

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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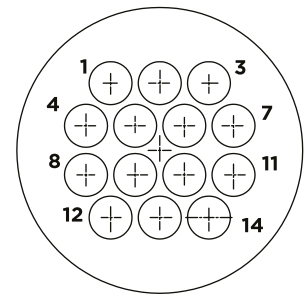
Circular Plastic Connector Selector Tool

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+

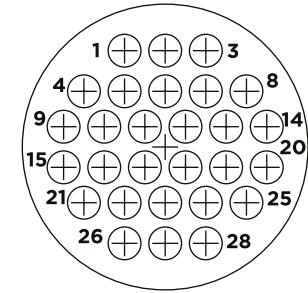
contacts (.062 [1.57] pin diameter) are capable of carrying a maximum of 13 amperes when crimped in wire. Type III solder contacts and posted contacts for pc board applications are also available. Many connector arrangements offer both standard and reverse mate contact loading – **from 4 thru 37 positions.**



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-

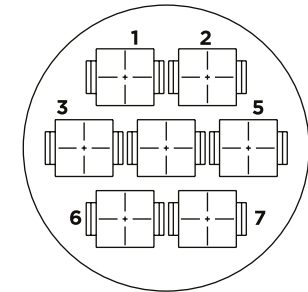
type and pc board applications. Maximum current carrying capability is 7.5 amperes. Many connector arrangements offer both standard and reverse mate contact loading – from 8 thru 63 positions.



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

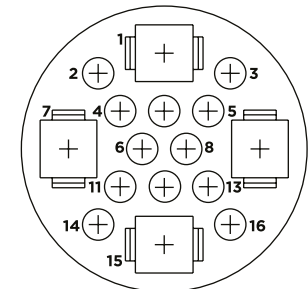
both standard and reverse mate connector arrangements 3 and 7 positions.



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

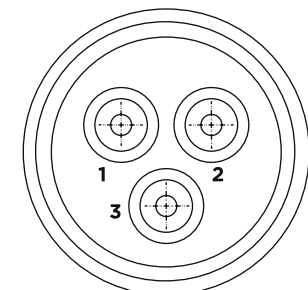
connector sizes offering power mixing combinations totaling 13, 16 and 22 positions.



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.

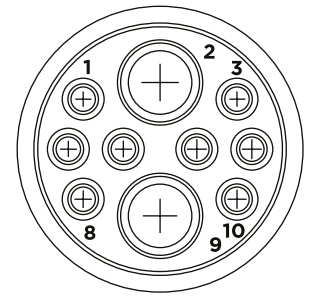


CONNECTOR SERIES AND TYPES

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

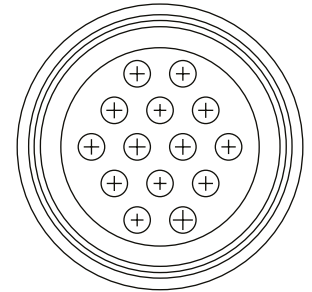
signal contacts is offered in one connector configuration containing two .125 POWERBAND contacts and eight Type III+ signal pin and socket contacts. positions.



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 mismatching when used

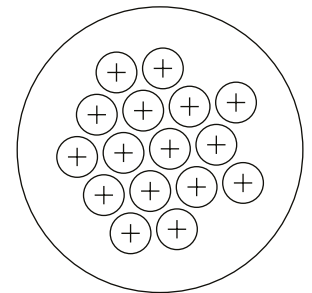
with other insert arrangements. As part of the AMP Multimate family of connectors, the MIL-C-5015 style connector offers the economies of crimp Type III+ pin and socket contacts in reel-mounted, strip-form for high volume automatic machine termination, as well as in loose piece-form for low volume, prototype 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.

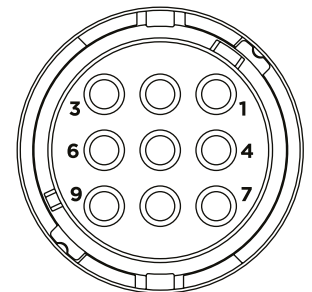


Miniature CPC Connectors

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-to-panel applications.



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

Arrangement	Plug
11	213811-1
13	213813-1
17	213810-1
23	213812-1

Material

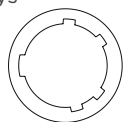
Housing - Thermoplastic, 94V-0 rated, black

Related Product Data

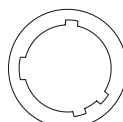
Contacts - Pages [12-16](#)
Contact Arrangement - Page [17](#)
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Accessories - Pages [19-26](#)

Keying

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



B - Optional Configuration: 4 Keys to prevent mismatching 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

¹Square 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

Arrangement	Plug
13	213813-1
17	213810-1
17	213812-1

Material

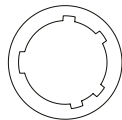
Housing - Thermoplastic, 94V-0 rated, black

Related Product Data

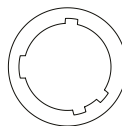
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Keying

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



B - Optional Configuration: 4 Keys to prevent mismatching 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.**

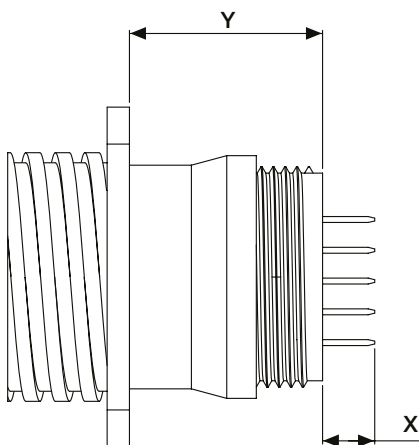
SQUARE FLANGE RECEPTACLES, PRINTED CIRCUIT BOARD MOUNT

Standard Mate (Posted Pin Contacts)

with .025 [0.64] sq. solder tails

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 18 for all other dimensions



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

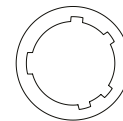
Related Product Data

Contact Arrangement - Page [17](#)

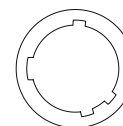
Keying

Molded-in keying in two configurations:

- A - Standard Configuration: 5 Keys



- B - Optional Configuration: 4 Keys to prevent mismatching 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

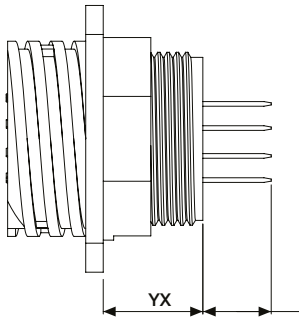
Reverse Mate (Posted Socket Contacts)

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 18 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 17

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

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



Material and Finish

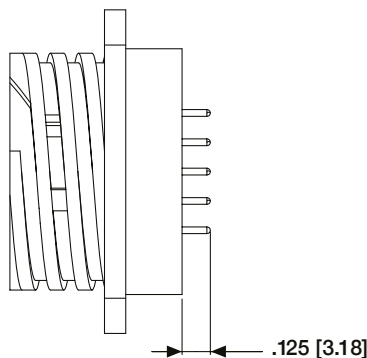
Housing - Thermoplastic, 94V-0 rated, heat-stabilized, fire-resistant, self-extinguishing, black

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

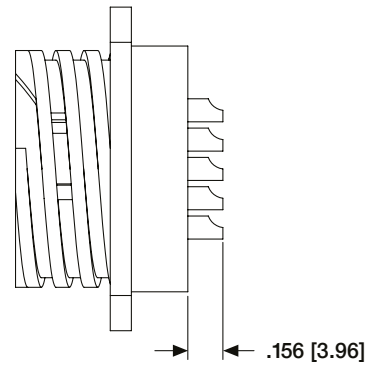
Housing - Thermoplastic,
94V-0 rated, heat-stabilized,
fireresistant,
self-extinguishing, black

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



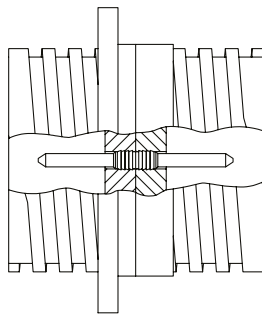
Arrangement		Contact Finish Code	Reverse Numbering Plug	Feed-Thru Shell Size Receptacle
Shell Size	No. of Positions			
11-4		206060-1	206516-1	206518-2
17-16		206037-1	206554-1	206552-1

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.

Material and Finish

Housing - Thermoplastic,
94V-0 rated, black

Contacts - Copper alloy,
gold over nickel plated



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	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

with .025 [0.64] sq. solder tails



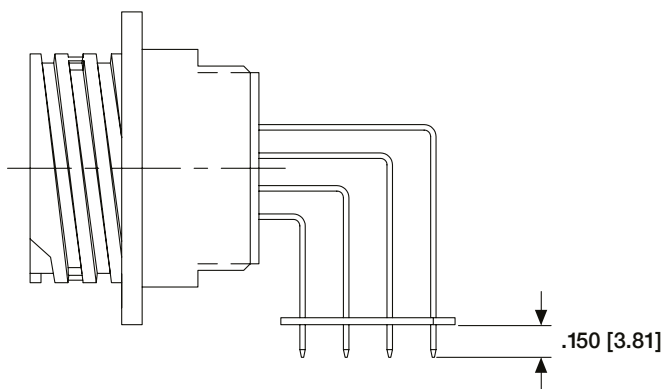
Square Flange Receptacle

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 18 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 17

Component Dimensions – Page 18

Keying – Standard Configuration:

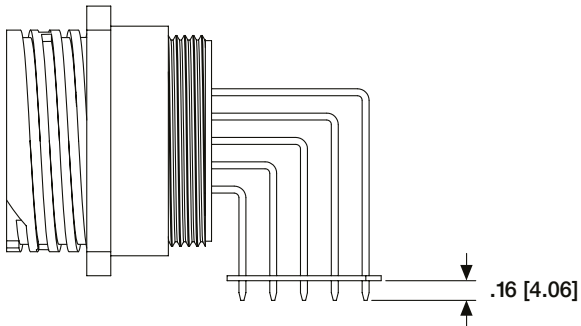
5 Keys – Page 7

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			
	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 18 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

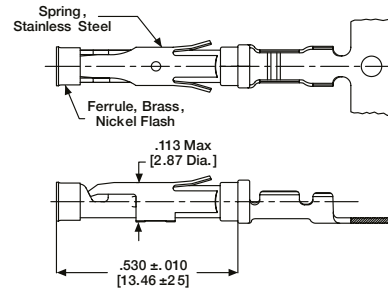
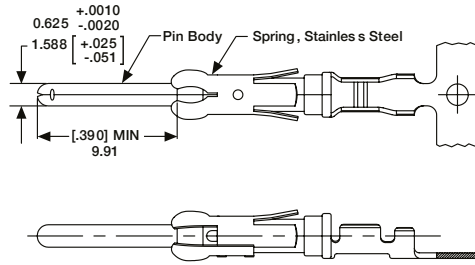
SIGNAL CONTACTS, TYPE III+, CRIMP, SNAP-IN



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	mm ²			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	2151847 -□	
		.014-.030 ¹ [0.36-0.76]	15 Precious metal/Tin ²	66393-7	66394-7	-	-		
		.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 8.

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.

⁴ 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.

⁵ Commercial PRO-CRIMPERS 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	mm ²			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		

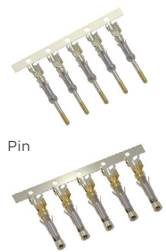
¹ Overall insulation crimp diameter, including crimp barrel, must not exceed .125 [3.18].

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.

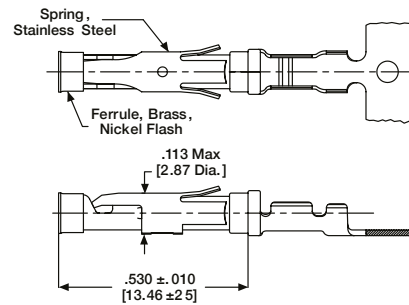
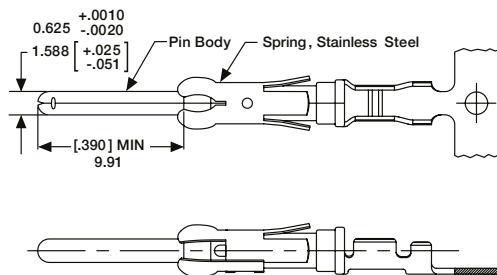
³ .000030 [.00076] min precious metal plate in the mating area with gold flash on the remainder, both over .000030 [.00076] min nickel underplate.

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

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



Socket



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% Inserts		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
13-7		.278	.995	.175	.750	.134	.567
17-14		.270	.990	.146	.625	.127	.472
23-19		.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	Wire Size	Wire Size
		14 AWG	14 AWG	14 AWG
11-4		.880	.880	.640
13-7		.880	.640	.480
17-14		.880	.520	.400
23-19		.880	.520	.400
23-37		.880	.440	.320

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

Standard Mate (Posted Pin Contacts)

with .025 [0.64] sq. solder tails

Wire Size Range		Ins. Dia. Range	Contact Finish	Grounding Pin Part No.		Strip Form No. Applicator Part No.	Loose Piece Hand Tool Part No.
AWG	mm ²			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		



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)

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](#).

SIGNAL CONTACTS, HIGH CURRENT POWER CONTACT - SIZE 16

Wire Size Range		Grounding Pin Part No.		Crimping Tool		
		Pin	Socket	Tool	Turret	
AWG	mm ²	Loose Piece	Loose Piece			for Pins
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	mm ²		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	Loose Piece Contact No.		Contact Color Code	Tooling Part No.	
AWG	mm ²		Pin	Socket		Loose Piece	Hand Tool
28-24	0.08-0.20	.035-.055 [0.89-1.40]	201611-1⁴	201613-1⁵	Red/Red	91538-1 or 601967-1	
		.048-.065 [1.22-1.65]	201334-1⁴	-	Red/Red		
24-20	0.2-0.6	.040-.062 [1.02-1.57]	201578-1⁴	201580-1⁵	Yellow/Red	91538-1 or 58541-1*	
		.055-.088 [1.40-2.16]	201330-1⁴	201328-1⁵	Yellow/Red		601967-1
18 (Two)	0.9-0.9 (Two)	No Ins. Support	-	202726-1⁴	Blue	91539-1 or 601967-1	
18-16	0.8-1.4	.080-105 [2.03-2.67]	202507-1⁴	202508-1⁵	-	601967-1	
		No Ins. Support	200336-1⁴	200333-1⁴	Blue/Blue	91539-1 58541-1* or 601967-1	
		No Ins. Support	204219-1^{5,6}	-	Blue/Blue		
14	2	No Ins. Support	201570-1⁴	201568-1⁵	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

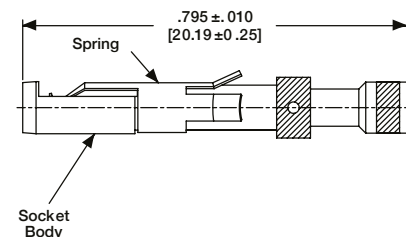
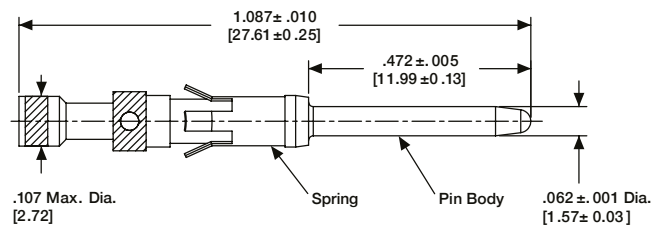
Contact Body –
.000030 [0.00076] gold over
.000050 [0.00127] nickel.
Gold thickness controlled on
socket O.D.
Retention Spring – Stainless steel



Pin



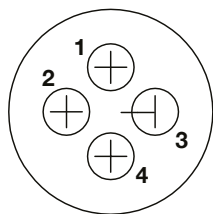
Socket



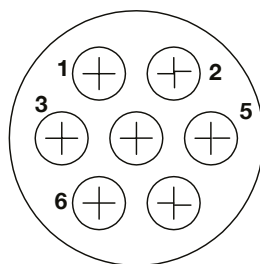
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

CONTACT ARRANGEMENTS

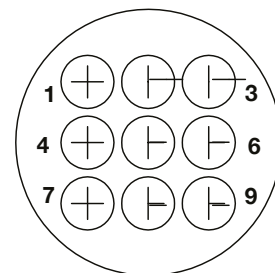
Shell Sizes 11 and 13



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

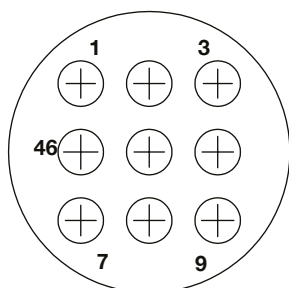


Arrangement 13-7
Max. Wire Ins. Dia. = .100 [2.54]

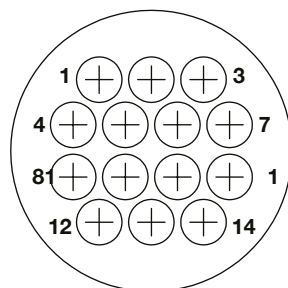


Arrangement 13-9
Max. Wire Ins. Dia. = .100 [2.54]

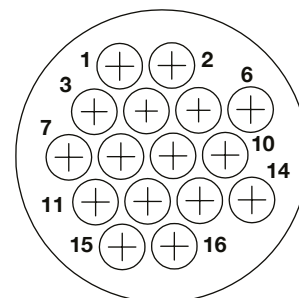
Shell Sizes 17



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

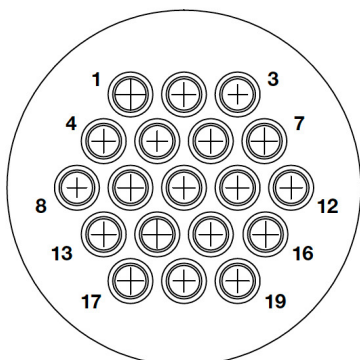


Arrangement 17-14
Max. Wire Ins. Dia. = .100 [2.54]

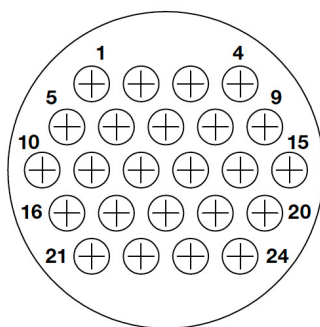


Arrangement 17-16
Max. Wire Ins. Dia. = .100 [2.54]

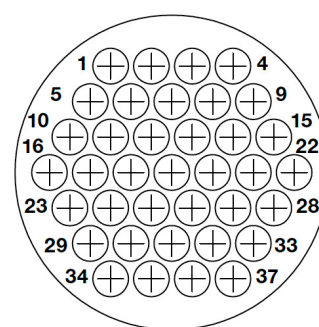
Shell Sizes 23



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



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



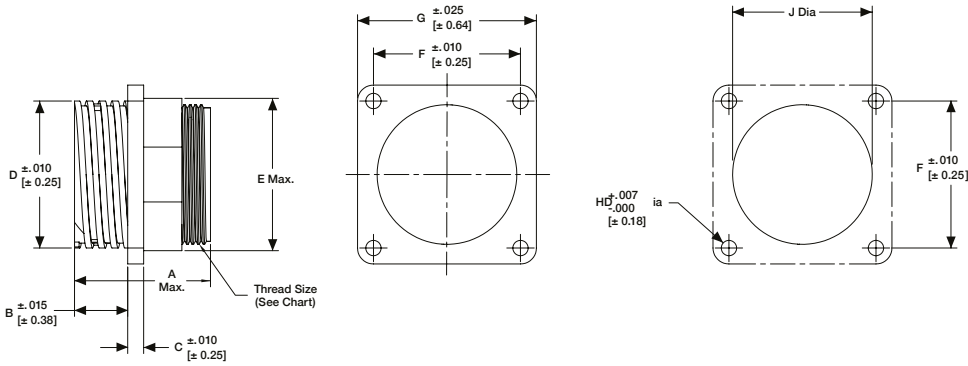
Arrangement 23-37
Max. Wire Ins. Dia. = .100 [2.54]

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

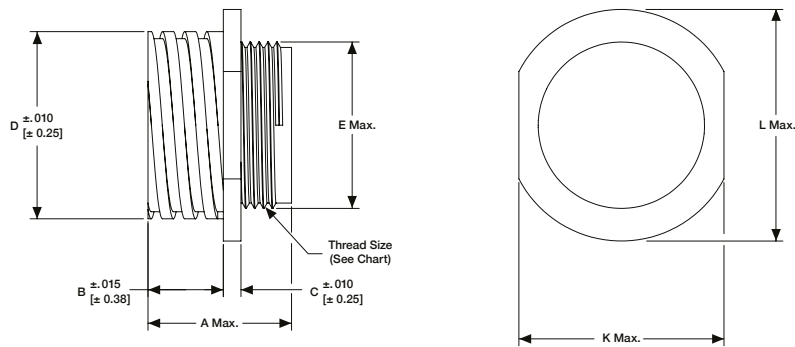
Note: All part numbers are RoHS Compliant.

COMPONENT DIMENSIONS

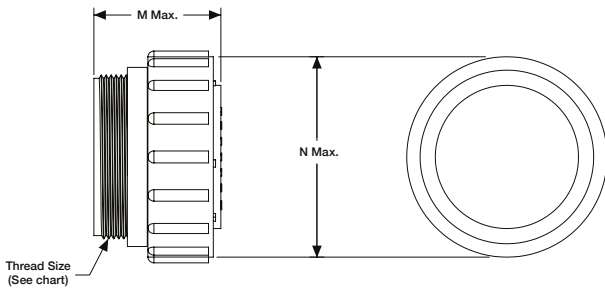
Square Flange Receptacle



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]											
14	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

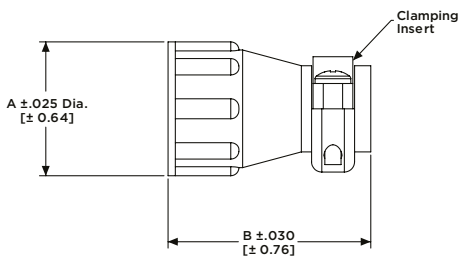
Shell Size	Dimensions		Cable O.D. (Max.)	Thread Size	Part No.	
	A	B			Individually Packaged	Bulk Packaged*
11	.825 [20.96]	1.250 [31.75]	.329 [8.36]	5/8-24 UNEF-2B	1-206062-4	1-206062-7** (400)
13	.950 [24.13]	1.400 [35.56]	.453 [11.51]	3/4-20 UNEF-2B	206966-7	206966-9** (200)
17	1.125 [28.58]	1.400 [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:

- 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.
- Components for all cable clamps are packaged unassembled. This includes the cable clamp, two screws and the clamping inserts.
- Cable clamps can be threaded directly onto plugs or receptacles, or onto back-shell extenders (page 21).
- 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](#).
- Cable clamp inserts not sold separately.



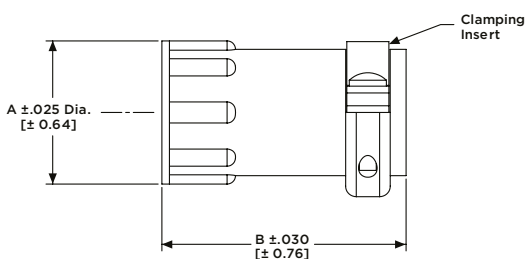
Shell Size	Dimensions		Cable O.D. (Max.)	Thread Size	Part No.	
	A	B			Individually Packaged	Bulk Packaged*
11	.850 [21.59]	1.450 [36.83]	.453 [11.51]	5/8-24 UNEF-2B	206358-5	206358-6** (400)
13	1.131 [28.73]	1.655 [42.04]	.703 [17.86]	3/4-20 UNEF-2B	207008-5	207008-6** (200)
17	1.131 [28.73]	1.655 [42.04]	.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:

- 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.
- Components for all cable clamps are packaged unassembled. This includes the cable clamp, two screws and the clamping inserts.
- Cable clamps can be threaded directly onto plugs or receptacles, or onto back-shell extenders (page 21).
- 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](#).
- Cable clamp inserts not sold separately.



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.

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



Standard Size

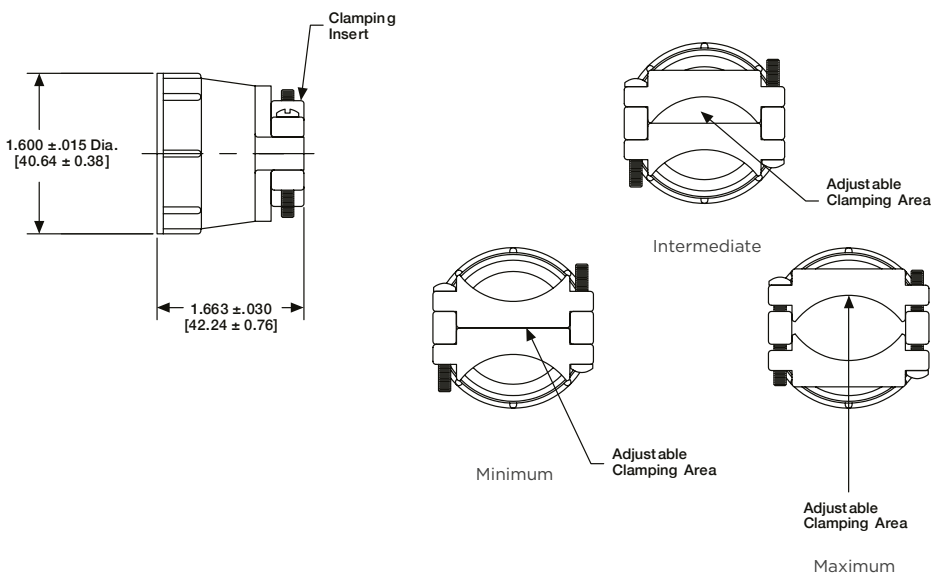
Material

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



Large Size

SELF-CENTERING CABLE CLAMP (SHELL SIZE 23)



- 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 21](#)).

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.



Standard Size

Material

Black thermoplastic, UL 94V-0 rated

Part Numbers

- [207774-3](#) (individually packaged)
- [207774-4](#) (bulk packaged)

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

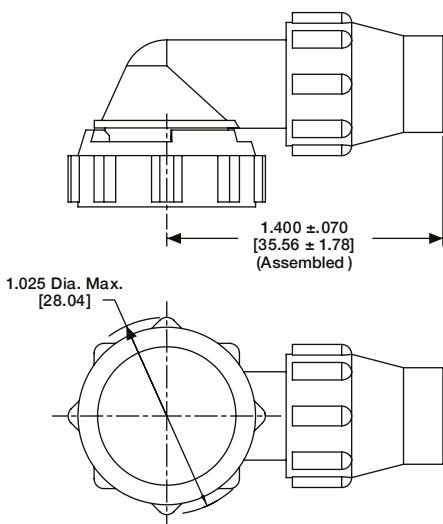
Right-angle cable clamps are used in tight areas where typical 180° cable clamp strain reliefs will not fit.



Standard Size

Material

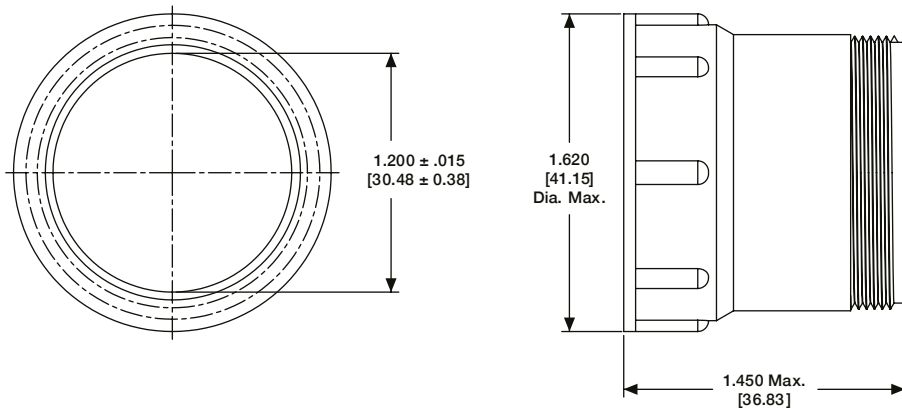
Black thermoplastic, UL 94V-0 rated



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

Note: All part numbers are RoHS Compliant.

BACK-SHELL EXTENDER (SHELL SIZE 23)



Note: Back-shell extenders can be threaded directly onto plugs or receptacles and will accept cable clamps of the appropriate size (page [19-20](#)).

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



Standard Size

Material

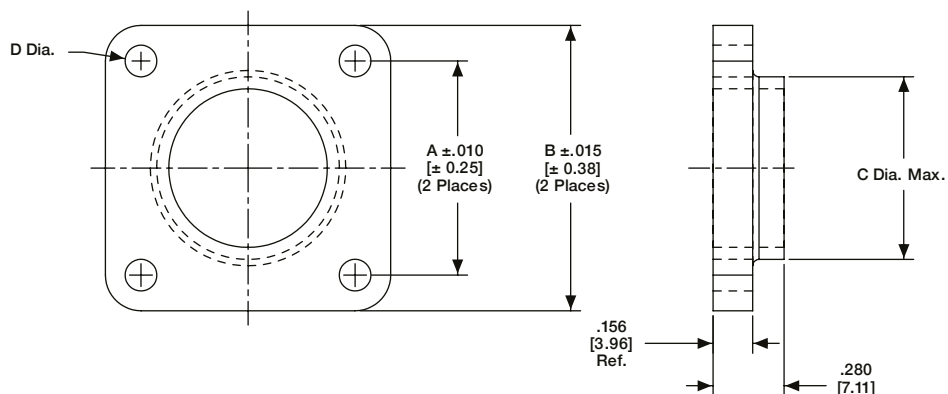
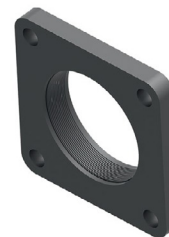
Black glass-filled thermoplastic

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

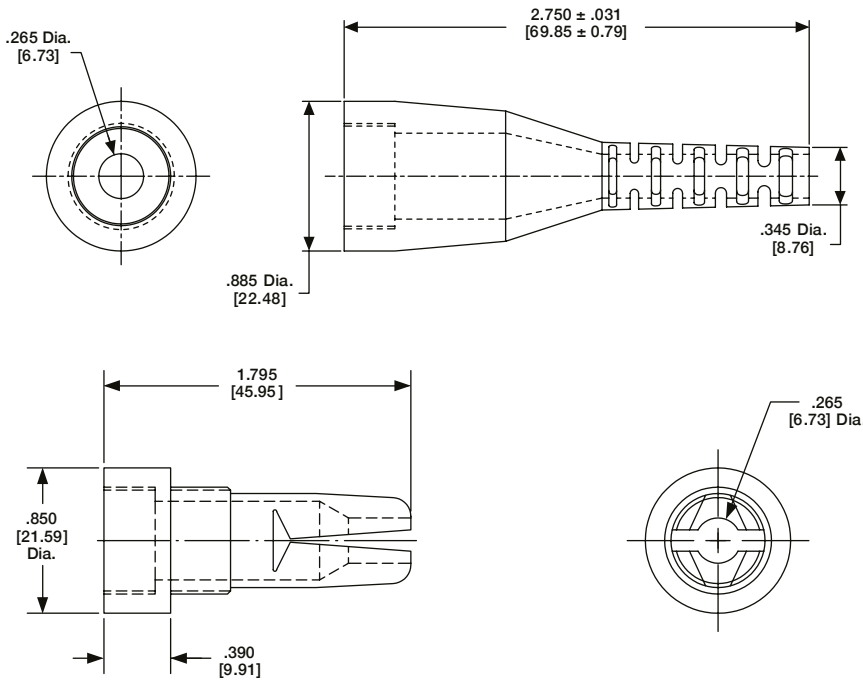
A panel mount flange is used in applications that require the plug half of a connector to be panel mounted.



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

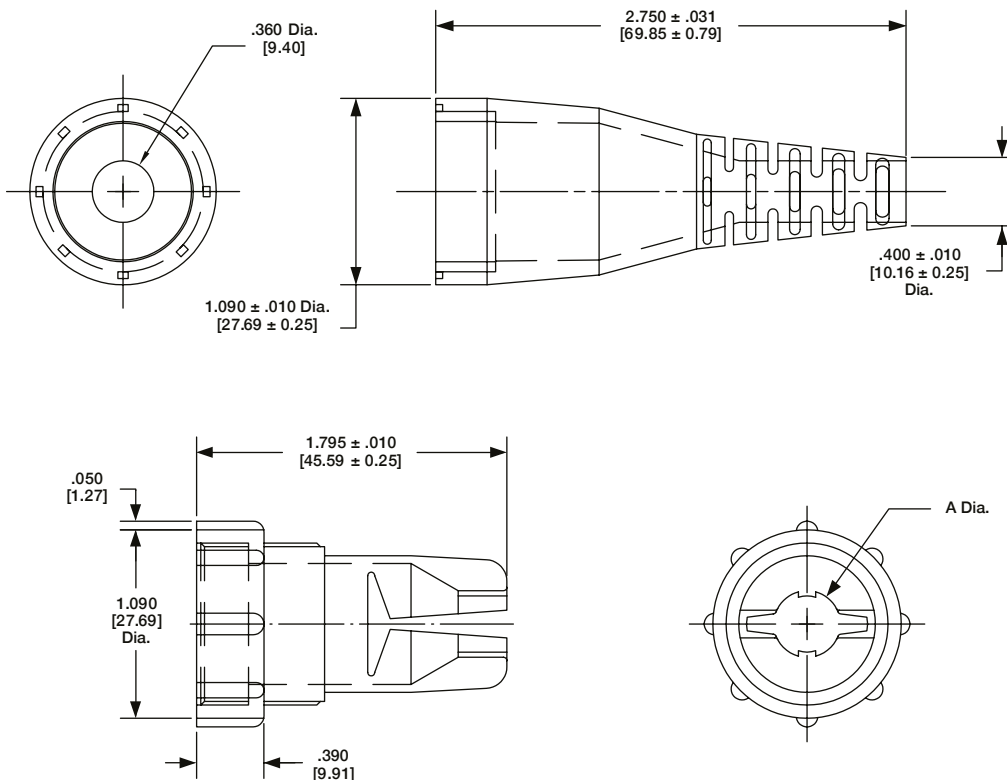
.150-.250 [3.81-6.35] Dia.

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)

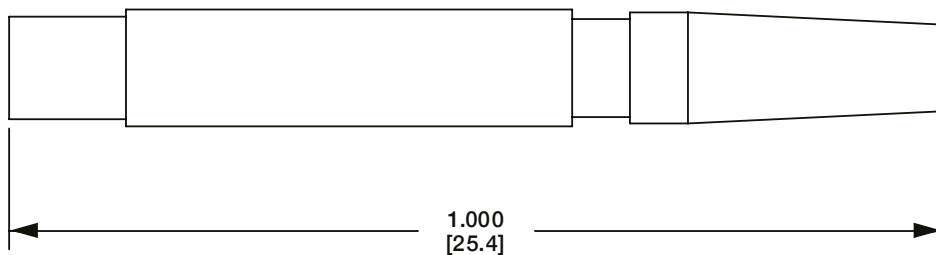
[207387-1](#) (Cable Grip)

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

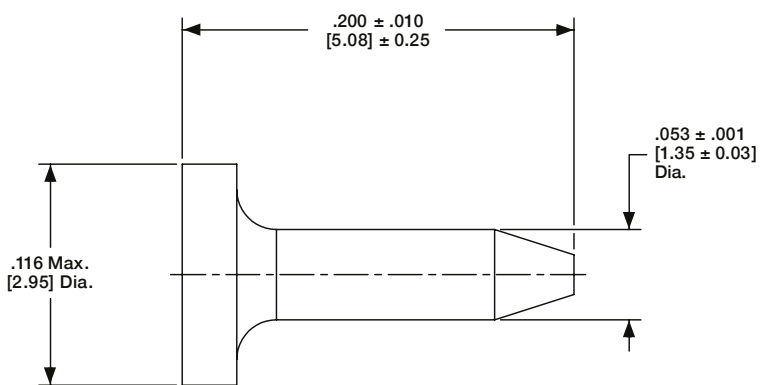


Material

Nylon, natural, UL 94V-2 rated

Series 1 and Series 4 Keying Plug (for Types III+ Contacts)

Part No. [200821-1](#)

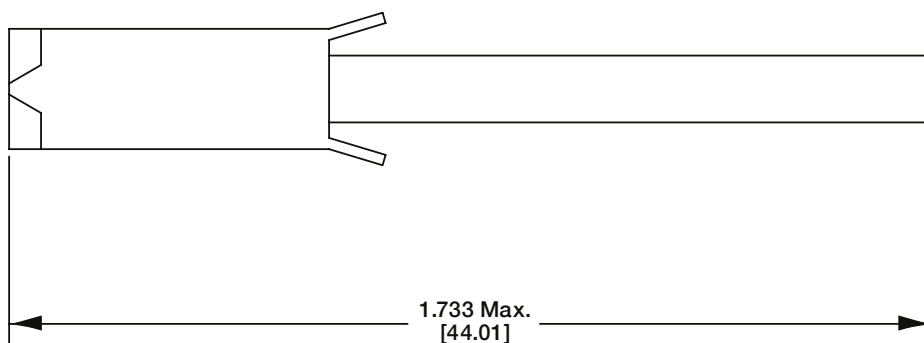


Material

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

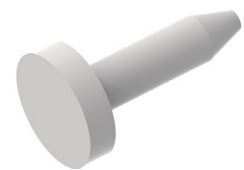
Series 3 and Series 4 Keying Plugs (for Type XII Contacts)

Part Nos. [206508-1](#) (Socket Cavities) - Shown Above
[207597-1](#) (Pin Cavities)

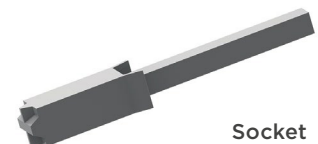
Keying plugs are used to provide keying capabilities for all connector series. Keying plugs are used in socket cavities of standard mate plugs and reverse mate receptacles, except when used with sealing caps.



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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

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

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



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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