CIRCULAR PLASTIC CONNECTORS (CPC)

CPC Series 1

Series 1 connectors permit the use of multiple combinations of signal and coaxial circuits in the same housing by accepting durable Multimate contacts. These pin and socket contacts include Type III+ and subminiature coaxial contacts, interchangeable in the same Multimate contact cavity. Type III+ contacts (.062 [1.57] pin diameter) are capable of carrying a maximum of 13 amperes when crimped in wire. Type III solder contacts and posted contacts for pc board applications are also available. Many connector arrangements offer both standard and reverse mate contact loading – from 4 thru 37 positions.

Circular Plastic Connectors (CPC) are rugged, cost-effective connectors that can be used to provide power input and output to and from devices. Common applications are control cabinets, energy management systems, power generators, material handling, agriculture equipment, battery management systems, industrial machinery, rolling stock, forklifts, welding equipment, robotics, construction equipment, power supplies, industrial scales and weighting, etc.

The use of Circular Plastic Connectors enables customers to reduce installation time, meet harsh and space saving requirements, design with high-performance materials, and speed up their go-to-market plans.

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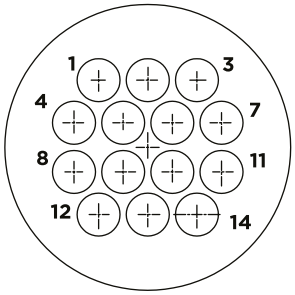
CONNECTOR SERIES AND TYPES

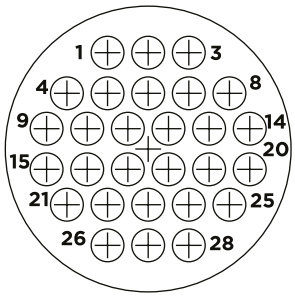
Series 1 – Size 16 Contacts

Series 1 connectors permit the use of multiple combinations of signal and coaxial circuits in the same housing by accepting durable Multimate contacts. These pin and socket contacts include Type III+ and subminiature coaxial contacts, interchangeable in the same Multimate contact cavity. Type III+ contacts (.062 [1.57] pin diameter) are capable of carrying a maximum of 13 amperes when crimped in wire. Type III solder contacts and posted contacts for pc board applications are also available. Many connector arrangements offer both standard and reverse mate contact loading – **from 4 thru 37 positions**.



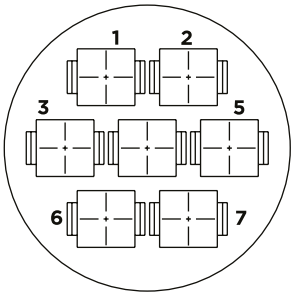
Series 2 – Size 20 Contacts

Series 2 connectors accept Size 20 DF (precision formed) and Size 20 DM (screw-machined) pin and socket contacts with a .040 [1.02] pin diameter, Size 20 DF contacts are available in crimp and solder versions, as well as a posted version for wrap-type and pc board applications. Maximum current carrying capability is 7.5 amperes. Many connector arrangements offer both standard and reverse mate contact loading – from **8 thru 63 positions**.



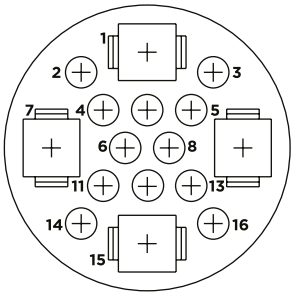
Series 3 – Power Contacts

Series 3 connectors accept Type XII power contacts which can carry up to 25 amps per contact. These contacts will accommodate a wire size range of 16 to 10 AWG [1.4 to 5 mm2]. Two connector sizes are available in both standard and reverse mate connector arrangements **3 and 7 positions**.



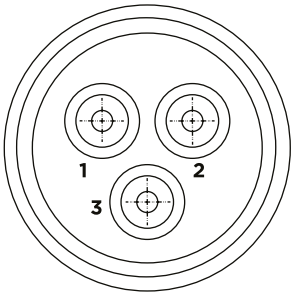
Series 4 – Combination, Size 16 and Power Contacts

Series 4 connectors accept Size 16 Multimate and Type XII power contacts, combining the signal and coaxial circuit capabilities of Series 1 connectors with the power circuit capabilities of Series 3 connectors. Available in three connector sizes offering power mixing combinations totaling **13, 16 an 22 positions**.



Series 5 – Power Contacts .125 POWERBAND

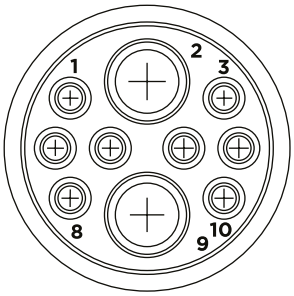
Series 5 connectors combine the revolutionary performance of the new AMP POWERBAND Contact, high current contact in configurations similar to the Series 3 connectors. AMP POWERBAND contacts offer the electrical performance of the best Mil Spec Size 8 screwmachined contacts with the economy and productivity of strip-fed, precision formed contacts. Series 5 connectors are environmentally sealable to meet IEC IP 65 and IP 67 specifications. Rated at 250 VAC or VDC, 50 amperes maximum in a single contact, the connectors are available in free-hanging and panelmount applications – **one connector configuration containing three .125 POWERBAND contacts**.



CONNECTOR SERIES AND TYPES

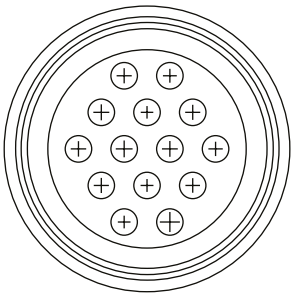
Series 6 – Combination, Size 16 and .125 POWERBAND Contacts

Series 6 combines the high current and environmental sealing capability of Series 5, POWERBAND contacts, and the reliability of signal carrying, low current Type III+ contacts. This combination of power and signal contacts is offered in **one connector configuration containing two .125 POWERBAND contacts and eight Type III+ signal pin and socket contacts.positions**.



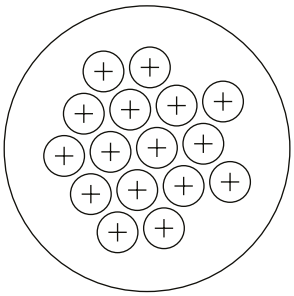
MIL-C-5015 Style – Size 16 Contacts

This new addition to the AMP Circular Plastic Connector Line is specifically designed to be **intermateable with Metal-Shell size 20-14 and 18-10, MIL-C-5015 Style connector systems**. The high impact resistant plastic housing offers the advantages of light weight and lower cost than existing metal-shell connectors. In addition the connector design prevents mismating when used with other insert arrangements. As part of the AMP Multimate family of connectors, the MIL-C-5015 style connector offers the economies of crimp Type III+ pin and socket contacts in reel-mounted, strip-form for high volume automatic machine termination, as well as in loose piece-form for low volume, prototype or maintenance and repair.



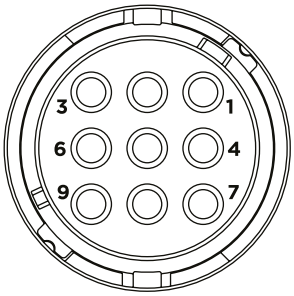
Metal-Shell, Circular Plastic Connectors

Metal-Shell CPC connectors consist of a black thermoplastic insert in a nickel-plated, zinc alloy shell. These connectors are currently available in **shell sizes 14, 22 and 28, and in two basic configurations consisting of plugs and square flange receptacles**.



Miniature CPC Connectors

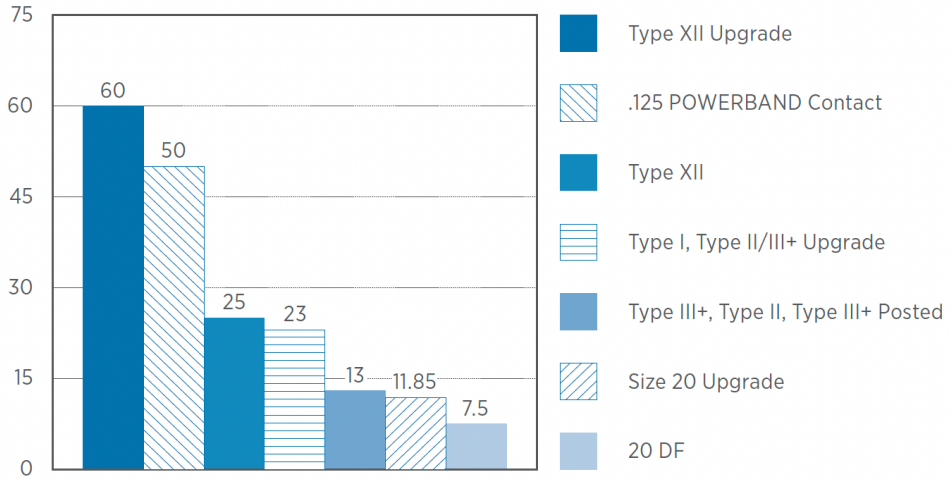
These compact connectors accept existing Mini-Universal MATE-N-LOK pin and socket contacts, 30-22 AWG [.05-.3 mm2]. Two shell sizes (8 or 11) are available, accommodating **from 1 to 4 and 5 to 9 positions**. Featuring high contact density and IP67 sealing, these durable connectors are well suited for many wire-to-wire and wire-topanel applications.



CURRENT CARRYING CAPABILITIES

The total current capacity of each contact in a given connector is dependent upon the heat rise resulting from the combination of electrical loads of the contacts in the connector arrangement and the maximum ambient temperature in which the connector will be operating. Caution must be taken so that this combination of conditions does not cause the internal temperature of the connector to exceed the maximum operating temperature of the housing material. Several variables which must be considered when determining this maximum current capability for your application are:

Contact Current Guide Maximum Current (Amperes) for Largest Wire Size



Wire Size– Larger wire will carry more current since it has less internal resistance to current flow and generates less heat. The wire also conducts heat away from the connector.

Connector Size– In general, with more circuits in a connector, less current per contact can be carried.

Current Load Distribution– Spreading those lines with greater current loads throughout the connector, particularly around the outer perimeter, will enhance heat dissipation.

Ambient Temperature– With higher ambient temperatures, less current can be carried.

Contact Selector Chart

Connector Type	20 DF	Type II	Type III+	Posted Type III+	Type XII	POWERBAND Contacts
CPC Series 1		✓	✓	✓		
CPC Series 2	✓					
CPC Series 3					✓	
CPC Series 4		✓	✓		✓	
CPC Series 5						✓
CPC Series 6		✓	✓			✓
CPC 5015			✓			
CMC Series 1		✓	✓	✓		
CMC Series 2	✓					
CMC Series 3					✓	
CMC Series 4		✓	✓		✓	

Note: All part numbers are RoHS Compliant.

CABLE OR PANEL MOUNT

Standard Mate Connectors (Receptacles accept pin contacts, Plugs accept socket contacts)

Arrangement		Keying	Square Flange Receptacle		Free-Hanging Receptacle	Plug
Shell Size	No. of Positions		With Threaded Inserts[1]	With Mounting Holes		
11-4		A	208130-1	206061-1	206153-1	206060-1
13-9		A	208131-1	206705-1	206705-2	206708-1
17-16		A	206036-8	206036-1	206036-3	206037-1
		B	-	213862-1	—	213849-1
23-24		A	211839-1	206838-1	206838-2	206837-1
		B	-	213866-1	—	213851-1
23-37		A	787610-1	206151-1	206151-2	206150-1
		B	-	213860-1	—	213848-1

[1] Four 4-40 threaded inserts per receptacle.

Reverse Mate Connectors (Receptacles accept socket contacts, Plugs accept pin contacts)

Arrangement		Keying	Square Flange Receptacle		Free-Hanging Receptacle	Plug
Shell Size	No. of Positions		With Threaded Inserts[1]	With Mounting Holes		
11-4		A	211102-1	206430-1	206430-2	206429-1
17-14		A	211103-1	206043-1	206043-3	206044-1
		B	-	796437-2	—	796449-1
23-37		A	206306-5	206306-1	206306-2	206305-1
		B	-	213864-1	—	213850-1

[1] Four 4-40 threaded inserts per receptacle.
Key Style "A" is the Standard 5 Locating Key arrangement. Key Style "B" is the 4 Locating Key arrangement.

Replacement Coupling Rings

Shell Size	Part No.
11	213811-1
13	213813-1
17	213810-1
23	213812-1

Material

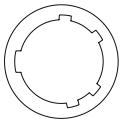
Housing – Thermoplastic, 94V-0 rated, black

Related Product Data

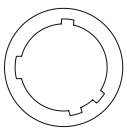
Contacts – Pages 13-17
Contact Arrangement – Page 18
Component Dimensions – Page 19
Accessories – Pages 20-27

Keying

Molded-in keying in two configurations:
A – Standard Configuration: 5 Keys



B – Optional Configuration: 4 Keys to prevent mismating of standard and reverse mate.



(Accepts Type III+, High Current Power and Type II Contacts)

Square Flange Receptacle

Free-Hanging Receptacle

Plug

Listed part numbers are for connectors only; **contacts must be ordered separately.**

CABLE OR PANEL MOUNT, VDE TESTED

Standard Mate Connectors (Receptacles accept pin contacts, Plugs accept socket contacts)

Arrangement		Keying	Square Flange Receptacle		Plug
Shell Size	No. of Positions		With Threaded Inserts[1]	With Mounting Holes	
13-7		A	211401-4	211401-1	211399-1
17-9		A	211767-2	211767-1	211766-1
23-19		A	211771-2	211771-1	211770-2
		B	-	213870-1	213853-1

[1] Four 4-40 threaded inserts per receptacle.

Reverse Mate Connectors (Receptacles accept socket contacts, Plugs accept pin contacts)

Arrangement		Keying	Square Flange Receptacle (With Mounting Holes[1])	Free-Hanging Receptacle	Plug
Shell Size	No. of Positions				
13-7		A	211398-1	211398-2	211400-1
17-9		A	211769-1	211769-3	211768-1
		B	796439-2	-	796450-1
23-19		A	211773-1	-	211772-1
		B	213868-1	-	213852-1

[1]Square flange receptacles available with 4-40 threaded inserts in mounting holes, contact TE Connectivity
Key Style "A" is the Standard 5 Locating Key arrangement. Key Style "B" is the 4 Locating Key arrangement.

Replacement Coupling Rings

Shell Size	Part No.
13	213813-1
17	213810-1
23	213812-1

Material

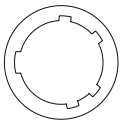
Housing – Thermoplastic, 94V-0 rated, black

Related Product Data

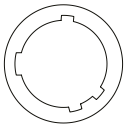
Contacts – Pages 13-17
Contact Arrangement – Page 18
Component Dimensions – Page 19
Accessories – Pages 20-27

Keying

Molded-in keying in two configurations:
A – Standard Configuration: 5 Keys



B – Optional Configuration: 4 Keys to prevent mismating of standard and reverse mate.



(Accepts Type III+, High Current Power and Type II Contacts)

Square Flange Receptacle

Plug

- Designed to meet requirements of VDE as shown in DIN Specification 57627
- Recognized under the Component Program of Underwriters Laboratories Inc. for 600 VAC and 600 VDC service, File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189

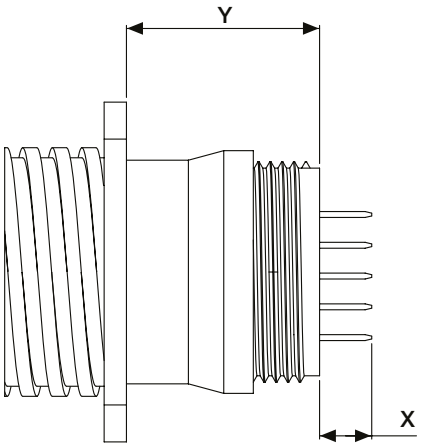
Listed part numbers are for connectors only; **contacts must be ordered separately.**

SQUARE FLANGE RECEPTACLES, PRINTED CIRCUIT BOARD MOUNT

Standard Mate (Posted Pin Contacts)

Arrangement		Receptacle Assemblies		Keying Style	Dimensions		Contact Finish Code	Peripheral Seal
Shell Size	No. of Pos	Mounting Holes	4-40 Threaded Inserts		X	Y		
11-4		-	207825-9	A	.119 [3.02]	.816 [20.73]	A	N
13-7		-	1-796433-1	A	.220 [5.59]	.816 [20.73]	A	N
13-9		208223-9	-	A	.220 [5.59]	.816 [20.73]	A	N
		-	1-208223-0	A	.220 [5.59]	.816 [20.73]	A	N
17-16		-	1-207303-4	A	.220 [5.59]	.816 [20.73]	A	N
		1-207303-5	-	A	.220 [5.59]	.816 [20.73]	C	N
		1-207303-3	-	A	.220 [5.59]	.816 [20.73]	A	N
		213855-3	213855-4	B	.220 [5.59]	.816 [20.73]	A	N
23-19		213782-4	-	A	.429 [10.90]	.674 [17.12]	A	N
		213859-2	-	B	.618 [15.70]	.654 [16.61]	C	N
23-24		-	213588-2	A	.220 [5.59]	.654 [16.61]	C	N
		213798-3	-	A	.618 [15.70]	.679 [17.24]	A	N
		213780-2	-	A	.220 [5.59]	.654 [16.61]	A	N
23-37		1-206934-1	-	A	.220 [5.59]	.654 [16.61]	A	N
		-	-	A	.119 [3.02]	.654 [16.61]	A	N
		-	1-206934-7	A	.119 [3.02]	.654 [16.61]	A	Y
		1-206934-8	-	A	.429 [10.90]	.654 [16.61]	A	N
		213854-3	-	B	.429 [10.90]	.654 [16.61]	A	N

Note: Posts are .017 [0.43] offset from centerline of contacts. All posts must be oriented in the same plane for proper contact/post location.



Dimensions X and Y are in the chart above.
See page 19 for all other dimensions

with .025 [0.64] sq. solder tails

Material

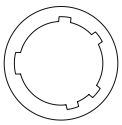
Housing – Thermoplastic, 94V-0 rated, black
Contacts –
A – Duplex plated gold flash on entire contact with .000030 [0.00076] min. precious metal on contact engagement area, tin on the termination area
C – Plated tin on the entire contact, tin on the termination area

Related Product Data

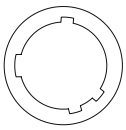
Contact Arrangement – Page 18

Keying

Molded-in keying in two configurations:
A – Standard Configuration: 5 Keys



B – Optional Configuration: 4 Keys to prevent mismating of standard and reverse mate.



Other Available Posted Contacts

TE Connectivity can make available contacts with various solder tail lengths for loading into the standard or reverse mate, square flange receptacles for applications requiring custom solder tail lengths.

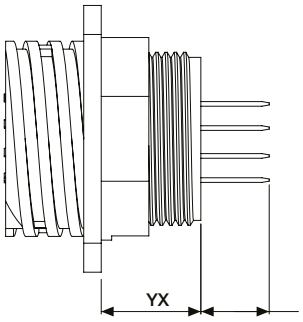
SQUARE FLANGE RECEPTACLES, PRINTED CIRCUIT BOARD MOUNT

Reverse Mate (Posted Socket Contacts)

with .025 [0.64] sq. solder tails

Arrangement		Receptacle Assemblies (Mounting Holes)	Keying Style	Dimensions		Contact Finish Code	Peripheral Seal
Shell Size	No. of Pos			X	Y		
11-4		208283-4	A	.159 [4.04]	.536 [13.61]	A	N
		1-788130-1	A	.704 [17.88]	.541 [13.74]	C	N
17-9		1-213826-1	A	.220 [5.59]	.536 [13.61]	C	Y
17-14		213729-9	A	.368 [9.35]	.536 [13.61]	A	N
		1-213825-7	A	.220 [5.59]	.536 [13.61]	C	Y
23-19		213827-8	A	368 [9.35]	.374 [9.50]	C	Y
23-37		2-208224-1	A	.557 [14.15]	.374 [9.50]	A	N
		213856-4	B	.557 [14.15]	.374 [9.50]	A	N
		207890-2	A	.159 [4.04]	.374 [9.50]	A	N

Note: Posts are .017 [0.43] offset from centerline of contacts. All posts must be oriented in the same plane for proper contact/post location.
Square flange receptacles available with 4-40 threaded inserts in mounting holes, contact TE Connectivity



Dimensions X and Y are in the chart above.
See page 19 for all other dimensions

Material and Finish

Housing – Thermoplastic, 94V-0 rated, black
Contacts –
A – Duplex plated gold flash on entire contact with .000030 [0.00076] min. precious metal on contact engagement area, tin on the termination area
C – Plated tin on the entire contact, tin on the termination area

Related Product Data

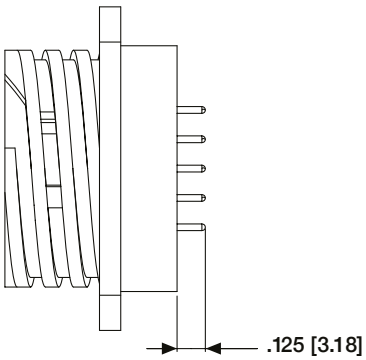
Contact Arrangement – Page 18

SPECIAL CPC CONNECTORS, SQUARE FLANGE RECEPTACLES, PRINTED CIRCUIT BOARD MOUNT

With Round Posted Contacts
(Size 16), Contact Arrangement 17-16

Material and Finish

Housing – Thermoplastic, 94V-0 rated, heat-stabilized, fireresistant, self-extinguishing, black
Contacts – Brass
Plating –
Connector Part No. 207292-1 – Plated tin over .000050 [0.00127] min. nickel on entire contact
Connector Part No. 207292-2 – Plated .000030 [0.00076] min. gold over .000050 [0.00127] min. nickel on entire contact



Note: Notes:
1. Connector can be used for pressure bulkhead feedthru (sealed) applications.
2. Receptacle is Standard Mate, supplied preloaded with 16 special round posted pin contacts, .030 [0.76] diameter.

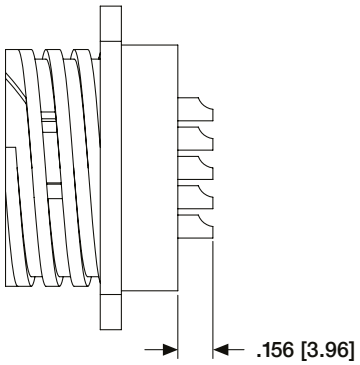
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.
Dimensions are shown for reference purposes only. Specifications subject to change.

SPECIAL CPC CONNECTORS, SQUARE FLANGE RECEPTACLES

With Solder Type Contacts (Size 16), Contact Arrangement 17-16

Material and Finish

Housing – Thermoplastic, 94V-0 rated, heat-stabilized, fireresistant, self-extinguishing, black
Contacts – Brass
Plating –
Plated .000030 [0.00076] min. gold over .000030 [0.00076] min. nickel on entire contact
Connector Part No. 206404-2 – Plated tin over .000100 [0.00254] min. copper on entire contact



Note: 1. Connector can be used for pressure bulkhead feedthru (sealed) applications.
2. Receptacle is standard mate, supplied preloaded with 16 special solder cup pin contacts.

SPECIAL CPC CONNECTORS, FEED-THRU

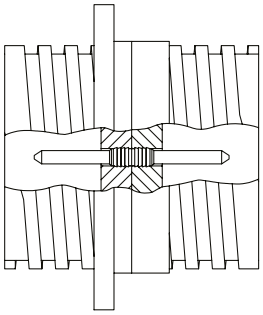
Pressure Rating up to 30 psi

Material and Finish

Housing – Thermoplastic, 94V-0 rated, black
Contacts – Copper alloy, gold over nickel plated

Arrangement		Standard Numbering Plug	Reverse Numbering Plug	Feed-Thru Receptacle
Shell Size	No. of Positions			
11-4		206060-1	206516-1	206518-2
17-16		206037-1	206554-1	206552-1

Note: Feed-Thru Receptacles are **fully loaded** with Size 16, feed-thru pin contacts. Order Size 16 crimp, snap-in socket contacts for plugs separately.



SQUARE FLANGE RECEPTACLES, RIGHT-ANGLE, POSTED

Standard Mate (Posted Pin Contacts)

with .025 [0.64] sq. solder tails

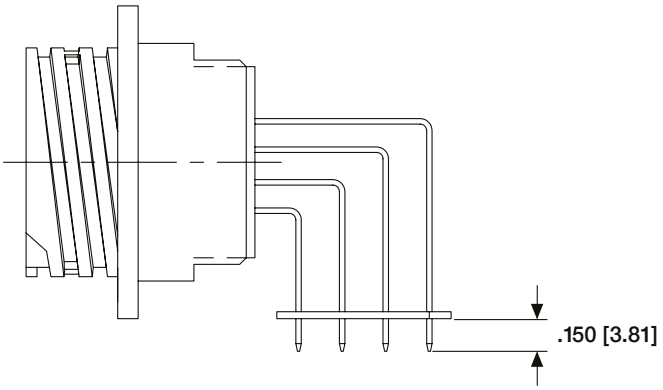
Arrangement		Receptacle Assemblies		Contact Body Finish Code	Mating Plug Part No.
Shell Size	No. of Positions	Mounting Holes	4-40 Threaded Inserts		
11-4		1-796403-1	1-796403-2	B	206060-1
13-7		-	1-796435-2	B	211399-1
13-9		1-796375-1	1-796375-2	B	206708-1
17-16		1-796404-1	-	B	206037-1
23-24		-	-	A	206837-1
		1-796387-2	-	B	206837-1
23-37		1-796406-1	-	B	206150-1

Square Flange Receptacle

Reverse Mate (Posted Socket Contacts)

Arrangement		Receptacle Assemblies (Mounting Holes)	Contact Body Finish Code	Mating Plug Part No.
Shell Size	No. of Positions			
11-4		1-796407-1	B	206429-1
13-7		1-796500-1	B	211400-1
17-14		796348-5	B	206044-1
23-19		1-796502-1	B	211772-1
23-37		1-796409-1	B	206305-1

See page 19 for callout dimensions
Square flange receptacles available with 4-40 threaded inserts in mounting holes, contact TE Connectivity



Material and Finish

Housing – Thermoplastic, 94V-0 rated, black
Location Wafer – Phenolic, black
Contact Posts –
.000100 [0.00254] min. tin over .000100 [0.00254] min. copper
Contact Body –
A – .000100 [0.00254] min. tin over .000050 [0.00127] min. nickel
B – .000030 [0.000762] min. precious metal for a length of .200 [5.08] min. from mating end, with remainder gold flash, both over .000050 [0.00127] min. nickel

Related Product Data

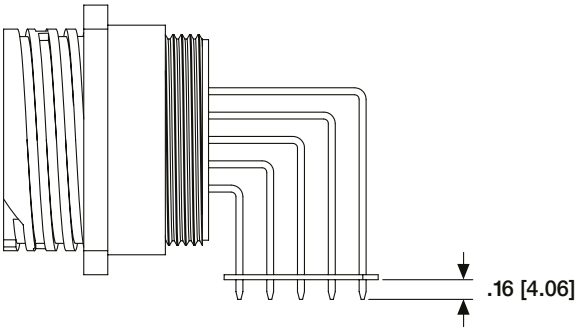
Contact Arrangements – Page 18
Component Dimensions – Page 19
Keying – Standard Configuration: 5 Keys – Page 8

SQUARE FLANGE RECEPTACLES, RIGHT-ANGLE, POSTED

Standard Mate (Posted Pin Contacts)

Arrangement		Receptacle Assemblies	Contact Body Finish Code	Mating Plug Part No.
Shell Size	No. of Positions	Mounting Holes		
13-7		1776903-1	B	211399-1
17-16		1776904-1	B	206037-1
23-24		1776905-1	B	206837-1
23-37		1776906-1	B	206150-1

See page 19 for dimensions



with **.045 [1.14] sq.** solder tails.
For Higher Current Applications

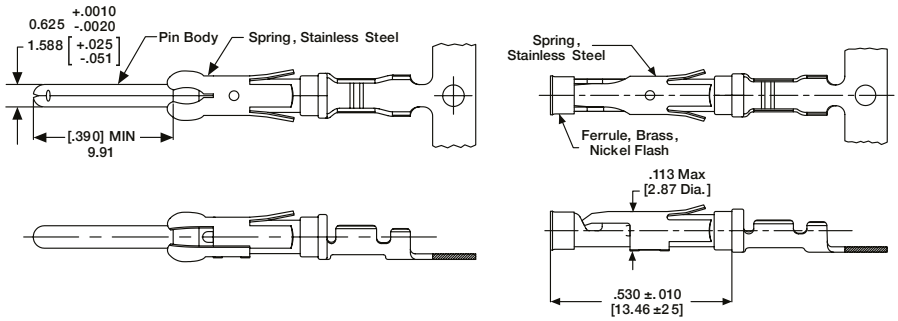
Material and Finish

Housing – Thermoplastic, 94V-0 rated, black
Location Wafer – Phenolic, black
Contact Posts – .000100 [0.00254] min. tin over .000100 [0.00254] min. copper
Contact Body –
B – .000030 [0.000762] min. precious metal for a length of .200 [5.08] min. from mating end, with remainder gold flash, both over .000050 [0.00127] min. nickel

SIGNAL CONTACTS, TYPE III+, CRIMP, SNAP-IN

Socket

Pin



Material and Finish
See chart.

Contact Body – Copper alloy
Retention Spring – Stainless steel

Technical Documents
Application Specification – 114-10004
Product Specification – 108-10042

Contact Size 16 – Pin Diameter .062 [1.57] (Test Current, 13 Ampere)‡

Wire Size Range		Ins. Dia. Range	Contact Finish	Strip Form Contact No.		Loose Piece Contact No.		Tooling Part No.	
AWG	mm²			Pin	Socket	Pin	Socket	Loose Piece Hand Tool	Strip Form Applicators
30-28	0.05-0.09	.015-.030 [0.38-0.76]	15 Precious metal/Tin[2]	788085-3	788088-2	-	-	-	***
		.015-.030 [0.38-0.76]	30 Precious metal/Tin[3]	788085-1	788088-1	-	-		
30-26	0.05-0.15	.040-.060[1] [1.02-1.52]	Tin	1-66425-2	1-66424-1	-	-	91515-1	***
		.040-.060[1] [1.02-1.52]	15 Precious metal/Tin[2]	66425-7	66424-7	66429-3	66428-3		
		.040-.060[1] [1.02-1.52]	30 Precious metal/Tin[3]	66425-8	66424-8	66429-4	66428-4		
		.014-.030[1] [0.36-0.76]	15 Precious metal/Tin[2]	66393-7	66394-7	-	-		2151847-☐
		.014-.030[1] [0.36-0.76]	30 Precious metal/Tin[3]	66393-8	66394-8	66406-4	66405-4		
26-24	0.12-0.2	.035-.055[1] [0.89-1.40]	Tin	1-66106-5	1-66108-5	1-66107-1	1-66109-7	91515-1 or 58495-1*	2266335-☐
		.035-.055[1] [0.89-1.40]	15 Precious metal/Tin[2]	66106-7	66108-7	66107-3	66109-3		
		.035-.055[1] [0.89-1.40]	30 Precious metal/Tin[3]	66106-8	66108-8	66107-4	66109-4		
24-20	0.2-0.6	.040-.080[1] [1.02-2.03]	Tin	2-66102-5	3-66104-0	1-66103-8	1-66105-9	91515-1 or 58495-1*	2151016-☐
		.040-.080[1] [1.02-2.03]	15 Precious metal/Tin[2]	66102-8	66104-8	66103-3	66105-3		
		.040-.080[1] [1.02-2.03]	30 Precious metal/Tin[3]	66102-9	66104-9	66103-4	66105-4		
		.060-.120[5] [1.52-3.05]	Tin	1-66564-2	1-66563-1	66566-7	66565-7	91542-1	2151669-☐
		.060-.120[5] [1.52-3.05]	30 Precious metal/Tin[3]	66564-8	66563-8	66566-4	66565-4		
		.080-.100[1] [2.03-2.54]	Tin	1-66332-4	1-66331-4	1-66400-0	1-66399-0	91523-1	2151641-☐
		.080-.100[1] [2.03-2.54]	15 Precious metal/Tin[2]	66332-7	66331-7	66400-3	66399-3		
		.080-.100[1] [2.03-2.54]	30 Precious metal/Tin[3]	66332-8	66331-8	66400-4	66399-4		
18-16	0.8-1.4	.080-.100[1] [2.03-2.54]	Tin	1-66098-8	1-66100-9	1-66099-5	1-66101-9	91505-1 or 91523-1 or 58495-1*	2151023-☐
		.080-.100[1] [2.03-2.54]	15 Precious metal/Tin[2]	66098-8	66100-8	66099-3	66101-3		
		.080-.100[1] [2.03-2.54]	30 Precious metal/Tin[3]	66098-9	66100-9	66099-4	66101-4		
18-14	0.8- 2.0	.080-.100[1] [2.03-2.54]	Tin	1-66359-4	1-66358-6	1-66361-2	1-66360-2	91519-1	2151101-☐
		.080-.100[1] [2.03-2.54]	15 Precious metal/Tin[2]	66359-9	66358-9	66361-3	66360-3		
		.080-.100[1] [2.03-2.54]	30 Precious metal/Tin[3]	1-66359-0	1-66358-0	66361-4	66360-4		
		.110-.150[5] [2.79-3.81]	Tin	66597-8	66598-9	66602-8	66601-9	91521-1	2151405-☐
		.110-.150[5] [2.79-3.81]	30 Precious metal/Tin[3]	66597-2	66598-2	66602-2	66601-2		

‡ Single contact, free-air test current is not to be construed as contact rating current. Use only for testing. Refer to contact current carrying capability information on page 5.
[1] Overall insulation crimp diameter, including crimp barrel, must not exceed .125 [3.18].
[2] .000015 [.00038] min precious metal plate in the mating area, .000050 [.00127] min matte tin plate in the wire crimp area, both over .000030 [.00076] min. nickel underplate.
[3] .000030 [.00076] min precious metal plate in the mating area, .000050 [.00127 min matte tin plate in the wire crimp area, both over .000030 [.00076] min nickel underplate.
[5] Contacts can ONLY be used in: Metrimate; CPC Series 1 (Arr. 23-19 & 23-24), Series 4 (Arr. 23-13M, 23-16M, 23-22M), and VDE connectors.
* Commercial PRO-CRIMPER II hand tool for field repair only. Note: Die Set can be adapted for use with 626 Pneumatic Tool System. Insertion Tool Part No. 91002-1 (for insulation diameters .070 [1.78] or less), No. 200893-2 (for insulation diameters .090 [2.29] max.). Extraction Tool Part No. 305183. (Instruction Sheet 408-1216)
*** Call Technical Support for Machine Applicator Part Numbers.

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.
Dimensions are shown for reference purposes only. Specifications subject to change.

SIGNAL CONTACTS, ENHANCED HIGH CURRENT TYPE III+, CRIMP, SNAP-IN

Contact Size 16 – Pin Diameter .062 [1.57]

Wire Size Range		Ins. Dia. Range	Contact Finish	Strip Form Contact No.		Loose Piece Contact No.		Tooling Part No.	
AWG	mm²			Pin	Socket	Pin	Socket	Loose Piece Hand Tool	Strip Form Applicators
18-14	0.8-2.0	.080-.100[1] [2.03-2.54]	Gold[3]	1-66359-6	1-66358-9	1-66361-4	1-66360-4	91519-1	2151101-☐ ***
		.080-.100[1] [2.03-2.54]	Tin[4]	1-66359-9	2-66358-1	1-66361-6	1-66360-6		
		.110-.150[2] [2.79-3.81]	Gold[3]	1-66597-0	1-66598-1	66602-9	1-66601-0	91521-1	2151405-☐ ***
		.110-.150[2] [2.79-3.81]	Tin[4]	1-66597-1	1-66598-2	1-66602-0	1-66601-2		

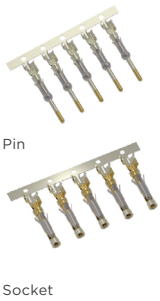
[1] Overall insulation crimp diameter, including crimp barrel, must not exceed .125 [3.18].

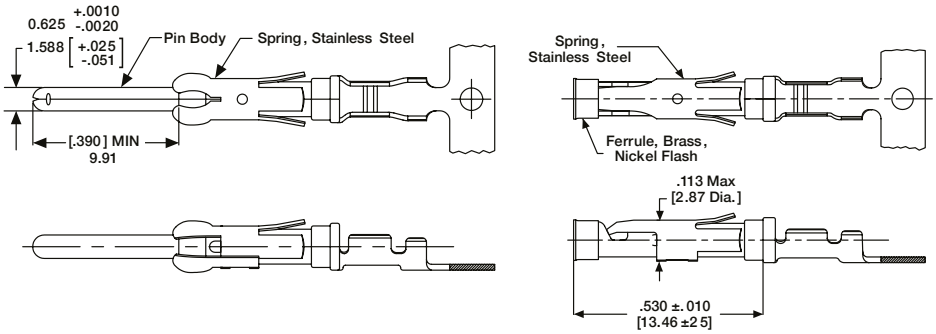
[2] Contacts can ONLY be used in CPC, Series 1 (Arr. 23-24), Series 4 (Arr. 23-13M, 23-16M, 23-22M), and VDE connectors.

[3] .000030 [.00076] min precious metal plate in the mating area with gold flash on the remainder, both over .000030 [.00076] min nickel underplate.

[4] .000050 [.00127] min tin over .000030 [.00076] min nickel.

*** Call Technical Support for Automatic Machine Applicator Part Numbers.





Material and Finish

(See chart)
Contact Body –
Copper Nickel Alloy
Retention Spring – Stainless steel

Ratings

Voltage – 250 Volts AC/DC
600 Volts AC/DC, Series I, VDE tested and select loaded only
Base Current –
Type III+ contacts: 17 amperes, 30°C temperature rise with single contact on 14 AWG wire
Enhanced High Current Type III+ contacts: **25 amperes**, 30°C temperature rise with single contact on 14 AWG wire
Temperature – -55°C to +105°C
VDE 0627 – XA/630/4KV/2 - Series I, VDE tested only

Multiplication Rating Factor (F)

Type III+ Contacts (Note: 1 = 17 amperes)

Arrangement		Percent Connector Loading					
Shell Size	No. of Positions	Single Circuit		≅ 50%		100%	
		Wire Size		Wire Size		Wire Size	
		30 AWG	14 AWG	30 AWG	14 AWG	30 AWG	14 AWG
11-4		.291	1	.212	.905	.140	.684
13-9		.278	.995	.175	.750	.134	.567
17-16		.270	.990	.146	.625	.127	.472
23-24		.281	.985	.138	.550	.120	.416
23-37		.275	.985	.131	.497	.114	.376

Enhanced High Current Type III+ Contacts (14 AWG wire only - Note: 1 = 25 amperes)

Arrangement		Percent Connector Loading		
Shell Size	No. of Positions	Single Circuit	≅ 50%	100%
		14 AWG	14 AWG	14 AWG
11-4		.880	.840	.640
13-9		.880	.640	.480
17-16		.880	.520	.400
23-24		.880	.520	.400
23-37		.880	.440	.320

SIGNAL CONTACTS, TYPE III+ (PRECISION FORMED, CRIMP)

Wire Size Range		Ins. Dia. Range[1]	Contact Finish	Grounding Pin Part No.		Strip Form No. Applicator Part No.	Loose Piece Hand Tool Part No.
AWG	mm²			Strip Form	Loose Piece		
26-24	0.12-0.2	.035-.055 [0.89-1.4]	Tin	164159-3	164162-1	-	91515-1 or 58495-1*
		.035-.055 [0.89-1.4]	Sel. Gold/Nickel[4]	164159-4	164162-2		
24-20	0.2-0.6	.045-.070 [1.14-1.78]	Tin	164160-3	164163-1	2151016-□***	91515-1 or 91505-1 or 58495-1*
		.045-.070 [1.14-1.78]	Sel. Gold/Nickel[4]	164160-4	164163-2		
18-16	0.8-1.4	.078-.098 [1.98-2.49]	Tin	164161-3	164164-1	2151023-□***	91523-1 or 91505-1 or 58495-1*
		.078-.098 [1.98-2.49]	Sel. Gold/Nickel[4]	164161-4	164164-2		

[1] Overall insulation crimp diameter, including crimp barrel, must not exceed .125 [3.18].

[4] Gold flash over .000030 [0.00076] min. nickel on entire contact, with .000030 [0.00076] gold in contact area.

* Commercial PRO-CRIMPER II hand tool for field repair only.

*** Call Technical Support for Automatic Machine Applicator Part Numbers.
Extraction Tool Part No. 539972-1.

Contact Size

16

Pin Diameter

.062 [1.57]

Material and Finish

Contact Body – Copper alloy, plated tin or gold
Spring – Stainless steel

Grounding Pin

(make first – break last)

SIGNAL CONTACTS, HIGH CURRENT POWER CONTACT – SIZE 16

Wire Size Range		Contact Part No.		Crimping Tool		
		Pin	Socket	Tool	Turret	
AWG	mm²	Loose Piece	Loose Piece		for Pins	for Sockets
18-16	0.8-1.4	796964-1	796966-1	601967-1	1-601967-5	1-601967-5
14	2	193844-1	193846-1	601967-1	1-601967-6	1-601967-5

Extraction Tool Part No. 305183

Socket

Pin

The features of the High Current Size 16 contact have been designed to retrofit into the existing AMP Connectors such as CPC (Circular Plastic Connector) and CMC (Circular Metal Connector), G Series, M Series, Metrimate Square Grid and Drawer Connector housings. An initial T-Rise test in free air has shown a 23 amp capability with a 30° T-Rise. The contact may be crimped onto 14 AWG wire with an AMP hand tool **Part No. 601967-1**. Use turret TH502 **(1-601967-6)** for the pin and turret TH501 **(1-601967-5)** for the socket.

Material and Finish

Body – Copper alloy
Louvertac Band – Beryllium copper
Retention Spring – Stainless steel

Finish

Body – Silver
Louvertac Band – Gold

SIGNAL CONTACTS, TYPE III+ (PRECISION FORMED, SOLDER)

Contact Size 16 – Pin Diameter .062 [1.57]

Wire Size Range		Contact Finish	Loose Piece Contact No.	
AWG	mm²		Pin	Socket
26-20	0.12-0.6	Gold/Nickel[1]	66182-1	66183-1
18-16	0.8-1.4	Gold/Nickel[1]	66180-1	66181-1
Solder Tab[3]		Duplex[2]	202236-7	202237-7
		Tin	202236-5	202237-5

Contact Size
16

Pin Diameter
.062 [1.57]

Material and Finish
Contact Body – Copper alloy, plated tin or gold
Spring – Stainless steel

[1] .000030 [0.00076] gold in mating area over .000030 [0.00076] min. nickel.

[2] Duplex plated .000030 [0.00076] gold in mating area over .000030 [0.00076] min. nickel on contact body; bright tin on solder tab.

[3] Designed for up to 14 AWG; but, not to exceed current limitation of contact.

Note: These contacts can be used in Multimate contact cavities of all connector housings.

‡ Single contact, free-air test current is not to be construed as contact rating current. Use only for testing.
Extraction Tool Part No. 305183

Solder-Type (with Preformed Wire Barrel/Insulation Support)

Pin

Socket

Solder-Tab

Pin

Socket

SIGNAL CONTACTS, TYPE II, SCREW MACHINED, CRIMP

Contact Size 16 – Pin Diameter .062 [1.57] (Test Current, 13 Ampere)‡

Wire Size Range		Ins. Dia. Range[1]	Loose Piece Contact No.		Contact Color Code	Tooling Part No.
AWG	mm²		Pin	Socket		Loose Piece / Hand Tool
28-24	0.08-0.20	.035-.055 [0.89-1.40]	201611-1[4]	201613-1[5]	Red/Red	91538-1 or 601967-1
		.048-.065 [1.22-1.65]	201334-1[4]	-	Red/Red	
24-20	0.2-0.6	.040-.062 [1.02-1.57]	201578-1[4]	201580-1[5]	Yellow/Red	91538-1 or 58541-1*
		.055-.088 [1.40-2.16]	201330-1[4]	201328-1[5]	Yellow/Red	601967-1
18 (Two)	0.9-0.9 (Two)	No Ins. Support	-	202726-1[4]	Blue	91539-1 or 601967-1
18-16	0.8-1.4	.080-.105 [2.03-2.67]	202507-1[4]	202508-1[5]	-	601967-1
		No Ins. Support	200336-1[4]	200333-1[4]	Blue/Blue	91539-1 58541-1* or 601967-1
		No Ins. Support	204219-1[5,6]	-	Blue/Blue	
14	2	No Ins. Support	201570-1[4]	201568-1[5]	Violet/Blue	91539-1 58541-1* or 601967-1
		No Ins. Support	212618-1[3,6,†]	-	-	

[1] Overall insulation crimp diameter, including crimp barrel, must not exceed .125 [3.18].

[3] Grounding pin is used to provide a make-first/break-last condition when mating and unmating connector halves.

[4] Use turret TH502 (**1-601967-6**) with hand tool **601967-1**.

[5] Use turret TH501 (**1-601967-5**) with hand tool **601967-1**.

[6] Pin length is .630±.005 [16.002±.127] on these two pins.

* Commercial PRO-CRIMPER II Hand Tool for field repair use only.

† Does not use Hand Tool 91539-1 or 601967-1.

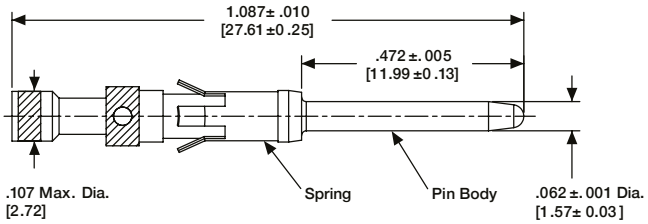
‡ Single contact, free-air test current is not to be construed as contact rating current. Use only for testing.
Insertion Tool Part No. 200893-2 (for insulation diameters .070 [1.78] or less).
Extraction Tool Part No. 305183.

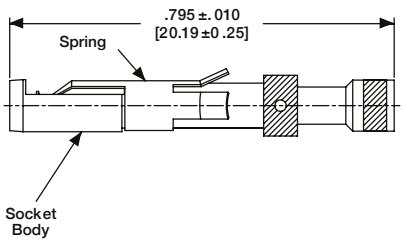
Material

Contact Body – Brass
Retention Spring – Stainless steel

Finish

Contact Body – .000030 [0.00076] gold over .000050 [0.00127] nickel. Gold thickness controlled on socket O.D.
Retention Spring – Stainless steel

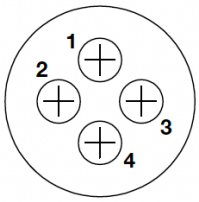




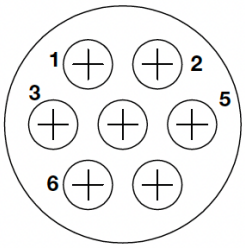
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.
Dimensions are shown for reference purposes only. Specifications subject to change.

CONTACT ARRANGEMENTS

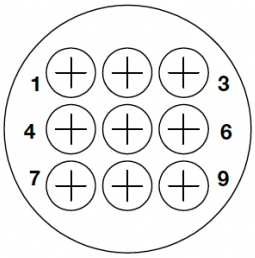
Shell Sizes 11 and 13



Arrangement 11-4
Max. Wire Ins. Dia. = .100 [2.54]

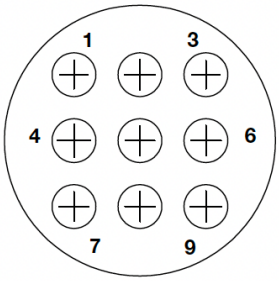


Arrangement 13-7
Max. Wire Ins. Dia. = .100 [2.54]

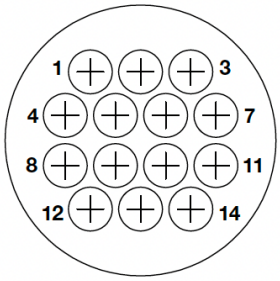


Arrangement 13-9
Max. Wire Ins. Dia. = .100 [2.54]

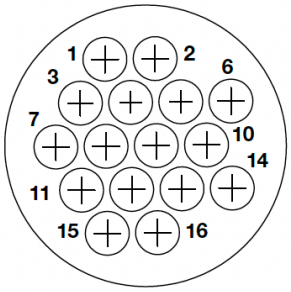
Shell Sizes 17



Arrangement 17-9
Max. Wire Ins. Dia. = .150 [3.81]

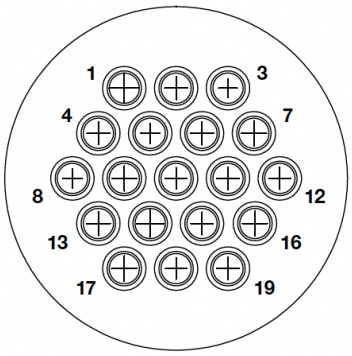


Arrangement 17-14
Max. Wire Ins. Dia. = .100 [2.54]

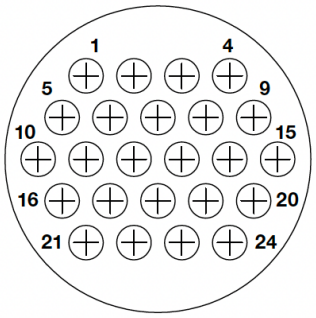


Arrangement 17-16
Max. Wire Ins. Dia. = .100 [2.54]

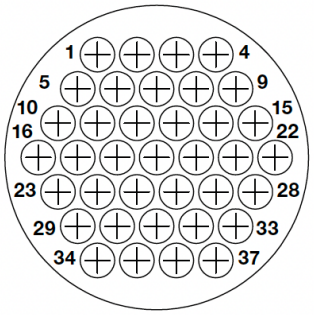
Shell Sizes 23



Arrangement 23-19
Max. Wire Ins. Dia. = .150 [3.81]



Arrangement 23-24
Max. Wire Ins. Dia. = .150 [3.81]



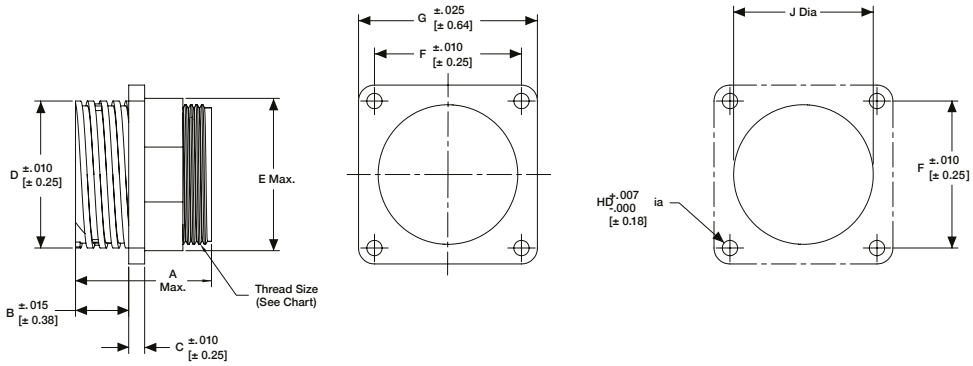
Arrangement 23-37
Max. Wire Ins. Dia. = .100 [2.54]

Note: Contact arrangements shown are for pin mating face (plug or receptacle). Socket mating face is mirror image.

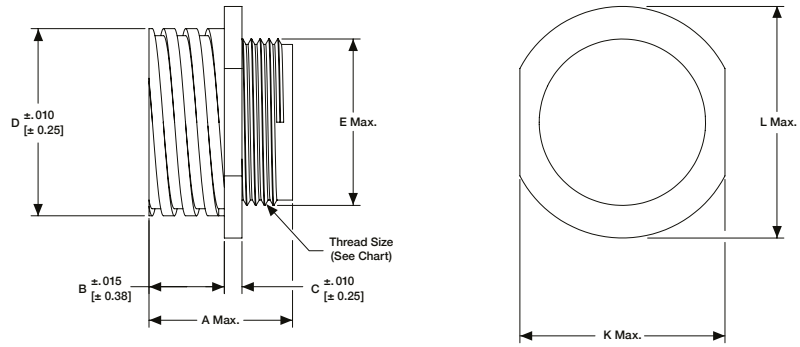
Note: All part numbers are RoHS Compliant.

COMPONENT DIMENSIONS

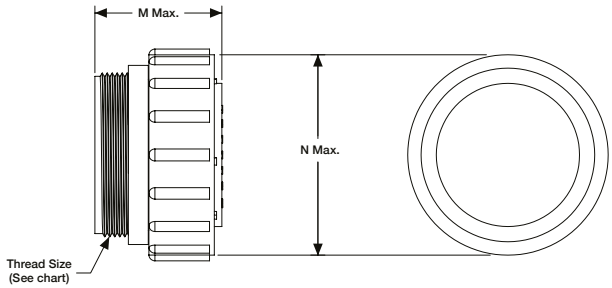
Square Flange Receptacle



Free-Hanging Receptacle



Plug



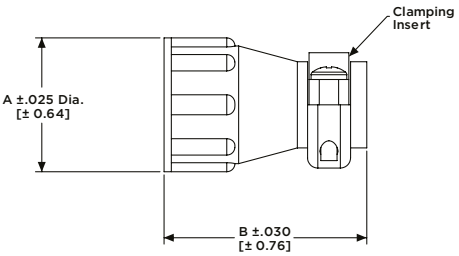
Shell Size	Mate	Dimensions													Thread Size
		A	B	C	D	E	F	G	H	J	K	L	M	N	
11	Rev.	1.070 [27.18]	.420 [10.67]	.094 [2.39]	.687 [17.45]	.740 [18.8]	.844 [21.44]	1.125 [28.58]	.125 [3.18]	.840 [21.34]	.817 [20.75]	.935 [23.75]	1.365 [34.67]	.975 [24.77]	5/8-24 UNEF-2A
	Std.	1.350 [34.29]											1.080 [27.43]		
13	Std.	1.350 [34.29]	.420 [10.67]	.094 [2.39]	.812 [20.62]	.879 [22.33]	.969 [24.61]	1.281 [32.54]	.125 [3.18]	.979 [24.87]	.874 [22.2]	1.072 [27.23]	1.080 [27.43]	1.105 [28.07]	3/4-20 UNEF-2A
17	Rev.	1.070 [27.18]	.420 [10.67]	.094 [2.39]	1.050	1.110	1.125 [28.58]	1.435 [36.45]	.150 [3.81]	1.210	1.161 [29.49]	1.310 [33.27]	1.365 [34.67]	1.349 [34.26]	15/16-20 UNEF-2A
	Std.	1.350 [34.29]											1.080 [27.43]		
23	Rev.	1.070 [27.18]	.520 [13.21]	.156 [3.96]	1.438 [36.53]	1.510 [38.35]	1.438 [36.53	1.750 [44.45]	.150 [3.81]	1.610 [40.89]	1.505 [38.23]	1.733 [44.02]	1.365 [34.67]	1.788 [45.42]	1-3/8-18 UNEF-2A
	Std.	1.350 [34.29]											1.080 [27.43]		

CABLE CLAMPS

Shell Size	Dimensions		Cable O.D. (Max.)	Thread Size	Part No.	
	A	B			Individually Packaged	Bulk Packaged*
11	.825 [20.96]	1.250 [31.75]	.329 [8.36]	5/8-24 UNEF-2B	1-206062-4	1-206062-7** (400)
13	.950 [24.13]	1.400 [35.56]	.453 [11.51]	3/4-20 UNEF-2B	206966-7	206966-9** (200)
17	1.125 [28.58]	1.400 [35.56]	.453 [11.51]	15/16-20 UNEF-2B	206070-8	1-206070-0** (200)
23	1.600 [40.64]	1.555 [39.5]	.703 [17.86]	1-3/8-18 UNEF-2B	206138-8	1-206138-0** (100)

* Numbers in parentheses specify, in multiples, the minimum quantity of parts that can be ordered.
** Packaging includes two screws: shell sizes 11-17, screw length .500 [12.7]; shell size 23, screw length .625 [15.88].

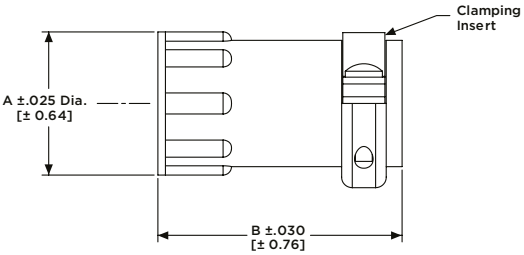
Notes:
1. Clamping areas adjustable by inverting or changing clamping inserts. The quantity of inserts supplied with each assembly is as follows: for size 11 cable clamps, one insert; for all other cable clamps, two inserts.
2. Components for all cable clamps are packaged unassembled. This includes the cable clamp, two screws and the clamping inserts.
3. Cable clamps can be threaded directly onto plugs or receptacles, or onto back-shell extenders (page 8).
4. Replacement screws are available in the following sizes: 3/8 in. [9.52] – **5019024-1**, 1/2 in. [12.7] – **5019024-2**, 5/8 in. [15.88] – **5019024-3**, 1 in. [25.4] – **5019024-4**, 3/4 in. [19.05] – **5019024-5**.
5. Cable clamp inserts not sold separately.



Shell Size	Dimensions		Cable O.D. (Max.)	Thread Size	Part No.	
	A	B			Individually Packaged	Bulk Packaged*
11	.850 [21.59]	1.450 [36.83]	.453 [11.51]	5/8-24 UNEF-2B	206358-5	206358-6** (400)
13	1.131 [28.73]	1.655 [42.04]	.703 [17.86]	3/4-20 UNEF-2B	207008-5	207008-6** (200)
17	1.131 [28.73]	1.655 [42.04]	.703 [17.86]	15/16-20 UNEF-2B	206322-9	1-206322-0** (200)
23	1.600 [40.64]	1.655 [42.04]	1.125 [28.58]	1-3/8-18 UNEF-2B	206512-5	206512-6** (100)

* Numbers in parentheses specify, in multiples, the minimum quantity of parts that can be ordered.
** Packaging includes two screws: shell sizes 11-17, screw length .500 [12.7]; shell size 23, screw length .625 [15.88].

Notes:
1. Clamping areas adjustable by inverting or changing clamping inserts. The quantity of inserts supplied with each assembly is as follows: for size 11 cable clamps, one insert; for all other cable clamps, two inserts.
2. Components for all cable clamps are packaged unassembled. This includes the cable clamp, two screws and the clamping inserts.
3. Cable clamps can be threaded directly onto plugs or receptacles, or onto back-shell extenders (page 8).
4. Replacement screws are available in the following sizes: 3/8 in. [9.52] – **5019024-1**, 1/2 in. [12.7] – **5019024-2**, 5/8 in. [15.88] – **5019024-3**, 1 in. [25.4] – **5019024-4**, 3/4 in. [19.05] – **5019024-5**.
5. Cable clamp inserts not sold separately.



Cable clamps provide strain relief and can be used on all series receptacles and plugs.

Standard Size

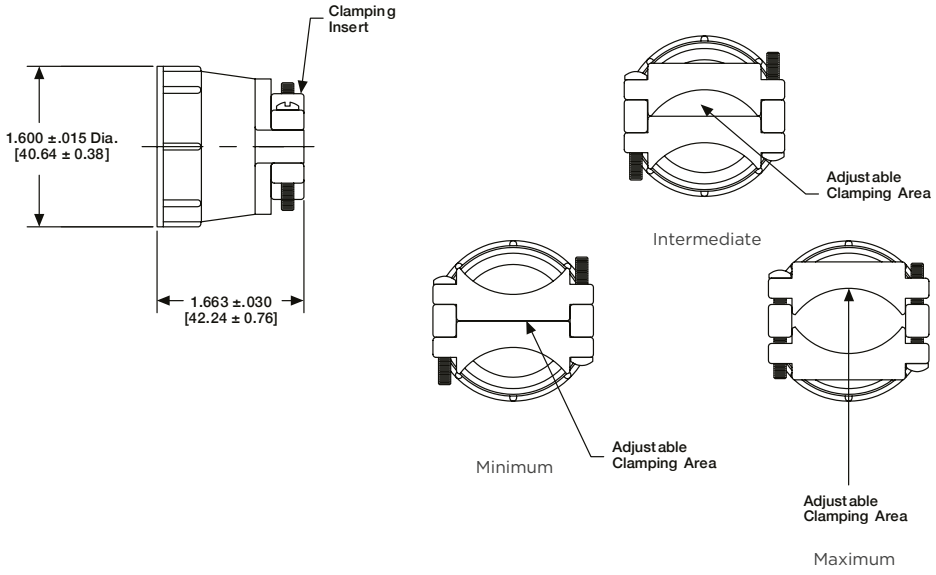
Material

Black thermoplastic heat-stabilized, fire-resistant, self-extinguishing, UL 94V-0 rated

Large Size

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

SELF-CENTERING CABLE CLAMP (SHELL SIZE 23)



The self-centering cable clamp is used in applications where strain relief protection is required and the cable or wire bundle is large and/or stiff.

Material

Black thermoplastic,
UL 94V-0 rated

Part Numbers

207774-3 (individually packaged)
207774-4 (bulk packaged)

Notes:
1. Clamping area is adjustable by inverting clamping inserts; maximum cable diameter is 1.125 [28.58].
2. Components for cable clamp are packaged unassembled. This includes the cable clamp, two screws (1.00 [25.4]) and the clamping inserts.
3. Cable clamp can be threaded directly onto plugs or receptacles, or onto back-shell extenders (page 22).

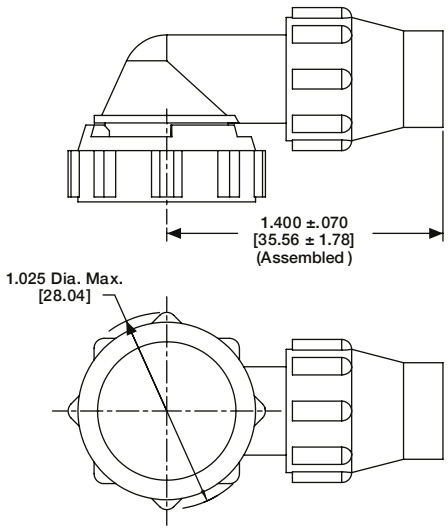
RIGHT-ANGLE CABLE CLAMPS

Shell Size	Dimensions	Cable O.D. (Max.)	Coupling Ring Thread Size	Part Number	
	A			Kit	Kit w/Cover
11	.900 [22.86]	.329 [8.36]	5/8-24 UNEF-2B	796379-2	1546347-2
13	1.100 [27.94]	.453 [11.51]	3/4-20 UNEF-2B	796380-2	1546348-2
17	1.200 [30.48]	.453 [11.51]	15/16-20 UNEF-2B	796381-2	1546349-2
23	1.500 [38.10]	.703 [17.86]	1-3/8-18 UNEF-2B	796382-2	1546350-2

Right-angle cable clamps are used in tight areas where typical 180° cable clamp strain reliefs will not fit.

Material

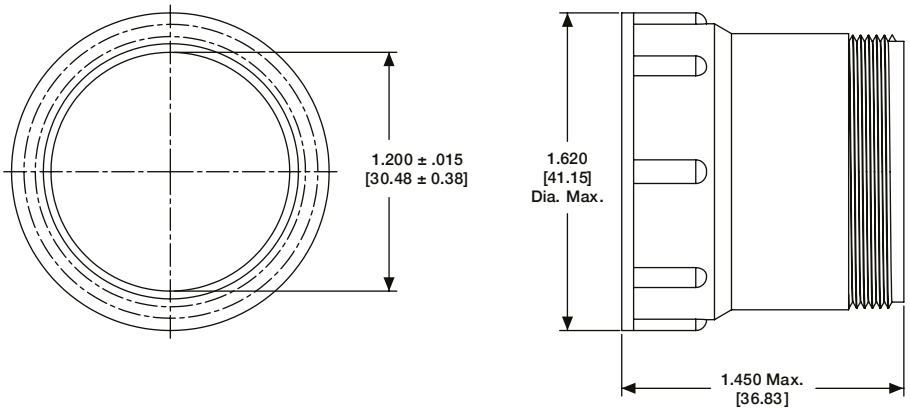
Black thermoplastic,
UL 94V-0 rated



Style B
Part Number 213982-1
(for Shell Size 13)

Note: All part numbers are RoHS Compliant.

BACK-SHELL EXTENDER (SHELL SIZE 23)



A back-shell extender is used with a cable clamp in applications where added length and/or additional wire breakout are required.

Note: Back-shell extenders can be threaded directly onto plugs or receptacles and will accept cable clamps of the appropriate size (page 20-21).

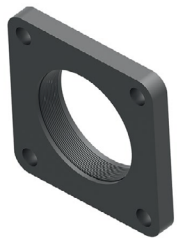
Material
Black glass-filled thermoplastic

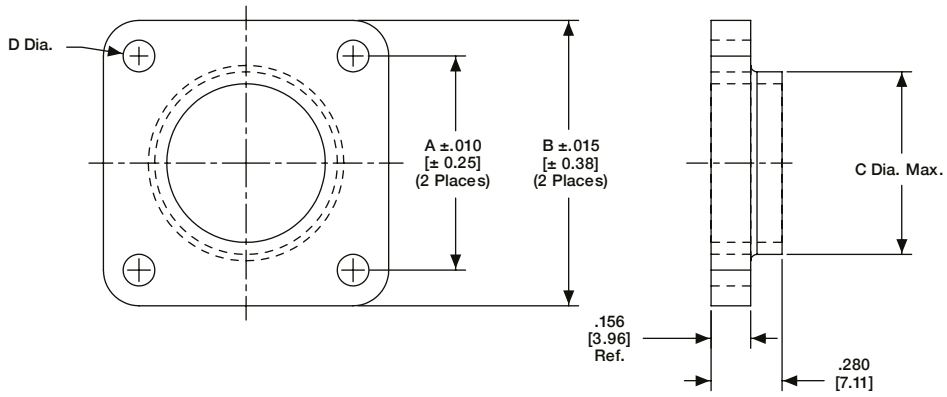
Part No. 207055-1

PANEL MOUNT FLANGES (PLUGS ONLY)

Shell Size	Dimensions				Part Number
	A	B	C	D	
11	.844 [21.44]	1.125 [28.58]	.750 [19.05]	.125 [3.18]	207299-1
13	.969 [24.61]	1.280 [32.51]	.875 [22.22]	.125 [3.18]	207299-2
17	1.125 [28.58]	1.435 [36.45]	1.110 [28.19]	.150 [3.81]	207299-3
23	1.438 [36.53]	1.750 [44.45]	1.510 [38.35]	.150 [3.81]	207299-4

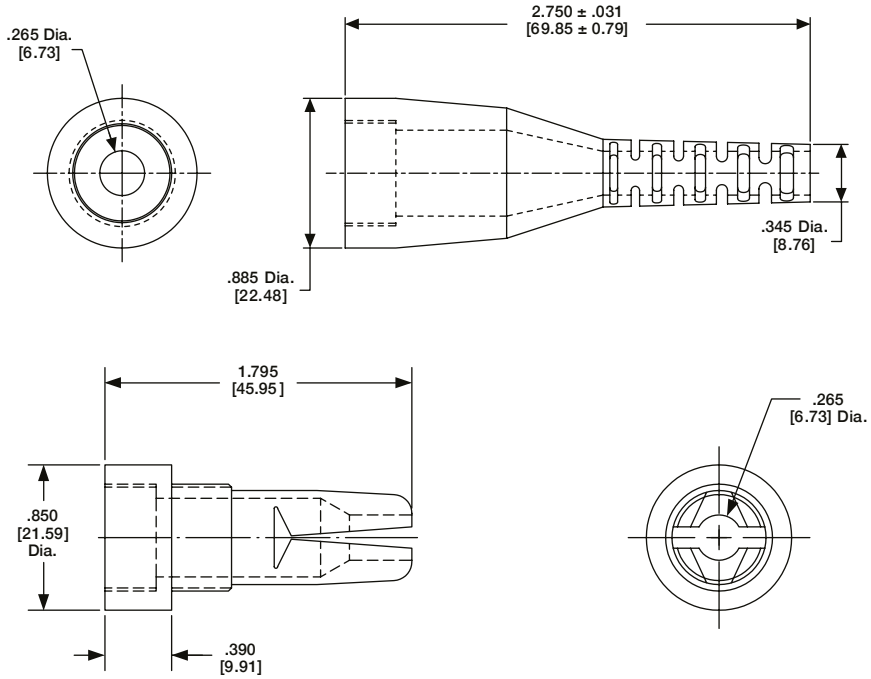
A panel mount flange is used in applications that require the plug half of a connector to be panel mounted.





Material
Black thermoplastic

FLEXIBLE CABLE BOOT AND INTERNAL CABLE GRIP (SHELL SIZE 11)



Flexible cable boots, with internal cable grip installed, provide strain relief capabilities for jacketed cable in applications where aesthetic appearance is essential. They can be threaded onto plugs or receptacles.

Cable Grip

Cable Boot

Material

Black thermoplastic

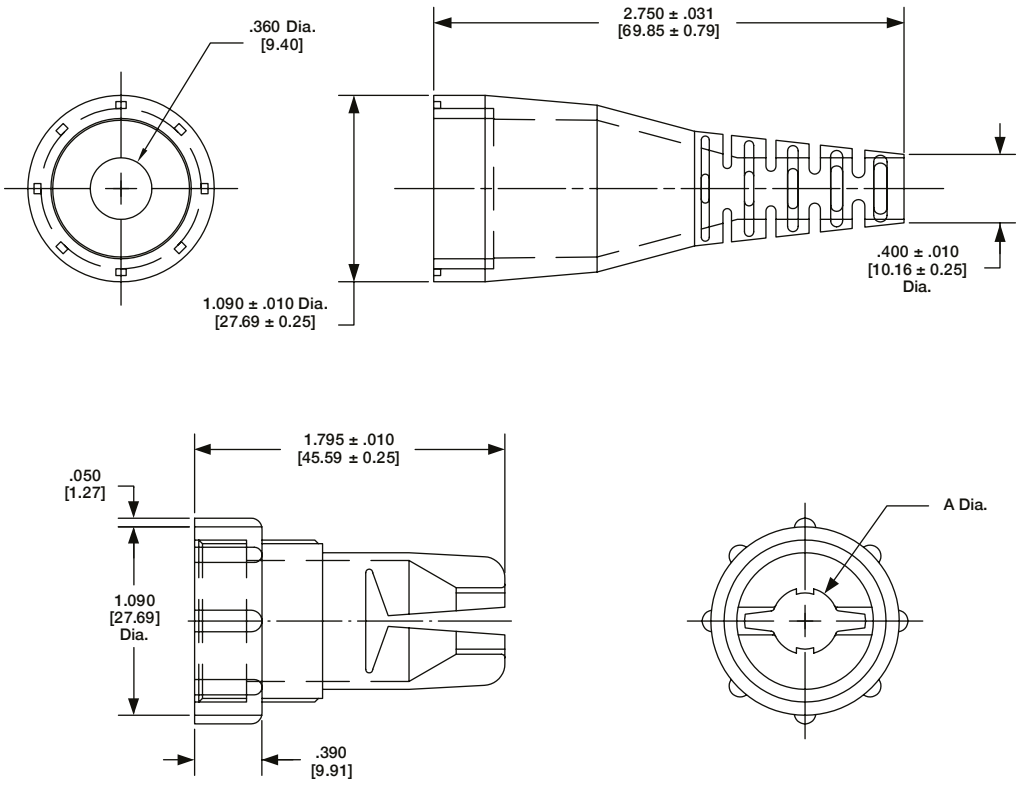
Cable Range

.150-.250 [3.81-6.35] Dia.

Part Numbers

207489-1 (Cable Boot)
207490-1 (Cable Grip)

FLEXIBLE CABLE BOOT AND INTERNAL CABLE GRIP (SHELL SIZE 17)



Flexible cable boots, with internal cable grip installed, provide strain relief capabilities for jacketed cable in applications where aesthetic appearance is essential. They can be threaded onto plugs or receptacles.

Cable Boot

Cable Grip

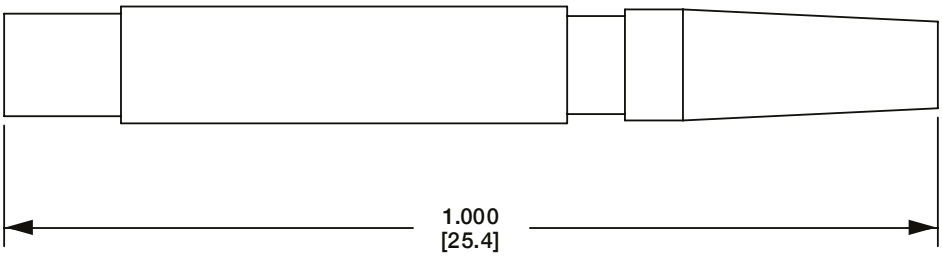
Material

Black thermoplastic

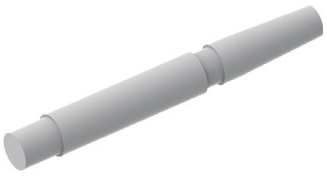
Part Numbers

207241-1 (Cable Boot)
207387-1 (Cable Grip)
A Dia. = .325 [8.26] for cable range of .200-.250 [5.08-6.35]
207387-2 (Cable Grip)
A Dia. = .385 [9.78] for cable range of .250-.350 [6.35-8.89]

KEYING PLUGS

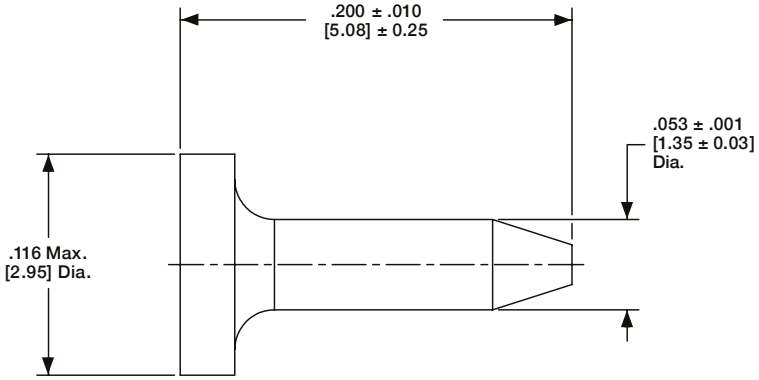


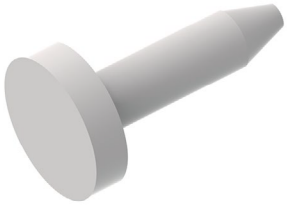
Keying plugs are used to provide keying capabilities for all connector series. Keying plugs are used in socket cavities of standard mate plugs and reverse mate receptacles, except when used with sealing caps.



Material
Nylon, natural, UL 94V-2 rated

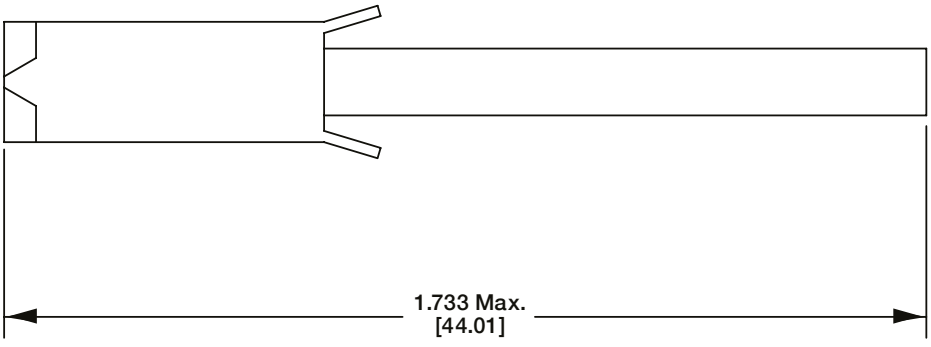
Series 1 and Series 4 Keying Plug
(for Types III+ Contacts)
Part No. 200821-1

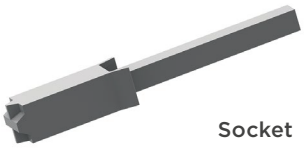




Material
Polyphenylene oxide, white,
UL 94V-1 rated

Series 2 Keying Plug
(for Size 20 DM and 20 DF Contacts)
Part No. 206509-1





Material
Nylon, natural, UL 94V-2 rated

Series 3 and Series 4 Keying Plugs
(for Type XII Contacts)
Part Nos. 206508-1 **(Socket Cavities) – Shown Above**
207597-1 **(Pin Cavities)**

PROTECTIVE CAPS

Cap Type	Shell Size	Part Number
PLUG	11	2407269-2
RECEPTACLE/PLUG	11/13	1-2407269-2
RECEPTACLE	13	2-2407269-2
PLUG	17	3-2407269-2
RECEPTACLE	17	4-2407269-2
PLUG	23	5-2407269-2

Note: Caps are available in orange, black, red and yellow. Download datasheet to learn more.

Material: LDPE (Low Density Polyethylene)

CPC disposable protective caps are designed to fit the existing CPC plugs and receptacles, providing protection from environmental contaminants during storage and handling.

SEALING CAPS (RECEPTACLES ONLY)

Shell Size	Series	Plastic Strap Part No.	Metal Bead Chain Part No.
11	1, 2	206903-2	208800-1
13	1	211870-2	213485-1
17	1, 2, 3	207445-3	208652-1
23	1, 3, 4	207446-3	208680-1
	2	207446-4	208680-2

Sealing caps are used to protect exposed contacts of unmated receptacles.

Material and Finish

Cap – Thermoplastic, heat stabilized, fire resistant, self-extinguishing, 94V-1 rated, black
Sealing Gasket – Neoprene, black
Bead Chain – Steel, nickel plated
Bead Chain Coupling – Brass, plated nickel

CABLE ENTRY SEALS

Shell Size	Expanded Wall Thickness	Sealing Range (Dia.)	Max. Recovered Inside Diameter	Part No.
11	.050 [1.27] Ref.	.250-.600 [6.35-15.24]	.160 [4.06]	54010-4
	.050 [1.27] Ref.	.250-.600 [6.35-15.24]	.250 [6.35]	54010-1
13	.060 [1.52] Ref.	.375-.725 [9.53-18.42]	.300 [7.62]	54123-1
17	.060 [1.52] Ref.	.400-.875 [10.16-22.22]	.375 [9.52]	54011-1
	.060 [1.52] Ref.	.400-.875 [10.16-22.22]	.375 [9.52]	54011-3
23	.070 [1.78] Ref.	.550-1.250 [13.97-31.75]	.500 [12.70]	54012-1

Heat Shrinkable Sealing Boots Cable entry seals are used with jacketed cable to provide an environmentally sealed wire-to-connector system. They can be used with either plugs or receptacles.

Thick Wall Boots Material

Internal Sleeve – Nylon
Outer Tubing – Polyolefin, black

Thick Wall Boots Material

Inter Sleeve – Nylon
Outer Tubing – Polyolefin
Expanded Wall Thickness – .020 [0.51]
Max. Recovered Wall Thickness – .040 [10.16]
Sealing Range – .250 [6.35]- .500 [12.70] Dia.

Shell Size 17
Part No. 213933-1

Note: All part numbers are RoHS Compliant.

JACKETED CABLE SEALS (SHELL SIZE 23)

Sealing Range (Dia.)	Kit Number
.300-.450 [7.62-11.43]	207052-1
.450-.600 [11.43-15.24]	207052-2
.600-.875 [15.24-22.22]	207052-3

A jacketed cable seal kit provides an environmentally sealed connection for jacketed cable.

Material

Peripheral Seal – Grey elastomer
Collar – Aluminum
Jacketed Cable Seal – Black rubber
Back-Shell Extender –
Black glass-filled thermoplastic
Special Clamp Saddle –
Black thermoplastic
Note: Jacketed cable seals must be used with large cable clamps and can be used on plugs or receptacles. Large cable clamps are to be ordered separately.
Each jacketed cable seal kit includes:

- Peripheral Seal – to be discarded if kit is used on plug. Additional seals may be purchased
- Collar – provides bearing surface for back-shell extender
- Jacketed Cable Seal
- Back-Shell Extender
- Special Clamp Saddle – to be used in lieu of clamping insert supplied with large cable clamp

RUBBER BOOT

Shell Size	Cable Dia. Sealing Range	Part No.
11	.219-.438 [5.56-11.13]	206304-1

Notes:
1. Rubber boots are recommended for use with jacketed cable and can be used on plugs or receptacles, except Series 2 connectors.
2. For detailed performance data on rubber boots, refer to Product Specification No. **108-10024**.

Rubber boots are used with jacketed cable to provide splashproof connections for Series 1 and Series 3 connectors. (Not for Metal Shell Connectors.)

Material

Black neoprene

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