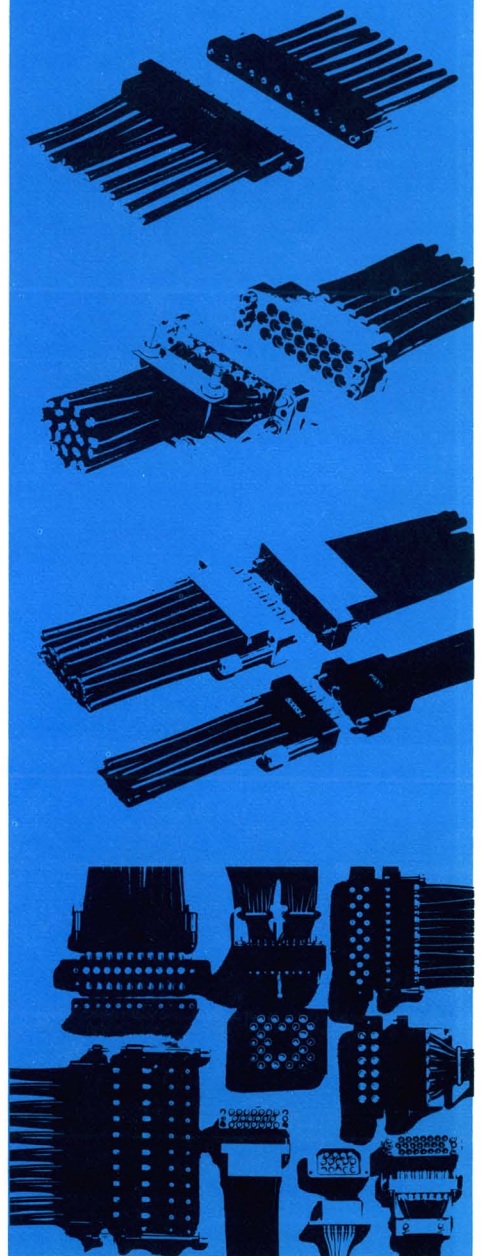


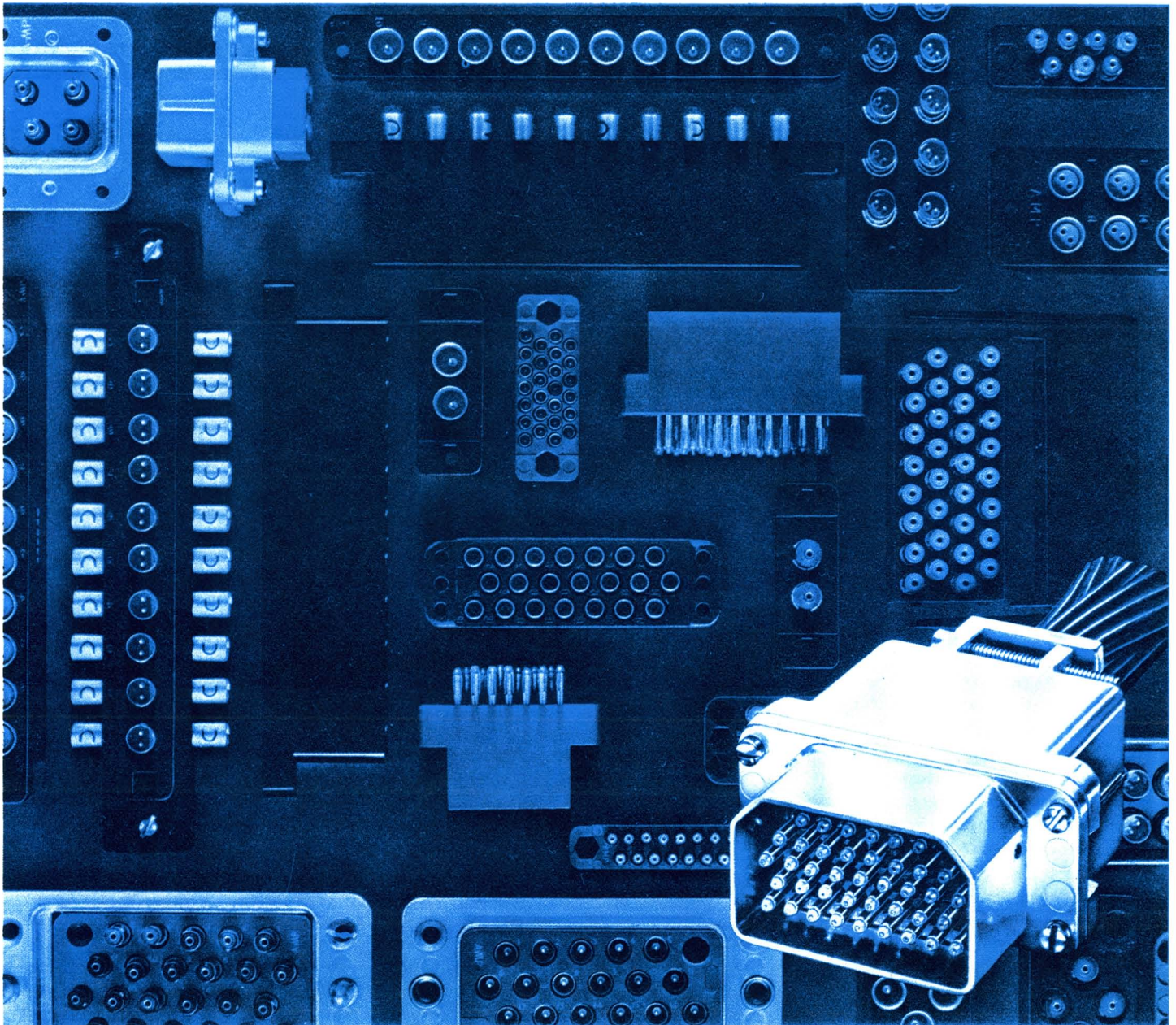
Coaxial cable connectors designed for multiple circuit use feature snap-in contacts incorporating AMP's exclusive one-stroke crimp; inner conductor, outer braid and cable support are terminated simultaneously by matching AMP crimping tools. Connectors are available in sizes and configurations to accommodate a wide range of wire sizes and corresponding contacts. PC board mount sockets for single cable to board termination. Also complete line of coaxial ribbon cable assemblies and connectors for cable to cable and cable to board applications.

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MULTIPLE POSITION COAXIAL CONNECTORS



AMP MULTIPLE COAXICON CONNECTORS



AMP... FIRST IN COAX TERMINATION TECHNOLOGY

The expanding use of the electro magnetic frequency spectrum is increasing the need for coaxial cable in almost every phase of the electronics industry. In order to help manufacturers keep pace with this rising increase in the use of coaxial cables, AMP has developed numerous advanced products and tools for the termination of coaxial cables of all types. Important Firsts from AMP in this field:

- The first single-crimp termination method for coaxial cables
- The first automatic termination tooling for coaxial cables
- The first two-piece coaxial contacts

More than 75 U. S. patents have been awarded during the past 10 years covering coaxial innovations in the RF connector field.

AMP is well staffed with competent RF connector engineers who regularly meet the challenge of building su-

perior RF performance into economical designs. They are ably assisted by two completely equipped Microwave Laboratories — one for current design verification and qualification testing, and the other for research into advanced design and testing techniques.

AMP's exclusive one-step crimping method saves time and labor, while assuring a stable and reliable connection every time. Outer braid, inner conductor and cable support are crimped simultaneously to produce connections that are mechanically and electrically similar to the cable itself.

The contacts described and illustrated in this catalog include the Miniature, Subminiature, Standard, and Twin Standard COAXICON contacts.

For more information on these or other coaxial connectors, contact AMP Incorporated, Harrisburg, Pennsylvania.

All dimensions in inches.

AMP'S CRIMPED COAXIAL CONTACTS

Great care must be used in the selection of coaxial contacts particularly if they operate at RF frequencies. Improper application in an RF circuit can cause degradation due to standing waves, cross talk, phase distortion, interference, dielectric losses, and other effects. The spacing of elements determines the impedance of the connector. All A-MP coaxial cable contact assemblies (except the twin coaxial types, of course) are designed to provide concentric spacing between the outside diameter of the center conductor and the inside diameter of the shell.

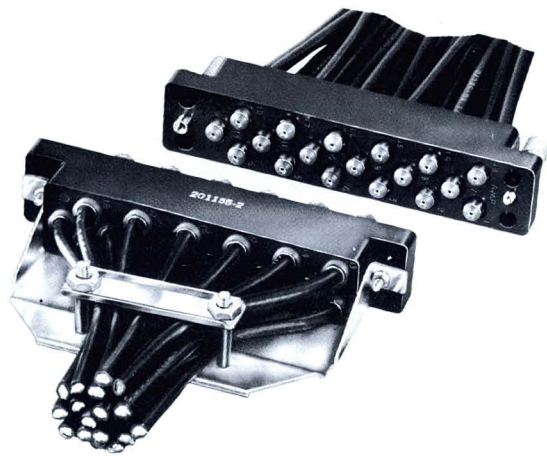
When terminating coaxial cable, two different conductors (braid and center conductors) must be joined, dielectric properties must be preserved, conductor spacing must be maintained. Therefore, attaching coaxial contacts is a more intricate operation than terminating a single wire. The AMP one crimp termination technique used with COAXICON contacts greatly simplifies both the cable preparation and the crimping procedure. No heat and no solder are used, resulting in an operation that is as free of human error and as uniform as possible. In addition, the crimp is designed to maintain the impedance of the cable/contact assembly. Heat is NOT applied, so high-temperature, high-cost dielectric cables are unnecessary in non-critical applications. Because contacts are extensions of cables they connect, they should be as reliable as the cable itself. However, they need not exceed the performance requirements for a given application. For example, connectors used to carry audio current in a stereo set are not as critical as those used in radar equipment. Contact selection, then, should be based not only on performance, but also on the economics of the application. AMP makes reliable stamped and formed contacts as well as quality machined coaxial contacts to give you the widest possible choice.

The wide range of choices in the A-MP COAXICON connector line simplifies the problem of specifying contacts or connectors for coaxial cables. Regardless of the type — Standard, Miniature, Subminiature, or Twin — every COAXICON connector or contact is designed to give the highest performance in the function for which it was designed. Some of the features of COAXICON contacts are: low noise level, low VSWR, high cable retention, less critical stripping requirements, light weight, contact stability, low contact resistance, and high dielectric strength. COAXICON connectors are characterized by: high resistance to vibration, shock, and environmental conditions; good contact retention; high arc resistance; and durability. For performance data on the individual contacts or connectors, refer to the appropriate specification section.

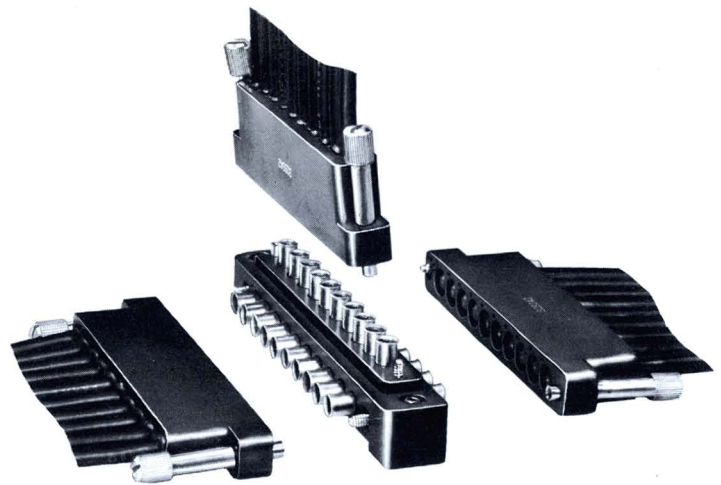
One of the most serious omissions in planning is to delay the selection of connectors until equipment design has been frozen or is very close to that stage. This tendency is generally traceable to the fact that some design engineers look upon a connector as an appendage, rather than an integral part of the equipment. This can cause costly and time-consuming revisions or lead to a compromise in connector or contact selection.

Other sources of difficulty may include special assembly problems involving the cable, harness, equipment size, the use of untrained personnel, or inadequate testing facilities. All these variables in the selection and use of coaxial contacts and multiple coaxial connectors can be controlled by consulting AMP within a reasonable time before equipment designs are established. In this way you will be assured of obtaining the right connector and/or contact assembly for any specific project.

COAXIAL CABLE				
RG/U CABLE NO. AND TYPE	A-MP COAXICON CONTACTS			
	STANDARD	TWIN STANDARD	MINIATURE	SUBMINIATURE
55, 55A, 55B	X		X	
58, 58A, 58B, 58C	X		X	
59, 59A, 59B	X		X	
62, 62A, 62B	X		X	
71, 71A, 71B	X		X	
122			X	
124	X		X	
140	X		X	
141, 141A	X		X	
142, 142A, 142B	X		X	
161			X	X
174			X	X
178, 178A			X	X
179				X
179A			X	
180, 180A	X		X	
187			X	X
188			X	X
195	X		X	
196			X	X
210	X		X	
223	X		X	
316				X
21-597	X		X	
21-598			X	
Brand Rex T209A #29 AWG	X		X	
Belden 8411	X			
Raychem 0030D1314			X	
Army Ord. 11207177			X	
32-26			X	
22-20			X	
108, 108A		X		
Belden 8451, 8641, 8737, 8759, 8761, 8762		X		
Microdot 2-3932, 2-3934		X		
SHIELDED WIRE				
WIRE SIZE	A-MP COAXICON CONTACTS			
	MINIATURE	SUBMINIATURE		
No. 26 AWG .075 Max. O.D.	X	X		
No. 26, NAS-702, Class A, B & C	X			
No. 26, MIL-W-16878, Types E & EE	X			
No. 24, NAS-702, Class A, B & C	X			
No. 24, MIL-W-16878, Types E & EE	X			
No. 22, NAS-702, Class A, B & C	X			
No. 22, MIL-W-16878, Types E & EE	X			
No. 22, MIL-C-7078 A, Types I & II	X			
No. 1 Dielectric, .068 O.D., No. 2 Dielectric, .075 O.D., No. 3 Dielectric, .085 O.D.	X			
TWISTED PAIRS				
WIRE SIZE	A-MP COAXICON CONTACTS			
	STANDARD	MINIATURE	SUBMINIATURE	
No. 20 Solid Copper	X			
No. 22 & 24 Solid or Stranded Copper	X	X		
No. 26 & 28 Solid Copper		X	X	
No. 28 Stranded Copper			X	
No. 30 Solid Copper			X	



18-POSITION CONNECTOR



10-POSITION "T" CONNECTOR

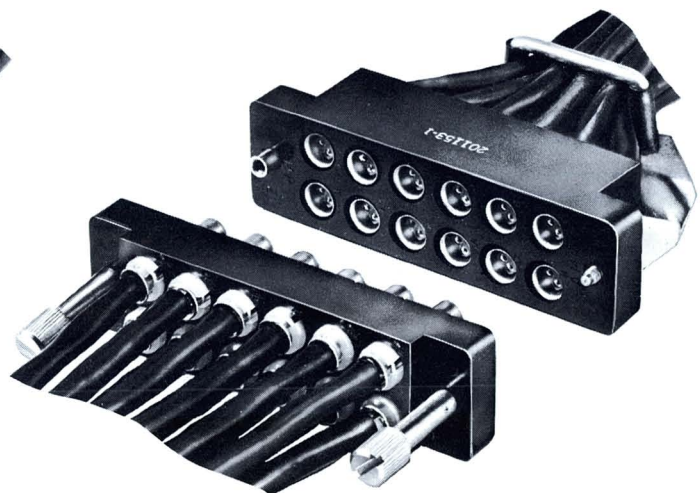


STANDARD COAXICON CONTACT

TYPICAL TWIN STANDARD COAXICON CONTACTS AND CONNECTORS



8-POSITION SERIES "W" CONNECTOR

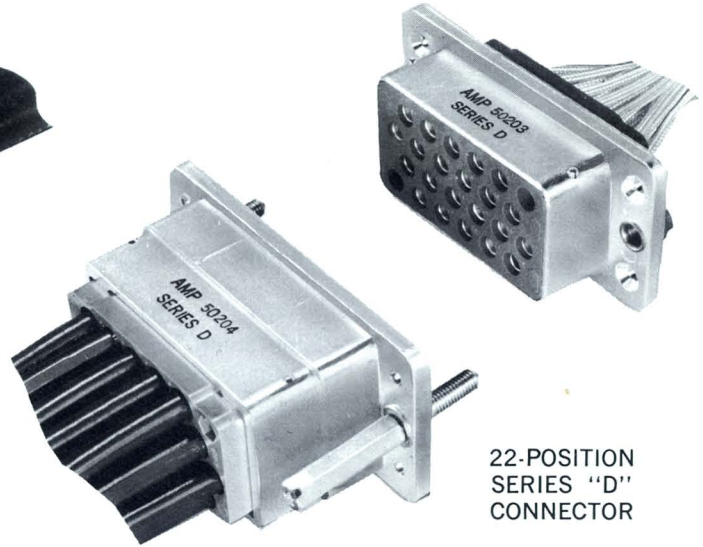


12-POSITION CONNECTOR



TWIN STANDARD COAXICON CONTACT

7-POSITION
SERIES "M"
CONNECTOR



22-POSITION
SERIES "D"
CONNECTOR



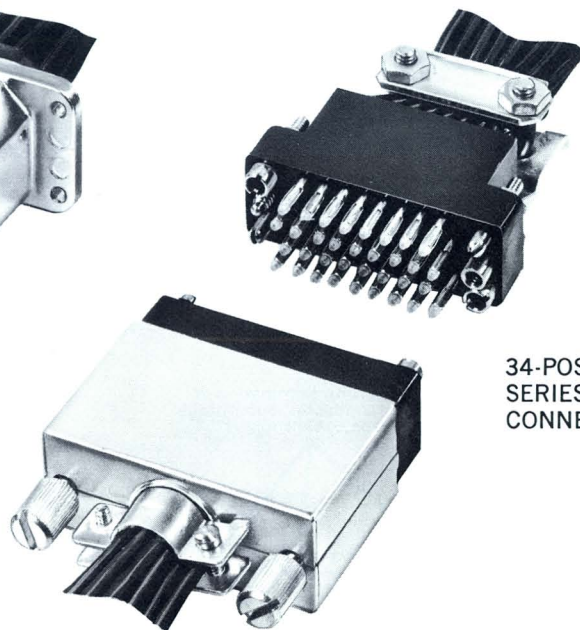
MINIATURE
COAXICON CONTACTS

TYPICAL SUBMINIATURE COAXICON CONTACTS AND CONNECTORS

40-POSITION
SERIES "W"
CONNECTOR



34-POSITION
SERIES "M"
CONNECTOR



SUBMINIATURE CONTACTS

CONTACT INFORMATION

AMP provides a variety of contacts for multiple coaxial connectors. Contacts are available in a range of sizes that may be used with the various types of coaxial cable on the market. COAXICON contacts are of the crimp, snap-in type and are used in the Standard, Twin Standard, Miniature, and Subminiature COAXICON connectors. In addition, Sub-Miniature COAXICON contacts can be used in the Series "D", "DD", "G", "M", "W" and "WW" pin-and-socket connectors.

To be acceptable, contacts must perform five basic functions:

1. Carry required current load
2. Create a low-resistance path for current
3. Tolerate repeated insertion and extraction without wear, damage or loss of conductivity
4. Resist oxidation and other harmful environmental factors

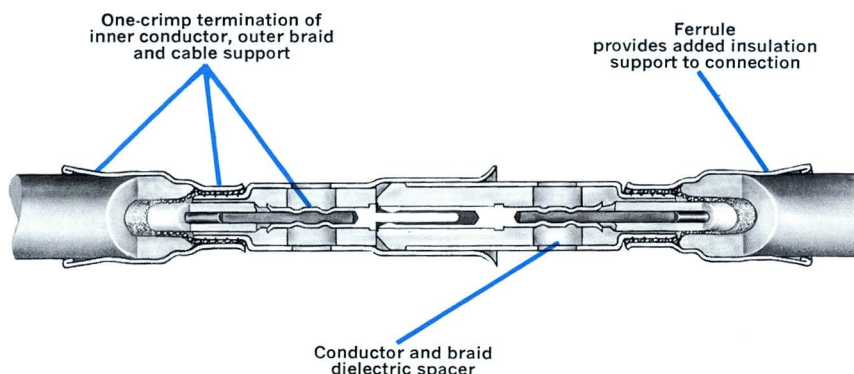
5. Coaxial contacts must carry RF signals without excessive distortion, attenuation, VSWR, noise or cross talk

A-MP COAXICON contacts satisfy these criteria. AMP's exclusive one-stroke crimp termination maintains a low-resistance current path without introducing power or heat losses. The standard AMP gold over copper or nickel plating provides high resistance to oxidation, humidity, and corrosion. Gold plating is required for proper conductivity in "dry" or low-level sensitive circuits. AMP's x-ray measuring technique assures uniform plating thickness on each contact, providing a contact surface that is extremely resistant to corrosion and other environmental effects. Cantilever-beam contact springs on both inner and outer portions of the contacts assure high conductivity even after repeated insertion and extraction. Special design produces low VSWR, low noise level, and (where applicable) impedance matching.

STANDARD COAXICON CONTACTS



The COAXICON Contact, standard size, for use in multiple circuit connectors, was specifically designed to meet industry's growing requirements in the use of coaxial cable. It is a crimp, snap-in contact, incorporating AMP's unique and exclusive one-stroke crimp. Here, inner conductor, outer braid and cable support are terminated simultaneously by the matching A-MP crimping tool.



MATERIAL, FINISH AND TEST SPECIFICATIONS

The following specifications and standards form a part of this specification:

(See AMP Product Specification GPS-501-2)

Brass	QQ-B-613, QQ-B-626
Beryllium Copper	QQ-C-533, QQ-C-530
Copper	QQ-C-576
Bronze	ASTM-B-140
Polyethylene	LP-590, MIL-T-3803
Polypropylene	Fed. Spec. L-P-394B Type I
Gold Plating	MIL-G-45204
Nickel Plating	QQ-N-290
Silver Plating	QQ-S-365
Test Method for Electronic and Electrical Component Parts	MIL-STD-202
VSWR Test Method	MIL-C-39012

PERFORMANCE REQUIREMENTS

Insulation Resistance — Insulation resistance of mated contacts is at least 5,000 megohms between the inner contact and outer shell.

Dielectric Withstanding Voltage — The contacts can withstand a potential of 1,500 volts rms for a period of one minute.

Cable Retention — Shell and inner pin contacts withstand tensile pull values shown below when the cable is pulled at a speed of one inch per minute.

RG-71 B/U	55 lbs.
RG-55 B/U	85 lbs.
RG-62 B/U	75 lbs.
RG-223	55 lbs.
RG-58 C/U	50 lbs.
RG-180 A/U	28 lbs.

Contact Resistance — With test current of one ampere flowing in the center contacts, the contact resistance does not exceed 2.0 milliohms.

Low-level Conductivity — With the contacts mated in a connector assembly, both inner and outer contacts will conduct current in either direction with a voltage of 10 microvolts DC applied across each contact pair.

Durability — After being subjected to 200 engagements and withdrawals at a rate not exceeding 10 cycles per minute, the contacts meet the requirements of the foregoing Contact Resistance and Low-level Conductivity tests.

Voltage Standing Wave Ratio — When tested with a long length of coaxial cable, the VSWR does not exceed 1.25 to 1.0 at frequencies up to 2,000 Mhz.

Temperature Cycling — When tested in accordance with MIL-STD-202, Condition D, Method 102 for five cycles, the contacts show no evidence of physical damage.

Vibration — Mated connector assemblies vibrated in accordance with MIL-STD-202, Method 201, for a period of two hours in each of three mutually perpendicular planes do not exhibit any discontinuity greater than 10 microseconds nor show any evidence of physical damage.

Shock — Mated connector assemblies subjected to eight 50-g deceleration shocks in each of three mutually perpendicular axes do not exhibit any discontinuity greater than 10 microseconds nor show any evidence of physical damage. After this test, the assemblies meet the requirements of aforementioned specifications for Insulation Resistance and Dielectric Withstanding Voltage.

DESIGN AND CONSTRUCTION

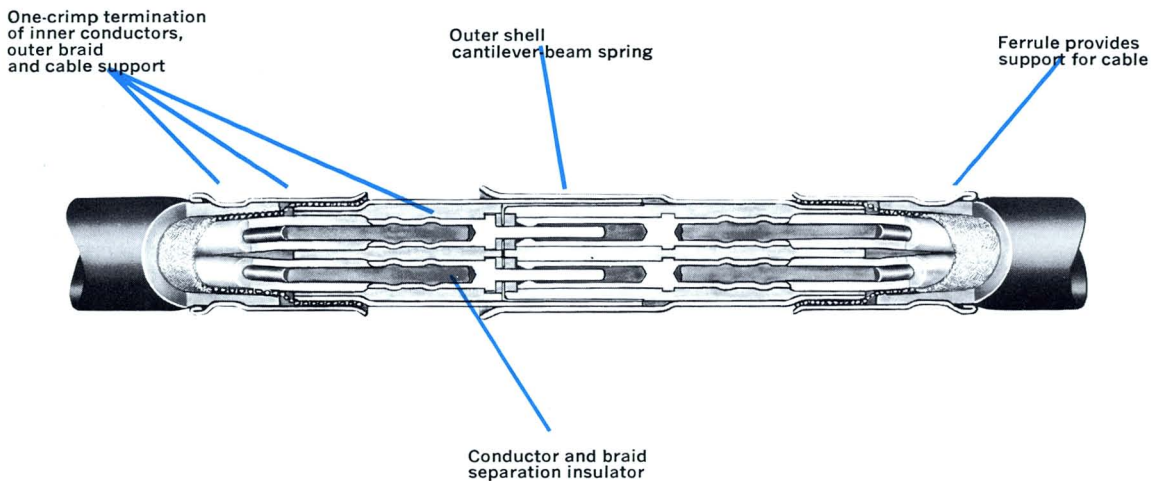
Temperature Range — Contacts perform satisfactorily and are capable of being mated and unmated within a temperature range of -55°C to $+85^{\circ}\text{C}$.

Finish and Plating — Contacting surfaces are smooth and are gold plated to a minimum thickness of .00003" over a minimum nickel subplating of .00003" in accordance with MIL-G-45204 for gold and QQ-N-290 for nickel.

TWIN STANDARD COAXICON CONTACT



The A-MP Standard Twin COAXICON Contact is designed for use in multiple connector housings. It is a non-constant impedance contact for twin conductor radio-frequency cables. As in other COAXICON products, the cable braid, the insulation, and the center conductors are crimped simultaneously with A-MP tooling. Structurally, the twin contacts include male or female inner conductor contacts separated from each other and from the outer shell by dielectric material. A cantilever spring in the male outer shell provides contact pressure between the shells when mated.



MATERIAL, FINISH AND TEST SPECIFICATIONS

The following specifications and standards form a part of this specification:
(See AMP Product Specification GPS-501-3)

Brass	QQ-B-613
Beryllium Copper	QQ-C-530, QQ-C-533
Copper	QQ-C-576
Bronze	ASTM-B-140
Polypropylene	Fed. Spec. L-P-394B Type I
Gold Plating	MIL-G-45204
Silver Plating	QQ-S-365
Nickel Plating	QQ-N-290
Test Methods for Electronic and Electrical Component Parts ..	MIL-STD-202

PERFORMANCE REQUIREMENTS

Insulation Resistance — Insulation resistance of mated contacts is at least 5,000 megohms between the inner contacts and between either inner contact and the shell.

Dielectric Withstanding Voltage — The mated contact assembly can withstand a voltage of 1,000 volts rms for a period of one minute when applied between adjacent inner contacts or between inner contacts and shell.

Cable Retention — Shell and inner pin contacts withstand a tensile pull of 50 pounds when used on RG-108/U cable and when the cable is pulled at a speed of one inch per minute.

Contact Resistance — With a test current of one ampere flowing in each center contact, the contact resistance does not exceed 2.0 milliohms.

Low-level Conductivity — With the contacts mated in a connector assembly, both inner and outer contacts will conduct current in either direction with a voltage of 10 microvolts DC applied across each contact pair.

Durability — After being subjected to 200 engagements and withdrawals at a rate not exceeding 10 cycles per minute, the contacts meet the requirements of the foregoing Contact Resistance and Low-level Conductivity tests.

Temperature Cycling — When tested in accordance with MIL-STD-202, Condition D, Method 102 for five cycles, the contacts show no evidence of physical damage.

Vibration — Mated connector assemblies vibrated in accordance with MIL-STD-202, Method 201, for a period of two hours in each of three mutually perpendicular planes do not exhibit any discontinuity greater than 10 microseconds nor show any evidence of physical damage.

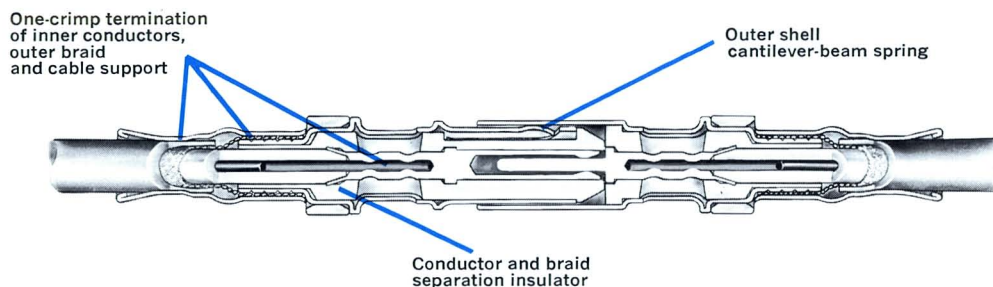
Shock — Mated connector assemblies subjected to eight 50-g deceleration shocks in each of three mutually perpendicular axes do not exhibit any discontinuity greater than 10 microseconds nor show any evidence of physical damage. After this test, the assemblies meet the requirements of aforementioned specifications for Insulation Resistance and Dielectric Withstanding Voltage.

Temperature Range — Contacts perform satisfactorily and are capable of being mated and unmated within a temperature range of -55°C to $+85^{\circ}\text{C}$.

MINIATURE COAXICON CONTACTS



The COAXICON Miniature Contact is a crimp, snap-in type, designed for high density, multiple circuit connector applications . . . it features the exclusive AMP one-crimp termination of inner conductor, outer braid and cable support. Construction consists of male and female center contacts separated from outer shells by dielectric material. A cantilever-beam engagement spring in the male shell provides contact pressure between outer shells. Special type retention spring provides firm seating into the connector block and acts as a shield over crimping ports. Wide range of cable sizes is accommodated by utilizing three sizes of outer shell termination ends and three sizes of inner contacts.



MATERIAL, FINISH AND TEST SPECIFICATIONS

The following specifications and standards form a part of this specification:

(See AMP Product Specification GPS-501-1)

Brass	QQ-B-613, QQ-B-626
Beryllium Copper	QQ-C-533, QQ-C-530
Copper	QQ-C-576
Bronze	ASTM-B-140
Polyethylene	LP-590, MIL-T-3808
Polypropylene	Fed. Spec. L-P-394B Type I
Nylon	MIL-M-20693A, Type I
Gold Plating	MIL-G-45204
Nickel Plating	QQ-N-290
Silver Plating	QQ-S-365
Test Method for Electronic and Electrical Component Parts	MIL-STD-202
VSWR Test Method	MIL-C-39012

MINIATURE COAXICON CONTACTS (Cont.)

PERFORMANCE REQUIREMENTS

Insulation Resistance — Insulation resistance of mated contacts is not less than 5,000 megohms between the inner contact and outer shell.

Dielectric Withstanding Voltage — The contacts can withstand a potential of 1,000 volts rms for a period of one minute.

Cable Retention — Shell and inner pin contacts withstand the tensile pull values shown below when the cable is pulled at a speed of one inch per minute.

RG-58 C/U	50 lbs.
RG-188 A/U	30 lbs.
RG-180 B/U	28 lbs.
RG-195 A/U	16 lbs.

Contact Resistance — With a test current of one ampere flowing in the center contacts, the contact resistance does not exceed 2.0 milliohms.

Low-level Conductivity — With the contacts mated in a connector assembly, both inner and outer contacts will conduct current in either direction with a voltage of 10 microvolts DC applied across each contact pair.

Durability — After being subjected to 500 engagements and withdrawals at a rate not exceeding 10 cycles per minute, the contacts meet the requirements of the foregoing Contact Resistance and Low-level Conductivity tests.

Voltage Standing Wave Ratio — When tested with a long length of RG-58, RG-178, and RG-188 coaxial cable, the VSWR does not exceed 1.3 to 1.0 at frequencies up to 1,000 Mhz.

Contact Engaging and Separating Force — The force required to engage contact assemblies does not exceed 1.5 pounds; the force required to separate contact assemblies does not exceed 1.0 pound.

Temperature Cycling — When tested in accordance with MIL-STD-202, Method 102, for five cycles, the contacts show no evidence of physical damage.

Vibration — Mated connector assemblies were vibrated in accordance with MIL-STD-202, Method 201, for a period of 2 hours in each of three mutually perpendicular planes. The contacts did not show any discontinuity greater than 10 microseconds, and no evidence of physical damage.

Shock — Mated connector assemblies were subjected to eight 50-g deceleration shocks in each of three mutually perpendicular planes in accordance with Method 202 of MIL-STD-202. The connector assemblies showed no discontinuity greater than 10 microseconds and no evidence of physical damage. After this test, the assemblies met the requirements of the aforementioned Insulation Resistance and Dielectric Withstanding Voltage specifications.

DESIGN AND CONSTRUCTION

Temperature Range — Contacts perform satisfactorily and are capable of being mated and unmated within a temperature range of -55°C to $+125^{\circ}\text{C}$.

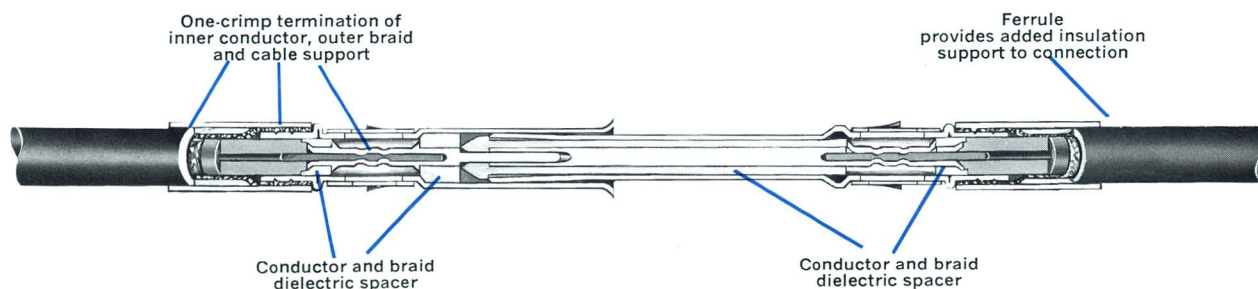
Finish and Plating — Contacting surfaces are smooth and are gold plated to a minimum thickness of .00003" over a minimum nickel subplating of .00003" in accordance with MIL-G-45204 for gold and QQ-N-290 for nickel.

SUBMINIATURE COAXICON CONTACTS



AMP's subminiature COAXICON contact is a crimp, snap-in contact, designed for high density, multiple circuit connector application. These subminiature coaxial contacts feature the exclusive one-crimp termination of inner conductor, outer braid and cable support.

The design includes complete contact assembly with built in retention spring and a separate ferrule. Ideal for mixing coaxial and pin and socket contacts in the same connector, these contacts are available in loose piece or in strip form for automatic machine application.



SUBMINIATURE COAXICON CONTACTS (Cont.)

MATERIAL, FINISH AND TEST SPECIFICATIONS

The following specifications and standards form a part of this specification:

(See AMP Product Specification GPS-501-8)

Brass	MIL-C-50
Bronze	ASTM-B-140
Beryllium Copper	QQ-C-533
Polypropylene	Fed. Spec. L-P-394B Type I
Cable, Radio Frequency, Coaxial	MIL-C-17C
Gold Plating	MIL-G-45204
Tin Plating	MIL-T-10727
Copper Plating	MIL-C-14550
Test Method for Electronic and Electrical Component Parts ..	MIL-STD-202

PERFORMANCE REQUIREMENTS

Insulation Resistance — Insulation resistance of mated contacts is not less than 5,000 megohms between the inner contact and outer shell.

Dielectric Withstanding Voltage — The contacts can withstand a potential of 600 volts rms for a period of one minute.

Cable Retention — Shell and inner pin contacts withstand the tensile pull values shown below when the cable is pulled at a speed of one inch per minute.

RG-174	25 lbs.
RG-196	13 lbs.

Contact Resistance — With a test current of one ampere flowing in the center contacts, the contact resistance does not exceed 9.0 milliohms.

Durability — After being subjected to 500 engagements and withdrawals at a rate not exceeding 10 cycles per minute, the contacts meet the requirements of the foregoing Contact Resistance test.

Voltage Standing Wave Ratio — When tested with a long length of RG-174 coaxial cable, the VSWR does not exceed 1.35 to 1.0 at frequencies up to 500 Mhz.

Contact Engaging and Separating Force — The force required to engage or separate or contact assembly shall not exceed 1.5 pounds.

Temperature Cycling — When tested in accordance with MIL-STD-202, Method 107, for five cycles, the contacts show no evidence of physical damage.

Vibration — Mated connector assemblies were vibrated in accordance with MIL-STD-202, Method 204. The contacts did not show any discontinuity greater than 1 microsecond, and no evidence of physical damage.

Shock — Mated connector assemblies were subjected to 50-g physical shocks in accordance with Method 205 of MIL-STD-202. The connector assemblies showed no discontinuity greater than 1 microsecond and no evidence of physical damage. After this test, the assemblies met the requirements of the aforementioned Insulation Resistance and Dielectric Withstanding Voltage specifications.

DESIGN AND CONSTRUCTION

Temperature Range — Contacts perform satisfactorily and are capable of being mated and unmated within a temperature range of -55°C to $+85^{\circ}\text{C}$.

Finish and Plating — Contacting surfaces are smooth and are gold plated to a minimum thickness of .00003" over a minimum copper subplating of .00003" in accordance with MIL-G-45204 for gold and MIL-C-14550 for copper.

MULTIPLE COAX

THE AMP MATCHED CONTACT-TOOL CONCEPT

It is axiomatic that "no connector is any better than the contacts it contains." It is also true (although frequently overlooked) that the method of terminating the coaxial cable to the contact is equally important. Unlike other methods, with their human and mechanical variants and limitations, AMP compression crimping produces a repeatable crimp for a given size cable and contact, that is precisely alike in appearance and performance.

Sound engineering principles underlie this method: the technique consists of matching the coaxial cable, the contact, and the manual or automatic crimping tool. The accurately calculated pressure applied results in an optimum crimp of the contact and the coaxial cable. The dies fully bottom on the contact before pressure can be released.

This method which performs three crimps simultaneously (contact, outer braid and insulation support) makes the termination safe from oxidants and contamination, as well as extremely resistant to shock, vibration and other critical environments. Moreover, it results in tensile strength in the termination which approaches that of the cable itself.

THE RELIABILITY FACTOR IN CRIMPED CONTACTS

Within the last decade or two, technological advancements in the area of electrical/electronic circuits have, more and more, placed the emphasis on reliability. To a great extent, this stress has been brought about by the increasing complexities of design and function in nearly all equipments.

The trend toward complexity has not only resulted from man's moving into uncharted areas of space and time, but also in the demands he has placed on the most mundane of electrical conveniences. With this as a basic and unalterable fact, the design engineer has had to devote more time and effort toward the pursuit of reliability. When the market place becomes the seat of judgment and continued product acceptance is entirely dependent on reliable performance, he cannot afford to do otherwise.

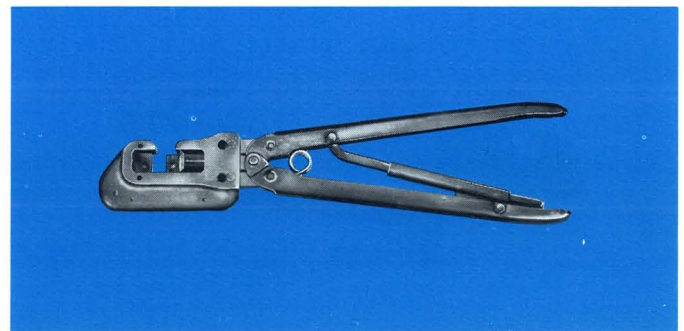
When we consider the increasing use of computers, data processing equipment, specialized radar installations, ground support equipment and the growing array of missiles and satellites which have been sent into the forward edge of space, it becomes apparent that the factor of reliability must receive primary consideration. It is in these areas that man conducts a constant search for what he has always considered unattainable — perfection. Up until now, such a term was always clouded by the gray areas of the abstract. But for the design engineer who is responsible, in any way, for a computer to juggle vital statistics or come up with answers to compound problems or the swift rise of a "bird" from the launching pad — the idea of reliability being un-

attainable cannot be entertained. Investments are too great. Prestige is too important. Success is imperative.

Under such conditions the seemingly insignificant coaxial contact takes on a far more important role than its original assignment. It must do more than work, for now it must rise to match the electrical integrity of the complex system it serves. Further, taking into account vital economic factors, it imposes on the manufacturers the responsibility of providing terminations of unsurpassed reliability at lowest practical cost. Such results can be achieved only when the principles of design are based on a sound understanding of the end task it must serve.

ADVANTAGES OF AMP'S COMPRESSION CRIMPING METHOD AS APPLIED TO CONNECTORS

- This method eliminates solder and other agents which are not stable at accelerated temperatures and therefore have limited reliability.
- Repeatability of reliable terminations.
- No heat is employed. This bypasses the danger of insulation burns as well as the disadvantages of other variables and eliminates the need for special high temperature insulated cable.
- The A-MP tooling produces an optimum crimp or joining of the metals.
- Eliminates need for special operator training.
- Crimped contacts have great tensile strength — almost equal to that of the conductor itself.
- Insulation support barrel supports or grips the wire, and prevents vibration damage.
- A-MP automated crimping tools provide the fastest method of terminating a conductor to a contact. This results not only in high production, but also in lower applied costs. Automated tools are available to strip the cable and apply formed contacts from reels.

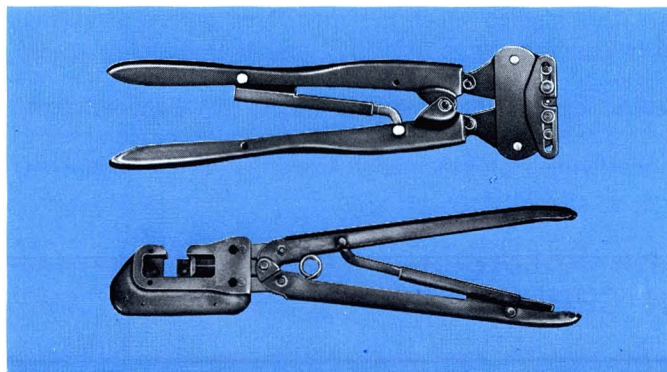


TOOLING INFORMATION

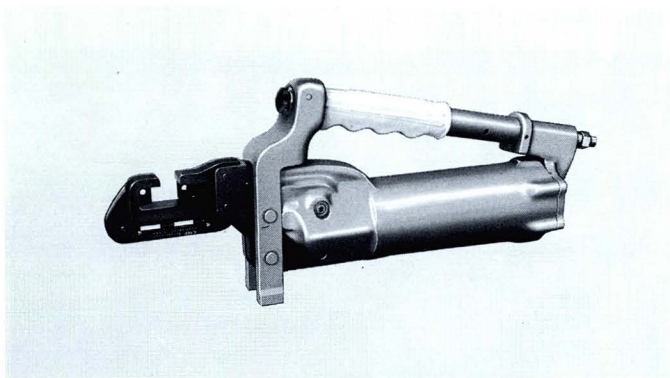
Tools ranging from hand tools to fully automatic crimping and stripping machines are available to meet every production need. Depending on the type of work and scope of operations, one or more of the following are recommended:

PRECISION ENGINEERED DIES

The dies that make the AMP compression termination technique possible are precision-engineered from the finest hard-metal alloys available. The crimping areas of the dies and the controlled pressure exerted during the crimping cycle are calculated to produce the optimum crimped termination. AMP dies produce crimps that are identical in appearance and performance through millions of terminations. The pressure needed for such precise results is controlled by a ratchet device on the hand-crimping tool or a corresponding precalibration in the crimping jaws of AMP automated crimping machines. Crimp know-how is a vital element in selecting a supplier of crimp-type contacts. The superiority of the AMP matched contact-tool concept has been validated in thousands of diversified manufacturing operations for over 25 years.



CERTI-CRIMP* Hand Tool — Here are AMP's basic hand tools. A ratchet keeps the tool pressure-locked until the jaws are brought together under the precise pressure needed to form a perfect crimp. The pre-calibrated dies simultaneously crimp contact, outer braid and insulation support.



Pneumatic Hand Tool — This air-powered hand tool provides the flexibility and portability of a manually operated hand tool with increased production. It offers the same quality control features, including the CERTI-CRIMP ratchet, to produce precision crimped terminations at speeds limited only by operator skill.

CONNECTOR HOUSING MATERIALS

A-MP COAXICON connectors consist of preassembled snap-in COAXICON contacts in plastic housings. The die-cast aluminum shells (when required) come in a variety of finishes including clear cadmium plate and olive drab cadmium plate.

The plastic inserts are available in diallyl phthalate per MIL-M-14F, Type SDG-F or phenolic per MIL-M-14F, type CFG.



PHENOLIC resins are formed through the reaction of phenol and formaldehyde. While lower in cost than many other thermosets, they are excellently suited to many uses. As a group, phenolic resins have good electrical characteristics. Cellulose filled phenolic is used extensively for COAXICON connector housings. They form strong, rigid, and dimensionally stable housings. In addition, they are poor conductors of heat and, even under extreme conditions, are unaffected by oils, greases, alcohol, and a wide variety of solvents.

DIALLYL PHTHALATE reinforced by glass fiber conforms to the military specifications for connectors. It has all the mechanical and electrical properties needed to provide maximum protection for components and/or resistance to most hostile environments. Among its numerous attributes, glass-filled diallyl phthalate has extremely high arc resistance and, conversely, very low dielectric loss. Excellent mechanical properties constitute another characteristic that makes it ideal for use in COAXICON connector housings. This material maintains all these properties under high temperature and humidity conditions. In addition, it has extremely low post-mold shrinkage which makes it first choice for close tolerance applications. Chemically, diallyl phthalate is unaffected by most acids and alkalis.

PROCEDURE FOR SELECTING A CONNECTOR

The A-MP COAXICON line of coaxial connectors is primarily composed of plastic, rectangular housings or inserts with metal shells into which are inserted male and female contact members. Beyond the need for fastening the pin and socket housings together, the choice of accessory hardware is optional. The succeeding pages explain the variety of selection of the primary units (housings and contacts), as well as the availability of the optional hardware (shields, strain relief clamps, guide pins, etc.).

Selection of components for a properly functioning connector should be made in the following order:

1. CONTACTS

As mentioned previously in this catalog, there are four contact types available — standard, twin standard, miniature, and subminiature. Tabular data for these contacts is categorized by contact and cable type.

2. HOUSINGS

The housings are categorized by number of contact positions and by plastic material (phenolic or diallyl phthalate). The tabular data for the housings immediately follows the tabular data for the contacts. The socket housing is normally used as the panel mounted half with the contacts flush with interface of housing. The pin housing always contains the protruding pin contacts.

3. FASTENING HARDWARE

In all applications, whether panel or free hanging, it is recommended that the COAXICON connector be adequately fastened together. Fastening devices such as turnable and fixed jack screws are available for this use. Consult the hardware tabular data section under the appropriate number of positions; the fastening devices vary with the size of the housing.

4. ACCESSORY HARDWARE

The items explained briefly below are categorized in the tabular data.

SHIELDS — available in aluminum with finishes of anodized, iridite or cadmium plate, and in cadmium plated steel. Standard and long versions; the long version provides pin protection. All have integral cable clamps to aid in grouping leads and resisting vibration.

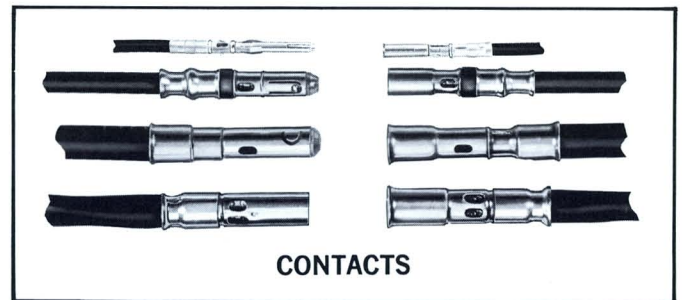
CENTER AND CORNER GUIDE ASSEMBLIES — male and female guide devices which aid in correct mating of connector halves (cadmium plated brass, stainless steel and cadmium plated steel.)

JACKSCREWS (FIXED AND TURNABLE) — double-lead thread screw arrangement which holds connector halves firmly together. Also aids in guiding connector halves to proper mating.

PIN HOOD — protective covering (iridite aluminum, anodized aluminum or cadmium plated steel) for exposed pin ends.

STRAIN RELIEF CLAMP — basic lead-grouping device (cadmium plated steel) which aids in resisting cable strain.

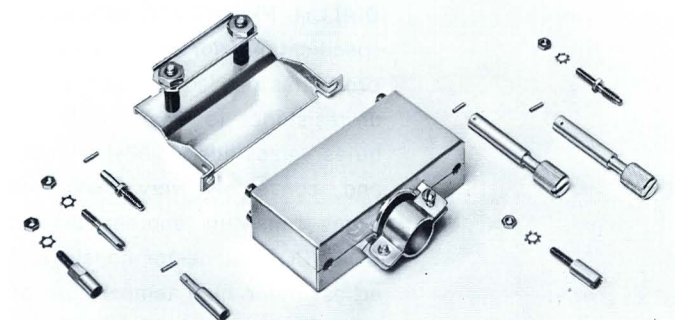
LOCKING SPRING (STANDARD AND CATCH TYPES) — spring action locking device which automatically locks connector halves in proper mating position.



CONTACTS

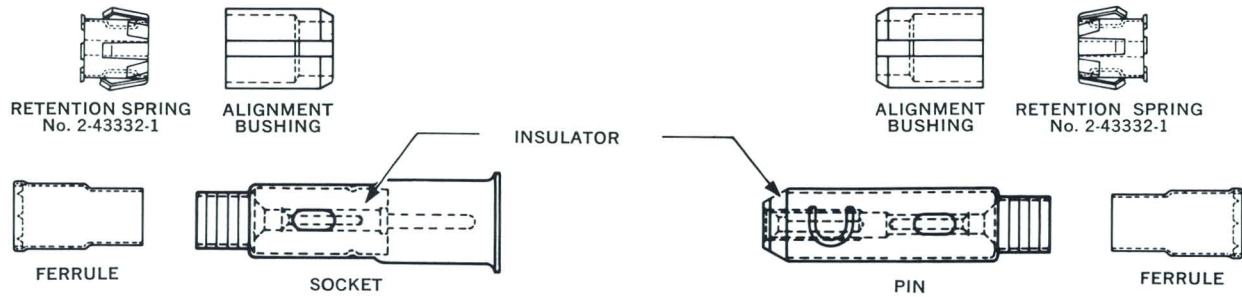


HOUSINGS



ACCESSORY HARDWARE

STANDARD CONTACTS



NOTE: COAXICON Standard Contacts utilize color coding for identification during assembly. When used with RG/U cable, the inner insulator and the alignment bushing match the color of the crimping tool handle.

SELECTION CHART FOR RG/U WIRE

RG/U CABLE NO.	SOCKET NO. & INSULATOR COLOR	PIN NO. & INSULATOR COLOR	FERRULE NO.	ALIGNMENT BUSHING NO. & COLOR CODE	HAND CRIMPING TOOL NO.	TOOL HANDLE COLOR CODE	DIE INSERT NO. FOR TOOLS HAND-69710 PNEU.-69365† & 69365-2
55, 55A, 55B, 141, 142, 223	329016 Blue	329017 Blue	330478	329052 Blue	45740-4	Blue & Orange	69220-4
141A, 142A, 142B	2-329016-4 Orange	2-329017-4 Orange	330478	2-329052-2 Orange	45740-4	Blue & Orange	69220-4
58, 58A, 58B, 58C	329016 Blue	329017 Blue	328663	329052 Blue	45740-4	Blue & Orange	69220-4
59, 59A, 59B, 62, 62A, 62B, 124, 140, 210	329004 Yellow	329005 Yellow	329006	329050 Yellow	45634-2	Yellow	69221-1
180, 180A, 195, 21-597	329013 Red	329014 Red	328664	329051 Red	45639-4	Red	69222-4
Brand Rex T-209-A	2-329932-2** Green	2-329931-2** Green	328665	2-329051-2 Green	45639-4	Red	69222-4

SELECTION CHART FOR TWISTED PAIRS & BELDEN CABLE

WIRE NO.	SOCKET NO. & INSULATOR COLOR	PIN NO. & INSULATOR COLOR	FERRULE NO.	ALIGNMENT BUSHING NO. & COLOR CODE	HAND CRIMPING TOOL NO.	TOOL HANDLE COLOR CODE	DIE INSERT NO. FOR TOOLS HAND-69710 PNEU.-69365† & 69365-2
No. 24 Solid or Str. Copper No. 22 Solid Copper	329069* White	329068* White	329029	329051 Red	45639-4	Red	69222-4
No. 22 Stranded Copper No. 20 Solid Copper	329932** White	329931** White	329029	329051 Red	45639-4	Red	69222-4
Belden 8411	329046 White	329045 White	328664	329051 Red	45639-4	Red	69222-4

NOTE: Extraction Tool No. 305141-1 Insertion Tool No. 305142

*These Assemblies have a Red Metal Bushing inside the Support Sleeve.

**These Assemblies have a Blue Metal Bushing inside the Support Sleeve.

†Requires manual take up Attachment No. 69689

TWIN STANDARD CONTACTS



CABLE NO.	SOCKET NO.	PIN NO.	FERRULE NO.	INSULATOR COLOR CODE	HAND CRIMPING TOOL NO.	DIE INSERT NO. FOR TOOLS HAND-69710 PNEU.-69365† & 69365-2
BELDEN 8737 (Spiral Wrapped Shield)	329010	329009	329041	Natural (White)	45707-2	69231-2
RG 108/U & RG 108 A/U (Ctr. Cond. 7/.0126) BELDEN 8762, 8759	2-329010-1	2-329009-1	329041	Yellow	45707-2	69231-2
2-3932 (Microdot) 2-3934 (Microdot)	329055	329054	329056	Red	45707-2	69231-2
BELDEN 8451, 8641 & 8761	329010	329009	329056	Natural (White)	45707-4	69494-1

†Requires manual take up Attachment No. 69689

TWIN STANDARD CONTACTS (Continued)

ALIGNMENT BUSHING & RETENTION DEVICE SELECTION CHART

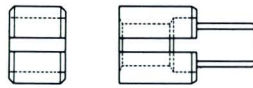
(2 each required)

RETENTION SPRING



No. 329042

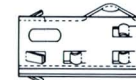
ALIGNMENT BUSHINGS



No. 329053

No. 330576

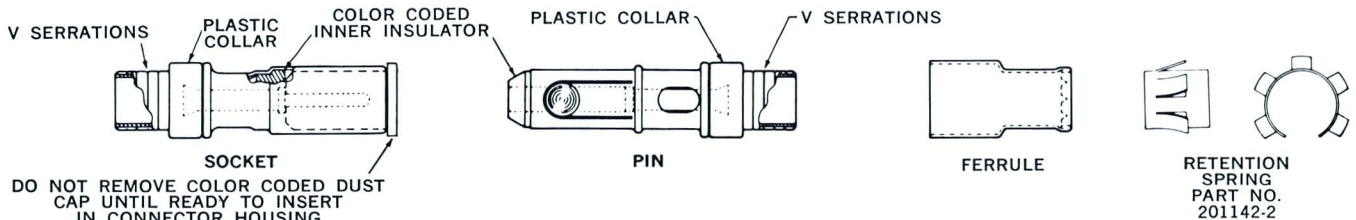
RETENTION SPRING



No. 51413-1
No. 51413-3

COAXICON MULTIPLE CONNECTOR CONFIGURATION	RETENTION SPRING NO.	ALIGNMENT BUSHING NO. & COLOR	USED WITH		EXTRACTION TOOL NO.
			SOCKET NO.	PIN NO.	
12 Position	329042	329053 Natural (White) 330576 Yellow	329010 2-329010-1 329055 329010	329009 2-329009-1 329054 329009	305141-2
10 Position & 8 Position "W" Series	51413-3	—	329010 2-329010-1 329055 329010	329009 2-329009-1 329054 329009	305141-4
10 Position "T"	51413-1	—	329010 2-329010-1 329055 329010	—	305141-4

MINIATURE CONTACTS



SELECTION CHART FOR COAXIAL CABLE*

RG/U CABLE NO.	.000030 GOLD PLATED CONTACTS			.000100 GOLD PLATED CONTACTS			FERRULE NO. ***	HAND CRIMPING TOOL NO.	DIE INSERT NO. FOR TOOLS—HAND-69710 PNEU.-69365† & 69365-2	TOOL HANDLE, DIE INSERT AND PLASTIC COLLAR COLOR CODE**
	SOCKET NO.	PIN NO.	INNER INS. & DUST CAP COLOR†	SOCKET NO.	PIN NO.	INNER INS. & DUST CAP COLOR†				
Δ71, 71A, 71B	201098-1	201097-1	Green	201098-3	201097-3	Yellow	330016	69613	69675	Violet & Yellow
Δ59, 59A, 59B, 62, 62A, 62B, 124, 140, 210	201098-1	201097-1	Green	201098-3	201097-3	Yellow	329006	45634-3	69675-1	Yellow
55, 55A, 55B, 141, 142, 223	201146-4	201145-4	Orange	201146-9	201145-9	Red	330478	69248-4	69315-4	Blue & Orange
58, 58A, 58B, 58C	201146-4	201145-4	Orange	201146-9	201145-9	Red	328663	45740-2	69220-2	Blue
174, 179A, 187, 21-598	201144-1	201143-1	White	201144-6	201143-6	Blue	328666	45638-2	69227-2	White
180, 180A, 195, 21-597	201146-2	201145-2	White	1-201146-0	1-201145-0	Blue	328664	45639-2	69222-2	Red
161	201144-4	201143-4	White	201144-8	201143-8	Blue	328666	69147-2	69230-1	Grey
178, 178A, 196	201512-1	201511-1	White	201512-3	201511-3	Blue	328667	69186-2	69373	Brown
188	201144-5	201143-5	Green	201144-7	201143-7	Yellow	328666	45638-2	69227-2	White
141A, 142A, 142B	1-201146-3	1-201145-3	Brown	—	—	—	330478	69248-4	69315-4	Blue & Orange
122	201146-1	201145-1	Orange	1-201146-5	1-201145-5	Red	328664	45639-2	69222-2	Red

SELECTION CHART FOR TWISTED PAIRS*

WIRE SIZE AND TYPE	INSUL. DIAMETER (TWO WIRES COMBINED)	.000030 GOLD PLATED CONTACTS			.000100 GOLD PLATED CONTACTS			FERRULE NO. ***	HAND CRIMPING TOOL NO.	DIE INSERT NO. FOR TOOLS—HAND-69710 PNEU.-69365† & 69365-2	TOOL HANDLE, DIE INSERT AND PLASTIC COLLAR COLOR CODE**
		SOCKET NO.	PIN NO.	INNER INSULATOR & DUST CAP COLOR†	SOCKET NO.	PIN NO.	INNER INSULATOR & DUST CAP COLOR†				
No. 22 or No. 24 Stranded	.115 Max.	201144-5	201143-5	Green	201144-7	201143-7	Yellow	328666	45638-3	69672	Grey & White
No. 22 or No. 24 Solid or Stranded	.160 Max.	50080-1	50079-1	Green	—	—	—	329029	45639-2	69222-2	Red
No. 26 or No. 28 Solid	.080 Max.	201512-1	201511-1	White	201512-3	201511-3	Blue	328667	69186-2	69373	Brown

MINIATURE CONTACTS (Continued)

SELECTION CHART FOR VARIOUS MANUFACTURERS' CABLES*

CENTER COND. AWG WIRE	MAX. DIELECT O.D.	CABLE O.D.	BRAID	.000030 GOLD PLATED CONTACTS			.000100 GOLD PLATED CONTACTS			FERRULE NO.	HAND CRIMPING TOOL NO.	DIE INSERT NO. FOR TOOLS— HAND-69710 PNEU.-69365† & 69365-2	TOOL HANDLE, DIE INSERT AND PLASTIC COLLAR COLOR CODE**
				SOCKET NO.	PIN NO.	INNER INSULATOR & DUST CAP COLOR†	SOCKET NO.	PIN NO.	INNER INSULATOR & DUST CAP COLOR†				
Brand Rex T209A #29Awg.	.076	.112-.122	Single	201146-6	201145-6	Natural (White)	1-201146-6	1-201145-6	Blue	330587	69360-2	69440	Orange
Brand Rex T-5788A #26Awg.	.106	.160	Single	201146-2	201145-2	White	1-201146-0	1-201145-0	Blue	328664	45639-2	69222-2	Red
Raychem 0030D1314 Army Ord. 11207177	.129	.122-.137	Single	201146-6	201145-6	Natural (White)	1-201146-6	1-201145-6	Blue	330587	69360-2	69440	Orange
32-26	.129	.187-.199	Single or Double	1-201146-1	1-201145-1	Natural (White)	—	—	—	328663	45740-2	69220-2	Blue
22-20	.129	.122-.137	Single	201146-7	201145-7	Orange	—	—	—	330587	69360-2	69440	Orange

SELECTION CHART FOR SHIELDED WIRE*

SHIELDED WIRE NO.	.000030 GOLD PLATED CONTACTS			.000100 GOLD PLATED CONTACTS			FERRULE NO.	HAND CRIMPING TOOL NO.	DIE INSERT NO. FOR TOOLS— HAND-69710 PNEU.-69365† & 69365-2	TOOL HANDLE, DIE INSERT AND PLASTIC COLLAR COLOR CODE**
	SOCKET NO.	PIN NO.	INNER INSULATOR & DUST CAP COLOR†	SOCKET NO.	PIN NO.	INNER INSULATOR & DUST CAP COLOR†				
No. 26, NAS-702, Class A & C No. 26, MIL-W-16878, Types E & EE No. 24, NAS-702, Class A & C No. 24, MIL-W-16878, Types E & EE No. 22, NAS-702, Class C No. 22, MIL-W-16878, Type E No. 22, MIL-C-7078 A, Type I No. 1 Dielectric, .068 O.D.	201144-2	201143-2	Green	—	—	—	328666	69147-2	69230-1	Grey
No. 26, NAS-702, Class B No. 24, NAS-702, Class B No. 22, MIL-W-16878, Type EE	201146-3	201145-3	Green	—	—	—	328665	45639-2	69222-2	Red
No. 22, NAS-702, Class A No. 22, MIL-C-7078 A, Type II	201144-3	201143-3	Orange	201144-9	201143-9	Red	328666	45638-2	69227-2	White
No. 22, MIL-C-7078 A, Type I & II No. 2 Dielectric, .075 O.D. No. 3 Dielectric, .085 O.D.	201146-1	201145-1	Orange	—	—	—	328665	45639-2	69222-2	Red
No. 22, NAS-702, Class B	201146-4	201145-4	Orange	201146-9	201145-9	Red	328663	45740-2	69220-2	Blue

△These contacts are for use in the 22 position Series "D" and 4 position "G" Series module only.

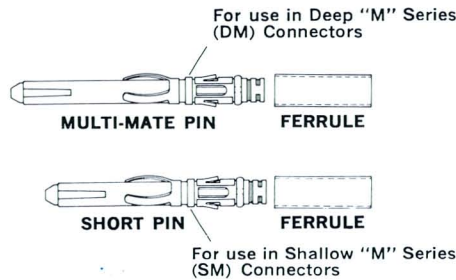
*Wire other than that listed may be used. Send sample wire and/or specifications to AMP for engineering recommendation.

**Match Plastic Collar and Tool Colors for application to cable Inner Insulator Color Codes Wire Barrel of Center Contact, not tool.

†The insulator and dust cap color code may be used with collar color code to readily identify any contacts that have been accidentally mixed. Dust cap color matches insulator.

‡Requires manual take-up attachment No. 69689. NOTE: Extraction Tool No. 305183-8.

SUBMINIATURE COAXICON CONTACTS



CABLE SIZE	CONTACT FORM	MULTI-MATE PIN NUMBER		SHORT PIN NUMBER		SOCKET NUMBER		FERRULE NUMBER	HAND CRIMPING TOOL NUMBER	DIE INSERT NOS. FOR HAND 69710, PNEU. 69365† & 69365-2 TOOLS	PRESS & APPLICATOR
		.000030 GOLD PLATED CONTACTS	.000050 GOLD PLATED CONTACTS	.000030 GOLD PLATED CONTACTS	.000050 GOLD PLATED CONTACTS	.000030 GOLD PLATED CONTACTS	.000050 GOLD PLATED CONTACTS				
RG-178, 196	Strip	226533-2	226533-5	51562-2*	51562-5*	51564-2*	51564-5*	1-332057-0	—	—	220014-2
	Loose Piece	226537-2	226537-5	51563-2*	51563-5*	51565-2*	51565-5*		69656-2, Mod. E	69690-2	—
RG-196 Double Braid	Strip	226533-2	226533-5	51562-2*	51562-5*	51564-2*	51564-5*	225088-1	—	—	—
	Loose Piece	226537-2	226537-5	51563-2*	51563-5*	51565-2*	51565-5*		69656-9, Mod. A	—	—
RG-174, 188, 316	Strip	226533-1	226533-4	51562-1	51562-4	51564-1	51564-4	1-332056-0	—	—	220014-1
	Loose Piece	226537-1	226537-4	51563-1	51563-4	51565-1	51565-4		69656, Mod. E	69690, Mod. D	—
RG-174 Double Braid	Strip	226533-1	226533-4	51562-1	51562-4	51564-1	51564-4	225088-3	—	—	—
	Loose Piece	226537-1	226537-4	51563-1	51563-4	51565-1	51565-4		69656-7, Mod. E	—	—
RG-179, 187	Strip	226533-1	226533-4	51562-1	51562-4	51564-1	51564-4	1-332056-0	—	—	220014-3
	Loose Piece	226537-1	226537-4	51563-1	51563-4	51565-1	51565-4		69656-1, Mod. E	69690-1, Mod. D	—
RG-187 Double Braid	Strip	226533-1	226533-4	51562-1	51562-4	51564-1	51564-4	225088-1	—	—	—
	Loose Piece	226537-1	226537-4	51563-1	51563-4	51565-1	51565-4		69656-8, Mod. E	—	—
RG-161	Strip	226533-1	226533-4	51562-1	51562-4	51564-1	51564-4	1-332056-0	—	—	—
	Loose Piece	226537-1	226537-4	51563-1	51563-4	51565-1	51565-4		69656-5, Mod. D	—	—
26 AWG Shielded, .075 Max. O.D.	Strip	226533-1	226533-4	51562-1	51562-4	51564-1	51564-4	1-332057-0	—	—	220014-4
	Loose Piece	226537-1	226537-4	51563-1	51563-4	51565-1	51565-4		69656-3, Mod. E	69690, Mod. D	—
26 AWG Tw. Pr., Solid or Stranded (7 Str.), .0063 Dia.	Loose Piece	226537-3	226537-6	51563-3	51563-6	51565-3	51565-6	1-332057-0	69656, Mod. E	69690, Mod. D	—
	Loose Piece	226537-3	226537-6	51563-3	51563-6	51565-3	51565-6	1-332057-0	69656, Mod. E	69690, Mod. D	—
28 AWG Tw. Pr., Solid	Loose Piece	226537-3	226537-6	51563-3	51563-6	51565-3	51565-6	1-332057-0	69656, Mod. E	69690, Mod. D	—
	Loose Piece	226537-3	226537-6	51563-3	51563-6	51565-3	51565-6	1-332057-0	69656-1, Mod. E or 69656-2, Mod. E	69690-1, Mod. D or 69690-2	—
30 AWG Tw. Pr., Solid	Loose Piece	226537-3	226537-6	51563-3	51563-6	51565-3	51565-6	1-332057-0	69656-2, Mod. E	69690-2	—

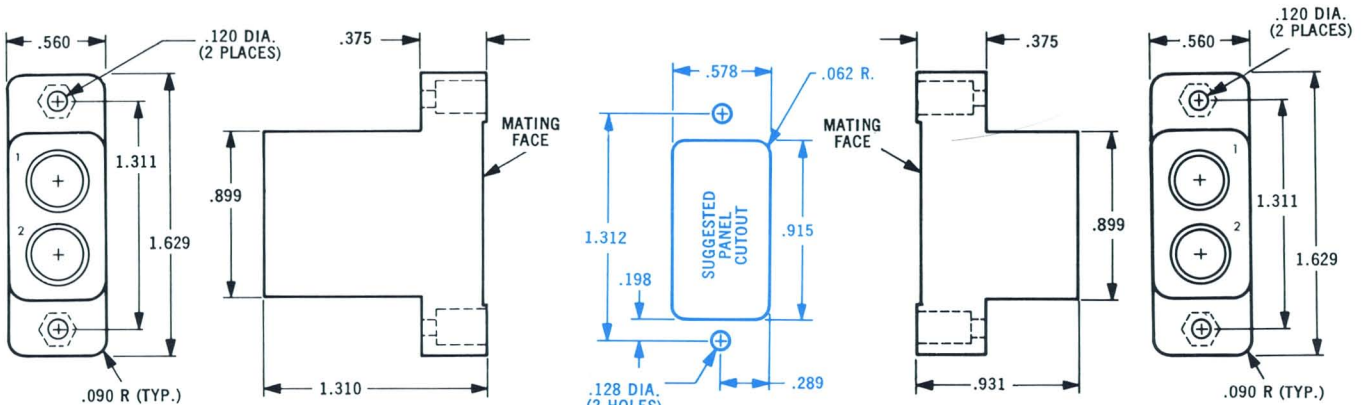
*These contacts have insulating liner inside support sleeve.
 †Requires Manual Take-Up Attachment No. 69689.

Extraction Tool—Part No. 305183

STANDARD HOUSINGS SPECIFICATIONS

Unless otherwise noted all housing materials are:
 Black Phenolic — MIL-M-14F, Type CFG Diallyl Phthalate — MIL-M-14F, Type SDG-F

2 POSITION STANDARD SERIES "M" TYPE

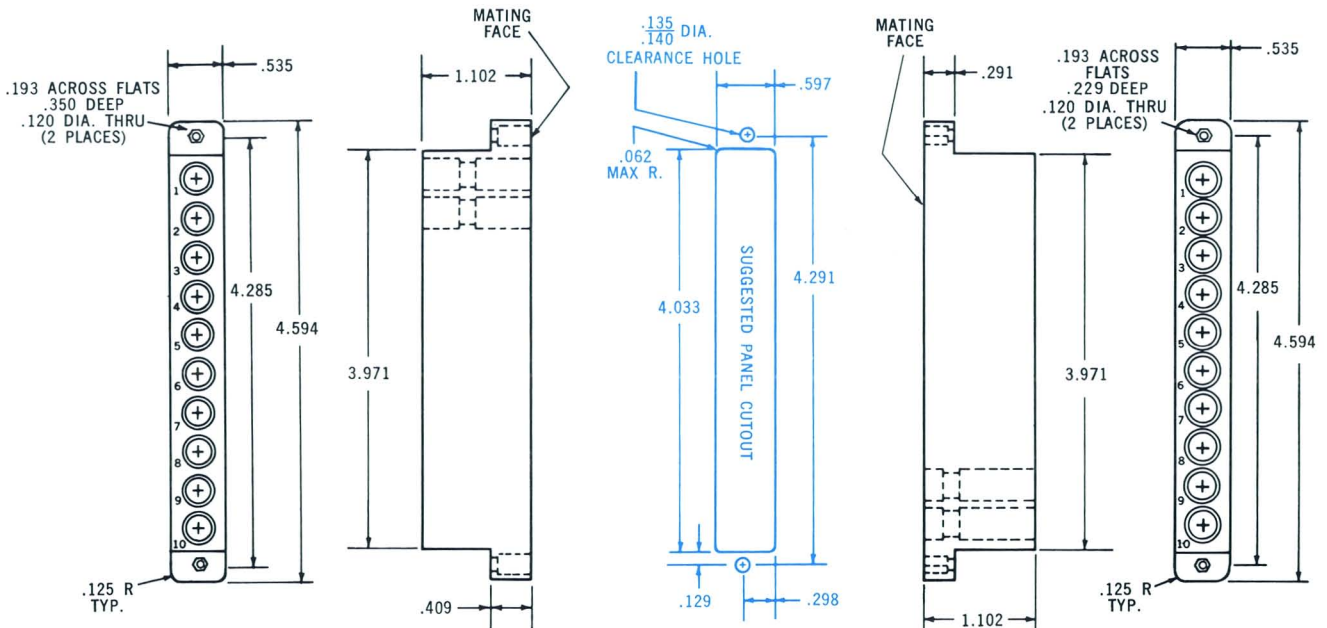


SOCKET HOUSING
 Part No. 50713

MATERIAL — Phenolic, Black

PIN HOUSING
 Part No. 50712

10 POSITION STANDARD

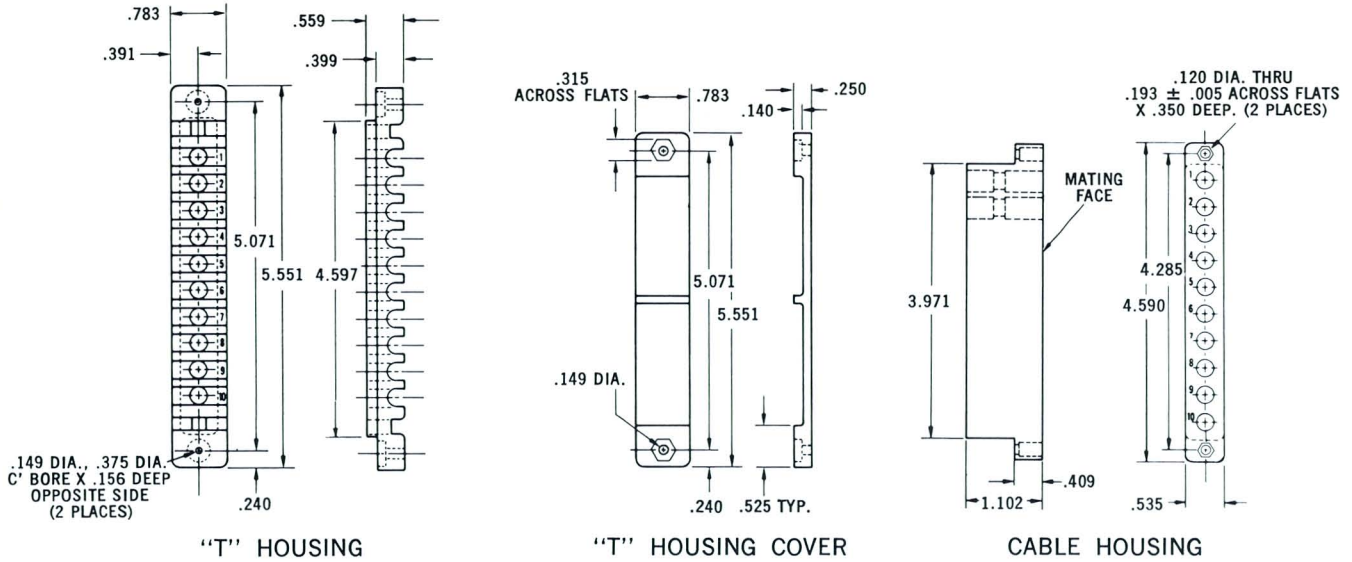


SOCKET HOUSING

PIN HOUSING

MATERIAL	PART NUMBERS	
	SOCKET HOUSING	PIN HOUSING
Phenolic, Black	329342	330064
Diallyl Phthalate, Blue	2-329342-1	2-330064-1

10 POSITION STANDARD "T"

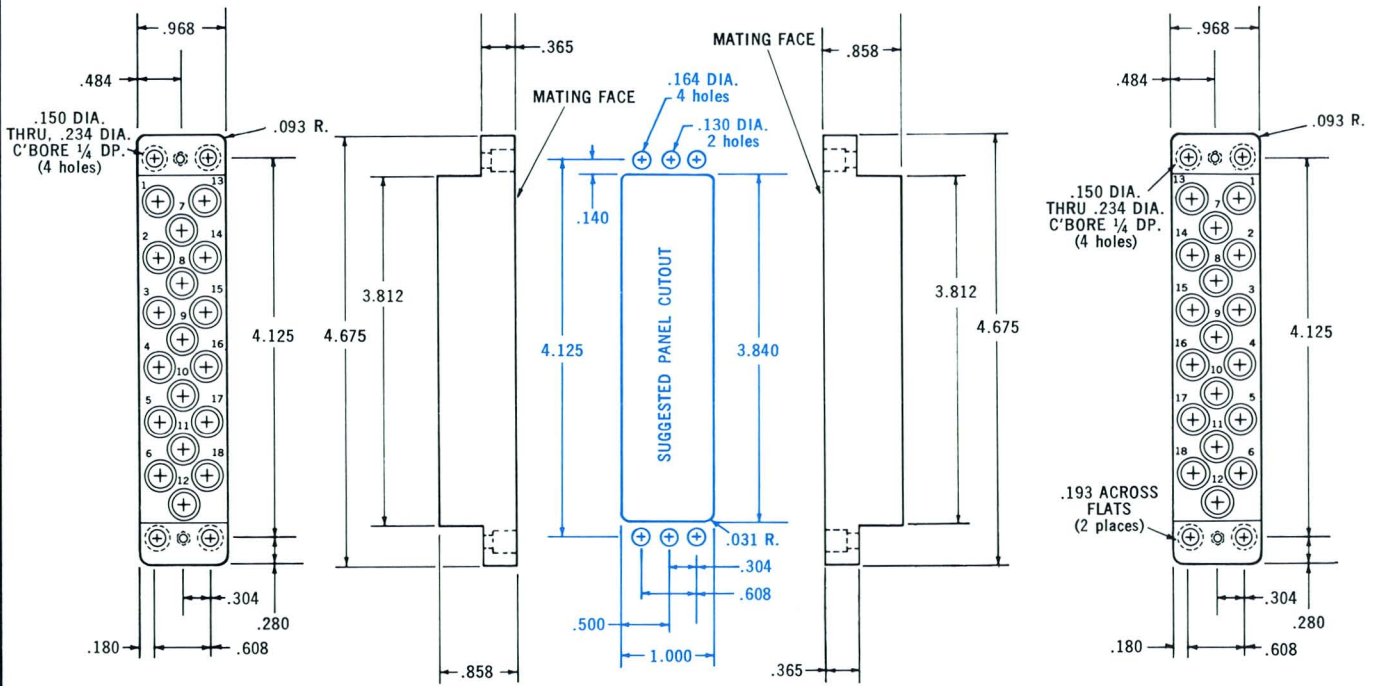


HOUSING ASSEMBLIES

PART NUMBER	DESCRIPTION	MATERIAL	NUMBER REQUIRED
329340	"T" Housing*	Phenolic Black	1
329343	"T" Housing* Cover	Phenolic Black	1
329342	Cable Housing*	Phenolic Black	3
331376	"T" Contacts	†Shell - Brass †Contacts - Brass Dielectric-Polypropylene	10

*These items available as one assembly Part No. 329350.
†Plating—.00003 gold over .00005 nickel.

18 POSITION STANDARD

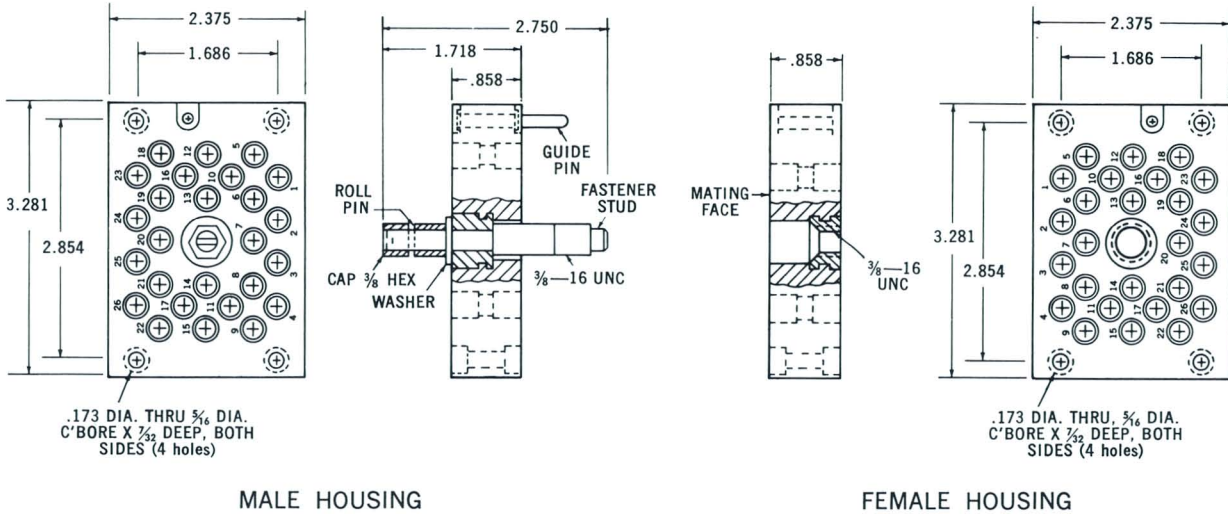


PIN HOUSING
Part No. 201154-2

MATERIAL — Phenolic, Black

SOCKET HOUSING
Part No. 201155-2

26 POSITION STANDARD

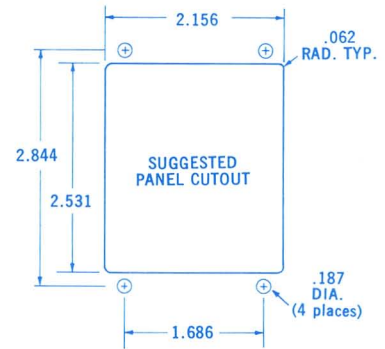


MALE HOUSING

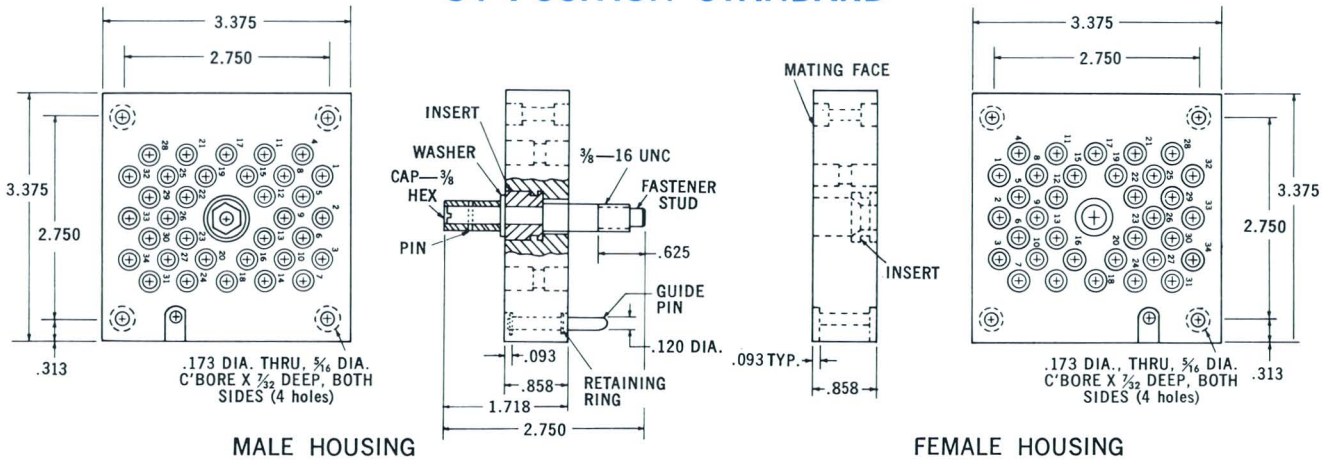
FEMALE HOUSING

HOUSING ASSEMBLIES

HOUSING PART NUMBER	DESCRIPTION	FASTENING DEVICE (INCLUDED)	HOUSING MATERIAL
201158-1	Female Housing	Insert, Stainless St. Passivated	Phenolic, Black
201159-1	Male Housing	Cd. Pl. Steel (QQ-P-416)	
201159-2		Cd. Pl. Steel (QQ-P-416) Olive Drab (MIL-C-16232)	



34 POSITION STANDARD

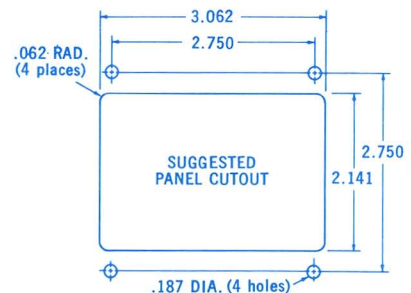


MALE HOUSING

FEMALE HOUSING

HOUSING ASSEMBLIES

HOUSING PART NUMBER	DESCRIPTION	FASTENING DEVICE (INCLUDED)	HOUSING MATERIAL
201140-1	Female Housing	Insert, Stainless St. Passivated	Phenolic, Black
201141-1	Male Housing	Cd. Pl. Steel (QQ-P-416)	
201141-2		Cd. Pl. Steel (QQ-P-416) Olive Drab (MIL-M-14)	



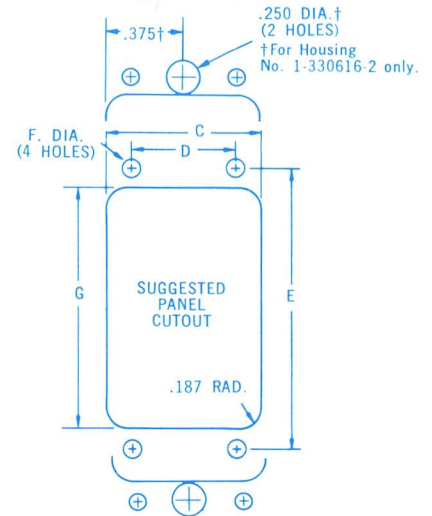
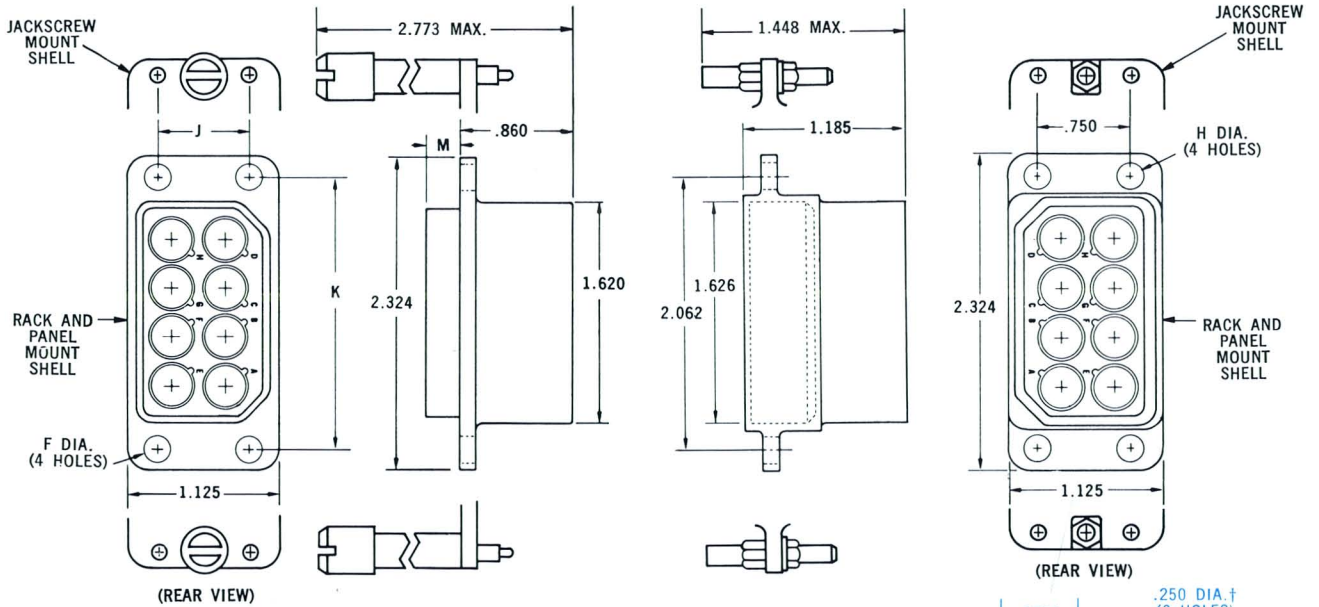
TWIN STANDARD HOUSING SPECIFICATIONS

Unless otherwise noted all housing materials are:
 Black Phenolic — MIL-M-14F, Type CFG Diallyl Phthalate — MIL-M-14F, Type SDG-F

8 POSITION TWIN STANDARD SERIES "W" TYPE

PLUG HOUSING ASSEMBLY

RECEPTACLE HOUSING ASSEMBLY



PLUG HOUSING ASSEMBLIES (Use socket contacts)

Shell Material: Die Cast Aluminum. Insert Material: Diallyl Phthalate

SHELL STYLE	SHELL FINISH	DIMENSIONS				PART NUMBER
		H	J	K	M	
Rack & Panel Mount	Olive Drab Cad. Plate	.203	.684	2.025	.296	330615
	Cad. Plate	.125	.750	2.062	.296	1-330615-0
Jackscrew Mount	Cad. Plate	.125	.750	2.062	.296	1-330615-3*

RECEPTACLE HOUSING ASSEMBLIES (Use pin contacts)

Shell Material: Die Cast Aluminum. Insert Material: Diallyl Phthalate

SHELL STYLE	SHELL FINISH	DIMENSIONS		PART NUMBER
		H	M	
Rack & Panel Mount	Olive Drab Cad. Plate	.140	.296	330616
	Cad. Plate	.125	.296	1-330616-0
Jackscrew Mount	Cad. Plate	.125	.296	1-330616-2**

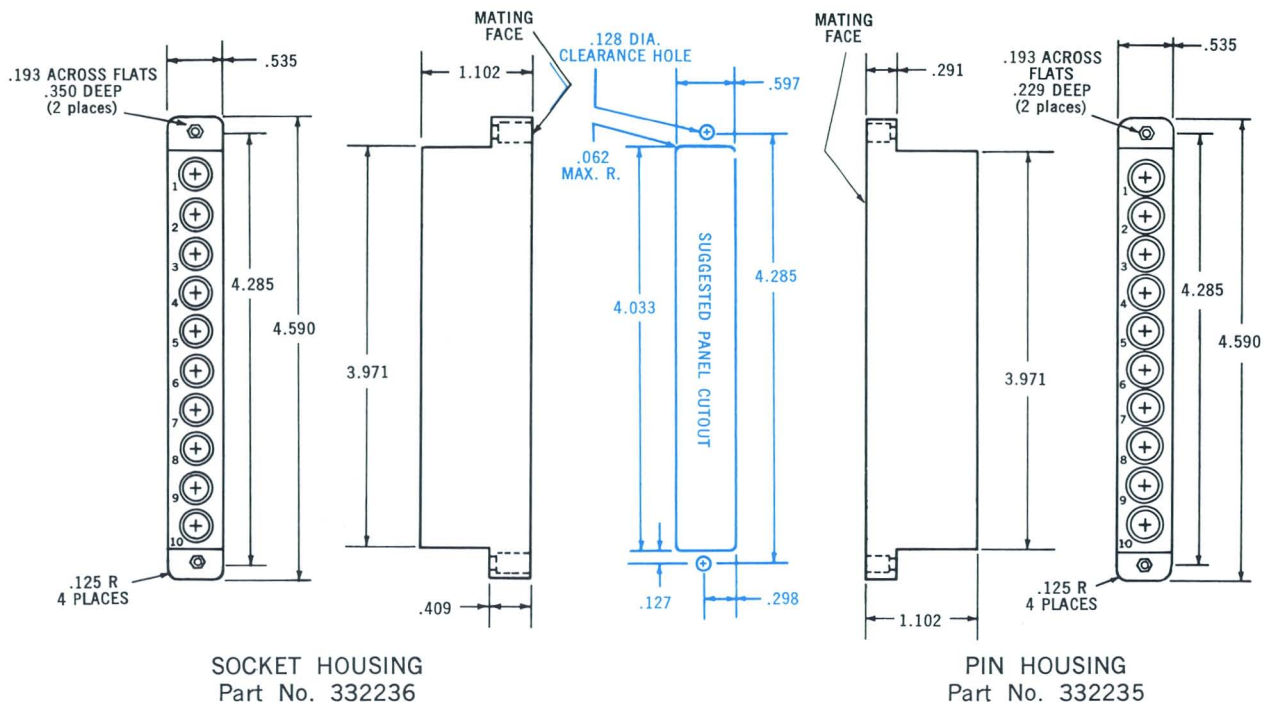
PANEL CUTOUT DIMENSIONS

PART NUMBER	C	D	E	F	G
330615	1.032	.684	2.025	.203	1.656
1-330615-0	1.032	.750	2.062	.125	1.656
1-330615-3	1.032	.750	2.062	.125	1.656
330616	1.140	.750	2.062	.140	1.781
1-330616-0	1.140	.750	2.062	.125	1.781
1-330616-2	1.140	.750	2.062	.125	1.781

KEYING PLUG NO. 330619

*Assembly includes turnable jackscrews mounted.
 **Assembly includes fixed jackscrews mounted.

10 POSITION TWIN STANDARD

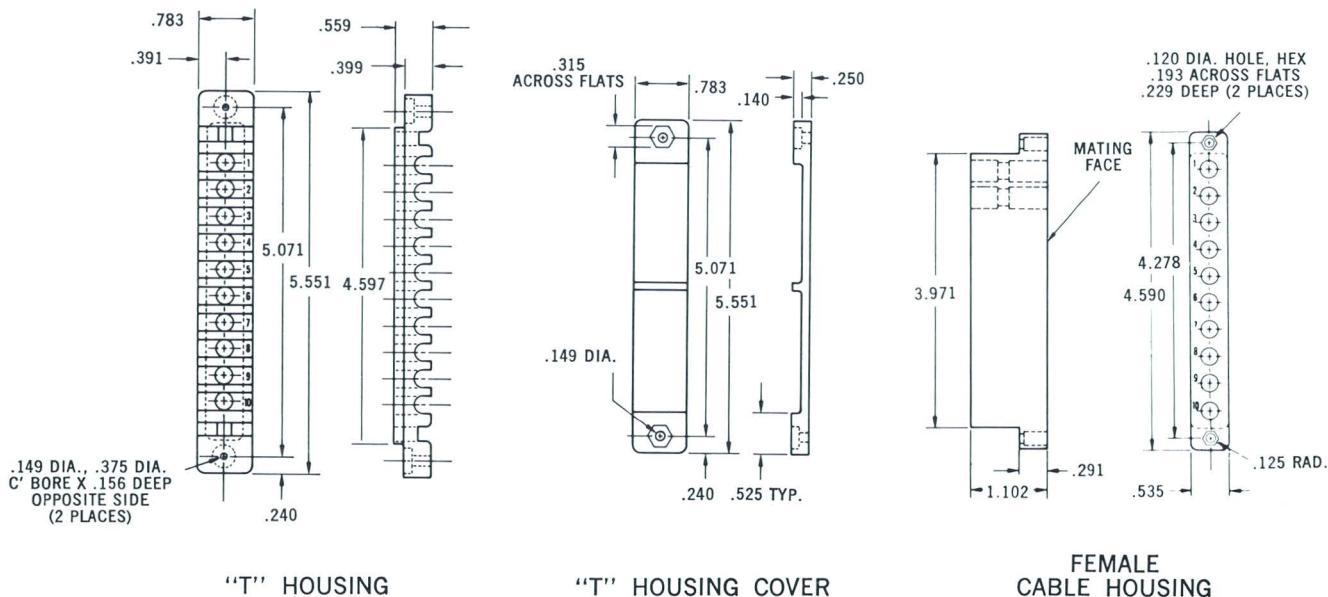


SOCKET HOUSING
Part No. 332236

PIN HOUSING
Part No. 332235

HOUSING MATERIAL — Phenolic, Black

10 POSITION TWIN STANDARD "T"



"T" HOUSING

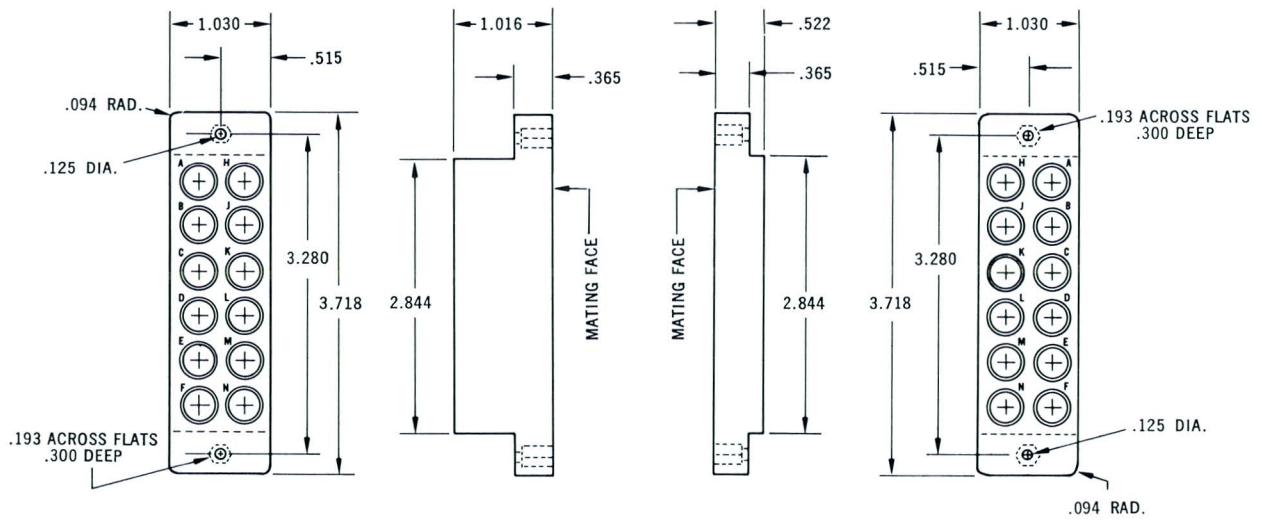
"T" HOUSING COVER

FEMALE
CABLE HOUSING

HOUSING ASSEMBLIES

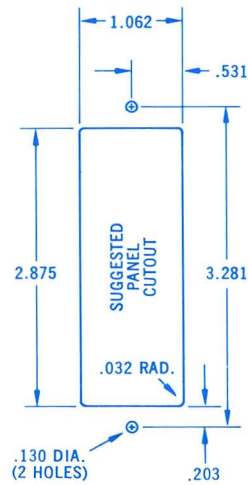
PART NUMBER	DESCRIPTION	MATERIAL	NUMBER REQUIRED
329340	"T" Housing	Phenolic, Black	1
329343	"T" Housing Cover	Phenolic, Black	1
332236	Female Cable Housing	Phenolic, Black	3
50481	"T" Contacts	Shell — Brass Contacts — Bronze Dielectric — Polyethylene	10

12 POSITION TWIN STANDARD



SOCKET HOUSING

PIN HOUSING



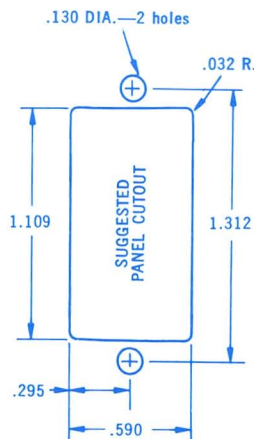
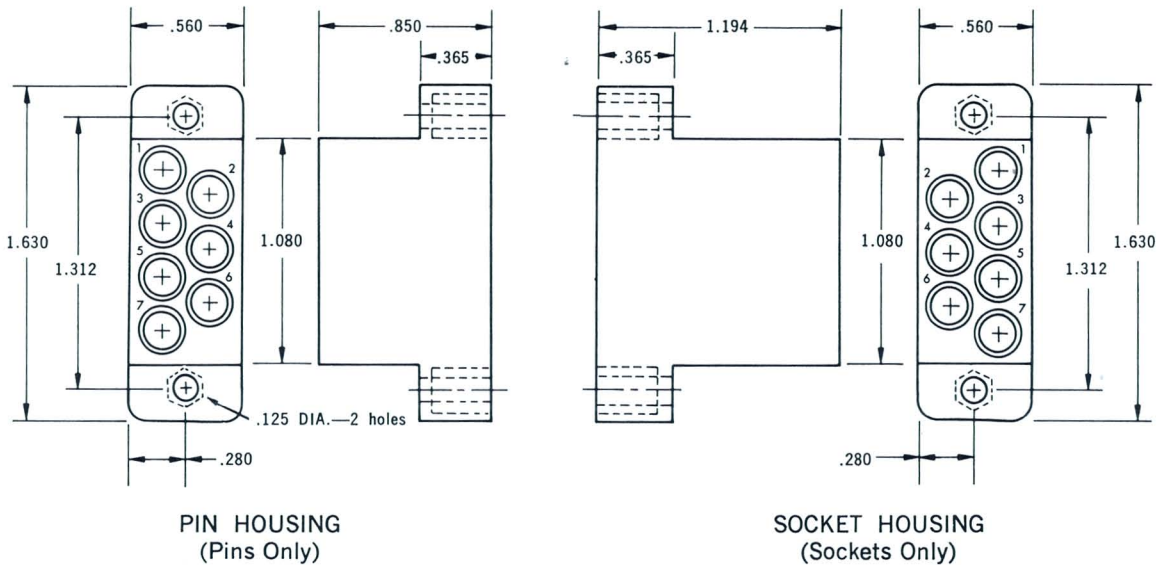
HOUSING ASSEMBLIES

MALE HOUSING PART NUMBER	SOCKET HOUSING PART NUMBER	MATERIAL & COLOR
201152-1	201153-1	Phenolic, Black
201152-2	201153-2	Diallyl Phthalate, Blue
201152-5	201153-5	Diallyl Phthalate, Red
201152-6	201153-6	Diallyl Phthalate, Black

MINIATURE HOUSING SPECIFICATIONS

Unless otherwise noted all housing materials are:
 Black Phenolic — MIL-M-14F, Type CFG Diallyl Phthalate — MIL-M-14F, Type SDG-F

7 POSITION MINIATURE SERIES "M" TYPE

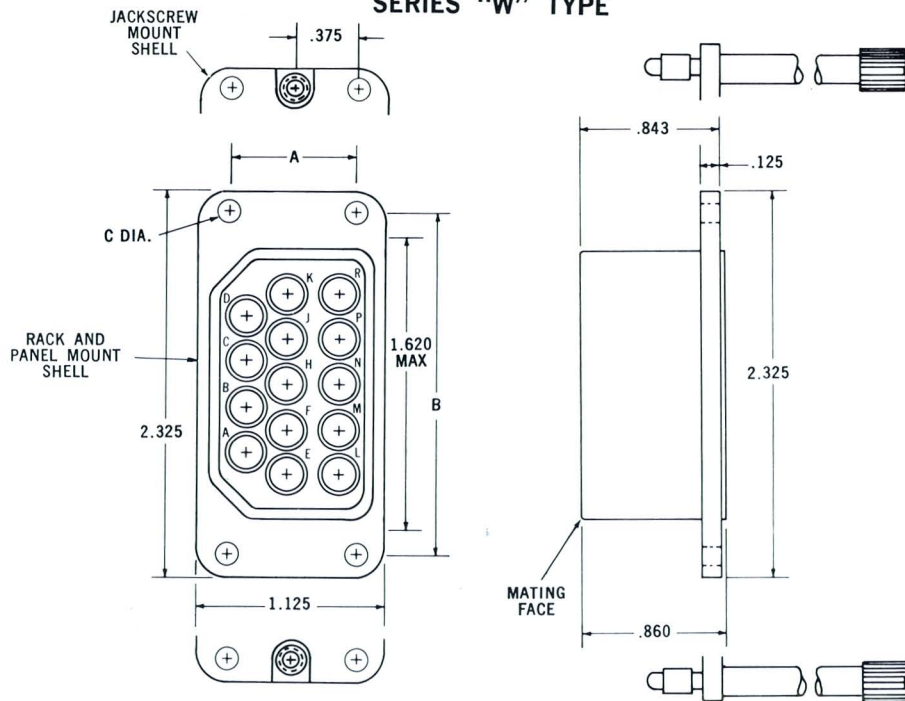


HOUSINGS

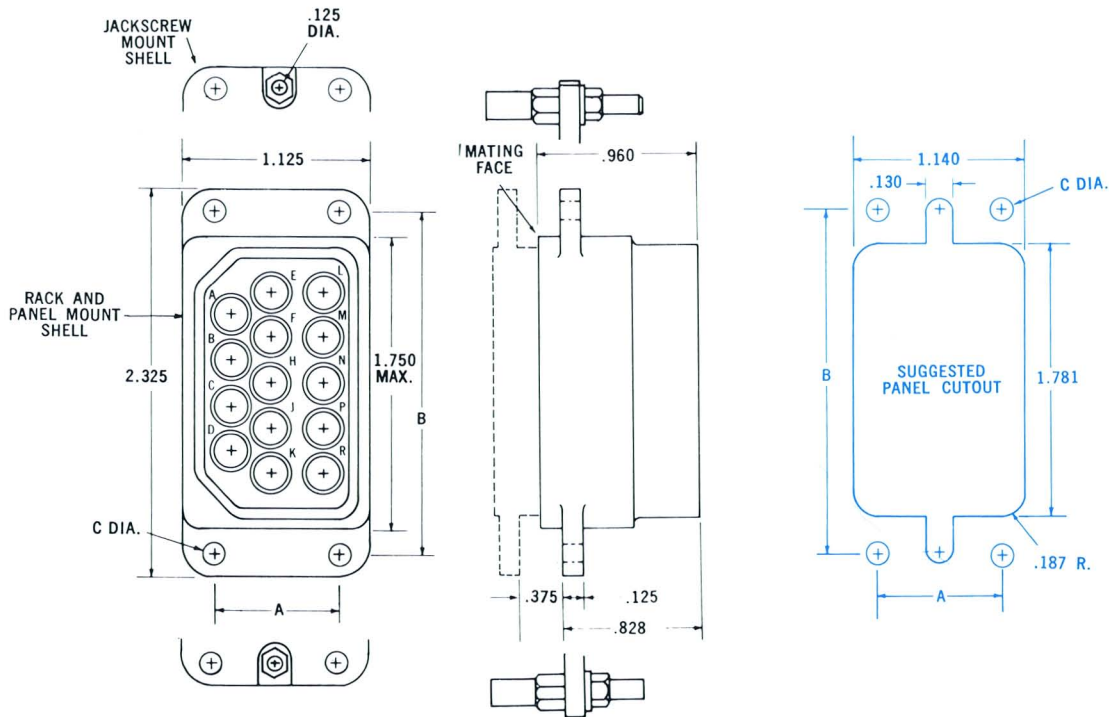
PIN HOUSING PART NUMBER	SOCKET HOUSING PART NUMBER	MATERIAL & COLOR
50063-1	50064-1	Phenolic, Black
50063-2	50064-2	Diallyl Phthalate, Blue

14 POSITION MINIATURE

SERIES "W" TYPE



PLUG HOUSING ASSEMBLY



RECEPTACLE HOUSING ASSEMBLY

PLUG HOUSING ASSEMBLIES

Insert Material: Green Diallyl Phthalate

SHELL STYLE	HOUSING PART NUMBER	SHELL MATERIAL AND FINISH	DIMENSIONS		
			A	B	C
Rack and Panel Mount	201293-1	Cd. Pl. Alum.	.750	2.062	.125
	201293-2				
Jackscrew Mount*	1-201293-2	Cd. Pl. Alum. (Olive Drab)			
Rack and Panel Mount	201293-3		.680	2.025	.203
Jackscrew Mount*	1-201293-0	Cd. Pl. Alum.	.750	2.062	.125

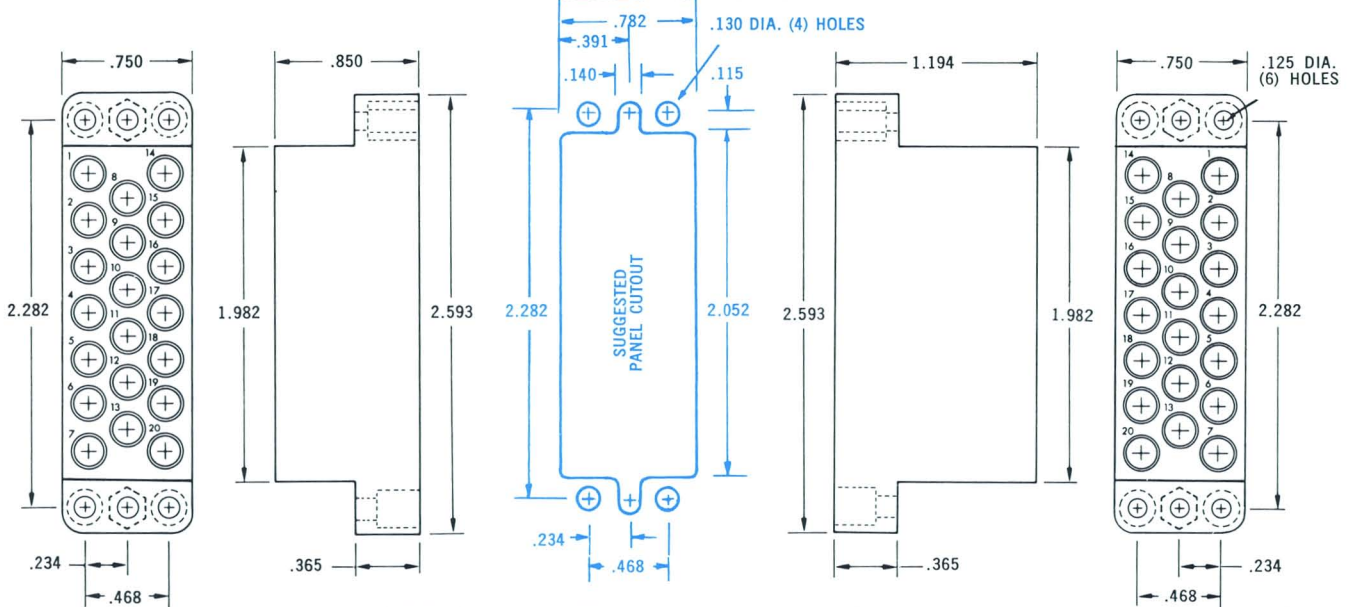
RECEPTACLE HOUSING ASSEMBLIES

Insert Material: Green Diallyl Phthalate

SHELL STYLE	HOUSING PART NUMBER	SHELL MATERIAL AND FINISH	DIMENSIONS		
			A	B	C
Rack and Panel Mount	201294-1	Cd. Pl. Alum.	.750	2.062	.125
	201294-2				
Jackscrew Mount*	1-201294-2	Cd. Pl. Alum. (Olive Drab)			
Rack and Panel Mount	201294-3		.750	2.025	.138
Jackscrew Mount*	201294-5	Cd. Pl. Alum.	.750	2.062	.125

*Includes Jackscrew

20 POSITION MINIATURE SERIES "M" TYPE

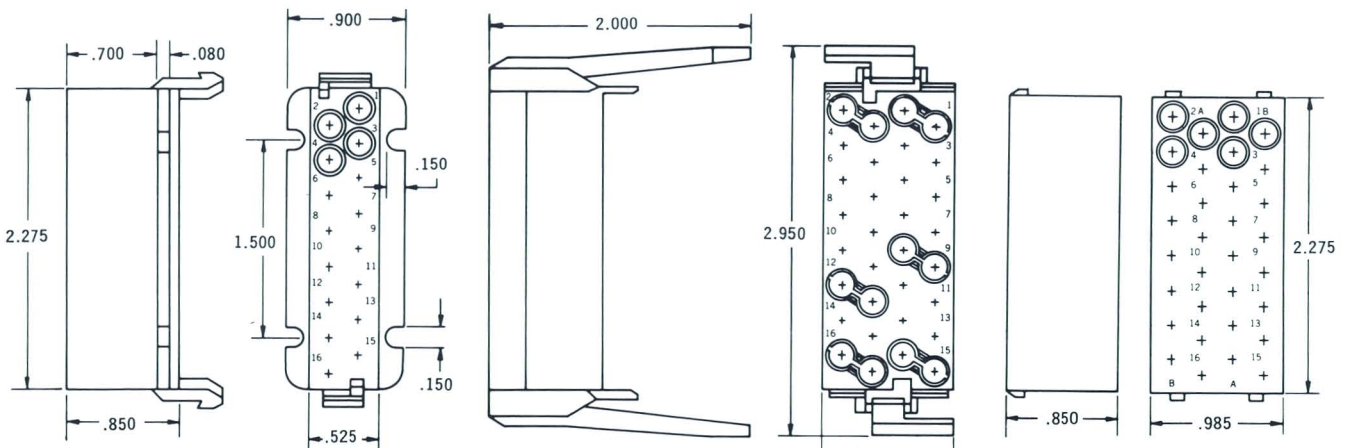


PIN HOUSING (Pins Only)

MALE HOUSING PART NUMBER	FEMALE HOUSING PART NUMBER	MATERIAL AND COLOR
200458-1	200459-1	Diallyl Phthalate Blue
200458-3	200459-3	Phenolic Black
200458-5	200459-5	Diallyl Phthalate Grey-Green

SOCKET HOUSING (Sockets Only)

16, 14, 12, 10, 8 POSITION MINIATURE "Y"



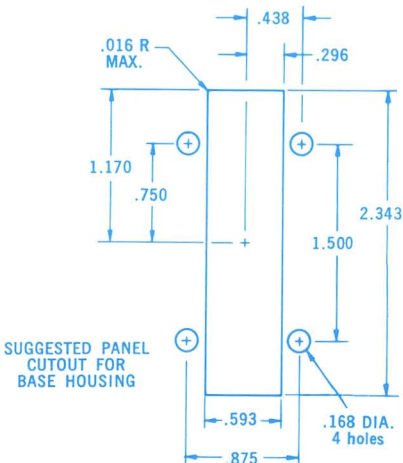
BASE HOUSING (with mounting flange) Part No. 50229

"Y" HOUSING (with contacts)

TOP HOUSING Part No. 50228

HOUSING MATERIAL: Black NYLON

"Y" HOUSINGS WITH CONTACTS

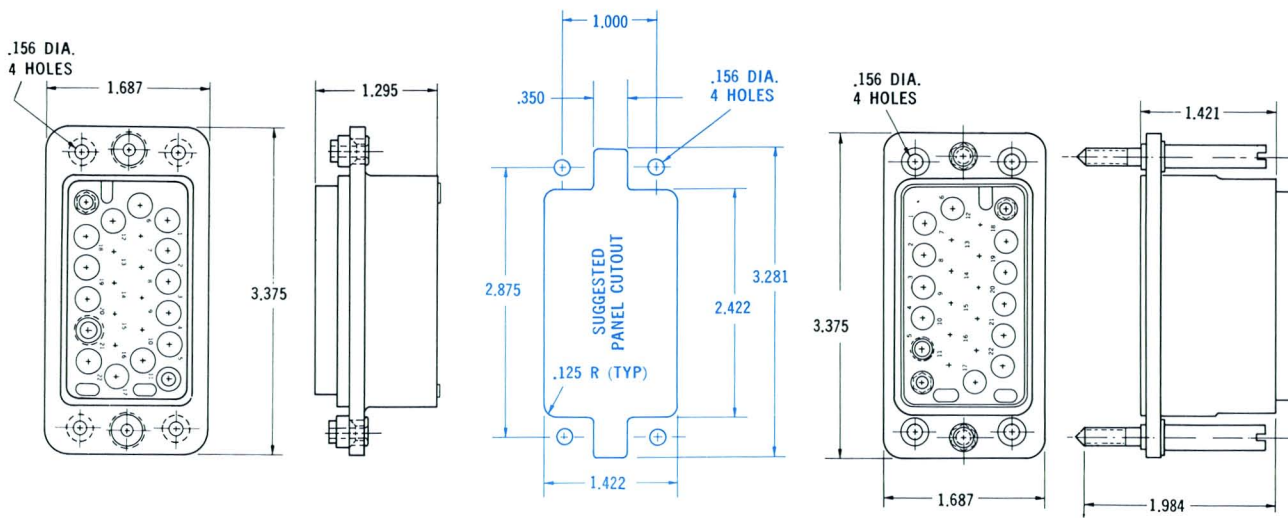


SUGGESTED PANEL CUTOUT FOR BASE HOUSING

NUMBER OF POSITIONS	PART NUMBERS		CONTACT CAVITIES LOADED
	.000030 GOLD PLATED CONTACTS	.000100 GOLD PLATED CONTACTS	
16	50221	50221-5	ALL
14	50221-1	50221-6	2-15
12	50221-2	50221-7	3-14
10	50221-3	50221-8	4-13
8	50221-4	50221-9	5-12

22 POSITION MINIATURE SERIES "D" TYPE

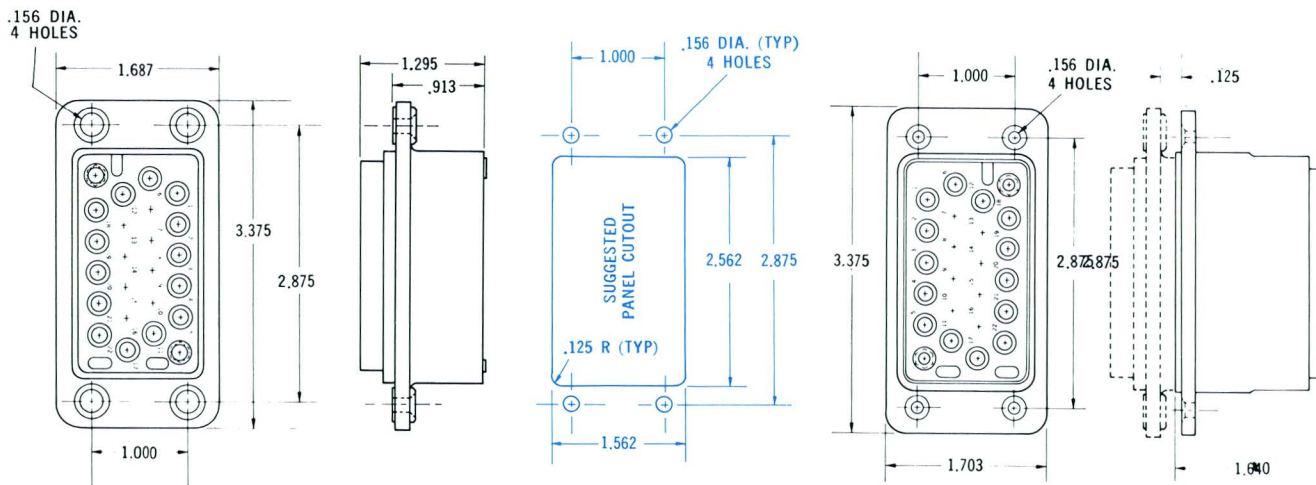
TYPE A (Jackscrews Included)



PLUG ASSEMBLY
(Sockets Only)

RECEPTACLE ASSEMBLY
(Pins Only)

TYPE B (Alignment Bushings — Guide Pins Included)



PLUG ASSEMBLY
(Sockets Only)

RECEPTACLE ASSEMBLY
(Pins Only)

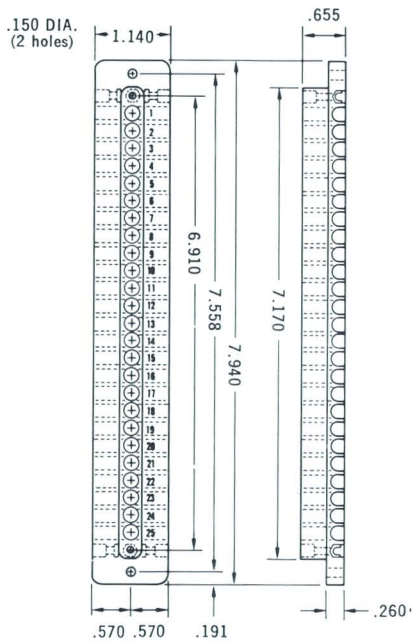
PLUG AND RECEPTACLE ASSEMBLIES

Shell Material: Die Cast Aluminum Insert Material: Diallyl Phthalate

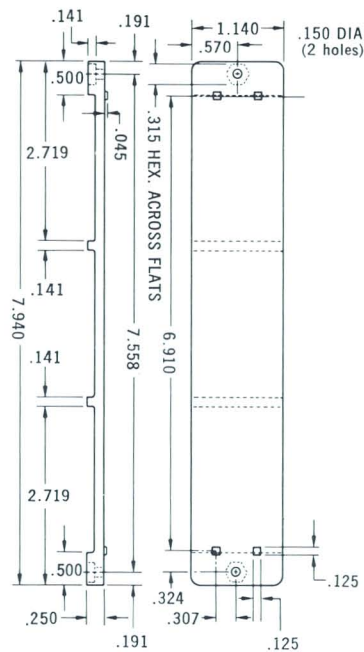
TYPE	SHELL FINISH	PLUG ASSEMBLY PART NO.	RECEPTACLE ASSEMBLY PART NO.
A	Clear Cad. Plate	50203	50204
	Clear Cad. Plate	50203-1*	50204-1*
B	Clear Cad. Plate	50205	50206
	Olive Drab Cad. Plate	50205-1	50206-1

*Jackscrews reversed

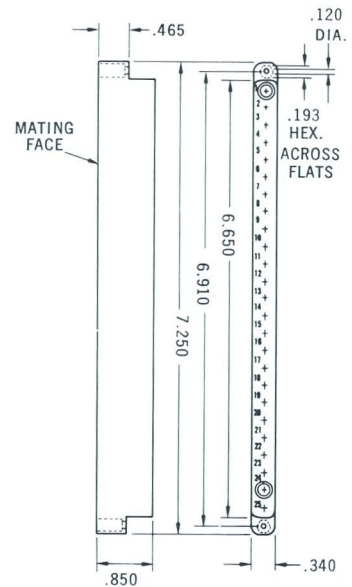
25 POSITION MINIATURE "T"



"T" HOUSING



"T" HOUSING COVER



CABLE HOUSING
(Pins Only)

HOUSING ASSEMBLIES

PART NUMBER	DESCRIPTION	MATERIAL	NO. REQ'D
50156*	"T" Housing		1
50157*	"T" Housing Cover	Phenolic, Black	1
50158	Cable Housing		3
50147	"T" Contacts	Shell—Brass Contact—Brass Dielectric—Polypropylene	25

*Accommodates #6 hex nut, washer & screw not supplied by AMP.
Housing Assembly Kit — Part Number 51509-1
 (Includes all parts listed in above table, plus required jackscrews)

SUBMINIATURE HOUSING SPECIFICATIONS

The A-MP SUBMINIATURE COAXICON coaxial contact fits any of AMP's connectors that will accept a size 16, 18 or 20 pin or socket (long pin socket for size 16, short pin and socket for size 18 or 20). This means that you can now bring power and coaxial or shielded circuits through the same connector . . . in any combination. It is no longer necessary to have special housings with fixed positions for coaxial contacts. You can select from a variety of connector configurations and insert coaxial contacts in any number of positions desired. You also get a much wider choice of housing materials and hardware.

To assemble your connector, here's all that you need to do: 1) Choose any Series M, D, DD, G, W or WW connector housing that accepts size 16, 18 or 20 pin and socket contacts (A-MP Type II, III, or III+); 2) Crimp contacts on cable using AMP's one-stroke crimp technique, then snap them into the housing cavities; 3) If you are mixing your power and shielded signal circuits, snap in the other contacts. Whether you mix or match the contacts in the connector, you get not only quick, easy assembly, but a uniform reliability that eliminates rejects.

And in addition, when you use AMP's subminiature COAXICON contacts you can take advantage of AMP's revolutionary automatic termination of coaxial cable. A two-stage machine operation completely strips the cable, flares the braid, applies the ferrule and then terminates the cable in less than twenty seconds, all in one continuous operation. This saves more than half the normal time and labor required, as well as reducing the cost of production.

The following connector types and sizes accept the subminiature COAXICON contact:

Series "D" — 45, 60 and 78 positions. (Use short pins)

Series "DD" — 90, 120 and 156 positions. (Use short pins)

Series "G" — Any 1-, 2-, or 3-module insert that takes a size 16 contact (use long pins)

Series "M" — 6, 14, 20, 21, 26, 34, 41, 50, 75, 104 and 160 positions. (Shallow blocks use short pins; deep blocks use long pins). 160 position (use long pins only)

Series "W" — 26, 40, and 45 positions. (Use short pins)

Series "WW" — 52, 80, and 90 positions. (Use short pins)

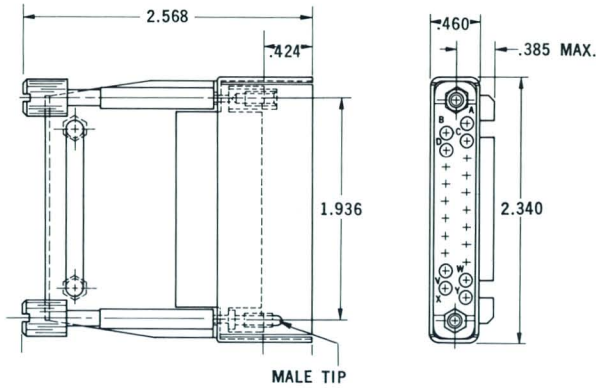
AMP's Series "M" connectors consist of molded diallyl phthalate or phenolic blocks into which the crimped coaxial contacts are inserted. The Series "D", "DD", "W", and "WW" connectors consist of non-magnetic shells which hold the contacts. The Series "G" connectors consist of metal shells which accept a variety of modular inserts and which, in turn, accept miniature and/or subminiature COAXICON contacts. A variety of hardware is available for fastening, shielding, and relieving the strain from cables for each of these connectors.

For complete information on any of the aforementioned connectors, consult the AMP catalog that bears its name (Catalog No. 940 — "M" Series*, Catalog No. 947, "D, DD, W, WW" Series). AMP's exclusive 21 position Subminiature "Y" coaxial connector specifications appear on page 32.

*Special hardware for use with "M" Series Connectors loaded with subminiature coaxial contacts available.



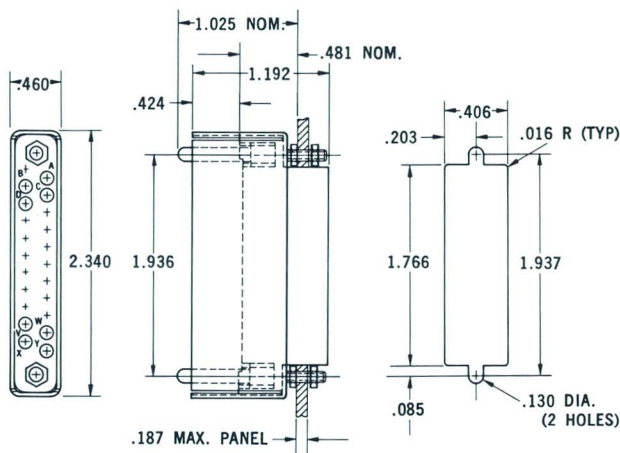
21 POSITION SUBMINIATURE "Y"



PLUG ASSEMBLY (Cable Side)

Material: Housing — Blue Diallyl Phthalate
 Pin Hood and Cable Clamp — Cadmium Plated Cold Rolled Steel
 Jackscrews — Body, Cadmium Plated Brass
 Tip, Stainless Steel

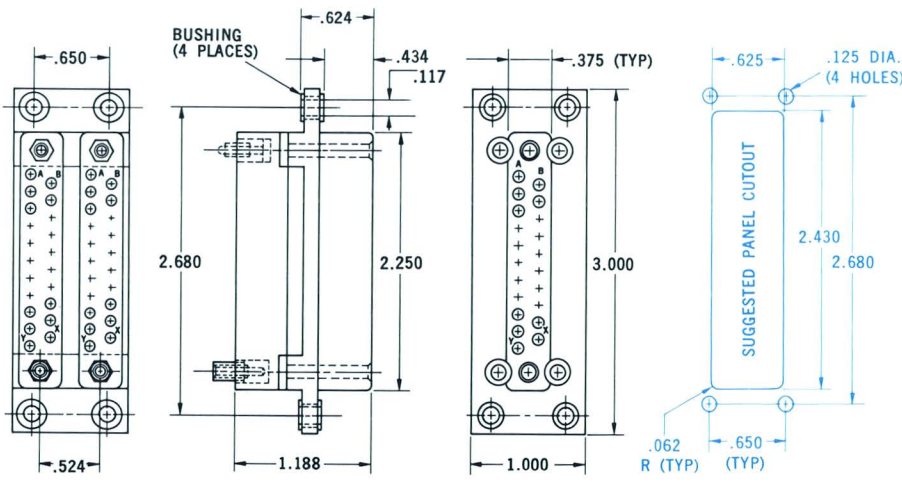
Part Number: 51615-1
 (Use short pin contact only)



PLUG ASSEMBLY (Machine Side)

Material: Housing — Blue Diallyl Phthalate
 Pin Hood — Cadmium Plated Cold Rolled Steel
 Guide Pins — Stainless Steel

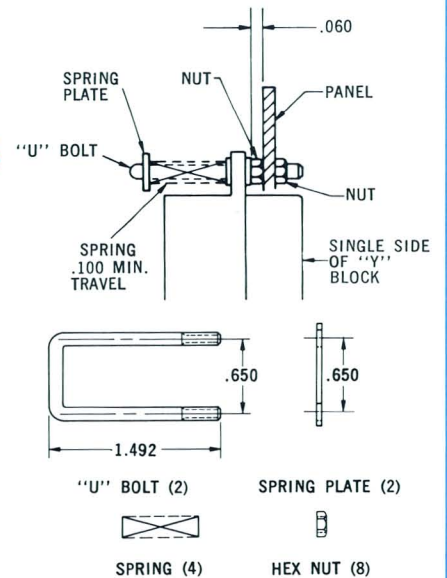
Part Number: 51614-1
 (Use short pin contact only)



"Y" CONNECTOR ASSEMBLY (Common Ground)

Material: Housing — Phenolic, Gold over Nickel Plated
 Jackscrews — Stainless Steel
 Bushings — Cadmium Plated Brass
 Contacts — Gold over Nickel Plated Brass

*Use short pin subminiature contacts only.
Part Number: 51613-1

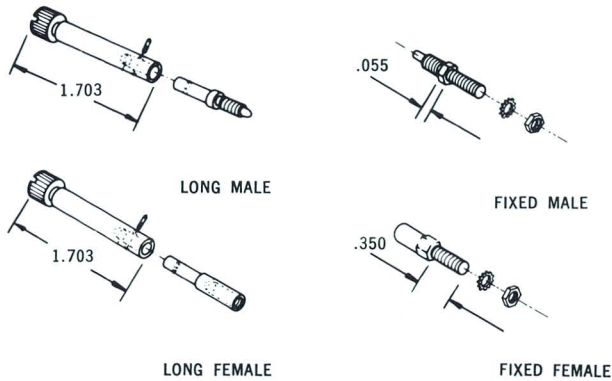


SPRING MOUNT KIT

Material: Cadmium Plated Cold Rolled Steel and Stainless Steel
Part Number: 51709-1

JACKSCREWS

2 POSITION STANDARD



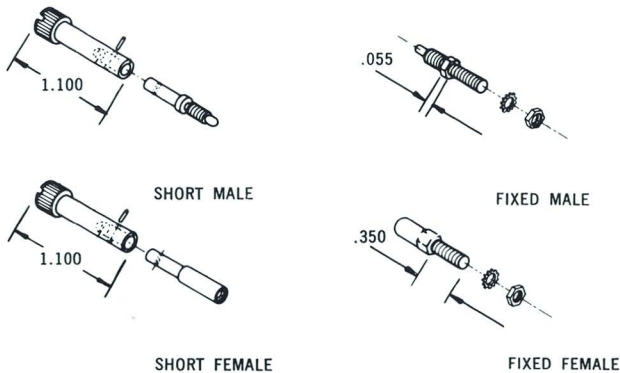
TURNABLE JACKSCREWS

TYPE AND BODY MATERIAL	TIP MATERIAL	PART NUMBERS	
		MALE	FEMALE
Long (Cd. Pl. Brass)	Stainless Steel	200871-1*	200867-1*
	Stainless Steel	200871-4**	200867-4**
	Cd. Plated Steel	200871-2*	200867-2*

FIXED JACKSCREWS

MATERIAL	PART NUMBERS	
	MALE	FEMALE
Stainless Steel	200874-1	200875-1
Cd. Plated Steel	200874-2	200875-2

10 POSITION STANDARD



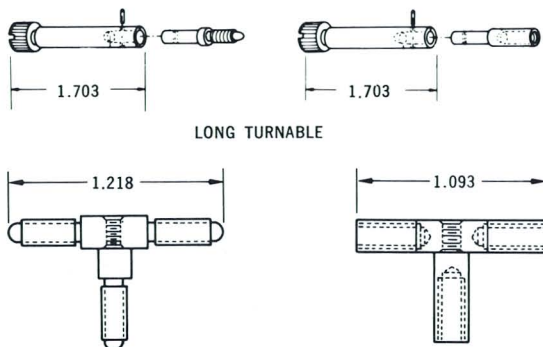
TURNABLE JACKSCREWS

TYPE AND BODY MATERIAL	TIP MATERIAL	PART NUMBERS	
		MALE	FEMALE
Short (Cd. Pl. Brass)	Stain. Steel	200868-1	200870-1
	Cd. Plated Steel	200868-2	200870-2

FIXED JACKSCREWS

MATERIAL	PART NUMBERS	
	MALE	FEMALE
Stain. Steel	200874-1	200875-1
Cd. Plated Steel	200874-2	200875-2

10 POSITION STANDARD "T"



TURNABLE JACKSCREWS

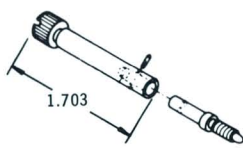
BODY MATERIAL	TIP MATERIAL	PART NUMBER		NO. REQUIRED
		MALE	FEMALE	
Cd. Pl. Brass	St. Steel	201566-1	201565-1	3 sets

"T" SCREW ASSEMBLIES*

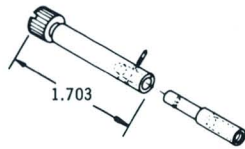
DESCRIPTION	PART NUMBER	FINISH	NO. REQUIRED
"T" Screw Pin	329347	Stain. Steel	1
"T" Screw Socket	329348	Stain. Steel	1

*Included in complete assembly Part No. 329350.

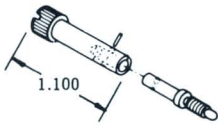
18 POSITION STANDARD



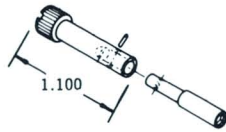
LONG MALE



LONG FEMALE



SHORT MALE



SHORT FEMALE



FIXED MALE



FIXED FEMALE

TURNABLE JACKSCREWS

TYPE AND BODY MATERIAL	TIP MATERIAL	PART NUMBER	
		MALE	FEMALE
Long (Cd. Pl. Brass)	Stain. Steel	200871-1*	200867-1*
	Stain. Steel	200871-4**	200867-4**
	Cd. Plated Steel	200871-2*	200867-2*
Short (Cd. Pl. Brass)	Stain. Steel	200868-1	200870-1
	Cd. Pl. Steel	200868-2	200870-2

*Used for one 20 GA. Metal Thickness (Shield and Cable Clamp, Strain Relief Clamp, or Pin Hood).
**Used for two 20 GA. Metal Thicknesses.

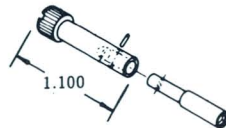
FIXED JACKSCREWS

MATERIAL	PART NUMBERS	
	MALE	FEMALE
Stain. Steel	200874-1	200875-1
Cd. Pl. Steel	200874-2	200875-2

10 POSITION TWIN STANDARD



SHORT MALE



SHORT FEMALE



FIXED MALE



FIXED FEMALE

TURNABLE JACKSCREWS

(Pin housing only)

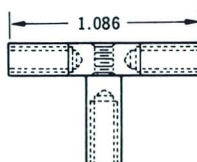
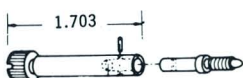
TYPE AND BODY MATERIAL	TIP MATERIAL	PART NUMBERS	
		MALE	FEMALE
Short (Cd. Pl. Brass)	Stain. Steel	200868-1	200870-1
	Cd. Plated Steel	200868-2	200870-2

FIXED JACKSCREWS

(Socket housing only)

MATERIAL	PART NUMBERS	
	MALE	FEMALE
Stainless Steel	200874-1	200875-1
Cd. Plated Steel	200874-2	200875-2

10 POSITION TWIN STANDARD "T"



TURNABLE JACKSCREWS

BODY MATERIAL	TIP MATERIAL	PART NUMBER	NO. REQUIRED
Cd. Pl. Brass	Stain. Steel	202535-1	6

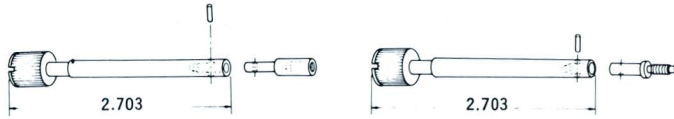
"T" SCREW ASSEMBLIES

DESCRIPTION	PART NUMBER	FINISH	NO. REQUIRED
"T" Screw Socket	329348	Stain. Steel	2

12 POSITION TWIN STANDARD



FIXED



EXTRA LONG TURNABLE



LONG TURNABLE



SHORT TURNABLE

FIXED JACKSCREWS

MATERIAL	PART NUMBERS	
	MALE	FEMALE
Stain. Steel	200874-1	200875-1
Cd. Pl. Steel	200874-2	200875-2

TURNABLE JACKSCREWS

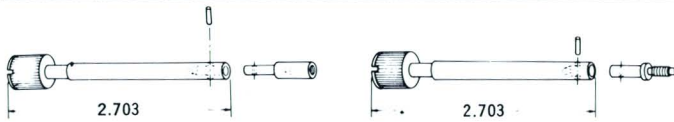
TYPE AND BODY MATERIAL	TIP MATERIAL	PART NUMBERS	
		MALE	FEMALE
Extra Long (Cd. Pl. Brass)	Stain. Steel	201911-1	201910-1
	Cd. Pl. Steel	201911-2	201910-2
Long (Cd. Pl. Brass)	Stain. Steel	200871-1*	200867-1*
	Cd. Pl. Steel	200871-2*	200867-2*
Short (Cd. Pl. Brass)	Stain. Steel	200868-1	200870-1
	Cd. Pl. Steel	200868-2	200870-2

*Used for one 20 GA. Metal Thickness.
**Used for two 20 GA. Metal Thicknesses.

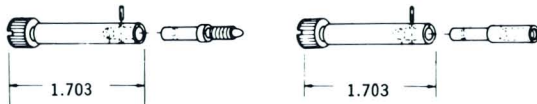
7 POSITION MINIATURE



FIXED



EXTRA LONG TURNABLE



LONG TURNABLE



SHORT TURNABLE



SHORT-SHORT TURNABLE

FIXED JACKSCREWS

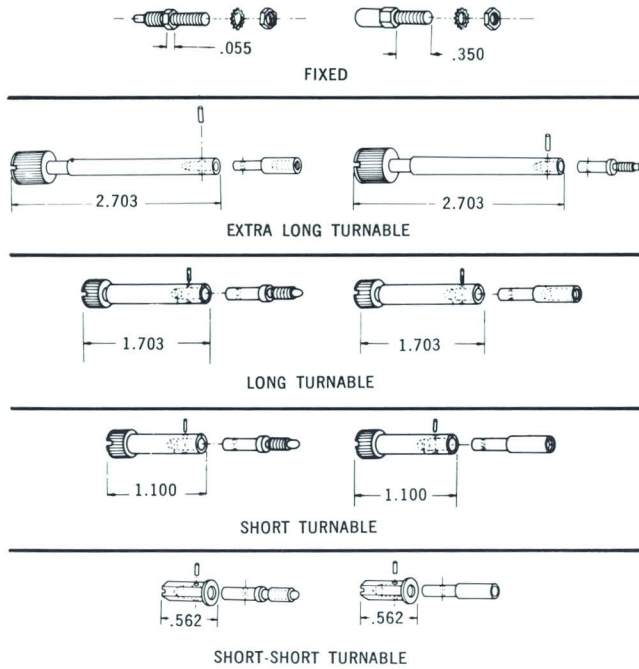
MATERIAL	PART NUMBER	
	MALE	FEMALE
Stain. Steel	200874-1	200875-1
Cd. Pl. Steel	200874-2	200875-2

TURNABLE JACKSCREWS

TYPE AND BODY MATERIAL	TIP MATERIAL	PART NUMBER	
		MALE	FEMALE
Extra Long (Cd. Pl. Brass)	Stain. Steel	201911-1	201910-1
	Cd. Pl. Steel	201911-2	201910-2
	Stain. Steel	201911-3*	201910-3*
	Cd. Pl. Steel	201911-4*	201910-4*
	Stain. Steel	202201-1	202200-1
	Stain. Steel	200871-1*	200867-1*
	Stain. Steel	200871-4**	200867-4**
	Cd. Pl. Steel	200871-2*	200867-2*
	Stain. Steel	200868-1	200870-1
Short (Cd. Pl. Brass)	Cd. Pl. Steel	200868-2	200870-2
	Stain. Steel	201388-1*	201389-1*
Short-Short (Stain. Steel)	Cd. Pl. Steel	201388-2*	201389-2*

*Used for one 20 GA. Metal Thickness.
**Used for two 20 GA. Metal Thicknesses.

20 POSITION MINIATURE



FIXED JACKSCREWS

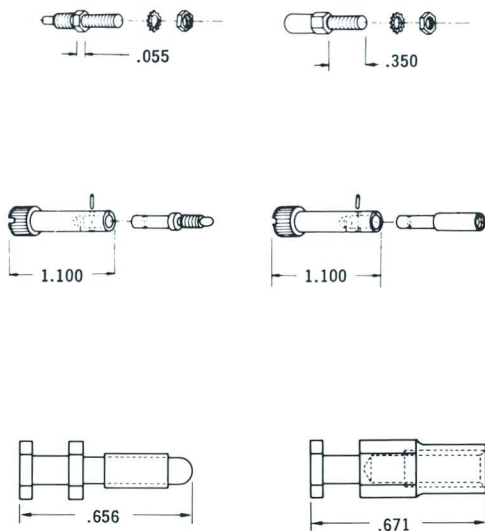
MATERIAL	PART NUMBERS	
	MALE	FEMALE
Stain. Steel	200874-1	200875-1
Cd. Pl. Steel	200874-2	200875-2

TURNABLE JACKSCREWS

TYPE AND BODY MATERIAL	TIP MATERIAL	PART NUMBERS	
		MALE	FEMALE
Extra Long (Cd. Pl. Brass)	Stain. Steel	201911-1	201910-1
	Cd. Pl. Steel	201911-2	201910-2
	Stain. Steel	201911-3*	201910-3*
	Cd. Pl. Steel	201911-4*	201910-4*
Long (Cd. Pl. Brass)	Stain. Steel	202201-1	202200-1
	Stain. Steel	200871-1*	200867-1*
	Cd. Pl. Steel	200871-2*	200867-2*
Short (Cd. Pl. Brass)	Stain. Steel	202201-1	202200-1
	Stain. Steel	200871-1*	200867-1*
	Stain. Steel	200871-4**	200867-4**
	Cd. Pl. Steel	200871-2*	200867-2*
Short-Short (Stain. Steel)	Stain. Steel	201388-1*	201389-1*
	Cd. Pl. Steel	201388-2*	201389-2*

*Used for one 20 GA. Metal Thickness.
**Used for two 20 GA. Metal Thicknesses.

25 POSITION MINIATURE "T"



FIXED JACKSCREWS

MATERIAL	PART NUMBERS		NO. REQ.
	MALE	FEMALE	
Stain. Steel	200874-1	200875-1	1 set

TURNABLE JACKSCREWS

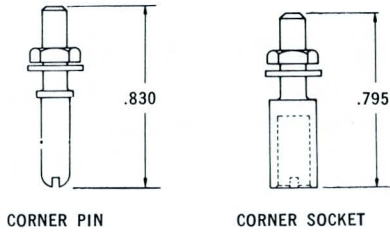
BODY MATERIAL	TIP MATERIAL	PART NUMBERS		NO. REQ.
		MALE	FEMALE	
Cd. Pl. Brass	Stain. Steel	200868-1	200870-1	3 sets
	Cd. Pl. Steel	200868-2	200870-2	

CAPTIVE JACKSCREWS

MATERIAL	PART NUMBERS		NO. REQ.
	MALE	FEMALE	
Stain. Steel	50159	50160	2 sets

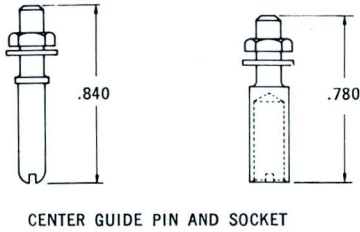
GUIDE PINS AND SOCKETS

18 POSITION STANDARD



TYPE	MATERIAL	PART NUMBER	
		PIN	SOCKET
Corner Guide Assembly	Stainless Steel	200833-2	200835-2
	Cd. Pl. Brass	200833-4	200835-4

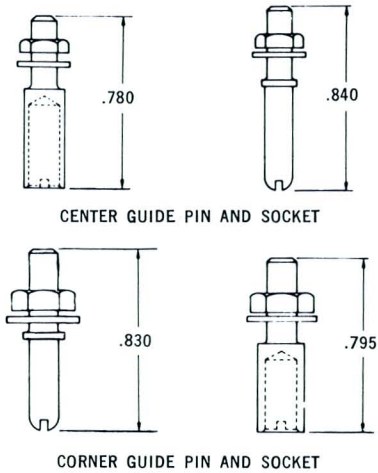
7 POSITION MINIATURE



TYPE	MATERIAL AND FINISH	PART NUMBER	
		PIN	SOCKET
Center Guide Assembly	Stain. Steel	200389-2	200390-2
	Cd. Pl. Brass	200389-4	200390-4

NOTE: Stainless Steel 305 per QQ-S-763.

20 POSITION MINIATURE

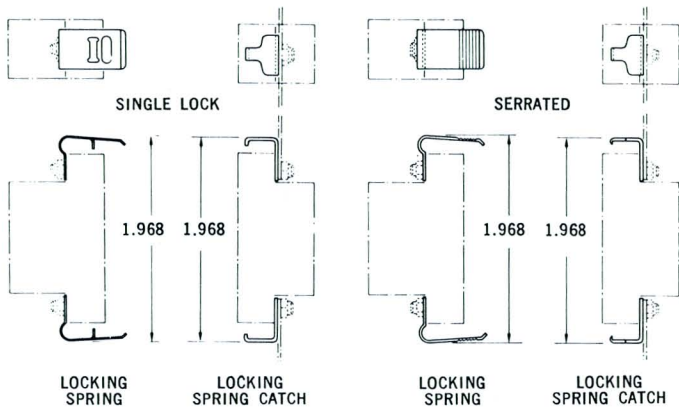


TYPE	MATERIAL AND FINISH	PART NUMBERS	
		PIN	SOCKET
Center Guide Assembly	Stain. Steel	200389-2	200390-2
	Cd. Pl. Brass	200389-4	200390-4
Corner Guide Assembly	Stain. Steel	200833-2	200835-2
	Cd. Pl. Brass	200833-4	200835-4

NOTE: Stainless Steel 305 per QQ-S-763.

LOCKING SPRINGS

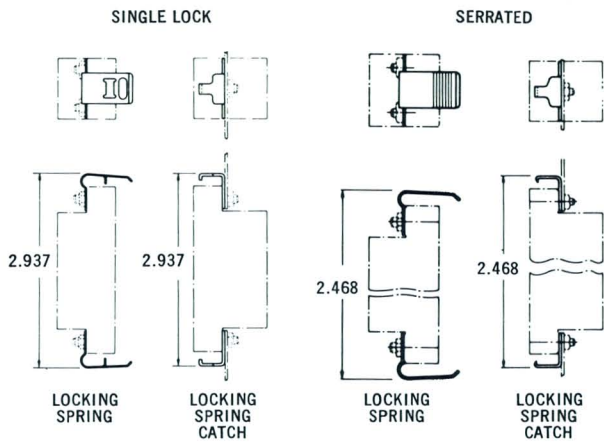
7 POSITION MINIATURE



TYPE	LOCKING SPRING SETS		LOCKING SPRING CATCH SETS	
	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL
Single Lock	201674-1*	Stain. Steel	201675-1*	Stain. Steel
Serrated	201923-1*	Nickel Pl. Spring Steel	201924-1*	Stain. Steel

*These Part Numbers are assemblies containing 2 each per package.

20 POSITION MINIATURE

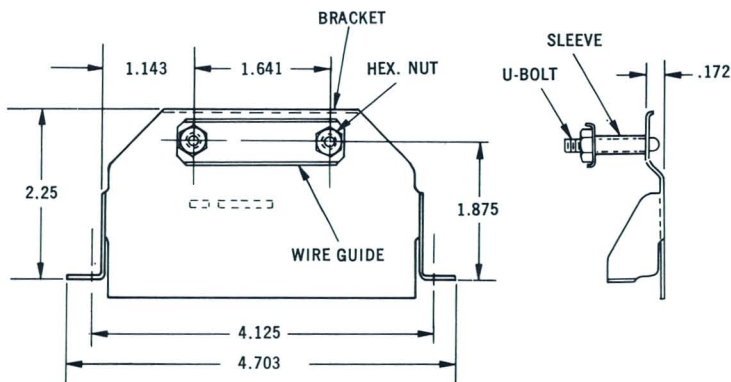


TYPE	LOCKING SPRING SETS		LOCKING SPRING CATCH SETS	
	PART NUMBER	MATERIAL	PART NUMBER	MATERIAL
Single Lock	201676-1*	Stain. Steel	201677-1*	Stain. Steel
Serrated	201925-1*	Nickel Pl. Spring Steel	201926-1*	Stain. Steel

*These Part Numbers are assemblies containing 2 each per package.

STRAIN RELIEF CLAMPS

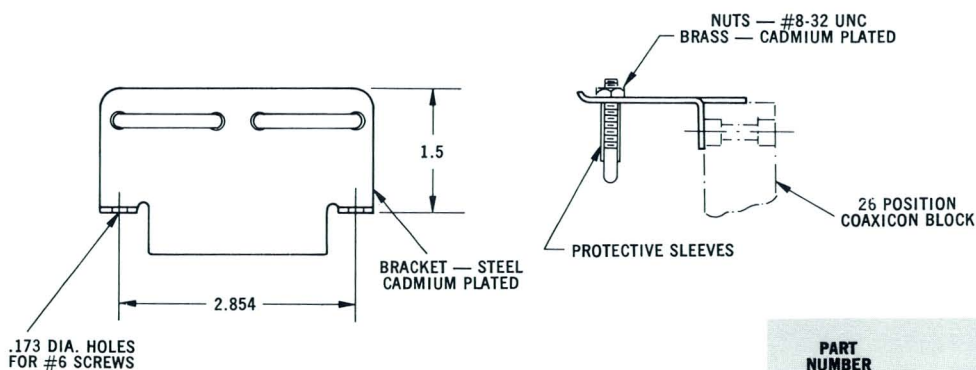
18 POSITION STANDARD



PART NUMBER	MATERIAL AND FINISH	MAX. CLAMP DIMENSION
330712	Cd. Pl. Steel	1 3/32 x 7/8 each "U" Bolt

Use long turnable Jackscrews with Strain Relief Clamp.

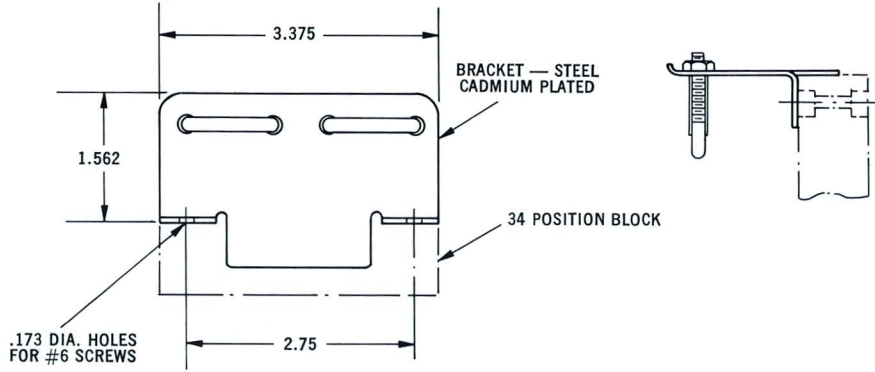
26 POSITION STANDARD



PART NUMBER	MATERIAL AND FINISH	MAX. CLAMP DIMENSION
201323-1	Cd. Pl. Steel	1 1/8 x 7/8 each "U" Bolt

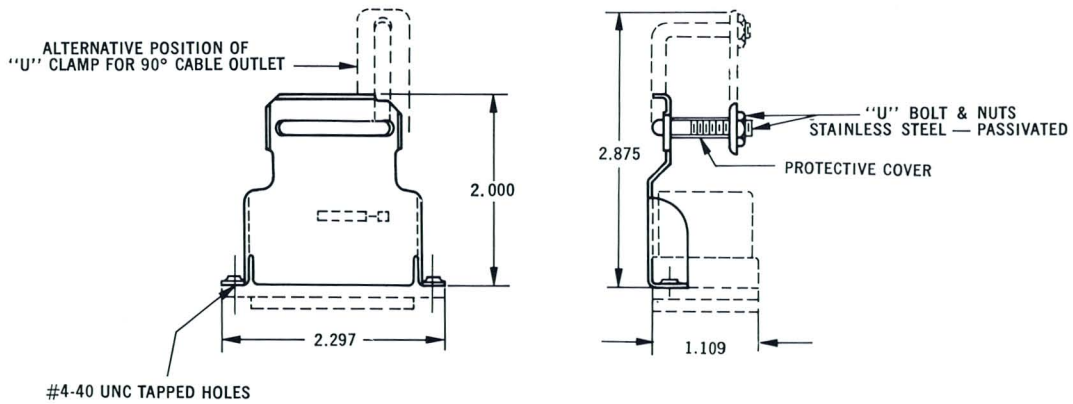
STRAIN RELIEF CLAMPS (Cont.)

34 POSITION STANDARD



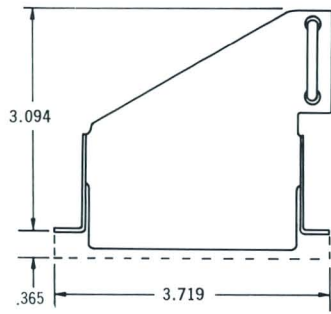
PART NUMBER	MATERIAL AND FINISH	MAX. CLAMP DIMENSION
201324-1	Cd. Pl. Steel	1 1/8 x 3/4 each "U" Bolt

8 POSITION TWIN STANDARD

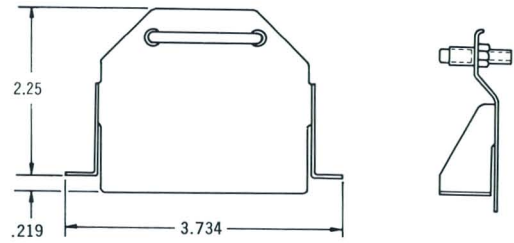


PART NUMBER	MATERIAL	FINISH	MAX. CLAMP DIMENSION
201557-1	Steel	Clear Cad. Plate	3/4 x 5/8
330842	Steel	Clear Cad. Plate	3/4 x 3/4

12 POSITION TWIN STANDARD



STRAIN RELIEF CLAMP — 90°



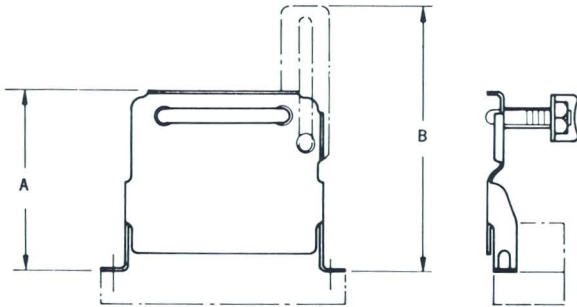
STRAIN RELIEF CABLE CLAMP — 180°

Use Long Turnable Jackscrews with 180° Strain Relief Clamp.

TYPE	MATERIAL AND FINISH	MAX. CLAMP DIMENSION	PART NUMBER
180°	Cd. Pl. Steel	1½ x 1½	50088-1
90°	Cd. Pl. Steel	¾ x 1¼	329959
90°*	Cd. Pl. Steel	¾ x 1¼	330485

*Supplied with Lock Nuts on Cable Clamp Bolt.

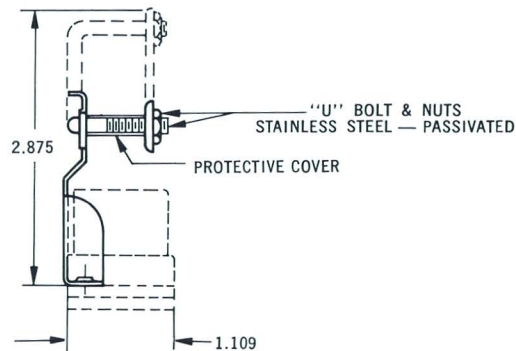
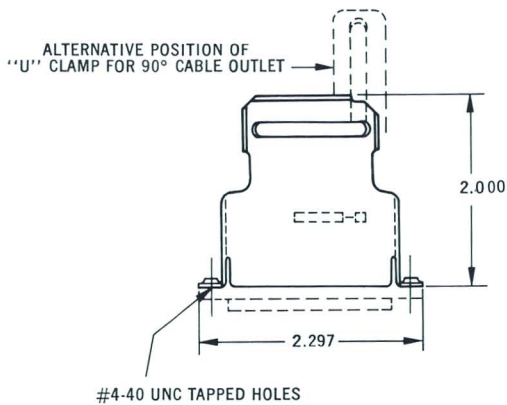
7 POSITION MINIATURE



Use Short Turnable Jackscrews with Strain Relief Clamp.

TYPE	MATERIAL AND FINISH	MAX. CLAMP DIMENSION	CLEARANCE DIMENSIONS		TO BE USED ON	PART NUMBER
			"A"	"B"		
90° or 180°	Cd. Pl. Steel	1½ x 2½	2.125	2.734	Pin or Socket Housing	201845-1
	Cd. Pl. Steel	1½ x 2½	1.250	2.031	Pin Housing	201229-1

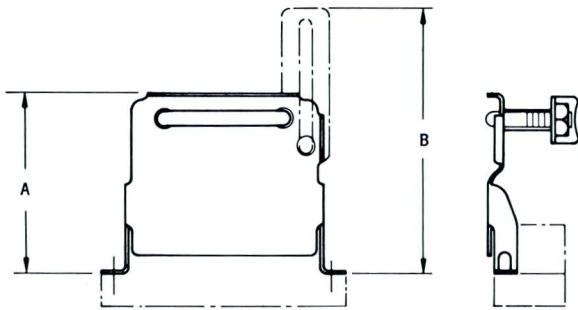
14 POSITION MINIATURE



#4-40 UNC TAPPED HOLES

PART NO.	MATERIAL	FINISH	MAX. CLAMP DIMENSION
201557-1	Steel	Clear Cad. Plate	¾ x ¾
330842	Steel	Clear Cad. Plate	¾ x ¾

20 POSITION MINIATURE

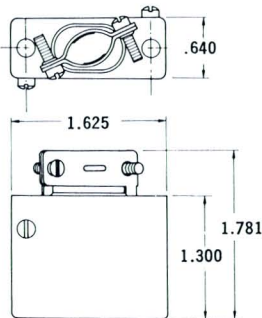


Use long turnable Jackscrews with Strain Relief Clamp.

TYPE	MATERIAL AND FINISH	MAX. CLAMP DIMENSION	CLEARANCE DIMENSIONS		PART NUMBER
			"A"	"B"	
90° or 180°	Cd. Pl. Steel	1/2 x 1 1/2	2.406	3.312	201847-1
	Stainless Steel	1/2 x 1 1/2	2.406	3.312	201847-2
90° or 180° with Self-locking Nuts	Cd. Pl. Steel	1/2 x 1 1/2	2.406	3.312	201841-1

SHIELD AND CABLE CLAMPS

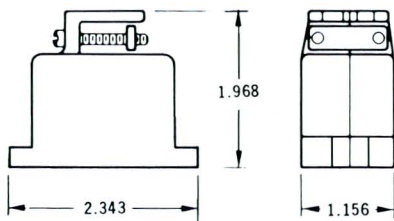
2 POSITION STANDARD



TYPE	MATERIAL AND FINISH	MAX. CLAMP DIMENSION	PART NUMBER
180° (Two piece)	Al. Anod.	.580 Dia.	200514-1
	Cd. Plated Steel	.580 Dia.	200514-2

8 POSITION TWIN STANDARD

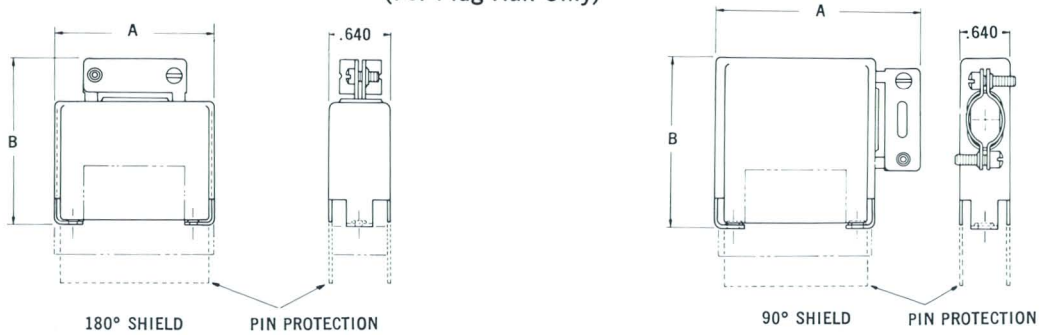
(For Plug Half Only)



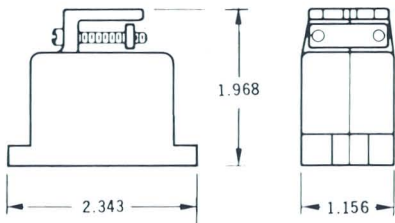
TYPE	PART NUMBER	MATERIAL	FINISH	MAX. CLAMP DIMENSION
180° (Two piece)	201753-1	Alum.	Clear Cad. Plate	5/8 x 1 3/16
	201753-2	Alum.	Olive Drab Cad. Plate	5/8 x 1 3/16

7 POSITION MINIATURE

(For Plug Half Only)



TYPE	PIN PROTECTION	MATERIAL AND FINISH	CLEARANCE DIMENSION		MAX. CLAMP DIMENSION	PART NUMBER	JACKSCREWS USED
			"A"	"B"			
180° Two Piece	Without	Al. Anod.	1.625	1.781	.580 Dia.	200514-1	Long
	Without	Cd. Pl. Steel	1.625	1.781	.580 Dia.	200514-2	Long
180° One Piece	With	Cd. Pl. Steel	1.687	1.734	.500 Dia.	201382-2	None
	Without	Cd. Pl. Steel	1.687	1.734	.500 Dia.	201169-2	None
90° One Piece	With	Cd. Pl. Steel	2.171	1.812	.500 Dia.	200488-2	None
	Without	Cd. Pl. Steel	2.171	1.812	.500 Dia.	201468-2	None

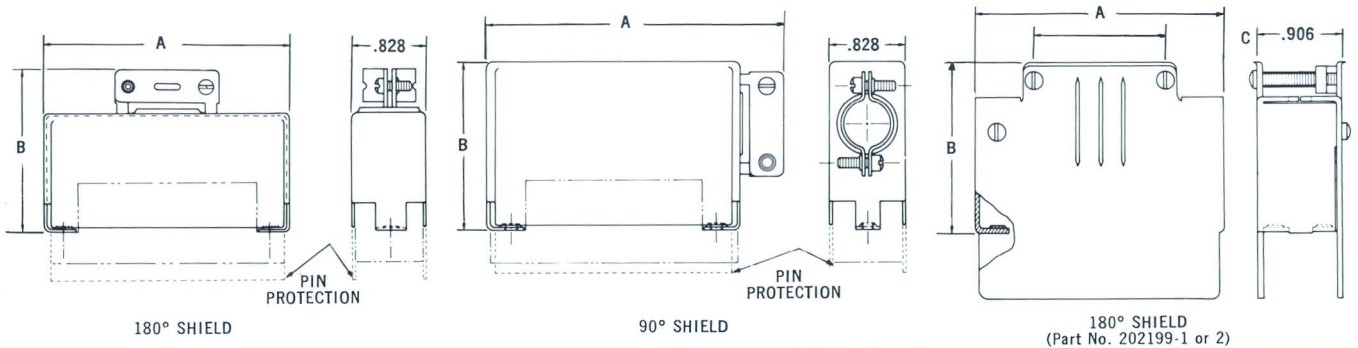


14 POSITION MINIATURE

(For Plug Half Only)

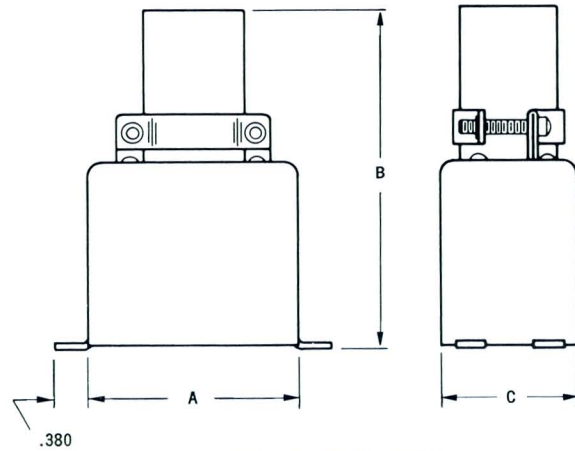
TYPE	PART NUMBER	MATERIAL	FINISH	MAX. CLAMP DIMENSION
180° (Two piece)	201753-1	Alum.	Clear Cad. Plate	5/8 x 1 1/8
	201753-2	Alum.	Olive Drab Cad. Plate	5/8 x 1 1/8

20 POSITION MINIATURE

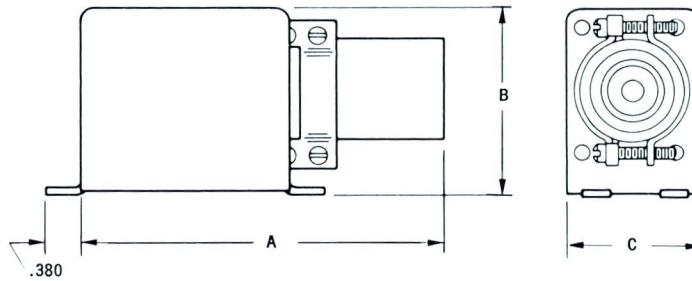


SHIELD TYPE	PIN PROTECTION	MATERIAL & FINISH	CLEARANCE DIMENSIONS		MAX. CLAMP DIMENSION	TO BE USED ON	PART NUMBER	JACKSCREWS USED
			"A"	"B"				
180° Two Piece	With	Al. Anod.	2.593	1.796	1/2 Dia.	Male Housing	201443-1	Long
	Without	Al. Anod.	2.593	1.796	1/2 Dia.	Male Housing	200532-1	Long
	Without	Cd. Pl. Steel	2.593	1.796	1/2 Dia.	Male Housing	200532-2	Long
	With	Cd. Pl. Steel	2.593	1.796	1/2 x 1 1/32	Male or Female Housing	202199-1	Extra Long
	With	Cd. Pl. Steel Olive Drab	2.593	1.796	1/2 x 1 1/32	Male or Female Housing	202199-2	Extra Long
180° One Piece	With	Cd. Pl. Steel	2.812	1.796	3/8 Dia.	Male Housing	201386-2	None
	Without	Cd. Pl. Steel	2.812	1.796	3/8 Dia.	Male Housing	201173-2	None
90° One Piece	With	Cd. Pl. Steel	3.296	1.843	3/8 Dia.	Male Housing	200492-2	None
	Without	Cd. Pl. Steel	3.296	1.843	3/8 Dia.	Male Housing	201470-2	None

22 POSITION MINIATURE



SHIELD & CABLE CLAMP 180°
WITH BUSHINGS



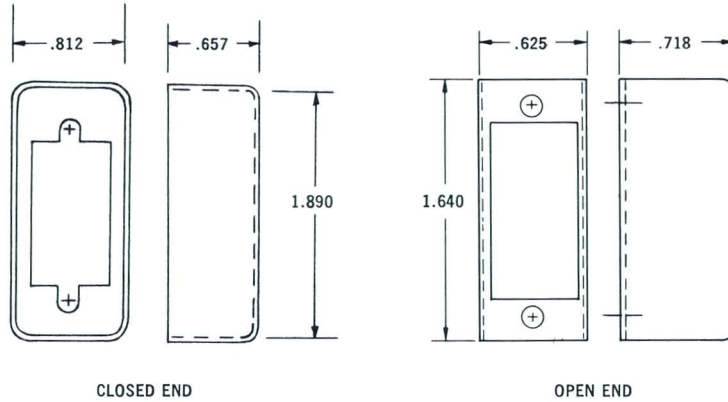
SHIELD & CABLE CLAMP 90°
WITH BUSHINGS

Material and Finish: Steel, Cadmium Plated

PART NUMBERS

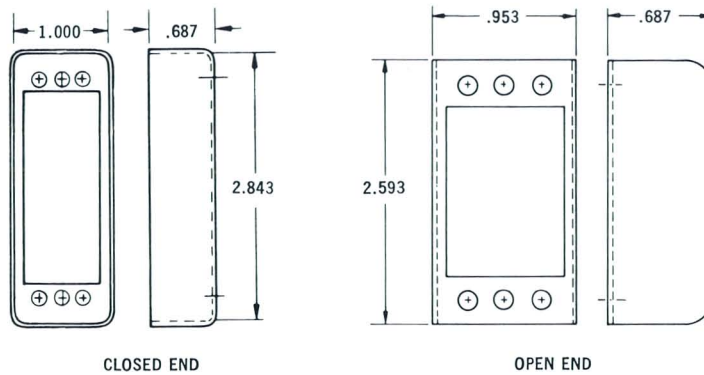
USED WITH	CABLE CLAMP I.D.	CABLE BUSHINGS	CABLE OUTLET	FOUR MOUNTING HOLES .145 DIA.	FOUR EXTRUDED AND TAPPED MOUNTING HOLES FOR #6-32 UNC-2B	A	B	C
Plug	1 1/32 Max.	Four Neoprene for Cable Dias. 1/4, 5/8, 3/4 & 1 1/16	180°	202154-1	202154-2	2.265	3.906	1.593
			90°	202155-1	202155-2	4.464	2.093	1.593
		None	180°	202156-1	202156-2	2.625	2.578	1.593
			90°	202157-1	202157-2	3.130	2.093	1.593
Receptacle	1 1/32 Max.	Four Neoprene for Cable Dias. 1/4, 5/8, 3/4 & 1 1/16	180°	202132-1	202132-2	2.625	5.062	1.625
			90°	202133-1	202133-2	4.464	3.250	1.625
		None	180°	202152-1	202152-2	2.625	3.734	1.625
			90°	202153-1	202153-2	3.130	3.250	1.625

7 POSITION MINIATURE



TYPE	MATERIAL AND FINISH	PART NUMBER
Closed End (Drawn)	Al. Iridite	201349-2
Open End	Al. Anod.	201785-2
	Cd. Pl. Steel	201785-4

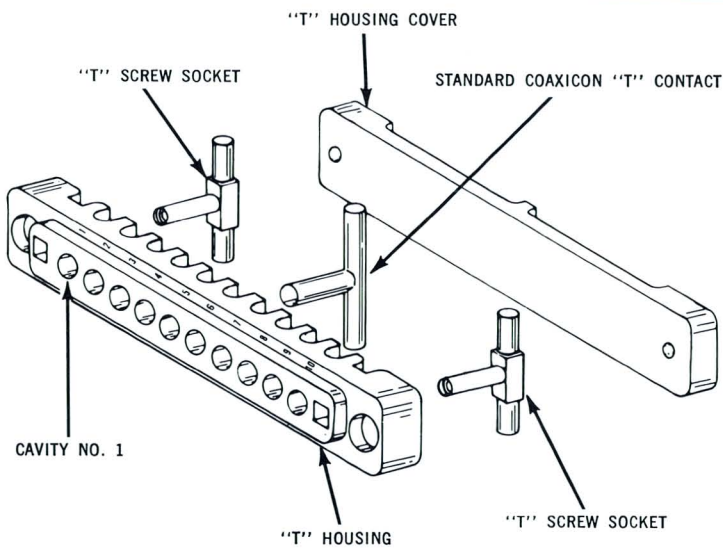
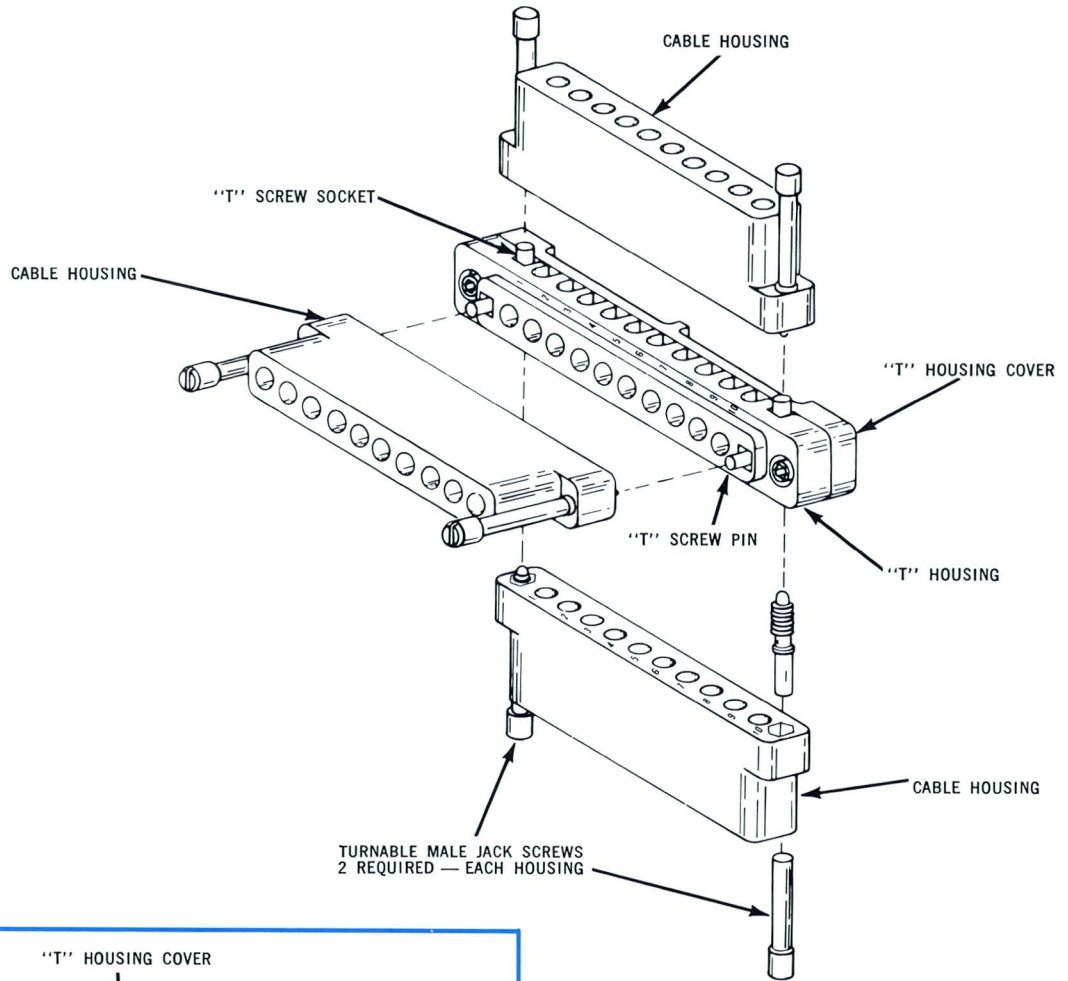
20 POSITION MINIATURE



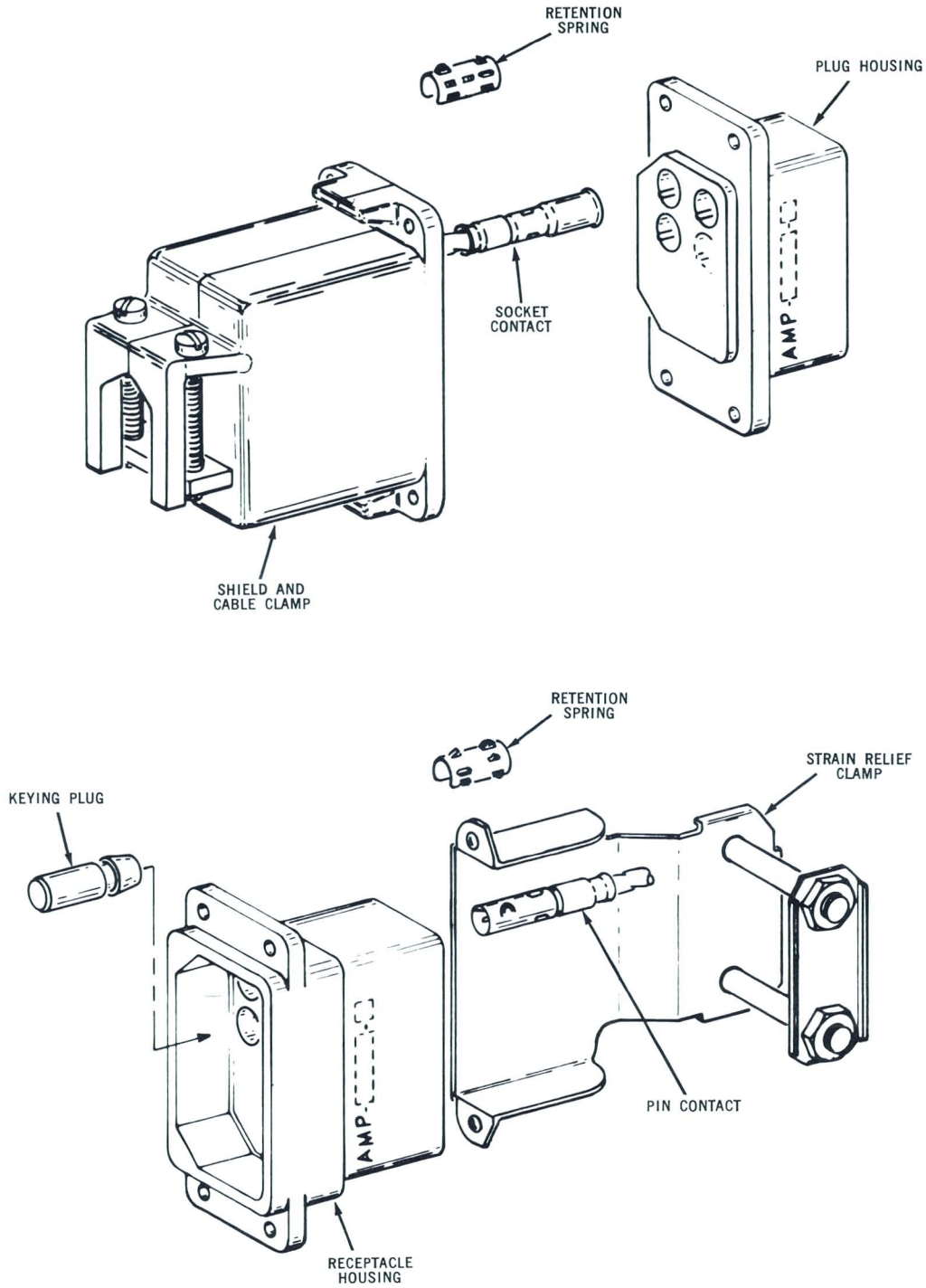
TYPE	MATERIAL AND FINISH	PART NUMBER
Closed End (Drawn)	Al. Iridite	201390-2
	Cd. Pl. Steel	201390-5
Open End	Al. Anod.	201317-2
	Cd. Pl. Steel	201317-4

TYPICAL HOUSING ASSEMBLIES

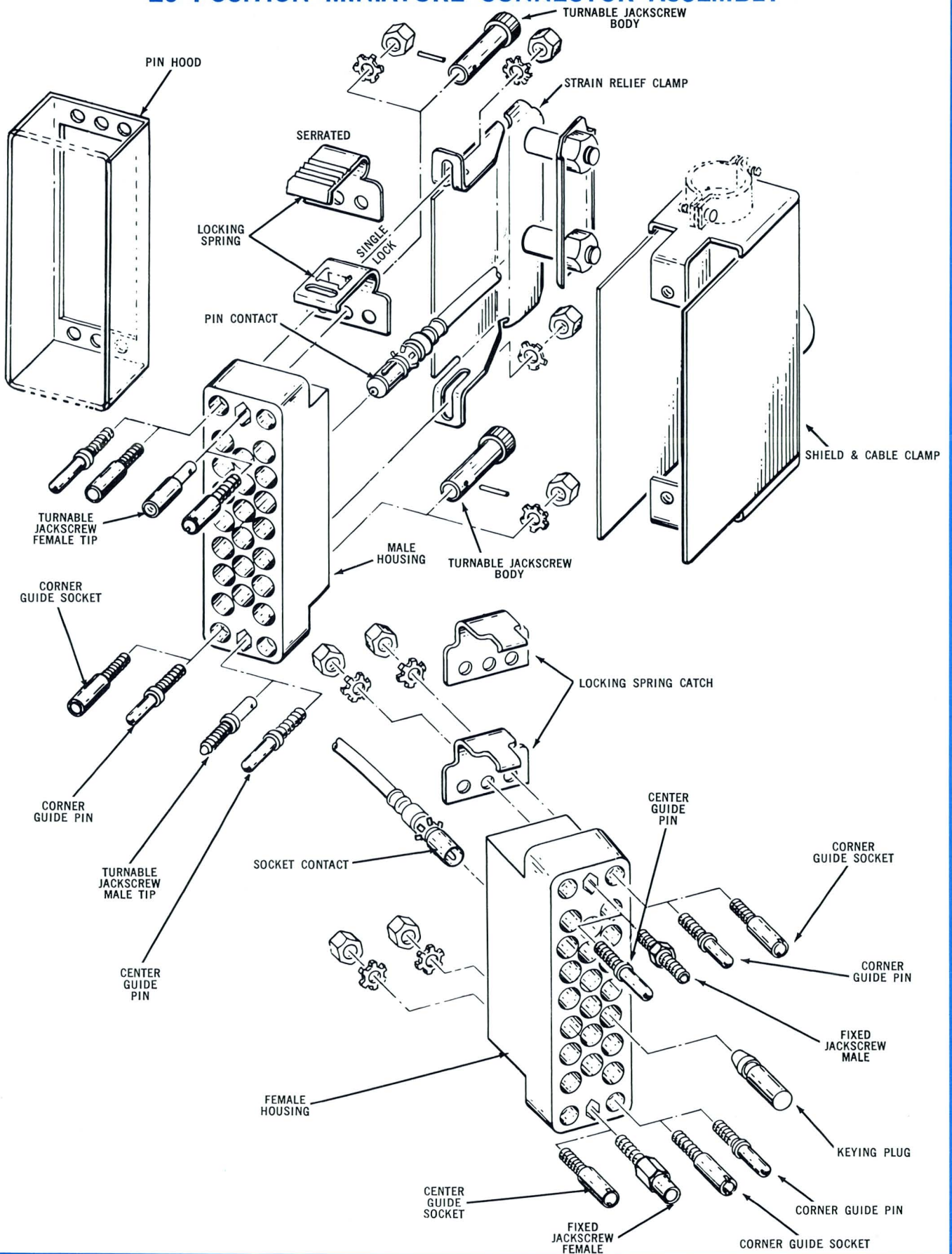
10 POSITION STANDARD "T" CONNECTOR ASSEMBLY



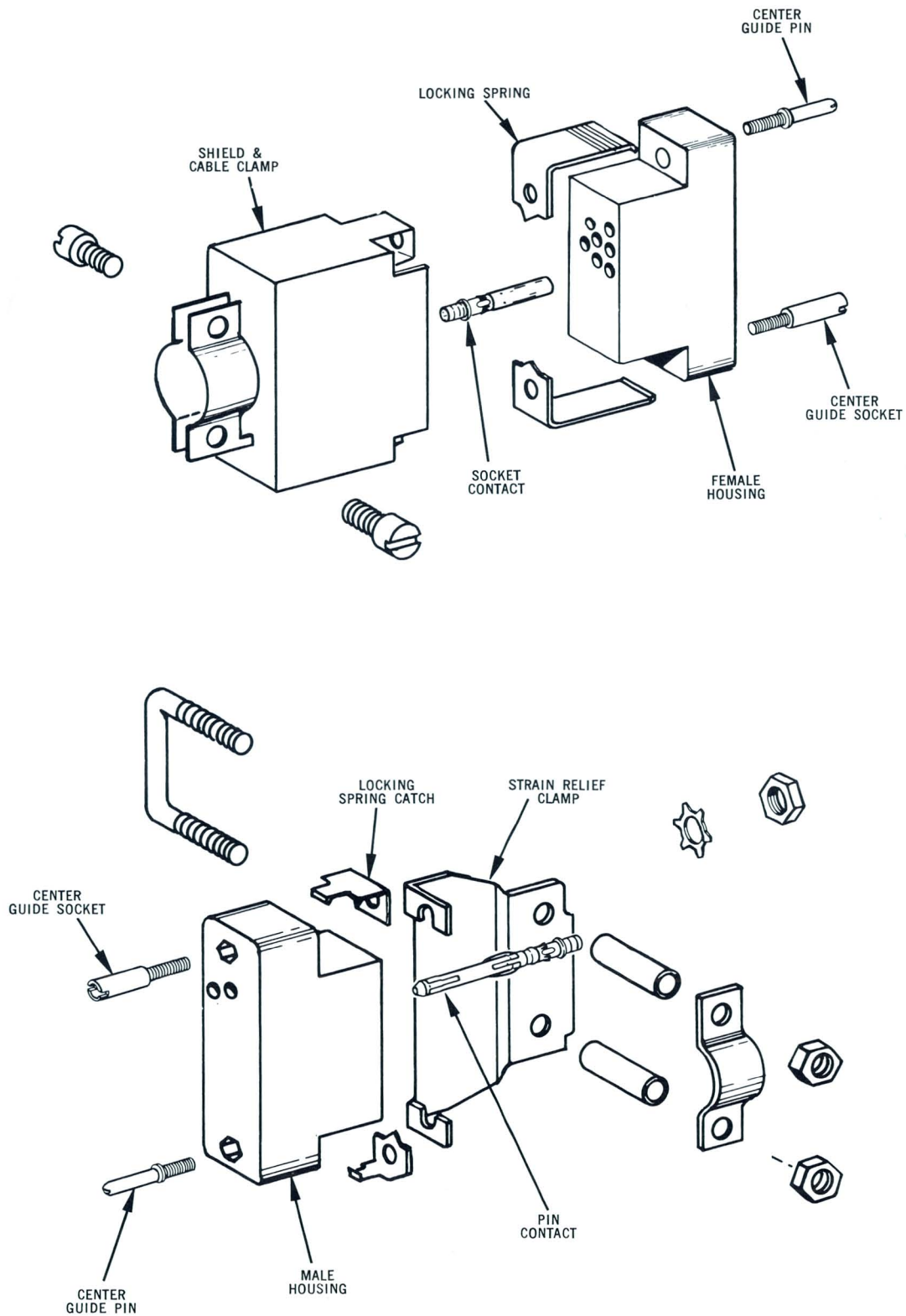
8 POSITION TWIN STANDARD CONNECTOR ASSEMBLY



20 POSITION MINIATURE CONNECTOR ASSEMBLY

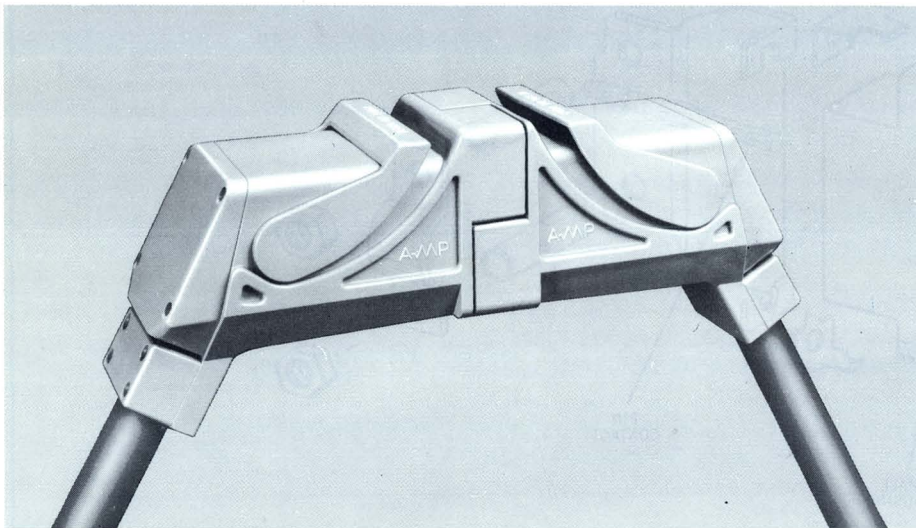
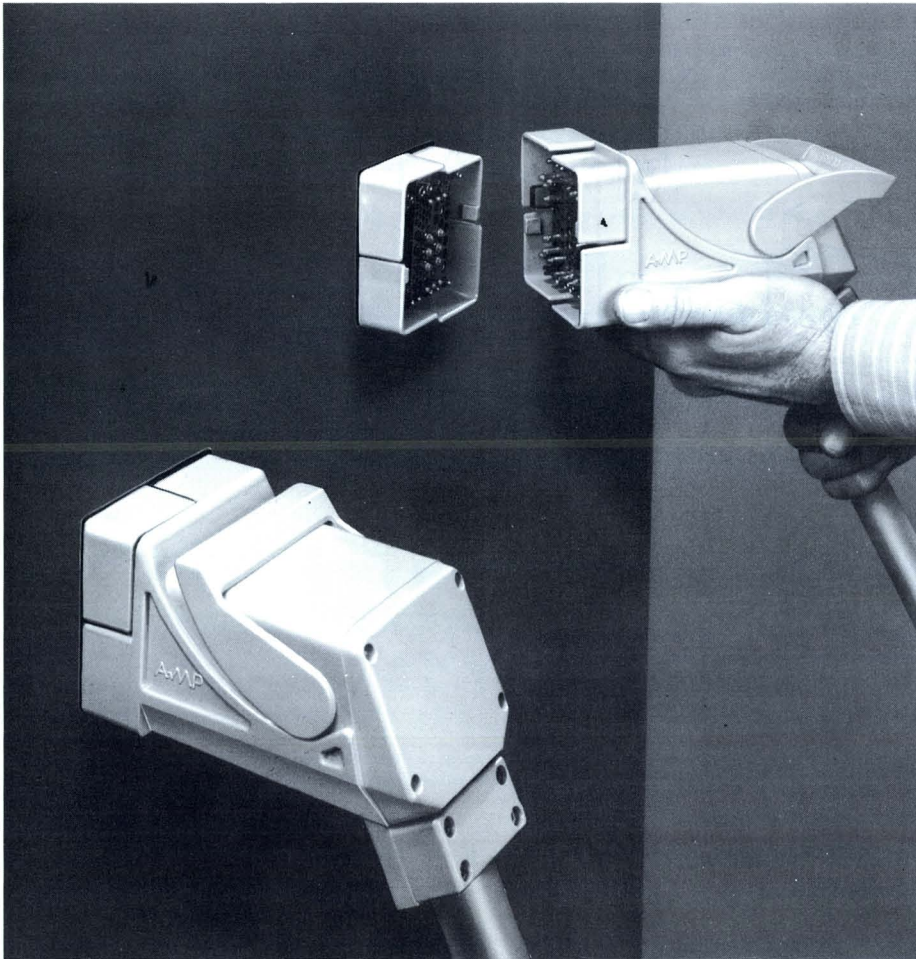


26 POSITION SUBMINIATURE CONNECTOR ASSEMBLY

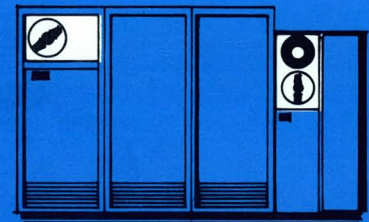
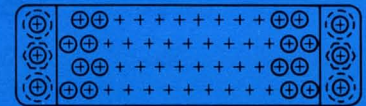
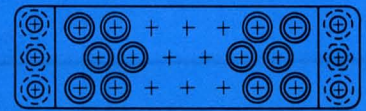


16 AMP

Multiple Position Coaxial Connectors



Latching Connector



COAXICON Latching Connector

Finding wide application in the computer and peripheral equipment industries, the A-MP★ COAXICON Latching Connector provides a fast, versatile and reliable means of packaging signal and power circuit terminations. This high density connector is designed to accept up to three standard A-MP multi-contact connector blocks, including the 50-position AMP-INCERT★ "M" Series block, the 42-position AMP-INCERT Mixed "M" Series block and the 20-position Miniature COAXICON Contact block . . . or any combination of the three. Its versatility is further enhanced by its ability to be mated plug-to-plug (free hanging) as well as plug-to-receptacle (bulkhead mounted) with the proper selection of contacts and hardware.

Comprised of a plug assembly and a receptacle, the latching connector is ruggedly constructed of high impact polycarbonate and stainless steel for maximum durability. Both plug and receptacle are designed to provide positive alignment when mated. The extended outer rim of the plug and receptacle housing assures easy and accurate mating by allowing both connector halves to engage at least 0.5 inch before the pins and sockets engage. This reliability feature also provides full protection for the pin contacts during handling. Additional alignment and keying are also available by the use of guide pins and sockets which are installed in the connector blocks.

Fast engagement and disengagement of the latching connector is accomplished by a handle operated camming mechanism installed in the plug assembly. In addition to its quick connect/disconnect capabilities,, the plug half of the connector is also equipped with an integral cable clamp. This clamp accommodates wiring harnesses up to 1.150 inches in diameter and also serves to protect the rear bay wiring against flexing and axial pullout. Two strain relief clamps offer the same protection for the rear wiring of the receptacle.

The connector blocks for the COAXICON Latching Connector are available in either diallyl or phenolic material. These housing inserts accept miniature and subminiature COAXICON contacts and power and standard pin and socket contacts. These contacts can be used in a variety of combinations for mixing power and signal circuits. All pins and sockets are crimp, snap-in contacts that couple AMP's automated compression-controlled crimping techniques and simplified assembly to save you both time and money.

Precision engineered, versatile and highly reliable, the A-MP COAXICON Latching Connector is ideally suited to virtually all applications requiring the high density packaging of mixed or matched signal and power circuit connections.

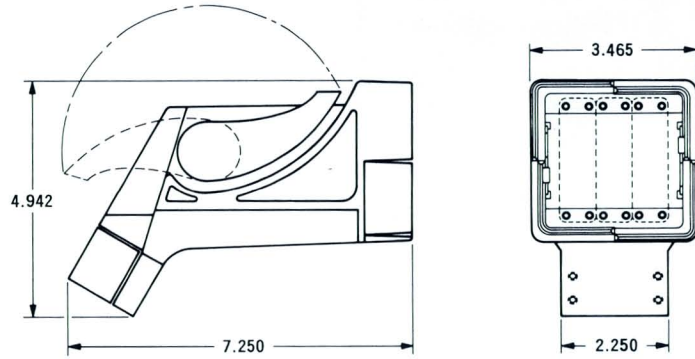
FEATURES

- Accepts up to three standard 50-position "M" Series, 42-position Mixed "M" Series, and 20-position Miniature COAXICON Contact blocks — or any combination.
- Can be mated plug-to-plug (free hanging) or plug-to-receptacle (bulkhead mounted).
- Hand operated camming mechanism offers quick connect/disconnect capabilities.
- Designed for positive and accurate mating to assure superior electrical and mechanical performance.
- Accepts miniature and subminiature COAXICON contacts and power and standard pin and socket contacts.
- Crimp, snap-in pin and socket contacts combine automated crimping techniques and simplified assembly.

All Dimensions in Inches

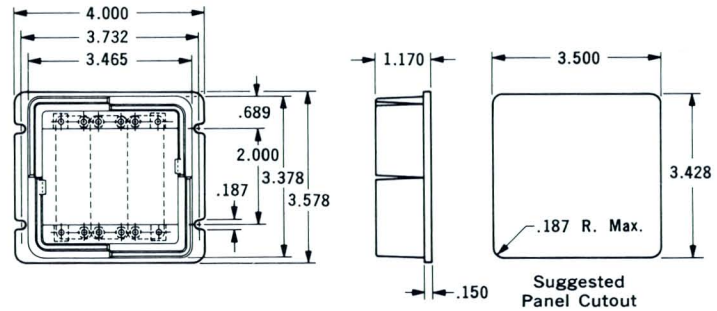
Note: Specifications subject to change. Consult AMP Incorporated for latest design specifications.

Plug Assembly



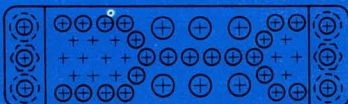
Material: Polycarbonate, Stainless Steel
Part No.: 225004-1

Receptacle



Material: Polycarbonate
Part No.: 225005-1

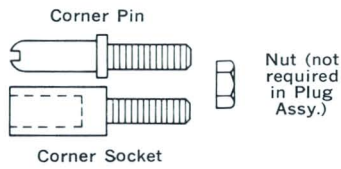
Housing Inserts



Number of Contacts	Housing Will Accommodate These Variations of Contacts	Housing Part Numbers		Description
		Phenolic	Diallyl Phthalate	
20	Miniature Coaxicon Contacts or Type I Size 12 Power Contacts	200458-3 (Black)	200458-1 (Blue) 200458-5 (Grey-Green)	Pin Housing
		200459-3 (Black)	200459-1 (Blue) 200459-5 (Grey-Green)	Socket Housing
42 Mixed	36-Type II, III or III(+) Size 16 (STD) or 36 Submin. Coaxicon Contacts and 6-Miniature Coaxicon Contacts or 6-Type I Size 12 Power Contacts	202515-1 (Black)	202515-3 (Blue)	Pin Housing
		202516-1 (Black)	202516-3 (Blue)	Socket Housing
50	Type II Size 20, Type II Size 16 (STD), Type III or III(+) Size 18 or 20, or Submin. Coaxicon Contacts (Short)	200276-2	200276-4	Pin Housing
		200277-2	200277-4	Socket Housing
	Type II Size 16 (Long), Type III or III(+) Size 16, or Submin. Coaxicon Contacts (Long)	200277-2 201358-1	200277-4 201358-3	Either Housing Will Accept Pins and/or Sockets (one of each Housing Required)

Note: For complete housing and contact specifications refer to AMP-INCERT "M" Series Pin and Socket Connectors Catalog No. 940 and A-MP COAXICON Connectors Catalog No. 467-8.

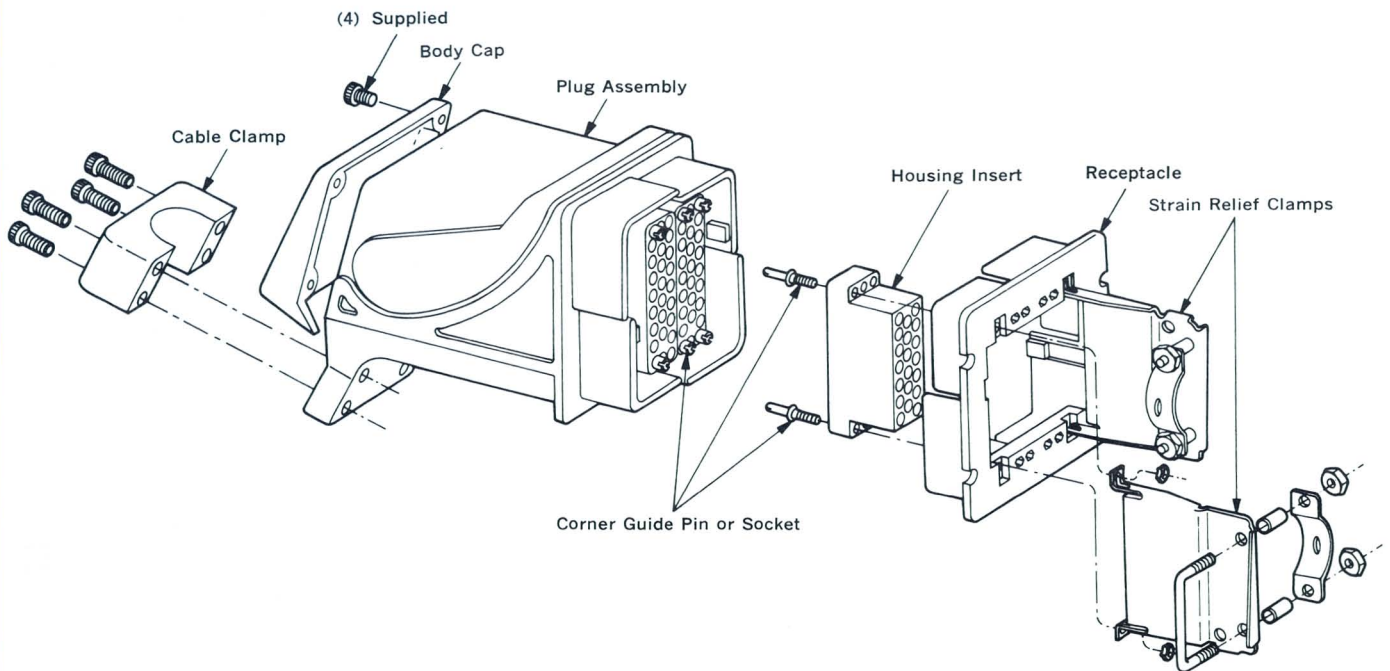
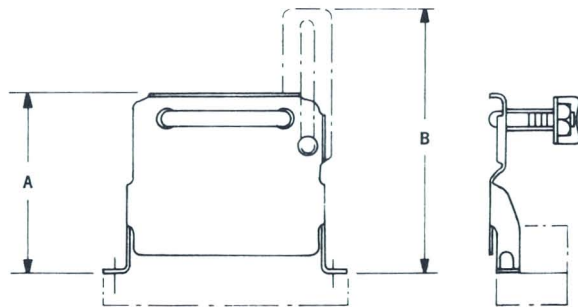
Guide Pins and Sockets

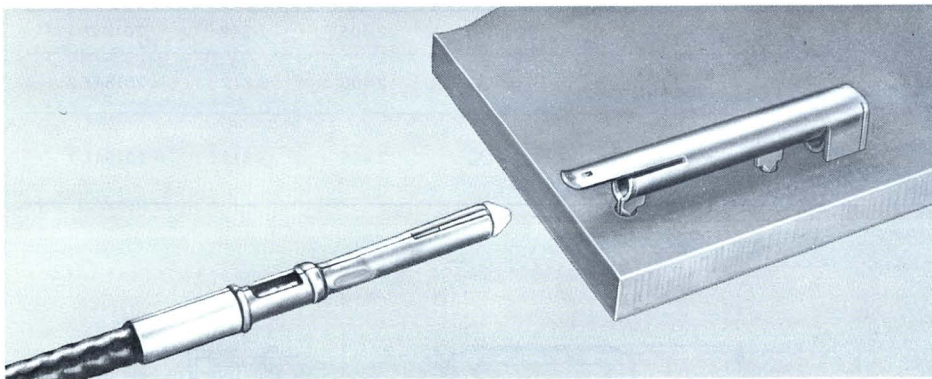
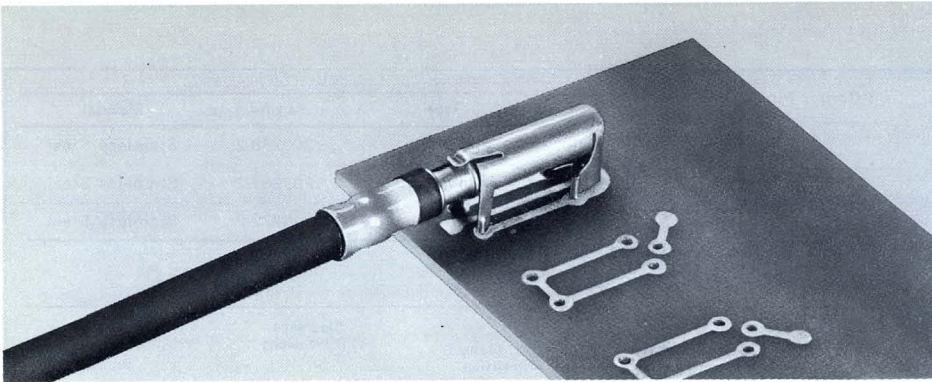


Type	Part No.	Material
Corner Pin	200788-2	Stainless Steel
Corner Socket	203963-2	Stainless Steel
Hex Nut	200773-2	Stainless Steel

Strain Relief Clamps

Type	Material and Finish	Max. Clamp Dimension	Clearance Dimensions		Part Number
			"A"	"B"	
90° or 180°	Cd. Pl. Steel	1½ x 1½	2.406	3.312	201847-1
	Stainless Steel	1½ x 1½	2.406	3.312	201847-2
90° or 180° with Self-locking Nuts	Cd. Pl. Steel	1½ x 1½	2.406	3.312	201841-1





The rapid trend toward miniaturization has caused a widespread change in product concepts. Two such examples are the AMP miniature and subminiature COAXICON sockets for printed circuit boards. These coaxial cable connectors feature a very low profile design—a 3/8" height for the miniature and 5/16" height for the subminiature—to permit extremely compact packaging. They can be mounted on a board near other components or placed at the board edge.

The miniature socket will mate with any male miniature COAXICON pin and is designed for use with .062" and .125" thick boards having a .100" grid spacing. Two types of contact retention features are available for each board thickness: (1) a spring type with a 1¼ lb. (min.) retention; and (2) a positive-lock type that releases only when the

male contact is depressed for removal. Rigid board mounting is assured by the socket's four "V" shaped legs which also provide good fillet during dip soldering operations. The legs are sharply pointed to permit easy entrance into the board and extend .050" through the board. This allows the .125" board socket to be used on a .062" breadboard, providing the extra length needed for soldering components or wires to the legs.

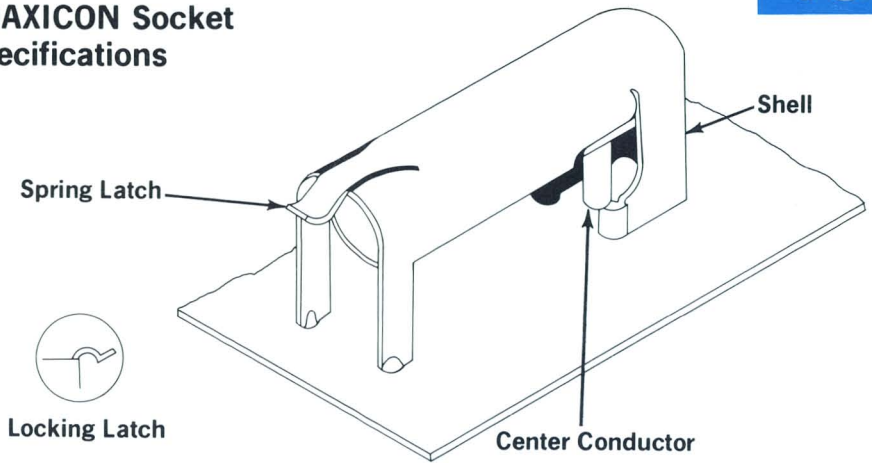
The subminiature socket is for use with 1/8" and 1/16" thick pc boards having an in-line grid spacing and can be mounted on a center-to-center spacing of .150". Two sharply pointed, diamond shaped legs assure the socket's rigid mounting, easy board entrance and good solderability. This socket is designed to mate only with the short subminiature COAXICON pin contact.

Miniature and Subminiature Sockets for Printed Circuit Boards

Features

- Miniature sockets for use with .062" and .125" thick boards; subminiature sockets for .045" to .071" thick boards.
- Low profile.
- Socket legs designed for rigid mounting, easy board entrance and good solderability.
- Center conductor leads through separate hole in each circuit.
- Miniature sockets usable with any miniature COAXICON contact.
- Both available with Spring or Locking Latch.
- Subminiature sockets mateable with short subminiature COAXICON pins.
- Subminiature pins provide loaded spring retention.

Miniature COAXICON Socket Specifications



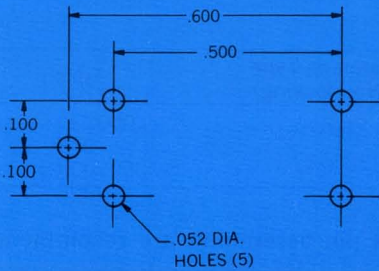
Materials

- Brass: MIL-C-50 and QQ-B-626
- Polypropylene: General Purpose
- Gold Plating: MIL-G-45204
- Nickel Plating: QQ-N-290
- Copper Plating: MIL-C-14550

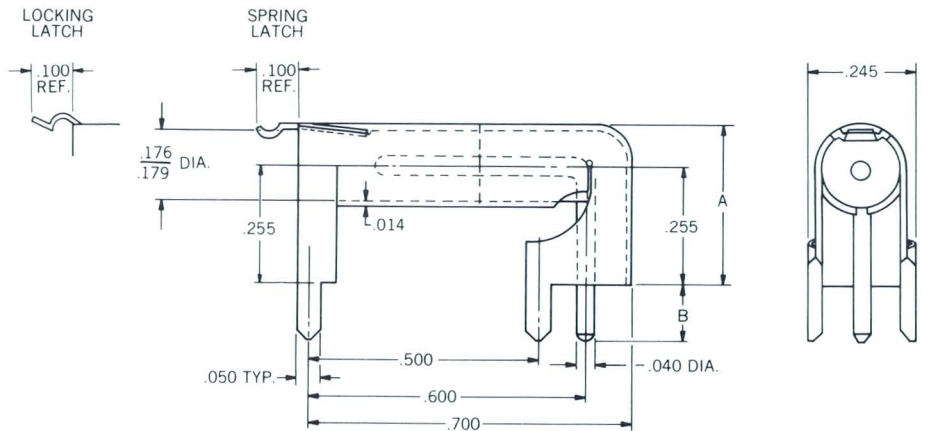
Performance Characteristics

- Test Voltage: 1000 Volts, Minimum
- Operating Temperature Range: - 55°C to +85°C
- Impedance: Non-constant

Dimensions



Mounting Hole Layout



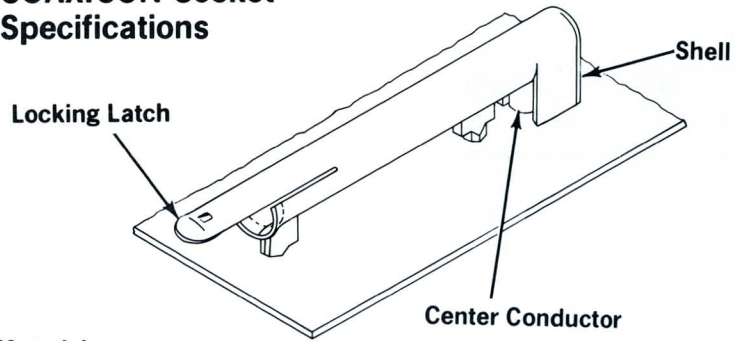
Board Thickness	Dimensions		Finish	Latch Type	Retention	Part No.
	A	B				
.062	.357	.125	.000030 Gold over	Spring	1¼ lbs. (min.)	50084-1
			.000050 Nickel	Locking	Positive Lock	50107-1
.125	.295	.187	.000030 Gold over	Spring	1¼ lbs. (min.)	50095-1
			.000050 Nickel	Locking	Positive Lock	50105-1
.062	.357	.125	.000100 Gold over	Spring	1¼ lbs. (min.)	50084-2
			.000100 Copper			

NOTE: For mateable miniature COAXICON contacts, refer to AMP Catalog #467-8.

All dimensions in inches.

NOTE: Specifications subject to change. Consult AMP Incorporated for latest design specifications.

Subminiature COAXICON Socket Specifications



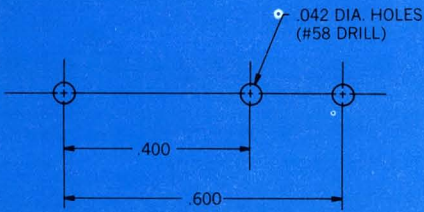
Materials

Brass: MIL-C-50 and QQ-B-626
 Polypropylene: General Purpose
 Gold Plating: MIL-G-45204
 Copper Plating: MIL-C-14550

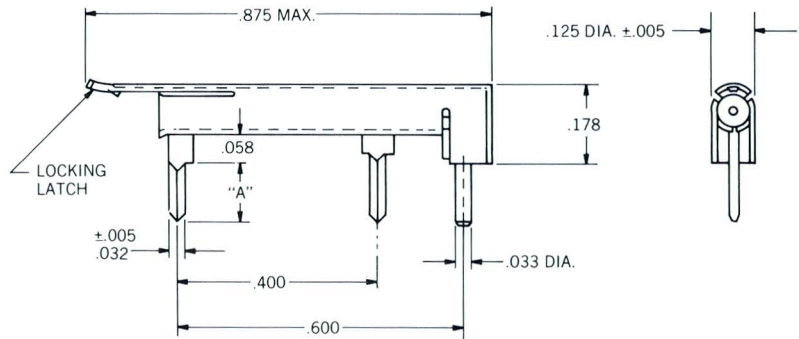
Performance Characteristics

Test Voltage: 600 Volts, Minimum
 Operating Temperature Range: -55°C to +85°C

Dimensions



Mounting Hole Layout



P.C. Board Thickness	Locking Type	Latching Type (Non-locking)	Finish
1/16 inch	226060-1	226023-1	.000030 Gold over
1/8 inch	226060-2	226023-2	.000100 Copper

Mating Subminiature COAXICON Pins

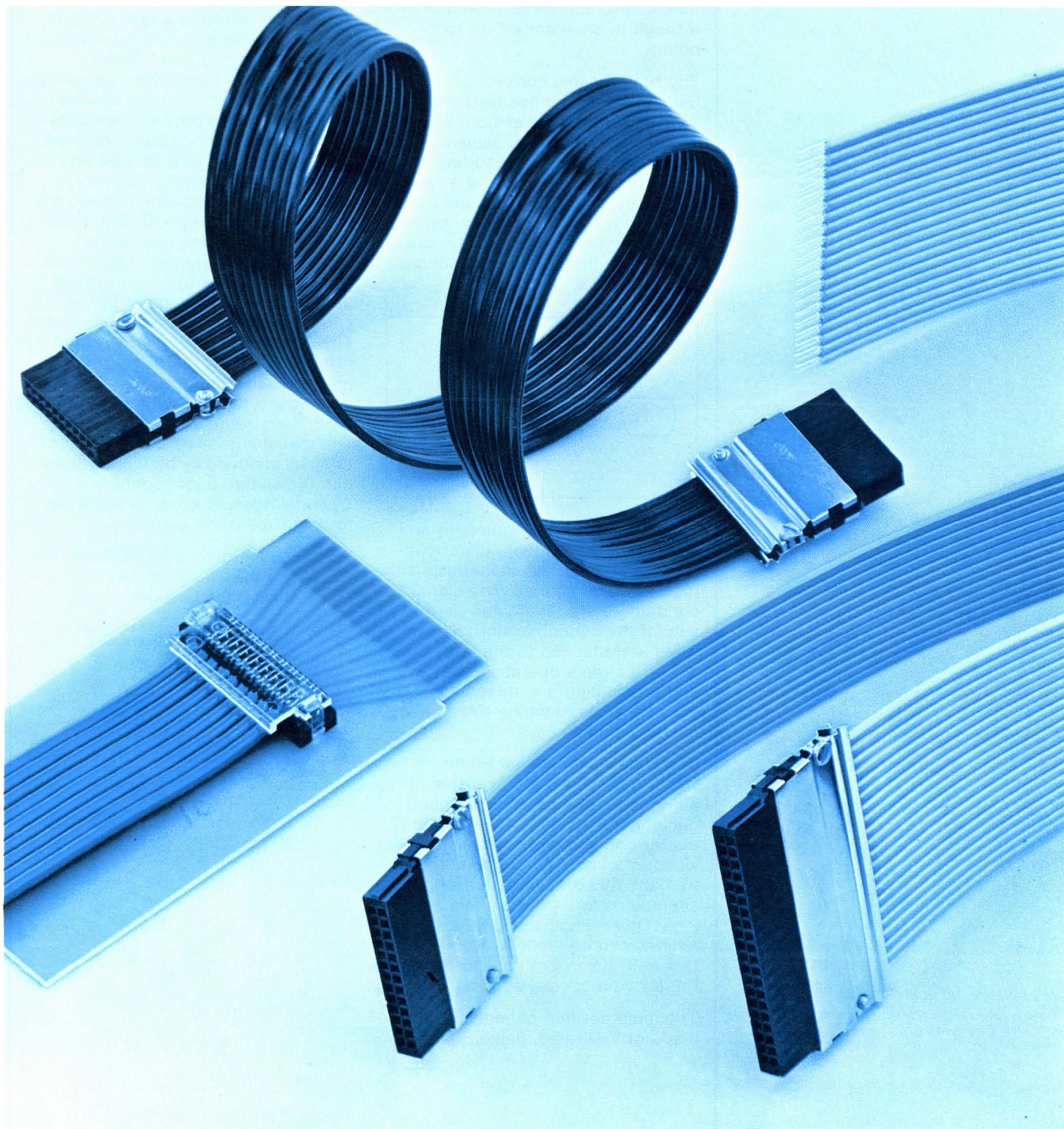
The following short subminiature COAXICON pin assemblies are recommended for use with any of the sockets listed above.



Wire Range	Part No.		Ferrule Number	Hand Tool Number	Die For Tool 69365-2 or 69710
	Loose Piece*	Strip*			
RG 174, 188	51563-8	51562-7	1-332056-0	69656	69690
RG 179, 187	51563-8	51562-7	1-332056-0	69656-1	69690-1
RG 178, 196	51563-9	51562-8	1-332057-0	69656-2	69690-2
No. 26 Thru No. 30 AWG Twisted Pair	1-51563-0	—	1-332057-0	See Note Below	See Note Below

Alignment springs are not required for this application and are not included with the pin assemblies.
NOTE: Refer to AMP Instruction Sheet No. IS 2024-2 for the applicable hand tool nos. of specific cable sizes.

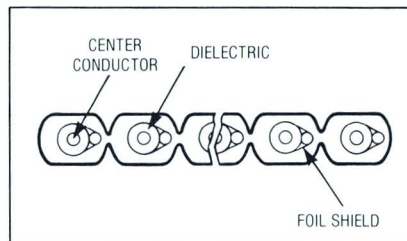
Coaxial Ribbon Cable Assemblies and Printed Circuit Board Connectors



General Information

Speed in digital equipment has reached the point where shielding and attenuation have become critical. Until now the use of coaxial cable in volume applications was not economically feasible. With the introduction of AMP Coaxial Ribbon Cable Assemblies the problems of economics and reliability are eliminated. This represents a major breakthrough in interconnection technology.

The ribbon cable consists of individual coaxial cables encased in a PVC jacket that makes up a standard flat coaxial ribbon cable configuration. Each coaxial lead has a solid center conductor and a foil-drain wire shield. This unique construction allows the cable to be cut in any length, maintaining the exact positioning of the center conductor and drain wire.



Through the use of AMP stripping and terminating equipment, all conductors are stripped simultaneously and then mass terminated. The signal conductors are terminated on one side of the connector and the drain wires are attached to the opposite side. This triple operation stripping and terminating greatly reduces assembly time, damage to cable and overall applied cost.

Complete AMP Coaxial Ribbon Cable Assemblies are available using 50, 75 and 93 ohm coaxial ribbon cable in 10, 13, 17, 20 and 25 conductor configurations and are provided in a choice of lengths from 6" to 120". All conductors are on .100" centerlines for maximum space savings. Other lengths, widths and centerlines can be made available, contact AMP Incorporated, Harrisburg, Pa. for your special application.

The multi-position connectors are made of V-O rated, flame retardant

glass filled nylon with gold over nickel plated beryllium copper contacts and mate with .0252" post for p.c. board mount pin header and I/O post applications. Recommended post lengths are .200" min. to .318" max.

The AMP Printed Circuit Board Connector for coaxial ribbon cable application provides a fast, reliable means of cable-to-board termination. Housings are V-O rated, flame retardant glass filled nylon with alloy 725 slotted beam contacts. Present configurations accept 95 ohm coaxial ribbon cable on .125 centerlines and are available in 6 thru 24 positions. Cable termination is simply and quickly accomplished. Insert the connector into the pre-drilled holes. The housing is then soldered in place. The pre-stripped ribbon cable is positioned over the connector at approximately 30° angle with the conductors over the front comb slots. The conductors are inserted into the front comb, drawn through and pressed down into the rear slot. The assembly is then positioned in the AMP Mass Termination Machine. The machine terminates all conductors, simultaneously by forcing them into the slotted beam contacts. Optional housing cover is available to complement the assembly.

For complete details on AMP Ribbon Cable see the Electrical and Mechanical Specifications.

Other width & length connectors and cables can be made available. Contact AMP Incorporated . . . for your special application.

ALL DIMENSIONS IN INCHES.

Note: Specifications subject to change. Consult AMP Incorporated for latest design specifications.

Specifications
Coaxial Ribbon Cable Assemblies
(.100 x .100 centers)

Electrical (50Ω)

Impedance— $50^{\pm 3}$ ohms using 150 pico sec. risetime pulse, measured flat, $\frac{1}{4}$ " bend radius and 90° flat bend.

Capacitance—31 pf/ft nom.

Crosstalk Constant—
 Adjacent Pair: KF < .002 nano sec/ft; KB < .1%
 All other lines: KF < .001 nano sec/ft; KB < .05%

Propagation Delay—<1.6 nano sec/ft
 Risetime Degradation—<400 pico sec/10 ft 20–80% levels
 Attenuation—at 100 MHz) <14 db/100 ft

Mechanical (50Ω)

Center Conductor—28 AWG, tin plated copper
 Nominal Diameter .0126
 Elongation 15% min.
 Resistance (D.C.) 72.9 ohms max. per 1,000 ft at 20°C

Dielectric—Polypropylene
 Dielectric Constant 2.3 nom.
 Dia. over Primary Dielectric .041 nom.

Shield—Aluminized Mylar .00135 Tk. nom.

Drain Conductor—28 AWG, tin plated copper
 Nom. Dia. .0126
 Elongation 15% min.
 Resistance (D.C.) 72.9 ohms max. per 1,000 ft. at 20°C

Jacket—Polyvinyl Chloride (PVC)

Color—Black per EIA STD RS-359

Cable Construction—Coaxial cables in flat ribbon configuration
 Centerline spacing .100

Electrical (75Ω)

Impedance— $75^{\pm 4}$ ohms using 150 pico sec. Risetime pulse, measured flat, $\frac{1}{4}$ " bend radius and 90° flat bend

Capacitance—17 pf/ft nom.

Crosstalk Constant—
 Adjacent Pair: KF < .002 nano sec/ft; KB < .1%
 All Other Lines: KF < .001 nano sec/ft; KB < .05%

Propagation Delay—<1.4 nano sec/ft

Risetime Degradation—<350 pico sec/10 ft 20–80% levels

Attenuation—at 100 MHz)—<10 db/100 ft

Mechanical (75Ω)

Center Conductor—30 AWG, tin plated copper
 Nom. Dia. .010
 Elongation 15% min.
 Resistance (D.C.) 112.1 ohms max. per 1,000 ft. at 20°C

Dielectric—Foamed Polypropylene
 Dielectric Constant 1.6 nom.
 Dia. over primary dielectric .048 nom.

Shield—Aluminized Mylar .00135 Tk. nom.

Drain Conductor—30 AWG, tin plated copper
 Nom. Dia. .010
 Elongation 15% min.
 Resistance (D.C.) 112.1 ohms max. per 1,000 ft. at 20°C

Jacket—Polyvinyl Chloride (PVC)

Color—Gray per EIA STD RS-359

Cable Construction—Coaxial Cables in flat ribbon configuration
 Centerline Spacing .100

Electrical (93Ω)

Impedance — $93^{\pm 5}$ ohms using 150 pico sec. Risetime pulse, measured flat, $\frac{1}{4}$ " bend radius and 90° flat bend

Capacitance—14 pf/ft nom

Crosstalk Constant—
 Adjacent Pair: KF < .002 nano sec/ft; KB < .1%
 All Other Lines: KF < .001 nano sec/ft; KB < .05%

Propagation Delay—<1.35 nano sec/ft

Risetime Degradation—<350 pico sec/10 ft 20–80% levels

Attenuation—at 100 MHz)—<9 db/100 ft.

Mechanical (93Ω)

Center Conductor—30 AWG, copper
 Nom. Dia. .010
 Elongation 15% min.
 Resistance (D.C.) 112.1 ohms max. per 1,000 ft. at 20°C

Insulation Coating—Alkyd enamel

Dielectric—Foamed Polyethylene
 Dielectric Constant 1.5 nom.
 Dia. over primary dielectric .064 nom.

Shield—Aluminized Mylar .00135 Tk. nom.

Drain Conductor—30 AWG, tin plated copper
 Nom. Dia. .010
 Elongation 15% min.
 Resistance (D.C.) 112.1 ohms max. per 1,000 ft. at 20°C

Jacket—Polyvinyl Chloride (PVC)

Color—Red per EIA STD RS-359

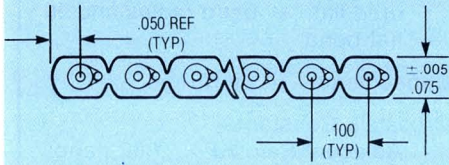
Cable Construction—Coaxial Cables in flat ribbon configuration
 Centerline Spacing .100

Receptacle Connector Assemblies (.100 x .100 centers)

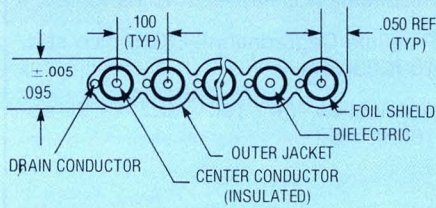
Individual connector kits and bulk ribbon coaxial cable available, refer to page 7.

Cable Assemblies

50Ω & 75Ω

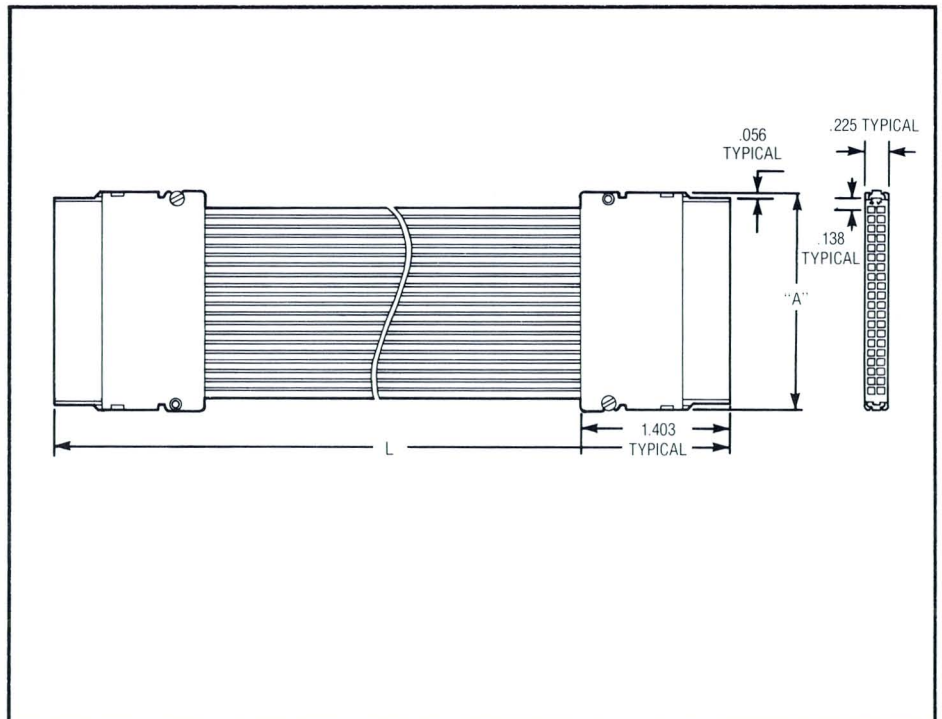


93Ω



10 Conductors
“A” Dimension
1.286

13 Conductors
“A” Dimension
1.586



Assembly Length (in inches)	Part Numbers		
	50Ω	75Ω	93Ω
6	226581-1	226584-1	226588-1
12	226581-2	226584-2	226588-2
18	226581-3	226584-3	226588-3
24	226581-4	226584-4	226588-4
30	226581-5	226584-5	226588-5
36	226581-6	226584-6	226588-6
48	226581-7	226584-7	226588-7
60	226581-8	226584-8	226588-8
72	226581-9	226584-9	226588-9
96	1-226581-0	1-226584-0	1-226588-0
108	1-226581-1	1-226684-1	1-226588-1
120	1-226581-2	1-226584-2	1-226588-2

To insure proper mating of connector use with a post length of .200 minimum to .318 maximum.

Assembly Length (in inches)	Part Numbers		
	50Ω	75Ω	93Ω
6	226580-1	226585-1	226589-1
12	226580-2	226585-2	226589-2
18	226580-3	226585-3	226589-3
24	226580-4	226585-4	226589-4
30	226580-5	226585-5	226589-5
36	226580-6	226585-6	226589-6
48	226580-7	226585-7	226589-7
60	226580-8	226585-8	226589-8
72	226580-9	226585-9	226589-9
96	1-226580-0	1-226585-0	1-226589-0
108	1-226580-1	1-226585-1	1-226589-1
120	1-226580-2	1-226585-2	1-226589-2

To insure proper mating of connector use with a post length of .200 minimum to .318 maximum.

**Receptacle Connector Assemblies
(.100 x .100 centers)**

Individual connector kits and bulk ribbon coaxial cable available, refer to page 7.

Cable Assemblies (Cont'd.)

**17 Conductors
"A" Dimension
1.986**

Assembly Length (in inches)	Part Numbers		
	50Ω	75Ω	93Ω
6	226582-1	226586-1	226590-1
12	226582-2	226586-2	226590-2
18	226582-3	226586-3	226590-3
24	226582-4	226586-4	226590-4
30	226582-5	226586-5	226590-5
36	226582-5	226586-6	226590-6
48	226582-7	226586-7	226590-7
60	226582-8	226586-8	226590-8
72	226582-9	226586-9	226590-9
96	1-226582-0	1-226586-0	1-226590-0
108	1-226582-1	1-226586-1	1-226590-1
120	1-226582-2	1-226586-2	1-226590-2

To insure proper mating of connector use with a post length of .200 minimum to .318 maximum.

**20 Conductors
"A" Dimension
2.286**

Assembly Length (in inches)	Part Numbers		
	50Ω	75Ω	93Ω
6	226312-1	226475-1	226515-1
12	226312-2	226475-2	226515-2
18	226312-3	226475-3	226515-3
24	226312-4	226475-4	226515-4
30	226312-5	226475-5	226515-5
36	226312-6	226475-6	226515-6
48	226312-7	226475-7	226515-7
60	226312-8	226475-8	226515-8
72	226312-9	226475-9	226515-9
96	1-226312-0	1-226475-0	1-226515-0
108	1-226312-1	1-226475-1	1-226515-1
120	1-226312-2	1-226475-2	1-226515-2

To insure proper mating of connector use with a post length of .200 minimum to .318 maximum.

**25 Conductors
"A" Dimension
2.786**

Assembly Length (in inches)	Part Numbers		
	50Ω	75Ω	93Ω
6	226583-1	226587-1	226543-1
12	226583-2	226587-2	226543-2
18	226583-3	226587-3	226543-3
24	226583-4	226587-4	226543-4
30	226583-5	226587-5	226543-5
36	226583-6	226587-6	226543-6
48	226583-7	226587-7	226543-7
60	226583-8	226587-8	226543-8
72	226583-9	226597-9	226543-9
96	1-226583-0	1-226587-0	1-226543-0
96	1-226583-0	1-226587-0	1-226543-0
108	1-226583-1	1-226587-1	1-226543-1
120	1-226583-2	1-226587-2	1-226543-2

To insure proper mating of connector use with a post length of .200 minimum to .318 maximum.

Printed Circuit Board Connectors (.125 x .125 centers)

Electrical (95Ω)

Characteristic Impedance— $95 \pm 5\Omega$

Capacitance—15 pf/ft ref

Propagation delay— < 1.35 nano sec/ft

Risetime Degradation— < 400 pico sec/10 ft, 20–80% levels

Attenuation— < 9 db/100 ft at 100 MHz

Crosstalk Constants:

Adjacent pair—KF $< .002$ nano sec/ft KB $< .1\%$

All other lines—KF $< .001$ nano sec/ft KB $< .05\%$

DC resistance of center and drain conductors—81.2 ohms max per 1,000 ft at 20°C

Mechanical (95Ω)

Center Conductor (with ins.)

29 AWG, .0113 nom dia solid tin plated copper per ASTM-B-33
Elongation 15% min.

Drain Conductor

29 AWG, .0113 nom dia solid tin plated copper per ASTM-B-33
Elongation 15% min

The drain conductors are to run parallel to and on the same plane as the center conductors

Dielectric

Material—foamed polyethylene
Dielectric constant—1.5 ref
Dielectric dia—.075

Shield

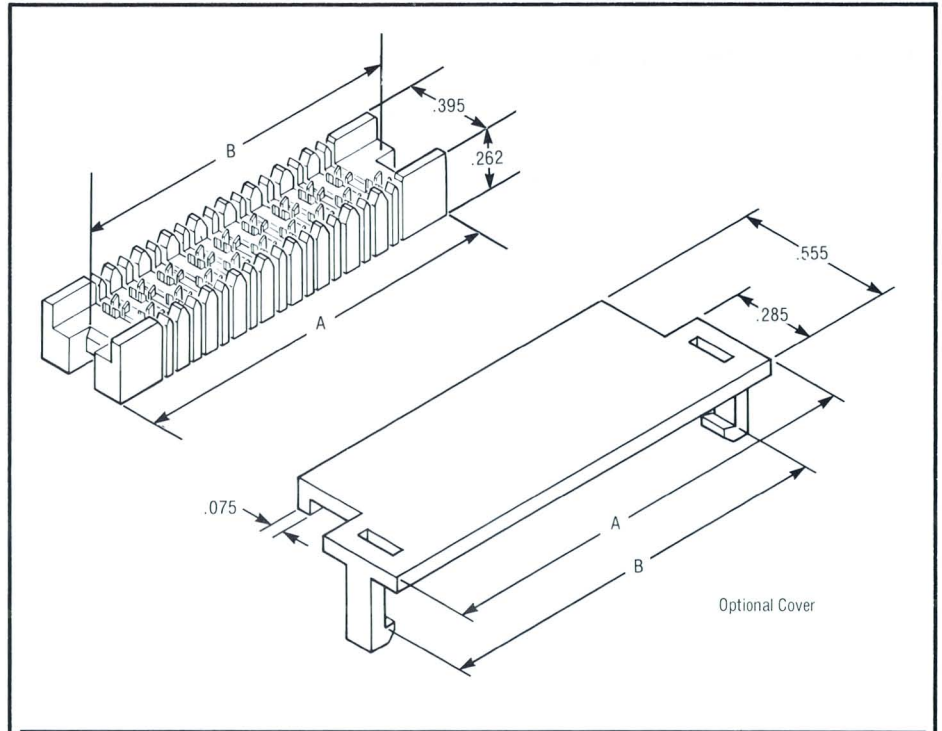
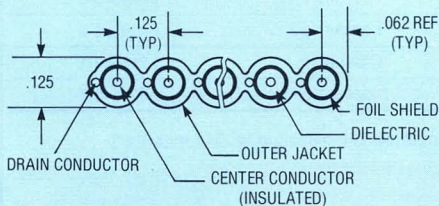
Material—aluminized mylar foil

Outer Jacket

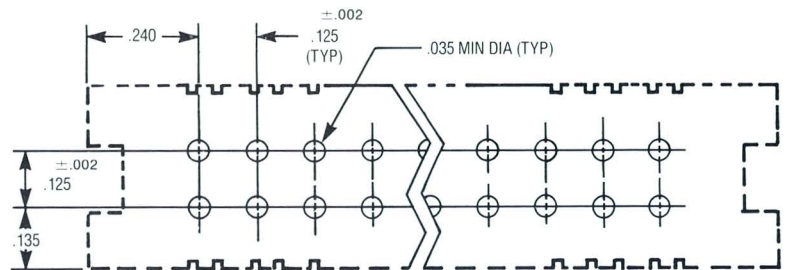
The jacket material to be Fr Polyvinyl Chloride (PVC) in accordance with the configuration and dims shown
Color—Blue per EIA STD RS-359

Stripping

Strip per AMP I.S. 2577



Number of Conductors Terminated	Terminator Part No.	Cover Part No.	Cable Part No.	Dim. "A"	Dim. "B"
6	1-226472-7	1-226482-7	226596-6	1.125	.975
7	1-226472-8	1-226482-8	226596-7	1.250	1.100
8	1-226472-9	1-226482-9	226596-8	1.375	1.225
9	226472-1	226482-1	226596-9	1.500	1.350
10	226472-2	226482-2	1-226596-0	1.625	1.475
11	226472-3	226482-3	1-226596-1	1.750	1.600
12	226472-4	226482-4	1-226596-2	1.875	1.725
13	226472-5	226482-5	1-226596-3	2.000	1.850
14	226472-6	226482-6	1-226596-4	2.125	1.975
15	226472-7	226482-7	1-226596-5	2.250	2.100
16	226472-8	226482-8	1-226596-6	2.375	2.225
17	226472-9	226482-9	1-226596-7	2.500	2.350
18	1-226472-0	1-226482-0	1-226596-8	2.625	2.475
19	1-226472-1	1-226482-1	1-226596-9	2.750	2.600
20	1-226472-2	1-226482-2	2-226596-0	2.875	2.725
21	1-226472-3	1-226482-3	2-226596-1	3.000	2.850
22	1-226472-4	1-226482-4	2-226596-2	3.125	2.975
23	1-226472-5	1-226482-5	2-226596-3	3.250	3.100
24	1-226472-6	1-226482-6	2-226596-4	3.375	3.225



Other Coaxial Ribbon Cable Products

Connector Kits and Bulk Cable

Number of Conductors	Receptacle Connector Kit Part Nos.	Cable Part Nos.		
		50	75	93
10	226476-1	1-226298-0	1-226463-0	1-226464-0
13	226477-1	1-226298-3	1-226463-3	1-226464-3
17	226478-1	1-226298-7	1-226463-7	1-226464-7
20	226305-1	2-226298-0	2-226463-0	2-226464-0
25	226479-1	2-226298-5	2-226463-5	2-226464-5

Note:

Kit comprised of preloaded connector, cable clamps (2) & slotted pan head machine screws (2).

The photograph below illustrates the versatility of the Ribbon Coaxial Cable system. The ability to terminate to standard discrete coaxial connectors permits the system to mate with existing interfaces, while allowing mass termination high package density wherever desirable. The RF Connectors and Multiple Position COAXICON Contacts are available from AMP Incorporated, for maximum system flexibility. Custom cable assemblies, using combinations of these products, can be made available. Contact AMP Incorporated for your special application.

