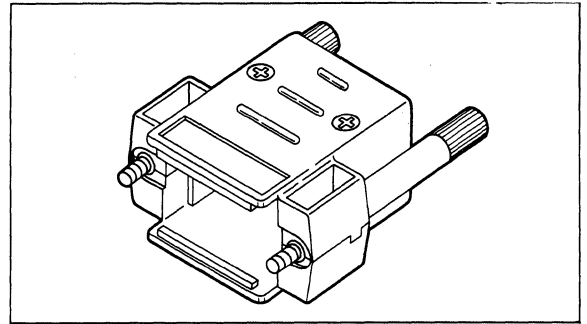
Fastening Screws - Steel, bright tin or zinc plating with yellow chromate (2 pieces)

Covers - Black thermoplastic (2 pieces)

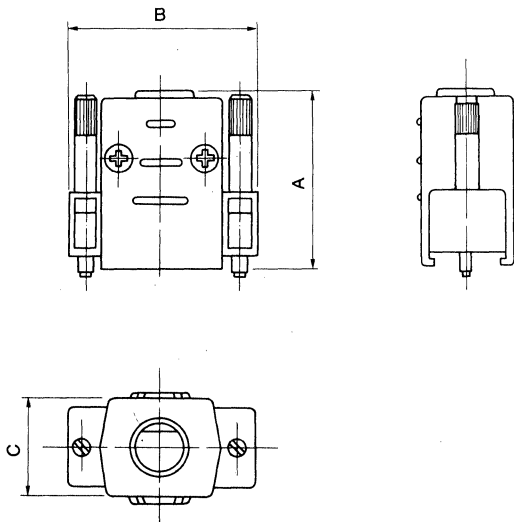
Screws to Join Covers - Zinc plated with yellow or black chromate (2 pieces)

Cable Clamp - Tin plate (1 piece)

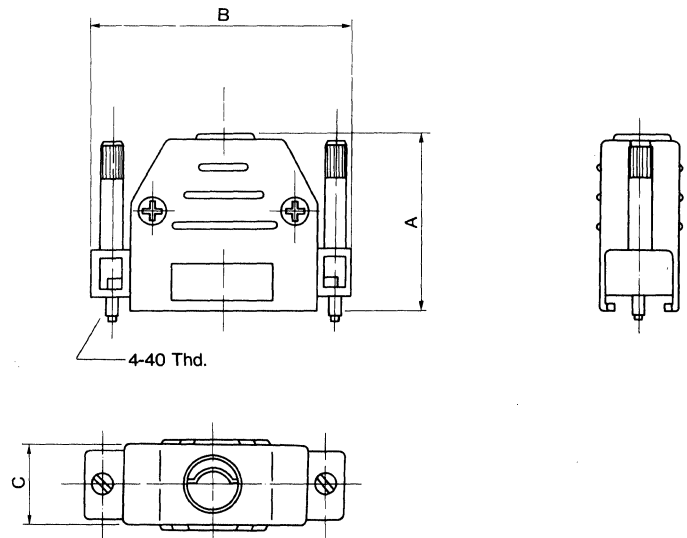
Screws for Clamp - Zinc plated with clear or black chromate (2 pieces)



9 Circuit(1)



15-50 Circuits (2-5)



Ordering Information

inch (mm)

Ckt. No. (Shell Size)	Mat'l Color	Order No.	Dim. A	Dim. B	Dim. C
9 (1)	Metallized	82007-0128	1.110	1.230	.610
	Black Plastic	82007-0129	(28.2)	(31.2)	(15.5)
15 (2)	Metallized	82007-0130	1.307	1.575	.606
	Black Plastic	82007-0131	(33.2)	(40.0)	(15.4)
25 (3)	Metallized	82007-0132	1.465	2.205	.606
	Black Plastic	82007-0133	(37.2)	(56.0)	(15.4)
37 (4)	Metallized	82007-0134	1.504	2.756	.606
	Black Plastic	82007-0135	(38.2)	(70.0)	(15.4)
50 (5)	Metallized	82007-0136	1.504	2.661	.724
	Black Plastic	82007-0137	(38.2)	(67.6)	(18.4)



Cable Backshells for Clip & Retainer Attachment

- With black thermoplastic or metallized covers
- Straight or 90° wire exit option for 15, 25, 37 and 50 circuits
- Alternative cable ports
- Hood can be used with female screw locks, locking clips or slide lock

Hood (Case and Cover): Black or metallized thermoplastic (2 pieces)

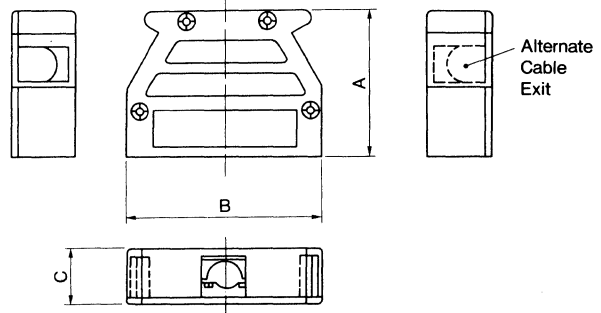
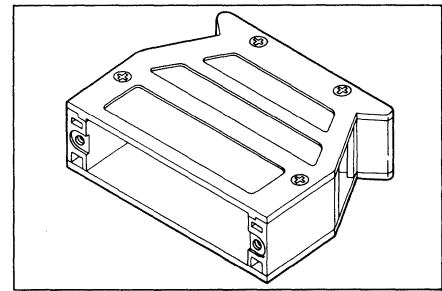
Screws to Join Cover - Zinc plated with clear or black chromate (4 pieces)/9 ckt. version (3 pieces)

Cable Clamp - Tin plated (1 piece)

Screws for Clamp - Zinc plated with clear chromate

Contents per set:

Mounting Screws - Bright tin or zinc plating with yellow chromate (2 pieces)



Ordering Information

inch(mm)

Ckt. No. (Shell Size)	Mat'l Color	Order No.	Dim. A	Dim. B	Dim. C
9(1)	Metallized	82007-0090	1.575 (40.0)	1.220 (31.0)	.630 (16.0)
	Black Plastic	82007-0091			
15(2)	Metallized	82007-0092	1.575 (40.0)	1.547 (39.3)	.630 (16.0)
	Black Plastic	82007-0093			
25(3)	Metallized	82007-0094	1.575 (40.0)	2.099 (53.2)	.630 (16.0)
	Black Plastic	82007-0095			
37(4)	Metallized	82007-0096	1.575 (40.0)	2.736 (69.5)	.630 (16.0)
	Black Plastic	82007-0097			
50(5)	Metallized	82007-0098	1.575 (40.0)	2.638 (67.0)	.709 (18.0)
	Black Plastic	82007-0099			

Clip and Retainer Accessories

- Clips use screws provided with cable backshell (above)

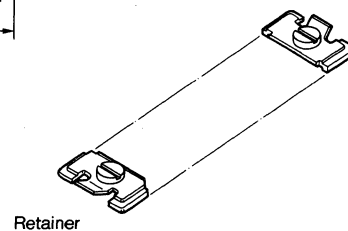
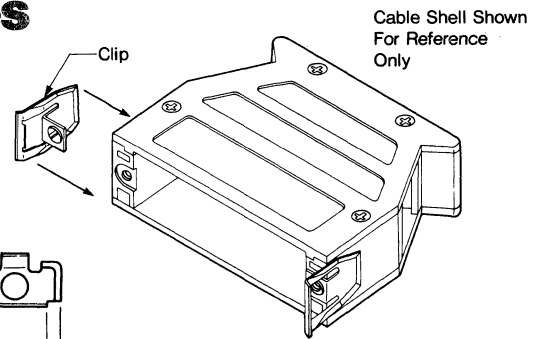
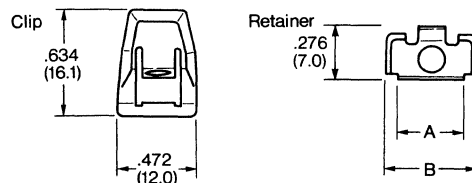
Contents per set:

Clip - Stainless steel (2 pieces)

Retainer - Tin or zinc with yellow chromate (2 pieces)

Screw - Tin zinc with yellow chromate (2 pieces)

Net - Tin or zinc with yellow chromate (2 pieces)



Ordering Information

inch(mm)

Ckt. No. (Shell Sizes)	Finish	Order No.	Dim. A	Dim. B
9-37(1-4)	Tin	82007-1034	.500 (12.7)	.571 (14.5)
	Zinc	82007-0034		
50(5)	Tin	82007-1033	.610 (15.5)	.689 (17.5)
	Zinc	82007-0033		

Clip or retainer can be ordered separately. Contact sales office for details.



Slide Latch Assembly

- For simple one-step latching
- Provided with self-tapping screws for use with cable clamps or with standard screws and washers

Contents per set:

Slide Latch - Stainless steel (1 piece)

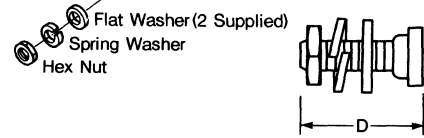
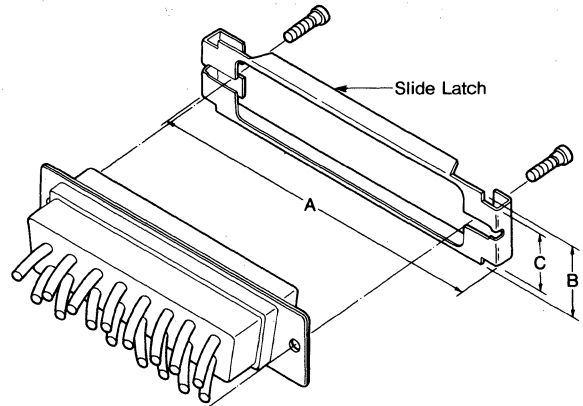
Slide Screw - Steel, zinc plating with yellow chromate (2 pieces)

Nut - Steel, or zinc plating with yellow chromate (2 pieces)

Flat Washer - Steel, or zinc plating with yellow chromate (4 pieces)

Spring Washer - Steel, or zinc plating with yellow chromate (2 pieces)

Self-Tapping Screw - Self-tapping screw kits come with two self-tapping steel screws in place of slide screw, nut, washer, spring washer



D1: Screw Assembly
D2: Self Tap Version
(Comes without Washer and Nut)
inch(mm)

Ordering Information

Ckt. No. (Shell Size)	Mounting Screw	Order No.	Dim. A	Dim. B	Dim. C	Dim. D1	Dim. D2
9 (1)	4-40	82007-0045	1.398 (35.5)	.492 (12.5)	.394 (10.0)	.354 (9.0)	.338 (8.6)
	Self Tap	82007-0046					
15 (2)	4-40	82007-0047	1.732 (44.0)	.492 (12.5)	.394 (10.0)	.354 (9.0)	.338 (8.6)
	Self Tap	82007-0048					
25 (3)	4-40	82007-0049	2.272 (57.7)	.492 (12.5)	.394 (10.0)	.354 (9.0)	.338 (8.6)
	Self Tap	82007-0050					
37 (4)	4-40	82007-0051	2.925 (74.3)	.492 (12.5)	.394 (10.0)	.354 (9.0)	.338 (8.6)
	Self Tap	82007-0052					
50 (5)	4-40	82007-0053	2.827 (71.8)	.598 (15.2)	.532 (13.5)	.354 (9.0)	.338 (8.6)
	Self Tap	82007-0054					

Locking Post Assembly

- To mate with slide latch

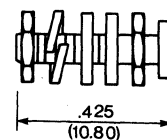
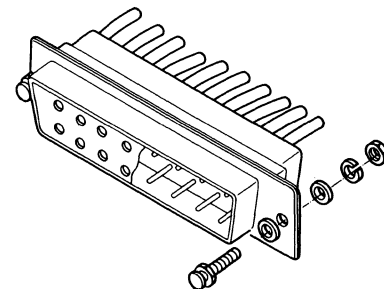
Contents per set:

Locking Post - Steel, bright tin or zinc plating with yellow chromate (2 pieces)

Nut - Steel, bright tin or zinc plating with yellow chromate (2 pieces)

Flat Washer - Steel, bright tin or zinc plating with yellow chromate (1 piece)

Spring Washer - Steel, bright tin or zinc plating with yellow chromate (2 pieces)



4-40 Locking Post Assembly

Ordering Information

inch(mm)

Finish	Order No.
Tin Plate	82007-1028
Zinc Plate, Yellow Chromate	82007-0028

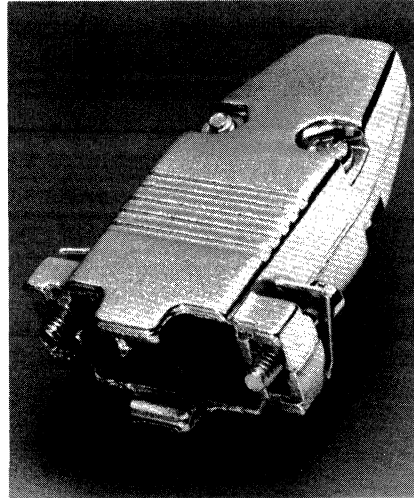


D-Subminiature Accessories

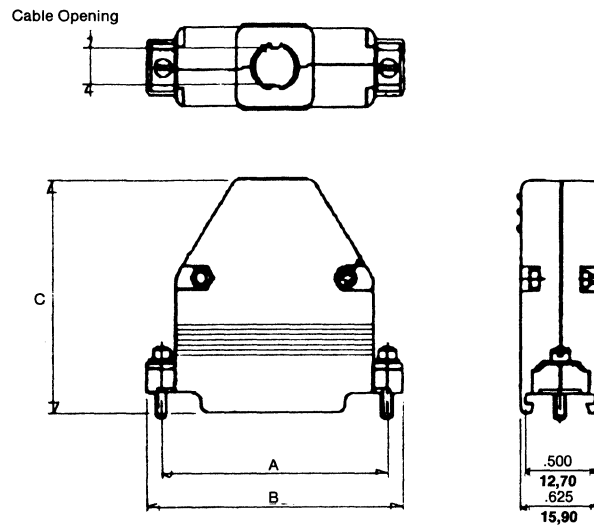


Die-Cast Shell

- 3 circuit sizes (9, 15, 25)
- 2 piece construction
- Sturdy zinc alloy shells
- Chromate plating
- 2 cable openings offered for each circuit size



Dimensions



Circuits	Dim. A	Dim. B	Dim. C
9	.984 25,0	1.220 31,0	1.937 49,2
15	1.311 33,3	1.559 39,6	2.905 48,4
25	1.850 47,0	2.125 54,0	1.929 49,0

Ordering Information

Circuits	Cable Opening	Order No.
9	.236 6,0	82007-0176
	.276 7,0	82007-0177
15	.236 6,0	82007-0178
	.315 8,0	82007-0179
25	.217 5,5	82007-0180
	.335 8,5	82007-0181

Contents per Set

Die Cast Shell	X 2
Hexagonal Nut	X 2
Saddle Washer	X 2
Cross Head Screw	X 2
Slotted Head Screw	X 2
Cable Ring Clamp	X 1

P

Female Screw Locks

□ Mate with male screw retainers

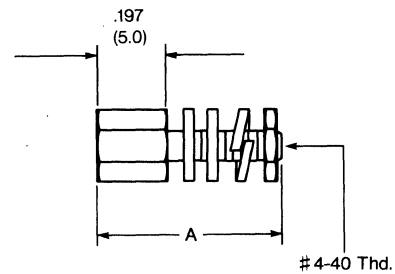
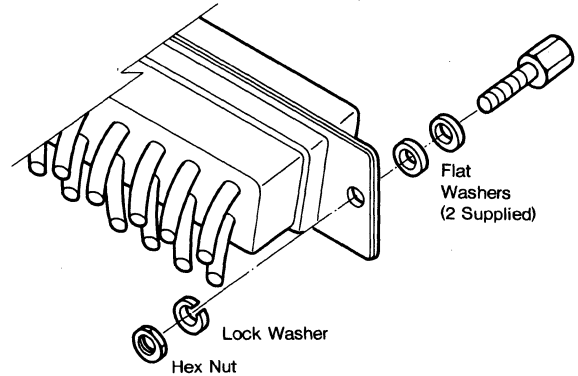
Contents Per Set:

Hexagonal Screw - Steel, bright tin or zinc plating with yellow chromate (2 pieces)

Nut - Steel, bright tin or zinc plating with yellow chromate (2 pieces)

Flat Washer - Steel, bright tin or zinc plating with yellow chromate (4 pieces)

Spring Washer - Steel, bright tin or zinc plating with yellow chromate (2 pieces)



Ordering Information

inch(mm)

Screw Length (A)	Finish	Order No.
.520 (13.2)	Bright Tin Yellow Chromate	82007-0023 82007-0025
.716 (18.2)	Bright Tin Yellow Chromate	82007-0024 82007-0026

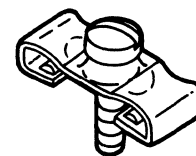
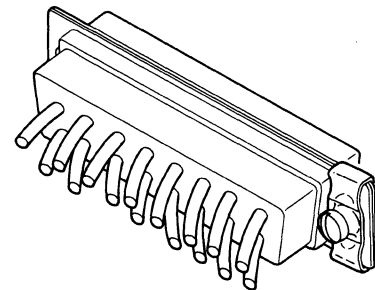
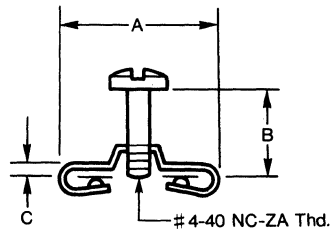
Male Screw & Clips

□ One set of two per connector

Contents Per Set:

Male Screw - Steel, bright tin or zinc plating with yellow chromate (2 pieces)

Clips - Steel, bright tin or zinc plating with yellow chromate (2 pieces)



Ordering Information

inch(mm)

Ckt. No. (Shell Size)	Mat'l Color	Order No.	Dim. A	Dim. B	Dim. C
9-37 (1-4)	Tin Plating	82007-1037	.551 (14.0)	.295 (7.5)	.035 (0.9)
	Yellow Chromate	82007-0037			
50(5)	Tin Plating	82007-1150	.650 (16.5)	.295 (7.5)	.035 (0.9)
	Yellow Chromate	82007-0150			

P

D-Subminiature Right Angle PCB Mount Receptacle, .318" Foot Print

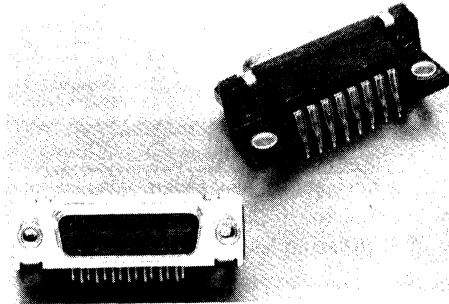


Introduction

Molex D-Subminiature R/A PCB mount receptacles are designed to mate with D-Subminiature plugs that conform to RS232, RS442 and RS449 standards.

The connectors are made of a high temperature plastic able to withstand harsh environments and various soldering techniques. They are UL recognized and CSA certified.

The terminals are offered with selective gold plating in the contact area. A variety of connector face and PCB mounting options are also available. These include a sturdy PCB eyelet that holds the connector in place and provides added stabilization before soldering.



Specifications 82008/82009 Connectors

Meets industry standard dimensional, mechanical, and electrical requirements specified in EIA Standards RS 232C, RS-442 and RS 449.

UL Recognized

Material:

Housing - Glass-filled PET, UL rated 94V-0, color: black

Terminal - Phosphor bronze

Plating - 50 microinches (1,27 microns) min. nickel overall, 150 microinches (3,81 microns) tin/lead selectively on solder tails, and gold selectively in contact area. See ordering information for various gold thickness options available

Metal Shell - Low carbon, aluminum killed steel; bright tin plate over copper underplate

Face Mounting Hardware - Steel; nickel plated

Mechanical:

Insertion Force - Max. insertion force of a .0410" (1,0414) dia. pin will be 12 oz. (340,5 gm)

Withdrawal Forces - Min. withdrawal force of a .0390" (0,9906) dia. pin will be 0.75 oz. (21,3gm)

Contact Retention - Contacts will withstand minimum 5 (lbf) (2,27 kg) force without backing out

Electrical:

Insulation Resistance - 20K megohms min. initial, 5K megohms min. final

Dielectric Withstanding Voltage - 1000 VAC RMS min., applied between adjacent terminals

Contact Resistance - 10 milliohms max. initial, dry circuit condition

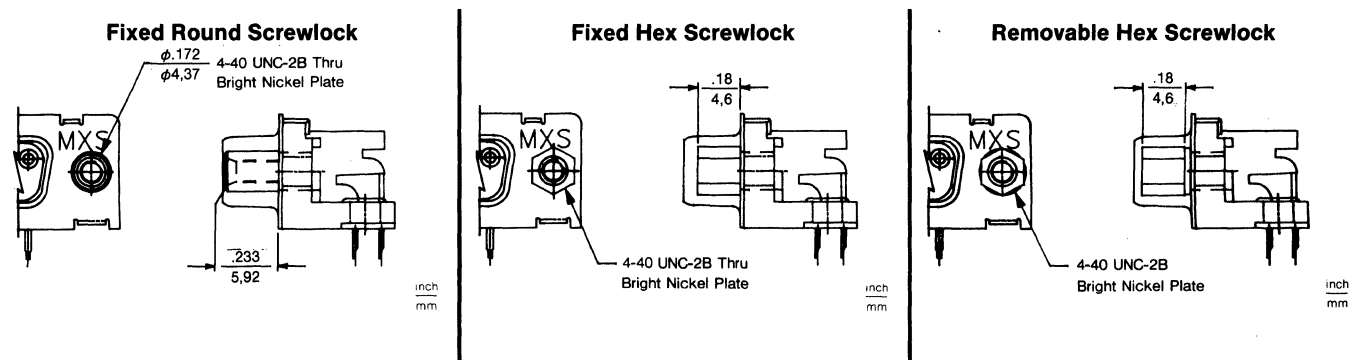
Rated Current - 5 amps max. (30°C max. temperature rise)

Capacitance - 2 picofarads max. between adjacent contacts

PCB Specifications

Recommended - PCB thickness .062 ± .008 (1,57 ± 0,20)

Mounting Hardware Dimensions

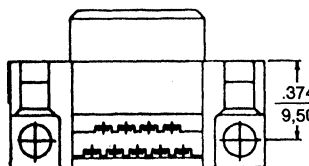
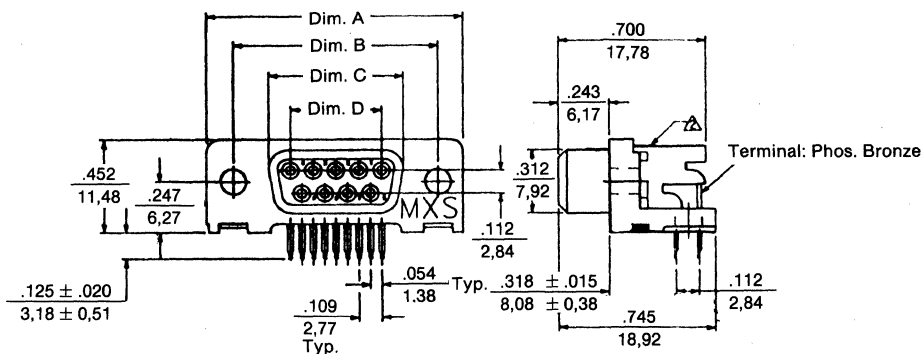
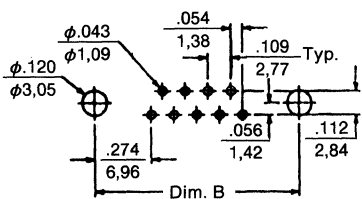
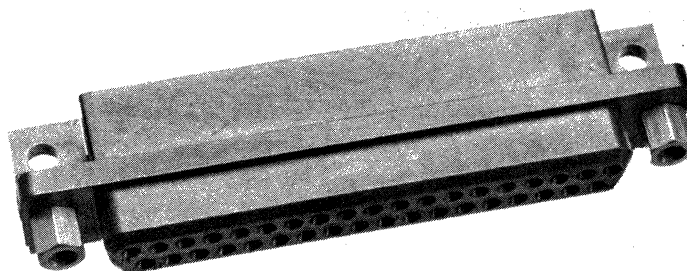


D-Subminiature Right Angle PCB Mount Receptacle, .318" Foot Print



82008 Series Plastic Housing

- 9, 15, 19, 25 and 37 positions
- Fully intermateable with industry standard D-Subminiature male headers
- Selective gold plating options
- .318" (8,08mm) Foot print



Dimensions (Dimensions A, B, C and D apply for both 82008 and 82009 Series)

No. Pos.	Dim. A	Dim. B	Dim. C	Dim. D
9	1.224 31,090	.984 24,990	.645 16,380	.436 11,070
15	1.552 39,420	1.312 33,320	.973 24,710	.763 19,380
19	1.764 44,810	1.525 38,740	1.184 30,070	.981 24,920
25	2.091 53,110	1.852 47,040	1.511 38,380	1.308 33,220
37	2.738 69,550	2.500 63,500	2.161 54,890	1.962 49,830

Ordering Information 82008, plastic housing

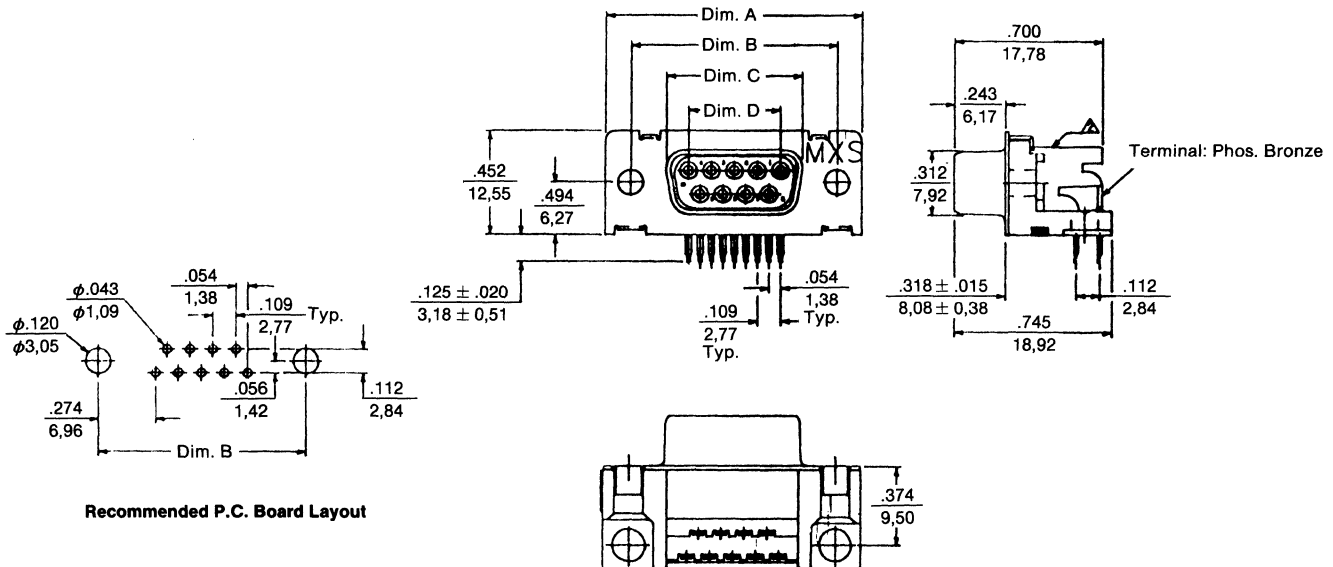
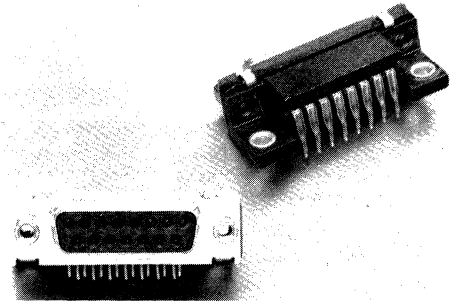
ORDER NUMBER FORMULA	
Circuit Size 0 = 9 positions 1 = 15 positions 2 = 19 positions 3 = 25 positions 4 = 37 positions	Face Mounting Hardware 0 = No Hardware 1 = Fixed Round Screwlock 2 = Flush Insert (Threaded) 3 = Fixed Hex Screwlock 4 = Removable Hex Screwlock

D-Subminiature Right Angle PCB Mount Receptacle, .318" Foot Print



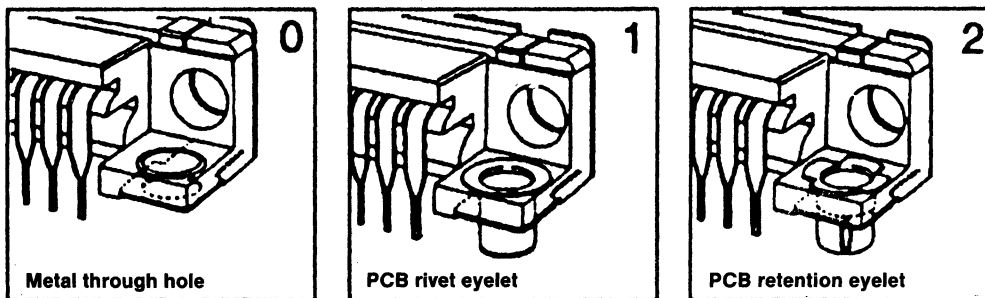
82009 Series Metal Shell

- 9, 15, 19, 25 and 37 positions
- Provides grounding with metal-shielded cables
- Fully intermateable with industry standard D-Subminiature male headers
- Selective gold plating options
- .318" (8,08mm) Foot print



Board Locking Feature

Board Mounting Hardware



Ordering Information 82009, Connector with metal shell

ORDER NUMBER FORMULA

Board Mounting Hardware

- 0 = Metal Through-Hole
- 1 = Rivet Eyelet
- 2 = Retention Eyelet (Round Board Lock)

Circuit Size

- 0 = 9 positions
- 1 = 15 positions
- 2 = 19 positions
- 3 = 25 positions
- 4 = 37 positions

Terminal Plating Code

- 4 = 30µin/.76µm gold min.
- 5 = 15µin/.38µm gold min.
- 6 = 4µin/.102µm min. gold flash

Face Mounting Hardware

- 0 = No Hardware
- 1 = Fixed Round Screwlock
- 2 = Flush Insert (Threaded)
- 3 = Fixed Hex Screwlock
- 4 = Removable Hex Screwlock

P

DS50™ D-Subminiature For .050" (1,27 mm) Center Ribbon Cable



Introduction

Molex DS50 D-Subminiature ribbon connector system utilizes cost-saving mass termination of insulation displacement technology, for harness production.

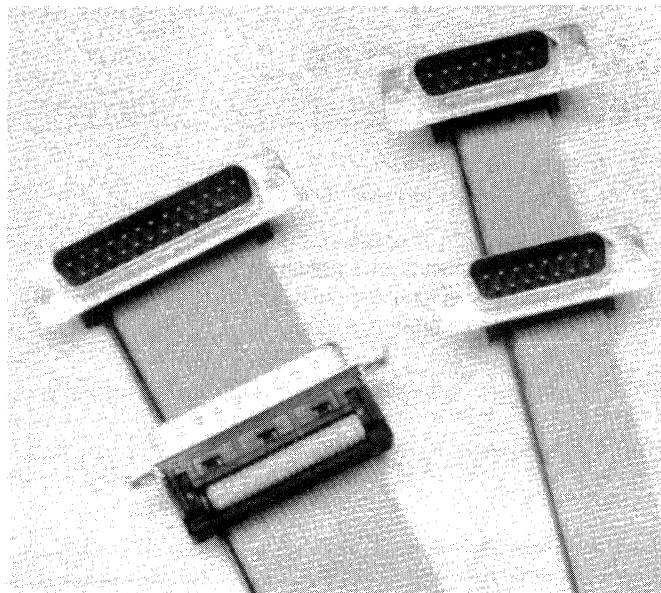
Available in 9-37 circuits, DS50 connectors accept standard AWG #28 stranded .050" (1,27mm) ribbon cables. The connectors are ideally suited for computer, peripherals, business machines and other applications. The DS50 system is designed to be intermateable with industry standard D-Subminiatures for input/output interconnect with minimal assembly and easy operator installation.

The DS50 connector system offers full plastic and metal shells for both plug and receptacle. The metal shell plug is optionally available with grounding indents to aid in EMI/RFI suppression.

The terminals are offered with various selective gold plating in the contact area and with the IDT area tin plated.

A strain relief is optionally included with the connector. Connectors without strain relief can also be ordered when the strain relief is not required.

Application Tooling available. See pages 17M and 27M, this catalog.



D-Subminiature Plug Metal Shell



71527 Series For .050" (1,27mm) Center Ribbon Cable

- Integral termination cap
- Selective gold plating on contacts
- 9, 15, 25 and 37 contact positions
- Plated steel shell
- Optional strain relief
- Mass termination via the insulation displacement method

Shell: Steel, tin-plated or zinc plated with yellow chromate finish

Contacts: Phosphor bronze selectively plated with gold in contact area and tin in insulation displacement area over nickel overall

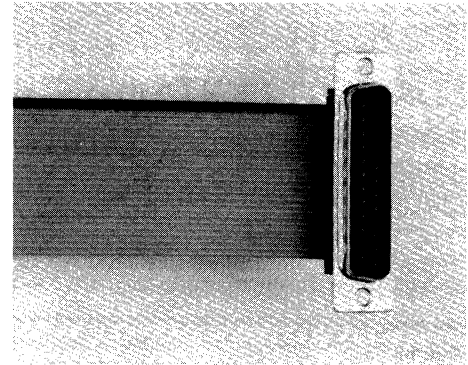
— **Electrical**

Current Rating: 1 Amp (28 AWG stranded)

Voltage Rating: 750 V ac

Insulation Resistance: > 1000 megohms

Contact Resistance: 15 milliohms max.



71527 Series Plug

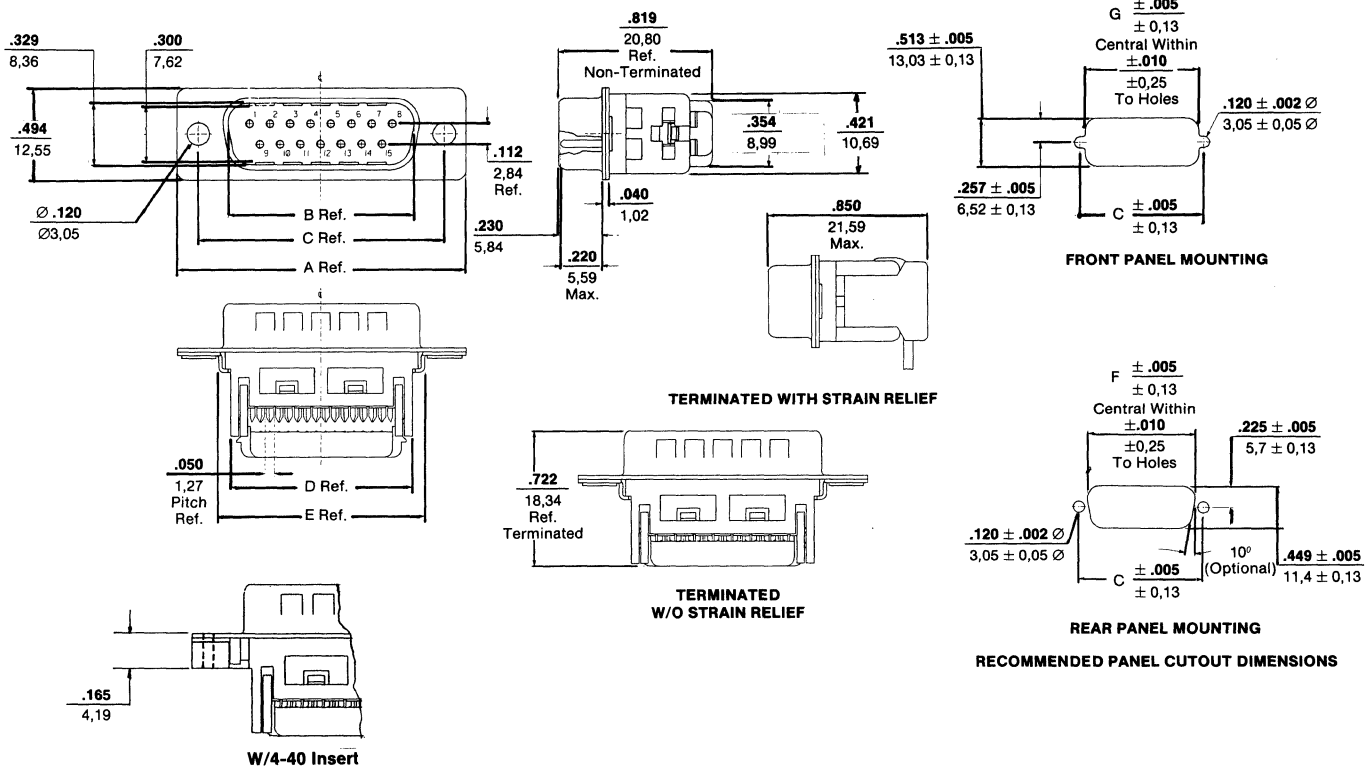
SPECIFICATIONS

— **Material**

Housing: Glass reinforced PBT, UL 94V-0, black color

BENEFITS

- No splicing or separation of ribbon cable necessary
- Available with grounding indents to aid in EMI/RFI suppression
- Designed for #28 AWG stranded wire
- Intermateable with industry standard D-Subminiatures
- Front or rear panel mounting for design flexibility
- Application tooling available. See pages 17M and 27M



Dimensions inches/mm

CIRCUITS	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E	DIM. F	DIM. G
9	1.212/30,80	.663/16,84	.984/24,99	.634/16,10	.758/19,25	.806/20,47	.874/22,20
15	1.539/39,10	.991/25,17	1.312/33,32	.945/24,00	1.093/27,76	1.134/28,80	1.202/30,53
25	2.090/53,09	1.534/38,96	1.852/47,04	1.502/38,14	1.624/41,24	1.674/42,52	1.743/44,27
37	2.732/69,40	2.183/55,45	2.500/63,50	2.150/54,80	2.278/57,86	2.326/59,08	2.391/60,73

STRAIN RELIEF ORDER NOS.	
CIRCUITS	ORDER NO.
9	71529-09
15	71529-15
25	71529-25
37	71529-37

Ordering Information

ORDER NUMBER FORMULA

71527- X X X X

- Shell Plating Face Mtg. Hole**
 - 0 = Tin Plated Through Hole
 - 1 = Tin Plated 4-40 Threaded Insert
 - 2 = Zinc Yellow Chromate Finish
 - 3 = Zinc Yellow Chromate Through Hole
- Contact Plating**
 - 0 = Gold Finish
 - 1 = 15µin./,76µm Au min.
 - 2 = 30µin./,38µm Au min.
- Strain Relief**
 - 0 = Without
 - 1 = With
- Circuit Size**
 - 1 = 9 Ckts.
 - 2 = 15 Ckts.
 - 3 = 25 Ckts.
 - 4 = 37 Ckts.



DS50™ D-Subminiature Receptacle Metal Shell



71528 Series Receptacle For .050" (1,27mm) Center Ribbon Cable

- Integral termination cap
- Selective gold plating on contacts
- 9, 15, 25 and 37 contact positions
- Plated steel shell
- Optional strain relief
- Mass termination via the insulation displacement method

Shell: Steel, tin-plated or zinc plated with yellow chromate finish

Contacts: Phosphor bronze selectively plated with gold in contact area and tin in insulation displacement area over nickel overall

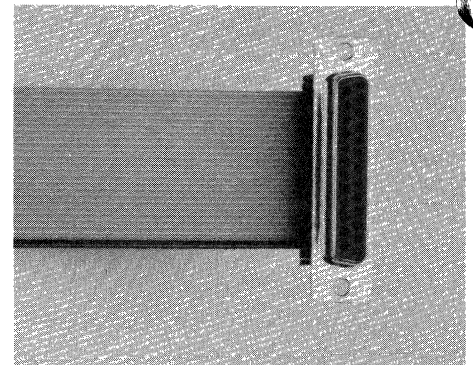
— Electrical

Current Rating: 1 Amp (28 AWG stranded)

Voltage Rating: 750 V ac

Insulation Resistance: > 1000 megohms

Contact Resistance: 15 milliohms max.



71528 Series Receptacle

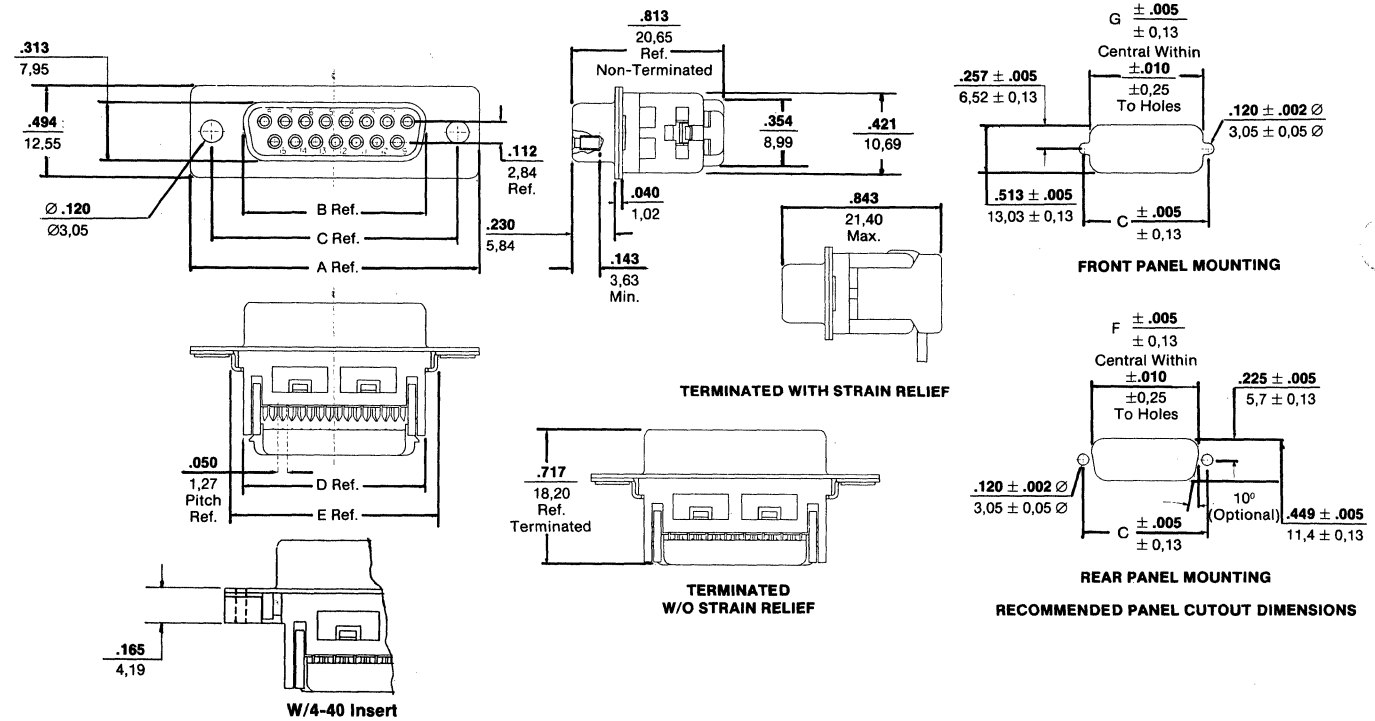
SPECIFICATIONS

— Material

Housing: Glass reinforced PBT, UL 94V-0, black color

BENEFITS

- No splicing or separation of ribbon cable necessary
- Designed for #28 AWG wires
- Application tooling available. See pages 17M and 27M
- Intermateable with industry standard D-Subminiatures
- Front or rear panel mounting for design flexibility



Dimensions

inches/mm

CIRCUITS	DIM. A	DIM. B.	DIM. C	DIM. D	DIM. E	DIM. F	DIM. G
9	1.212/30,80	.642/16,31	.984/24,99	.634/16,10	.758/19,25	.806/20,47	.874/22,20
15	1.539/39,10	.970/24,64	1.312/33,32	.945/24,00	1.093/27,76	1.134/28,80	1.202/30,53
25	2.090/53,09	1.511/38,38	1.852/47,04	1.502/38,14	1.624/41,24	1.674/42,52	1.743/44,27
37	2.732/69,40	2.159/54,84	2.500/63,50	2.150/54,60	2.278/57,86	2.326/59,08	2.391/60,73

STRAIN RELIEF ORDER NOS.	
CIRCUITS	ORDER NO.
9	71529-09
15	71529-15
25	71529-25
37	71529-37

Ordering Information

ORDER NUMBER FORMULA

Shell Plating Face Mtg. Hole

- 0 = Tin Plated Through Hole
- 1 = Tin Plated 4-40 Threaded Insert
- 2 = Zinc Yellow Chromate Finish 4-40 Threaded Insert
- 3 = Zinc Yellow Chromate Through Hole

Contact Plating

- 0 = Gold Flash
- 1 = 15µin./,76µm Au min.
- 2 = 30µin./,38µm Au min.

Strain Relief

- 0 = Without
- 1 = With

Circuit Size

- 1 = 9 Ckts.
- 2 = 15 Ckts.
- 3 = 25 Ckts.
- 4 = 37 Ckts.

71528- X X X X

DS50™ D-Subminiature Plug Plastic Shell



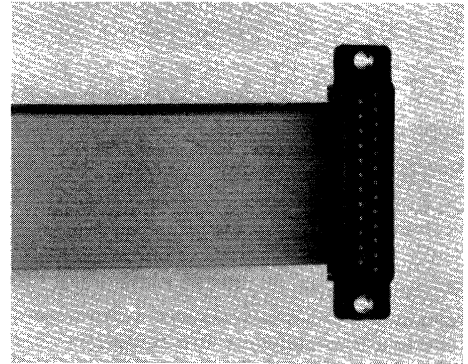
71530 Series Plug For .050" (1,27mm) Center Ribbon Cable

- Integral termination cap
- Selective gold plating on contacts
- 9, 15, 25 and 37 contact positions
- Optional strain relief
- Mass termination via the insulation displacement method

Contacts: Phosphor bronze selectively plated with gold in contact area and tin in insulation displacement area over nickel overall

— Electrical

Current Rating: 1 Amp (28 AWG stranded)
Voltage Rating: 750 V ac
Insulation Resistance: > 1000 megohms
Contact Resistance: 15 milliohms max.



71530 Series Plug

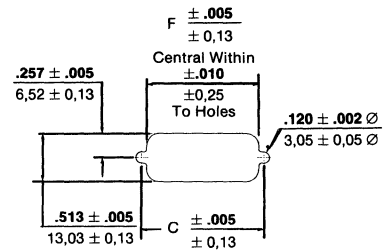
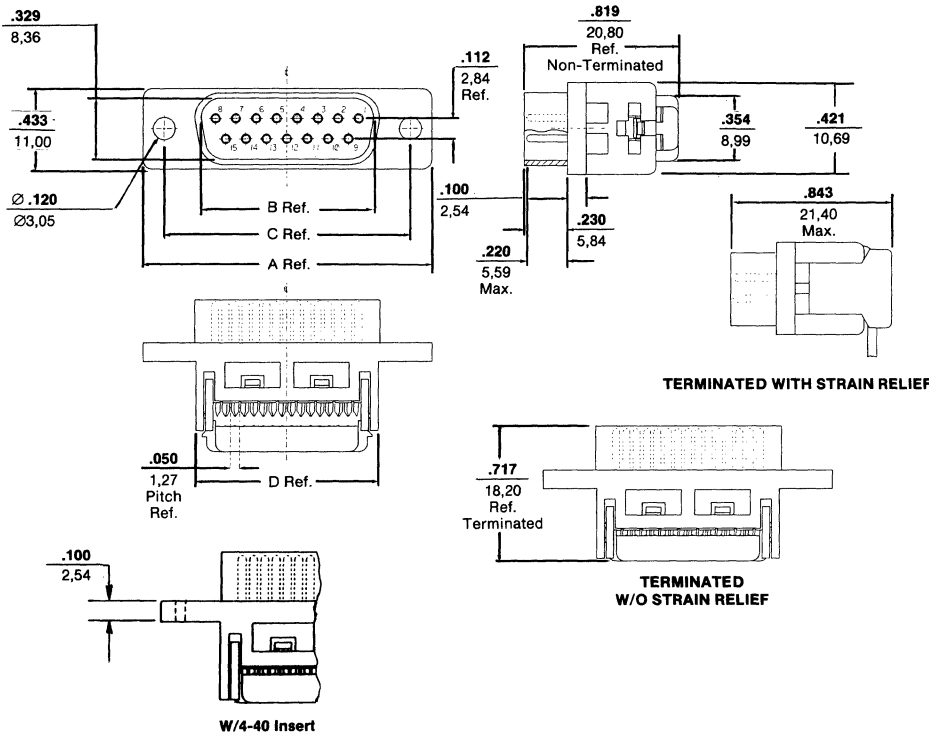
SPECIFICATIONS

— Material

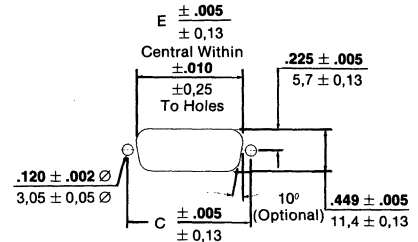
Housing: Glass reinforced PBT, UL 94V-0, black color

BENEFITS

- No splicing or separation of ribbon cable necessary
- Available with grounding indents to aid in EMI/RFI suppression
- Designed for #28 AWG stranded wire
- Intermateable with industry standard D-Subminiatures
- Front or rear panel mounting for design flexibility
- Application tooling available. See pages 17M and 27M



FRONT PANEL MOUNTING



REAR PANEL MOUNTING

RECOMMENDED PANEL CUTOUT DIMENSIONS

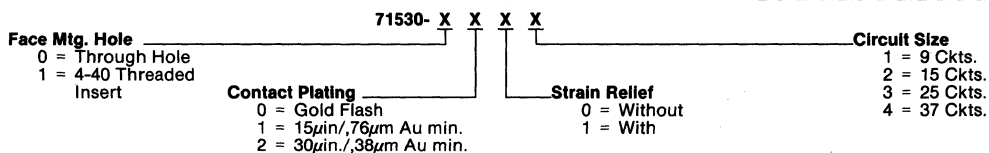
Dimensions inches/mm

CIRCUITS	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E	DIM. F
9	1.212/30,80	.666/16,92	.984/24,99	.634/16,10	.806/20,47	.874/22,20
15	1.539/39,10	.994/25,25	1.312/33,32	.945/24,00	1.134/28,80	1.202/30,53
25	2.090/53,09	1.534/38,96	1.852/47,04	1.502/38,14	1.674/42,52	1.743/44,27
37	2.732/69,40	2.183/55,45	2.500/63,50	2.150/54,60	2.326/59,08	2.391/60,73

STRAIN RELIEF ORDER NOS.	
CIRCUITS	ORDER NO.
9	71529-09
15	71529-15
25	71529-25
37	71529-37

Ordering Information

ORDER NUMBER FORMULA



DS50™ D-Subminiature Receptacle Plastic Shell



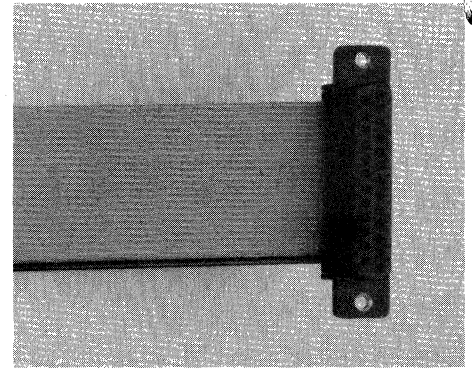
71531 Series Receptacle For .050" (1,27mm) Center Ribbon Cable

- Integral termination cap
- Selective gold plating on contacts
- 9, 15, 25 and 37 contact positions
- Optional strain relief
- Mass termination via the insulation displacement method

Contacts: Phosphor bronze selectively plated with gold in contact area and tin in insulation displacement area over nickel overall

Electrical

Current Rating: 1 Amp (28 AWG stranded)
Voltage Rating: 750 V ac
Insulation Resistance: > 1000 megohms
Contact Resistance: 15 milliohms max.



71531 Series Receptacle

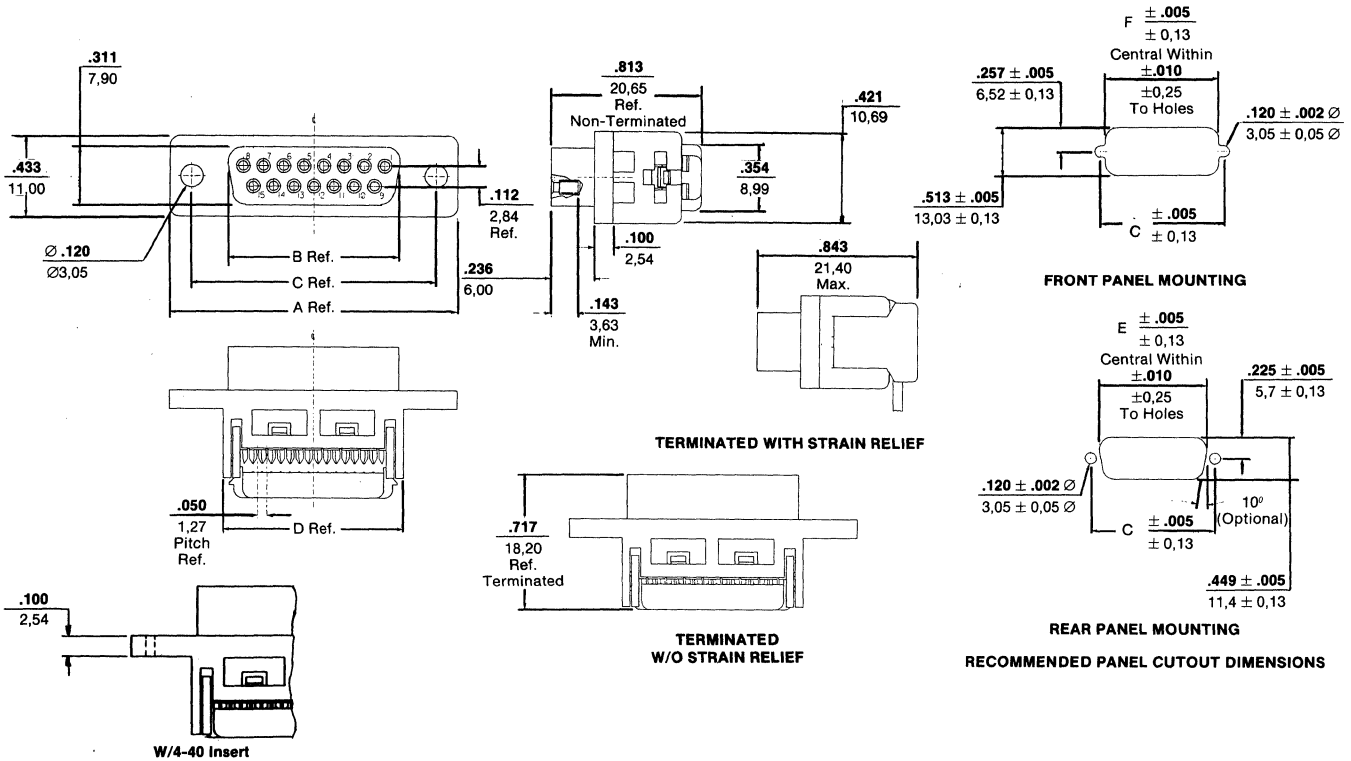
SPECIFICATIONS

Material

Housing: Glass reinforced PBT, UL 94V-0, black color

BENEFITS

- No splicing or separation of ribbon cable necessary
- Available with grounding indents to aid in EMI/RFI suppression
- Designed for #28 AWG stranded wire
- Intermateable with industry standard D-Subminiatures
- Front or rear panel mounting for design flexibility
- Application tooling available. See pages 17M and 27M



Dimensions inches/mm

CIRCUITS	DIM. A	DIM. B.	DIM. C	DIM. D	DIM. E	DIM. F
9	1.212/30,80	.643/16,33	.984/24,99	.634/16,10	.806/20,47	.874/22,20
15	1.539/39,10	.971/24,66	1.312/33,32	.945/24,00	1.134/28,80	1.202/30,53
25	2.090/53,09	1.511/38,38	1.852/47,04	1.502/38,14	1.674/42,52	1.743/44,27
37	2.732/69,40	2.159/54,84	2.500/63,50	2.150/54,60	2.326/59,08	2.391/60,73

STRAIN RELIEF ORDER NOS.	
CIRCUITS	ORDER NO.
9	71529-09
15	71529-15
25	71529-25
37	71529-37

Ordering Information

ORDER NUMBER FORMULA

71531- X X X X

Face Mtg. Hole
 0 = Through Hole
 1 = 4-40 Threaded Insert

Contact Plating
 0 = Gold Flash
 1 = 15µin./,76µm Au min.
 2 = 30µin./,38µm Au min.

Strain Relief
 0 = Without
 1 = With

Circuit Size
 1 = 9 Ckts.
 2 = 15 Ckts.
 3 = 25 Ckts.
 4 = 37 Ckts.

Environmental Connectors



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Affordable Backshells for MIL Spec Connectors 6Q-9Q

ADVANTAGE™

High Performance Control Connectors 9Q

SPIRIT™

Modular Environmental Connector System 10Q-26Q

Molex Industrial Interfaces, Inc. Electrical Distributors 27Q



industrial interfaces, inc.
affordable connectors for rugged environments

1325 Paramount Parkway Batavia, Illinois 60510 (312) 879-6262 FAX (312) 879-6019

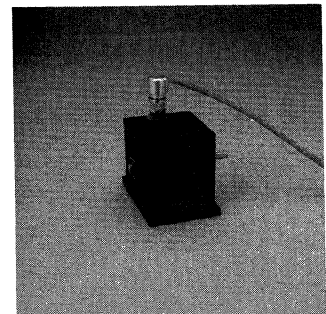
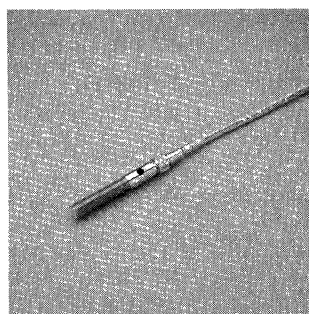
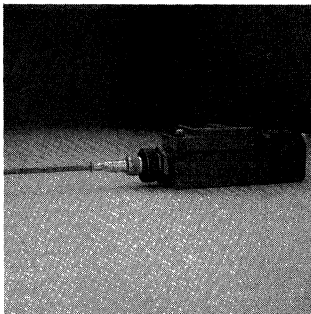
MICRO-C *Miniature Connectors for Rugged Environments*



MICRO-C prewired miniature connectors are intended for signal circuits in sensing, monitoring, switching and control applications. They are suitable for applications in the industrial, medical and scientific markets where high reliability, ruggedness and environmental sealing are required.

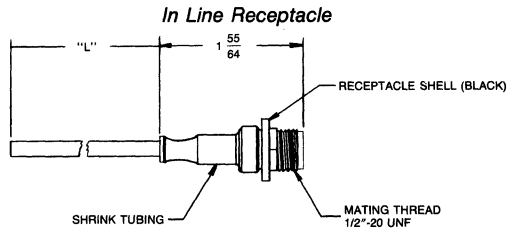
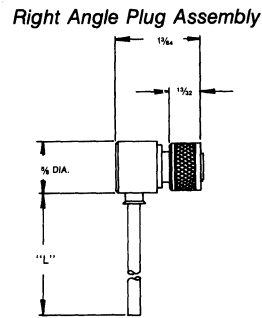
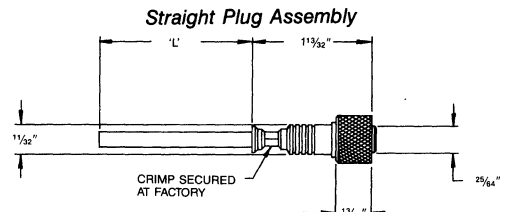
MICRO-C connectors are intermateable with other miniature connectors that conform to US and International configuration standards, but are uniquely constructed to offer increased benefits to the user. The all mechanical securement of the connector head eliminates the reliability and long delivery problems of molded-on connector heads found on competitive designs.

THE MICRO-C IS ENGINEERED FOR DELIVERY



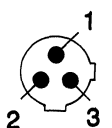
MICRO-C Plugs and Receptacle Cables

THREE CONDUCTOR						
				SOCKET FACE	KEY FACE	PIN FACE
				US KEY STANDARD		
STYLE				STRAIGHT PLUG	RIGHT ANGLE PLUG	IN-LINE RECEPTACLE
WIRE GAGE	JACKET MATERIAL /COLOR	COLOR CODE	LENGTH	CATALOG NUMBERS		
#22	PVC Grey with Braid	1-Green 2-R/BK 3-R/WH	3 FT	08001M04	08001K04	08001Y04
			6 FT	08002M04	08002K04	08002Y04
			9 FT	08003M04	08003K04	08003Y04
			12 FT	08004M04	08004K04	08004Y04
			20 FT	08005M04	08005K04	08005Y04
#18	PVC Yellow with Braid	1-Green 2-R/BK 3-R/WH	3 FT	08071M04	08071K04	08071Y04
			6 FT	08072M04	08072K04	08072Y04
			9 FT	08073M04	08073K04	08073Y04
			12 FT	08074M04	08074K04	08074Y04
			20 FT	08075M04	08075K04	08075Y04
#22	PUR Grey Without Braid	1-Green 2-Black 3-Brown	3 FT	08051M04	08051K04	08051Y04
			6 FT	08052M04	08052K04	08052Y04
			9 FT	08053M04	08053K04	08053Y04
			12 FT	08054M04	08054K04	08054Y04
			20 FT	08055M04	08055K04	08055Y04



FOUR CONDUCTOR									
				SOCKET FACE	KEY FACE	PIN FACE	SOCKET FACE	KEY FACE	PIN FACE
				DIN AC KEY STANDARD			DIN DC KEY STANDARD		
STYLE				STRAIGHT PLUG	RIGHT ANGLE PLUG	IN-LINE RECEPTACLE	STRAIGHT PLUG	RIGHT ANGLE PLUG	IN-LINE RECEPTACLE
WIRE GAGE	JACKET MATERIAL /COLOR	COLOR CODE	LENGTH	CATALOG NUMBERS					
#18	PVC YELLOW without Braid	1-Brown 2-White 3-Blue 4-Black	3 FT	08441M14	08441K14	08441Y14	08441M24	08441K24	08441Y24
			6 FT	08442M14	08442K14	08442Y14	08442M24	08442K24	08442Y24
			9 FT	08443M14	08443K14	08443Y14	08443M24	08443K24	08443Y24
			12 FT	08444M14	08444K14	08444Y14	08444M24	08444K24	08444Y24
			20 FT	08445M14	08445K14	08445Y14	08445M24	08445K24	08445Y24
#22	PUR Grey with Braid	1-Brown 2-White 3-Blue 4-Black	3 FT	08451M14	08451K14	08451Y14	08451M24	08451K24	08451Y24
			6 FT	08452M14	08452K14	08452Y14	08452M24	08452K24	08452Y24
			9 FT	08453M14	08453K14	08453Y14	08453M24	08453K24	08453Y24
			12 FT	08454M14	08454K14	08454Y14	08454M24	08454K24	08454Y24
			20 FT	08455M14	08455K14	08455Y14	08455M24	08455K24	08455Y24

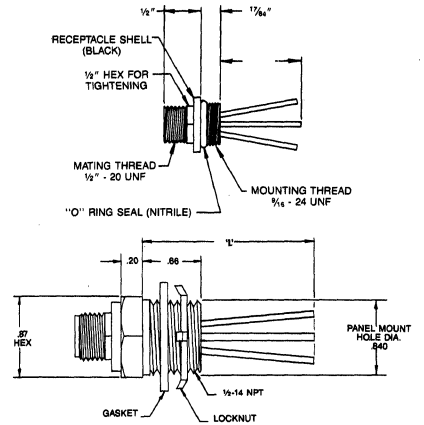
MICRO-C Receptacles THREE CONDUCTOR



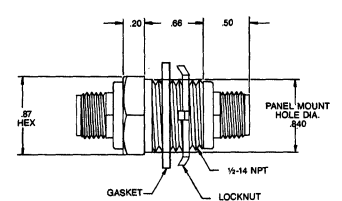
				US KEY STANDARD			
				STYLE	1/4 INCH PIPE	1/2 INCH PIPE	DOUBLE ENDED
				HOUSING COLOR	GREY	GREY	BLACK
WIRE GAGE	INSUL. MATERIAL	COLOR CODE	LENGTH	CATALOG NUMBERS			
#22	PVC	1-Green	4 IN	08121M01	08131M01	08811M01	
		2-R/BK	1 FT	08122M01	08132M01		
		3-R/WH	--				

- NOTES:
1. ALL RECEPTACLE MOUNTS COME WITH SEALS AND MOUNTING NUTS.
 2. ALL CABLES HAVE PVC INSULATION OVER CONDUCTORS UNDER THE JACKET SPECIFIED.
 3. ABBREVIATIONS: PVC IS POLYVINYL CHLORIDE
PUR IS POLYURETHANE
 4. PUR PROVIDES ENHANCED PERFORMANCE IN PRESENCE OF HONING OILS.
 5. ALL BRAIDED CABLE IS 65% TINNED BRAID.
 6. ALL CONDUCTORS ARE STRANDED #36 AWG WIRE FOR SUPERIOR FLEX.

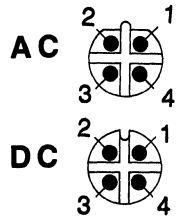
Stationary Receptacle Assembly



Double Ended Receptacle



AC FOUR CONDUCTOR

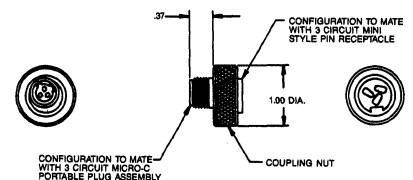


				DIN AC KEY STANDARD			DIN DC KEY STANDARD			
				STYLE	1/4 INCH PIPE	1/2 INCH PIPE	DOUBLE ENDED	1/4 INCH PIPE	1/2 INCH PIPE	DOUBLE ENDED
				HOUSING COLOR	BLACK	BLACK	BLACK	GREY	GREY	GREY
WIRE GAGE	INSUL. MATERIAL	COLOR CODE	LENGTH	CATALOG NUMBERS						
#22	PVC	1-Brown	4 IN	08521M11	08531M11	08812M11		08521M21	08531M21	08812M21
		2-White	1 FT	08522M11	08532M11			08522M21	08532M21	
		3-Blue								
4-Black										

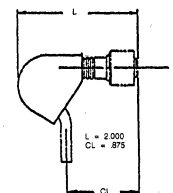
ACCESSORIES

CATALOG NUMBER	DESCRIPTION
08820M01	MICRO-C to Mini Type Adapter (3 Circuit, US Key). Allows the use of a MICRO-C Plus with an old style Mini Type Pin Receptacle.
08855M01	90 Degree Strain Relief Adapter for Straight Cable Plugs Provides Positive 90 Degree Bends at any Clocking Position

Micro to Mini Adapter



90° Strain Relief Adapter



MICRO-C

DESIGN FEATURES

- High strength cable crimp survives 35-60 pounds pull out force. Eliminates failure problems found in "flexible" molded-on connector heads.
- Epoxy sealed receptacle shells for positive reliability
- 6P rating allows mated pair to be used under 6 feet of water
- All metal plug shell construction offers extreme ruggedness
- Ground circuit mates before other terminals
- Compatible with European DIN standard Prox switches
- Fast mount hex driven stationary receptacles — no special span wrench required.
- Terminals are supported by elastomer dielectric to resist deformation and shock

SPECIALS ARE EASY TOO — INCLUDING:

- Gold plated terminals
- Custom cable or cable lengths
- Custom color codes
- Double ended plug cables
- Customer components may be assembled to the harness

SEVERAL CONSTRUCTION VARIATIONS ARE OFFERED AS STANDARD OFF-THE-SHELF ASSEMBLIES:

- 3 and 4 circuit inserts
- US and International keying, both AC and DC
- #18 and #22 AWG cables
- Standard cable lengths of 3,6,9,12 and 20 feet
- Braided and non-braided cables
- Polyvinyl and Polyurethane jackets
- Straight and Right Angle Plugs
- 1/4" and 1/2" pipe mount receptacles
- In-line cable receptacles
- Accessories include

MICRO-C to mini style adapters

Double ended receptacles

Angle boot adapters for straight plugs

CHALLENGE OUR ENGINEERS WITH YOUR OEM APPLICATION!

MICRO-C Connector Specifications

1.0 RECOGNIZED AGENCY APPROVALS:

MICRO-C SERIES connectors are recognized under the Underwriters Laboratories Component Recognition Program. File E81982(N)

2.0 MECHANICAL SPECIFICATIONS:

2.1 Receptacle Body: UL recognized high impact glass filled polyester. Rated tensile strength of 30,000 PSI. Heat deflection temperature exceeds 220 degrees centigrade. Excellent chemical resistance to gasoline, motor oil, transmission fluid, hydrocarbons and organic solvents. Good resistance to ketones, esters and mild acids at lower temperature. Hardness is 100M.

2.2 Insert Material: UL recognized plastic elastomer. Excellent performance compared to thermoplastic/rubber blends. Exceptional chemical resistance, electrical support and seal capability.

2.3 Plug Shell and Coupling Nut: Brass alloy with zinc/chromate protective finish.

2.4 Terminals: Copper alloy, tin plated made from solid bar stock.

2.5 Receptacle Seal: Nitrite "O" ring.

2.6 Cable (Plug): Available in polyvinyl chloride (PVC) or polyurethane (PUR) jacket. Some cable types have overall braid for additional strength.

2.7 Leads (Receptacle): Stranded and tinned #22 AWG wire .009 thick PVC insulation.

2.8 Spacings: Minimum spacing between terminals or between terminals and dead metal parts is 3/64" per UL 498; 250 volt rating.

2.9 Cable Strain Relief: 35 pound minimum per UL STD 514.

3.0 ELECTRICAL SPECIFICATIONS

3.1 Voltage: 250 V AC/DC Connector rating

300 V AC/DC Cable rating

3.2 Current: Central Guidelines. (consult factory if your application exceeds these values)

Wire Size	Circuits	
	2,3	4
#18 AWG	9 AMPS	7 AMPS
#22 AWG	5 AMPS	4 AMPS

3.3 Dielectric Strength:

The Connector can withstand 1000 VRMS plus twice the rating for 1 minute applied between adjacent terminals and between terminals and the shell (per UL STD 498).

3.4 Insulation Resistance: At room temperature (25 degrees C) and 40-60% relative humidity, a minimum of 5000 megohms between terminals or terminals and ground is typical.

4.0 ENVIRONMENTAL SPECIFICATIONS:

4.1 Temperature Rating: -40 degrees C to +90 degrees C (-40 degrees F to +194 degrees F).

4.2 Rainproof: Meets rainproof requirements of UL rain test as specified in UL STD 514.

4.3 Corrosion: Zinc/Chromate finish provides 48 hour salt spray protection per MIL-STD 202 Method 101.

4.4 Vibration: Complies with MIL STD 202F, test method 204, test condition B.

MIL-C

Affordable Backshells for MIL Spec Connectors



Industrial Interfaces has developed the MIL-C series of cylindrical backshells to meet the rugged applications of the industrial environment. The backshells are intended for use on several different types of MIL Spec connectors as well as popular commercial cylindrical connectors manufactured by Amphenol, AMP, Cannon and Others.

In the industrial environment, the conventional backshells have presented performance problems when applied to cable in the areas of seal and strain relief. The Industrial Interfaces' MIL-C backshell series offers an affordable upgrade to improve the biggest single failure mode. In addition, backshells which interface directly to liquid tight conduit with no additional parts or fittings, are available.

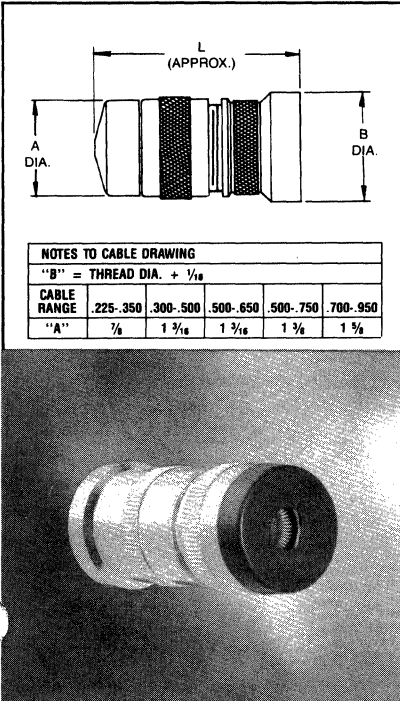
Best of all, MIL-C backshells are designed for delivery. Days rather than months separate you from the exact parts you need.

MIL-C BACKSHELL FEATURES AND BENEFITS

- **STOCK AVAILABILITY** modular design allows all ranges, all sizes, to always be in stock.
- **COMPETITIVE PRICES** modular design permits larger production runs with lower costs.
- **IMPROVED LEVELS OF PERFORMANCE** positive seals, greater strain relief, larger cable ranges
- **TWO CORROSION PROTECTION LEVELS** available in 48 or 500 hour salt spray rating finishes
- **ONE STOP SHOPPING** everything required for installation is included. Additional fittings or adapters are not required.

MIL-C Cable Backshells

MIL-C Cable Backshells achieve extraordinary sealing and strain relief through the independent action of expandable elastomer and spring pressure loading. The stainless steel strain relief spring closes around the cable as the compression nut is threaded downward. High but controlled pressure is applied to the cable yielding superior holding power without damage to the cable.



CABLE BACKSHELLS							L DIMEN. APPROX.
THREAD SIZE	CATALOG NO.	CABLE RANGE	CATALOG NO.	CABLE RANGE	CATALOG NO.	CABLE RANGE	(IN)
5/8-24 UNEF	70010M04	.225-.350					2
1 1/8-24 UNEF	70011M04	.225-.350					2
3/4-20 UNEF	70012M04	.225-.350					2
1 3/8-20 UNEF	70013M04	.225-.350					2
7/8-20 UNEF	70014M04	.225-.350					2 1/4
1 5/8-20 UNEF	70015M04	.225-.350					2
1-20 UNEF	70016M04	.300-.500	70116M04	.500-.650			2 3/8
1 1/8-18 UNEF	70017M04	.300-.500	70117M04	.500-.650			2 3/8
1 1/4-18 UNEF	70018M04	.300-.500	70118M04	.500-.650			2 3/8
1 3/8-18 UNEF	70019M04	.300-.500	70119M04	.500-.650			2 3/8
1 1/2-18 UNEF	70020M04	.300-.500	70120M04	.500-.650			2 3/8
1 5/8-18 UNEF	70021M04	.300-.500	70121M04	.500-.750	70221M04	.700-.950	2 3/8
1 3/4-18 UNEF	70022M04	.300-.500	70122M04	.500-.750	70222M04	.700-.950	2 3/8
1 7/8-18 UNEF	70223M04	.300-.500	70023M04	.500-.750	70123M04	.700-.950	2 3/8
1 1/2-18 UNEF	70224M04	.300-.500	70024M04	.500-.750	70124M04	.700-.950	2 3/8
1 5/8-18 UNEF	70226M04	.300-.500	70026M04	.500-.750	70126M04	.700-.950	3
1 3/4-18 UNS	70128M04	.300-.500	70028M04	.500-.750	70228M04	.700-.950	3 1/2

All of the catalog numbers listed are available off-the-shelf in all ranges and sizes. In addition, several other ranges and sizes can be made on special order with only a few weeks lead time for smaller quantities. Consult factory with your specific requirement.

Selection Chart

(See Selection Chart Definition on back page)

MIL CONNECTOR DESIGNATION

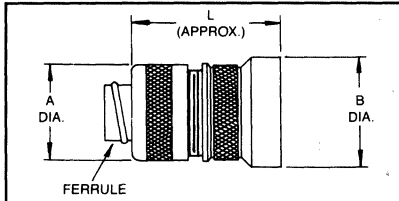
5015-C	5015-SE	5015-A-A	5015-A-E	5015-B	5015-C-A	5015-C-E	26482-1A	26482-1B	26482-2	38999-1	38999-2	83723-1	83723-2
10,10S,10SL	10SL,12,12S	10SL	10SL	10SL,12,12S		12,12S		8	10,10S,10SL			10,10S,10SL	12,12S
		12,12S	12,12S		12,12S		12			13	12		
12,12S	14,14S	14,14S	14,14S	14,14S	14,14S	14,14S		10	12,12S			12,12S	14,14S
							14			15	14		
14,14S	16,16S	16,16S	16,16S	16,16S	16,16S	16,16S		12	14,14S				16,16S
							16			17	16		
16,16S	18	18	18	18	18	18		14	16,16S			16,16S	18
18							18		18	19	18	18	
		20		20	20	20		16					20
20	20,22						20		20	21	20	20	
		22	22	22	22	22		18					22
22							22		22	23	22	22	
		24	24	24	24	24		20					24
24	24,28						24		24	25	24	24	
								22					
		28	28	28	28	28		24					28
28	32												

All reference shell designations are for preliminary reference only. To insure thread conformance, always measure thread of front shell whenever possible. The many variation differences between manufactures and the multitude of backshell adapters or endbells involved, especially on 5015 commercial types, may not always be reflected in these summary charts. Consult factory if you are in doubt as to the proper backshell to use.

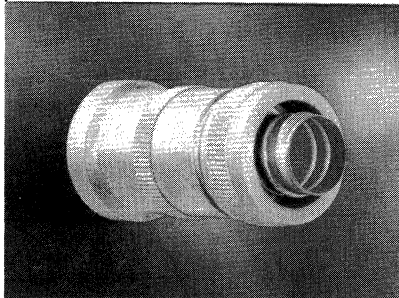


MIL-C Liquid-Tight Conduit Backshells

MIL-C Liquid-Tight Conduit Backshells will accept direct attachment of various types of liquid-tight conduit. Acceptable conduit types include ALT, AT, CSA, EF, EFL, HC, HEX, LA, LOR, LT, OR, UXTL & UA.



NOTES TO LT DRAWING			
"B" =	THREAD DIA.	+	1/16
SIZE	3/8	1/2	3/4
"A"	1 3/16	1 3/8	1 1/2



LIQUID-TIGHT CONDUIT BACKSHELLS

THREAD SIZE	CATALOG NO.	SIZE	CATALOG NO.	SIZE	CATALOG NO.	SIZE	L DIMEN. APPROX. (IN)
1-20 UNEF	71016M04	3/8 LT	71116M04	1/2 LT			1 7/8
1 1/8-18 UNEF	71017M04	3/8 LT	71117M04	1/2 LT			1 7/8
1 1/8-18 UNEF	71018M04	3/8 LT	71118M04	1/2 LT			1 7/8
1 1/8-18 UNEF	71019M04	3/8 LT	71119M04	1/2 LT			1 7/8
1 1/4-18 UNEF	71120M04	3/8 LT	71020M04	1/2 LT	71220M04	3/4 LT	1 7/8
1 1/4-18 UNEF	71221M04	3/8 LT	71021M04	1/2 LT	71121M04	3/4 LT	1 7/8
1 3/8-18 UNEF	71222M04	3/8 LT	71022M04	1/2 LT	71122M04	3/4 LT	1 7/8
1 7/16-18 UNEF	71223M04	3/8 LT	71023M04	1/2 LT	71123M04	3/4 LT	1 7/8
1 1/2-18 UNEF	71224M04	3/8 LT	71024M04	1/2 LT	71124M04	3/4 LT	1 7/8
1 5/8-18 UNEF	71226M04	3/8 LT	71026M04	1/2 LT	71126M04	3/4 LT	2 1/8
1 3/4-18 UNS	71228M04	3/8 LT	71028M04	1/2 LT	71128M04	3/4 LT	2 5/8

Liquid tight conduit backshells are also available for other types of non-metallic conduit including CN-P, LMN-P, POLYTUFF II, and XTRA FLEX TYPE 1. Consult factory with your application.

Selection Chart

(See Selection Chart Definition on back page)

MIL CONNECTOR DESIGNATION

5015-C	5015-SE	5015-A-A	5015-A-E	5015-B	5015-C-A	5015-C-E	26482-1A	26482-1B	26482-2	38999-1	38999-2	83723-1	83723-2
16,16S	18	18	18	18	18	18		14	16,16S			16,16S	18
18							18		18	19	18	18	
		20		20	20	20		16					20
20	20,22						20		20	21	20	20	
		22	22	22	22	22		18					22
22							22		22	23	22	22	
		24	24	24	24	24		20					24
24	24,28						24		24	25	24	24	
								22					
		28	28	28	28	28		24					28
28	32											28	

The catalog numbers above indicate a clear chromate over nickel plating system rated at a 48 hour salt spray. Other finishes are available with a few weeks lead time:

SUFFIX	DESCRIPTION	SALT SPRAY RATING
MO0	Raw Brass	—
MO2	Olive Drab Cadmium over Nickel	500 HR
MO3	Clear Nickel	500 HR
MO4	Clear Chromate over Zinc	48 HR
MO6	Olive Drab Cadmium over Zinc	48 HR

MIL-C Connector Backshell Specifications

1.0 RECOGNIZED AGENCY APPROVALS:
CSA certification and UL recognition is planned.

2.0 MECHANICAL SPECIFICATIONS:
Dimensions, Materials

2.1 Overall Part dimensions are given on the included drawing.

2.2 Material selection:
Backshell and compression nut:
Brass Alloy with corrosion protective finish.
Seals: Polychloroprene (cable) or Polypropylene (liquid tight conduit)

3.0 CABLE SECUREMENT

3.1 Each cable backshell when assembled with the smallest

diameter cable in the specified range will be capable of surviving a dead weight pull of 35 lbs. for 1 minute per UL-STD-514.

3.2 Each cable backshell when assembled with midpoint of the range cable will be capable of a dead weight pull of 50 lbs. for 1 minute per UL-STD-514.

LIQUID TIGHT CONDUIT SECUREMENT

The assembly will survive a 150 lb. pull test per UL 514.

4.0 ENVIRONMENTAL SPECIFICATIONS:

4.1 Rain Tight: The backshell when assembled with the proper cable or liquid tight conduit and military connector will meet the rain test requirement defined in UL-STD-514.
Temperature Rating: -40 degrees C to +90 degrees C

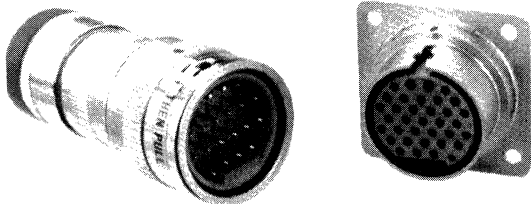
4.2 Salt Spray: Two variations are available:

1) 48 hour salt spray per MIL-STD 202 Method 101

2) 500 hour salt spray per MIL-STD 1344 Method 1001

Selection Chart Definition

MIL-C SPEC	SERIES	MFGR.	DESCRIPTION	CLASS	SHELL DESIGNATIONS				
					INDUSTRIAL INTERFACES	GLENAIR	BREEZE	ESC	SUNBANK
COMMERCIAL	CPC-METAL	AMP	PLUG		CPC-P				
COMMERCIAL	CPC-METAL	AMP	RECP		CPC-R				
5015	MS34**	ALL	CRIMP PER MIL SPEC	D,K,L,U,W	5015-C	A		AF	C
5015	MS31**	ALL	SOLDER PER MIL SPEC	A,E,R	5015-SE	B-A		AD	A
5015 COMMER	97	AMPHENOL	SOLDER, NON ENVIR. W/O ENDBELL	A,B	5015-A-A	B-H	A	AA	A
5015 COMMER.	97	AMPHENOL	SOLDER, NON ENVIR. W/ ENDBELL	A,B	5015-SE	B-A		AD	A
5015 COMMER.	69	AMPHENOL	CMP/SOLDER, ENVIR. W/O ENDBELL	E,F,R	5015-A-E	B-J	B	AA	A
5015 COMMER.	69	AMPHENOL	CMP/SOLDER, ENVIR. W/ ENDBELL	E,F,R	5015-SE	B-A		AD	A
5015 COMMER.	10-72*	BENDIX	SOLDER, W/O ENDBELL	A,E,F,R	5015-B	B-L	C	AB	A
5015 COMMER.	10-72*, CS31**	BENDIX	SOLDER, W/ ENDBELL	A,B,E,F,R	5015-SE	B-A		AD	A
5015 COMMER.	MS31*	CANNON	CMP/SOLDER, NON ENVIR. W/O ENDBELL	A	5015-C-A	B-M	D	AC	A
5015 COMMER.	MS31*	CANNON	CMP/SOLDER, NON ENVIR. W/ ENDBELL	A	5015-SE	B-A		AD	A
5015 COMMER.	CA31**	CANNON	CMP/SOLDER, ENVIR. W/O ENDBELL	E,F,R	5015-C-E	B-N	E	AC	A
5015 COMMER.	CA31**	CANNON	CMP/SOLDER, ENVIR. W/ ENDBELL	E,F,R	5015-SE	B-A		AD	A
26482	1	ALL	EXCEPT MS3114, MS3124	E,F,P	26482-1A	D	H	BA/BN	K
26482	1	ALL	ONLY MS3114, MS3124	E,F,P	26482-1B	D		BB	M
26482	2	ALL		A,L	26482-2	A		AF	C
38999	I	ALL		E,P,T	38999-1	F	N	BF	F
38999	II	ALL		E,P,T	38999-2	F	N	BF	F
81703	3	ALL		E,L	5015-C	A		AF	C
83723	I & III	ALL		A,G,K,R,S	83723-1	A	R	AF	C
83723	II	ALL	B,T	A,G,R	83723-2	K		AP	P



ADVANTAGE

The Affordable Alternative

Contact factory for catalog and assistance.

The ADVANTAGE series presents an economically balanced high performance control connector to the industrial user as well as to original equipment manufacturers.

Brass screw machine shells offer precision, strength and economy. Heavy clear chromate zinc plating provides industrial grade corrosion protection. Backshell interfaces to cable, liquid-tight conduit, rigid conduit hubs and panels are available from stock.

The coupling lock is a unique spring mechanism which automatically and positively locks the two connector halves together when mated.

Spirit

The Modular Environmental Connector System



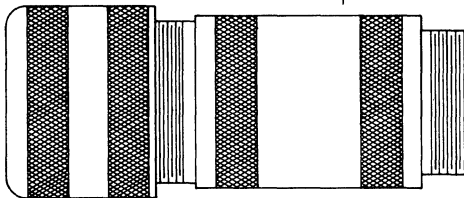
industrial interfaces inc.
affordable connectors for rugged environments

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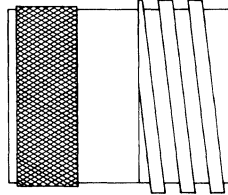
Spirit

The Modular Environmental Connector System

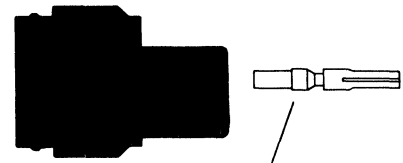
Backshell Assemblies
for
Industrial Cable
appear on
Page 17Q



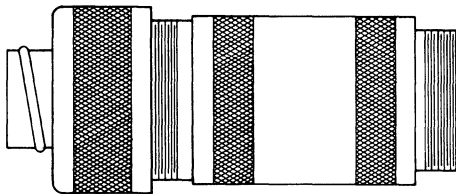
Receptacle
Assemblies
appear on
Page 16Q



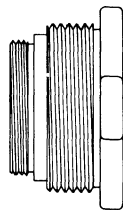
Socket Insert
Configurations
appear on
Page 14Q



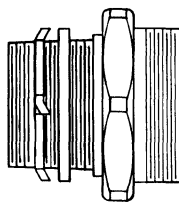
Socket Terminals
appear on
Page 25Q



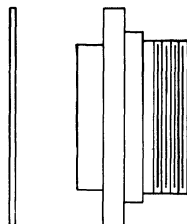
Backshell
Assemblies for
Liquid Tight
Conduit
appear on
Page 18Q



Feed Through
Adapters
appear on
Page 22Q



Backshell
Assemblies
for
Conduit Hub
appear on
Page 20Q



Backshell
Assemblies
for
Square Flange
appear on
Page 20Q

- To determine length of total assembled connector, total "L" dimensions of selected components.

- To determine length of mated pair of total assembled connectors, subtract $\frac{5}{16}$ " from total of all "L" dimensions.

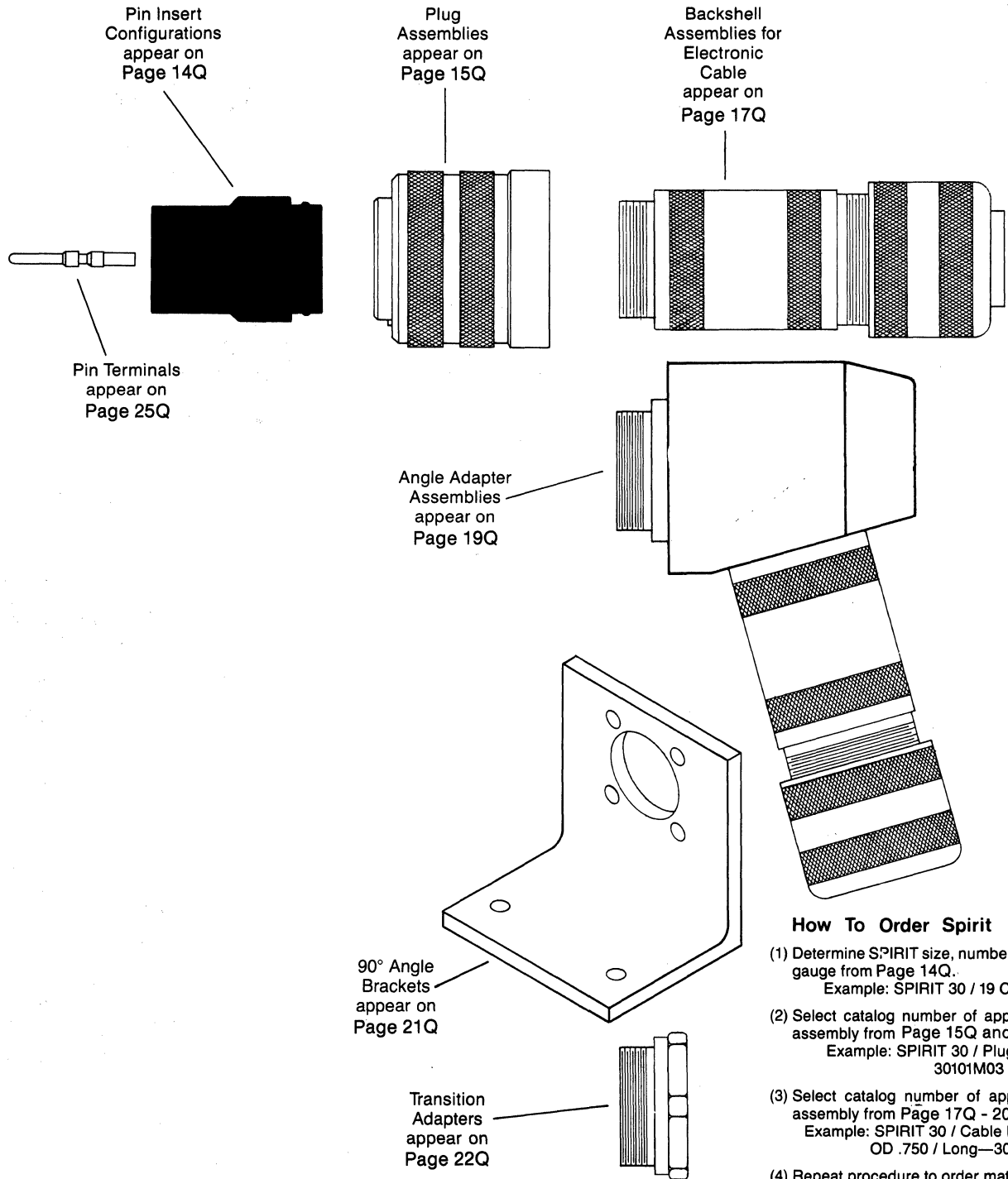
Industrial Interfaces, inc. has developed the SPIRIT connector series expressly to meet the rugged applications of the industrial environment. It is a modularized design concept not encumbered with extraneous Mil Spec requirements. The uncompromised design offers features and degrees of freedom not previously available.

The SPIRIT modularized building block concept allows for the assembly of thousands of connector variations through the use of the relatively few components listed in this catalog. An assortment of backshell hardware is available including cable attachment, liquid-tight conduit attachment, Mil Spec dimensioned square flange panel mount and pipe thread, box or conduit hub attachments. All backshell hardware interfaces with either plug or receptacle shells.

SPIRIT is also the answer for connector applications requiring alternate key positions, reversed inserts or hardware variations — once termed specials with long lead delivery — now available as standard parts.

Combining the performance capabilities of SPIRIT, as listed in this catalog, with its flexibility, availability and resulting cost economies clearly defines the express design mandate of Industrial Interfaces, inc.

Environmental Connectors



How To Order Spirit

- (1) Determine SPIRIT size, number of circuits and wire gauge from Page 14Q.
Example: SPIRIT 30 / 19 Circuit / 16 AWG
- (2) Select catalog number of appropriate Front-shell assembly from Page 15Q and 16Q.
Example: SPIRIT 30 / Plug / Pin Insert—30101M03
- (3) Select catalog number of appropriate Backshell assembly from Page 17Q - 20Q.
Example: SPIRIT 30 / Cable Backshell / Jacket OD .750 / Long—30003M03
- (4) Repeat procedure to order mating assembly.

NOTE: SPIRIT mated pair consists of four catalog numbers.

Q



industrial interfaces, inc.
affordable connectors for rugged environments

1325 Paramount Parkway Batavia, Illinois 60510 (312) 879-6262 FAX (312) 879-6015

Environmental Connectors



Spirit Connector Specifications

1.0 AGENCY APPROVALS

1.1 NATIONAL ELECTRIC CODE:

SPIRIT connectors conform to the NEC if applied within the constraints of the code. SPIRIT also complies with "Hard Usage" and "Extra Hard Usage" portable cord applications and meets the requirements for Class 1 Div. 2 hazardous locations.

1.1 UNDERWRITERS LABORATORIES:

SPIRIT series connectors are recognized under the Underwriters Laboratories Component Recognition Program. File: E81982(N).

1.2 CANADIAN STANDARDS ASSOCIATION:

SPIRIT series connectors are certified by CSA under File: LR56804-1, -2, -3.

1.3 OTHER:

1.31 SPIRIT conforms to the JIC and Machine Tool Standard NFPA79.

1.32 SPIRIT meets NEMA 4X, enclosure requirements.

1.33 SPIRIT 600V inserts meet the spacing requirements of VDE.

(3mm through air, 4mm over surface)

2.0 MECHANICAL

2.1 CORD STRAIN RELIEF: 35 pound minimum throughout range per UL 514. SPIRIT values exceed 100 pounds on most applications. (50 pounds with sleeve glands).

2.2 LIQUID-TIGHT CONDUIT STRAIN RELIEF: 150 pound minimum per UL 514.

2.3 TERMINAL CRIMP STRENGTHS: SPIRIT values exceed UL 486 for all wire gages specified.

2.4 MATING CYCLES: 1000 mate/unmate cycles without excessive wear.

2.5 SHOCK: 50 G minimum, all planes. Coupling nut is spring suspended to resist impact damage.

2.6 VIBRATION: Complies with MIL STD 202F, Test Method 204, Test Condition B. Coupling nut is spring loaded to resist loosening under vibration.

3.0 ELECTRICAL

3.1 RATINGS:

1) Voltage rating of each insert is stated as AC/DC values.

2) Current ratings are determined by the bulk temperature rise, including ambient, not exceeding the insert temperature rating, which is 90°C. In general, the connectors are capable of carrying the currents of the SO Cable they are designed to accommodate. The NEC Tables on Current Ratings of Wires in Conduit also may be used as reference to allowable currents.

CIRCUITS	CURRENT RATINGS CONSERVATIVE (AMPS)—ALL CIRCUITS						
	TERMINAL SIZE						
	#8	#10	#12	#14	#16	#18	#20
2	40	30	25	18	13	10	7
3	40	25	20	15	10	7	5
4-6	35	20	16	12	8	6	4
7-24	—	17.5	14	10.5	7	5	3.5
25-42	—	15	12	9	6	4	3
43+	—	12.5	10	7.5	5	3.5	2.5

In specific applications larger currents may be adequately handled by a few circuits without difficulty, but in no instances should more than the following maximums be applied to the terminals:

TERMINAL	ABSOLUTE MAX CURRENT (AMPS)
#8	50
#10 or #12	35
#14 or #16	15
#18 or #20	10

Consult the factory for advice if the application is questionable. In no instance should the bulk temperature exceed 90°C including ambient when max. current is applied.

3) All ratings apply to applications where the connector is not disengaged under load. Consult the factory for advice if the application requires disconnecting under load.

3.2 DIELECTRIC WITHSTAND:

Conforms to UL 498. Tested at 1000 volts plus twice rated voltage for 1 minute between terminals and terminals to the shell.

3.3 INSULATION RESISTANCE:

5000 megohms typical at 25°C, 40-60% R.H.

3.4 MILLIVOLT DROP:

Voltage probes located 1/4" away from crimp barrel.

TERMINAL	WIRE	CURRENT	MV DROP
#16 TIN	#16 AWG	1 AMP	1.5 MV
#20 GOLD	#20 AWG	1 AMP	3.1 MV

4.0 ENVIRONMENTAL:

4.1 TEMPERATURE: -40°C to +90°C (-40°F to +194°F)

4.2 HUMIDITY: 100 Megohms min. insulation resistance after 96 hours of 95-100% R.H. at 100°C (MIL STD 202F Test Method 103B Condition B)

4.3 MOISTURE SEALS: No water enters electrical chamber when subjected to water jet spray per UL514. Applies to mated or unmated connectors without dust caps. Dust caps afford additional seal protection as well as preventing entry of mud, chips & other debris.

4.4 CORROSION: No exposure of base metal evident after 500 hours in salt spray per MIL-STD 1344. Shells are inert to most caustics.

Hardcoat finish is approved for off shore marine duty.

4.5 CHEMICAL RESISTANCE: Inserts impervious to most oils, alcohols, fuels, glycols, salts, soaps and mild alkalis. Consult factory for specific applications.



SPIRIT SERIES connectors are recognized under the Underwriters Laboratories Component Recognition Program File E81982(N)

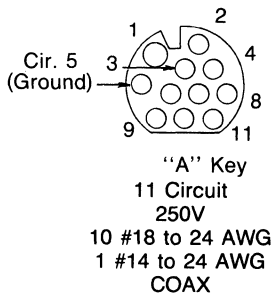
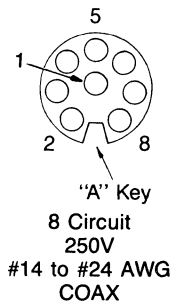
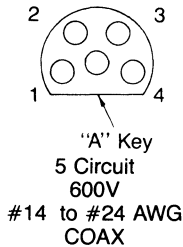


SPIRIT SERIES connectors are certified by Canadian Standards Association under File LR56804-1, -2, -3.

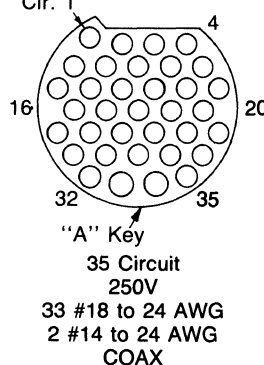
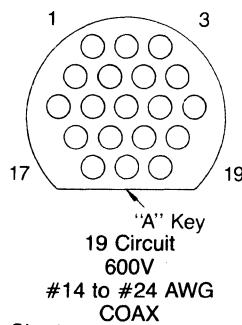
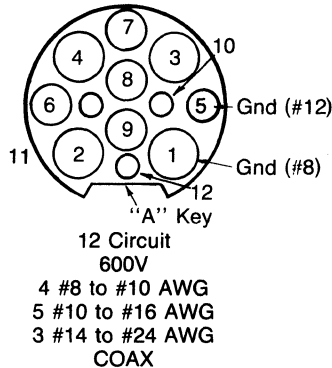
Spirit Insert Configuration Guide

Socket Front Shown
Ground Circuit is #1 Position
Unless Otherwise Noted

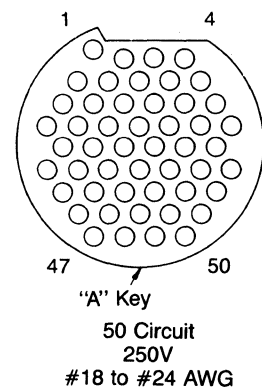
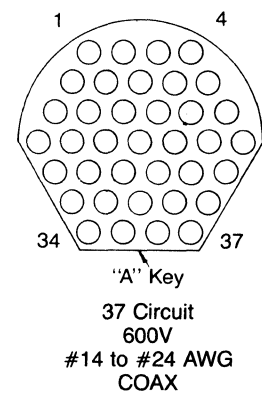
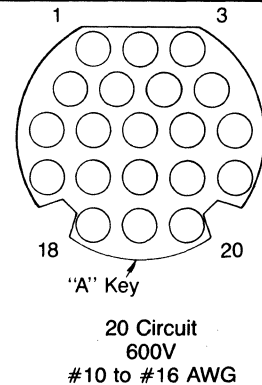
Spirit 17



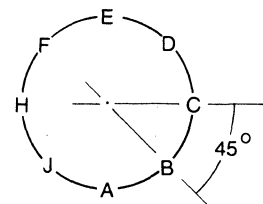
Spirit 30



Spirit 36



Key Progression
(view from socket rear)



The SPIRIT Insert Configuration Guide is intended to assist in the selection of a proper combination of wire gauge and number of circuits required. Unique features of the SPIRIT design allow for the use of a single insert for many applications.

ENVIRONMENTAL SEALING is assured with a newly developed UL recognized thermoplastic elastomer that combines the low durometer sealing characteristics of rubber with the long time aging properties of plastic. Double shrouding by the insert and shell walls provide redundant sealing.

ADDED SEALING CAPABILITY is provided by individual elastomer diaphragms covering each terminal cavity. The diaphragm is pierced only when a terminal is required. If less than the total number of terminal cavities are used the integrity of seal is maintained without the need of dummy pins or sockets.

EQUIPMENT GROUNDING is achieved through a raised terminal in the socket insert. A make first and break last condition, insuring a safe ground before engaging or disengaging live circuits, is forever present without the use of longer ground pins.

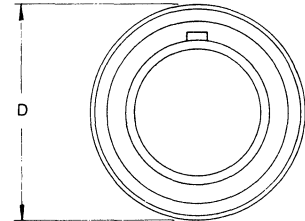
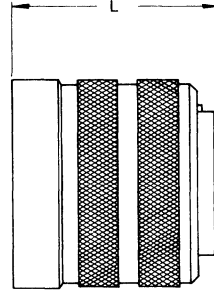
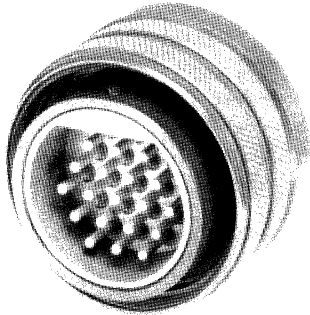
LOW INSERTION FORCE TERMINAL LOCK through expandable elastomer design creates positive locking and insures relatively low insertion forces. Socket terminals do not require lead-in guide pins. No delicate locking tangs to distort or break. Maximum holding force is realized when backshell is fully assembled to frontshell.

Environmental Connectors



Spirit Front Shell Assemblies

Plug Assemblies



MAX. NO. OF CIRCUITS	AWG WIRE RANGE	SHELL SIZE	TERMINAL FINISH	VOLTAGE RATING	WITH	WITH
					PIN INSERT	SOCKET INSERT
5	14-18	17	TIN	600	17201M03	17203M03
5	16-20	17	TIN	600	17101M03	17103M03
5	18-22	17	TIN	600	17701M03	17703M03
5	20-24	17	GOLD	600	17301M03	17303M03
8	14-18	17	TIN	250	17205M03	17207M03
8	16-20	17	TIN	250	17105M03	17107M03
8	18-22	17	TIN	250	17705M03	17707M03
8	20-24	17	GOLD	250	17305M03	17307M03
11	18-22	17	TIN	250	17309M03	17311M03
11	20-24	17	GOLD	250	17109M03	17111M03
12	(4) 8-10 (5) 12-16 (3) 16-20	30	TIN	600	30151M03	30153M03
*12	(4) 8-10 (5) 10-16 (3) 14-24	30	TIN TIN BOTH	600	30951M03	30953M03
19	14-18	30	TIN	600	30201M03	30203M03
19	16-20	30	TIN	600	30101M03	30103M03
19	18-22	30	TIN	600	30701M03	30703M03
19	20-24	30	GOLD	600	30301M03	30303M03
35	18-22	30	TIN	250	30309M03	30311M03
35	20-24	30	GOLD	250	30109M03	30111M03
20	10-14	36	TIN	600	36205M03	36207M03
20	12-16	36	TIN	600	36105M03	36107M03
37	14-18	36	TIN	600	36201M03	36203M03
37	16-20	36	TIN	600	36101M03	36103M03
37	18-22	36	TIN	600	36701M03	36703M03
37	20-24	36	GOLD	600	36301M03	36303M03
50	18-22	36	TIN	250	36309M03	36311M03
50	20-24	36	GOLD	250	36109M03	36111M03

SHELL SIZE	DIMENSIONS	
	L	D
17	1.275	1.312
30	1.275	1.975
36	1.275	2.250

SPIRIT front shell assemblies are designed to accept all inserts of the appropriate shell size. Shell material is 6061-T6 machined aluminum dark hardcoated with teflon sealcoat for MAXIMUM CORROSION PROTECTION with built-in thread lubrication.

ACME COUPLING threads fully mate and unmate in less than 2½ turns. Spring loaded coupling nut resists vibration.

IN FIELD INSERT KEYING is achieved by alignment of a molded key letter on the rear of the insert with an indicator on the rear of the shell during assembly. Eight alternate keying positions are provided.

RUGGEDNESS throughout with coarse mating threads. Plug key protection by heavy wall sections. Double shrouding by the insert and shell walls provide added protection. Coupling nut is spring suspended to resist impact shock.

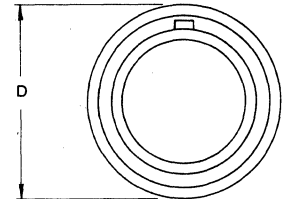
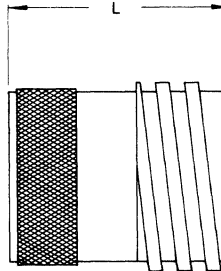
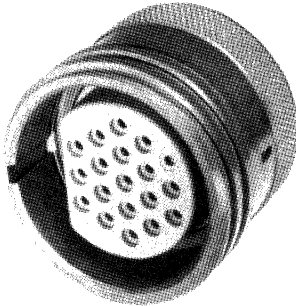
Please refer to Page 25Q for terminal insertion and removal tools.

Unless otherwise indicated, assemblies include pre-packaged frontshell, insert terminals and instruction sheet. Terminal package includes 10% spares. See Page 25Q for required insertion tool kits and removal tool kits. All frontshells require a backshell to complete the connector half.

*Indicates assembly without terminals. See Page 24Q for selecting guides of screw machine and coaxial terminals.

Spirit Front Shell Assemblies

Receptacle Assemblies



SHELL SIZE	DIMENSIONS	
	L	D
17	1.375	1.187
30	1.375	1.750
36	1.375	2.000

SPIRIT front shell assemblies are designed to accept all inserts of the appropriate shell size. Shell material is 6061-T6 machined aluminum dark hardcoated with teflon sealcoat for MAXIMUM CORROSION PROTECTION with built-in thread lubrication.

ACME COUPLING threads fully mate and unmate in less than 2½ turns.

IN FIELD INSERT KEYING is achieved by alignment of a molded key letter on the rear of the insert with an indicator on the rear of the shell during assembly. Eight alternate keying positions are provided.

Please refer to Page 25Q for terminal insertion and removal tools.

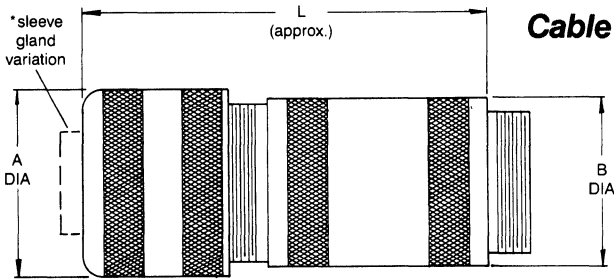
MAX. NO. OF CIRCUITS	AWG WIRE RANGE	SHELL SIZE	TERMINAL FINISH	VOLTAGE RATING	WITH SOCKET INSERT	WITH PIN INSERT
5	14-18	17	TIN	600	17204M03	17202M03
5	16-20	17	TIN	600	17104M03	17102M03
5	18-22	17	TIN	600	17704M03	17702M03
5	20-24	17	GOLD	600	17304M03	17302M03
8	14-18	17	TIN	250	17208M03	17206M03
8	16-20	17	TIN	250	17108M03	17106M03
8	18-22	17	TIN	250	17708M03	17706M03
8	20-24	17	GOLD	250	17308M03	17306M03
11	18-22	17	TIN	250	17312M03	17310M03
11	20-24	17	GOLD	250	17112M03	17110M03
12	(4) 8-10 (5) 12-16 (3) 16-20	30	TIN	600	30154M03	30152M03
*12	(4) 8-10 (5) 10-16 (3) 14-24	30	TIN TIN BOTH	600	30954M03	30952M03
19	14-18	30	TIN	600	30204M03	30202M03
19	16-20	30	TIN	600	30104M03	30102M03
19	18-22	30	TIN	600	30704M03	30702M03
19	20-24	30	GOLD	600	30304M03	30302M03
35	18-22	30	TIN	250	30312M03	30310M03
35	20-24	30	GOLD	250	30112M03	30110M03
20	10-14	36	TIN	600	36208M03	36206M03
20	12-16	36	TIN	600	36108M03	36106M03
37	14-18	36	TIN	600	36204M03	36202M03
37	16-20	36	TIN	600	36104M03	36102M03
37	18-22	36	TIN	600	36704M03	36702M03
37	20-24	36	GOLD	600	36304M03	36302M03
50	18-22	36	TIN	250	36312M03	36310M03
50	20-24	36	GOLD	250	36112M03	36110M03

Unless otherwise indicated, assemblies include pre-packaged frontshell, insert terminals and instruction sheet. Terminal package includes 10% spares. See Page 25Q for required insertion tool kits and removal tool kits. All frontshells require a backshell to complete the connector half.

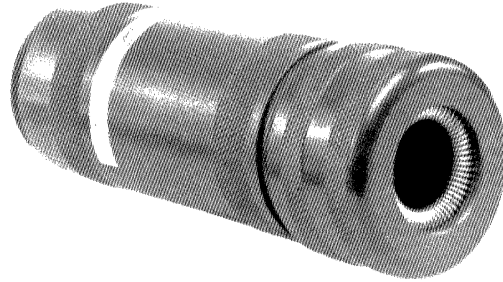
*Indicates assembly without terminals. See Page 24Q for selecting guides of screw machine and coaxial terminals.



Spirit Backshell Assemblies



Cable Backshells



SHELL SIZE	CABLE RANGE (INCHES)	LONG BACKSHELL	SHORT BACKSHELL	DIMENSIONS (inches)			
				A	B	L (long)	L (short)
17	*.250 - .350	17037MO3	17038MO3	1.156	1.050	2¼	1½
17	.350 - .500	17003MO3	17004MO3	1.156	1.050	2¼	1½
30	*.450 - .700	30037MO3	30038MO3	1.750	1.625	4	2⅞
30	.700 - .950	30003MO3	30004MO3	1.750	1.625	4	2⅞
30	.950 - 1.150	30053MO3	30054MO3	1.750	1.625	4	2⅞
36	*.650 - .900	36037MO3	36038MO3	2.000	1.875	5¼	3¼
36	.900 - 1.15	36003MO3	36004MO3	2.000	1.875	5¼	3¼
36	1.150 - 1.350	36053MO3	36054MO3	2.000	1.875	5¼	3¼
36	1.350 - 1.425	36067MO3	36068MO3	2.000	1.875	5¼	3¼

*Sleeve Gland Variation

Assembly includes pre-packaged backshell, cable seal, strain relief spring and compression nut, fully assembled.

See page 23Q for cable range reducers.

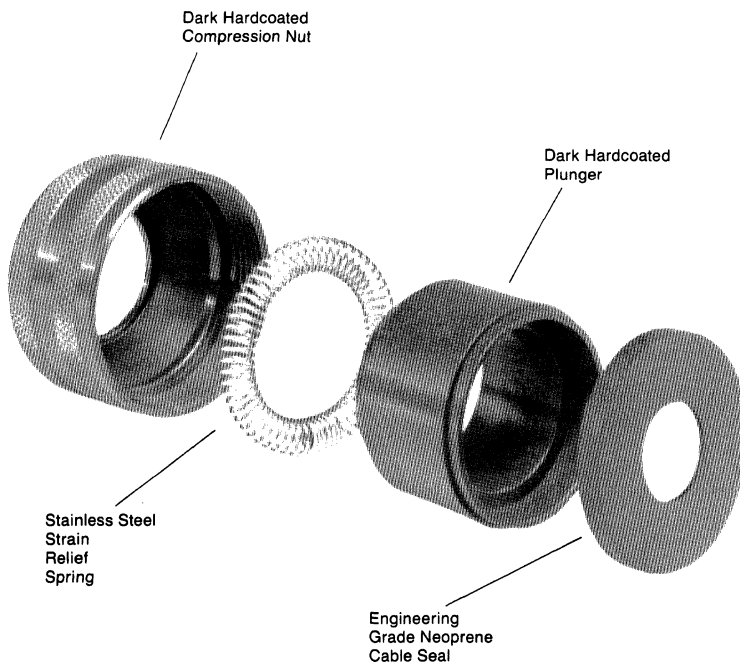
SPIRIT cable backshells achieve extraordinary sealing and strain relief through the independent action of expandable elastomers and spring pressure loading. The stainless steel strain relief spring closes around the cable as the compression nut is threaded downward. High but controlled pressure is applied to the cable yielding superior holding power without damage to the cable. Pulling the cable increases the spring force on the cable further enhancing the holding power when needed.

Sealing is accomplished by an expandable elastomer diaphragm which conforms to the cable diameter when inserted into the shell. Wide-range cable diameter performance is possible without an assortment of sealing grommets typical in conventional designs.

For smaller diameter cable, such as electronic cable or for discrete wire applications, a cable sleeve gland variation is available. The strain relief action is similar but in this case, the seal is obtained by the spring compressing the sleeve gland around the cable or wire bundle.

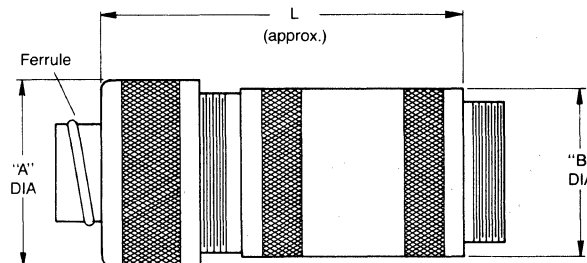
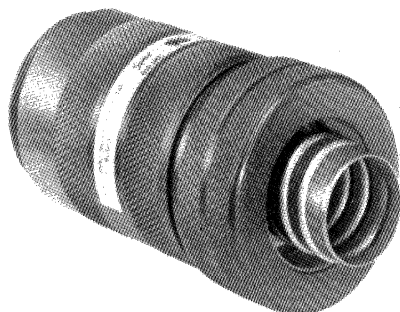
Backshell assemblies are threaded to front shell assemblies. Hand tightening the backshell pressurizes the insert in the front shell and provides the peripheral seal. **NO WRENCHING REQUIRED.**

To allow the SPIRIT Cable Backshells to be used with very small diameter electronic cable, NORPORENE THERMOPLASTIC ELASTOMER bushings are available. See Cable Range Reducers listed on page 23Q.



Spirit Backshell Assemblies

Liquid Tight Conduit Backshells



SHELL SIZE	CONDUIT TRADE SIZE	BACKSHELL STYLE	LONG BACKSHELL	SHORT BACKSHELL	DIMENSIONS (Inches)			
					A	B	L (long)	L (short)
17	3/8	M	17007M03	17006M03	1.156	1.050	2	1 3/8
17	1/2	M	17012M03	17011M03	1.156	1.050	2	1 3/8
30	1/2	M	30064M03	30063M03	1.750	1.625	3 5/8	2 1/2
30	3/4	M	30007M03	30006M03	1.750	1.625	3 5/8	2 1/2
30	1	M	30012M03	30011M03	1.750	1.625	3 5/8	2 1/2
36	3/4	M	36007M03	36006M03	2.000	1.875	4 7/8	2 7/8
36	1	M	36012M03	36011M03	2.000	1.875	4 7/8	2 7/8
17	3/8	R	17062M03	17061M03	1.156	1.050	2 1/4	1 5/8
17	1/2	R	17057M03	17056M03	1.156	1.050	2 1/4	1 5/8
30	1/2	R	30057M03	30056M03	1.750	1.625	4	2 7/8
30	3/4	R	30062M03	30061M03	1.750	1.625	4	2 7/8
36	3/4	R	36057M03	36056M03	2.000	1.875	5 1/4	3 1/4
36	1	R	36062M03	36061M03	2.000	1.875	5 1/4	3 1/4
36	1 1/4	R	N/A	36046M03	2.420	1.875	N/A	2 1/2
17	3/8	T	17062M13	17061M13	1.156	1.050	2 1/4	1 5/8
17	1/2	T	17057M13	17056M13	1.156	1.050	2 1/4	1 5/8
30	1/2	T	30057M13	30056M13	1.750	1.625	4	2 7/8
30	3/4	T	30062M13	30061M13	1.750	1.625	4	2 7/8
36	3/4	T	36057M13	36056M13	2.000	1.875	5 1/4	3 1/4
36	1	T	36062M13	36061M13	2.000	1.875	5 1/4	3 1/4

SPIRIT liquid-tight conduit backshell assemblies will accept direct attachment of various sizes of liquid-tight conduit. Backshells are dimensioned to standard conduit sizes which ELIMINATES TRANSITION ADAPTERS from connector shell to conduit.

Backshells are available for several metallic and non metallic liquid tight conduits. Choose the backshell style you require by referring to conduit composition chart. Then determine the backshell required in the catalog number chart for the style and trade size you require.

Backshell assemblies are threaded to front shell assemblies. Hand tightening the backshell pressurizes the insert to the front shell and achieves maximum holding force. NO WRENCHING REQUIRED.

Assembly includes pre-packaged backshell, plastic seal, liquid-tight conduit ferrule, tie wrap and compression nut, fully assembled.

CONDUIT COMPOSITION	DESCRIPTION	BACKSHELL STYLE	CONDUIT TYPES
Metallic	Plastic Over Metal	M	ALT,AT,CSA,EF,EFL,HC,HEX,LA LOR,LT,OR,UXTL,UA,ZHN
Non-Metallic	Heavy Wall Plastic	M	Polytuff I, Xtra Flex Type 2
Non-Metallic	Nylon Reinforced Rubber	R	CN-P, LMN-P
Non-Metallic	Thin Corrugated Plastic	T	Polytuff II, Xtra Flex Type 1

Shell material is 6061-T6 machined aluminum dark hardcoated with teflon seal-coat for MAXIMUM CORROSION PROTECTION with built in thread lubrication. See Specifications on Page 13Q.

Q



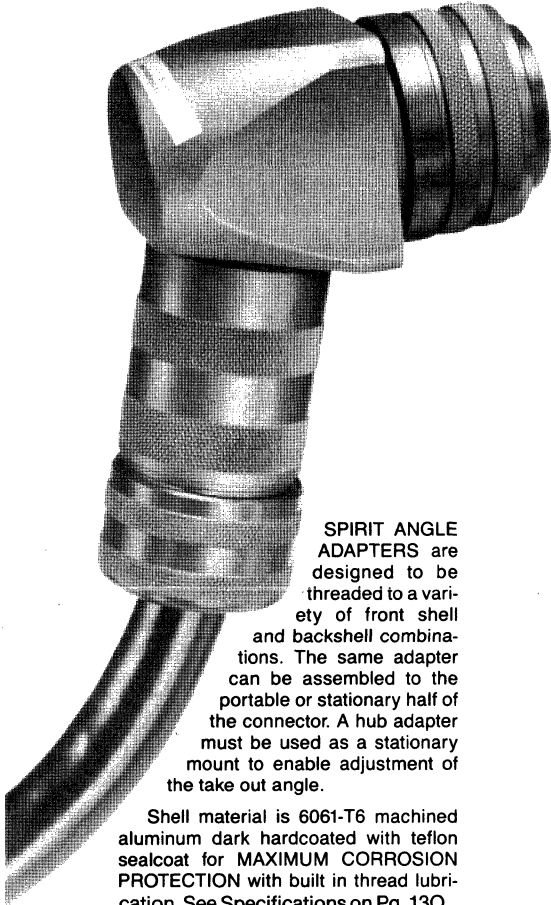
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affordable connectors for rugged environments

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Spirit Accessories

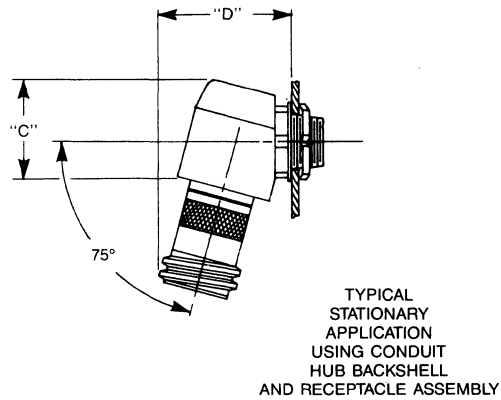
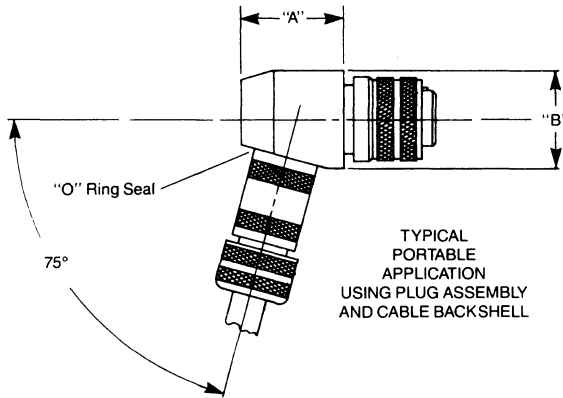
75° Angle Adapter

FOR USE IN HUB MOUNT SYSTEMS
CANNOT BE USED WITH SQUARE
FLANGE BACKSHELL



SPIRIT ANGLE ADAPTERS are designed to be threaded to a variety of front shell and backshell combinations. The same adapter can be assembled to the portable or stationary half of the connector. A hub adapter must be used as a stationary mount to enable adjustment of the take out angle.

Shell material is 6061-T6 machined aluminum dark hardcoated with teflon sealcoat for MAXIMUM CORROSION PROTECTION with built in thread lubrication. See Specifications on Pg. 13Q.

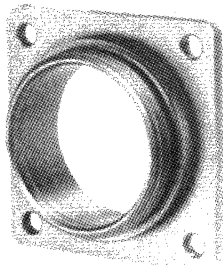


SHELL SIZE	CATALOG NUMBER	A	B	C	D
17	17055M03	1.750	1.500	1.875	1.875
30	30055M03	2.125	2.000	2.234	2.375
36	36055M03	2.375	2.250	2.476	2.750

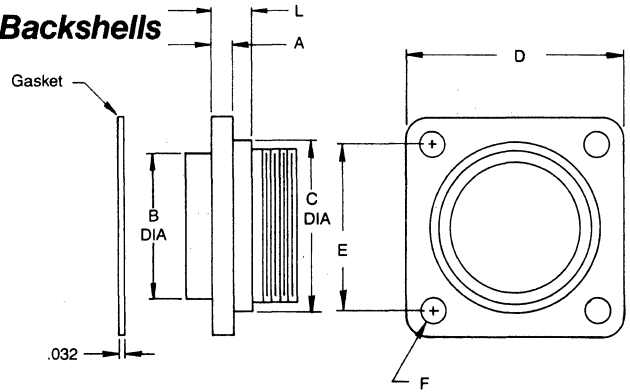
Assembly includes Angle Shell, "O" Ring Seal and Instruction Sheet.

NOTE: Frontshell and backshell sold separately.

Spirit Backshell Assemblies



Square Flange Backshells

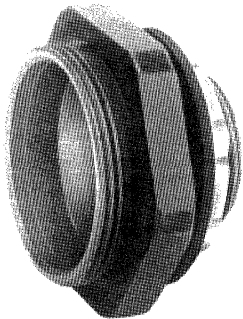


SPIRIT Square Flange Adapters are threaded to front shell assemblies. Hand tightening the adapter pressurizes the insert to the front shell and achieves maximum holding force. NO WRENCHING REQUIRED.

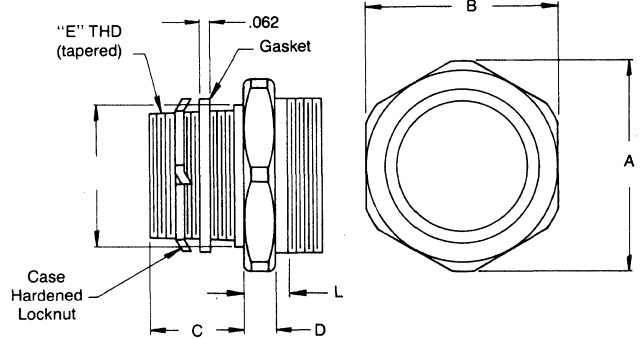
Square flange adapters are designed to MS mounting dimensions to eliminate the need of changing drawings when connector systems are upgraded.

SHELL SIZE	CATALOG NUMBER	A	B	C	D	E	F	L	PANEL MOUNT HOLE DIA.	PANEL MOUNT SCREW SIZE	MIL SPEC REF.
17	17014M03	.125	.850	1.000	1.281	.969	.150	.312	1.030	#6	MS 16
30	30014M03	.125	1.500	1.630	2.000	1.562	.177	.312	1.780	#8	MS 28
36	36014M03	.125	1.720	1.820	2.250	1.750	.209	.312	2.030	#10	MS 32

Assembly includes flange backshell, neoprene gasket, and tie wrap. To mount flange on inside of panel place gasket on other side and assemble front shell after flange is mounted. Maximum panel thickness for this application is .125 inches.



Conduit Hub Backshells



SPIRIT Conduit Hub Adapters allow for a variety of connector mounting methods. The freedom to select wireway or panel mount through use of a knockout punch; hub or pendant mount; 90° or 45° angle conduit coupling attachment are but a few of the possibilities.

Shell material is 6061-T6 machined aluminum dark hardcoated with teflon seal-coat for MAXIMUM CORROSION PROTECTION with built-in thread lubrication. See Specifications on page 13Q.

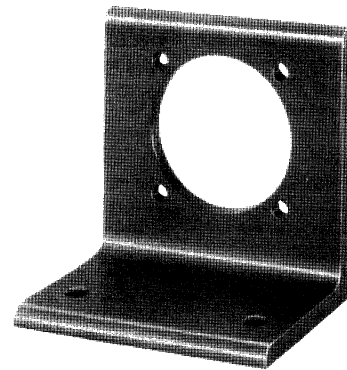
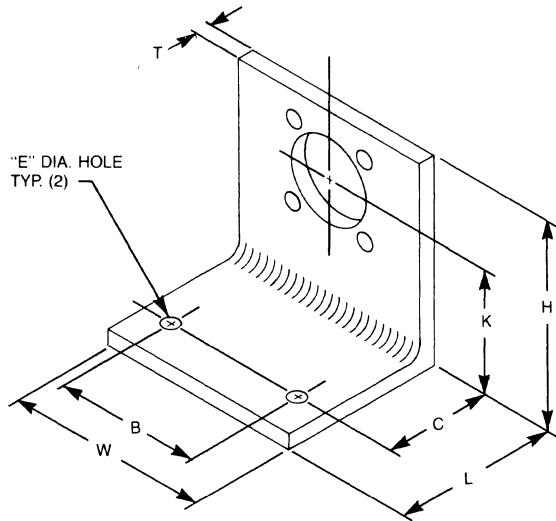
SHELL SIZE	TRADE SIZE	CATALOG NUMBER	A	B	C	D	L	E THREAD	PANEL MOUNT HOLE DIAMETER
17	1/2	17018M03	1 1/4	1 1/8	.556	.212	.312	1/2 - 14 NPT	.875
30	3/4	30018M03	1 9/16	1 3/4	.600	.275	.375	3/4 - 14 NPT	1.109
30	1	30019M03	1 9/16	1 3/4	.650	.275	.375	1 - 11 1/2 NPT	1.375
36	1	36018M03	2 1 1/16	2	.650	.396	.496	1 - 11 1/2 NPT	1.375
36	1 1/4	36019M03	2 1 1/16	2	.700	.396	.496	1 1/4 - 11 1/2 NPT	1.734

Assembly includes pre-packaged backshell, neoprene gasket, locknut and tie wrap.

NOTE: Do not use with 30151M03 or 30951M03. Improper spacings of power conductors can result.

Spirit Accessories

90° Angle Brackets

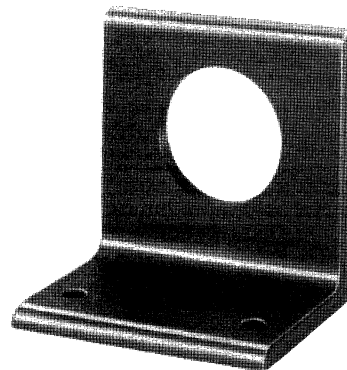
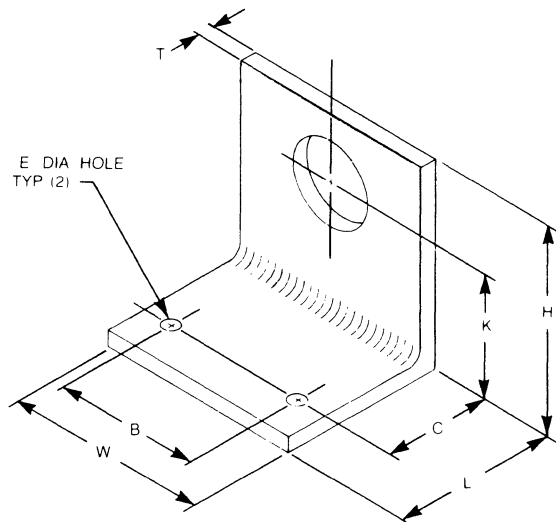


Flange Mount

SHELL SIZE	DESCRIPTION	CATALOG NUMBER	DIMENSIONS							
			T	W	L	K	H	E	C	B
17	FLANGE	98201M01	.187	2.50	3.00	1.5	2.50	.275	1.50	1.75
30	FLANGE	98202M01	.250	3.50	2.50	2.0	3.50	.275	1.75	2.50
36	FLANGE	98203M01	.250	3.50	2.50	2.0	3.50	.275	1.75	2.50

Angle Brackets are available for either flange mount applications or for feed through adapter mountings. The flange mount would be used where seal on the mounted side is not required. The feed through adapter mounting would be used where seal is required on both sides of the bracket. An example would be an in-line cable connection on the external frame of a machine.

Material is aluminum angle stock black anodized.

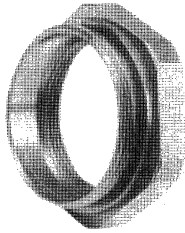


Feed Through Adapter Mount

SHELL SIZE	DESCRIPTION	CATALOG NUMBER	KNOCKOUT TRADE SIZE	DIMENSIONS							
				T	W	L	K	H	E	C	B
30	FEED THROUGH	98204M01	1 1/2"	.250	3.50	2.50	2.0	3.50	.275	1.75	2.50
36	FEED THROUGH	98205M01	2"	.250	3.50	2.50	2.0	3.50	.275	1.75	2.50

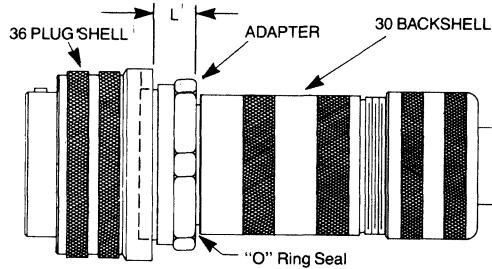
Spirit Accessories

Transition Adapters



Spirit transition adapters permit the use of different frontshell and backshell sizes allowing increased cable and conduit ranges. This adapter assembles between frontshell and backshell.

Shell material is 6061-T6 machined aluminum dark hardcoated with teflon seal-coat for MAXIMUM CORROSION PROTECTION with built-in thread lubrication. See specification on Page 13Q.

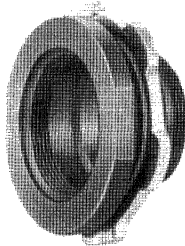


CATALOG NO.	DESCRIPTION	FRONTSHELL SIZE	BACKSHELL SIZE	L
30087M03	Expansion Adapter	30	36	.500
36045M03	Reducing Adapter	36	30	.450

Assemblies include "O" Ring Seal and Instructions.

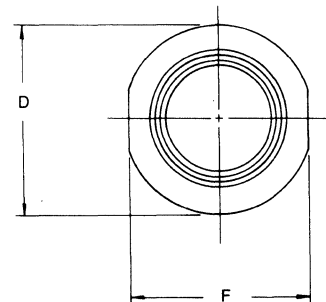
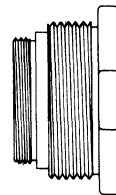
Feed Through Mounting Adapters

FOR USE WITH RECEPTACLE ASSEMBLIES



To allow pre-assembled connectors using receptacle front shells and cable or liquid-tight conduit backshells to be mounted on frames, bulkheads, or NEMA enclosures without disturbing connector assembly.

SPiRiT 30 and SPiRiT 36 now offer advantages when installing prefabricated cable assemblies or when connecting "in the open" with seals required on both sides.



SHELL SIZE	CATALOG NUMBER	KNOCKOUT TRADE SIZE	MOUNTING HOLE DIAM.	DIMENSIONS	
				D	F
30	30069M03	1 1/2"	1.937	2 1/4"	2 1/8"
36	36069M03	2"	2.406	2 5/8"	2 1/2"

Assembly includes locknut.

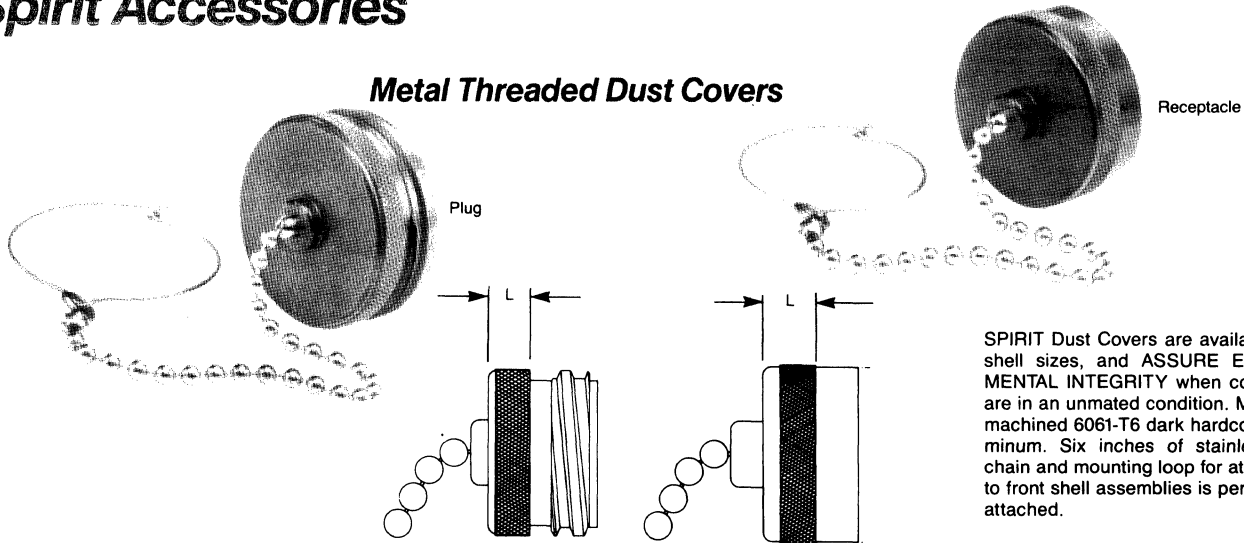
Q

Environmental Connectors



Spirit Accessories

Metal Threaded Dust Covers



SPiRiT Dust Covers are available in all shell sizes, and ASSURE ENVIRONMENTAL INTEGRITY when connectors are in an unmated condition. Material is machined 6061-T6 dark hardcoated aluminum. Six inches of stainless steel chain and mounting loop for attachment to front shell assemblies is permanently attached.

SHELL SIZE	PLUG DUST CAP	RECEPTACLE DUST CAP	L ADDITIONAL LENGTH TO CONNECTOR
17	17043M03	17044M03	3/8
30	30043M03	30044M03	3/8
36	36043M03	36044M03	3/8

Assembly includes Dust Cover, Seals, and stainless steel chain with mounting loop and instruction sheet.

Small Diameter Sleeve Glands

For Field Retrofit of Cable Backshells

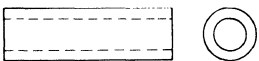


The small diameter Sleeve Gland replaces flat diaphragm glands to accommodate the smaller wire diameters or discrete wire bundles. Sleeve Glands cannot be used on extra large diameter Backshells, (30053M03, 30054M03, 36053M03, 36054M03) due to the utilization of larger plungers and springs.

Cord Ranges & Part Numbers

SHELL SIZE	GLAND PART NUMBER	CABLE RANGE (inches)	FOR USE WITH THE FOLLOWING BACKSHELLS
17	17031MO1	.250-.350	17003M03, 17004M03
30	30031MO1	.450-.700	30003M03, 30004M03
36	36031MO1	.650-.900	36003M03, 36004M03

Cable Range Reducers



Cable Range Reducers allow the use of very small diameter electronic cable in the SPiRiT cable backshells. The NORPRENE THERMOPLASTIC bushing accessories are available to retrofit existing cable backshells to accept the cable diameters shown.

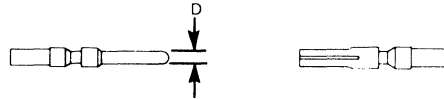
CATALOG NO.	DESCRIPTION	RANGE	LONG BACKSHELLS	SHORT BACKSHELLS
98130MO1	Bushing—5 Pak	.130—.180	17037M03	17038M03
98131MO1	Bushing—5 Pak	.180—.250	17003M03	17004M03
98132MO1	Bushing—5 Pak	.200—.250	30037M03	30038M03
98133MO1	Bushing—5 Pak	.250—.310	30037M03	30038M03
98134MO1	Bushing—5 Pak	.310—.370	30037M03	30038M03
98135MO1	Bushing—5 Pak	.370—.440	30037M03	30038M03
98136MO1	Bushing—5 Pak	.520—.620	36037M03	36038M03

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Terminal Selection Guide



Screw Machined Terminal Description

SPIRIT front shell assemblies include the proper compliment of pre-packaged terminals. However, all SPIRIT inserts are capable of accommodating several different wire gauges, in addition to coax. The user therefore has the option to specify a variety of terminal sizes to exactly meet his requirements using standard terminals in standard front shell assemblies.

Example: An application required 2#14AWG, 2#22AWG and 1 coax RF signal circuit can be satisfied by selecting 17201MO3, five circuit plug assembly, with #20AWG and coax terminals purchased separately.

Refer to Page 14Q Insert Configuration Guide for wire range of selected front shell assembly.

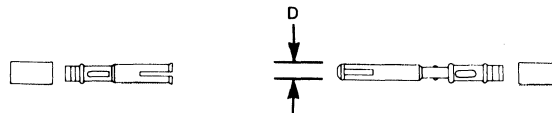
Subminiature coax terminals are stamped from brass alloy, gold plated and use polypropylene insulators. They are provided as a pre-assembled unit and feature a one crimp termination of the inner conductor, outer braid and cable support using a special crimp tool which facilitates fast and easy termination.

All other terminals are screw machined high performance brass alloys. Standard finishes (shown in the chart) yield high corrosion resistance, long term solderability and low millivolt drop. All terminals are lubricated for increased mating life and protection from fret corrosion.

TERMINAL SIZE	CRIMP RANGE (AWG)	QUANTITY	PIN TERMINAL		SOCKET TERMINAL		DIMENSION D DIAMETER
			TIN	GOLD	TIN	GOLD	
#8	8-10	5	90010M00		90011M00		4.0
		10	90010M01		90011M01		
		100	90010M02		90011M02		
		1000	90010B01		90011B01		
#10	10-14	5	90014M00		90015M00		3.0
		10	90014M01		90015M01		
		100	90014M02		90015M02		
		1000	90014B01		90015B01		
#12	12-16	5	90004M00		90005M00		3.0
		10	90004M01		90005M01		
		100	90004M02		90005M02		
		1000	90004B01		90005B01		
#14	14-18	5	90008M00		90009M00		2.0
		10	90008M01		90009M01		
		100	90008M02		90009M02		
		1000	90008B01		90009B01		
#16	16-20	5	90006M00	90006MG0	90007M00	90007MG0	2.0
		10	90006M01	90006MG1	90007M01	90007MG1	
		100	90006M02	90006MG2	90007M02	90007MG2	
		1000	90006B01	90006BG1	90007B01	90007BG1	
#18	18-22	5	90016M00	90016MG0	90017M00	90017MG0	1.5
		10	90016M01	90016MG1	90017M01	90017MG1	
		100	90016M02	90016MG2	90017M02	90017MG2	
		1000	90016B01	90016BG1	90017B01	90017BG1	
#20	20-24	5		90012MG0		90013MG0	1.5
		10		90012MG1		90013MG1	
		100		90012MG2		90013MG2	
		1000		90012BG1		90013BG1	

Terminals are screw machined from high performance brass alloys. Terminals are lubricated for increased mating life and protection from fret corrosion.

Pins and sockets of different sizes with the same D diameter will mate in the same connector.



Subminiature Coax Terminal Descriptions

CABLE TYPE RG/U	QUANTITY	OUTER PIN	OUTER SOCKET	IMPEDANCE (OHMS)	INNER WIRE GAGE (AWG)	CRIMP TOOL	D
178,196	5	90030MG0	90031MG0	50		81030M01	.090
	10	90030MG1	90031MG1				
	100	90030MG2	90031MG2				
174,188,316	5	90032MG0	90033MG0	50		81031M01	.090
	10	90032MG1	90033MG1				
	100	90032MG2	90033MG2				
179,187	5	90032MG0	90033MG0	75		81032M01	.090
	10	90032MG1	90033MG1				
	100	90032MG2	90033MG2				

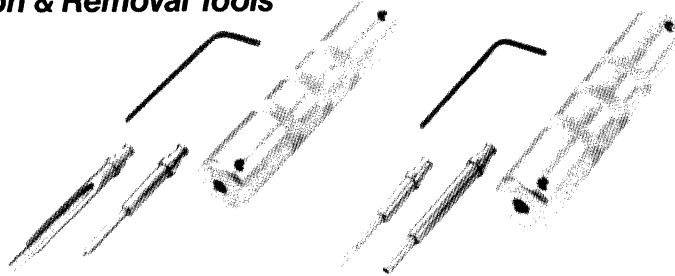
Terminal packs include ferules to capture wire braid. Refer to crimp tool section for tool specification. All coax terminals use the #16 insertion tool kit. (Catalog number 81003M01).

Standard Finish: Terminals: Gold
Ferules: Tin

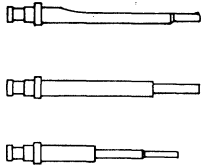
Q

Tool Selection Guide

Insertion & Removal Tools



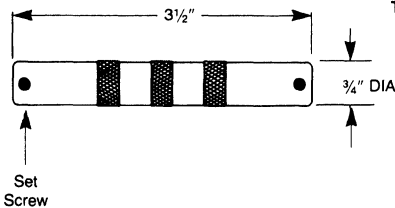
Insertion and Removal Kits



TERMINAL SIZES	COLOR CODE	KITS		TIPS ONLY			
		INSERTION	REMOVAL	INSERTION TIPS		REMOVAL TIPS	
				PIERCING	INSERTION	PIN	SOCKET
#8	RED	81043M01	81044M01	81144M01	81143M01	81145M01	81144M01
#10,#12	YELLOW	81014M01	81008M01	81117M01	81114M01	81112M01	81108M01
#14,#16	BLUE	81003M01	81001M01	81115M01	81103M01	81102M01	81101M01
#18,#20	RED	81020M01	81018M01	81142M01	81120M01	81119M01	81118M01
COAX	BLUE	81003M01	N/A	81115M01	81103M01	N/A	N/A

*Above kits include 1 handle and 1 each of two tips required.
Terminal size is the maximum wire size the terminal will accommodate.
Insertion kits must be used in assembling the frontshells.
Removal kits are recommended when large numbers of assemblies are involved.

These kits include all required insertion and removal tools required to work with terminal sizes shown.



Master Kits

TERMINAL SIZES	CATALOG NUMBER	INCLUDES
#20,18,16,14	81002M01	Two handles, and seven tips in tool caddy
#8,10,12	81017M01	Two handles, and seven tips in tool caddy

Tool Selection Guide

Crimp Tools & Locators



Spirit Screw Machine Terminals must be crimped with a military four star indent tool to insure proper reliability.

Hand Crimp Tools

Pneumatic Crimp Tools

The SPIRIT terminals are designed to crimp properly with standard commercially available crimp tools with full cycle action. The standard indent settings are used for the wire being crimped.

It is not recommended that single indent, hex indent splice tools or tools without full cycle action be used.

Locators must be used to position terminals at the right depth for proper crimping. The locators accommodate both pins and sockets.

SPIRIT Terminal locators are mounted on the tool in the same manner as Mil. Spec. locators, and include set screws.

Locators are available for the two most common crimp tools utilized in industry. Consult the factory if the crimp tool you plan to use is not shown.

Crimp tools may be purchased from Industrial Interfaces, Inc.

TERMINAL SIZES	DANIELS PN: AF8 MIL SPEC: M22520/1-01 COLOR CODE: BLUE	M309 MODIFIED RED	WA27F M22520/29 BLUE	WA27-309EP MODIFIED RED	LOCATOR CATALOG NUMBER
#8				81041M01	81028M01
#10		81027M01		81041M01	81010M01
#12	81011M01	81027M01	81040M01	81041M01	81010M01
#14,#16	81011M01		81040M01		81009M01
#18,#20	81011M01		81040M01		81022M01

Above tools crimp all wire sizes accommodated by terminals listed. Locators fit all crimp tools listed. Locators are required to properly position terminal.

Pneumatic Crimp Tool Accessories

Bench Mount	81038M01	(Daniels PN WA27BUV)
Foot Switch	81039M01	(Daniels PN WA10)

All crimp tools above are manufactured by Daniels Mfg. Corp., and may be purchased from Industrial Interfaces or directly from Daniels. Locators are manufactured only by Industrial Interfaces.

Coax Terminal Crimp Tools

CABLE TYPE RG/U	CATALOG NUMBER	AMP PART NUMBER
178,196	81030M01	69656-2 MOD E
174,188,316	81031M01	69656 MOD E
179,187	81032M01	69656-1 MOD E

All crimp tools above are manufactured by AMP, Inc., and may be purchased from Industrial Interfaces or an AMP distributor. Locators are not required for COAX Crimp Tools.

Q

Molex Industrial Interfaces, Inc. Electrical Distributors



Molex Industrial Interfaces, Inc. — 1325 Paramount Parkway, Batavia, Illinois 60510
Phone (312) 879-6262 FAX (312) 879-6019

ALABAMA

Industrial Electric Supply

2812 S. 5th Avenue
Birmingham, AL 35210
205/956-8504

CALIFORNIA

Buckles Smith

801 Savaker Avenue
San Jose, CA 95126
408/280-7777

County Wholesale Electric

560 N. Main Street
Orange, CA 92668
714/633-6440

Wille Electric

101 South 7th Street
Modesto, CA 95354
209/527-6800

GEORGIA

Mack Electric Supply

2200 Gillionville Road
Albany, GA 31707
912/883-5156

Triple H. Specialty

510 Coffee Street
Hazelhurst, GA 31539
912/375-7723

Wesco

724 Pine Avenue
Albany, GA 31702
912/432-1285

ILLINOIS

Bodine Electric

1845 N. 22nd Street
Decatur, IL 62525
217/423-2593

Crescent Electric

811 Lively Blvd.
Wood Dale, IL 60191
312/595-3170

Forest City Electric Supply

737 N. Madison
Rockford, IL 61105
815/968-5781

Revere Electric Supply Co.

2501 W. Washington Blvd.
Chicago, IL 60612
312/738-3636

INDIANA

Farrell Argast Electric

6905 E. 32nd Street
Indianapolis, IN 46226
317/546-4041

KENTUCKY

CED/E&H

1720 Fortune Ct.
Lexington, KY 40555
606/293-0573

Main Electric Supply

1420 W. Chestnut Street
Louisville, KY 40203
502/587-6511

MASSACHUSETTS

Eagle Electric Supply

195 Old Colony Avenue
Boston, MA 02127
617/268-9500

MICHIGAN

Advance Controls

4205 White Street S.W.
Grandville, MI 49418
616/538-1707

Advance Electric

1011 E. 5th Avenue
Flint, MI 48503
313/238-5611

Cadillac Electric Supply Co.

20700 Hubbell Avenue
Oak Park, MI 48237
313/967-1221

Electronic Connection

36535 Groesbeck
Mt. Clemens, MI 48403
313/792-8400

Fischer Flack Inc.

2115 Rust Avenue
Saginaw, MI 48605
517/752-4181

Great Lakes Electric

129 Grand Trunk Avenue
Battle Creek, MI 49016
616/963-6282

McNaughton-McKay Electric

1357 E. Lincoln
Madison Heights, MI 48071
313/399-7500

NORTH CAROLINA

Wesco

1101 N. I-85 Service Road
Charlotte, NC 28231
704/333-1201

NEW JERSEY

Feldman Brothers

610 East 32nd Street
Paterson, NJ 07513
201/742-7329

IMS Distribution

3472 Delaware Court
Pennsauken, NJ 08109
800/752-1770

NEW YORK

Wehle Electric

900 E. Church St.
Elmira, NY 14905
607/733-6647

Wehle Electric

105 College Avenue
Rochester, NY 14607
716/461-0200

OHIO

Basic Distribution

520 E. 1st Street
Dayton, OH 45402
513/228-0938

Empcorp

1040 National Parkway
Mansfield, OH 44906
419/529-4400

F D Lawrence

3450 Beekman Street
Cincinnati, OH 45223
513/542-1100

Martin Electric Co.

701 S. Patterson Blvd.
Dayton, OH 45402
513/228-5141

Midland Electric Supply

5135 Naiman Park
Solon, OH 44139
216/248-3800

Milner Electric

3804 St. Claire Avenue
Cleveland, OH 44114
216/361-0300

Richards Electric

4620 Reading Road
Cincinnati, OH 45229
513/242-8800

PENNSYLVANIA

Mosebach Electric

1115 Arlington Avenue
Pittsburgh, PA 15203
412/488-5000

SOUTH CAROLINA

Roberts Electric

9115 Greenville Highway
Spartanburg, SC 29304
803/574-0350

TENNESSEE

Richardson Electric

Amnicola Highway at Appling
Chattanooga, TN 37401
615/629-2521

Wesco

401 6th Avenue South
Nashville, TN 37203
615/242-7301

WISCONSIN

Graybar Electric

1475 S. 101 Street
Milwaukee, WI 53214
414/778-1330

Holt Electric

5225 W. State Street
Milwaukee, WI 53208
414/771-6600



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Q

RF Coaxial Connectors



Contents



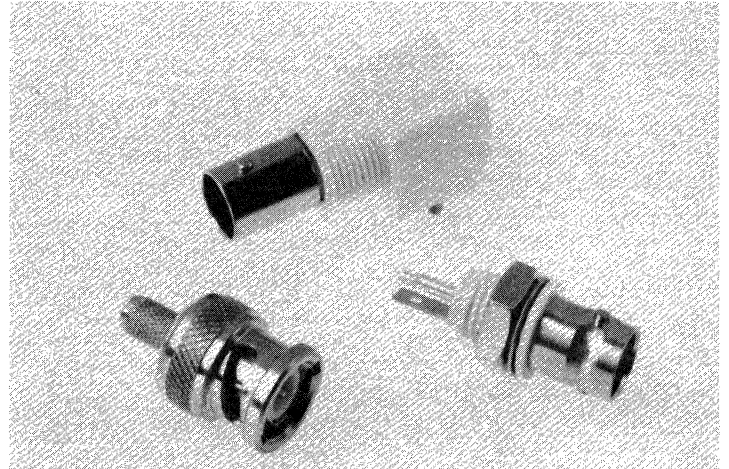
BNC2R-21R
TNC22R-32R
N33R-40R
TWINAX41R-45R
UHF .....	.46R-53R
Between Series Adapters .....	.54R
SMA .....	.55R-67R
SMB/SMC .....	.68R-76R
MCX .....	.77R-81R
BNO .....	.82R-85R
TNO .....	.86R-89R
RF Tooling .....	.90R
Part Number Index .....	.91R-96R

BNC Connectors

The BNC range are bayonet locking coaxial connectors used in quick connect/disconnect applications and are the most widely used RF connectors in the industry today. Molex offers a wide variety of cable and chassis mounting styles as well as a full range of accessories.

Molex BNC connectors are designed to be intermateable with industry standards and MIL-C-39012 connectors. The BNC range are available in both 50 & 75 Ohm versions.

Molex 50 & 75 Ohm versions are intermateable.



Specifications

VSWR (Typical) — (Straight) 1.3 Max. up to 4 GHz
(Right Angle & Adapters) 1.35 up to 4 GHz

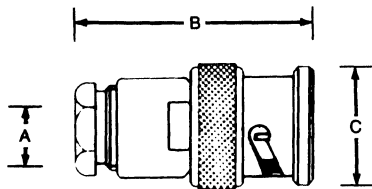
Working Voltage — 500V Peak

Proof Voltage — 2000V Peak

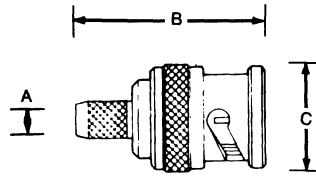
Temperature Range — -55°C–150°C (Machined Connectors)
-40°C– + 85°C (Molded Connectors)

Impedance — 50 & 75 Ohm Versions

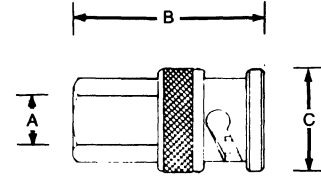
Straight Plugs



Clamp/Solder



Crimp/Crimp



Screw-On

Ordering Information

inches
mm

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features	UG-
						A	B	C	D	E		
58C, 141A	50	73100-1111	50	Clamp/Solder	20R - (A)	.220 5.59	1.08 27.5	.563 14.3				
174A, 188A, 316	50	73100-1221	50	Clamp/Solder	20R - (B)	1.20 3.05	1.08 27.5	.563 14.3				
178B, 196A	50	73100-1421	50	Clamp/Solder	20R - (B)	.106 2.69	1.08 27.5	.563 14.3				
58C, 141A	50	• 73100-1131	50	Clamp/Solder	19R - (B)	.220 5.59	1.08 27.5	.563 14.3			Non-Captive Contact	88
59B, 140	75	• 73100-1531	75	Clamp/Solder	19R - (B)	.257	1.08	.563			Non-Captive Contact	260
62B, 71B, 210	93					6.53	27.5	14.3				
58C, 141A	50	73101-1111	50	Clamp/Solder	20R - (A)	.219 5.56	1.25 31.8	.563 14.3				
303	50	73101-1011	50	Clamp/Solder	20R - (A)	.190 4.83	1.25 31.8	.563 14.3				
174A, 188A, 316	50	73101-1221	50	Clamp/Solder	20R - (A)	.110 2.79	1.25 31.8	.563 14.3				
55B, 142B, 223, 400	50	73101-1711	50	Clamp/Solder	20R - (A)	.257 6.53	1.25 31.8	.563 14.3				
179B, 187A	75	73101-1321	75	Clamp/Solder	20R - (B)	.120 3.05	1.25 31.8	.563 14.3				
59B, 140	75	73101-1511	75	Clamp/Solder	20R - (A)	.257	1.25	.563				
62B, 71B, 210	93					6.53	31.8	14.3				
59B, 140	75	73102-1551	75	Clamp/Solder	17R - (A)	.252	1.02	.563			3-Piece Assembly	
62B, 71B, 210	93					6.40	25.8	14.3				
8A, 213	50	73103-0641	50	Clamp/Solder	20R - (A)	.420 10.67	1.50 38.0	.563 14.3				
9B, 214	50	73103-0841	50	Clamp/Solder	20R - (A)	.443 11.25	1.50 38.0	.563 14.3				
58C, 141A	50	• 73104-1111	50	Crimp/Crimp	18R - (A)	.124 3.15	1.0 25.4	.563 14.3				
174A, 188A, 316	50	73104-1221	50	Crimp/Crimp	18R - (B)	.066 1.68	1.0 25.4	.563 14.3				
55B, 142B, 223, 400	50	73104-1711	50	Crimp/Crimp	18R - (A)	.124 3.15	1.0 25.4	.563 14.3				
59B, 140	75	• 73104-0111	75	Crimp/Crimp	18R - (A)	.154 3.91	1.0 25.4	.563 14.3				
59B, 140	75	• 73104-0113	75	Crimp/Crimp	18R - (A)	.154 3.91	1.0 25.4	.563 14.3			Nickel Body/Gold Contact	
62B, 210	93	• 73104-0311	75	Crimp/Crimp	18R - (A)	.154 3.91	1.0 25.4	.563 14.3				
71B	93	73104-0511	75	Crimp/Crimp	18R - (A)	.154 3.91	1.0 25.4	.563 14.3				
59B, 140	75	73104-0131	75	Crimp/Crimp	17R - (B)	.154 3.91	1.20 30.5	.563 14.3			2-Piece Assembly	
59B, 140	75	73105-0111	75	Screw-On	17R - (C)	1/4-20 UNF	1.46 37.0	.563 14.3			1-Piece Assembly	

• U.S. Standard Product, available through Molex franchised distributors.

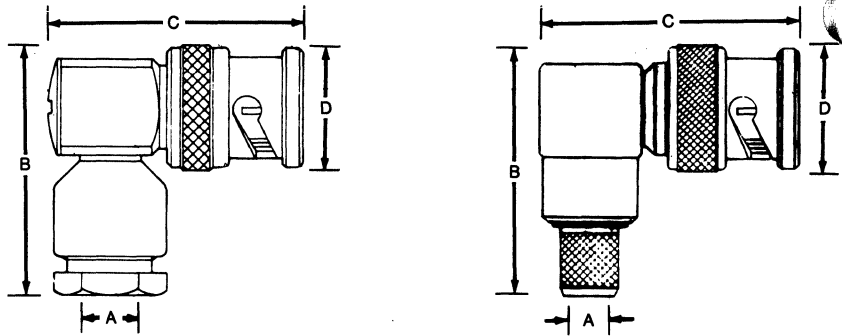
—U.G. Part Numbers are equivalent only.

—All connectors have captive contacts unless otherwise specified.

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example *****3.

—Tooling requirements are located on page 90R.

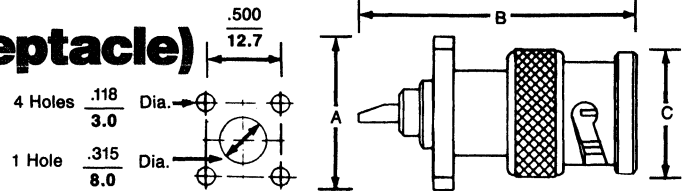
Right Angle Plugs



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Cable/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
303	50	73106-1061	50	Clamp/Solder	20A	.190 4.83	1.15 29.2	1.10 28.0	.563 14.3		
58C, 141A	50	73106-1161	50	Clamp/Solder	20A	.219 5.56	1.15 29.2	1.10 28.0	.563 14.3		
174A, 188A, 316	50	73106-1271	50	Clamp/Solder	20B	.110 2.79	1.15 29.2	1.10 28.0	.563 14.3		
178B, 196A	50	73106-1471	50	Clamp/Solder	20B	.095 2.41	1.15 29.2	1.10 28.0	.563 14.3		
179B, 187A	75	73106-1371	75	Clamp/Solder	20B	.120 3.05	1.15 29.2	1.10 28.0	.563 14.3		
59B, 140	75	73106-1561	75	Clamp/Solder	20A	.257	1.15	1.10	.563		
62B, 71B, 210	93					6.53	29.2	28.0	14.3		
58C, 141A	50	73107-1111	50	Crimp/Crimp	17A	.124 3.15	1.04 26.3	1.13 28.6	.563 14.3		
174A, 188A, 316	50	73107-1221	50	Crimp/Crimp	17B	.066 1.68	1.04 26.3	1.13 28.6	.563 14.3		
55B, 142B, 223, 400	50	73107-1711	50	Crimp/Crimp	17B	.124 3.15	1.04 26.3	1.13 28.6	.563 14.3		
179B, 187A	75	73107-1321	75	Crimp/Crimp	17B	.066 1.68	1.04 26.3	1.13 28.6	.563 14.3		
59B, 140	75	73107-0111	75	Crimp/Crimp	17A	.154 3.91	1.04 26.3	1.13 28.6	.563 14.3		
62B, 210	75	73107-0311	75	Crimp/Crimp	17A	.154 3.91	1.04 26.3	1.13 28.6	.563 14.3		

Straight Panel Plug (Receptacle)

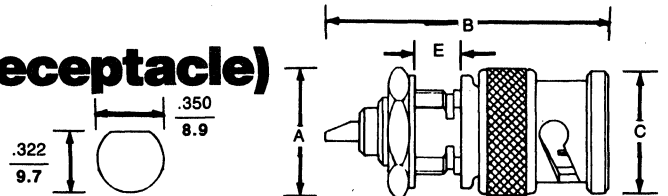


Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73108-5001	50		.689 17.5	1.26 32.0	.563 14.3			3.0mm Through Holes
73108-7001	75		.689 17.5	1.26 32.0	.563 14.3			3.0mm Through Holes

Other panel mounting hole styles available.

Straight Bulkhead Plug (Receptacle)



Ordering Information

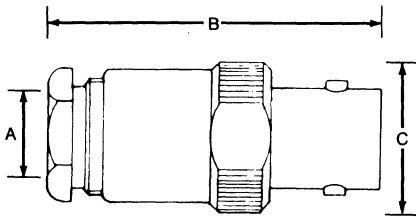
Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73109-5001	50		127- A/F	1.26 32.0	.563 14.3		.185 4.7	Front Mount
73109-7001	75		127- A/F	1.26 32.0	.563 14.3		.185 4.7	Front Mount

—All connectors have captive contacts unless otherwise specified.

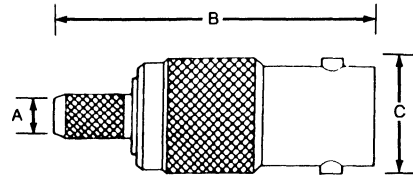
—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example *****3.

—Tooling requirements are located on page 90R.

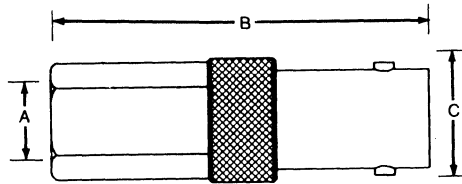
Straight Jacks



Clamp/Solder



Crimp/Crimp



Screw-On

Ordering Information

inches
mm

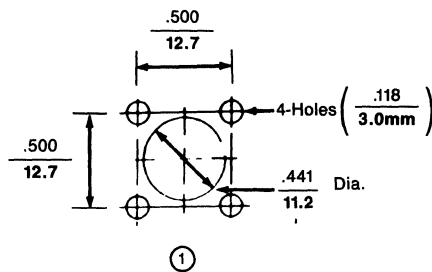
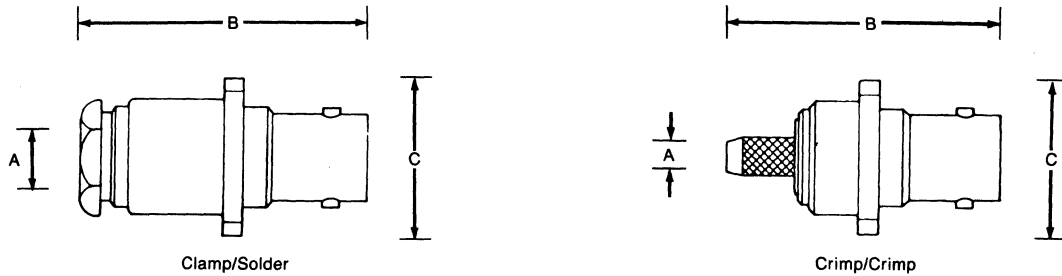
RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
58C, 141A	50	73115-1111	50	Clamp/Solder	20R - (A)	5.56 2.19	33.3 1.31	14.3 .563			
174A, 188A, 316	50	73115-1221	50	Clamp/Solder	20R - (B)	2.79 .110	33.3 1.31	14.3 .563			
55B, 142B, 223, 400	50	73115-1711	50	Clamp/Solder	20R - (A)	6.53 .257	33.3 1.31	14.3 .563			
179B, 187A	75	73115-1321	75	Clamp/Solder	20R - (B)	3.05 .120	33.3 1.31	14.3 .563			
59B, 140	75	73115-1511	75	Clamp/Solder	20R - (A)	6.53	33.3	14.3			
62B, 71B, 210	93					.257	1.31	.563			
58C, 141A	50	73116-1111	50	Crimp/Crimp	18R - (A)	3.15 .124	31.1 1.22	11.9 .469			
174A, 188A, 316	50	73116-1221	50	Crimp/Crimp	18R - (B)	1.68 .066	31.1 1.22	11.9 .469			
55B, 142B, 223, 400	50	73116-1711	50	Crimp/Crimp	18R - (A)	3.15 .124	31.1 1.22	11.9 .469			
179B, 187A	75	73116-1321	75	Crimp/Crimp	18R - (B)	1.68 .066	31.1 1.22	11.9 .469			
59B, 140	75	73116-0111	75	Crimp/Crimp	18R - (A)	3.91 .154	31.1 1.22	11.9 .469			
62B, 210	93	73116-0311	75	Crimp/Crimp	18R - (A)	3.91 .154	31.1 1.22	11.9 .469			
71B	93	73116-0511	75	Crimp/Crimp	18R - (A)	3.91 .154	31.1 1.22	11.9 .469			
59B, 140	75	73117-0111	75	Screw-On	17R - (C)	1/4-20 UNF	37.0 1.46	11.6 0.46			1 Piece Assembly

—All connectors have captive contacts unless otherwise specified.

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example ***** - ****3.

—Tooling requirements are located on page 90R.

Straight Panel Jacks



Ordering Information

inches
mm

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
58C, 141A	50	73118-1111	50	Clamp/Solder	20R - (A)	.219 5.56	1.26 32.0	.689 17.5			.118 3.0mm Through Holes
303	50	73118-1011	50	Clamp/Solder	20R - (A)	.190 4.83	1.26 32.0	.689 17.5			.118 3.0mm Through Holes
55B, 142B, 223, 400	50	73118-1711	50	Clamp/Solder	20R - (A)	.257 6.53	1.26 32.0	.689 17.5			.118 3.0mm Through Holes
174A, 188A, 316	50	73118-1221	50	Clamp/Solder	20R - (A)	? 2.79	1.26 32.0	.689 17.5			.118 3.0mm Through Holes
178B, 196A	75	73118-1321	75	Clamp/Solder	20R - (A)	.120 3.05	1.26 32.0	.689 17.5			.118 3.0mm Through Holes
59B, 140	75	73118-1511	75	Clamp/Solder	20R - (A)	.257	1.26	.689			.118
62B, 71B, 210	93					6.53	32.0	17.5			3.0mm Through Holes
58C, 141A	50	73119-1111	50	Crimp/Crimp	18R - (A)	.124 3.15	1.22 31.0	.689 17.5			.118 3.0mm Through Holes
174A, 188A, 316	50	73119-1221	50	Crimp/Crimp	18R - (A)	.066 1.68	1.22 31.0	.689 17.5			.118 3.0mm Through Holes
55B, 142B, 223, 400	50	73119-1711	50	Crimp/Crimp	18R - (A)	.124 3.15	1.22 31.0	.689 17.5			.118 3.0mm Through Holes
179B, 187A	75	73119-1321	75	Crimp/Crimp	18R - (A)	.066 1.68	1.22 31.0	.689 17.5			.118 3.0mm Through Holes
59B, 140	75	73119-0111	75	Crimp/Crimp	18R - (A)	.154 3.91	1.22 31.0	.689 17.5			.118 3.0mm Through Holes
62B, 210	93	73119-0311	75	Crimp/Crimp	18R - (A)	.154 3.91	1.22 31.0	.689 17.5			.118 3.0mm Through Holes

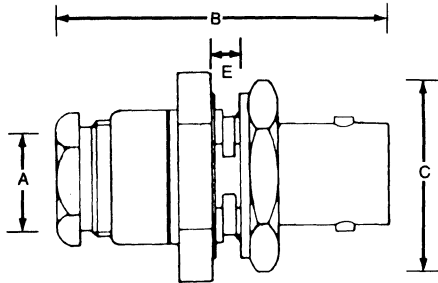
Other panel mounting hole styles available

—All connectors have captive contacts unless otherwise specified.

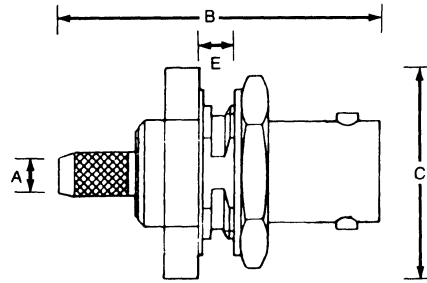
—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example ***** - ***3.

—Tooling requirements are located on page 90R.

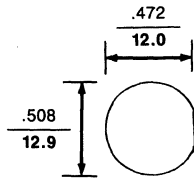
Straight Bulkhead Jacks



Clamp/Solder



Crimp/Crimp



Ordering Information

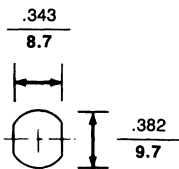
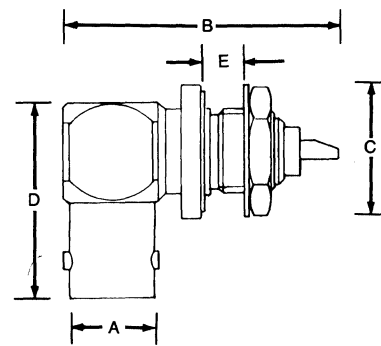
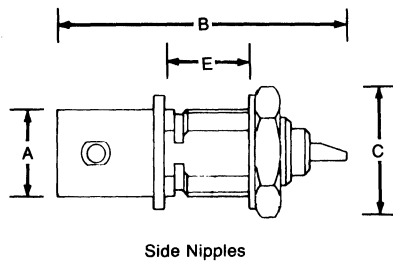
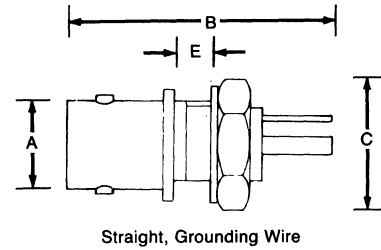
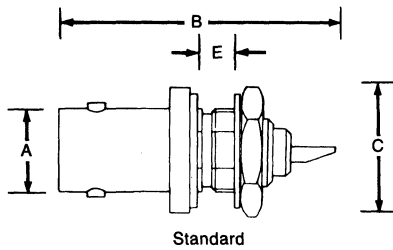
inches
mm

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
303	50	73120-1011	50	Clamp/Solder	20R - (A)	.190 4.83	1.26 32.0	.795 20.2		.118 3.0	Rear Mount
58C, 141A	50	73120-1111	50	Clamp/Solder	20R - (A)	.219 5.56	1.26 32.0	.795 20.2		.118 3.0	Rear Mount
174A, 188A, 316	50	73120-1221	50	Clamp/Solder	20R - (B)	.110 2.79	1.26 32.0	.795 20.2		.118 3.0	Rear Mount
55B, 142B, 223, 400	50	73120-1711	50	Clamp/Solder	20R - (A)	.257 6.53	1.26 32.0	.795 20.2		.118 3.0	Rear Mount
179B, 187A	75	73120-1321	75	Clamp/Solder	20R - (B)	.120 3.05	1.26 32.0	.795 20.2		.118 3.0	Rear Mount
59B, 140	75	73120-1511	75	Clamp/Solder	20R - (A)	.257	1.26	.795		.118	Rear Mount
62B, 71B, 210	93					6.53	32.0	20.2	3.0		
62B, 210	93	73121-0311	75	Crimp/Crimp	18R - (A)	.154 3.91	1.22 31.0	.689 17.5		.248 6.3	Rear Mount
58C, 141A	50	• 73122-1111	50	Crimp/Crimp	18R - (A)	.124 3.15	1.22 31.1	.795 20.2		.126 3.2	Rear Mount
174A, 188A, 316	50	73122-1221	50	Crimp/Crimp	18R - (B)	.066 1.68	1.22 31.1	.795 20.2		.126 3.2	Rear Mount
55B, 142B, 223, 400	50	73122-1711	50	Crimp/Crimp	18R - (A)	.124 3.15	1.22 31.1	.795 20.2		.126 3.2	Rear Mount
179B, 187A	75	73122-1321	75	Crimp/Crimp	18R - (B)	.066 1.68	1.22 31.1	.795 20.2		.126 3.2	Rear Mount
59B, 140	75	73122-0111	75	Crimp/Crimp	18R - (A)	.154 3.91	1.22 31.1	.795 20.2		.126 3.2	Rear Mount
62B, 210	93	73122-0311	75	Crimp/Crimp	18R - (A)	.154 3.91	1.22 31.1	.795 20.2		.126 3.2	Rear Mount

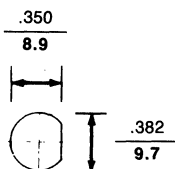
- U.S. Standard Product, available through Molex franchised distributors.
- All connectors have captive contacts unless otherwise specified.
- All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example ***** - 3333.
- Tooling requirements are located on page 90R.



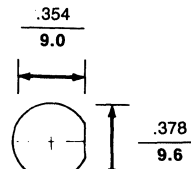
Bulkhead Receptacles (Jack)



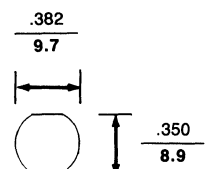
①



②



③



④

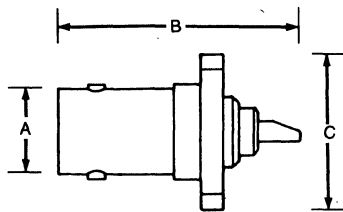
Ordering Information

inches
mm

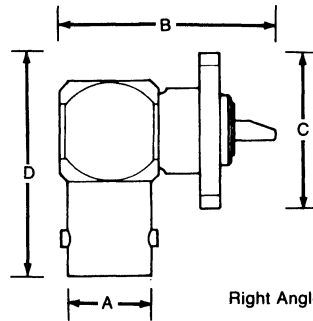
Order Number	Connector Impedance (Ohms)	Style	Panel Cutout	Dimensions					Features	UG-
				A	B	C	D	E		
73123-5001	50	Straight, Front Mount	①	.382 9.7	1.26 32.1	.563 14.3		.322 8.17	Standard (Panel Sealed)	
73123-7001	75	Straight, Front Mount	①	.382 9.7	1.26 32.1	.563 14.3		.322 8.17	Standard (Panel Sealed)	
• 73124-5001	50	Straight, Front Mount	①	.382 9.7	1.26 32.1	.579 14.7		.267 6.78	Standard (Panel Sealed)	1094A
73125-5001	50	Straight, Front Mount	③	.382 9.7	1.26 32.0	.579 14.7		.389 9.88	Side Nipples	
73125-7001	75	Straight, Front Mount	③	.382 9.7	1.26 32.0	.579 14.7		.389 9.88	Side Nipples	
• 73126-5001	50	Straight, Front Mount	②	.382 9.7	1.10 27.9	.579 14.7		.148 3.75	Side Nipples	1094
73126-7001	75	Straight, Front Mount	②	.382 9.7	1.10 27.9	.579 14.7		.148 3.75	Side Nipples	
• 73128-5001	50	Straight, Front Mount	④	.382 9.7	1.18 30.0	.579 14.7		.170 4.3	Panel Insulated, Grounding Wire	
73127-5001	50	Right Angle, Front Mount	②	.382 9.7	1.26 32.0	.579 14.7	.445 24.0	.207 5.30		
73127-7001	75	Right Angle, Front Mount	②	.382 9.7	1.26 32.0	.579 14.7	.445 24.0	.207 5.30		



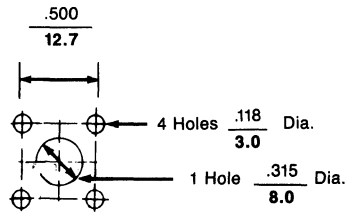
Panel Receptacles (Jack)



Straight



Right Angle



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Panel Cutout	Dimensions					Features
				A	B	C	D	E	
73130-5001	50	Straight	①	.382 9.7	1.06 27.0	.689 17.5			.118 3.0mm Through Holes
73130-7001	75	Straight	①	.382 9.7	1.06 27.0	.689 17.5			.118 3.0mm Through Holes
73131-5001	50	Right Angle	①	.382 9.7	.969 24.6	.689 17.5	.984 25.0		.118 3.0mm Through Holes
73131-7001	75	Right Angle	①	.382 9.7	.969 24.6	.689 17.5	.984 25.0		.118 3.0mm Through Holes

Other panel mounting hole styles available.

• U.S. Standard Product, available through Molex franchised distributors.

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3.
Example ***** - ***3.

PCB Receptacles (Jack)

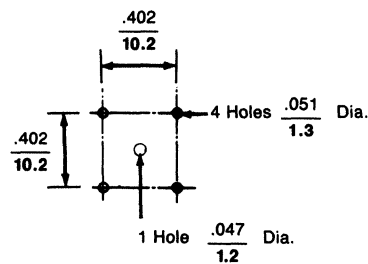
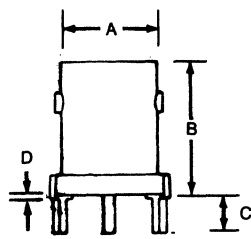
Ordering Information

Order Number	Connector Impedance (Ohms)	Style	Connector Style	Dimensions						Features
				A	B	C	D	E	F	
73132-5001	50	Straight, Metal Body	①	.382 9.7	.551 14.0	.142 3.6	.002 .04			w/Standoffs
73133-5001	50	Straight, Metal Body	②	.382 9.7	.661 16.8	.154 3.9	.002 .05			w/Standoffs
73134-5001	50	Straight, Metal Body	③	.382 9.7	.524 13.3	.161 4.1	.002 .04			w/Standoffs
73135-5001	50	Right Angle, Metal Body	④	.382 9.7	.819 20.8	.154 3.9	.002 .04	.87 22.0		w/Standoffs
• 73136-5001	50	Right Angle, Plastic Molded Body	⑤	.382 9.7	1.39 35.2	.146 3.7	.024 0.6	.343 8.7	.626 15.9	w/Standoffs, Black Body
73136-5011	50	Right Angle, Plastic Molded Body	⑤	.382 9.7	1.39 35.2	.146 3.7	.024 0.6	.343 8.7	.626 15.9	w/Standoffs, White Body
73137-5001	50	Right Angle, Plastic Molded Body	⑥	.382 9.7	1.35 34.4	.091 2.3	.024 0.6	.343 8.7	.512 13.0	Low Profile, Black Body
73139-5011	50	Right Angle, Plastic Molded Body	⑦	.382 9.7	1.39 35.3	.189 4.8	.024 0.6	.343 8.7	.626 15.9	w/Standoffs, White Body
73139-5001	50	Right Angle, Plastic Molded Body	⑦	.382 9.7	1.39 35.3	.189 4.8	.024 0.6	.343 8.7	.626 15.9	w/Standoffs, Black Body
73138-5001	50	Straight, Plastic Molded Body	⑧	.382 9.7	1.39 35.2	.138 3.5	.024 0.6	.339 8.6	.626 15.9	w/Standoffs, Black Body
73138-5011	50	Straight, Plastic Molded Body	⑧	.382 9.7	1.39 35.2	.138 3.5	.024 0.6	.339 8.6	.626 15.9	w/Standoffs, White Body
73140-5011	50	Straight, Plastic Molded Body	⑨	.382 9.7	1.39 35.3	.319 8.1	.024 0.6	.339 8.6	.626 15.9	w/Standoffs, White Body
73140-5001	50	Straight, Plastic Molded Body	⑨	.382 9.7	1.39 35.3	.319 8.1	.024 0.6	.339 8.6	.626 15.9	w/Standoffs, Black Body

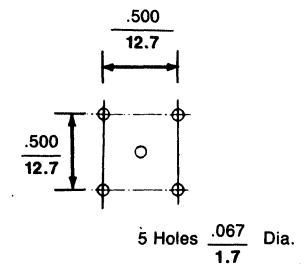
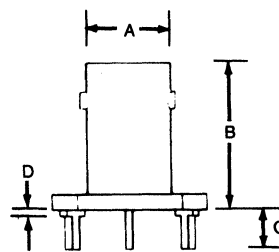
• U.S. Standard Product, available through Molex franchised-distributors.

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example *****3.

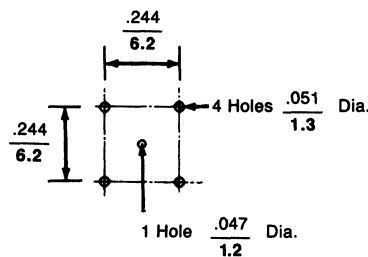
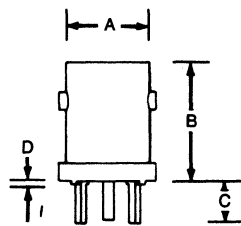
—Connector styles 5 through 9 are located on page 11R.



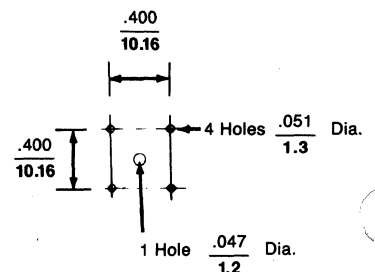
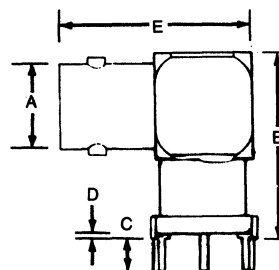
①



②

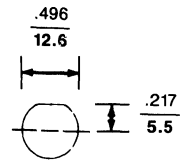
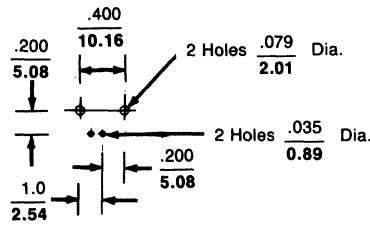
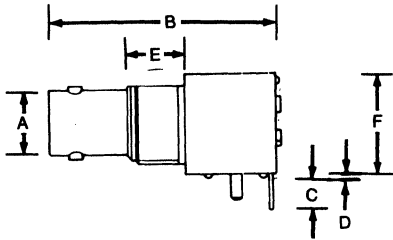


③

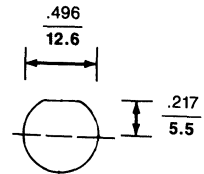
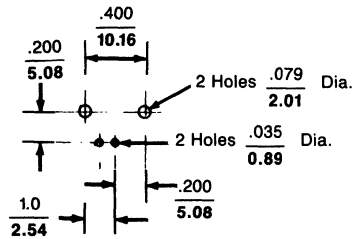
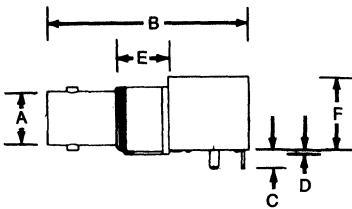


④

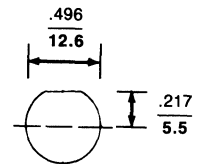
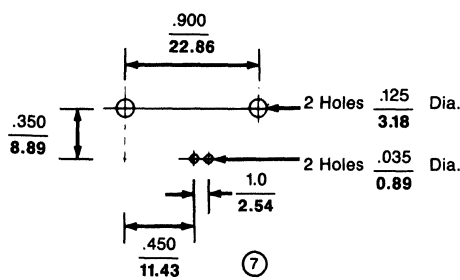
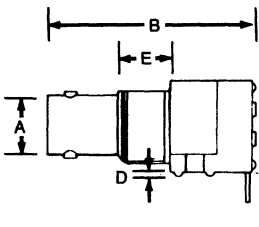
PCB Receptacles (Jack)



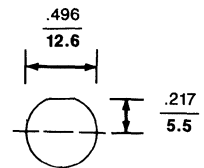
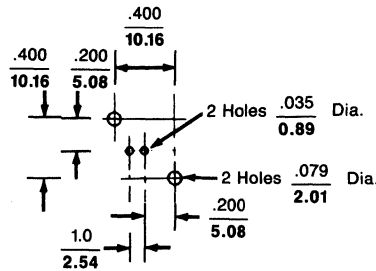
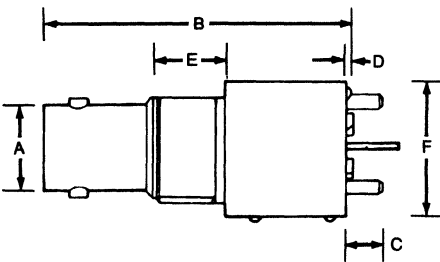
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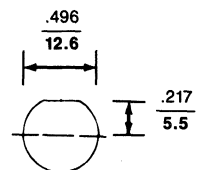
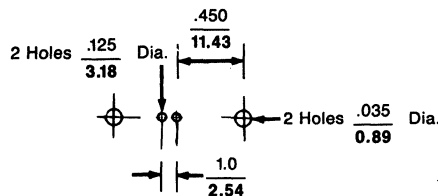
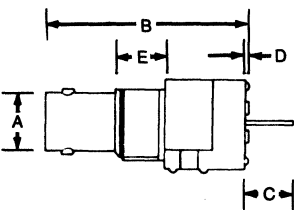
⑥



⑦

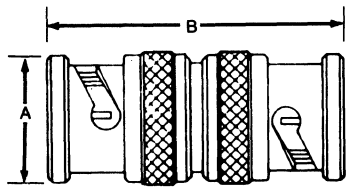


⑧

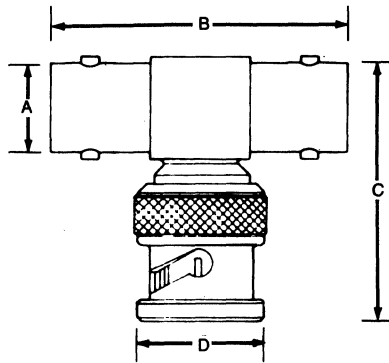


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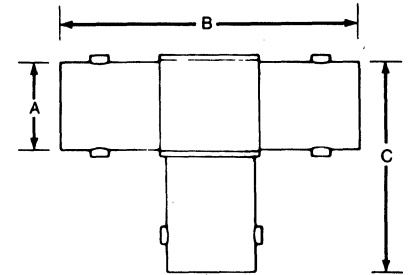
Adapters



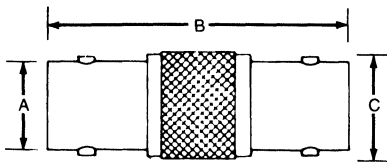
Plug-Plug



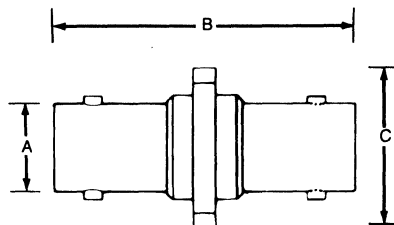
Jack-Plug-Jack



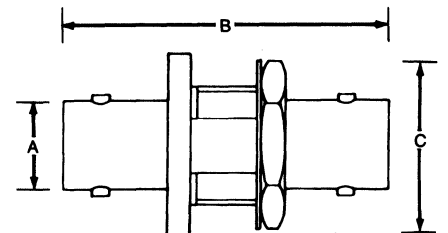
Jack-Jack-Jack



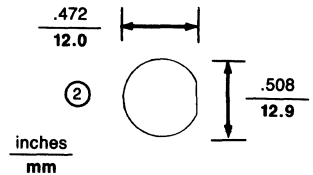
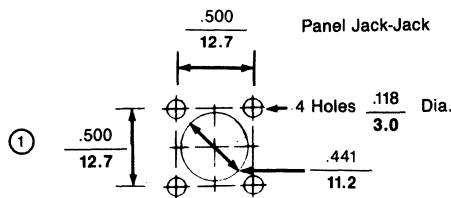
Jack-Jack



Panel Jack-Jack



Bulkhead Jack-Jack



Ordering Information

Order Number	Connector Impedance (Ohms)	Style	Panel Cutout	Dimensions					Features	UG-
				A	B	C	D	E		
73146-5001	50	Plug-Plug	—	.563 14.3	1.25 31.8					
73146-7001	75	Plug-Plug	—	.563 14.3	1.25 31.8					
• 73147-5005	50	Jack-Jack	—	.382 9.7	1.28 32.5	.464 11.8			Silver Body, Silver Cont.	914
73147-7005	75	Jack-Jack	—	.382 9.7	1.28 32.5	.464 11.8			Silver Body, Silver Cont.	
• 73148-5001	50	Jack-Plug-Jack	—	.382 9.7	1.28 32.5	1.12 28.5	.563 14.3			274
73148-7001	75	Jack-Plug-Jack	—	.382 9.7	1.28 32.5	1.12 28.5	.563 14.3			
73150-5001	50	Jack-Jack-Jack	—	.382 9.7	1.28 32.5	.937 23.8				
73150-7001	75	Jack-Jack-Jack	—	.382 9.7	1.28 32.5	.937 23.8				
73149-5001	50	Panel, Jack-Jack	①	.382 9.7	1.28 32.5	.689 17.5			.118 3.0mm Through Holes	
73149-7001	75	Panel, Jack-Jack	①	.382 9.7	1.28 32.5	.689 17.5			.118 3.0mm Through Holes	
• 73151-5001	50	Bulkhead, Jack-Jack	②	.382 9.7	1.38 35.0	.780 19.8		.248 6.3		
73151-7001	75	Bulkhead, Jack-Jack	②	.382 9.7	1.38 35.0	.780 19.8		.248 6.3		

Other panel mounting holes available.

• U.S. Standard product, available through Molex franchised distributors.

—UG part numbers are equivalent only.

—All connectors have nickel body/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example *****3.



Accessories (Descriptions)

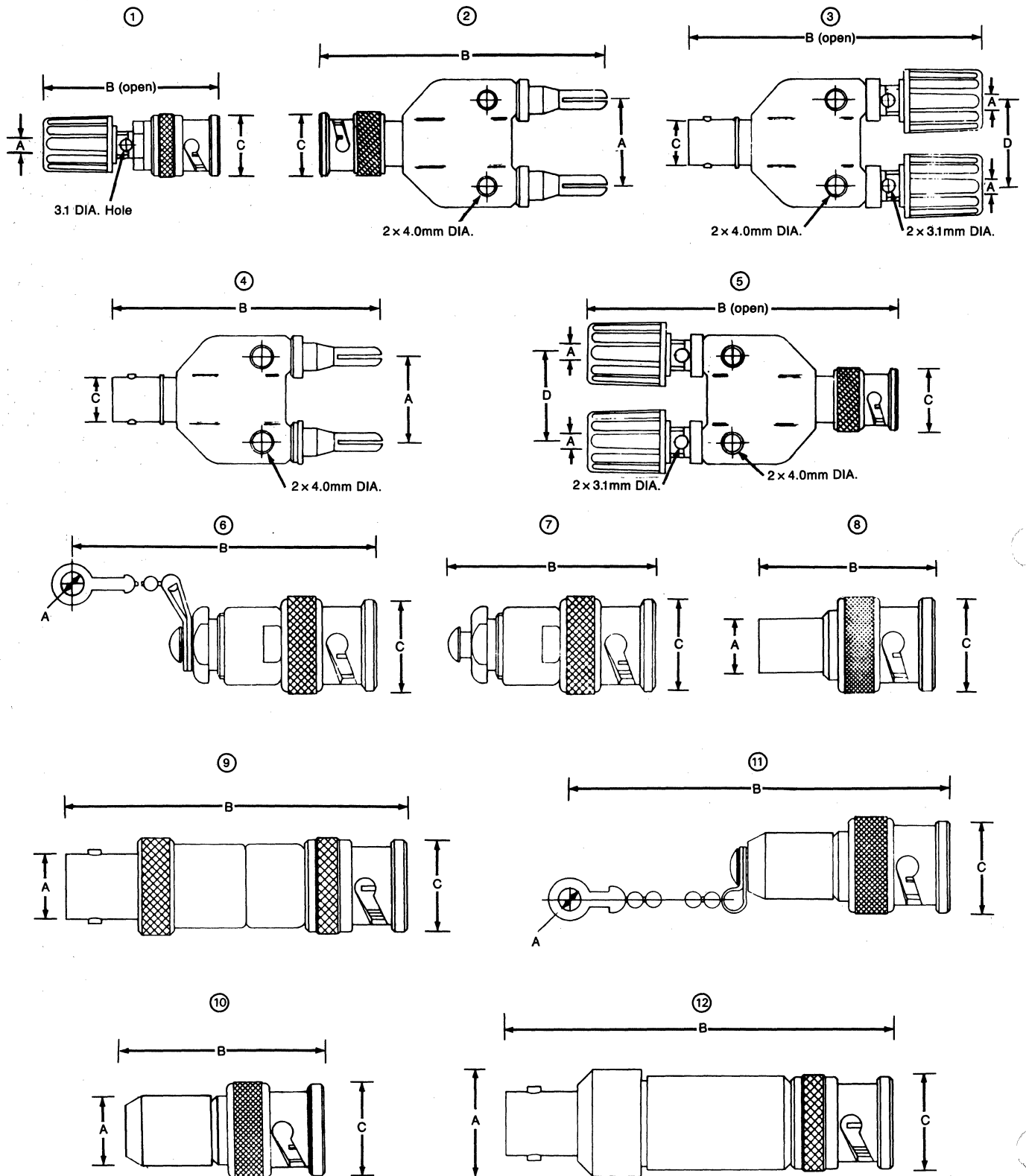
Ordering Information

inches
mm

Order Number	Impedance (Ohms)	Description	Drawing	Dimensions				
				A	B	C	D	E
73155-5001	50	Binding Post Adapter, BNC Male to 1 x Post	①	.157 4.0	1.69 42.8	.563 14.3		
73156-5001	50	Binding Post Adapter, BNC Male to 2 x Posts	②	.157 4.0	2.67 67.8	.563 14.3	.748 19.0	
73157-5001	50	Binding Post Adapter, BNC Female to 2 x 4mm Plugs	③	.748 19.0	2.38 60.5	.382 9.7		
73158-5001	50	Binding Post Adapter, BNC Female to 2 x Posts	④	.157 4.0	2.56 65.0	.382 9.7	.748 19.0	
73159-5001	50	Binding Post Adapter, BNC Male to 2 x 4mm Plugs	⑤	.748 19.0	2.52 64.0	.563 14.3		
73160-5001	50	Resistor Plug, with Chain	⑥	.157 4.0	1.41 35.7	.563 14.3	.299 7.6	
73160-7001	75	Resistor Plug, with Chain	⑥	.157 4.0	1.41 35.7	.563 14.3	.299 7.6	
73161-5001	50	Resistor Plug, without Chain	⑦	—	1.21 30.8	.563 14.3		
73161-7001	75	Resistor Plug, without Chain	⑦	—	1.21 30.8	.563 14.3		
73162-5001	50	Resistor Plug,	⑧	.311 7.9	1.02 25.9	.563 14.3		
73162-7001	75	Resistor Plug,	⑧	.311 7.9	1.02 25.9	.563 14.3		
73162-9001	91	Resistor Plug,	⑧	.311 7.9	1.02 25.9	.563 14.3		
73162-9002	9.1 milliohms	Resistor Plug,	⑧	.311 7.9	1.02 25.9	.563 14.3		
73163-5001	50	Attenuator, (3 db)	⑨	.382 9.7	1.98 50.4	.563 14.3		
73163-5002	50	Attenuator, (6 db)	⑨	.382 9.7	1.98 50.4	.563 14.3		
73163-5003	50	Attenuator, (10 db)	⑨	.311 9.7	1.98 50.4	.563 14.3		
73163-5004	50	Attenuator, (20 db)	⑨	.382 9.7	1.98 50.4	.563 14.3		
73163-7001	75	Attenuator, (3 db)	⑨	.382 9.7	1.98 50.4	.563 14.3		
73163-7002	75	Attenuator, (6 db)	⑨	.382 9.7	1.98 50.4	.563 14.3		
73163-7003	75	Attenuator, (10 db)	⑨	.382 9.7	1.98 50.4	.563 14.3		
73163-7004	75	Attenuator, (20 db)	⑨	.382 9.7	1.98 50.4	.563 14.3		
73164-5001	50	Terminator, without Chain, 1.0W VSWR 1.1	⑩	.402 10.2	1.20 30.5	.563 14.3		
73164-7001	75	Terminator, without Chain, 0.5W VSWR 1.1	⑩	.402 10.2	1.20 30.5	.563 14.3		
73165-5001	50	Terminator, with Chain, 1.0W VSWR 1.1	⑪	.157 4.0	3.13 79.6	.563 14.3	1.97 50.0	
73165-7001	75	Terminator, with Chain, 0.5W VSWR 1.1	⑪	.157 4.0	3.13 79.6	.563 14.3	1.97 50.0	
73166-5002	50	Through Terminator, 2W	⑫	.382 9.7	2.28 57.8	.563 14.3		
73166-7001	75	Through Terminator, 1W	⑫	.382 9.7	2.28 57.8	.563 14.3		

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3.
Example *****3.

Accessories



Accessories Description (cont.)

Ordering Information

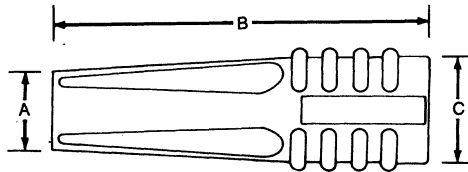
inches
mm

Order Number	Description	Drawing	Dimensions				
			A	B	C	D	E
• 73167-0001	Strain Relief, O.D.-5.5 Red (RG 58 & 223)	①	.190 4.83	1.50 38.1	4.9 12.4		
• 73167-0002	Strain Relief, O.D.-5.5 Black (RG 58 & 223)	①	.190 4.83	1.50 38.1	4.9 12.4		
73167-0003	Strain Relief, O.D.-5.5 Green (RG 58 & 223)	①	.190 4.83	1.50 38.1	4.9 12.4		
73167-0004	Strain Relief, O.D.-5.5 Blue (RG 58 & 223)	①	.190 4.83	1.50 38.1	4.9 12.4		
73167-0005	Strain Relief, O.D.-5.5 Brown (RG 58 & 223)	①	.190 4.83	1.50 38.1	4.9 12.4		
73167-0006	Strain Relief, O.D.-5.5 Yellow (RG 58 & 223)	①	.190 4.83	1.50 38.1	4.9 12.4		
73167-0007	Strain Relief, O.D.-5.5 Gray (RG 58 & 223)	①	.190 4.83	1.50 38.1	4.9 12.4		
73167-0008	Strain Relief, O.D.-5.5 Violet (RG 58 & 223)	①	.190 4.83	1.50 38.1	4.9 12.4		
73167-0009	Strain Relief, O.D.-5.5 Orange (RG 58 & 223)	①	.190 4.83	1.50 38.1	4.9 12.4		
73167-0000	Strain Relief, O.D.-5.5 White (RG 58 & 223)	①	.190 4.83	1.50 38.1	4.9 12.4		
• 73168-0001	Strain Relief, O.D.-6.3 Red (RG 59 & 62)	①	.219 5.56	1.50 38.1	4.9 12.4		
• 73168-0002	Strain Relief, O.D.-6.3 Black (RG 59 & 62)	①	.219 5.56	1.50 38.1	4.9 12.4		
73168-0003	Strain Relief, O.D.-6.3 Green (RG 59 & 62)	①	.219 5.56	1.50 38.1	4.9 12.4		
73168-0004	Strain Relief, O.D.-6.3 Blue (RG 59 & 62)	①	.219 5.56	1.50 38.1	4.9 12.4		
73168-0005	Strain Relief, O.D.-6.3 Brown (RG 59 & 62)	①	.219 5.56	1.50 38.1	4.9 12.4		
73168-0006	Strain Relief, O.D.-6.3 Yellow (RG 59 & 62)	①	.219 5.56	1.50 38.1	4.9 12.4		
73168-0007	Strain Relief, O.D.-6.3 Gray (RG 59 & 62)	①	.219 5.56	1.50 38.1	4.9 12.4		
73168-0008	Strain Relief, O.D.-6.3 Violet (RG 59 & 62)	①	.219 5.56	1.50 38.1	4.9 12.4		
73168-0009	Strain Relief, O.D.-6.3 Orange (RG 59 & 62)	①	.219 5.56	1.50 38.1	4.9 12.4		
73168-0000	Strain Relief, O.D.-6.3 White (RG 59 & 62)	①	.219 5.56	1.50 38.1	4.9 12.4		
• 73169-0001	Solder Tags	②	.157 4.0	.834 21.2	.512 13.0	.063 1.6 DIA.	.390 9.9 DIA.
73169-0002	Solder Tags	③	.118 3.0	.874 22.2	.748 19.0	.039 1.0 DIA.	.512 13.0 DIA.
73170-0001	Nylon Bushings	④	.374 9.5	.449 11.4	.563 14.3	.039 1.0	.016 .04
73171-0001	Nylon Bushings	⑤	.504 12.8	.626 15.9	.748 19.0	.039 1.0	.016 0.4
73172-0001	Male Cap with Chain	⑥	.157 4.0	2.54 64.5	.563 14.3	1.97 50.0	
73172-0002	Male Cap without Chain	⑦	—	.571 14.5	.563 14.3		
73173-0001	Female Cap with Chain	⑧	.157 4.0	3.53 89.7	.382 9.7	2.99 76.0	
73173-0002	Female Cap without Chain	⑨	—	.657 16.7	.382 9.7		

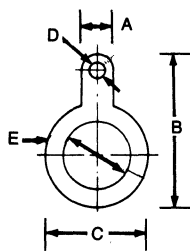
• U.S. Standard Product, available through Molex franchised distributors



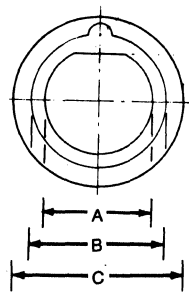
Accessories Drawings (cont.)



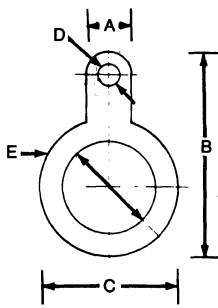
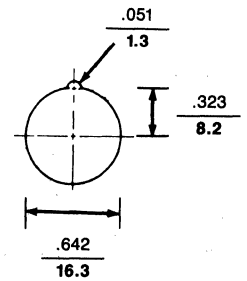
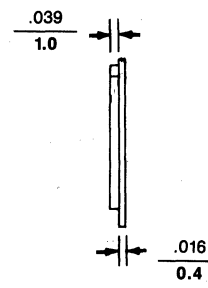
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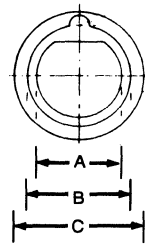
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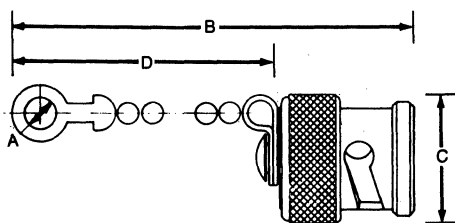
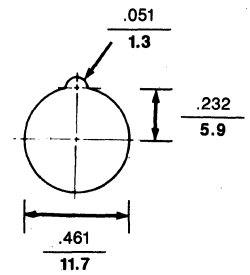
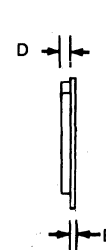
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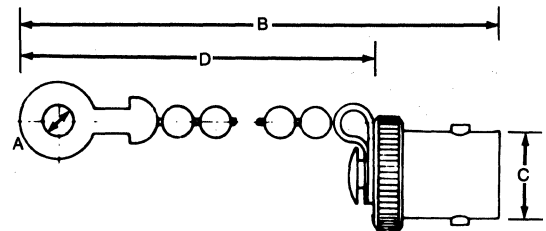
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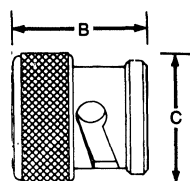
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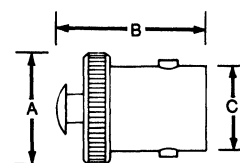
⑥



⑧



⑦



⑨

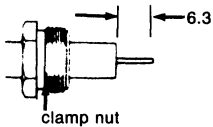
BNC ASSEMBLY INSTRUCTIONS



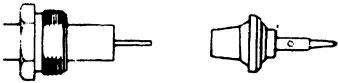
Clamp, Crimp, Screw-on

CLAMP THREE PIECE ASSEMBLY CAPTIVE CONTACT (A)

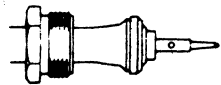
Slide clamp nut over cable, trim outer jacket braid and dielectric flush, as shown.



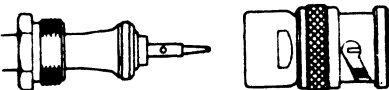
Push contact/ferrule sub-assembly onto cable until the dielectric touches the insulator and so that the tapered ferrule enters under the braid. The braid and jacket should cover the outside of the tapered ferrule.



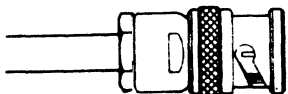
Solder center conductor onto the contact.



Push cable assembly into the body.

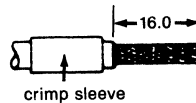


Engage and tighten clamp nut.

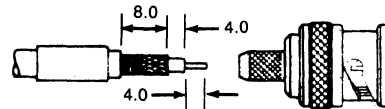


CRIMP TWO PIECE ASSEMBLY, RG-U 59B, 140 ONLY CAPTIVE CONTACT (B)

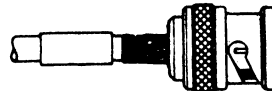
Slide crimp sleeve over cable, trim outer jacket as shown.



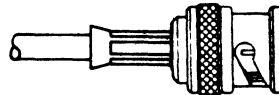
Trim braid and dielectric to dimensions.



Push cable fully into the body to ensure center conductor is firmly located in center contact. Ensure knurled ferrule is inserted under the braid.

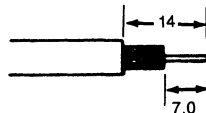


Slide crimp sleeve along cable until it butts against the body sub-assembly; then crimp.

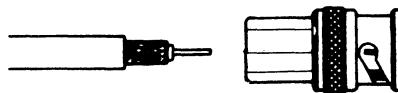


SCREW-ON ONE PIECE ASSEMBLY CAPTIVE CONTACT (C)

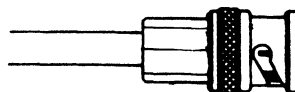
Trim outer jacket, braid and dielectric to the dimensions shown.



Twist braid in a clockwise direction to expose the dielectric.



Push the cable into the connector as far as possible and twist-on.



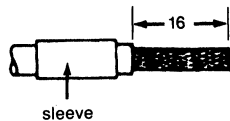
NOTE: These assembly instructions apply to both plugs and jacks.

BNC ASSEMBLY INSTRUCTIONS

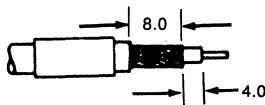
Crimp/Crimp

MIL-CRIMP STYLE CAPTIVE CONTACT (A)

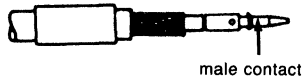
Slide metal crimp sleeve over cable, trim outer jacket from cable as shown.



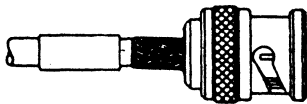
Trim back braid and dielectric to the dimensions shown.



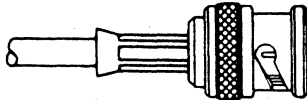
Fit contact over center conductor to butt against the dielectric, then crimp.



Press sub-assembly into body, until contact clicks into place and ensuring that the knurled ferrule is inserted between the dielectric and braid.

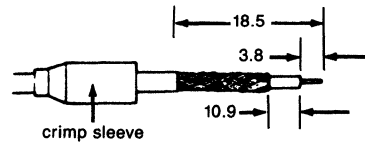


Slide the sleeve along the cable, until butts against the body sub-assembly and Crimp.



MIL-CRIMP STYLE FOR RG-U CABLE: 174A, 179B, 187A, 188A, 316 ONLY CAPTIVE CONTACT (B)

Slide metal crimp sleeve over cable, trim outer jacket, braid and dielectric as shown.



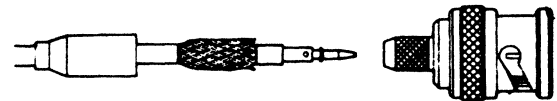
Slide small brass sleeve over dielectric and under braid. Place small plastic sleeve on the end of the dielectric.



Fit contact over center conductor to butt against the dielectric; then crimp.



Press sub-assembly into body, ensuring knurled ferrule is inserted between the dielectric and braid. Slide sleeve to butt against body sub-assembly and Crimp.



NOTE: These assembly instructions apply to both plugs and jacks, straight and right angle. Contacts may vary slightly in shape and size.

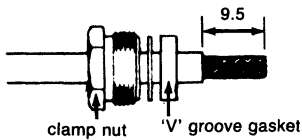
BNC ASSEMBLY INSTRUCTIONS



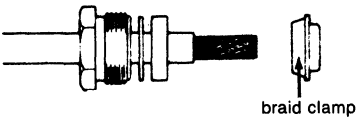
Clamp/Solder

V GROOVE STYLE NON-CAPTIVE CONTACT (A)

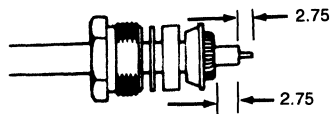
Slide clamp nut, washer and 'V' groove gasket over cable, (groove of gasket to face free end of cable) Trim outer jacket from cable as shown, without disturbing the braid.



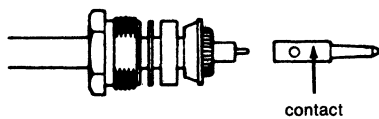
Slide braid clamp over braid so that internal shoulder butts against face of outer sheath.



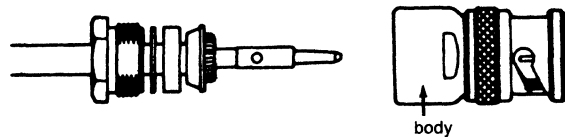
Fold braid back over braid clamp avoiding crossed wires and trim off surplus braid. Trim back dielectric and check length of center conductor.



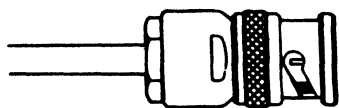
Tin center conductor and fit contact onto center conductor, hold cable and contact tightly together and solder.



Slide 'V' groove gasket, washer and clamp nut up to braid clamp and press sub-assembly into body as far as possible.

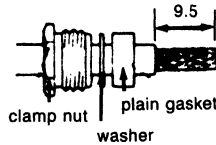


Engage and tighten clamp nut.

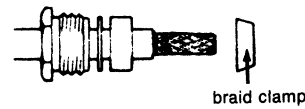


UG-STYLE NON-CAPTIVE CONTACT (B)

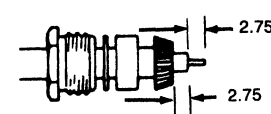
Slide clamp nut, washer and plain gasket over cable trim outer jacket from cable as shown, without disturbing the braid.



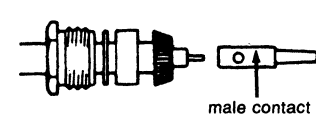
Fit braid clamp so that the internal shoulder butts to the end of the outer cable.



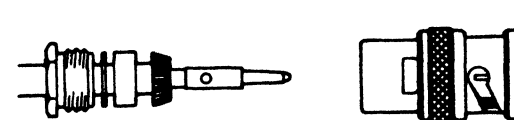
Fold back braid, avoiding crossed wires, and trim surplus braid. Trim dielectric and check that dimension of exposed center conductor.



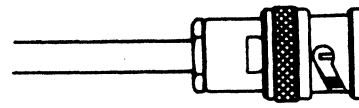
Tin center conductor and fit contact to butt against face of dielectric. Hold cable and contact tightly together and solder.



Slide plain gasket, flat washer and clamp nut to braid clamp and press sub-assembly into body as far as possible.



Engage and tighten clamp nut.



NOTE: These assembly instructions apply to both plugs and jacks. Contacts and insulators may vary slightly in shape and size.

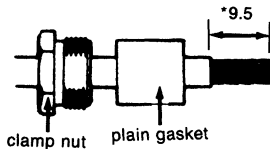
BNC ASSEMBLY INSTRUCTIONS

Clamp/Solder

STANDARD STYLE CAPTIVE CONTACT (A)

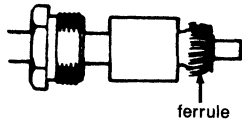
STANDARD STYLE FOR RG-U CABLE: 174A, 178B, 179B, 187A, 188A, 196A, 316 ONLY CAPTIVE CONTACT (B)

Slide clamp nut and plain gasket over cable and trim outer jacket from cable, as shown.

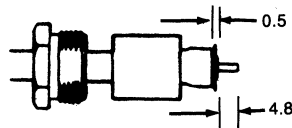


* RG/U CABLE CABLE DIM.
8A, 9B, 213, 214 .283/7.2

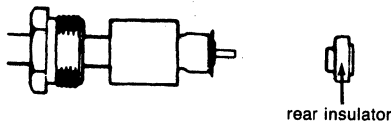
Fold back braid and push ferrule over dielectric to trap braid between outer jacket and ferrule. Trim off surplus braid.



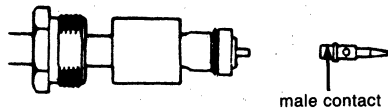
Trim back dielectric and check the length of the protruding center conductor.



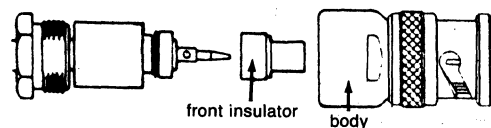
Tin center conductor, then slide rear insulator over dielectric, to butt against ferrule.



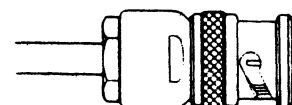
Fit contact onto center conductor, with collar pressed into recess in rear insulator. Hold cable and contact tightly together, and solder.



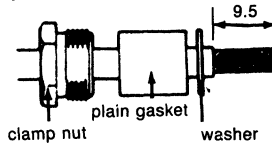
Slide plain gasket and clamp nut up to ferrule, trapping braid. Fit front insulator over contact to butt against rear insulator and press sub-assembly into body as far as possible.



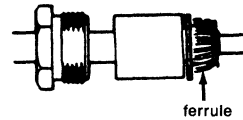
Engage and tighten clamp nut.



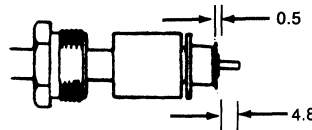
Slide clamp nut, plain gasket and washer over cable. Trim outer jacket from cable as shown.



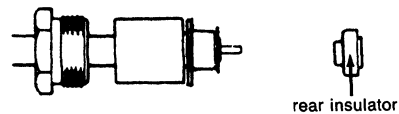
Fold back braid and push ferrule over dielectric to trap braid between outer jacket and ferrule. Trim off surplus braid.



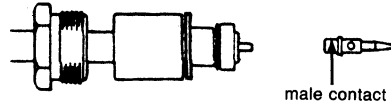
Trim back dielectric and check length of the protruding center conductor.



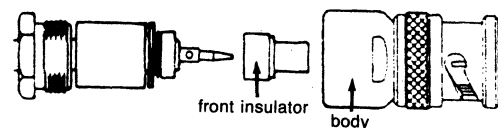
Tin center conductor, then slide rear insulator over dielectric to butt against ferrule.



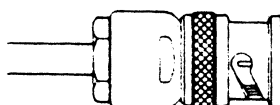
Fit contact onto center conductor, with collar pressed into recess in rear insulator. Hold cable and contact tightly together, and solder.



Slide washer, plain gasket and clamp nut up to ferrule, trapping braid. Fit front insulator over contact to butt against rear insulator and press sub-assembly into body as far as possible.



Engage and tighten clamp nut.



NOTE: These assembly instructions apply to both plugs and jacks. Contacts and insulators may vary slightly in shape and size.

BNC ASSEMBLY INSTRUCTIONS

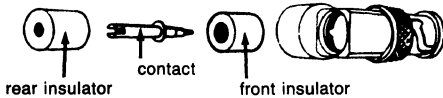


Clamp/Solder (Elbow Plugs)

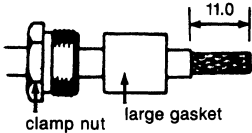
STANDARD STYLE CAPTIVE CONTACT (A)

STANDARD STYLE FOR RG-U CABLE 174A, 178B, 179B, 187A, 188A, 196A, 316 ONLY CAPTIVE CONTACT (B)

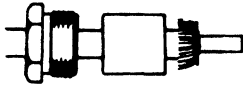
Assemble the contact and insulators in the sequence shown. Fit them into the body with the contact slot aligned ready for the conductor.



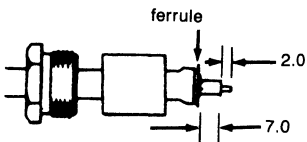
Slide clamp nut and large gasket over cable and trim outer jacket from cable as shown.



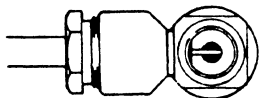
Fold back braid, and push ferrule over dielectric to trap braid between end of outer jacket and ferrule. Trim off surplus braid.



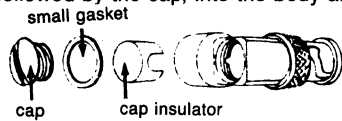
Slide gasket and clamp nut to ferrule, trapping the braid against the flange. Trim back dielectric and check the length of the center conductor.



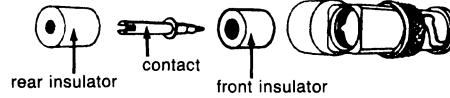
Tin center conductor and press sub-assembly into the body. Tighten clamp nut and solder center conductor to slot in contact.



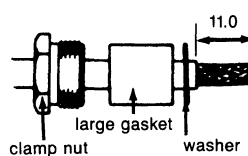
Fit the small gasket onto the cap, then fit the cupped insulator, followed by the cap, into the body and tighten.



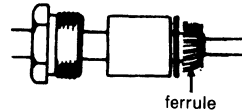
Assemble the contact and insulators in the sequence shown. Fit them into the body with the contact slot aligned ready for the conductor.



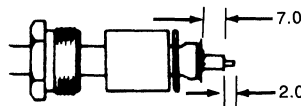
Slide clamp nut, large gasket and washer over cable and trim outer jacket from cable as shown.



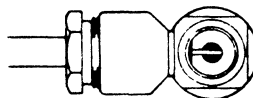
Fold back braid and push ferrule over dielectric to trap braid between end of outer jacket and ferrule. Trim surplus braid.



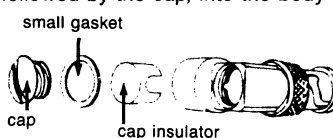
Slide gasket nut and washer to ferrule, trapping the braid against the flange. Trim dielectric and check the length of the center conductor.



Tin center conductor and press sub-assembly into the body. Tighten clamp nut and solder center conductor to slot in contact.



Fit the small gasket onto the cap, then fit the cupped insulator, followed by the cap, into the body and tighten.



NOTE: These assembly instructions apply to both plugs and jacks. Contacts and insulators may vary slightly in shape and size.

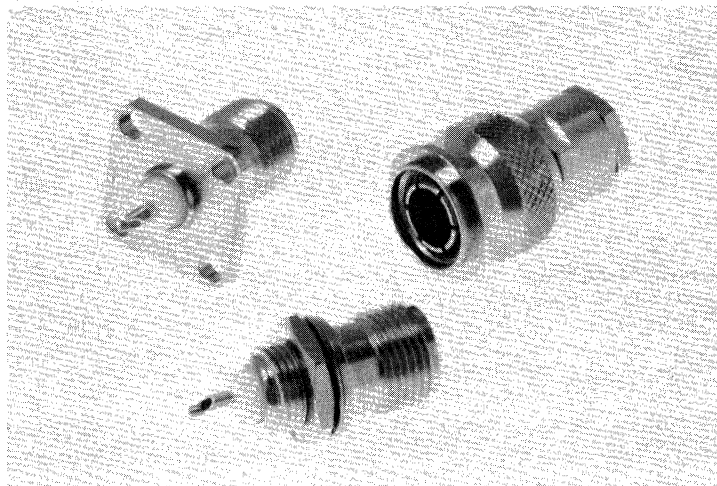
TNC Connectors

TNC Coaxial connectors are screw coupled versions of the BNC series.

The increased rigidity of the screw coupling gives the TNC range a more consistent performance than the BNC under adverse operating conditions. The TNC range is fully interchangeable with industry standards.

Molex has a comprehensive range of 50 & 75 OHM connectors.

The Molex 50 & 75 OHM versions are intermateable.



Specifications

VSWR (Typical) — Less than 1.2 up to 4GHz

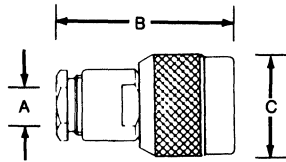
Working Voltage — 500V Peak

Proof Voltage — 2000V Peak

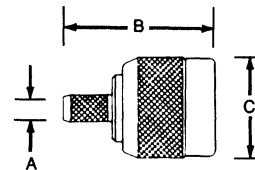
Temperature Range — 55°C to 150°C

Impedance — 50 & 75 OHM

Straight Plugs



Clamp/Solder



Crimp/Crimp

Ordering Information

inches
mm

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
174A, 188A, 316	50	73180-1221	50	Clamp/Solder	32R - (B)	.110 2.79	1.09 27.6	.626 15.9			
178B, 196A	50	73180-1421	50	Clamp/Solder	32R - (B)	.106 2.69	1.09 27.6	.626 15.9			
18C, 141A	50	73180-1121	50	Clamp/Solder	32R - (B)	.219 5.56	1.09 27.6	.626 15.9			
58C, 141A	50	73181-1111	50	Clamp/Solder	32R - (A)	.219 5.56	1.2 30.5	.626 15.9			UG Style Termination
59B, 140	75	73181-1511	75	Clamp/Solder	32R - (A)	.257	1.2	.626			UG Style Termination
62B, 71B, 210	93					6.53	30.5	15.9			
58C, 141A	50	• 73181-1121	50	Clamp/Solder	32R - (B)	.219 5.56	1.2 30.5	.626 15.9			
59B, 140	75	73181-1521	75	Clamp/Solder	32R - (B)	.257	1.2	.626			
62B, 71B, 210	93					6.53	30.5	15.9			
55B, 142B, 223, 400	50	73181-1721	50	Clamp/Solder	32R - (B)	.220 5.59	1.2 30.5	.626 15.9			
8A, 213	50	73182-0641	50	Clamp/Solder	32R - (B)	.420 10.67	1.50 38.0	.626 15.9			
9B, 214	50	73182-0841	50	Clamp/Solder	32R - (B)	.440 11.18	1.50 38.0	.626 15.9			
58C, 141A	50	73183-1111	50	Crimp/Crimp	30R - (A)	.124 3.15	.945 24.0	.626 15.9			
55B, 142B, 223, 400	50	73183-1711	50	Crimp/Crimp	30R - (A)	.124 3.15	.945 24.0	.626 15.9			
59B, 140	75	73183-0111	75	Crimp/Crimp	30R - (A)	.154 3.91	.945 24.0	.626 15.9			
62B, 210	93	73183-0311	75	Crimp/Crimp	30R - (A)	.154 3.91	.945 24.0	.626 15.9			

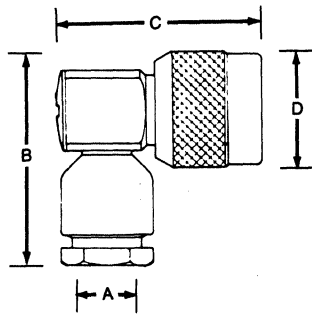
• U.S. Standard Product, available through Molex franchised distributors.

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example ***** - ***3.

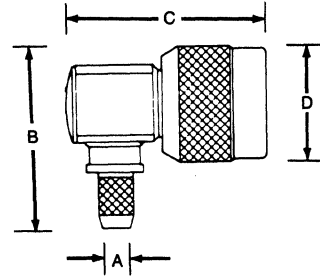
—Tooling requirements are located on page 90R.

TNC

Right Angle Plugs



Clamp/Solder

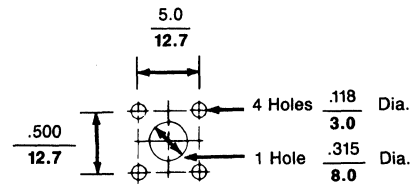
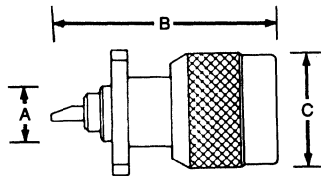


Crimp/Solder

Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
58C, 141A	50	73184-1131	50	Clamp/Solder	31R - (A)	.219 5.56	1.2 30.5	1.10 28.0	.626 15.9		
174A, 188A, 316	50	73184-1231	50	Clamp/Solder	31R - (A)	.110 2.79	1.2 30.5	1.10 28.0	.626 15.9		
178B, 196A	50	73184-1431	50	Clamp/Solder	31R - (A)	.095 2.41	1.2 30.5	1.10 28.0	.626 15.9		
179B, 187A	75	73184-1331	75	Clamp/Solder	31R - (A)	.120 3.05	1.2 30.5	1.10 28.0	.626 15.9		
59B, 140	75	73184-1531	75	Clamp/Solder	31R - (A)	.257	1.2	1.10	.626		
62B, 71B, 210	93					6.53	30.5	28.0	15.9		
58C, 141A	50	73185-1111	50	Crimp/Solder	30R - (B)	.124 3.15	1.02 26.0	1.10 28.0	.626 15.9		Mil-Crimp
55B, 142B, 223, 400	50	73185-1711	50	Crimp/Solder	30R - (B)	.124 3.15	1.02 26.0	1.10 28.0	.626 15.9		Mil-Crimp
59B, 140	75	73185-0111	75	Crimp/Solder	30R - (B)	.124 3.91	1.02 26.0	1.10 28.0	.626 15.9		Mil-Crimp
62B, 210	93	73185-0311	75	Crimp/Solder	30R - (B)	.124 3.91	1.02 26.0	1.10 28.0	.626 15.9		Mil-Crimp

Straight Panel Plug (Receptacle)



Ordering Information

Order Number	Cable Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73186-5001	50		.307	1.26	.626			.118
			7.8	32.0	15.9			3.0mm Through Holes
73186-7001	75		.307	1.26	.626			.118
			7.8	32.0	15.9			3.0mm Through Holes

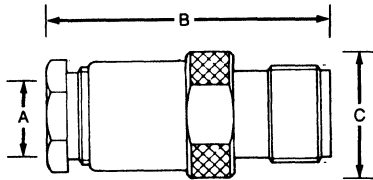
Other panel mounting hole styles available.

—All connectors have captive contacts unless otherwise specified.

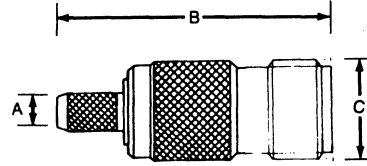
—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example ***** - ***3.

—Tooling requirements are located on page 90R.

Straight Jacks



Clamp/Solder



Crimp/Crimp

Ordering Information

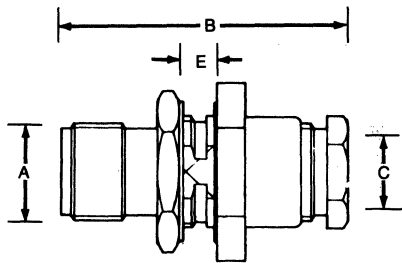
RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
174A, 188A, 316	50	73190-1221	50	Clamp/Solder	32R - (B)	.110 2.79	1.22 31.0	.563 14.3			
178B, 196A	50	73190-1421	50	Clamp/Solder	32R - (B)	.107 2.69	1.22 31.0	.563 14.3			
58C, 141A	50	73191-1121	50	Clamp/Solder	32R - (B)	.219 5.56	1.25 31.8	.563 14.3			
55B, 142B, 223, 400	50	73191-1721	50	Clamp/Solder	32R - (B)	.257 6.53	1.25 31.8	.563 14.3			
59B, 140	75	73191-1521	75	Clamp/Solder	32R - (B)	.257	1.25	.563			
62B, 71B, 210	93					6.53	31.8	14.3			
58C, 141A	50	73192-1111	50	Crimp/Crimp	30R - (A)	.124 3.15	1.22 31.1	.469 11.9			
55B, 142B, 223, 400	50	73192-1711	50	Crimp/Crimp	30R - (A)	.124 3.15	1.22 31.1	.469 11.9			
59B, 140	75	73192-0111	75	Crimp/Crimp	30R - (A)	.154 3.91	1.22 31.1	.469 11.9			
62B, 210	93	73192-0311	75	Crimp/Crimp	30R - (A)	.154 3.91	1.22 31.1	.469 11.9			

—All connectors have captive contacts unless otherwise specified.

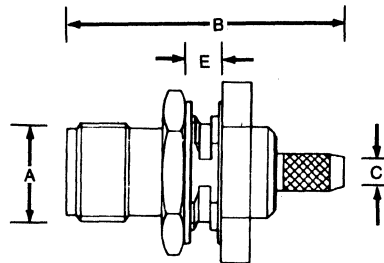
—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example ***** - ****3.

—Tooling requirements are located on page 90R.

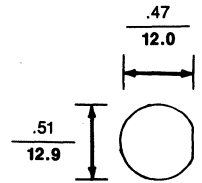
Bulkhead Jacks



Clamp/Solder



Crimp/Crimp



Ordering Information

inches
mm

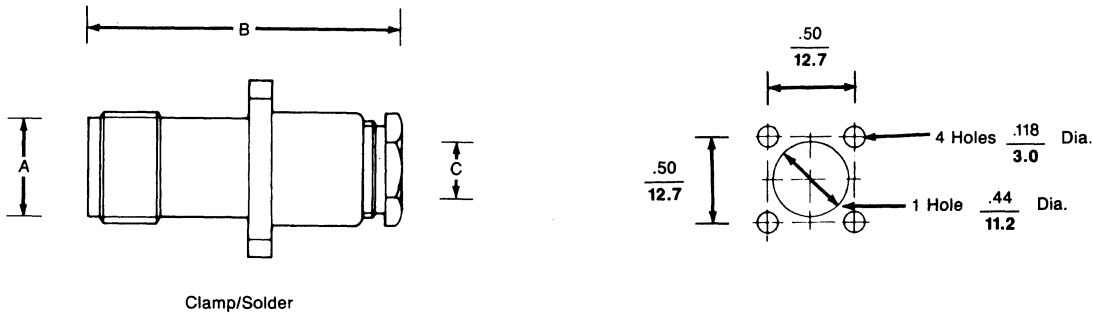
RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
174A, 188A, 316	50	73196-1221	50	Clamp/Solder	32R - (B)	.110 2.79	1.19 30.1	.795 20.2		.122 3.1	Rear Mount
178B, 196A,	50	73196-1421	50	Clamp/Solder	32R - (B)	.095 2.41	1.19 30.1	.795 20.2		.122 3.1	Rear Mount
58C, 141A,	50	73197-1121	50	Clamp/Solder	32R - (B)	.219 5.56	1.28 32.4	.795 20.2		.126 3.2	Rear Mount
55B, 142B, 223, 400	50	73197-1721	50	Clamp/Solder	32R - (B)	.257 6.53	1.28 32.4	.795 20.2		.126 3.2	Rear Mount
179B, 187A,	75	73197-1321	75	Clamp/Solder	32R - (B)	.120 3.05	1.28 32.4	.795 20.2		.126 3.2	Rear Mount
59B, 140	75	73197-1521	75	Clamp/Solder	32R - (B)	.257	1.28	.795		.126	Rear Mount
62B, 71B, 210	93					6.53	32.4	20.2	3.2		
58C, 141A,	50	73198-1111	50	Crimp/Crimp	30R - (A)	.124 3.15	1.22 31.0	.795 20.2		.126 3.2	Rear Mount
55B, 142B, 223, 400	50	73198-1711	50	Crimp/Crimp	30R - (A)	.220 5.59	1.22 31.0	.795 20.2		.126 3.2	Rear Mount
59B, 140	75	73198-0111	75	Crimp/Crimp	30R - (A)	.154 3.91	1.22 31.0	.795 20.2		.126 3.2	Rear Mount
62B, 210	93	73198-0311	75	Crimp/Crimp	30R - (A)	.154 3.91	1.22 31.0	.795 20.2		.126 3.2	Rear Mount

—All connectors have captive contacts unless otherwise specified.

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example ***** - ****3.

—Tooling requirements are located on page 90R.

Panel Jacks



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
174A, 188A, 316	50	73193-1221	50	Clamp/Solder	32R - (B)	.110 2.79	1.22 31.0	.689 17.5			.118 3.0mm Through Holes
178B, 196A	50	73193-1421	50	Clamp/Solder	32R - (B)	.106 2.69	1.22 31.0	.689 17.5			.118 3.0mm Through Holes
58C, 141A	50	73194-1121	50	Clamp/Solder	32R - (B)	.219 5.56	1.27 32.3	.689 17.5			.118 3.0mm Through Holes
55B, 142B, 223, 400	50	73194-1721	50	Clamp/Solder	32R - (B)	.257 6.53	1.27 32.3	.689 17.5			.118 3.0mm Through Holes
179B, 187A	75	73194-1321	75	Clamp/Solder	32R - (B)	.120 3.05	1.27 32.3	.689 17.5			.118 3.0mm Through Holes
59B, 140	75	73194-1521	75	Clamp/Solder	32R - (B)	.257	1.27	.689			.118
62B, 71B, 210	93					6.53	32.3	17.5			3.0mm Through Holes

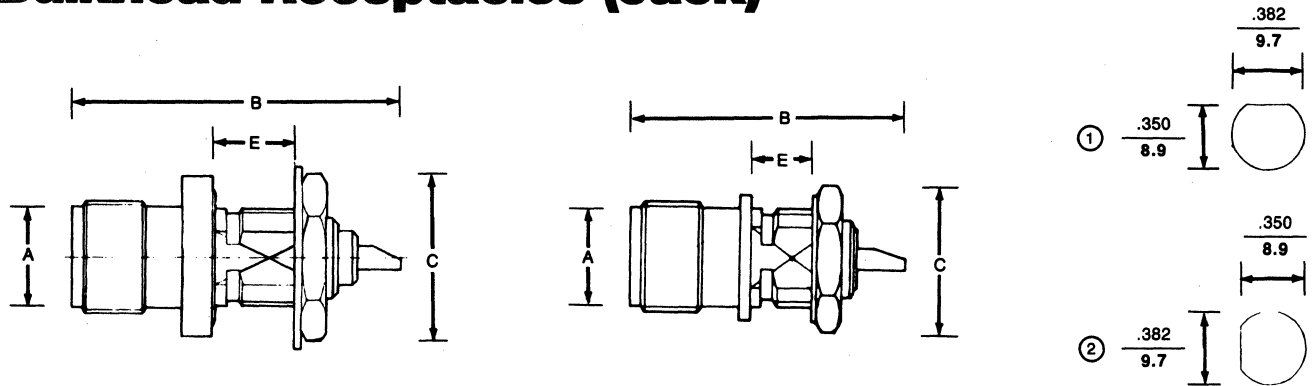
Other panel mounting hole styles available

—All connectors have captive contacts unless otherwise specified.

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3.
Example ***** - ****3.

TNC

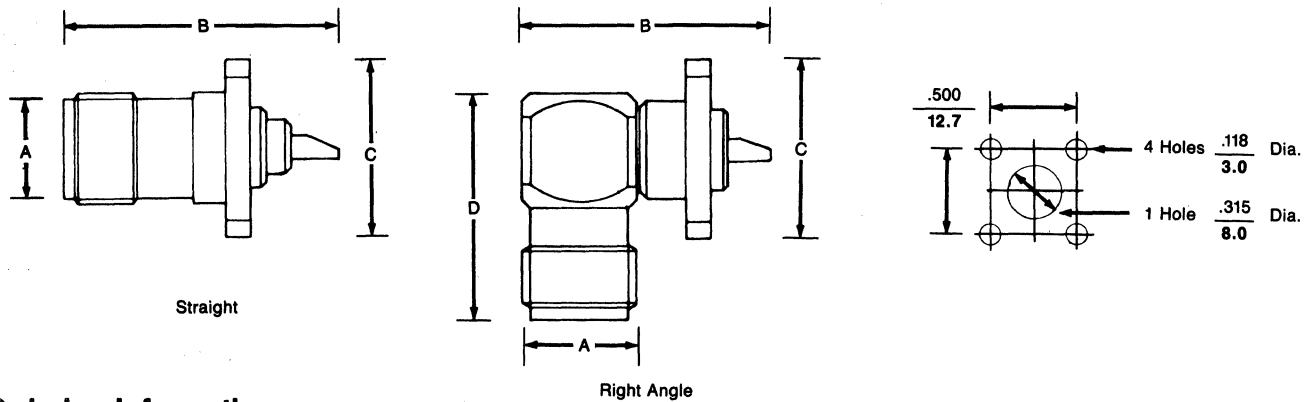
Bulkhead Receptacles (Jack)



inches
mm

Order Number	Connector Impedance (Ohms)	Description	Panel Cutout	Dimensions					Features
				A	B	C	D	E	
73200-5001	50	Front Mount	①	.626 15.9	1.27 32.3	.650 16.5		.252 6.4	
73200-7001	75	Front Mount	①	.626 15.9	1.27 32.3	.650 16.5		.252 6.4	
• 73201-5001	50	Front Mount	②	.453 11.5	1.06 26.9	.579 14.7		.150 3.8	
73201-7001	75	Front Mount	②	.453 11.5	1.06 26.9	.579 14.7		.150 3.8	

Panel Receptacles (Jack)



Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
• 73202-5001	50	Straight	.453 11.5	1.06 27.0	.689 17.5			.118 3.0mm Through Holes
73202-7001	75	Straight	.453 11.5	1.06 27.0	.689 17.5			.118 3.0mm Through Holes
73203-5001	50	Right Angle	.453 11.5	.969 24.6	.689 17.5	.984 25.0		.118 3.0mm Through Holes
73203-7001	75	Right Angle	.453 11.5	.969 24.6	.689 17.5	.984 25.0		.118 3.0mm Through Holes

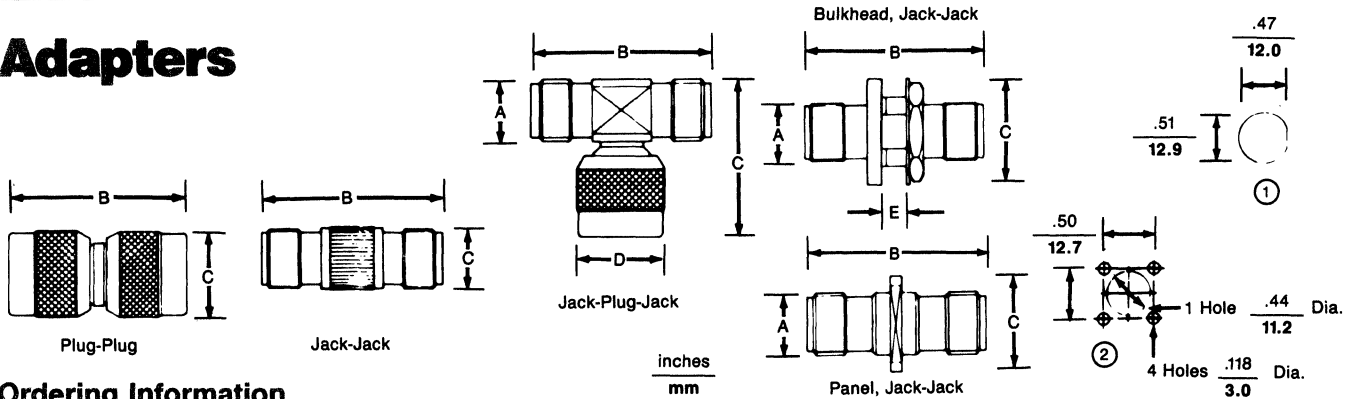
Other panel mounting hole styles available

• U.S. Standard Product available through Molex franchised distributors.

—All connectors have captive contacts unless otherwise specified.

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example *****3.

Adapters

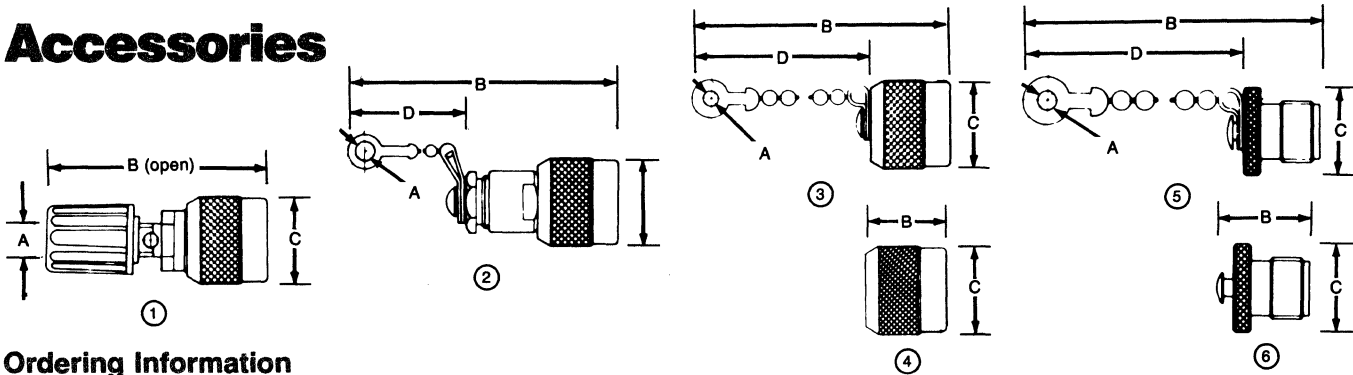


Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Panel Cutout	Dimensions					Features
				A	B	C	D	E	
73205-5001	50	Plug-Plug	—	—	1.25 31.8	.626 15.9			
73205-7001	75	Plug-Plug	—	—	1.25 31.8	.626 15.9			
73206-5001	50	Jack-Jack	—	—	1.28 32.5	.453 11.5			
73206-7001	75	Jack-Jack	—	—	1.28 32.5	.453 11.5			
73207-5001	50	Bulkhead, Jack-Jack	①	.453 11.5	1.28 32.5	.779 19.8		.173 4.4	Front Mount
73207-7001	75	Bulkhead, Jack-Jack	①	.453 11.5	1.28 32.5	.779 19.8		.173 4.4	Front Mount
* 73208-5001	50	Panel, Jack-Jack	②	.453 11.5	1.28 32.5	.689 17.5			.118 3.0mm Through Holes
* 73208-7001	75	Panel, Jack-Jack	②	.453 11.5	1.28 32.5	.689 17.5			.118 3.0mm Through Holes
73209-5001	50	Jack-Plug-Jack	—	.453 11.5	1.28 32.5	1.13 28.6	.626 15.9		
73209-7001	75	Jack-Plug-Jack	—	.453 11.5	1.28 32.5	1.13 28.6	.626 15.9		

*Other Panel Mounting Holes Available

Accessories



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Style	Dimensions				
				A	B	C	D	E
73210-5001	50	Binding Post Adapter, BNC Male To 1 x Post	①	.157 4.0	1.65 42.0	.626 15.9		
73214-5001	50	Resistor Plug With Chain	②	.157 4.0	1.41 35.7	.626 15.9	.299 7.6	
73214-7001	75	Resistor Plug With Chain	②	.157 4.0	1.41 35.7	.626 15.9	.299 7.6	
73215-0001	—	Male Cap With Chain	③	.157 4.0	2.54 64.5	.626 15.9	1.97 50.0	
73215-0002	—	Male Cap Without Chain	④	—	.571 14.5	.626 15.9		
73216-0001	—	Female Cap With Chain	⑤	.157 4.0	3.53 89.7	.626 15.9	2.99 76.0	
73216-0002	—	Female Cap Without Chain	⑥	—	.657 16.7	.626 15.9		

—All connectors have captive contacts unless otherwise specified.

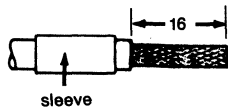
—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example *****3.

TNC ASSEMBLY INSTRUCTIONS

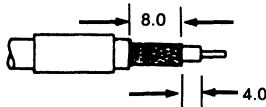
Crimp/Crimp, Crimp/Solder

CRIMP/CRIMP MIL-STYLE CAPTIVE CONTACT (A)

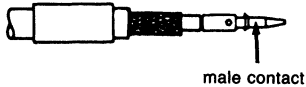
Slide metal crimp sleeve over cable, trim outer jacket from cable as shown.



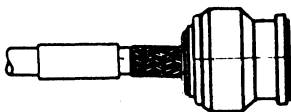
Trim back braid and dielectric to the dimensions shown.



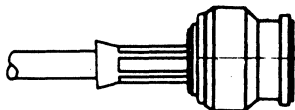
Fit contact over center conductor to butt against the dielectric, then crimp.



Press sub-assembly into body, until contact clicks into place, ensuring that the knurled ferrule is insert between the dielectric and braid.

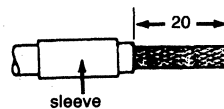


Slide the sleeve along the cable, until butts against the body sub-assembly and Crimp.

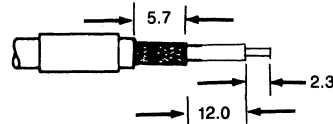


CRIMP/SOLDER MIL-STYLE, RIGHT ANGLE CAPTIVE CONTACT (B)

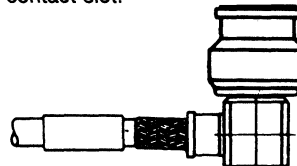
Slide metal crimp sleeve over cable, trim outer jacket from cable as shown.



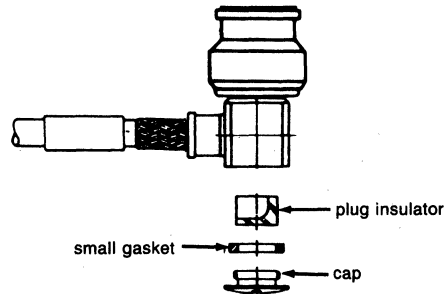
Trim back braid and dielectric to the dimensions shown and Tin center conductor.



Slide cable into the body, ensuring connector sleeve is between the braid and dielectric, allowing the center conductor to lay in contact slot.



Slide ferrule over the outer jacket and braid until it butts against the connector. Crimp ferrule, ensuring crimp tool butts against the connector. Solder center conductor into the slotted contact. Fit the small gasket onto the cap. Fit cupped insulator, followed by the cap into the body and tighten.



NOTE: These assembly instructions apply to both plugs and jacks. Contacts and insulators will vary slightly in shape and size.

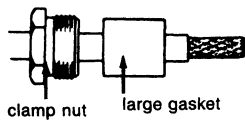
TNC ASSEMBLY INSTRUCTIONS



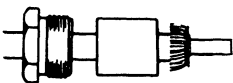
Clamp/Solder

STANDARD STYLE FOR RIGHT ANGLE ONLY CAPTIVE CONTACT (A)

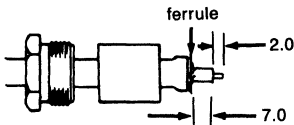
Slide clamp nut and large gasket over cable and trim outer jacket from cable as shown.



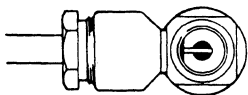
Fold back braid, and push ferrule over dielectric to trap braid between end of outer jacket and ferrule. Trim off surplus braid.



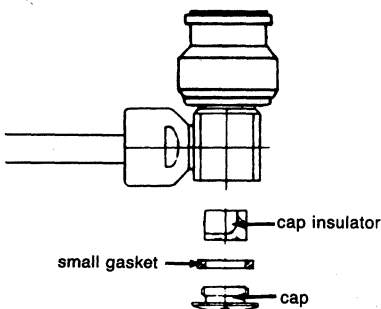
Slide gasket and clamp nut to ferrule, trapping the braid against the flange. Trim back dielectric and check the length of the center conductor.



Tin center conductor and press sub-assembly into the body. Tighten clamp nut and solder center conductor to slot in contact.

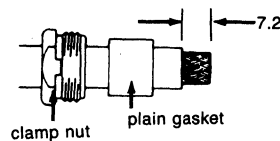


Fit the small gasket onto the cap, then fit the cupped insulator, followed by the cap, into the body and tighten.

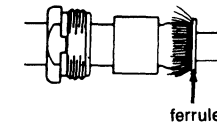


STANDARD STYLE FOR LARGE CABLE ONLY CAPTIVE CONTACT (B)

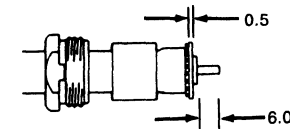
Slide clamp nut and plain gasket over cable and trim outer jacket from cable, as shown.



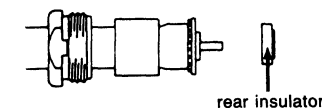
Fold back braid and push ferrule over dielectric to trap braid between outer jacket and ferrule. Trim off surplus braid.



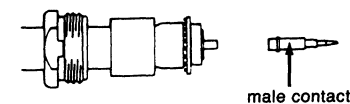
Trim dielectric and check length of center conductor.



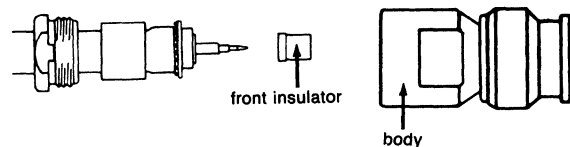
Tin center conductor and slide rear insulator over dielectric to butt against ferrule.



Fit contact onto center conductor with the collar pressed into the recess in the rear insulator. Hold cable and contact tightly together and solder.



Slide plain gasket and clamp nut up to the ferrule, trapping braid. Fit front insulator over contact to butt against rear insulator. Press sub-assembly into body as far as possible, and tighten clamp nut.



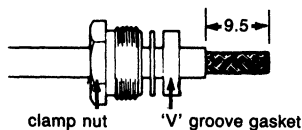
NOTE: These assembly instructions apply to both plugs and jacks. Contacts and insulators will vary slightly in shape and size.

TNC ASSEMBLY INSTRUCTIONS

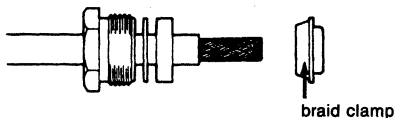
Clamp/Solder

UG V-GROOVE STYLE CAPTIVE CONTACT (A)

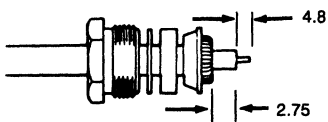
Slide clamp nut, washer and 'V' groove gasket over cable, (groove of gasket to face free end of cable) Trim outer jacket from cable as shown, without nicking the braid.



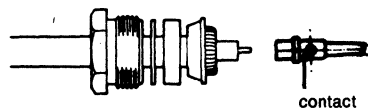
Slide braid clamp over braid so that internal shoulder butts against face of outer jacket.



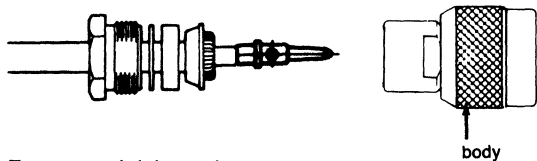
Fold braid back over braid clamp avoiding crossed wires and trim off surplus braid. Trim back dielectric and check length of center conductor.



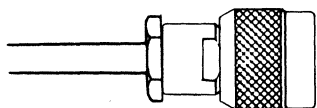
Tin center conductor and fit contact onto center conductor, hold cable and contact tightly together and solder.



Slide 'V' groove gasket, washer and clamp nut up to braid clamp and press sub-assembly into body as far as possible.

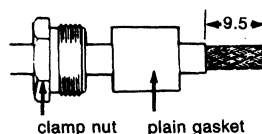


Engage and tighten clamp nut.

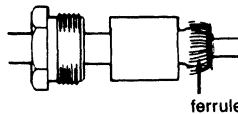


STANDARD STYLE CAPTIVE CONTACT (B)

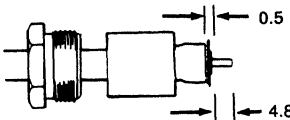
Slide clamp nut and plain gasket over cable and trim outer jacket from cable, as shown.



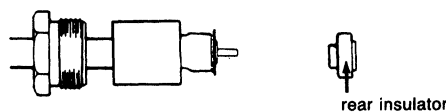
Fold back braid and push ferrule over dielectric to trap braid between outer jacket and ferrule. Trim off surplus braid.



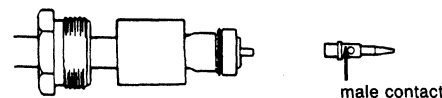
Trim back dielectric and check the length of the center conductor.



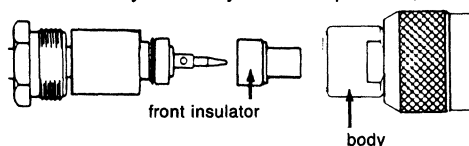
Tin center conductor, then slide rear insulator over dielectric, to butt against ferrule.



Fit contact onto center conductor, with collar pressed into recess in rear insulator. Hold cable and contact tightly together, and solder.



Slide plain gasket and clamp nut up to ferrule, trapping braid. Fit front insulator over contact to butt against rear insulator, press sub-assembly into body as far as possible, and tighten clamp nut.



NOTE: These assembly instructions apply to both plugs and jacks. Contacts and insulators will vary slightly in shape and size.

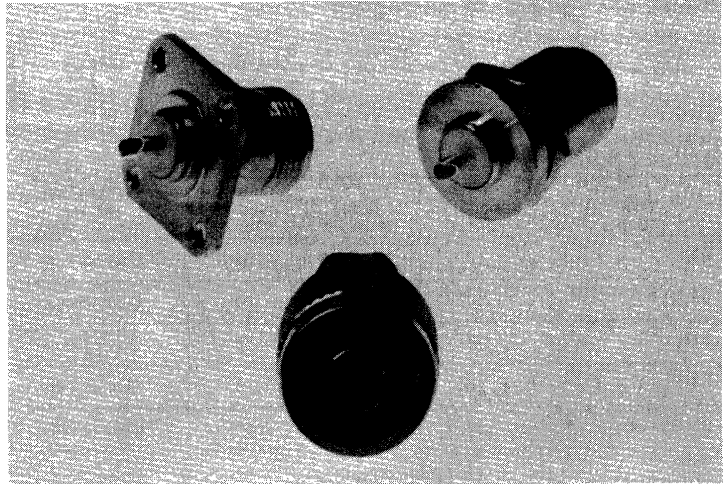
N Connectors



The N range are screw coupled coaxial connectors that come in both 50 & 75 OHM versions. They are best suited for use with RG cables ranging from 10mm to 23mm in diameter.

The Molex N range is fully intermateable with industry standards and those manufactured to MIL-C-39012 specifications.

Molex 50 and 75 OHM versions are not interchangeable.



Specifications

VSWR (Typical) — 1.1 up to 4 GHz

Frequency — 4 GHz

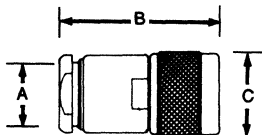
Working Voltage — 1000V Peak

Proof Voltage — 2500V Peak

Temperature Range — -55°C to +150°C

N Connectors

Straight Plugs

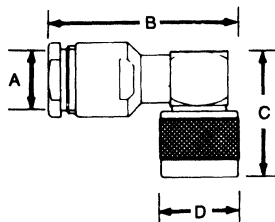


inches
mm

Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
8A, 213	50	• 73220-0611	50	Clamp/Solder	39R - (A)	.420 10.67	1.61 41.0	.811 20.6			
9B, 214	50	73220-0811	50	Clamp/Solder	39R - (A)	.443 11.25	1.61 41.0	.811 20.6			
11A	75	73220-0711	75	Clamp/Solder	39R - (A)	.420 10.67	1.61 41.0	.811 20.6			
13A, 216	75	73220-0911	75	Clamp/Solder	39R - (A)	.443 11.25	1.61 41.0	.811 20.6			
58C, 141A	50	• 73221-1121	50	Clamp/Solder	39R - (B)	.219 5.56	1.61 41.0	.811 20.6			
59B, 140	75	73221-1521	75	Clamp/Solder	39R - (B)	.257	1.61	.811			
62B, 71B, 210	93					6.53	41.0	20.6			
55B, 142B, 223, 400	50	73221-1721	50	Clamp/Solder	39R - (B)	.257 6.53	1.61 41.0	.811 20.6			

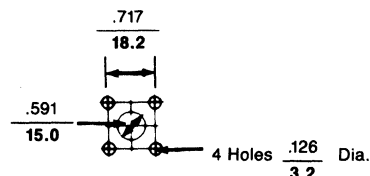
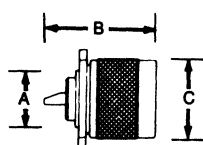
Right Angle Plugs



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
8A, 213	50	73222-0611	50	Clamp/Solder	39R - (A)	.420 10.67	1.81 46.0	1.38 35.0	.811 20.6		
9B, 214	50	73222-0811	50	Clamp/Solder	39R - (A)	.443 11.25	1.81 46.0	1.38 35.0	.811 20.6		
11A	75	73222-0711	75	Clamp/Solder	39R - (A)	.420 10.67	1.81 46.0	1.38 35.0	.811 20.6		
13A, 216	75	73222-0911	75	Clamp/Solder	39R - (A)	.443 11.25	1.81 46.0	1.38 35.0	.811 20.6		

Straight Panel Plugs (Receptacles)



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Panel Cutout	Dimensions					Features
				A	B	C	D	E	
73223-5001	50	Solder Cup		.587 14.9	1.14 28.9	.811 20.6			Non-Captive Contact .126/3.2mm Through Holes
73223-7001	75	Solder Cup		.587 14.9	1.14 28.9	.811 20.6			Non-Captive Contact .126/3.2mm Through Holes

Other panel mounting hole styles available

• U.S. Standard Product, available through Molex franchised distributors.

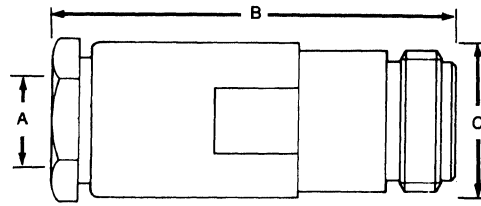
—All connectors have captive contacts unless otherwise specified.

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3.
Example *****3.

N Connectors



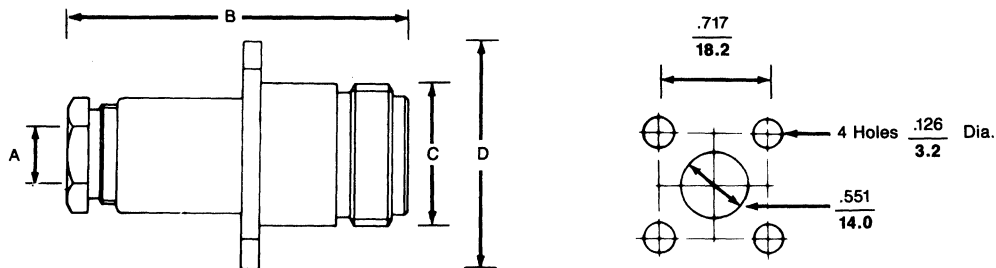
Straight Jacks



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
58C, 141A	50	73226-1121	50	Clamp/Solder	39R - (B)	.219 5.56	1.81 46.0	.685 17.4			
55B, 142B, 223, 400	50	73226-1721	50	Clamp/Solder	39R - (B)	.257 6.53	1.81 46.0	.685 17.4			
59B, 140	75	73226-1521	75	Clamp/Solder	39R - (B)	.257	1.81	.685			
62B, 71B, 210	93					6.53	46.0	17.4			
8A, 213	50	73227-0611	50	Clamp/Solder	39R - (A)	.420 10.67	1.81 46.0	.685 17.4			
9B, 214	50	73227-0811	50	Clamp/Solder	39R - (A)	.443 11.25	1.81 46.0	.685 17.4			
11A	75	73227-0711	75	Clamp/Solder	39R - (A)	.420 10.67	1.81 46.0	.685 17.4			
13A, 216	75	73227-0911	75	Clamp/Solder	39R - (A)	.443 11.25	1.81 46.0	.685 17.4			

Panel Jacks



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
8A, 213	50	73230-0611	50	Clamp/Solder	39R - (A)	.420 10.67	1.49 37.9	.618 15.69	1.00 25.4		.126 3.2mm Through Holes
9B, 214	50	73230-0811	50	Clamp/Solder	39R - (A)	.443 11.25	1.49 37.9	.618 15.69	1.00 25.4		.126 3.2mm Through Holes
11A	75	73230-0711	75	Clamp/Solder	39R - (A)	.420 10.67	1.49 37.9	.618 15.69	1.00 25.4		.126 3.2mm Through Holes
13A, 216	75	73230-0911	75	Clamp/Solder	39R - (A)	.443 11.25	1.49 37.9	.618 15.69	1.00 25.4		.126 3.2mm Through Holes
58C, 141A	50	73231-1121	50	Clamp/Solder	39R - (B)	.219 5.56	1.49 37.9	.618 15.69	1.00 25.4		.126 3.2mm Through Holes
55B, 142B, 223, 400	50	73231-1721	50	Clamp/Solder	39R - (B)	.257 6.53	1.49 37.9	.618 15.69	1.00 25.4		.126 3.2mm Through Holes
59B, 140	75	73231-1521	75	Clamp/Solder	39R - (B)	.257	1.49	.618	1.00		.126
62B, 71B, 210	93					6.53	37.9	15.69	25.4		3.2mm Through Holes

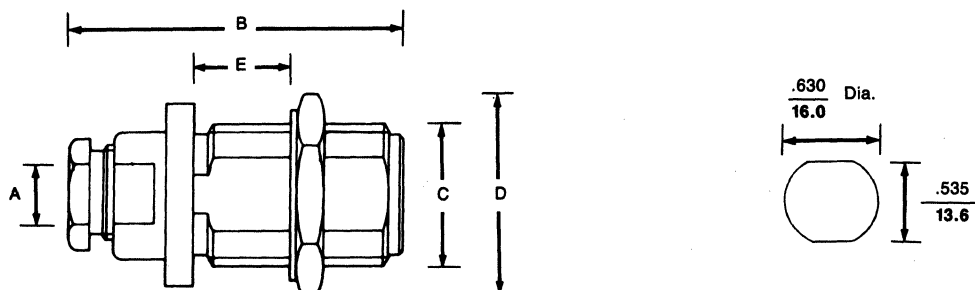
Other panel mounting holes available

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3.
Example *****3.



N Connectors

Bulkhead Jacks



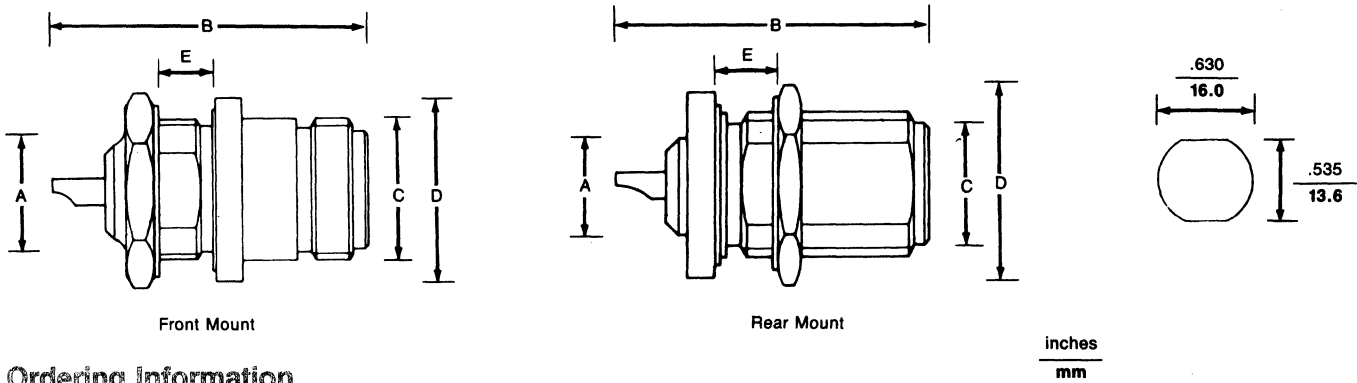
Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
8A, 213	50	73232-0631	50	Clamp/Solder	40R - (A)	.420 10.67	1.50 38.1	.618 15.69	.799 20.3	.441 11.2	Rear Mount
9B, 214	50	73232-0831	50	Clamp/Solder	40R - (A)	.443 11.25	1.50 38.1	.618 15.69	.799 20.3	.441 11.2	Rear Mount
11A	75	73232-0731	75	Clamp/Solder	40R - (A)	.420 10.67	1.50 38.1	.618 15.69	.799 20.3	.441 11.2	Rear Mount
13A, 216	75	73232-0931	75	Clamp/Solder	40R - (A)	.443 11.25	1.50 38.1	.618 15.69	.799 20.3	.441 11.2	Rear Mount
58C, 141A	50	73233-1121	50	Clamp/Solder	39R - (B)	.219 5.56	1.50 38.1	.618 15.69	.799 20.3	.441 11.2	Rear Mount
55B, 142B, 223, 400	50	73233-1721	50	Clamp/Solder	39R - (B)	.257 6.53	1.50 38.1	.618 15.69	.799 20.3	.441 11.2	Rear Mount

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3.
Example ***** - ***3.

N Connectors

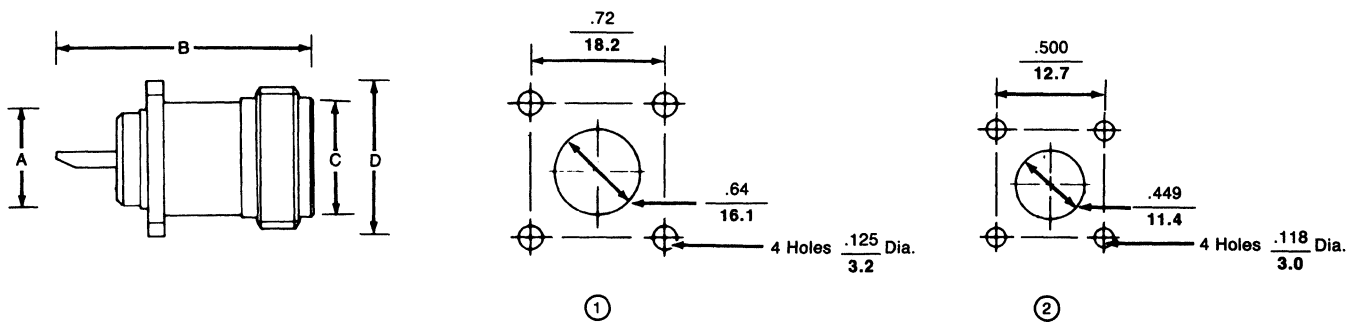
Bulkhead Receptacles (Jack)



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73234-5001	50	Front Mount	.626 15.9	1.39 35.3	.626 15.9	.815 20.7	.276 7.0	
73234-7001	75	Front Mount	.626 15.9	1.39 35.3	.626 15.9	.815 20.7	.276 7.0	
•73235-5001	50	Rear Mount	.626 15.9	1.39 35.3	.626 15.9	.815 20.7	.252 6.4	
73235-7001	75	Rear Mount	.626 15.9	1.39 35.3	.626 15.9	.815 20.7	.252 6.4	

Panel Receptacles (Jack)



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					MTG Style	Features
			A	B	C	D	E		
•73236-5001	50	Solder Cup	.437 11.1	1.13 28.6	.626 15.9	1.00 25.4		①	.125 3.2mm Through Holes
73236-7001	75	Solder Cup	.437 11.1	1.13 28.6	.626 15.9	1.00 25.4		①	.125 3.2mm Through Holes
73237-5001	50	Solder Cup	.437 11.1	1.13 28.6	.626 15.9	.689 17.5		②	.118 3.0mm Through Holes
73237-7001	75	Solder Cup	.437 11.1	1.13 28.6	.626 15.9	.689 17.5		②	.118 3.0mm Through Holes

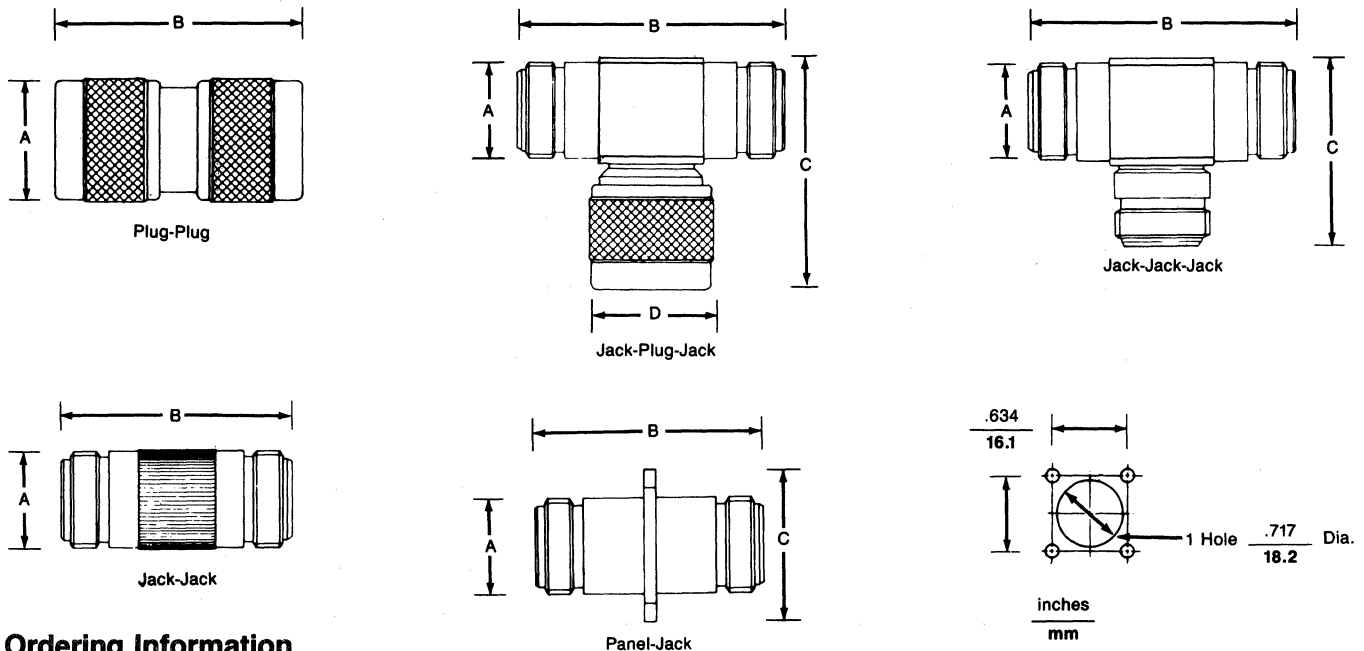
• U.S. Standard Product, available through Molex franchised distributors.

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3.
Example *****3.

N Connectors



Adapters

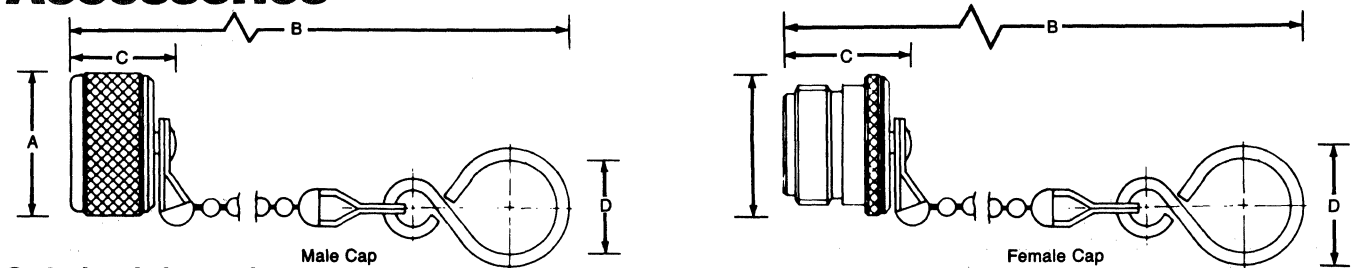


Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73240-5001	50	Plug-Plug	.811 20.6	1.59 40.5				
73240-7001	75	Plug-Plug	.811 20.6	1.59 40.5				
73241-5001	50	Jack-Jack	.618 15.69	1.50 38.1				
73241-7001	75	Jack-Jack	.618 15.69	1.50 38.1				
73242-5001	50	Jack-Plug-Jack	.618 15.69	1.75 44.5	1.50 38.1	.811 20.6		
73243-5001	50	Jack-Jack-Jack	.618 15.69	1.75 44.5	1.50 38.1			
*73244-5001	50	(Panel) Jack-Jack	.618 15.69	1.50 38.1	.100 25.4			.126 3.0mm Through Holes

*Other panel mounting holes available.

Accessories



Ordering Information

Order Number	Description	Dimensions				
		A	B	C	D	E
73245-0001	Male Cap With Chain	.811 20.6	5.50 139.8	.563 14.3	.634 16.1	
73246-0001	Female Cap With Chain	5/8-24-UNEF	6.50 165.2	.673 17.1	.634 16.1	

—All connectors have nickel bodies/silver contacts unless otherwise specified. Other platings available upon request.

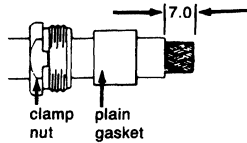
N ASSEMBLY INSTRUCTIONS



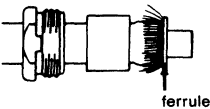
Clamp/Solder

STANDARD STYLE FOR LARGE CABLES CAPTIVE CONTACT (A)

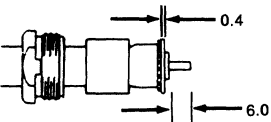
Slide clamp nut and plain gasket over cable and trim outer jacket from cable as shown.



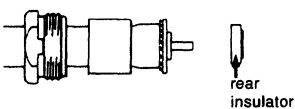
Fold back braid and push ferrule over dielectric to trap braid between outer jacket and ferrule. Trim off surplus braid.



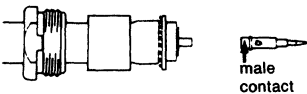
Trim dielectric and check length of center conductor.



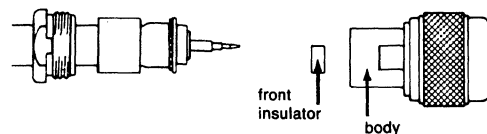
Tin center conductor and slide rear insulator over dielectric to butt against ferrule.



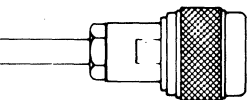
Fit contact, onto center conductor with the collar pressed into the recess in the rear insulator. Hold cable and contact tightly together and solder.



Slide plain gasket and clamp nut to the ferrule, trapping braid. Fit front insulator over contact to butt against rear insulator.

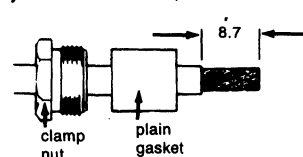


Press sub-assembly into body. Engage and tighten clamp nut.

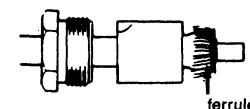


STANDARD STYLE CAPTIVE CONTACT (B)

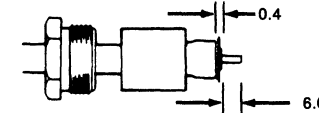
Slide clamp nut and plain gasket over the cable and trim outer jacket from cable, as shown.



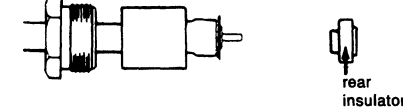
Fold back braid and push ferrule over dielectric to trap braid between outer jacket and ferrule. Trim off surplus braid.



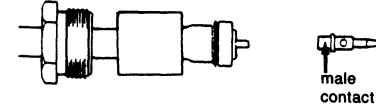
Trim dielectric and check length of the center conductor.



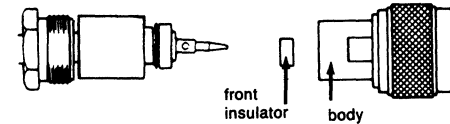
Tin center conductor then slide rear insulator over dielectric, to butt against ferrule.



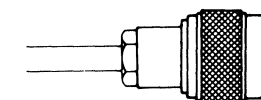
Fit contact onto center conductor with the collar pressed into recess in the rear insulator. Hold cable and contact tightly together, and solder.



Slide plain gasket and clamp nut up to ferrule, trapping braid. Fit front insulator over contact to butt against rear insulator.



Press sub-assembly into body. Engage and tighten clamp nut.



NOTE: These assembly instructions apply to both plugs and jacks. Contacts and insulators will vary slightly in shape and size.

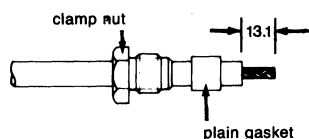
N ASSEMBLY INSTRUCTIONS

Clamp/Solder

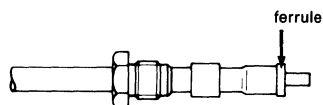
STANDARD STYLE FOR BULKHEAD CONNECTORS ONLY CAPTIVE CONTACT (A)

MIL-STYLE NON-CAPTIVE CONTACT (B)

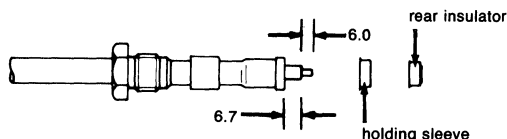
Slide the clamp nut, and plain gasket over cable. Trim outer jacket from cable as shown.



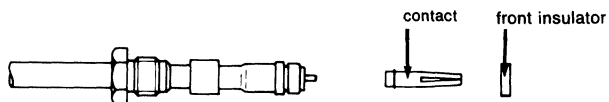
Fold back braid and push ferrule over dielectric to trap braid between outer jacket and ferrule (slit jacket on both sides to 2.5mm if necessary). Trim excess braid.



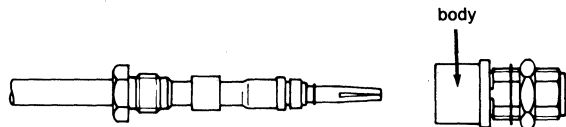
Trim dielectric to the dimension shown and tin the center conductor. Slide holding sleeve over dielectric to butt against ferrule. Slide rear insulator to butt against sleeve.



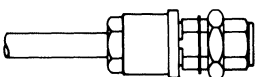
Fit contact onto center conductor. Hold contact and cable tightly together and solder. Fit front insulator over contact to butt against rear insulator.



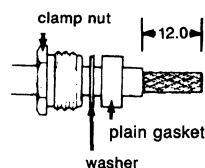
Slide clamp nut and plain gasket up to ferrule, trapping braid. Press sub-assembly into body.



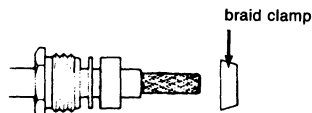
Engage and tighten clamp nut.



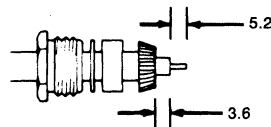
Slide clamp nut, washer and plain gasket over the cable: trim outer jacket from cable as shown, without disturbing the braid.



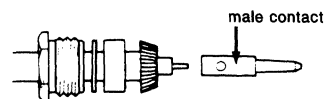
Fit braid clamp so that the internal shoulder butts to the end of the outer cable.



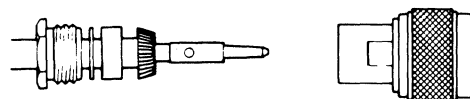
Fold back braid, avoiding crossed wires, and trim surplus braid. Trim dielectric and check that dimension of exposed center conductor is as shown.



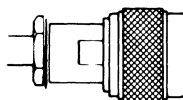
Tin center conductor and fit contact to butt against face of dielectric. Hold cable and contact tightly together and solder.



Slide plain gasket, flat washer and clamp nut to braid clamp and press sub-assembly into body as far as possible.



Engage and tighten clamp nut.



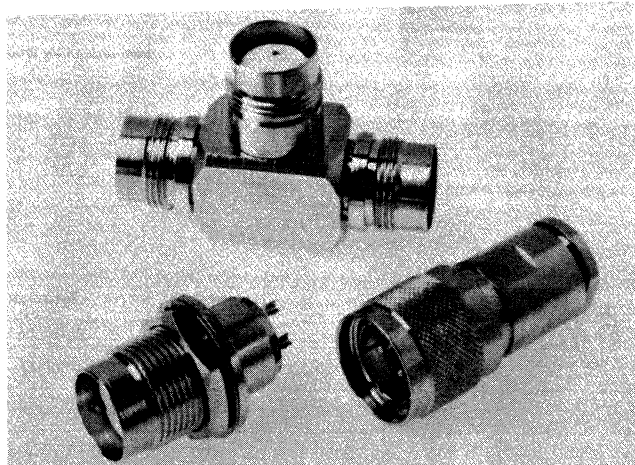
NOTE: These assembly instructions apply to both plugs and jacks. Contacts and insulators will vary slightly in shape and size.

Twinax Connectors

Molex series of twinax (dual conductor) connectors are designed to interface computer and other balanced line data transmission systems. All connectors offer an independent keyway to polarize the mating face and insure correct alignment.

The twinax construction provides high signal integrity for low level signal handling and make them ideal for the most demanding applications.

Molex twinax connectors meet IBM® specifications for use on IBM® 34 and 38 systems.



Specifications

Mating Face — Twin contact, polarized, independent key way @90°

Impedance — 100 ohms (suits systems from 70-140 ohms)

Working Voltage — 500V Peak

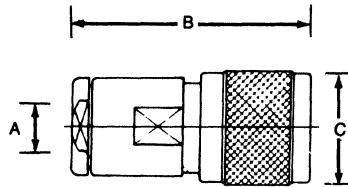
Proof Voltage — 1500V r.m.s.

Contact Resistance — <5 milliohms (per contact pair)

Frequency Limit — Up to 250 MHz

Insertion Loss — <0.2 dB per mated pair, measured at 100 MHz

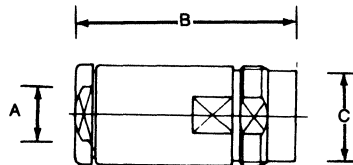
Straight Plugs



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
Belden 8227, 9207 IBM 7362211	100	• 73250-2011	100	Clamp/Solder	44R - (A)	1.75 8.64	.340 44.5	.874 22.2			IBM #7362229
"	100	73250-2021	100	Clamp/Crimp	44R - (B)	1.75 8.64	.340 44.5	.874 22.2			
"	100	73250-2031	100	Clamp/Crimp or Solder	44R - (A)	1.75 8.64	.340 44.5	.874 22.2			

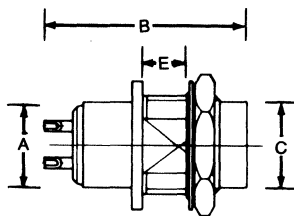
Straight Jack



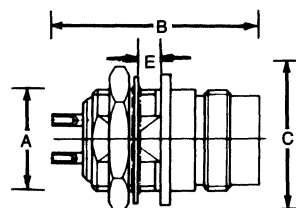
Ordering Information

RG/U Cable	Cable Impedance (Ohm)	Order Number	Connector Impedance (Ohm)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
Belden 8227, 9207 IBM 7362211	100	73251-2011	100	Clamp/Solder	44R - (A)	1.64 8.64	.340 41.7	.740 18.8			

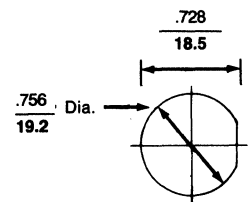
Bulkhead Receptacles



Rear Mount



Front Mount



Ordering Information

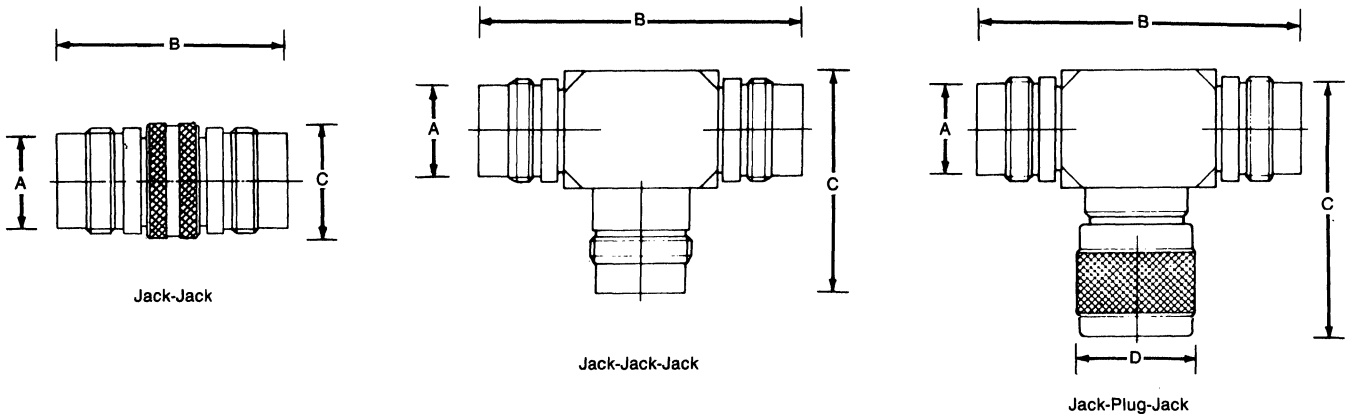
Order Number	Connector Impedance (Ohm)	Description	Dimensions					Features
			A	B	C	D	E	
• 73252-1001	100	Rear Mount	.740 18.8	1.54 39.2	.984 25.0		.089 2.25	IBM #7364498
73253-1001	100	Front Mount	.740 18.8	1.54 39.2	.984 25.0		.089 2.25	IBM #7362179

• U.S. Standard Product, available through Molex franchised distributors.

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example ***** - ***3.

—Tooling requirements are located on page 90R.

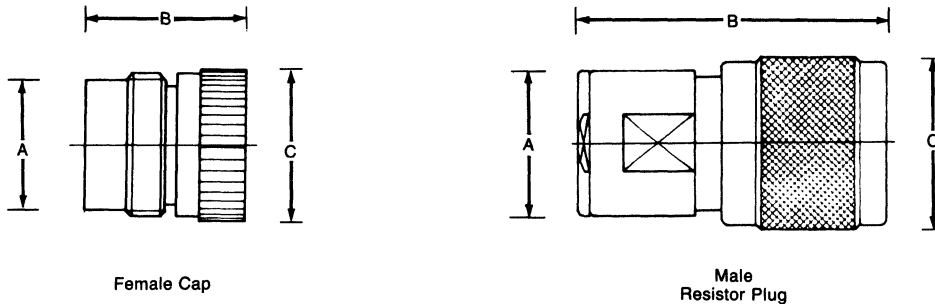
Adapters



Ordering Information

Order Number	Connector Impedance (Ohm)	Description	Dimensions					Features
			A	B	C	D	E	
73254-1001	100	Jack-Jack	.740 18.8	1.68 42.6	.799 20.3			IBM #7362230
73255-1001	100	Jack-Jack-Jack	.740 18.8	2.41 61.2	1.65 41.8			IBM #6851167
73256-1001	100	Jack-Plug-Jack	.740 18.8	2.41 61.2	1.87 47.6	.874 22.2		IBM #4178269

Accessories



Ordering Information

Order Number	Description	Dimensions					Features
		A	B	C	D	E	
73257-0001	Female Cap	.740 18.8	.843 21.4	.874 22.2			IBM #4178270
73258-0001	Male Resistor Plug	.75 19.1	.843 21.4	.874 22.2			IBM #7362188

• U.S. Standard Product, available through Molex franchised distributors.

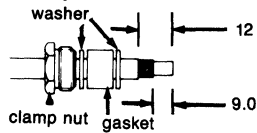
—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3.
Example ***** - ***3.

TWINAX ASSEMBLY INSTRUCTIONS

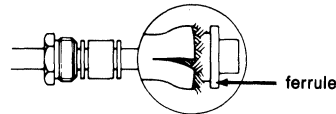


CLAMP/SOLDER (A)

Slide the clamp nut, washers, and gasket over the cable. Trim the outer jacket and braid as shown.



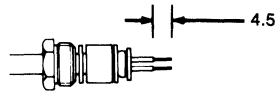
Slide the knurled ferrule over the dielectric and fully under the braid to trap the braid between the jacket and ferrule. It may be necessary to slit the jacket 5mm.



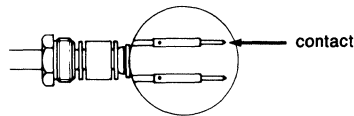
Slide the washers and gasket to butt against the flange.



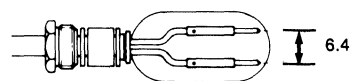
Trim the dielectric flush with the ferrule and trim the conductor insulation as shown.



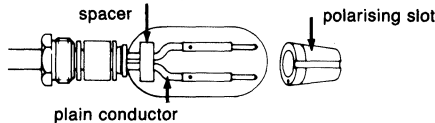
Solder the contacts onto the conductors.



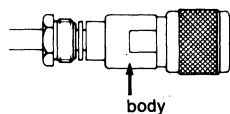
Bend the conductors and contacts through 90° and then bend them back so that they are parallel to form 6mm-7mm spacing between conductors, (6.4 mm is best).



Slide the spacer over the contacts as far as the ferrule. Fit the insulator, matching the dot to the plain conductor.

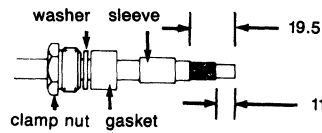


Insert the assembly into the connector body, aligning the polarizing slot in the insulator with the pin inside the plug body, tighten the clamp nut.

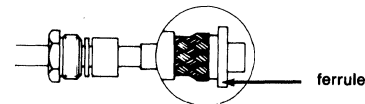


CLAMP/CRIMP/CRIMP (B)

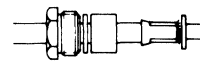
Slide the clamp nut, washer, gasket and crimp sleeve over the cable and trim the outer jacket and braid as shown.



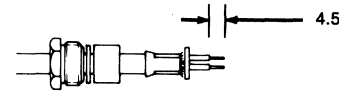
Slide the knurled ferrule over the dielectric until its flange butts against the braid, ensuring that the knurling is between the dielectric and the braid.



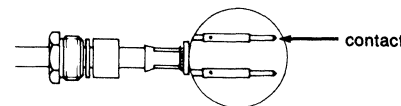
Slide back the sleeve, over the braid until it butts against the flange and crimp the sleeve, using the larger die cavity.



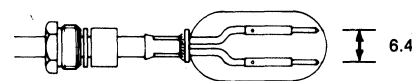
Trim back the dielectric flush with the ferrule and trim the conductor insulation as shown.



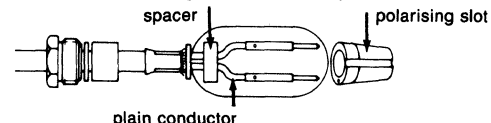
Crimp the contacts onto the conductors using the smaller cavity of the same tool as before.



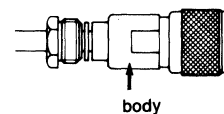
Bend the conductors and contacts 90° and then bend them back so that they are parallel to form 6mm-7mm spacing between conductors, (6.4 mm is best).



Slide the spacer over the contacts as far as the ferrule. Fit the insulator, matching the dot to the plain conductor.



Insert the assembly into the connector body, aligning the polarizing slot in the insulator with the pin inside the plug body, tighten the clamp nut.



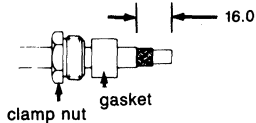
NOTE: These assembly instructions apply to both plugs and jacks.

TWINAX ASSEMBLY INSTRUCTIONS

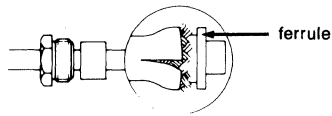


CLAMP/CRIMP or SOLDER (A)

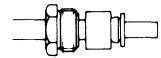
Slide the clamp nut, and gasket over the cable, trim the outer jacket and braid as shown.



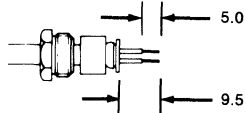
Slide the knurled ferrule over the dielectric and fully under the braid, to trap the braid between the jacket and ferrule. It may be necessary to slit the sheath 5mm.



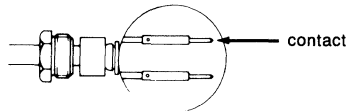
Slide the washers and gasket to butt against the flange.



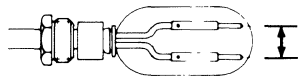
Trim the dielectric flush with the ferrule and trim the conductor insulation as shown.



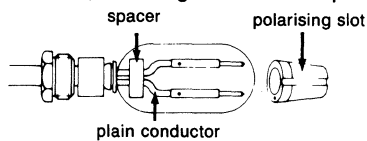
Solder or crimp contacts onto the center conductors. Note: If soldering, center conductors need to be pre-tinned.



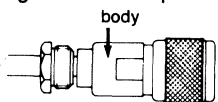
Bend the conductors and contacts through 90° and then bend them back so that they are parallel to form 6mm-7mm spacing between conductors, (6.4 mm is best).



Slide the spacer over the contacts as far as the ferrule. Fit the insulator, matching the dot to the plain conductor.



Insert the assembly into the connector body, aligning the polarizing slot in the insulator with the pin inside the plug body, tighten the clamp nut.

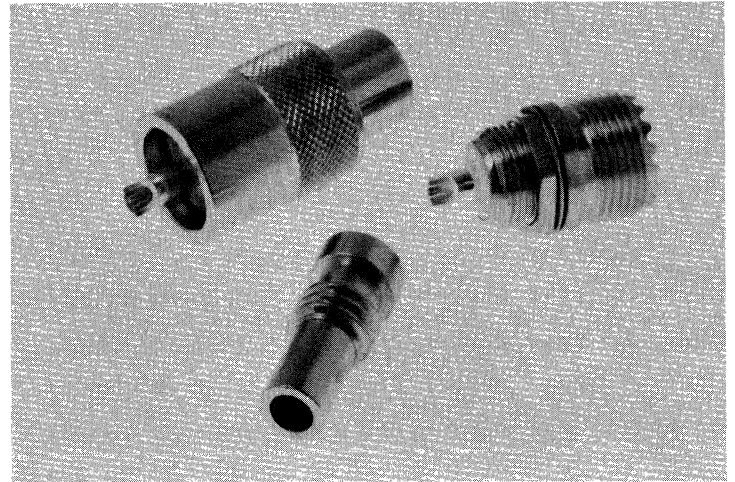


UHF Connectors

The UHF coaxial connector range are robustly designed for general purpose applications and are suitable for a wide variety of small to medium size cable.

Molex offers a variety of connectors and accessories to fit your needs.

Thread size for all UHF connectors is $\frac{5}{8}$ -24.



Specifications

Working Voltage — 500V Peak

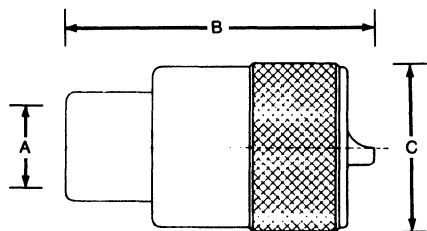
Frequency — 250 MHz

Proof Voltage — 3000V Peak

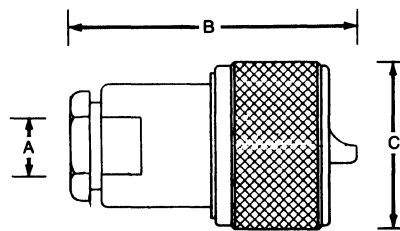
Impedance — Non-Constant

UHF Connectors

Straight Plugs



Solder/Solder

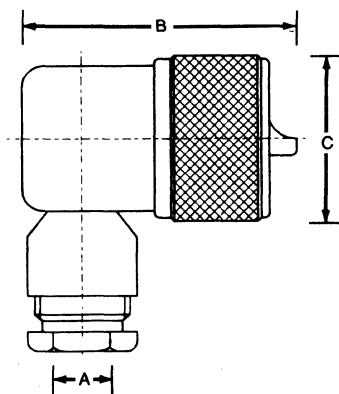


Clamp/Solder

Ordering Information

RG/U Cable	Order Number	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features	UG-
				A	B	C	D	E		
8A, 213	• 73260-0811	Solder/Solder	50R - (A)	.443 11.25	1.56 39.7	.780 19.8				PL-259
58C, 141A	73261-1111	Clamp/Solder	50R - (A)	.219 5.56	1.56 39.7	.780 19.8				

Right Angle Plug



Ordering Information

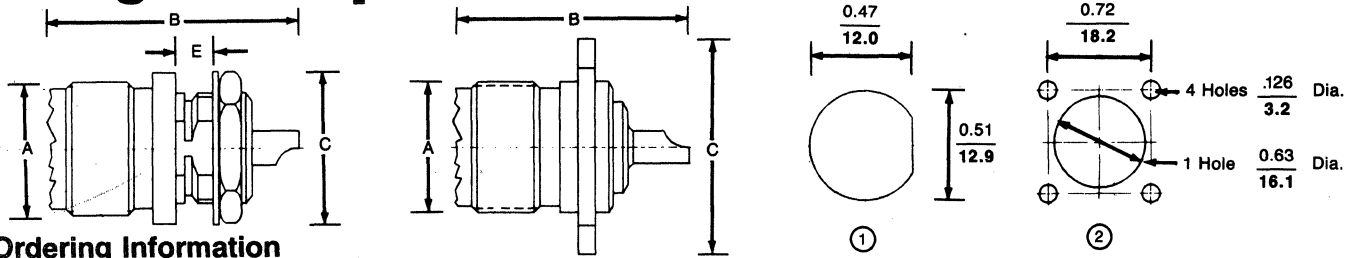
RG/U Cable	Order Number	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features	UG-
				A	B	C	D	E		
58C, 141A	73262-1131	Clamp/Solder	52R - (A)	.219 5.56	1.38 35.0	1.26 32.0	.780 19.8			

U.S. Standard Product, available through Molex franchised distributors

UG/PL Part Numbers are equivalent only.

All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example *****3.

Straight Receptacles

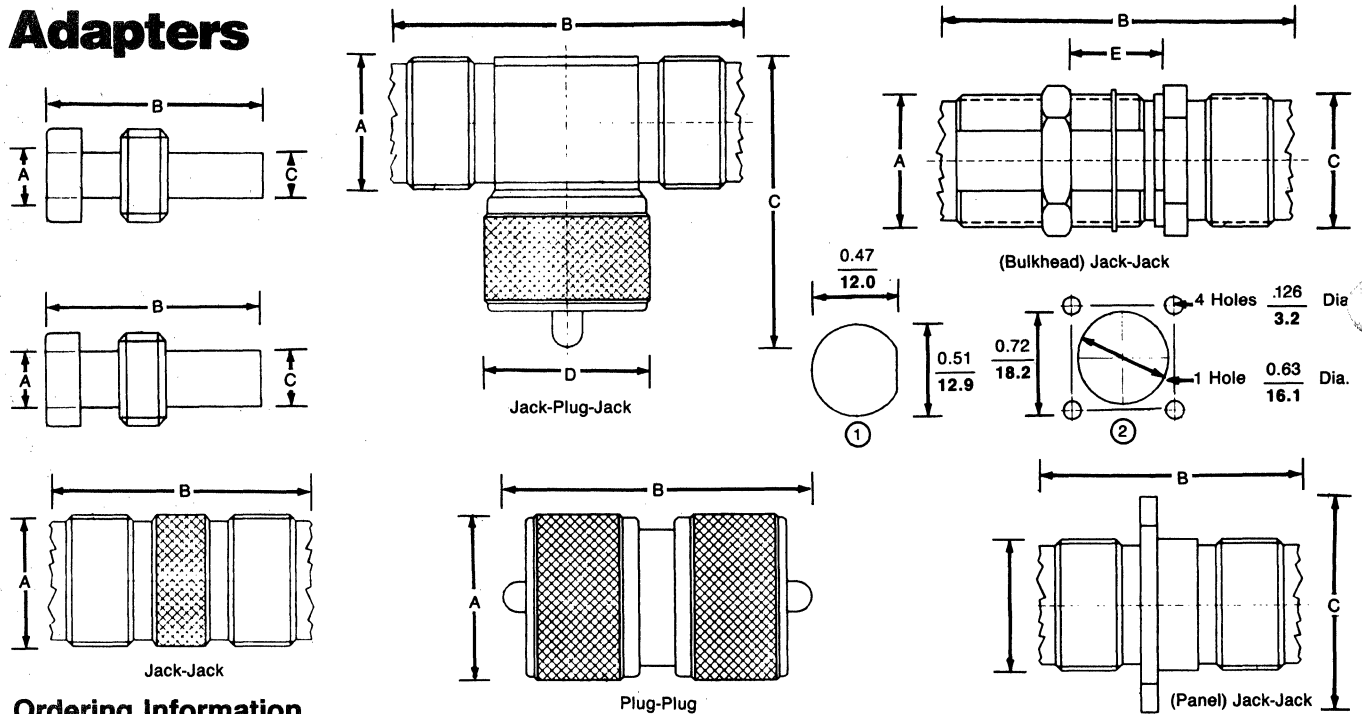


Ordering Information

Order Number	Description	Panel Cutout	Dimensions					Features
			A	B	C	D	E	
73269-0001	Bulkhead Mount	①	0.63 15.9	1.08 27.4	.650 16.5		0.17 4.4	Front Mount
• 73270-0001	Panel Mount	②	0.63 15.9	1.08 27.4	1.00 25.4			.126 3.2mm Through Holes

*Other panel mounting hole styles available.

Adapters



Ordering Information

Order Number	Description	Panel Cutout	Dimensions					Features
			A	B	C	D	E	
• 73273-5001	Reducing Adapter		0.43 11.1	1.00 25.4	0.21 5.3			RG 58 Cable
• 73274-7001	Reducing Adapter		0.43 11.1	1.00 25.4	0.26 6.6			RG 59 & 62 Cable
73275-0001	Plug-Plug		.79 19.8	1.44 36.5				
73276-0001	Jack-Jack		0.63 15.9	1.20 30.5				
73277-0001	(Bulkhead) Jack-Jack	①	.55 13.99	1.62 41.2	.69 17.5		.43 11.0	
73278-0001*	(Panel) Jack-Jack	②	0.63 15.9	1.20 30.5				.126 3.2mm Through Holes
73279-0001	Jack-Plug-Jack		0.63 15.9	1.61 41.0	1.28 32.5	.78 19.8		

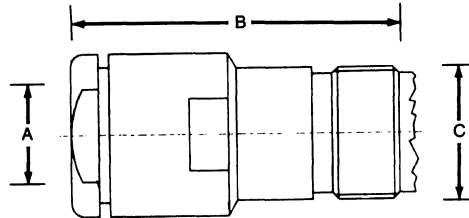
*Other panel mounting hole styles available.

• U.S. Standard Product, available through Molex franchised distributors.

—All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example *****3.

UHF

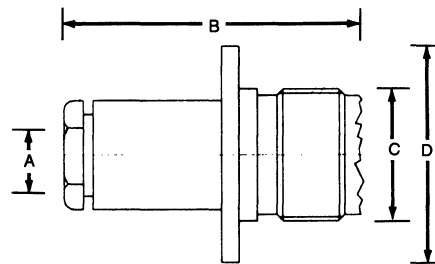
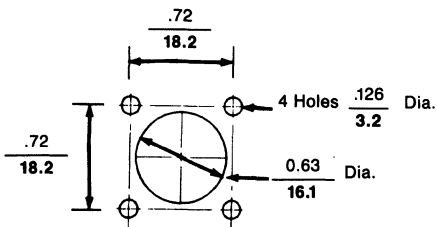
Straight Jacks



inches
mm

RG/U Cable	Order Number	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
				A	B	C	D	E	
58C, 141A	73265-1141	Clamp/Solder	52R - (B)	.219 5.56	1.59 40.5	.780 19.8			
59B, 140	73265-1541	Clamp/Solder	52R - (B)	.257	1.59	.780			
62B, 71B, 210				6.53	40.5	19.8			
8A, 213	73266-0651	Clamp/Solder	53R - (B)	.420 10.67	1.59 40.5	.780 19.8			
9B, 214	73266-0851	Clamp/Solder	53R - (B)	.443 11.25	1.59 40.5	.780 19.8			

Panel Jacks



Ordering Information

RG/U Cable	Order Number	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
				A	B	C	D	E	
58C, 141A	73267-1141	Clamp/Solder	53B	.219 5.56	1.38 35.0	.626 15.9	.100 25.4		.126 3.2mm Through Holes
59B, 140	73267-1541	Clamp/Solder	53B	.257	1.38	.626	.100		.126
62B, 71B, 210				6.53	35.0	15.9	25.4		3.2mm Through Holes
8A, 213	73268-0651	Clamp/Solder	54B	.420 10.67	1.38 35.0	.626 15.9	.100 25.4		.126 3.2mm Through Holes
9B, 214	73268-0851	Clamp/Solder	54B	.443 11.25	1.38 35.0	.626 15.9	.100 25.4		.126 3.2mm Through Holes

Other panel mounting hole styles available.

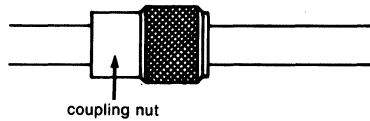
All connectors have nickel bodies/silver contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example ***** - ***3.

UHF ASSEMBLY INSTRUCTIONS

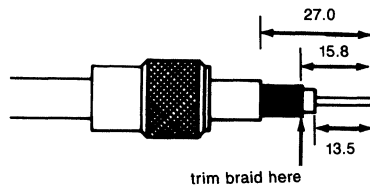
Solder/Solder

**MIL-TYPE PL 259
(A)**

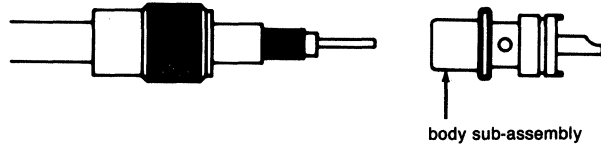
Slide coupling nut over braid as shown.



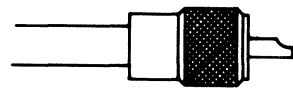
Trim cable to the dimensions indicated. Tin exposed braid and center conductor.



Screw body sub-assembly onto the cable as far as it will go. Solder braid to sub-assembly then solder center conductor to contact.

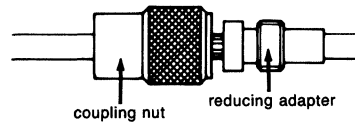


Screw coupling nut forward over sub-assembly and tighten.

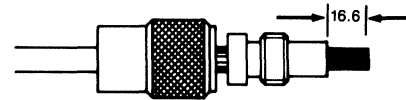


**MIL-TYPE PL 259 WITH
REDUCING ADAPTER
(B)**

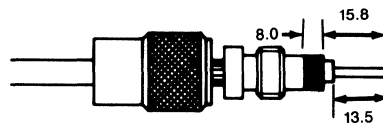
Slide coupling nut then reducing adapter over cable.



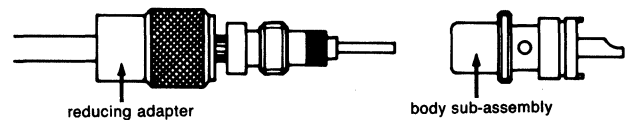
Trim outer jacket to the dimension indicated.



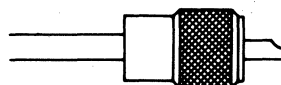
Position reducing adapter flush with the end of the outer jacket. Fold back braid over reducing adapter and trim as shown, making sure a total 15.8mm dimension is achieved. Tin center conductor and braid.



Screw body sub-assembly tightly against reducing adapter. Solder braid to sub-assembly and conductor to contact.



Screw coupling nut forward over sub-assembly and tighten.

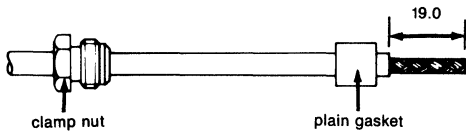


UHF ASSEMBLY INSTRUCTIONS

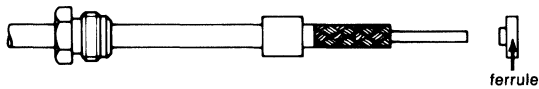
Clamp/Solder

STANDARD STYLE (PLUGS ONLY)

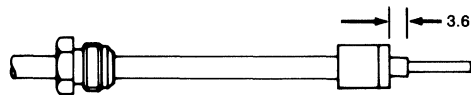
Place clamp nut and plain gasket over cable. Then trim jacket to the dimension indicated.



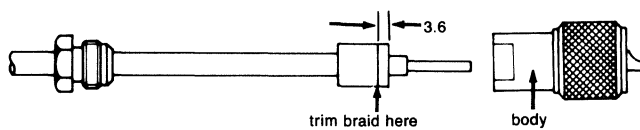
Fold back braid and insert ferrule between the dielectric and the braid trapping the braid against the outer jacket. Trim surplus braid.



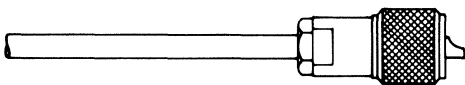
Slide plain gasket up to ferrule and trim dielectric to dimension indicated. Tin center conductor.



Push prepared cable into the body as far as possible.

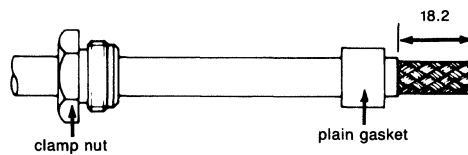


Engage and tighten clamp nut. Solder center conductor to contact.

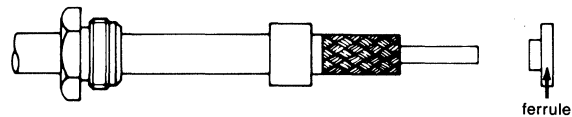


STANDARD STYLE LARGE CABLE ONLY 8A, 213, 11A, 9B, 214, 13A, 216 (PLUGS ONLY)

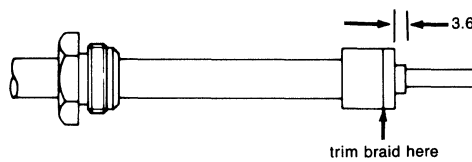
Place clamp nut and plain gasket over cable. Then trim jacket to the dimension indicated.



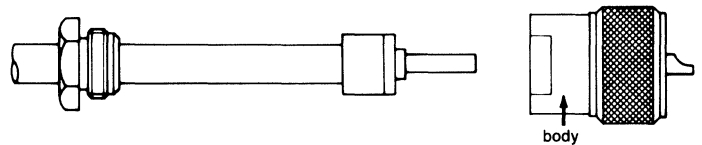
Fold back braid and insert ferrule between the dielectric and the braid trapping the braid against the outer jacket. Trim surplus braid.



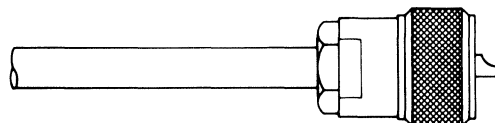
Slide plain gasket up to ferrule and trim dielectric to dimension indicated. Tin center conductor.



Push prepared cable into the body as far as possible.



Engage and tighten clamp nut. Solder center conductor to contact.

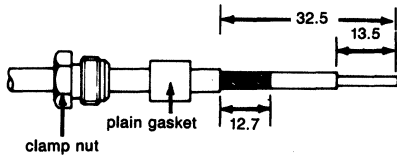


UHF ASSEMBLY INSTRUCTIONS

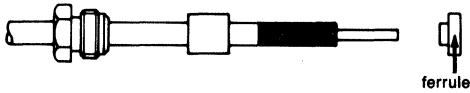
Clamp/Solder

STANDARD STYLE RIGHT ANGLE PLUGS ONLY (A)

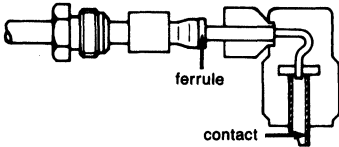
Place clamp nut and plain gasket over cable. Trim cable to dimensions indicated.



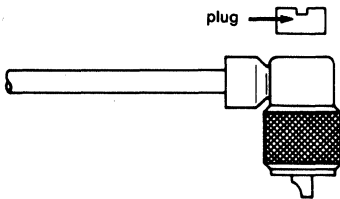
Fold back braid and insert ferrule between the dielectric and the braid trapping the braid against the outer jacket. Trim surplus braid, tin exposed center conductor.



Push prepared cable into the body while feeding the center conductor down the contact. Continue until the ferrule is seated inside the body and the dielectric is against the contact face.

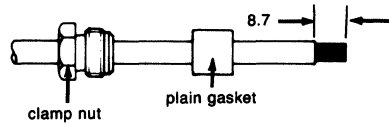


Holding the body and cable slide the plain gasket and clamp nut into the body and tighten clamp nut. Solder center conductor to contact, insert plug and tighten.

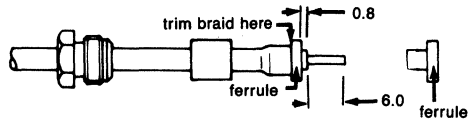


STANDARD STYLE FOR JACKS ONLY (B)

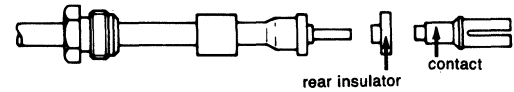
Place clamp nut and plain gasket over cable. Trim outer jacket to the dimension indicated.



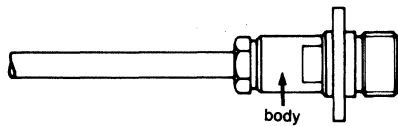
Fold back braid and insert ferrule between the dielectric and braid trapping the braid against the outer jacket. Trim dielectric as shown and tin exposed center conductor and trim surplus braid.



Push plain gasket up to ferrule and position rear insulator over dielectric to butt against the ferrule, tin center conductor. Place contact over center conductor with contacts undercut inside rear insulator, then solder.



Push the assembly into the body, enlarging the clamp nut into the body and tighten.

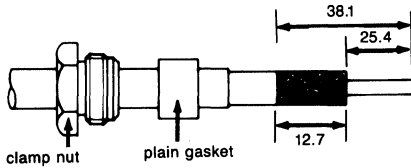


UHF ASSEMBLY INSTRUCTIONS

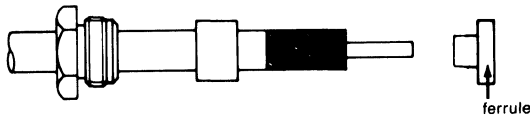
Clamp/Solder (Large Cables Only: 8A, 213, 11A, 913, 214, 13A, 216)

STANDARD STYLE FOR RIGHT ANGLE PLUGS ONLY (A)

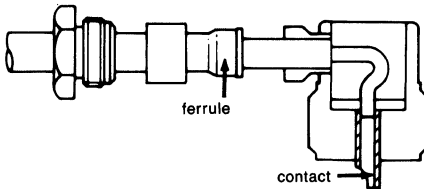
Place clamp nut and plain gasket over cable. Trim cable to dimensions indicated.



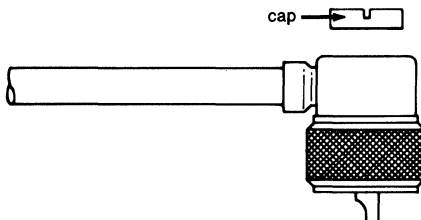
Fold back braid and insert ferrule between the dielectric and the braid trapping the braid against the outer jacket. Trim surplus braid, tin exposed center conductor.



Push prepared cable into the body while feeding the center conductor down the contact continue until the ferrule is seated inside the body and the dielectric is against the contact face.

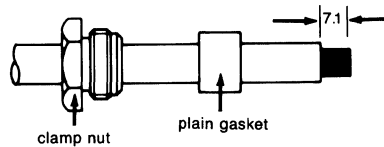


Holding the body and cable, slide the plain gasket and clamp nut into the body and tighten clamp nut. Solder center conductor to contact, insert cap and tighten.

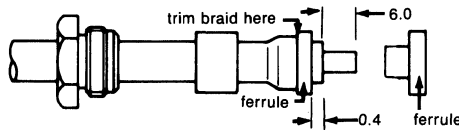


STANDARD STYLE FOR JACKS ONLY (B)

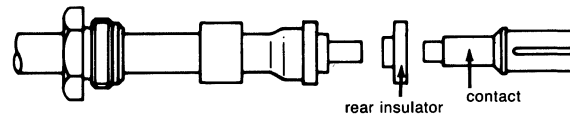
Place clamp nut and plain gasket over cable. Trim outer jacket to the dimension indicated.



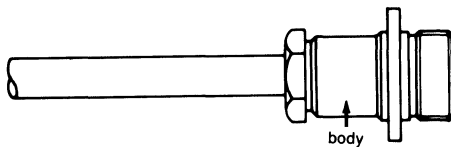
Fold back braid and insert ferrule between the dielectric and braid trapping the braid against the outer jacket. Trim dielectric as shown and tin exposed center conductor and trim surplus braid.



Push plain gasket up to ferrule and position rear insulator over dielectric to butt against the ferrule, tin center conductor. Place contact over center solder with contact undercut inside rear insulator, then solder.

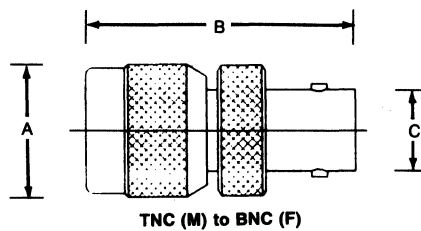
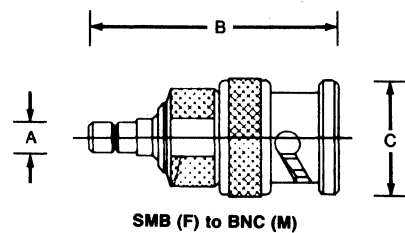
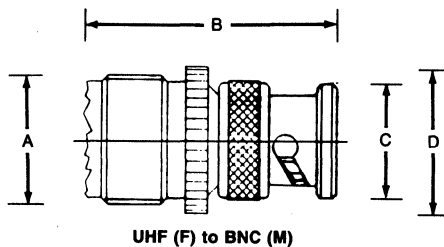
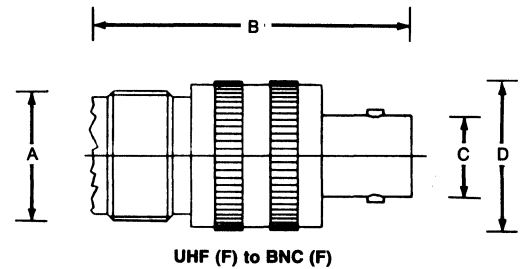
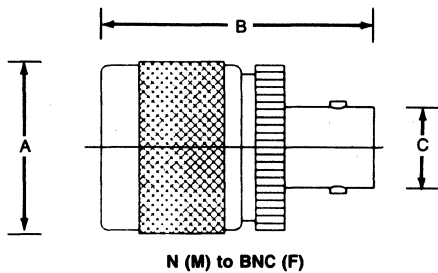
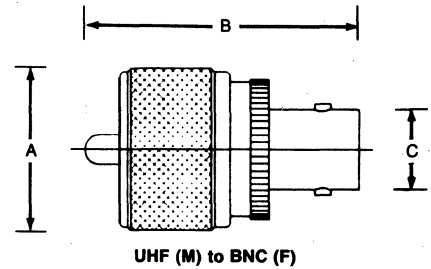
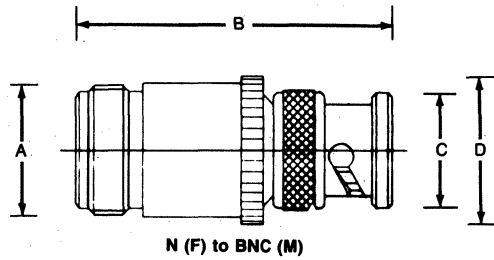


Push the assembly into the body engaging the clamp nut into the body and tighten.



Between Series Adapters

Molex Between Series Adapters are used where transitions are required to mate two different series together. All between series adapters are intermateable with industry standards and are offered only in 50 ohm versions.



inches
mm

Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73286-5001	50	N (F) to BNC (M)	.626 15.9	1.56 39.7	.563 14.3	.701 17.8		
73287-5001	50	N (M) to BNC (F)	.811 20.6	1.30 33.0	.382 9.7			
73288-5001	50	UHF (F) to BNC (M)	.626 15.9	1.22 31.0	.563 14.3	.701 17.8		
73289-5001	50	UHF (M) to BNC (F)	.768 19.5	1.34 34.0	.382 9.7			
73290-5001	50	UHF (F) to BNC (F)	.626 15.9	1.50 38.0	.382 9.7	.701 17.8		
73291-5001	50	SMB (F) to BNC (M)	.145 3.68	1.22 31.0	.563 14.3			
73292-5001	50	TNC (M) to BNC (F)	.622 15.8	1.25 31.7	.382 9.7			

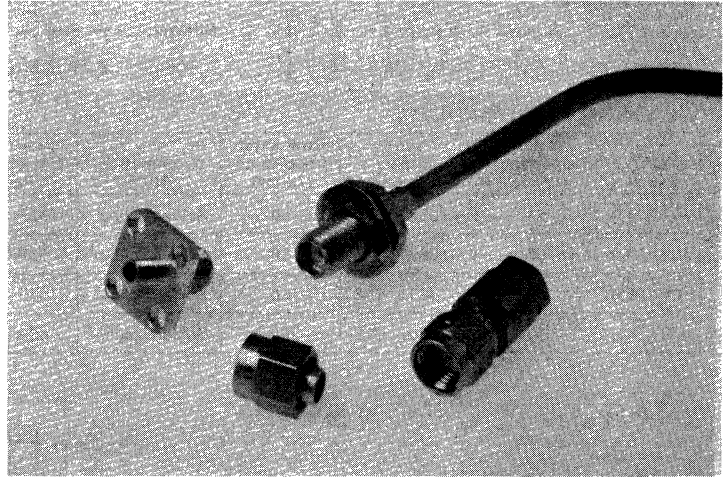
—All connectors have nickel bodies/silver contacts unless otherwise specified. Other platings available upon request.

SMA Connectors

The SMA range are screw coupled coaxial connectors that are designed for high frequency applications.

Molex offers a full range of SMA connectors for both semi-rigid and flexible coaxial cable.

Standard platings for the SMA line are gold body, gold contacts.



Specifications

VSWR (Typical) — 2 GHz up to 18 GHz (varies due to cable and connector style)

Working Voltage — 450V

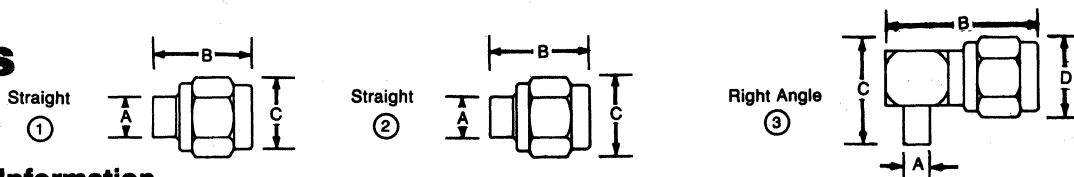
Proof Voltage — 1400V

Temperature Range — -55 to +155°

Impedance — 50 Ohms

SMA Connectors (Semi-rigid Cable)

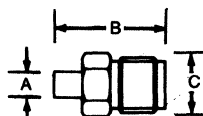
Plugs



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	Dimensions					Style	Features
						A	B	C	D	E		
402 (.141)	50	• 73300-1812	50	Solder/Clamp	67R - (A)	.146 3.7	.445 11.3	.358 9.1			①	Conductor Used As Contact
402 (.141)	50	• 73301-1812	50	Solder/Solder	66R - (A)	.146 3.7	.445 11.3	.358 9.1			②	Non-Captive Contact
405 (.085)	50	• 73301-1912	50	Solder/Solder	66R - (A)	.091 2.32	.445 11.3	.358 9.1			②	Non-Captive Contact
402 (.141)	50	• 73302-1822	50	Solder/Solder	66R - (B)	.146 3.7	.681 17.3	.358 9.1	.358 9.1		③	

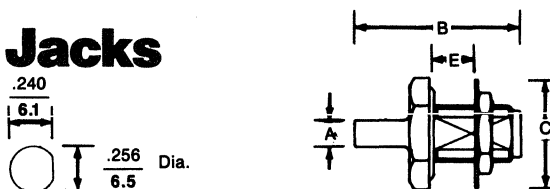
Straight Jacks



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
402 (.141)	50	73303-1812	50	Solder/Solder	66R - (A)	.146 3.7	.500 12.7	.358 9.1			Non-Captive Contact
405 (.085)	50	73303-1912	50	Solder/Solder	66R - (A)	.091 2.32	.500 12.7	.358 9.1			Non-Captive Contact

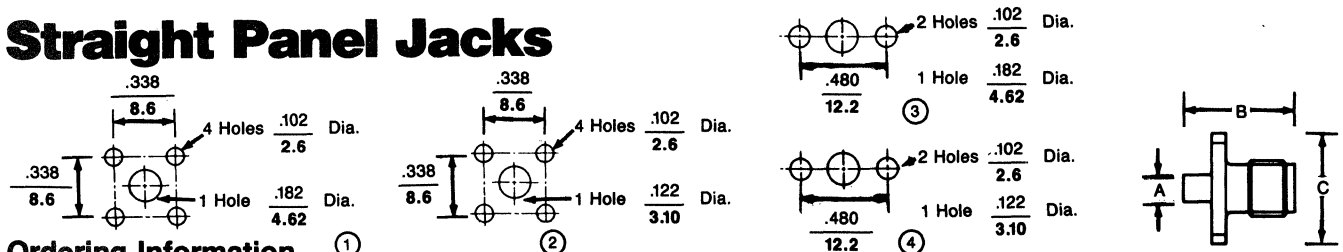
Straight Bulkhead Jacks



Ordering Information

RG/U Cable	Nom. Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
402 (.141)	50	73304-1812	50	Solder/Solder	66R - (A)	.146 3.7	.752 19.1	.500 12.7		.094 2.4	Rear-Mount, Non-Captive Contact
405 (.085)	50	73304-1912	50	Solder/Solder	66R - (A)	.091 2.32	.752 19.1	.500 12.7		.094 2.4	Rear-Mount, Non-Captive Contact

Straight Panel Jacks



Ordering Information

RG/U Cable	Nom. Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	MTG Style	Dimensions					Features
							A	B	C	D	E	
402 (.141)	50	73305-1812	50	Solder/Solder	66R - (A)	①	.146 3.7	.559 14.2	.500 12.7			Non-Captive Contact 4-Hole Mounting
405 (.085)	50	73305-1912	50	Solder/Solder	66R - (A)	②	.091 2.32	.559 14.2	.500 12.7			Non-Captive Contact 4-Hole Mounting
402 (.141)	50	73306-1812	50	Solder/Solder	66R - (A)	③	.146 3.7	.559 14.2	.626 15.9			Non-Captive Contact 2-Hole Mounting
405 (.085)	50	73306-1912	50	Solder/Solder	66R - (A)	④	.091 2.32	.559 14.2	.626 15.9			Non-Captive Contact 2-Hole Mounting

Other panel mounting hole styles available.

• U.S. Standard Product, available through Molex franchised distributors

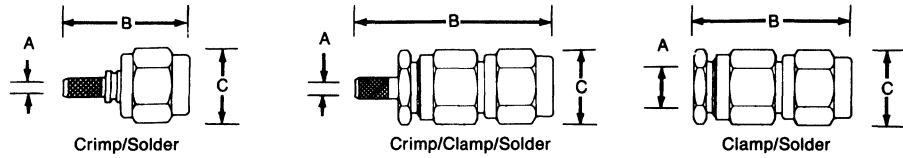
—All connectors have gold bodies/gold contacts unless otherwise specified. For stainless steel bodies/gold contacts change the last digit in the order number to a 7. Example *****7.

—All connectors have captive contacts unless otherwise specified.



SMA

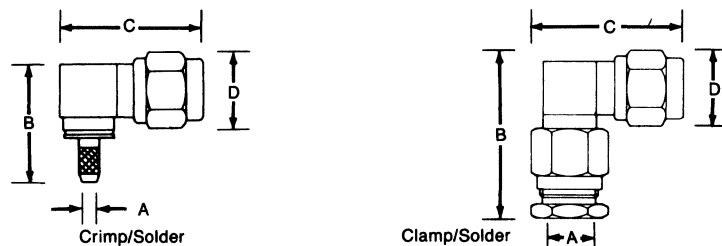
Straight Plugs (Flexible Cable)



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
58C, 141A	50	73311-1112	50	Crimp/Solder	64R - (A)	.125 3.18	.677 17.2	.358 9.1			Non-Captive Contact
174A, 188A, 316	50	• 73311-1216	50	Crimp/Solder	64R - (A)	.067 1.71	.677 17.2	.358 9.1			Non-Captive Contact, Passivated Stainless Steel Body
174A, 188A, 316	50	• 73311-1212	50	Crimp/Solder	64R - (A)	.067 1.71	.677 17.2	.358 9.1			Non-Captive Contact
55B, 142B, 223, 400	50	73311-1712	50	Crimp/Solder	64R - (A)	.125 3.18	.677 17.2	.358 9.1			Non-Captive Contact
58C, 141A	50	73312-1112	50	Crimp/Clamp/Solder	65R - (B)	.125 3.18	1.14 28.9	.358 9.1			
174A, 188A, 316	50	73312-1212	50	Crimp/Clamp/Solder	65R - (B)	.067 1.71	1.14 28.9	.358 9.1			
55B, 142B, 223, 400	50	73312-1712	50	Crimp/Clamp/Solder	65R - (B)	.125 3.18	1.14 28.9	.358 9.1			
58C, 141A	50	73314-1112	50	Clamp/Solder	63R - (A)	.223 5.66	.744 18.9	.358 9.1			
174A, 188A, 316	50	73314-1212	50	Clamp/Solder	63R - (A)	.115 2.93	.744 18.9	.358 9.1			
55B, 142B, 223, 400	50	73314-1712	50	Clamp/Solder	63R - (A)	.223 5.66	.744 18.9	.358 9.1			

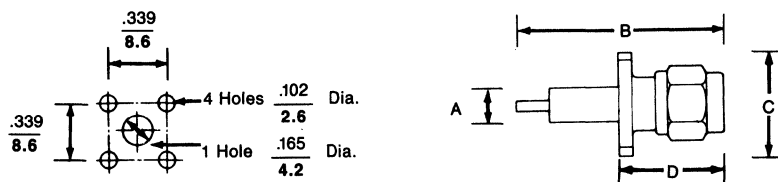
Right Angle Plugs (Flexible Cable)



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
58C, 141A	50	73313-1122	50	Crimp/Solder	64R - (B)	.125 3.18	.650 16.5	.681 17.3	.358 9.1		
174A, 188A, 316	50	• 73313-1222	50	Crimp/Solder	64R - (B)	.067 1.71	.650 16.5	.681 17.3	.358 9.1		
55B, 142B, 223, 400	50	73313-1722	50	Crimp/Solder	64R - (B)	.125 3.18	.650 16.5	.681 17.3	.358 9.1		
58C, 141A	50	73315-1122	50	Clamp/Solder	63R - (B)	.223 5.66	.764 19.4	.693 17.6	.358 9.1		
174A, 188A, 316	50	73315-1222	50	Clamp/Solder	63R - (B)	.115 2.93	.764 19.4	.693 17.6	.358 9.1		
55B, 142B, 223, 400	50	73315-1722	50	Clamp/Solder	63R - (B)	.223 5.66	.764 19.4	.693 17.6	.358 9.1		

Straight Panel Plug (Receptacle)



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73316-5002	50	Stub Contact	.165 4.2	1.02 25.8	.500 12.7	.508 12.9		.102 2.6mm Through Holes

Other panel mounting hole styles available.

• U.S. Standard Product, available through Molex franchised distributors

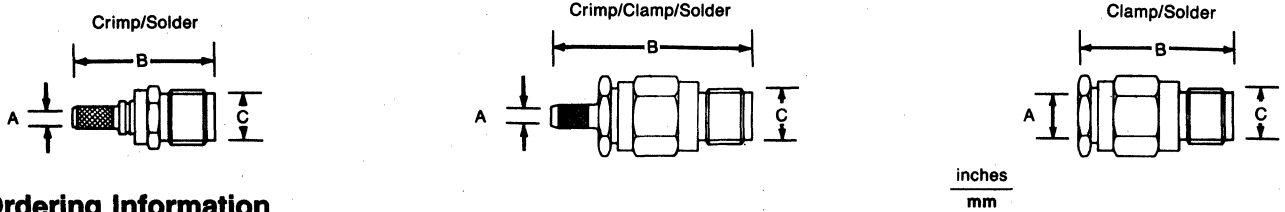
—All connectors have captive contacts unless otherwise specified.

—All connectors have gold bodies/gold contacts unless otherwise specified. For stainless steel bodies/gold contacts change the last digit in the order number to a 6. Example *****6.

—Tooling requirements are located on page 90R.

SMA

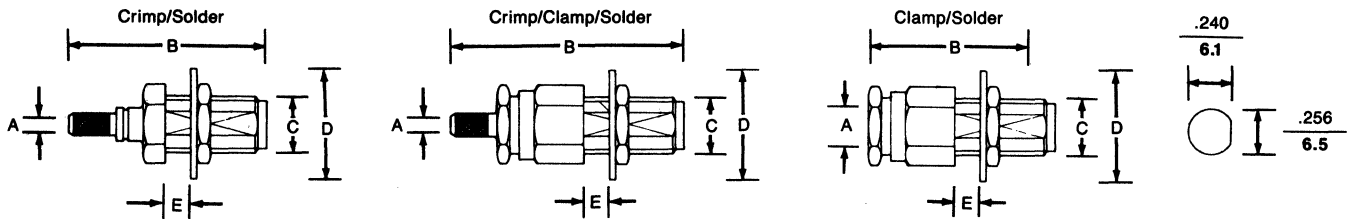
Straight Jacks



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
58C, 141A	50	73321-1112	50	Crimp/Solder	64R - (A)	.125 3.18	.638 16.2	.250 6.35			Non-Captive Contact
174A, 188A, 316	50	73321-1212	50	Crimp/Solder	64R - (A)	.067 1.71	.638 16.2	.250 6.35			Non-Captive Contact
55B, 142B, 223, 400	50	73321-1712	50	Crimp/Solder	64R - (A)	.125 3.18	.638 16.2	.250 6.35			Non-Captive Contact
58C, 141A	50	73322-1112	50	Crimp/Clamp/Solder	65R - (B)	.125 3.18	1.02 26.1	.250 6.35			
174A, 188A, 316	50	73322-1212	50	Crimp/Clamp/Solder	65R - (B)	.067 1.71	1.02 26.1	.250 6.35			
55B, 142B, 223, 400	50	73322-1712	50	Crimp/Clamp/Solder	65R - (B)	.125 3.18	1.02 26.1	.250 6.35			
58C, 141A	50	73326-1112	50	Clamp/Solder	63R - (A)	.222 5.66	.709 18.0	.250 6.35			
174A, 188A, 316	50	73326-1212	50	Clamp/Solder	63R - (A)	.115 2.93	.709 18.0	.250 6.35			
55B, 142B, 223, 400	50	73326-1712	50	Clamp/Solder	63R - (A)	.222 5.66	.709 18.0	.250 6.35			

Straight Bulkhead Jacks



Ordering Information

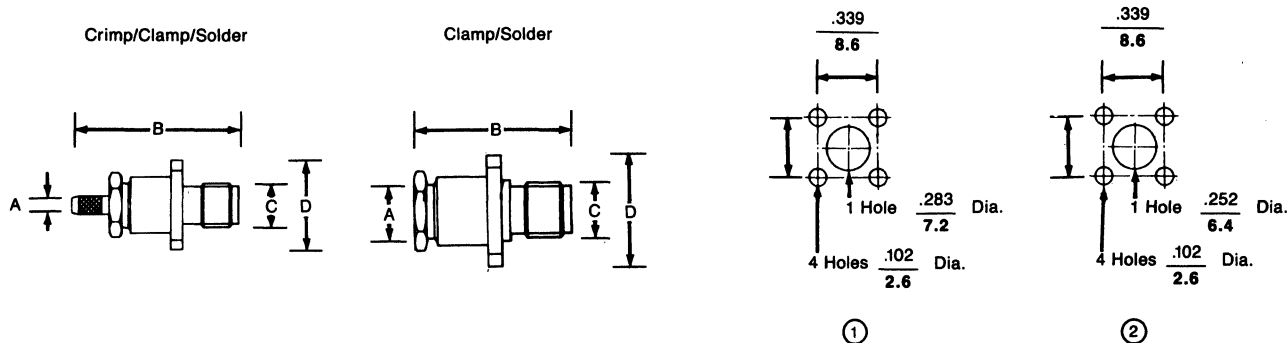
RG/U Cable	Nom. Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
58C, 141A	50	73323-1112	50	Crimp/Solder	64R - (A)	.125 3.18	.878 22.3	.250 6.35	.500 12.7	.106 2.7	Rear Mount, Non-Captive Contact
174A, 188A, 316	50	73323-1212	50	Crimp/Solder	64R - (A)	.067 1.71	.878 22.3	.250 6.35	.500 12.7	.106 2.7	Rear Mount, Non-Captive Contact
55B, 142B, 223, 400	50	73323-1712	50	Crimp/Solder	64R - (A)	.125 3.18	.878 22.3	.250 6.35	.500 12.7	.106 2.7	Rear Mount, Non-Captive Contact
58C, 141A	50	73324-1112	50	Crimp/Clamp/Solder	65R - (B)	.125 3.18	1.16 29.5	.250 6.35	.500 12.7	.106 2.7	Rear Mount
174A, 188A, 316	50	73324-1212	50	Crimp/Clamp/Solder	65R - (B)	.125 3.18	1.16 29.5	.250 6.35	.500 12.7	.106 2.7	Rear Mount
55B, 142B, 223, 400	50	73324-1712	50	Crimp/Clamp/Solder	65R - (B)	.125 3.18	1.16 29.5	.250 6.35	.500 12.7	.106 2.7	Rear Mount
58C, 141A	50	73327-1112	50	Clamp/Solder	63R - (A)	.222 5.66	.839 21.3	.250 6.35	.500 12.7	.106 2.7	Rear Mount
174A, 188A, 316	50	73327-1212	50	Clamp/Solder	63R - (A)	.115 2.93	.839 21.3	.250 6.35	.500 12.7	.106 2.7	Rear Mount
55B, 142B, 223, 400	50	73327-1712	50	Clamp/Solder	63R - (A)	.222 5.66	.839 21.3	.250 6.35	.500 12.7	.106 2.7	Rear Mount

Other Panel Mounting Holes Styles Available.

—All connectors have gold bodies/gold contacts unless otherwise specified. For stainless steel bodies/gold contacts change the last digit in the order number to a 6. Example *****-***6.

—Tooling requirements are located on page 90R.

Straight Panel Jacks



Ordering Information

RG/U Cable	Nom. Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	MTG Style	Dimensions					Features
							A	B	C	D	E	
58C, 141A	50	73325-1112	50	Crimp/Clamp/Solder	65R - (B)	①	.125 3.18	1.02 26.1	.250 6.35	.500 12.7		2.6mm Through Holes
174A, 188A, 316	50	73325-1212	50	Crimp/Clamp/Solder	65R - (B)	①	.067 1.71	1.02 26.1	.250 6.35	.500 12.7		2.6mm Through Holes
55B, 142B, 223, 400	50	73325-1712	50	Crimp/Clamp/Solder	65R - (B)	①	.125 3.18	1.02 26.1	.250 6.35	.500 12.7		2.6mm Through Holes
58C, 141A	50	73328-1112	50	Clamp/Solder	63R - (A)	②	.222 5.66	.709 18.0	.250 6.35	.500 12.7		2.6mm Through Holes
174A, 188A, 316	50	73328-1212	50	Clamp/Solder	63R - (A)	②	.115 2.93	.709 18.0	.250 6.35	.500 12.7		2.6mm Through Holes
55B, 142B, 223, 400	50	73328-1712	50	Clamp/Solder	63R - (A)	②	.222 5.66	.709 18.0	.250 6.35	.500 12.7		2.6mm Through Holes

Other Panel Mounting Hole Styles Available

—UG Part Numbers are equivalent only.

—All connectors have gold bodies/gold contacts unless otherwise specified. For stainless steel bodies/gold contacts change the last digit in the order number to a 6.
Example *****6.

—Tooling requirements are located on page 90R.

SMA

Straight Panel Receptacle (Jack)

inches
mm

Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Panel Cutout	Dimensions					Connector Style	Features
				A	B	C	D	E		
73331-5012	50	4-Hole Flange	①	.250 6.35	1.08 27.4	.500 12.7	.165 4.2	.051 1.3	①	Stub Contact, Extended Dielectric
73331-5022	50	4-Hole Flange	①	.250 6.35	1.08 27.4	.500 12.7	.165 4.2	.051 1.3	①	Non-Captive, Stub Contact, Extended Dielectric
73332-5012	50	2-Hole Flange	②	.250 6.35	1.08 27.4	.626 15.9	.165 4.2	.051 1.3	①	Stub Contact, Extended Dielectric
• 73332-5022	50	2-Hole Flange	②	.250 6.35	1.08 27.4	.626 15.9	.165 4.2	.051 1.3	①	Non-Captive, Stub Contact, Extended Dielectric
73333-5002	50	4-Hole Flange	③	.250 6.35	.570 14.5	.500 12.7		.031 0.8	②	Solder Cup Contact
• 73334-5002	50	2-Hole Flange	④	.250 6.35	.570 14.5	.626 15.9		.031 0.8	②	Solder Cup Contact
73335-5012	50	4-Hole Flange	⑤	.250 6.35	.460 11.7	.500 12.7	.063 1.6	.001 0.2	③	Pin Contact
73335-5022	50	4-Hole Flange	⑤	.250 6.35	.460 11.7	.500 12.7	.063 1.6	.001 0.2	③	Non-Captive, Pin Contact
73336-5012	50	4-Hole Flange	⑤	.250 6.35	.460 11.7	.500 12.7	.126 3.2	.001 0.2	③	Pin Contact, Extended Dielectric
73336-5022	50	4-Hole Flange	⑤	.250 6.35	.460 11.7	.500 12.7	.126 3.2	.001 0.2	③	Non-Captive, Pin Contact, Extended Dielectric
73337-5012	50	2-Hole Flange	⑥	.250 6.35	.460 11.7	.626 15.9	.063 1.6	.063 1.6	③	Pin Contact
73337-5022	50	2-Hole Flange	⑥	.250 6.35	.460 11.7	.626 15.9	.063 1.6	.063 1.6	③	Non-Captive, Pin Contact
73338-5012	50	2-Hole Flange	⑥	.250 6.35	.460 11.7	.626 15.9	.126 3.2	.063 1.6	③	Pin Contact, Extended Dielectric
73338-5022	50	2-Hole Flange	⑥	.250 6.35	.460 11.7	.626 15.9	.126 3.2	.063 1.6	③	Non-Captive, Pin Contact, Extended Dielectric
73344-5012	50	4-Hole Flange	①	.250 6.35	.626 15.9	.500 12.7	.028 0.7	.220 5.6	④	Slotted Contact
73344-5022	50	4-Hole Flange	①	.250 6.35	.626 15.9	.500 12.7	.028 0.7	.220 5.6	④	Non-Captive, Slotted Contact
73345-5012	50	2-Hole Flange	②	.250 6.35	.626 15.9	.626 15.9	.028 0.7	.220 5.6	④	Slotted Contact
73345-5022	50	2-Hole Flange	②	.250 6.35	.626 15.9	.626 15.9	.028 0.7	.220 5.6	④	Non-Captive, Slotted Contact
73346-5012	50	4-Hole Flange	⑦	.250 6.35	.472 12.0		.006 × .051 .15 × 1.3	.098 2.5	⑤	Tab Contact
73346-5022	50	4-Hole Flange	⑦	.250 6.35	.472 12.0		.006 × .051 .15 × 1.3	.098 2.5	⑤	Non-Captive, Tab Contact
73347-5012	50	2-Hole Flange	⑧	.250 6.35	.472 12.0		.006 × .051 .15 × 1.3	.098 2.5	⑤	Tab Contact
73347-5022	50	2-Hole Flange	⑧	.250 6.35	.472 12.0		.006 × .051 .15 × 1.3	.098 2.5	⑤	Non-Captive Tab Contact
73348-5002	50	Stripline	⑨	.250 6.35	.406 10.3	.563 14.3		.031 0.8	⑥	Non-Captive Floating Contact, Surface Launched
73349-5002	50	Stripline	⑩	.250 6.35	.406 10.3	.406 10.3		.031 0.8	⑥	Non-Captive Floating Contact, Surface Launched
73350-5002	50	Stripline	—	.250 6.35	.606 15.4	.378 9.60	.004 × 0.98 0.1 × 2.5		⑦	End Launched

Other panel mounting hole styles available.

• U.S. Standard Product, available through Molex franchised distributors

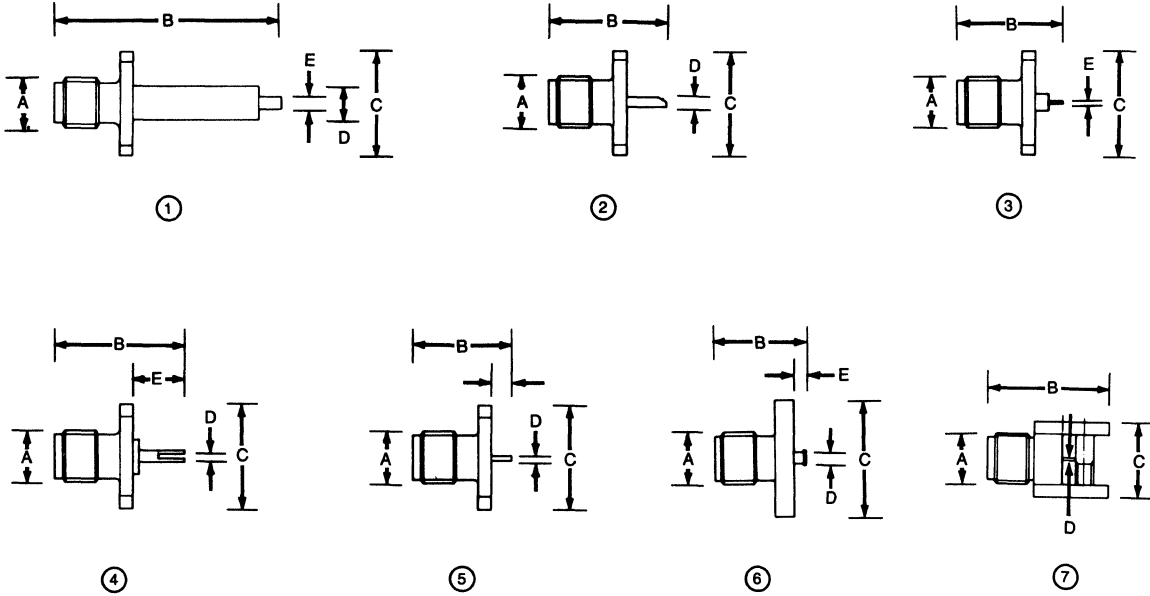
—All connectors have captive contacts unless otherwise specified.

—All connectors have gold bodies/gold contacts unless otherwise specified. For stainless steel bodies/gold contacts change the last digit in the order number to a 6. Example *****6.

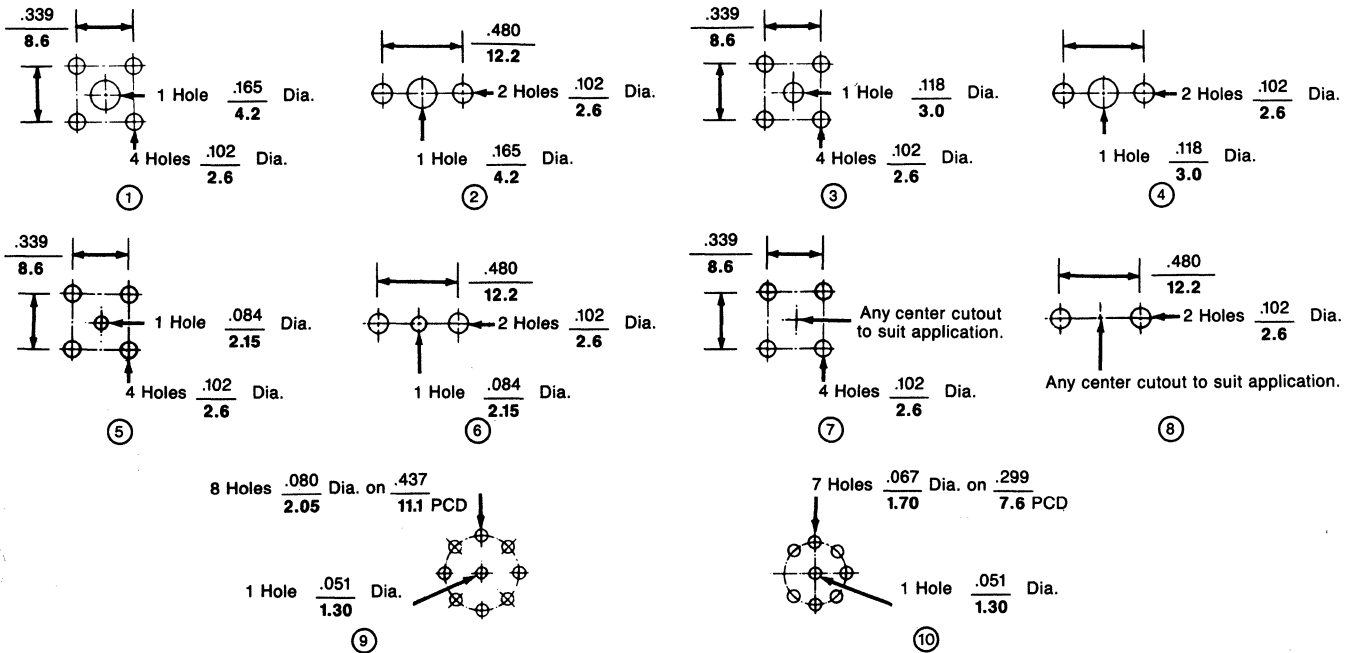
SMA

Straight Panel Receptacle (Jack)

CONNECTOR STYLE

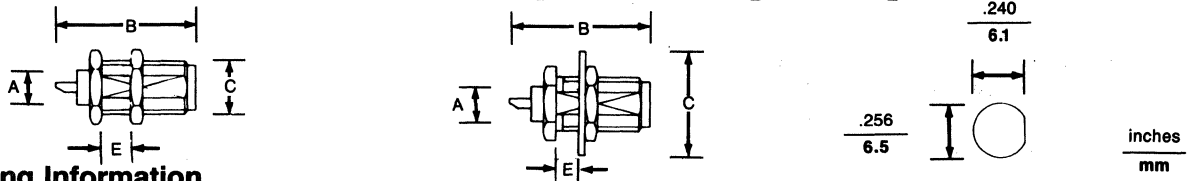


PANEL CUTOUT



SMA

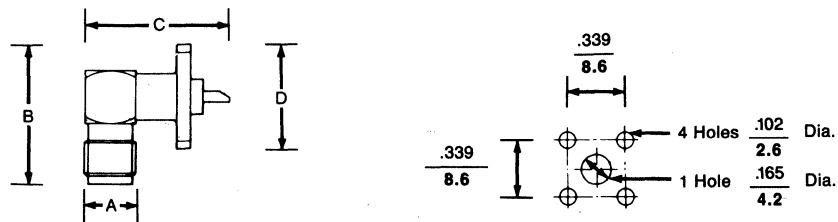
Straight Bulkhead Receptacles (Jack)



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73351-5002	50	Solder Cup	.165 4.2	.658 16.7	.28 7.0		.087 2.2	Rear Mount
• 73352-5002	50	Solder Cup	.165 4.2	.669 17.0	.500 12.7		.087 2.2	Rear Mount

Right Angle Panel Receptacle (Jack)

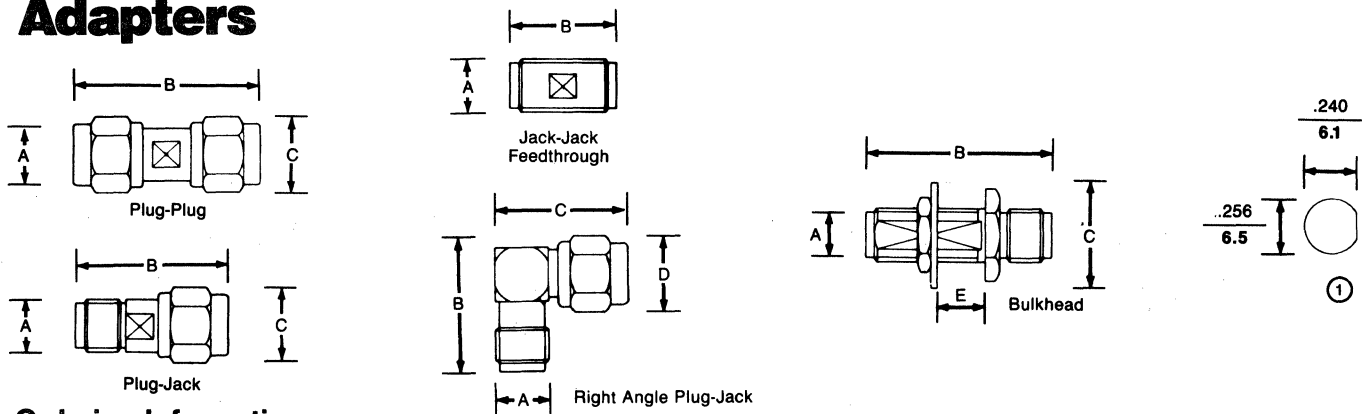


Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
• 73353-5002	50	Solder Cup	.250 6.35	.713 18.1	.689 17.5	.500 12.7		4-Hole Flange

Other panel mounting hole styles available.

Adapters



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Panel Cutout	Dimensions					Features
				A	B	C	D	E	
73355-5002	50	Plug-Plug		.358 9.1	.878 22.3	.358 9.1			
73356-5002	50	Jack-Plug		.250 6.35	.717 18.2	.358 9.1			
73357-5002	50	Feedthrough, Jack-Jack		.250 6.35	.500 12.7				
• 73358-5002	50	Right Angle, Plug-Jack		.250 6.35	.641 16.3	.626 15.9	.358 9.1		
• 73359-5002	50	Bulkhead, Jack-Jack	①	.250 6.35	.878 22.3	.500 12.7		.248 6.3	

• U.S. Standard Product, available through Molex franchised distributors

—All connectors have captive contacts unless otherwise specified

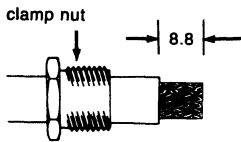
—All connectors have gold bodies/gold contacts unless otherwise specified. For stainless steel bodies/gold contacts change the last digit in the order number to a 6. Example *****6.

SMA ASSEMBLY INSTRUCTIONS

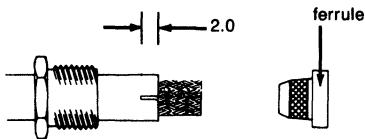
Clamp/Solder

STANDARD STYLE CAPTIVE CONTACT (A)

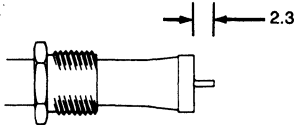
Slide clamp nut over cable and trim to dimension shown. Do not nick the braid.



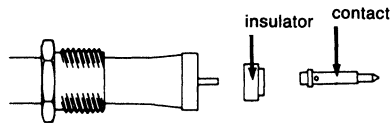
Flare out braid and insert ferrule over dielectric slitting jacket as necessary.



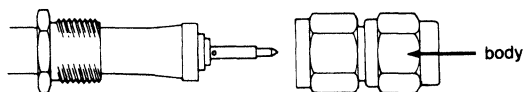
Trim braid to ferrule outer dia. Trim dielectric flush with front face of ferrule. Do not nick center conductor. Trim center conductor to dimensions shown.



Assemble insulator and soft solder contact to center conductor, ensure that flange on contact is fitted firmly against insulator, and solder. Remove excess solder.

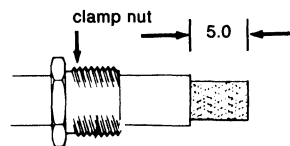


Insert assembly into body. Tighten clamp nut (15-20 pound).

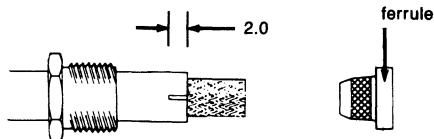


STANDARD RIGHT ANGLE STYLE CAPTIVE CONTACT (B)

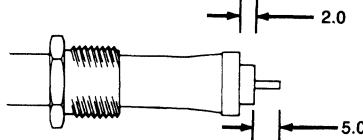
Slide clamp nut over cable and trim to dimension shown. Do not nick the braid.



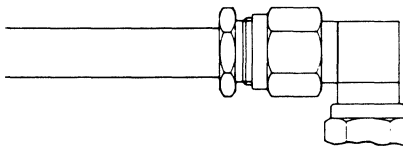
Flare out braid and insert ferrule over dielectric slitting jacket as necessary.



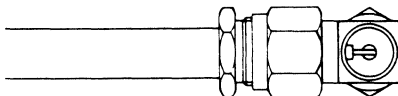
Trim braid to ferrule outer dia. Trim dielectric and center conductor to dimensions shown. Do not nick center conductor. Tin center conductor.



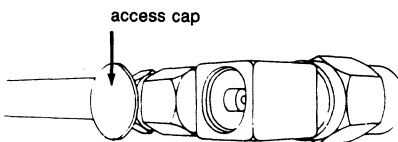
Insert Ferrule assembly into body and tighten clamp nut (15-20 pound).



Soft solder center conductor into slot in contact.



Soft solder or press fit access cap.



NOTE: These assembly instructions apply to both plugs and jacks. Contacts and insulators may vary slightly in shape and size.

SMA ASSEMBLY INSTRUCTIONS

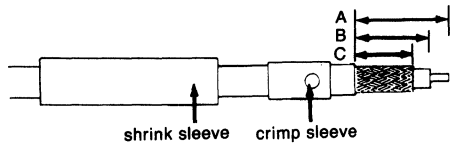
Crimp/Solder

STANDARD STYLE NON CAPTIVE CONTACT (A)

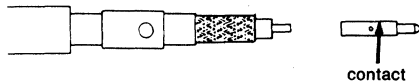
STANDARD STYLE RIGHT ANGLE ONLY (B)

inches/mm

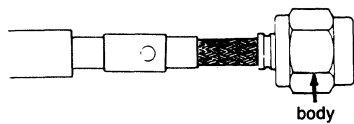
Slide shrink sleeve and crimp sleeve over cable. Trim to dimensions shown in the table below. Do not nick the braid or the center conductor.



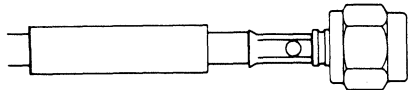
Solder contact to center conductor ensuring contact is firmly against cable dielectric, remove excess solder.



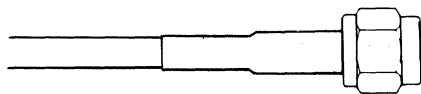
Insert assembly into body until cable dielectric butts against the internal shoulder of body. The ferrule should go over the dielectric and under the braid.



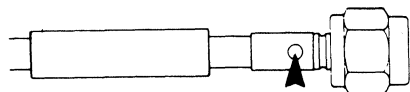
Slide crimp sleeve to butt against body and crimp.



Slide shrink sleeve to butt against body and carefully apply heat, (300°-400°C).

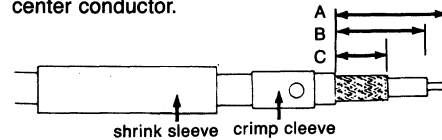


* Note: as an alternative to crimping, the cable braid can be soft soldered to the crimp sleeve and connector body, by allowing solder to flow into the crimp sleeve access holes. Pre-tinning of the ferrule outer diameter in the braid overlap area is recommended.

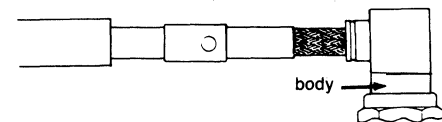


RG/U CABLE	Trimming Dimensions		
	A	B	C
58C/U, 142B/U, 223/U	.398/10.1	.319/8.1	.252/6.4
174A/U, 188A/U, 316/U	.402/10.2	.323/8.2	.209/5.3

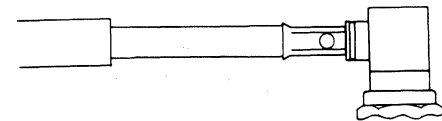
Slide shrink sleeve and crimp sleeve over cable. Trim to dimensions shown in the table below. Do not nick the braid or the center conductor.



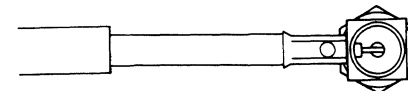
Tin center conductor and insert cable into body. The ferrule should go over the dielectric and under the braid.



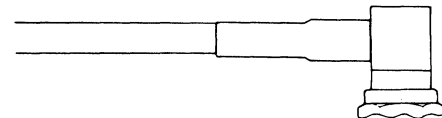
Slide the crimp sleeve to butt against the body. Crimp using the die specified below.



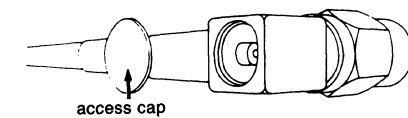
Soft solder the center conductor into slot in contact.



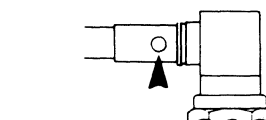
Slide shrink sleeve to butt against body and carefully apply heat, (300°-400°C).



Soft solder or press fit access cap.



* Note: as an alternative to crimping, the cable braid can be soft soldered to the crimp sleeve and connector body, by allowing solder to flow into the crimp sleeve access holes. Pre-tinning of the ferrule outer diameter in the braid overlap area is recommended.



RG/U CABLE	Trimming Dimensions		
	A	B	C
58C/U, 142B/U, 223/U	.531/13.5	.469/11.9	.252/6.4
174A/U, 188A/U, 316/U	.457/11.6	.390/ 9.9	.209/5.3

NOTE: These assembly instructions apply to both plugs and jacks. Contacts and insulators may vary slightly in shape and size.

SMA ASSEMBLY INSTRUCTIONS

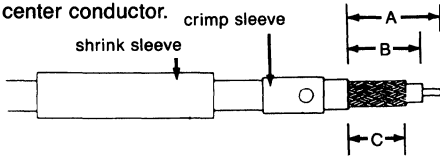


CRIMP/SOLDER BULKHEAD JACKS ONLY CAPTIVE CONTACT (A)

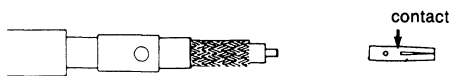
CRIMP/CLAMP/SOLDER STANDARD STYLE CAPTIVE CONTACT (B)

inches/mm

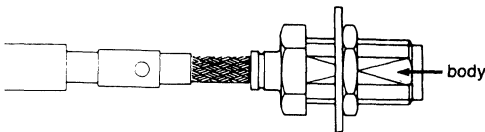
Slide shrink sleeve and crimp sleeve over the cable. Trim cable to the dimensions shown in the table below. Do not nick the braid or center conductor.



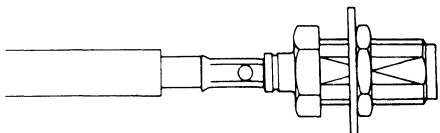
Solder contact to center conductor ensuring contact is firmly against cable dielectric. Remove excess solder.



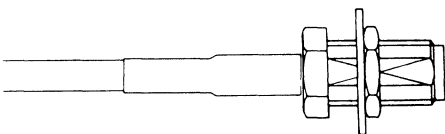
Insert assembly into body until cable dielectric butts against the internal shoulder of body. The ferrule should go over the dielectric and under the braid.



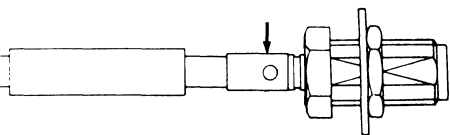
Slide crimp sleeve to butt against body and crimp.



Slide shrink sleeve to butt against body and carefully apply heat. (300°-400°C).



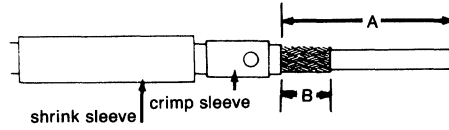
* Note: as an alternative to crimping, the cable braid can be soft soldered to the crimp sleeve and connector body, by allowing solder to flow into the crimp sleeve access holes. Pre-tinning of the ferrule outer diameter in the braid overlap area is recommended.



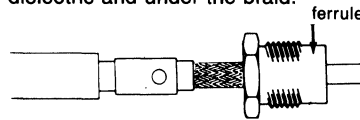
RG/U CABLE	Trimming Dimensions		
	A	B	C

58C/U, 142B/U, 223/U	.638/16.2	.560/14.2	.252/6.4
174A/U, 188A/U, 316/U	.641/16.3	.513/14.3	.209/5.3

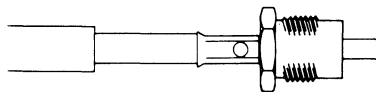
Slide shrink sleeve and crimp sleeve over cable. Trim to dimensions shown in the table below. Do not nick the braid.



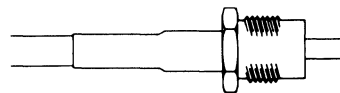
Insert cable in the ferrule, the ferrule should go over the dielectric and under the braid.



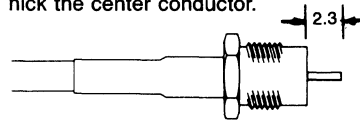
Slide crimp sleeve to butt against the ferrule and crimp.



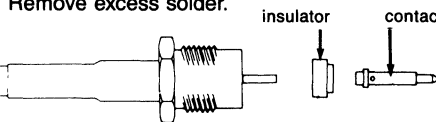
Slide shrink sleeve against ferrule and carefully apply heat. (300°-400°C).



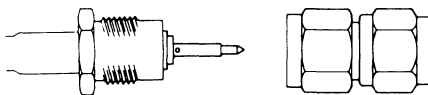
Trim dielectric flush and the center conductor as shown. Do not nick the center conductor.



Assemble insulator and soft solder contact to center conductor, ensure that flange on contact is fitted firmly against insulator. Remove excess solder.



Insert assembly into body. Tighten clamp nut (15-20 pounds).



RG/U CABLE	Trimming Dimensions	
	A	B

58C/U, 142B/U, 223/U	.709/18	.256/6.5
174A/U, 188A/U, 316/U	.669/17	.217/5.5

These assembly instructions apply to both plugs and jacks. Contacts and insulators may vary slightly in shape and size.

SMA ASSEMBLY INSTRUCTIONS

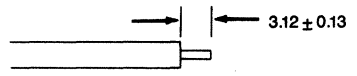
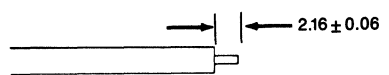
Solder/Solder (Semi-Rigid Cable)

STANDARD STYLE STRAIGHT PLUGS & JACKS ONLY (A)

STANDARD STYLE RIGHT ANGLE VERSIONS ONLY (B)

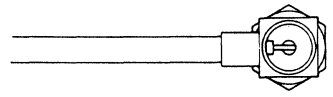
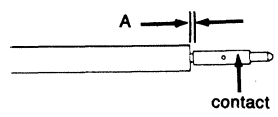
Clean outer conductor. Trim back outer conductor and dielectric to dimension shown. Do not nick center conductor.

Clean outer conductor. Trim back outer conductor and dielectric to dimension shown. Do not nick center conductor.



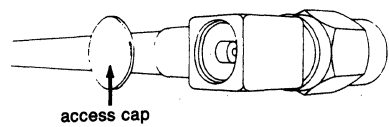
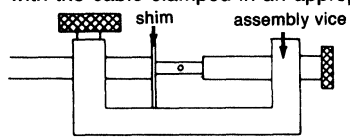
Solder contact to center conductor, allow gap 'A' shown in the table below by using a shim or spacer.

Tin center conductor and insert cable into body. Position center conductor into slot of contact and solder. Soft solder outer jacket to body.

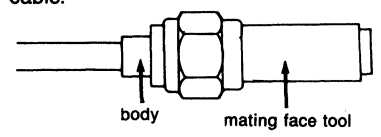


The above operation is easier if the contact holding tool is used with the cable clamped in an appropriate assembly kit.

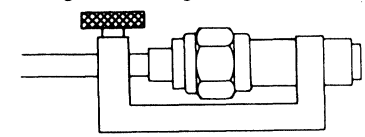
Soft solder or press fit access cap as appropriate.



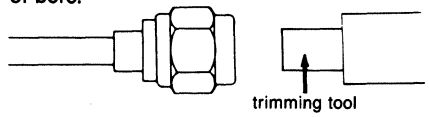
Screw body onto mating face setting tool and assemble onto cable.



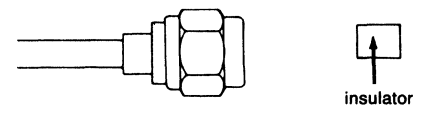
Clamp into assembly kit vice. Ensure contact locates fully in mating face setting tool and soft solder body to outer jacket.



Remove assembly from assembly kit vice and unscrew mating face tool. Using trimming tool, trim expanded dielectric from base of bore.



Insert Insulator.



RG/U CABLE	Dimensions A
402 (.140)	0.10 ± .002 / 0.25 ± 0.05
405 (.085)	.015 ± .002 / 0.38 ± 0.05

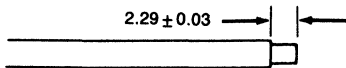
SMA ASSEMBLY INSTRUCTIONS



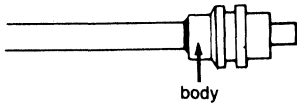
Solder/Solder (Semi-Rigid Cable)

STANDARD STYLE (CENTER CONDUCTOR IS USED AS THE CONTACT) (A)

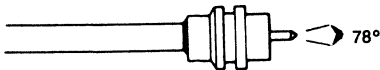
Clean outer conductor. Trim back outer conductor to dimension shown.



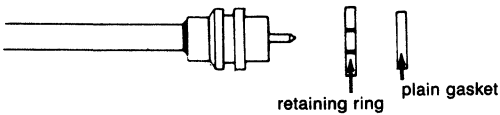
Insert body until mating face is flush with outer jacket. Soft solder cable outer conductor to body.



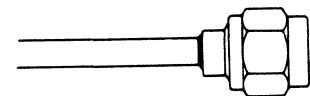
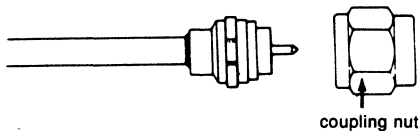
Trim dielectric flush with mating face, and center conductor to angle shown. Do not nick center conductor.



Fit retaining ring into body groove. Push plain gasket over body to butt against shoulder.



Fit assembly into coupling nut.



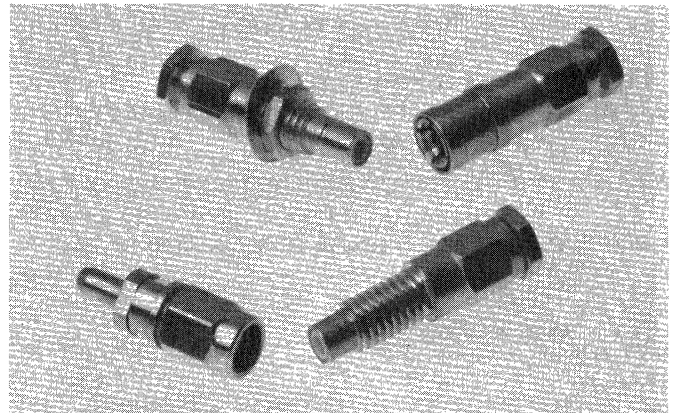
SMB/SMC Connectors

The SMB/SMC connector range are slightly smaller than SMAs and offer two types of locking mechanisms. SMB is a snap-on version and the SMC is a screw coupled.

Both the SMB & SMC series are available in 50 & 75 Ohm impedance ranges (75 Ohm limited).

These connectors are designed for high density, low loss applications in equipment.

NOTE: Plug style connectors have female contacts; Jack/Receptacle style connectors have male contacts. This is an industry standard.



Specifications

	(SMB)	(SMC)
<i>VSWR (Typical)</i> —	$1.30 + 0.04f^*$ to 4 GHz	$1.25 + 0.04f^*$ to 10 GHz
	* (f = frequency in GHz)	

Working Voltage — 250

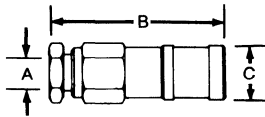
Proof Voltage — 750

Temperature Range — -55° to +155°C

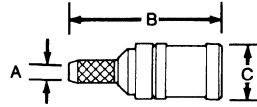
Impedance — 50 and 75 ohms (75 ohm limited)

SMB/SMC

Straight Plugs (Female Contacts)



Clamp/Solder



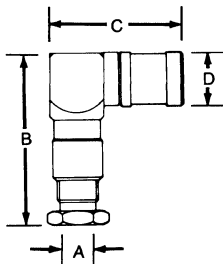
Crimp/Crimp

Ordering Information

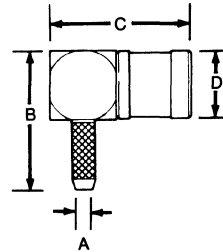
inches
mm

RG/U Cable	Cable Impedance (Ohms)	Order Number		Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions				
		SMB	SMC				A	B	C	D	E
174A, 188A, 316	50	• 73366-1212	• 73406-1212	50	Clamp/Solder	75R - (A)	.118 3.0	.787 20.0	.248 6.3		
178B, 196A	50	73366-1412	73406-1412	50	Clamp/Solder	75R - (A)	.086 2.18	.787 20.0	.248 6.3		
174A, 188A, 316	50	• 73367-1212	• 73407-1212	50	Crimp/Crimp	74R - (A)	.064 1.63	.768 19.5	.248 6.3		
178B, 196A	50	73367-1412	73407-1412	50	Crimp/Crimp	74R - (B)	.039 0.99	.768 19.5	.248 6.3		

Right Angle Plugs (Female Contacts)



Clamp/Solder



Crimp/Crimp

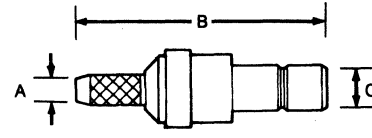
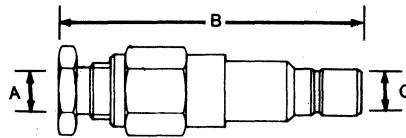
Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number		Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions					Features
		SMB	SMC				A	B	C	D	E	
174A, 188A, 316	50	73368-1222	73408-1222	50	Clamp/Solder	75R - (B)	.118 3.00	.768 19.5	.606 15.4	.248 6.3		
178B, 196A	50	73368-1422	73408-1422	50	Clamp/Solder	75R - (B)	.086 2.18	.768 19.5	.606 15.4	.248 6.3		
174A, 188A, 316	50	• 73369-1212	73409-1212	50	Crimp/Solder	76R - (A)	.064 1.63	.461 11.7	.602 15.3	.248 6.3		
178B, 196A	50	73369-1412	73409-1412	50	Crimp/Solder	76R - (A)	.039 0.99	.461 11.7	.602 15.3	.248 6.3		
174A, 188A, 316	50	73370-1222	73410-1222	50	Crimp/Solder	76R - (B)	.064 1.63	.768 19.5	.531 13.5	.248 6.3		Low Profile
178B, 196A	50	73370-1422	73410-1422	50	Crimp/Solder	76R - (B)	.039 0.99	.768 19.5	.531 13.5	.248 6.3		Low Profile

- U.S. Standard Product, available through Molex franchised distributors
- 75 ohm versions available (limited).
- All connectors have captive contacts unless otherwise specified.
- All connectors have gold bodies/gold contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example *****3.
- Tooling requirements are located on page 90R.
- All drawings are SMB versions.

SMB/SMC

Straight Jacks

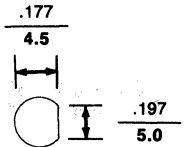
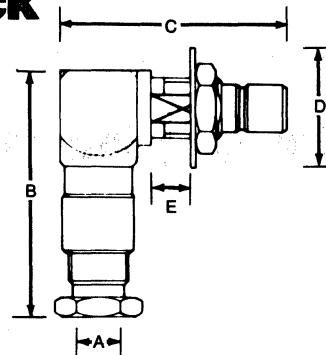


inches
mm

Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number		Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions				
		SMB	SMC				A	B	C	D	E
174A, 188A, 316	50	73379-1212	73419-1212	50	Clamp/Solder	75R - (A)	.118 3.0	.953 24.2	.144 3.68		
178B, 196A	50	73379-1412	73419-1412	50	Clamp/Solder	75R - (A)	.086 2.18	.953 24.2	.144 3.68		
174A, 188A, 316	50	73380-1212	73420-1212	50	Crimp/Crimp	74R - (A)	.064 1.63	.768 19.5	.144 3.68		
178B, 196A	50	73380-1422	73420-1422	50	Crimp/Crimp	74R - (B)/77B	.039 0.99	.768 19.5	.144 3.68		

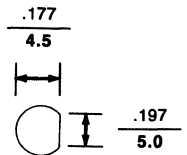
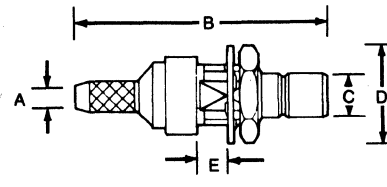
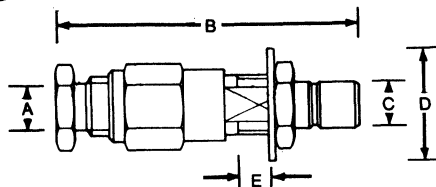
Right Angle Bulkhead Jack



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number		Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instructions Page	Dimensions				
		SMB	SMC				A	B	C	D	E
174A, 188A, 316	50	73381-1222	73421-1222	50	Clamp/Solder	75R - (B)	.118 3.0	.768 19.5	.704 17.9	.366 9.3	.102 2.6
178B, 196A	50	73381-1422	73421-1422	50	Clamp/Solder	75R - (B)	.084 2.15	.768 19.5	.704 17.9	.366 9.3	.102 2.6

Straight Bulkhead Jacks

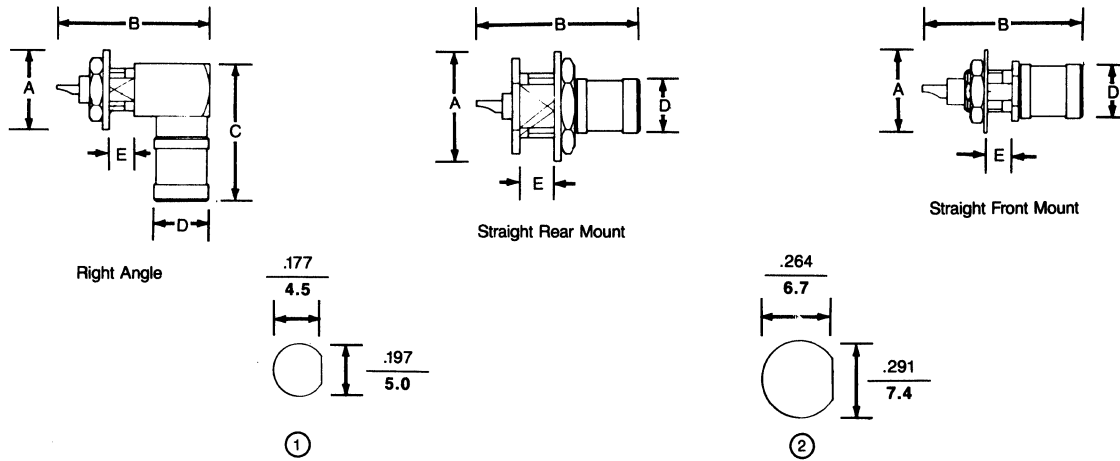


Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number		Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instruction Page	Dimensions					Features
		SMB	SMC				A	B	C	D	E	
174A, 188A, 316	50	73383-1212	73423-1212	50	Clamp/Solder	75R - (A)	.118 3.0	.944 24.0	.144 3.68	.334 8.5	.102 2.6	Rear Mount
178B, 196A	50	73383-1412	73423-1412	50	Clamp/Solder	75R - (A)	.084 2.15	.944 24.0	.144 3.68	.334 8.5	.102 2.6	Rear Mount
174A, 188A, 316	50	* 73384-1212	73424-1212	50	Crimp/Crimp	74R - (A)	.064 1.63	.771 19.6	.144 3.68	.334 8.5	.102 2.6	Rear Mount
178B, 196A	50	73384-1422	73424-1422	50	Crimp/Crimp	74R - (B)	.039 0.99	.771 19.6	.144 3.68	.334 8.5	.102 2.6	Rear Mount

- U.S. Standard Product, available through Molex franchised distributors
- 75 ohm versions available (limited).
- All connectors have captive contacts unless otherwise specified.
- All connectors have gold bodies/gold contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example ***** - ***3.
- Tooling requirements are located on page 90R.

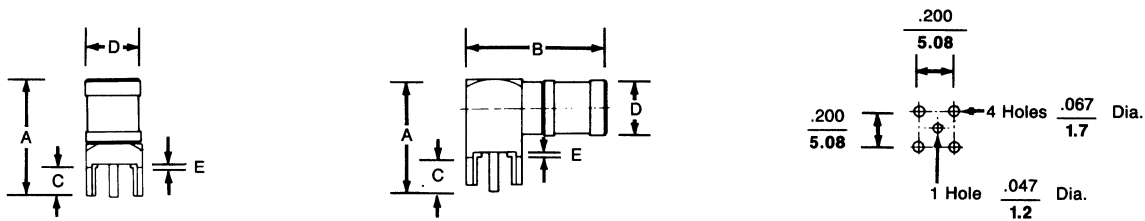
Bulkhead Receptacles (Plugs) (Female Contacts)



Ordering Information

Order Number		Connector Impedance (Ohms)	Description	MTG. Style	Dimensions					Features
SMB	SMC				A	B	C	D	E	
73371-5002	73411-5002	50	Right Angle	①	.366 9.3	.677 17.2	.602 15.3	.248 6.3	.106 2.7	
• 73372-5002	73412-5002	50	Straight	②	.366 9.3	.720 18.3	—	.248 6.3	.094 2.4	Rear Mount
• 73373-5002	73413-5002	50	Straight	①	.366 9.3	.712 18.1	—	.248 6.3	.114 2.9	Front Mount

PCB Receptacles (Plugs) (Female Contacts)



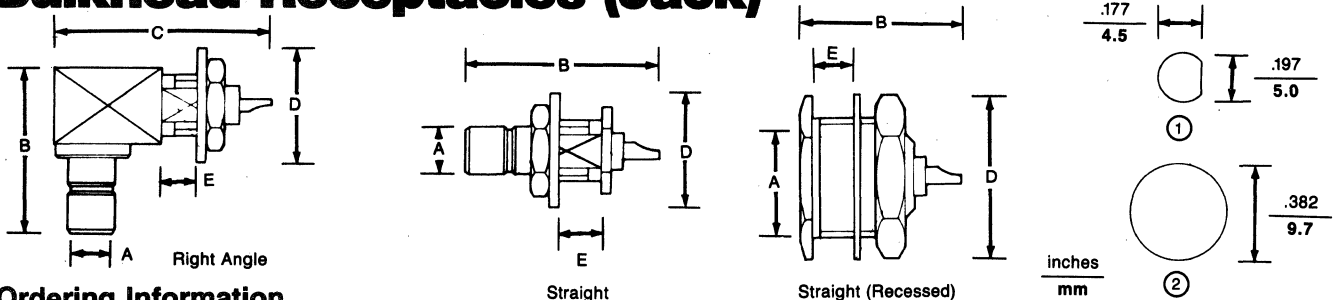
Ordering Information

Order Number		Connector Impedance (Ohms)	Description	MTG. Style	Dimensions					Features
SMB	SMC				A	B	C	D	E	
73374-5002	73414-5002	50	Straight	①	.528 13.4	—	.126 3.2	.248 6.3	.017 .43	With Standoffs
73375-5002	73415-5002	50	Right Angle	①	.339 8.6	.618 15.7	.126 3.2	.248 6.3	.017 .43	With Standoffs

- U.S. Standard Product, available through Molex franchised distributors
- 75 ohm versions available (limited).
- All connectors have captive contacts unless otherwise specified.
- All connectors have gold bodies/gold contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example *****3.
- All drawings are SMB versions.

SMB/SMC

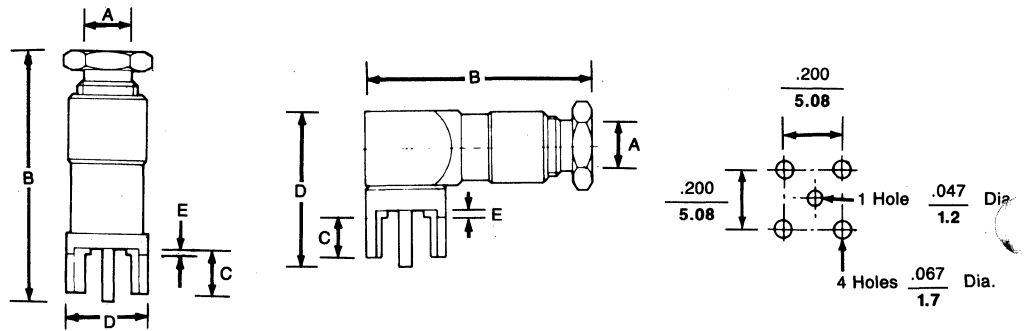
Bulkhead Receptacles (Jack)



Ordering Information

Order Number		Connector Impedance (Ohms)	Description	Panel Cutout	Dimensions					Features
SMB	SMC				A	B	C	D	E	
• 73382-5002	• 73422-5002	50	Right Angle	①	.144 3.68	.524 13.3	.677 17.2	.378 9.6	.106 2.7	Front Mount
73388-5002	73425-5002	50	Straight	①	.144 3.68	.606 15.4	—	.378 9.6	.118 3.0	Rear Mount
73389-5002	73426-5002	50	Straight	①	.144 3.68	.606 15.4	—	.378 9.6	.094 2.4	Front Mount
73390-5002	N/A	50	Straight (Recessed)	②	.255 6.5	.453 11.5	—	.508 12.9	.110 2.8	Front Mount

PCB Jacks

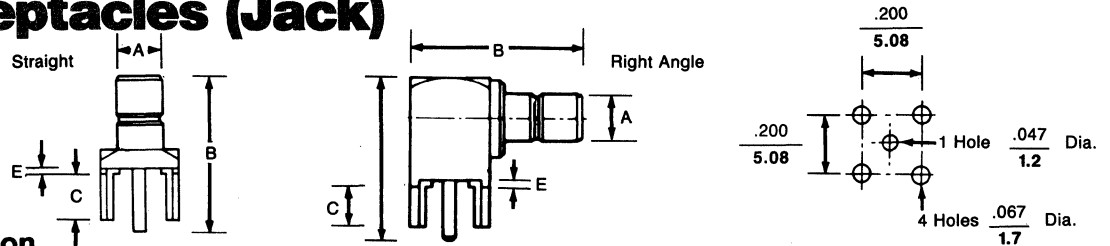


Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Description	Termination Style	Assembly Instruction Page	Dimensions				
							A	B	C	D	E
174A, 188A 316	50	73391-5002	50	Straight	Clamp/Solder To P.C.B.	75R - (A)	.118 3.0	.771 19.6	.126 3.2	.251 6.4	.017 .43
174A, 188A 316	50	73392-5002	50	Right Angle	Clamp/Solder To P.C.B.	75R - (B)	.118 3.0	.709 18.0	.126 3.2	.500 12.7	.017 .43

NOTE: SMB and SMC have the same order number

PCB Receptacles (Jack)



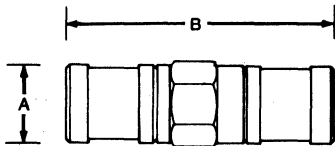
Ordering Information

Order Number		Connector Impedance (Ohms)	Description	Dimensions					Features
SMB	SMC			A	B	C	D	E	
• 73393-5002	• 73428-5002	50	Straight	.144 3.68	.440 11.2	.126 3.2	—	.017 .43	With Standoffs
• 73394-5002	• 73429-5002	50	Right Angle	.144 3.68	.535 13.6	.126 3.2	.488 12.4	.017 .43	With Standoffs

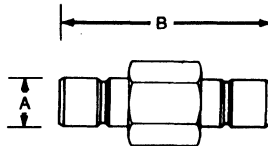
- U.S. Standard Product, available through Molex franchised distributors
- 75 ohm versions available (limited).
- All connectors have captive contacts unless otherwise specified.
- All connectors have gold bodies/gold contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example ***** - ***3.

- Tooling requirements are located on page 90R.
- All Drawings are SMB Versions

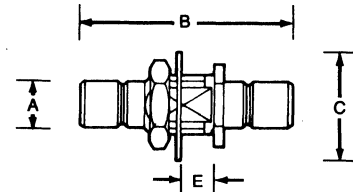
Adapters



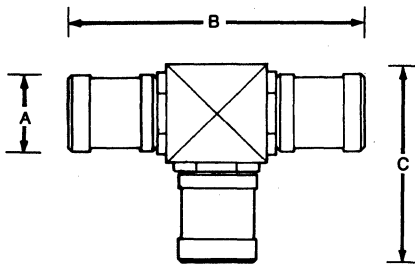
Plug-Plug



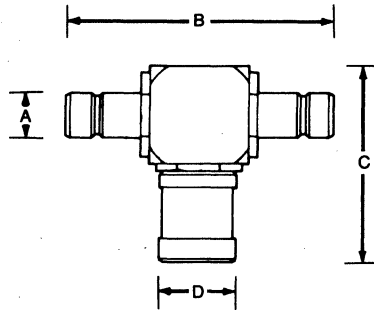
Jack-Jack



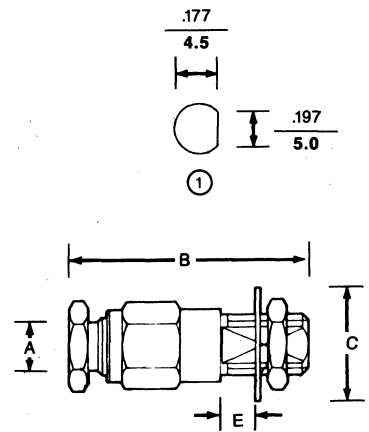
Bulkhead Jack-Jack



Plug-Plug-Plug



Jack-Plug-Jack



Feedthrough

Ordering Information

Order Number		Connector Impedance (Ohms)	Description	MTG. Style	Dimensions					Features
SMB	SMC				A	B	C	D	E	
73395-5002	73435-5002	50	Plug-Plug	—	.248 6.3	.819 20.8				
73396-5002	73436-5002	50	Jack-Jack	—	.144 3.68	.700 17.0				
73397-5002	73437-5002	50	Bulkhead, Jack-Jack	①	.144 3.68	.700 17.0	.382 9.7		.102 2.6	
73398-5002	73438-5002	50	Jack-Jack-Jack	—	.248 6.3	.937 23.8	.626 15.9			
73399-5002	73439-5002	50	Jack-Plug-Jack	—	.144 3.68	.854 21.7	.626 15.9	.248 6.3		
73400-5002	73440-5002	50	Feedthrough	①	.118 3.00	.787 20.0	.382 9.7		.169 4.3	No-Contacts, RG/174A, 188A, 316
73401-5002	73441-5002	50	Feedthrough	①	.086 2.18	.787 20.0	.382 9.7		.169 4.3	No-Contacts, RG/178B, 196A

—75 ohm versions available (limited).

—All connectors have captive contacts unless otherwise specified.

—All connectors have gold bodies/gold contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3. Example *****3.

inches
mm

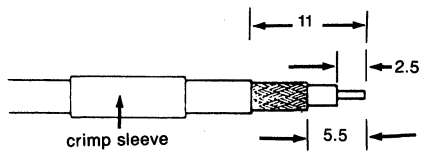
SMB/SMC ASSEMBLY INSTRUCTIONS



Crimp/Crimp

STANDARD STYLE FOR RG CABLE 174A, 188A, 316 ONLY CAPTIVE CONTACT (A)

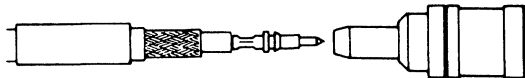
Place crimp sleeve over jacket and trim cable to the dimensions shown. Ensure that the center conductor is not damaged.



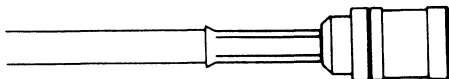
Place contact on center conductor and crimp.



Push contact into body sub-assembly. Ensure the contact clicks into rear insulator with the ferrule between the braid and the dielectric.

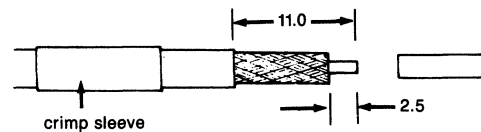


Slide crimp sleeve over the braid and crimp.

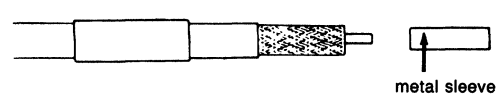


STANDARD STYLE FOR RG CABLE 178B & 196A ONLY CAPTIVE CONTACT (B)

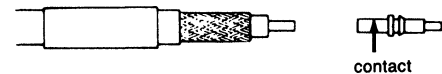
Place crimp sleeve over jacket and trim to dimensions shown. Ensure that the center conductor is not damaged.



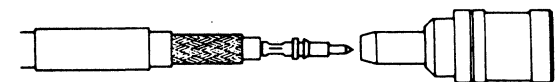
Place metal sleeve over dielectric and under braid.



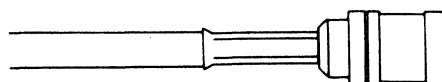
Place contact onto center conductor and crimp.



Push contact into body sub-assembly. Ensure that the contact 'clicks' into rear insulator with the ferrule between the dielectric and the metal sleeve.



Slide crimp sleeve over braid and crimp.



NOTE: Assembly instructions apply to both plugs and jacks. Contacts and insulators may vary slightly in shape and size.

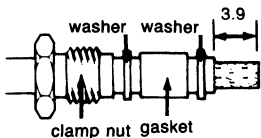
SMB/SMC ASSEMBLY INSTRUCTIONS



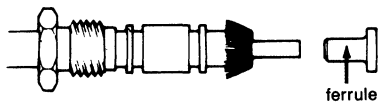
Clamp/Solder

STANDARD STYLE CAPTIVE CONTACT (A)

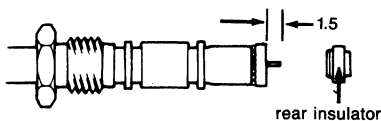
Slide clamp nut, a washer, gasket and the other washer over the cable and trim outer jacket to dimension shown.



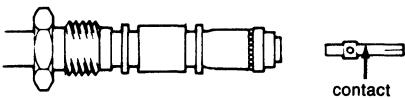
Fold back braid. Push ferrule over dielectric to trap braid between outer jacket and ferrule. Trim off surplus braid.



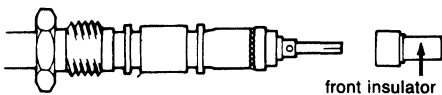
Trim dielectric flush with ferrule and check length of center conductor. Tin center conductor. Slide rear insulator over center conductor until it butts against ferrule.



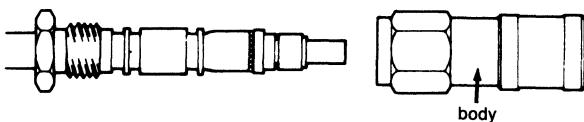
Fit contact onto center conductor until it butts against rear insulator. Hold cable and contact tightly together, and solder.



Fit front insulator over contact until it butts against internal shoulder.



Press sub-assembly into body as far as possible.

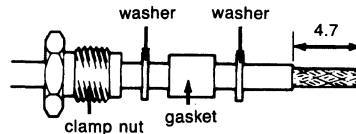


Engage and tighten clamp nut.

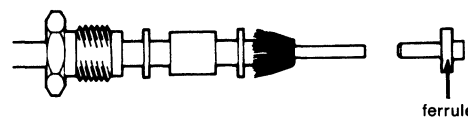


STANDARD STYLE FOR RIGHT ANGLE CONNECTORS ONLY CAPTIVE CONTACT (B)

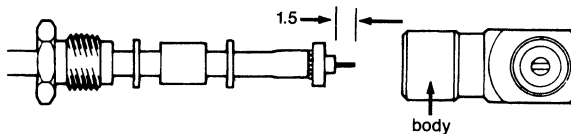
Slide the clamp nut, washer, gasket and the other washer over the cable, trim outer jacket to dimension shown.



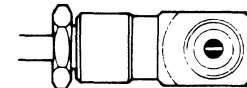
Fold back braid. Push ferrule over dielectric to trap braid between outer jacket and ferrule. Trim off surplus.



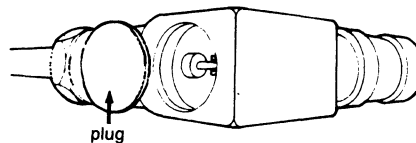
Trim dielectric to dimension shown. Tin center conductor.



Press sub-assembly into body, engage and tighten clamp nut. Solder center conductor into slot of contact.



Insert plug into body and flatten to retain.



NOTE: These assembly instructions apply to both plugs and jacks.

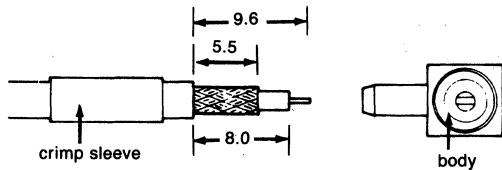
SMB/SMC ASSEMBLY INSTRUCTIONS



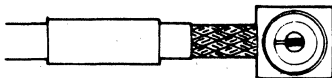
Crimp/Solder (Right Angle)

STANDARD STYLE CAPTIVE CONTACTS (A)

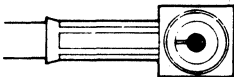
Slide crimp sleeve over cable. Trim outer jacket, braid and dielectric as shown. Tin center conductor.



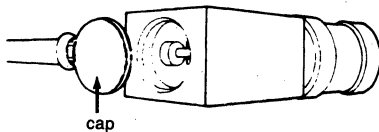
Slide body sub-assembly between dielectric and braid until braid butts against body. Slit outer jacket if necessary.



Slide the sleeve forward over cable until it butts against body then crimp the sleeve. Solder center conductor to the slot in contact.

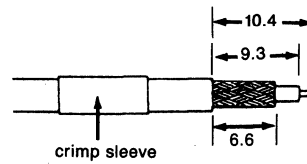


Soft solder or press fit access cap.

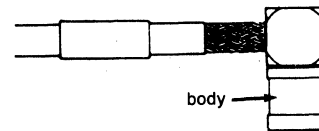


LOW PROFILE STYLE CAPTIVE CONTACTS (B)

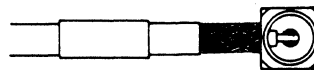
Slide crimp sleeve over cable and trim outer jacket, braid dielectric as shown. Tin center conductor.



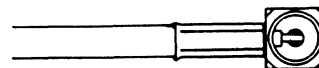
Slide the projecting body ferrule over the dielectric and under the braid. Slit outer jacket if necessary.



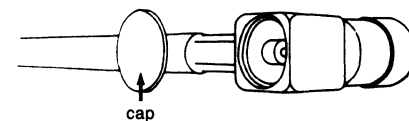
Ensure that the center conductor of the cable lies in the slot of the center contact.



Slide the crimp sleeve forward, over the braid and crimp.



Soft solder or press fit access cap.

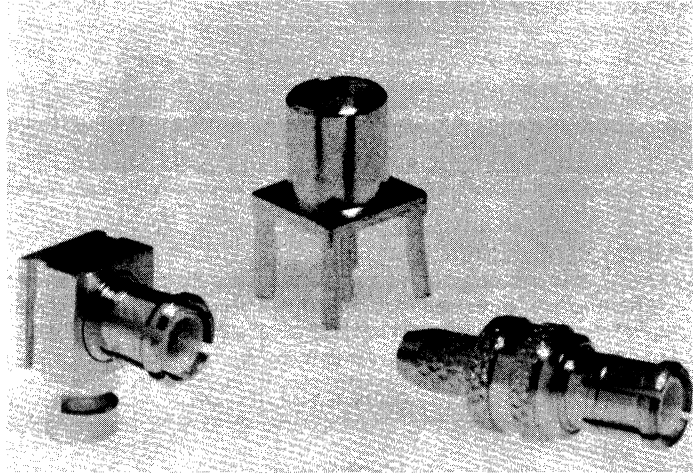


MCX Connectors

The MCX Micro-Miniature series are snap-on versions like the SMB range but are approximately 30% smaller. This connector is ideal for applications where space is at a premium and reliability critical.

The coupling mechanism utilizes the Beryllium copper spring fingers on the plug, which are compressed when mated and snap into an internal recess to ensure a secure connection.

Molex offers a full range of 50 ohm connectors.



Specifications

VSWR (Typical) — 1.35 up to 3GHz (depending on cable & connector style)

Working Voltage — 335V

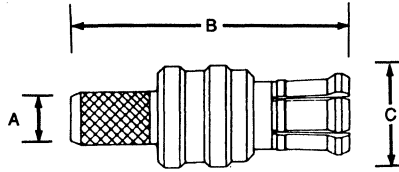
Proof Voltage — 750V

Temperature Range — -55° to + 155°C

Impedance — 50 ohm

MCX

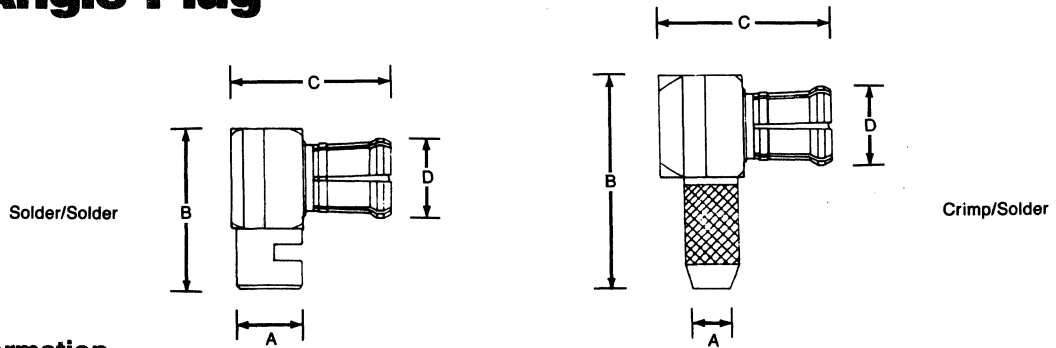
Straight Plug



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instruction Page	Dimensions					Features
						A	B	C	D	E	
174A, 188A, 316	50	• 73446-1212	50	Crimp/Crimp	80R - (A)	.065 1.66	.535 13.6	.193 4.9			
178B, 196A	50	73446-1412	50	Crimp/Crimp	80R - (A)	.041 1.03	.535 13.6	.193 4.9			

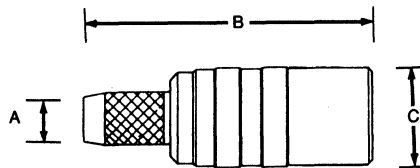
Right Angle Plug



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instruction Page	Dimensions					Features
						A	B	C	D	E	
174A, 188A, 316	50	• 73447-1212	50	Crimp/Solder	80R - (B)	.065 1.66	.413 10.5	.331 8.4	.193 4.9		
178B, 196A	50	73447-1412	50	Crimp/Solder	80R - (B)	.041 1.03	.413 10.5	.331 8.4	.193 4.9		
178B, 196A	50	73448-1412	50	Solder/Solder	81R - (A)	.090 2.29	.315 8.0	.307 7.8	.193 4.9		Low Profile
405 (.085)	50	73448-1922	50	Solder/Solder	81R - (B)	.090 2.29	.315 8.0	.307 7.8	.193 4.9		Semi-Rigid Cable

Straight Jack



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instruction Page	Dimensions					Features
						A	B	C	D	E	
174A, 188A, 316	50	• 73452-1212	50	Crimp/Crimp	80R - (A)	.065 1.66	.555 14.1	.197 5.0			
178B, 196A	50	73452-1412	50	Crimp/Crimp	80R - (A)	.041 1.03	.555 14.1	.197 5.0			Non-Captive Contact

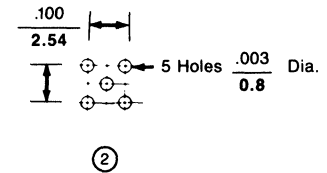
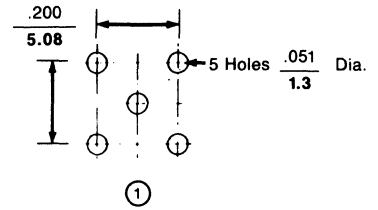
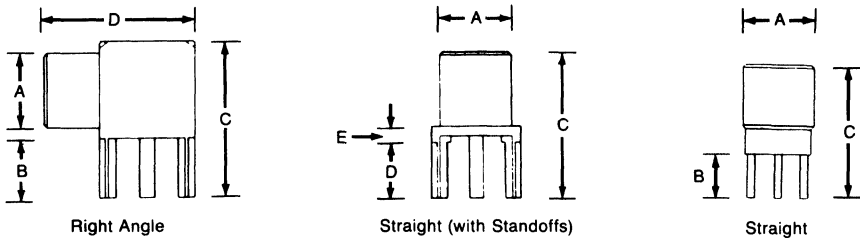
• U.S. Standard Product, available through Molex franchised distributors

—All connectors have captive contacts unless otherwise specified.

—All connectors have gold bodies/gold contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3.
Example *****-***3.

—Tooling requirements are located on page 90R.

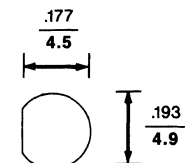
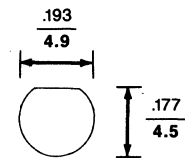
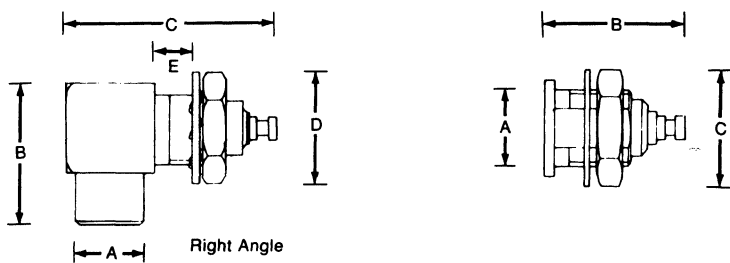
PCB Receptacles (Jacks)



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Panel Cutout	Dimensions					Features
				A	B	C	D	E	
• 73453-5002	50	Right Angle	①	.197 5.0	.146 3.7	.382 9.7	.374 9.5		
73454-5002	50	Straight	②	.197 5.0	.118 3.0	.354 9.0			
• 73455-5002	50	Straight	①	.197 5.0	.146 3.7	.382 9.7		.017 .43	With Standoffs

Bulkhead Receptacle (Jacks)



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Panel Cutout	Dimensions					Features
				A	B	C	D	E	
73456-5002	50	Right Angle	①	.197 5.0	.374 9.5	.559 14.2	.236 6.0	.098 2.5	Stub Contact,
73457-5002	50	Straight	②	.197 5.0	.342 8.7	.311 7.9	—	.098 2.5	Stub Contact, Front Mount Recessed Body

• U.S. Standard Product, available through Molex franchised distributors.

—75 ohm versions available (limited).

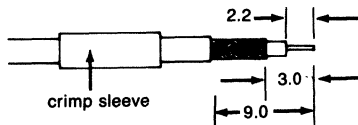
—All connectors have captive contacts unless otherwise specified.

—All connectors have gold bodies/gold contacts unless otherwise specified. For nickel bodies/gold contacts change the last digit in the order number to a 3.
Example *****-***3.

MCX ASSEMBLY INSTRUCTIONS

CRIMP/CRIMP STANDARD STYLE FOR STRAIGHT CONNECTORS ONLY (A)

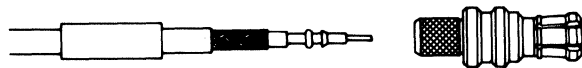
Place the crimp sleeve over the cable and trim to the dimensions shown.



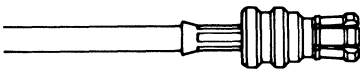
Fit the contact over the center conductor so that it touches the dielectric. Crimp the rear part of the contact, using the small square cavity of the crimping tool.



Insert the assembly into the rear of the connector, ensuring that the ferrule is between the dielectric and the braid. (Note captive contacts for group 1 versions can be heard to 'click' into place).



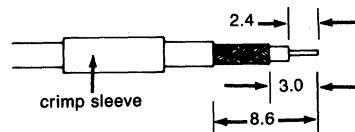
Push the crimp sleeve forward over the braid and crimp.



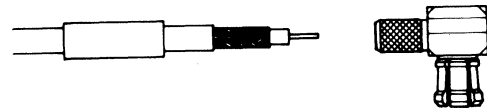
Contacts:
(1) RG/U-174A, 188A, 316 (Captive Contacts)
(2) RG/U-178B, 196A (Non-Captive)

CRIMP/SOLDER STANDARD STYLE FOR RIGHT ANGLE CONNECTORS ONLY CAPTIVE CONTACT (B)

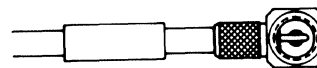
Place crimp sleeve over the cable. And trim cable to the dimensions shown below.



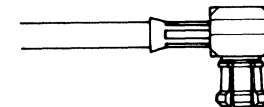
Tin center conductor. Place the body sub-assembly onto the cable. Ensure that the ferrule goes between the dielectric and the braid.



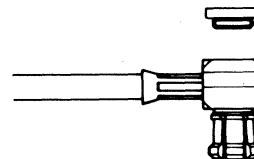
Solder the contact with a dry iron. Avoid excess solder and use a small quantity of non corrosive flux if necessary. (Ensure that the conductor fits into the slot in the contact.)



Push the crimp sleeve over the braid and crimp, making sure the crimp sleeve is flush against the sub-assembly.



Place cap insulator in position and force fit cap by using a light punch.



NOTE: These assembly instructions apply to both plugs and jacks. Contacts and insulators will vary slightly in shape and size.

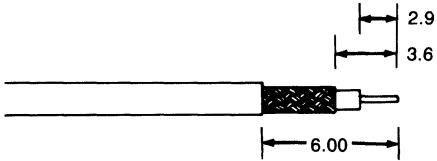
MCX ASSEMBLY INSTRUCTIONS



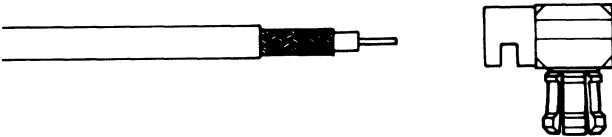
Solder/Solder

STANDARD STYLE FOR FLEXIBLE CABLE (RG 178B, 196A) (A)

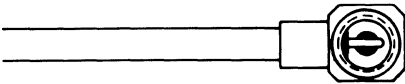
Trim cable to the dimensions shown below.



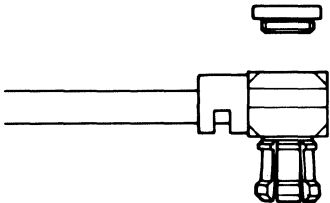
Tin center conductor and push cable into sub-assembly.



Place center conductor into contact slot and solder. Avoid any excess solder.

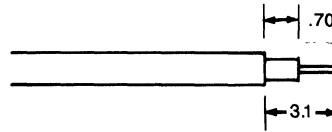


Solder cable braid to sub-assembly. Place cap insulator in position and force fit cap by using a light punch.

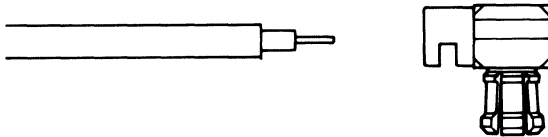


STANDARD STYLE FOR SEMI-RIGID CABLE (RG 405 ONLY) (B)

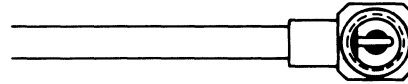
Trim cable to the dimensions shown below. Do not nick the center conductor.



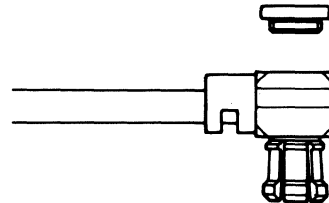
Tin center conductor and push cable into sub-assembly.



Place center conductor into contact slot and solder. Avoid any excess solder.



Solder cable jacket to sub-assembly. Place cap insulator in position and force fit cap.



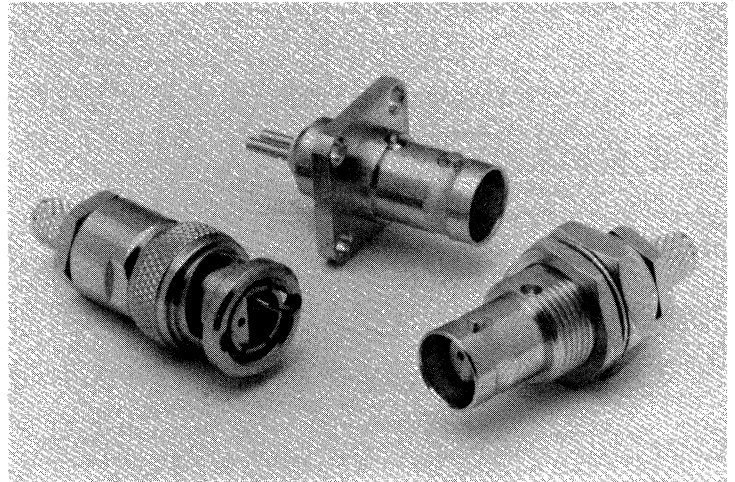
BNO Connectors



The BNO series are similar to the BNC series but are polarized twin contact (one male, one female) coaxial connectors.

These connectors are designed for RG-108/U coaxial cables and are available in 75 Ohm versions only.

Standard finish on these connectors: nickel body, silver contact.



Specifications

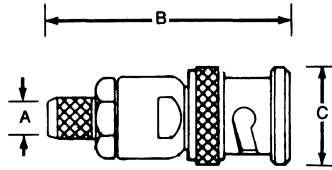
Working Voltage — 500V

Proof Voltage — 1.5KV

Temperature Range — -55 to +155°C

Impedance — (75 Ohm suitable for use with twin cables from 75-140 Ohms)

Straight Plug

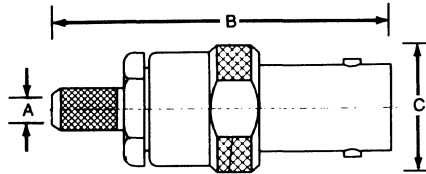


inches
mm

Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
108A	78	73461-2211	75	Crimp/Crimp	85R - (A)	.175 4.45	1.40 35.5	.563 14.3			

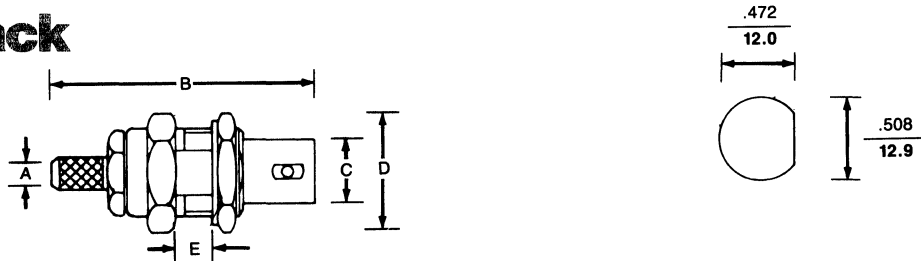
Straight Jacks



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
108A	78	73464-2211	75	Crimp/Crimp	85R - (A)	.175 4.45	1.50 38.1	.563 14.3			

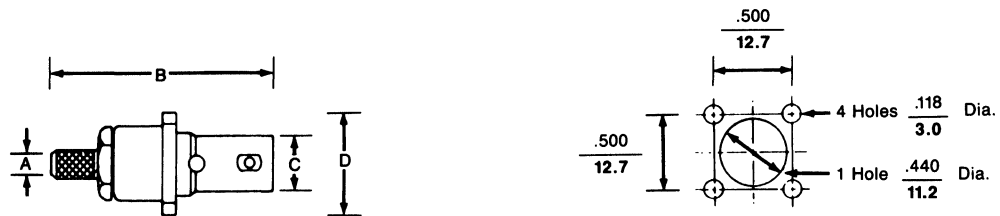
Bulkhead Jack



Ordering Information

RG/U Cable	Nom. Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
108A	78	73465-2211	75	Crimp/Crimp	85R - (A)	.175 4.45	1.50 38.0	.382 9.7	.724 18.4	.256 6.5	Rear-Mount

Panel Jack



Ordering Information

RG/U Cable	Nom. Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style	Assembly Instructions Page	Dimensions					Features
						A	B	C	D	E	
108A	78	73466-2211	75	Crimp/Crimp	85R - (A)	.175 4.45	1.50 38.0	.382 9.7	.689 17.5		.118 3.0mm Through Holes

Other panel mounting hole styles available.

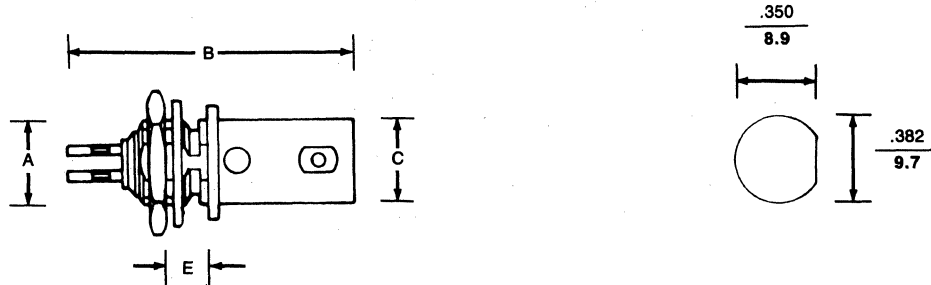
All connectors have captive contacts unless otherwise specified.

All connectors have nickel bodies/silver contacts unless otherwise specified.

Tooling requirements are located on page 90R.

BNO

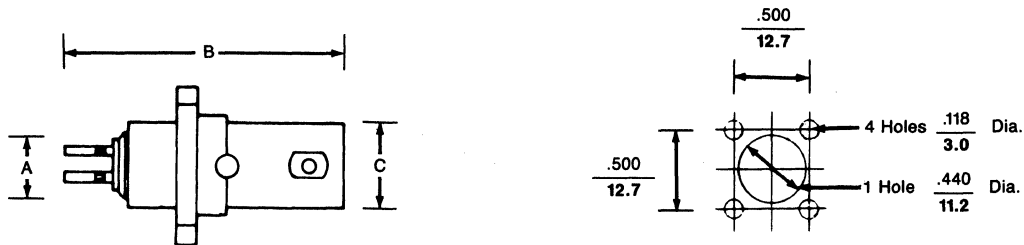
Bulkhead Receptacle (Jack)



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73467-7001	75	Straight	.342 8.7	1.26 32.0	.382 9.7		.232 5.9	Front Mount

Panel Receptacle (Jack)



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73468-7001	75	Front Mount	.382 9.7	1.26 32.0	.689 17.5			.118 3.0mm Through Holes

Other panel mounting hole styles available.

—All connectors have captive contacts unless otherwise specified

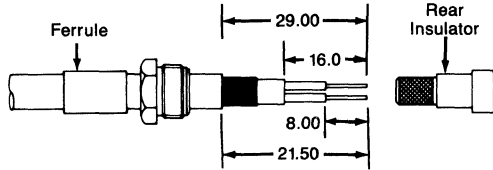
—All connectors have nickel bodies/silver contacts unless otherwise specified.

BNO ASSEMBLY INSTRUCTIONS

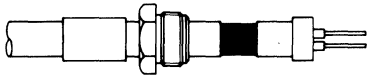
Crimp/Clamp/Crimp

STANDARD STYLE (A)

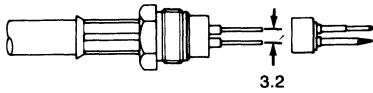
Slide ferrule and clamp nut over cable and trim cable to the dimensions shown below.



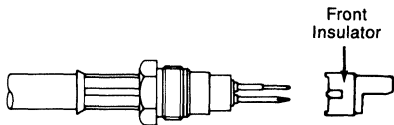
Slide rear insulator over dielectric and under braid.



Slide clamp nut and ferrule forward over braid until they butt up against the rear insulator and crimp, ensuring the crimp die is touching the face of the clamp nut. Bend conductors to dimension shown below and place contacts over center conductors.



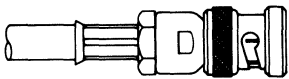
Crimp contacts to center conductors. If required; ensure conductors are fitted to the respective male and female contacts. Place front insulator over contacts.



Push sub-assembly into the body.



Engage and tighten clamp nut.



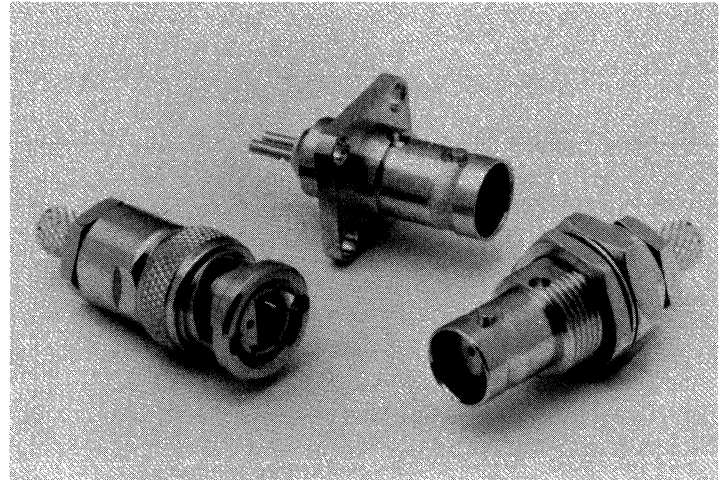
TNO Connectors

The TNO series are screw coupled polarized twin contact (one male, one female) coaxial connectors.

The TNO series are the same as the BNO series except for the screw coupled locking mechanism ($1/2''$ -28 UNEF).

These connectors are designed for RG-108A/U dual conductor coaxial cable and are used in data transmission applications. Standard finish on these connectors: nickel bodies, gold contacts.

Note: TNO receptacles also accept BNO style plugs.



Specifications

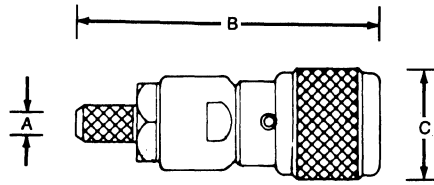
Working Voltage — 500V

Proof Voltage — 1.5KV

Temperature Range — -55° to $+155^{\circ}\text{C}$

Impedance — 75 ohm (Suitable for use with twin cables from 75-140 ohms)

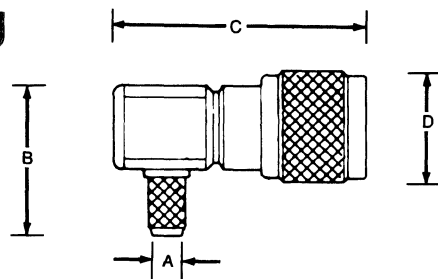
Straight Plugs



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instruction Page	Dimensions					Features
						A	B	C	D	E	
108A	78	73475-2213	75	Crimp/Crimp	89R - (A)	.175 4.45	1.62 41.2	.598 15.2			

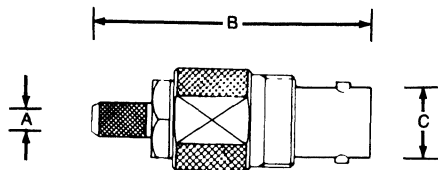
Right Angle Plug



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instruction Page	Dimensions					Features
						A	B	C	D	E	
108A	78	73476-2213	75	Crimp/Solder	89R - (B)	.175 4.45	.854 21.7	1.33 38.8	.598 15.2		

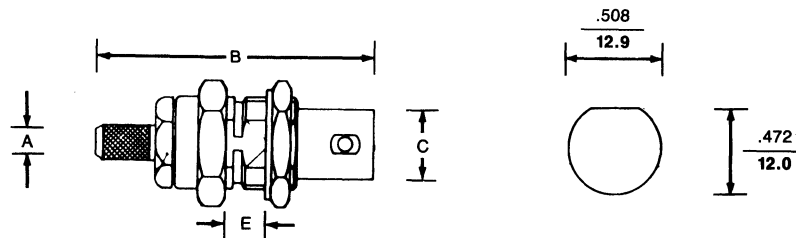
Straight Jack



Ordering Information

RG/U Cable	Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instruction Page	Dimensions					Features
						A	B	C	D	E	
108A	78	73480-2213	75	Crimp/Crimp	89R - (A)	.175 4.45	1.50 38.1	.381 9.7			

Bulkhead Jack



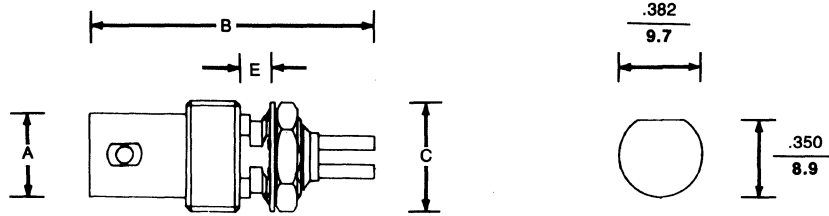
Ordering Information

RG/U Cable	Nom. Cable Impedance (Ohms)	Order Number	Connector Impedance (Ohms)	Termination Style Body/Contact	Assembly Instruction Page	Dimensions					Features
						A	B	C	D	E	
108A	78	73481-2213	75	Crimp/Crimp	89R - (A)	.175 4.45	1.50 38.1	.381 9.7		.256 6.5	

- All connectors have captive contacts unless otherwise specified.
- All connectors have nickel bodies/gold contacts unless otherwise specified.
- Tooling requirements are located on page 90R.

TNO

Bulkhead Receptacle (Jack)

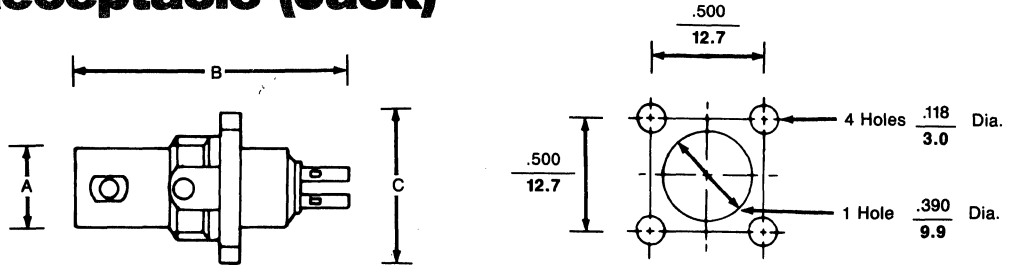


Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73482-7003	75	Straight	.382 9.7	1.20 30.5	.382 9.7		.150 3.8	Front Mount

inches
mm

Panel Receptacle (Jack)

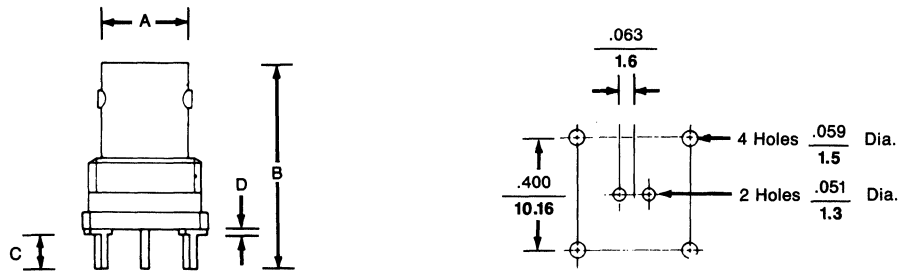


Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73483-7003	75	Straight	.382 9.7	1.26 32.0	.689 17.5			3.0mm Through Holes

Other panel mounting hole styles available.

PCB Receptacle (Jack)



Ordering Information

Order Number	Connector Impedance (Ohms)	Description	Dimensions					Features
			A	B	C	D	E	
73484-7003	75	Straight	.382 9.7	.913 23.2	.157 4.0	.020 .051		With Standoffs

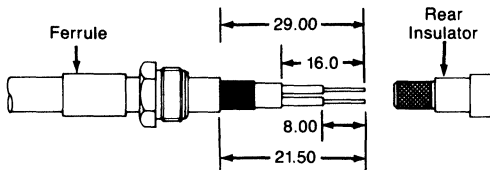
—All connectors have captive contacts unless otherwise specified.
—All connectors have nickel bodies/gold contacts unless otherwise specified.

TNO ASSEMBLY INSTRUCTIONS

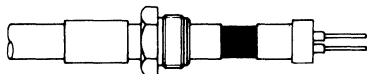
Crimp/Clamp/Crimp

STANDARD STYLE (A)

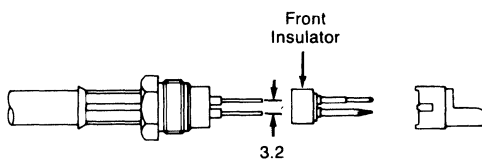
Slide ferrule and clamp nut over cable and trim cable to the dimensions shown below.



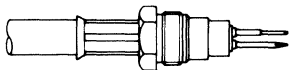
Slide rear insulator over dielectric and under braid.



Slide clamp nut and ferrule forward over braid until they butt against the rear insulator and crimp, ensuring the crimp die is touching the face of the clamp nut. Bend conductors to dimension shown below and place insulator over center conductors.



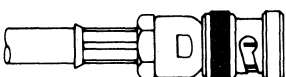
Crimp contacts to center conductors. If required, ensure conductors are fitted to the respective male and female contacts.



Push sub-assembly into the body.

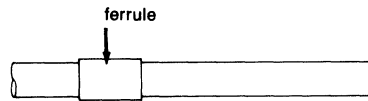


Engage and tighten clamp nut.

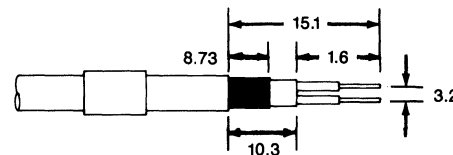


STANDARD STYLE FOR RIGHT ANGLE PLUGS ONLY (B)

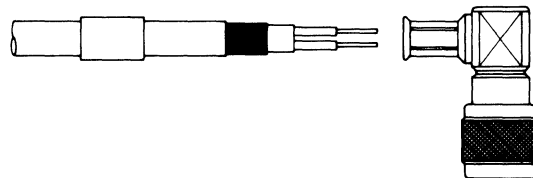
Slide ferrule over cable.



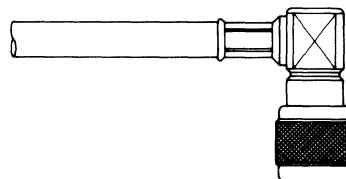
Trim cable to the dimensions shown below. And tin center conductors.



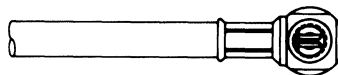
Slide cable into the body ensuring the knurled ferrule is inserted between the dielectric and the braid.



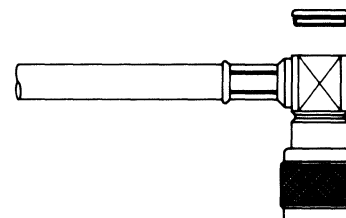
Slide ferrule over the braid until it butts up against the body and crimp.



Align center conductors into the slotted contacts and solder.



Place cap onto the body and tighten.

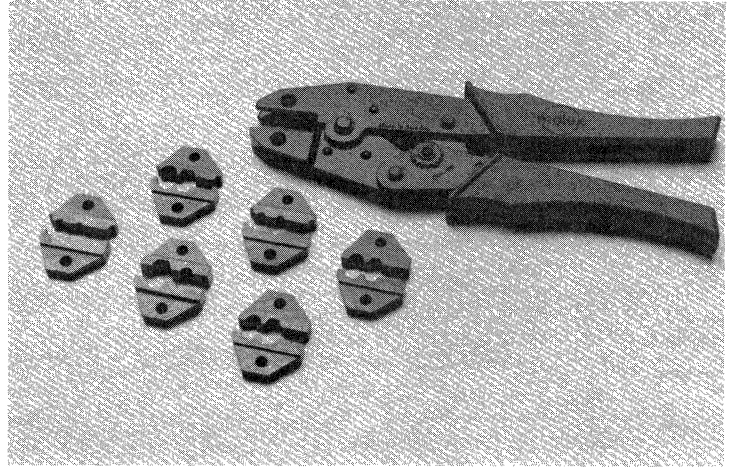


CRIMP TOOLS

Molex crimp tools offer quality and durability as well as reliability.

Each tool is equipped with safety releases and is fully ratcheted to provide convenience and operating ease for every crimp.

Note: Tools are only required for crimp version connectors.



Ordering Information

RG/U CABLE	SERIES	HAND TOOL		DIES	
		ENG. NO.	ORDER NO.	ENG. NO.	ORDER NO.
55B, 58C, 141A, 142B, 174A, 188A, 316, 223, 400	BNC, TNC, SMA	AM60039-6	11-31-6379	AM63103-1	11-31-9025
59B, 62B, 71B, 140, 210	BNC, TNC	AM60039-6	11-31-6379	AM63103-2	11-31-9026
174A, 188A, 316	SMA, SMB, SMC, MCX	AM60039-6	11-31-6379	AM63103-3	11-31-9027
178B, 196A*	SMB, SMC, MCX	AM60039-6	11-31-6379	AM63103-4	11-31-9028
Belden 8227, 9207 & IBM 7362211	TWINAX	AM60039-6	11-31-6379	AM63103-5	11-31-9029
108A	BNO, TNO	AM60039-6	11-31-6379	AM63103-6	11-31-9030

Hand tool and dies must be ordered separately.

*For part numbers 73367-142X, 73380-142X, 73384-142X, 73407-142X, 73420-142X, 73424-142X use die order number 11-31-9027.

RF CONNECTORS PART NUMBER INDEX



Numerical Listing

Order Number	Description	Page No.	Order Number	Description	Page No.			
BNC								
73100-1111	BNC Straight Plug	3R	73118-1221	BNC Straight Panel Jack	6R			
73100-1131	BNC Straight Plug		73118-1321	BNC Straight Panel Jack				
73100-1221	BNC Straight Plug		73118-1511	BNC Straight Panel Jack				
73100-1421	BNC Straight Plug		73118-1711	BNC Straight Panel Jack				
73100-1531	BNC Straight Plug		73119-0111	BNC Straight Panel Jack				
73101-1011	BNC Straight Plug		73119-0311	BNC Straight Panel Jack				
73101-1111	BNC Straight Plug		73119-1111	BNC Straight Panel Jack				
73101-1221	BNC Straight Plug		73119-1221	BNC Straight Panel Jack				
73101-1221	BNC Straight Plug		73119-1321	BNC Straight Panel Jack				
73101-1321	BNC Straight Plug		73119-1711	BNC Straight Panel Jack				
73101-1511	BNC Straight Plug		73120-1011	BNC Straight Bulkhead Jack		7R		
73101-1711	BNC Straight Plug		73120-1111	BNC Straight Bulkhead Jack				
73102-1551	BNC Straight Plug		73120-1221	BNC Straight Bulkhead Jack				
73103-0641	BNC Straight Plug		73120-1321	BNC Straight Bulkhead Jack				
73103-0841	BNC Straight Plug		73120-1511	BNC Straight Bulkhead Jack				
73104-0111	BNC Straight Plug		73120-1711	BNC Straight Bulkhead Jack				
73104-0113	BNC Straight Plug		73121-0311	BNC Straight Bulkhead Jack				
73104-0131	BNC Straight Plug		73122-0111	BNC Straight Bulkhead Jack				
73104-0311	BNC Straight Plug		73122-0311	BNC Straight Bulkhead Jack				
73104-1111	BNC Straight Plug		73122-1111	BNC Straight Bulkhead Jack				
73104-1221	BNC Straight Plug		73122-1221	BNC Straight Bulkhead Jack				
73104-1711	BNC Straight Plug		73122-1321	BNC Straight Bulkhead Jack				
73105-0111	BNC Straight Plug		73122-1711	BNC Straight Bulkhead Jack				
73106-1061	BNC Right Angle Plug		4R	73123-5001			BNC Straight Bulkhead Receptacle	8R
73106-1161	BNC Right Angle Plug			73123-7001			BNC Straight Bulkhead Receptacle	
73106-1271	BNC Right Angle Plug	73124-5001		BNC Straight Bulkhead Receptacle				
73106-1371	BNC Right Angle Plug	73125-5001		BNC Straight Bulkhead Receptacle				
73106-1471	BNC Right Angle Plug	73125-7001		BNC Straight Bulkhead Receptacle				
73106-1561	BNC Right Angle Plug	73126-5001		BNC Straight Bulkhead Receptacle				
73107-0111	BNC Right Angle Plug	73126-7001		BNC Straight Bulkhead Receptacle				
73107-0311	BNC Right Angle Plug	73127-5001		BNC Right Angle Bulkhead Recept.				
73107-1111	BNC Right Angle Plug	73127-7001		BNC Right Angle Bulkhead Recept.				
73107-1221	BNC Right Angle Plug	73128-5001		BNC Straight Bulkhead Receptacle	9R			
73107-1321	BNC Right Angle Plug	73130-5001		BNC Straight Panel Receptacle				
73107-1711	BNC Right Angle Plug	73130-7001		BNC Straight Panel Receptacle				
73108-5001	BNC Straight Panel Plug	73131-5001		BNC Right Angle Panel Receptacle				
73108-7001	BNC Straight Panel Plug	73131-7001		BNC Right Angle Panel Receptacle				
73109-5001	BNC Straight Bulkhead Plug	73132-5001		BNC Straight PCB Receptacle		10R		
73109-7001	BNC Straight Bulkhead Plug	73133-5001		BNC Straight PCB Receptacle				
73115-1111	BNC Straight Jack	73134-5001		BNC Straight PCB Receptacle				
73115-1221	BNC Straight Jack	73135-5001		BNC Right Angle PCB Receptacle				
73115-1321	BNC Straight Jack	73136-5001		BNC Right Angle PCB Receptacle				
73115-1511	BNC Straight Jack	73136-5011		BNC Right Angle PCB Receptacle				
73115-1711	BNC Straight Jack	73137-5001		BNC Right Angle PCB Receptacle				
73116-0111	BNC Straight Jack	73138-5001		BNC Straight PCB Receptacle				
73116-0311	BNC Straight Jack	73138-5011		BNC Straight PCB Receptacle				
73116-0511	BNC Straight Jack	73139-5001		BNC Right Angle PCB Receptacle				
73116-1111	BNC Straight Jack	73139-5011		BNC Right Angle PCB Receptacle				
73116-1221	BNC Straight Jack	73140-5001	BNC Straight PCB Receptacle	12R				
73116-1321	BNC Straight Jack	73140-5011	BNC Straight PCB Receptacle					
73116-1711	BNC Straight Jack	73146-5001	BNC Adapter					
73117-0111	BNC Straight Jack	73146-7001	BNC Adapter					
73118-1011	BNC Straight Panel Jack	73147-5005	BNC Adapter					
73118-1111	BNC Straight Panel Jack	73147-7005	BNC Adapter					



RF CONNECTORS PART NUMBER INDEX



Numerical Listing

Order Number	Description	Page No.	Order Number	Description	Page No.
73148-5001	BNC Adapter	12R	73168-0009	BNC Strain Relief	15R
73148-7001	BNC Adapter		73169-0001	BNC Solder Tag	
73149-5001	BNC Panel Adapter		73169-0002	BNC Solder Tag	
73149-7001	BNC Panel Adapter		73170-0001	BNC Bushing	
73150-5001	BNC Adapter		73171-0001	BNC Bushings	
73150-7001	BNC Adapter		73172-0001	BNC Male Cap	
73151-5001	BNC Bulkhead Adapter		73172-0002	BNC Male Cap	
73151-7001	BNC Bulkhead Adapter		73173-0001	BNC Female Cap	
73155-5001	BNC Binding Post/Banana Adapter		73173-0002	BNC Female Cap	
73156-5001	BNC Binding Post/Banana Adapter				
73157-5001	BNC Binding Post/Banana Adapter				
73158-5001	BNC Binding Post/Banana Adapter				
73159-5001	BNC Binding Post/Banana Adapter				
73160-5001	BNC Resistor Plug	13R	TNC		
73160-7001	BNC Resistor Plug		73180-1121	TNC Straight Plug	23R
73161-5001	BNC Resistor Plug		73180-1221	TNC Straight Plug	
73161-7001	BNC Resistor Plug		73180-1421	TNC Straight Plug	
73162-5001	BNC Resistor Plug		73181-1111	TNC Straight Plug	
73162-7001	BNC Resistor Plug		73181-1121	TNC Straight Plug	
73162-9001	BNC Resistor Plug		73181-1511	TNC Straight Plug	
73162-9011	BNC Resistor Plug		73181-1521	TNC Straight Plug	
73163-5001	BNC Attenuator		73181-1721	TNC Straight Plug	
73163-5002	BNC Attenuator		73182-0641	TNC Straight Plug	
73163-5003	BNC Attenuator		73182-0841	TNC Straight Plug	
73163-5004	BNC Attenuator		73183-0111	TNC Straight Plug	
73163-7001	BNC Attenuator	73183-0311	TNC Straight Plug		
73163-7002	BNC Attenuator	73183-1111	TNC Straight Plug		
73163-7003	BNC Attenuator	73183-1711	TNC Straight Plug		
73163-7004	BNC Attenuator	73184-1131	TNC Right Angle Plug	24R	
73164-5001	BNC Terminator Plug	73184-1231	TNC Right Angle Plug		
73164-7001	BNC Terminator Plug	73184-1331	TNC Right Angle Plug		
73165-5001	BNC Terminator Plug	73184-1431	TNC Right Angle Plug		
73165-7001	BNC Terminator Plug	73184-1531	TNC Right Angle Plug		
73166-5001	BNC Through Terminator	73185-0111	TNC Right Angle Plug		
73166-7001	BNC Through Terminator	73185-0311	TNC Right Angle Plug		
73167-0000	BNC Strain Relief	73185-1111	TNC Right Angle Plug		
73167-0001	BNC Strain Relief	73185-1711	TNC Right Angle Plug		
73167-0002	BNC Strain Relief	73186-5001	TNC Straight Panel Plug (Recept.)		
73167-0003	BNC Strain Relief	73186-7001	TNC Straight Panel Plug (Recept.)		
73167-0004	BNC Strain Relief	73190-1221	TNC Straight Jack		25R
73167-0005	BNC Strain Relief	73190-1421	TNC Straight Jack		
73167-0006	BNC Strain Relief	73191-1121	TNC Straight Jack		
73167-0007	BNC Strain Relief	73191-1521	TNC Straight Jack		
73167-0008	BNC Strain Relief	73191-1721	TNC Straight Jack		
73167-0009	BNC Strain Relief	73192-0111	TNC Straight Jack		
73168-0000	BNC Strain Relief	73192-0311	TNC Straight Jack		
73168-0001	BNC Strain Relief	73192-1111	TNC Straight Jack		
73168-0002	BNC Strain Relief	73192-1711	TNC Straight Jack		
73168-0003	BNC Strain Relief	73193-1221	TNC Straight Panel Jack		
73168-0004	BNC Strain Relief	73193-1421	TNC Straight Panel Jack		
73168-0005	BNC Strain Relief	73194-1121	TNC Straight Panel Jack		
73168-0006	BNC Strain Relief	73194-1321	TNC Straight Panel Jack		
73168-0007	BNC Strain Relief	73194-1521	TNC Straight Panel Jack		
73168-0008	BNC Strain Relief	73194-1721	TNC Straight Panel Jack		
		73196-1221	TNC Straight Bulkhead Jack	26R	
		73196-1421	TNC Straight Bulkhead Jack		
		73197-1121	TNC Straight Bulkhead Jack		

RF CONNECTORS PART NUMBER INDEX



Numerical Listing

Order Number	Description	Page No.	Order Number	Description	Page No.	
73197-1321	TNC Straight Bulkhead Jack	26R	73227-0911	N Straight Jack	35R	
73197-1521	TNC Straight Bulkhead Jack	↓	73230-0611	N Panel Jack	36R	
73197-1721	TNC Straight Bulkhead Jack		73230-0711	N Panel Jack	↓	
73198-0111	TNC Straight Bulkhead Jack		73230-0811	N Panel Jack		
73198-0311	TNC Straight Bulkhead Jack		73230-0911	N Panel Jack		
73198-1111	TNC Straight Bulkhead Jack		73231-1121	N Panel Jack		
73198-1711	TNC Straight Bulkhead Jack		73231-1521	N Panel Jack		
73200-5001	TNC Straight Bulkhead Receptacle		28R	73231-1721		N Panel Jack
73200-7001	TNC Straight Bulkhead Receptacle		↓	73232-0631		N Bulkhead Jack
73201-5001	TNC Straight Bulkhead Receptacle			73232-0731		N Bulkhead Jack
73201-7001	TNC Straight Bulkhead Receptacle			73232-0831		N Bulkhead Jack
73202-5001	TNC Straight Panel Receptacle	73232-0931		N Bulkhead Jack		
73202-7001	TNC Straight Panel Receptacle	73233-1121		N Bulkhead Jack		
73203-5001	TNC Right Angle Bulkhead Recept.	73233-1721		N Bulkhead Jack		
73203-7001	TNC Right Angle Bulkhead Recept.	73234-5001		N Bulkhead Receptacle	37R	
73205-5001	TNC Adapter	29R		73234-7001	N Bulkhead Receptacle	
73205-7001	TNC Adapter	↓		73235-5001	N Bulkhead Receptacle	
73206-5001	TNC Adapter			73235-7001	N Bulkhead Receptacle	
73206-7001	TNC Adapter		73236-5001	N Panel Mount Receptacle		
73207-5001	TNC Bulkhead Adapter		73236-7001	N Panel Mount Receptacle		
73207-7001	TNC Bulkhead Adapter		73237-5001	N Panel Mount Receptacle		
73208-5001	TNC Panel Adapter		73237-7001	N Panel Mount Receptacle		
73208-7001	TNC Panel Adapter		73238-5001	N Panel Mount Stripline		
73209-5001	TNC Tee Adapter		73240-5001	N Adapter	38R	
73209-7001	TNC Tee Adapter		73240-7001	N Adapter		
73210-5001	TNC Banana Adapter		73241-5001	N Adapter		
73214-5001	TNC Resistor	73241-7001	N Adapter			
73214-7001	TNC Resistor	73242-5001	N Adapter			
73215-0001	TNC Male Cap	73242-7001	N Adapter			
73215-0002	TNC Male Cap	73243-5001	N Adapter			
73216-0001	TNC Female Cap	73243-7001	N Adapter			
73216-0002	TNC Female Cap	73244-5001	N Adapter			
		↓	73244-7001	N Adapter		
N			73245-0001	N Male Cap		
73220-0611	N Straight Plug		73246-0001	N Female Cap		
73220-0711	N Straight Plug					
73220-0811	N Straight Plug		TWINAX			
73220-0911	N Straight Plug		73250-2011	Twinax Straight Plug	42R	
73221-1121	N Straight Plug		73250-2021	Twinax Straight Plug	↓	
73221-1521	N Straight Plug		73250-2031	Twinax Straight Plug		
73221-1721	N Straight Plug		73251-2011	Twinax Straight Jack		
73222-0611	N Right Angle Plug		73252-1001	Twinax Bulkhead Receptacle		
73222-0711	N Right Angle Plug	73253-1001	Twinax Bulkhead Receptacle			
73222-0811	N Right Angle Plug	73254-1001	Twinax Adapter	43R		
73222-0911	N Right Angle Plug	73255-1001	Twinax Adapter			
73223-5001	N Panel Mount Receptacle	73256-1001	Twinax Adapter			
73223-7001	N Panel Mount Receptacle	73257-0001	Twinax Female Cap			
73224-5001	N Panel Mount Stripline	73258-0001	Twinax Terminator			
73226-1121	N Straight Jack					
73226-1521	N Straight Jack	35R				
73226-1721	N Straight Jack	↓	UHF			
73227-0611	N Straight Jack		73260-0811	UHF Straight Plug	47R	
73227-0711	N Straight Jack		73261-1111	UHF Straight Plug	↓	
73227-0811	N Straight Jack		73262-1131	UHF Right Angle Plug		
			73265-1141	UHF Straight Jack		49R



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73266-0651	UHF Straight Jack	↓	73321-1112	SMA Straight Jack	58R			
73266-0851	UHF Straight Jack		73321-1212	SMA Straight Jack	↓			
73267-1141	UHF Straight Panel Jack		73321-1712	SMA Straight Jack				
73267-1541	UHF Straight Panel Jack		73322-1112	SMA Straight Jack				
73268-0651	UHF Straight Panel Jack		73322-1212	SMA Straight Jack				
73268-0851	UHF Straight Panel Jack		73322-1712	SMA Straight Jack				
73269-0001	UHF Straight Bulkhead Receptacle		48R	73323-1132		SMA Straight Bulkhead Jack		
73270-0001	UHF Straight Panel Receptacle		↓	73323-1232		SMA Straight Bulkhead Jack		
73273-5001	UHF Adapter			73323-1732		SMA Straight Bulkhead Jack		
73274-7001	UHF Adapter			73324-1112		SMA Straight Bulkhead Jack		
73275-0001	UHF Adapter			73324-1212		SMA Straight Bulkhead Jack		
73276-0001	UHF Adapter			73324-1712		SMA Straight Bulkhead Jack		
73277-0001	UHF Adapter			73325-1112		SMA Straight Panel Jack	59R	
73278-0001	UHF Adapter			73325-1212		SMA Straight Panel Jack	↓	
73279-0001	UHF Adapter			73325-1712		SMA Straight Panel Jack		
BETWEEN SERIES ADAPTERS				73326-1112		SMA Straight Jack	58R	
73286-5001	Between Series Adapter			↓		73326-1212	SMA Straight Jack	↓
73287-5001	Between Series Adapter	54R			73326-1712	SMA Straight Jack		
73288-5001	Between Series Adapter	73327-1112			SMA Straight Bulkhead Jack			
73289-5001	Between Series Adapter	73327-1212			SMA Straight Bulkhead Jack			
73290-5001	Between Series Adapter	73327-1712			SMA Straight Bulkhead Jack			
SMA				73328-1112	SMA Straight Panel Jack	59R		
73300-1812	SMA Straight Plug	↓		73328-1212	SMA Straight Panel Jack	↓		
73301-1812	SMA Straight Plug		56R	73328-1712	SMA Straight Panel Jack			
73301-1912	SMA Straight Plug		73331-5012	SMA Straight Panel Receptacle	↓			
73302-1822	SMA Right Angle Plug		73331-5022	SMA Straight Panel Receptacle				
73302-1922	SMA Right Angle Plug		73332-5012	SMA Straight Panel Receptacle				
73303-1812	SMA Straight Jack		73332-5022	SMA Straight Panel Receptacle				
73303-1912	SMA Straight Jack		73333-5002	SMA Straight Panel Receptacle				
73304-1812	SMA Straight Bulkhead Jack		73334-5002	SMA Straight Panel Receptacle				
73304-1912	SMA Straight Bulkhead Jack		73335-5012	SMA Straight Panel Receptacle				
73305-1812	SMA Straight Panel Jack		73335-5022	SMA Straight Panel Receptacle				
73305-1912	SMA Straight Panel Jack		73336-5012	SMA Straight Panel Receptacle				
73306-1812	SMA Straight Panel Jack		73336-5022	SMA Straight Panel Receptacle				
73306-1912	SMA Straight Panel Jack		73337-5012	SMA Straight Panel Receptacle				
73311-1112	SMA Straight Plug		73337-5022	SMA Straight Panel Receptacle				
73311-1212	SMA Straight Plug		73338-5012	SMA Straight Panel Receptacle				
73311-1216	SMA Straight Plug		73338-5022	SMA Straight Panel Receptacle				
73311-1712	SMA Straight Plug		73344-5012	SMA Straight Panel Receptacle				
73312-1112	SMA Straight Plug		73344-5022	SMA Straight Panel Receptacle				
73312-1212	SMA Straight Plug		73345-5012	SMA Straight Panel Receptacle				
73312-1712	SMA Straight Plug		73345-5022	SMA Straight Panel Receptacle				
73313-1122	SMA Right Angle Plug		73346-5012	SMA Straight Panel Receptacle				
73313-1222	SMA Right Angle Plug		73346-5022	SMA Straight Panel Receptacle				
73313-1722	SMA Right Angle Plug		73347-5012	SMA Straight Panel Receptacle				
73314-1112	SMA Straight Plug		73347-5022	SMA Straight Panel Receptacle				
73314-1212	SMA Straight Plug		73348-5002	SMA Straight Panel Receptacle				
73314-1712	SMA Straight Plug		73349-5002	SMA Straight Panel Receptacle				
73315-1122	SMA Right Angle Plug		73350-5002	SMA Straight Panel Receptacle				
73315-1222	SMA Right Angle Plug		73351-5002	SMA Straight Bulkhead Receptacle		↓		
73315-1722	SMA Right Angle Plug		73352-5002	SMA Straight Bulkhead Receptacle				
		73353-5002	SMA Right Angle Panel Receptacle					
		73354-5002	SMA Straight Receptacle	62R				



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73357-5002	SMA Adapter	↓	73409-1212	SMC Right Angle Plug	↓
73358-5002	SMA Adapter	↓	73409-1412	SMC Right Angle Plug	↓
73359-5002	SMA Adapter	↓	73410-1222	SMC Low Profile Right Angle Plug	↓
SMB		69R	73410-1422	SMC Low Profile Right Angle Plug	↓
73366-1212	SMB Straight Plug	↓	73411-5002	SMC Right Angle Bulkhead Recept.	71R
73366-1412	SMB Straight Plug	↓	73412-5002	SMC Bulkhead Receptacle	↓
73367-1212	SMB Straight Plug	↓	73413-5002	SMC Bulkhead Receptacle	↓
73367-1422	SMB Straight Plug	↓	73414-5002	SMC Straight PCB Receptacle	↓
73368-1222	SMB Right Angle Plug	↓	73415-5002	SMC Right Angle PCB Receptacle	70R
73368-1422	SMB Right Angle Plug	↓	73419-1212	SMC Straight Jack	↓
73369-1212	SMB Right Angle Plug	↓	73419-1412	SMC Straight Jack	↓
73369-1412	SMB Right Angle Plug	↓	73420-1212	SMC Straight Jack	↓
73370-1222	SMB Low Profile Right Angle Plug	↓	73420-1422	SMC Straight Jack	↓
73370-1422	SMB Low Profile Right Angle Plug	↓	73421-1222	SMC Right Angle Bulkhead Jack	↓
73372-5002	SMB Bulkhead Receptacle	71R	73421-1422	SMC Right Angle Bulkhead Jack	↓
73373-5002	SMB Bulkhead Receptacle	↓	73422-5002	SMC Right Angle Bulkhead Recept.	72R
73374-5002	SMB Straight PCB Receptacle	↓	73423-1212	SMC Straight Bulkhead Jack	70R
73375-5002	SMB Right Angle PCB Recept.	↓	73423-1412	SMC Straight Bulkhead Jack	↓
73379-1212	SMB Straight Jack	70R	73424-1212	SMC Straight Bulkhead Jack	↓
73379-1412	SMB Straight Jack	↓	73424-1412	SMC Straight Bulkhead Jack	72R
73380-1212	SMB Straight Jack	↓	73425-5002	SMC Straight Bulkhead Receptacle	↓
73380-1422	SMB Straight Jack	↓	73426-5002	SMC Straight Bulkhead Receptacle	↓
73381-1222	SMB Right Angle Bulkhead Jack	↓	73428-5002	SMC Straight PCB Receptacle	↓
73381-1422	SMB Right Angle Bulkhead Jack	↓	73429-5002	SMC Right Angle PCB Receptacle	↓
73382-5002	SMB Right Angle Bulkhead Recept.	72R	73435-5002	SMC Adapter	73R
73383-1212	SMB Straight Bulkhead Jack	70R	73436-5002	SMC Adapter	↓
73383-1412	SMB Straight Bulkhead Jack	↓	73437-5002	SMC Bulkhead Adapter	↓
73384-1212	SMB Straight Bulkhead Jack	↓	73438-5002	SMC Tee Adapter	↓
73384-1422	SMB Straight Bulkhead Jack	↓	73439-5002	SMC Tee Adapter	↓
73388-5002	SMB Straight Bulkhead Receptacle	72R	73440-5002	SMC Cable Feedthrough	↓
73389-5002	SMB Straight Bulkhead Receptacle	↓	73441-5002	SMC Cable Feedthrough	↓
73390-5002	SMB (1-hole) Panel Mount Recept.	↓	MCX		78R
73391-5002	SMB/SMC Straight PCB Receptacle	↓	73446-1212	MCX Straight Plug	↓
73392-5002	SMB/SMC Right Angle PCB Receptacle	↓	73446-1412	MCX Straight Plug	↓
73393-5002	SMB/SMC Straight PCB Receptacle	↓	73447-1212	MCX Right Angle Plug	↓
73394-5002	SMB/SMC Right Angle PCB Receptacle	↓	73447-1412	MCX Right Angle Plug	↓
73395-5002	SMB Adapter	73R	73448-1412	MCX Right Angle Plug	↓
73396-5002	SMB Adapter	↓	73448-1922	MCX Right Angle Plug	↓
73397-5002	SMB Bulkhead Adapter	↓	73452-1212	MCX Straight Jack	↓
73398-5002	SMB Tee Adapter	↓	73452-1412	MCX Straight Jack	↓
73399-5002	SMB Tee Adapter	↓	73453-5002	MCX Right Angle PCB Receptacle	79R
73400-5002	SMB Cable Feedthrough	↓	73454-5002	MCX Straight PCB Receptacle	↓
73400-5012	SMB Cable Feedthrough	↓	73455-5002	MCX Straight PCB Receptacle	↓
SMC		69R	73456-5002	MCX Right Angle Bulkhead Recept.	↓
73406-1212	SMC Straight Plug	↓	73457-5002	MCX Straight Bulkhead Receptacle	↓
73406-1412	SMC Straight Plug	↓	BNO		83R
73407-1212	SMC Straight Plug	↓	73461-2211	BNO Straight Plug	↓
73407-1422	SMC Straight Plug	↓	73464-2211	BNO Straight Jack	↓
			73465-2211	BNO Straight Bulkhead Jack	83R
			73466-2211	BNO Straight Panel Jack	↓

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TNO		
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73476-2213	TNO Right Angle Plug	
73480-2213	TNO Straight Jack	
73481-2213	TNO Straight Bulkhead Jack	88R
73482-7003	TNO Straight Bulkhead Receptacle	
73483-7003	TNO Straight Panel Receptacle	
73484-7003	TNO Straight PCB Receptacle	

Notes



Wire Gauge Classifications*



AWG	DIAMETER		AREA		
	In.	mm	Circular Mils	In ²	mm ²
10 (1)	.1019	2.59	10384	.00816	5.27
10 (37/26)	.1113	2.83	9361	.00736	4.75
12 (1)	.0808	2.05	6528	.00513	3.31
12 (19/25)	.0895	2.27	6088	.00479	3.09
12 (37/28)	.0882	2.24	5883	.00463	2.88
14 (1)	.0641	1.63	4109	.00323	2.08
14 (19/27)	.071	1.80	3831	.00300	1.94
16 (1)	.0508	1.29	2581	.00203	1.31
16 (19/29)	.0557	1.41	2426	.00190	1.23
18 (1)	.0403	1.02	1620	.00128	.823
18 (19/30)	.050	1.27	1900	.00149	.963
20 (1)	.032	.813	1020	.000804	.519
20 (7/28)	.0378	.960	1113	.000875	.563
20 (19/32)	.040	1.02	1216	.000956	.616
22 (1)	.0253	.643	640	.000503	.324
22 (7/30)	.030	.762	700	.000550	.355
22 (19/34)	.0315	.800	754	.000593	.382
24 (1)	.0201	.511	404	.000317	.205
24 (7/32)	.024	.609	448	.000352	.227
24 (19/36)	.025	.635	475	.000372	.241
26 (1)	.0159	.404	253	.000199	.128
26 (7/34)	.0189	.480	278	.000218	.141
26 (19/38)	.020	.510	304	.000239	.154
28 (1)	.0126	.320	159	.000125	.0804
28 (7/36)	.015	.381	175	.000137	.0889
28 (19/40)	.0155	.395	183	.000143	.0925
30 (1)	.0100	.254	100	.0000785	.0507
30 (7/38)	.012	.306	112	.0000882	.0568
30 (19/42)	.0125	.320	119	.0000933	.0600
32 (1)	.0080	.203	64.0	.0000503	.0324
32 (7/40)	.0093	.237	67.3	.0000529	.0341
32 (19/44)	.010	.255	76.0	.0000597	.0386
34 (1)	.0063	.160	39.7	.0000312	.0201
34 (7/42)	.0075	.192	43.8	.0000344	.0222
36 (1)	.0050	.127	25.0	.0000196	.0127
36 (7/44)	.006	.153	28.0	.0000220	.0142
38 (1)	.0040	.102	16.0	.0000126	.00811
40 (1)	.0031	.079	9.61	.00000755	.00487
42 (1)	.0025	.064	6.25	.00000491	.00317
44 (1)	.0020	.051	4.00	.00000314	.00203

*Classifications of insulated round copper conductors.

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Richey/Impact Electronics Inc.
Canton, MA 02021
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FAX 617-828-4130

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612-944-9192

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Lectronix
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314-946-6424

Time Electronics
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314-391-6444

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Solon, OH 44139
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Radar Electric
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503-684-3780

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Hamilton Avnet
Pittsburg, PA 15222
412-281-4150

Sager Electronics
Trevose, PA 19047
215-638-7491

Time Electronics
King of Prussia, PA 19406
215-337-0900

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Memphis, TN 38118
901-365-3539

Nashville, TN 37210
615-244-3562

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Hixson, TN 37343
615-842-0514

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Force Electronics
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214-247-9955

Houston, TX 77099
713-561-8644

Hamilton Avnet
Austin, TX 78758
512-837-8911

Irving, TX 75062
214-550-6111

Stafford, TX 77477
713-240-7733

Harper S.I.D.
Irving, TX 75063
214-621-0500

Kent Electronics
Austin, TX 78758-4031
512-834-1900

Houston, TX 77477
713-780-7770

Richardson, TX 75081-2437
214-669-2600

Time Electronics
Austin, TX
512-339-3051

Carrollton, TX 75006
214-241-7441

Houston, TX 77099
713-530-0800

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801-972-6969

Hamilton Avnet
Salt Lake City, UT 84119
801-972-2800

Integrated Electronics
North Salt Lake City, UT 84054
801-298-1869

Time Electronics
Salt Lake City, UT 84119
801-973-8181

West Valley, UT
801-973-8181

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206-881-6697
1-800-562-7834

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Richland, WA 99352
509-943-8336

Radar Electric
Seattle, WA 98119
206-282-2511

Spokane, WA 99202
509-747-3053

Time Electronics
Redmond, WA 98052
206-882-1600

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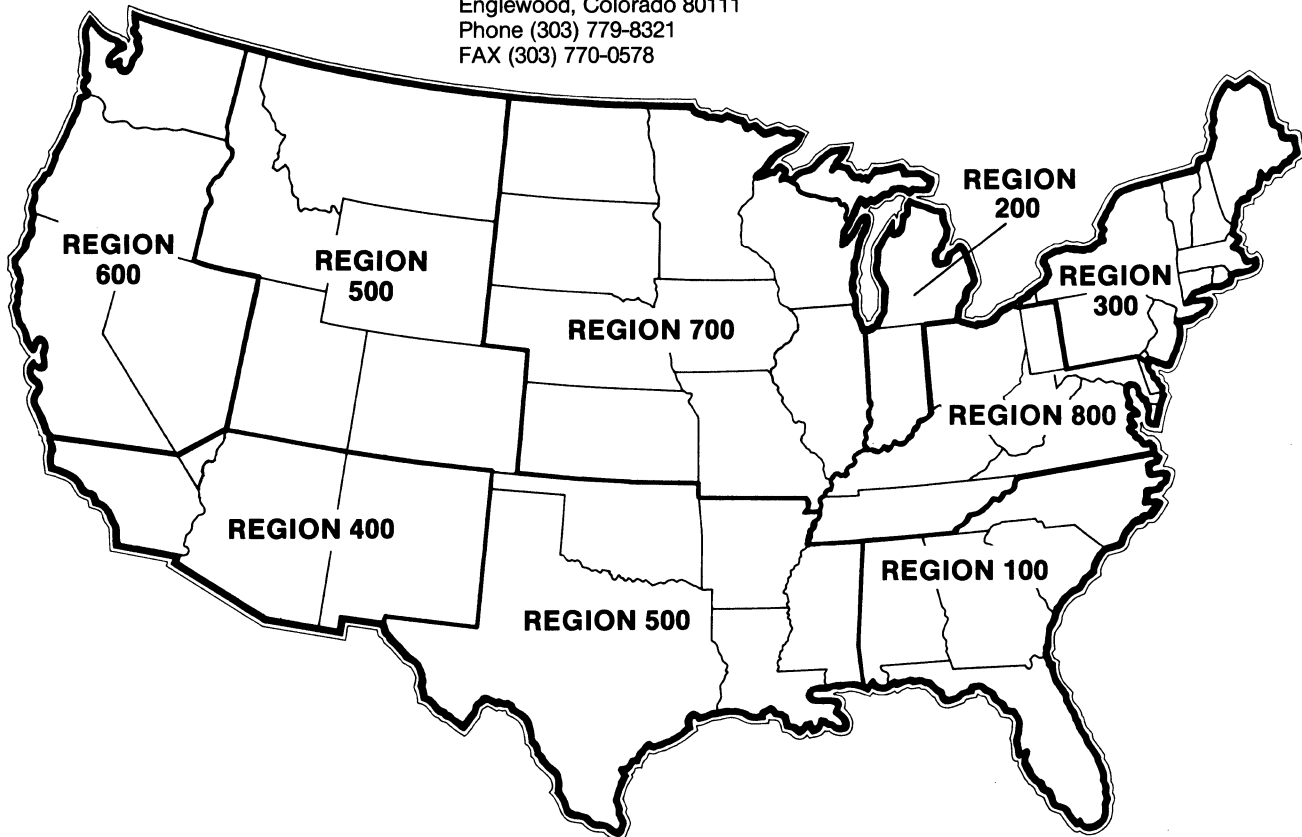
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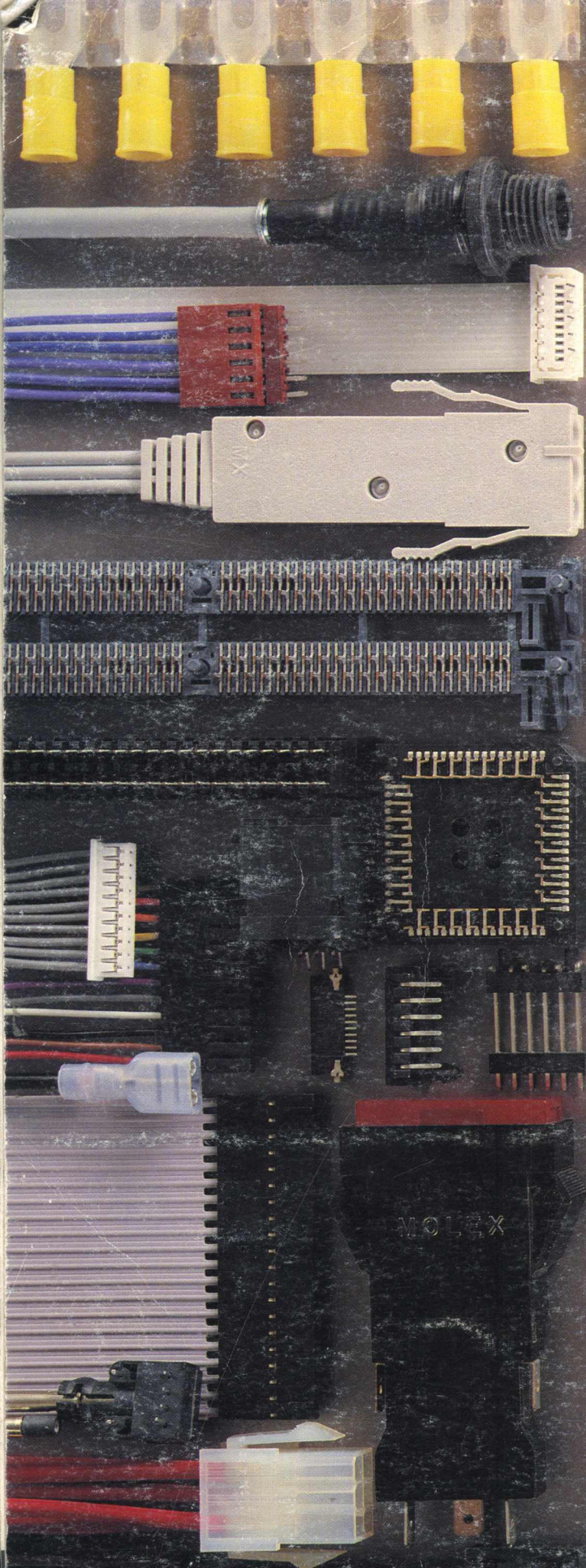
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