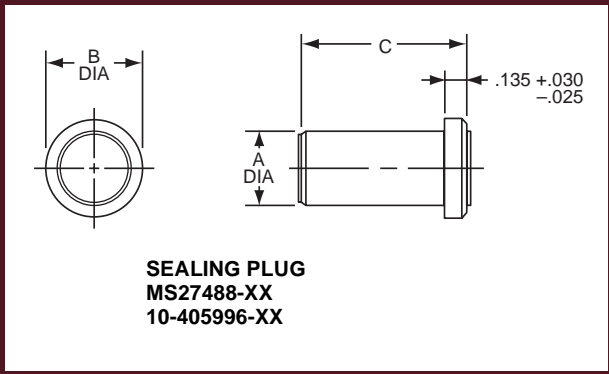


# PT, SP, PC

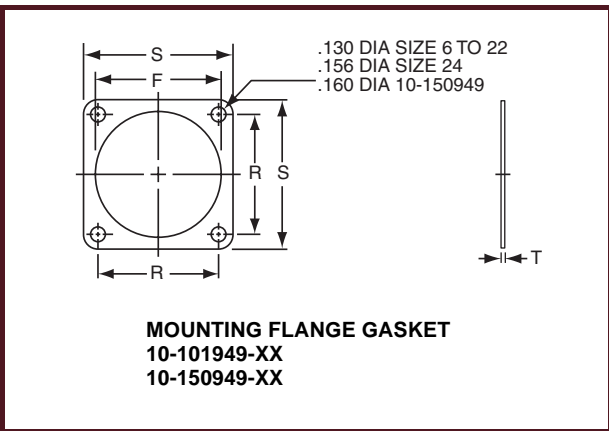
## accessories – sealing plugs, flange gaskets, potting boots



### SEALING PLUGS – FOR PT, SP, PC

Contact Size	Amphenol® Part Number	MS Number	A Dia. ±.010	B Dia. ±.005	C ±.010	Color Code
12	10-405996-12	MS27488-12	.121	.171	.564	Yellow
16	10-405996-16	MS27488-16	.083	.133	.564	Blue
20	10-405996-20	MS27488-20	.060	.090	.564	Red

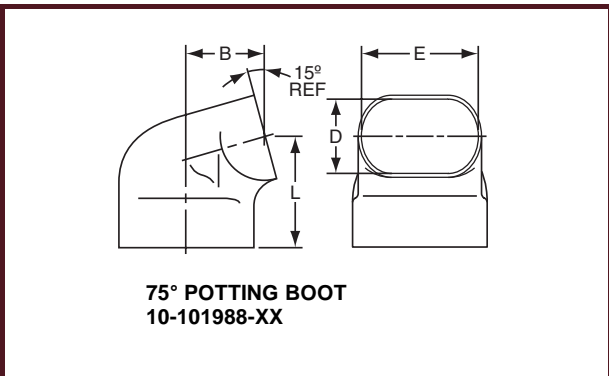
How to Order: Order by 10- (Proprietary) or MS part number as shown in chart above.



### MOUNTING FLANGE GASKETS – FOR PT, SP, PC

Shell Size	PT, PC 10-101949		SP 10-150949		PT, SP, PC 10-101949 10-150949	
	R ±.010	S ±.010	R ±.010	S ±.010	F +.016 -.000	T ±.008
6	.469	.688	.641	.953	.375	.024
8	.594	.812	.734	1.047	.500	.024
10	.719	.938	.812	1.125	.625	.024
12	.813	1.031	.938	1.250	.750	.024
14	.906	1.125	1.031	1.344	.875	.024
16	.969	1.219	1.125	1.438	1.000	.024
18	1.063	1.312	1.203	1.516	1.125	.024
20	1.156	1.438	1.297	1.672	1.250	.024
22	1.250	1.563	1.375	1.750	1.375	.024
24	1.375	1.688	1.500	1.875	1.500	.024

How to Order: For PT, PC: 10-101949-XX (complete order number with desired shell size).  
 For SP: 10-150949-XX (complete order number with desired shell size).



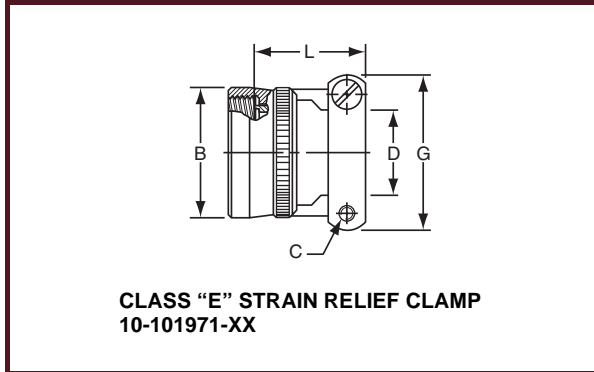
### 75° POTTING BOOTS – FOR PT, SP, PC

Shell Size	B Max.	D ±.015	E ±.015	L Max.
8	.433	.312	.438	.766
10	.493	.438	.562	.830
12	.552	.516	.688	.861
14	.643	.625	.781	.916
16	.658	.656	.890	.936
18	.689	.703	1.000	.959
20	.750	.766	1.125	1.052
22	.794	.812	1.234	1.073
24	1.070	.918	1.374	1.310

How to Order: 10-101988-XX (complete order number with desired shell size).

All dimensions for reference only.

# PT, SP, PC accessories – clamps



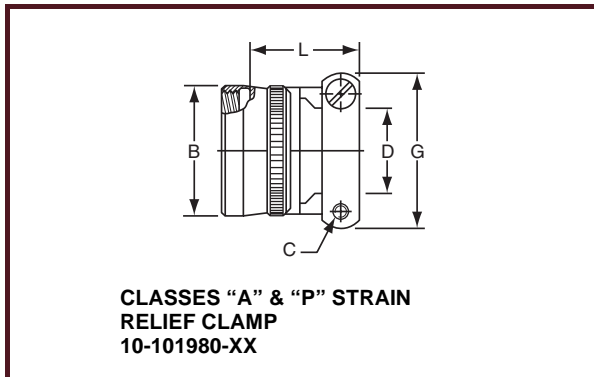
## CLASS "E" STRAIN RELIEF CLAMP – FOR PT, SP, PC

Shell Size	B Max.	C Thread Class 2B	D Min.	G Max.	L Max.
8	.550	6-32 NC	.240	.812	.930
10	.675	6-32 NC	.302	.875	.930
12	.803	6-32 NC	.428	1.000	.930
14	.920	6-32 NC	.552	1.125	.930
16	1.047	6-32 NC	.615	1.188	1.062
18	1.165	8-32 NC	.740	1.438	1.062
20	1.291	8-32 NC	.740	1.438	1.093
22	1.418	8-32 NC	.928	1.719	1.093
24	1.533	8-32 NC	.928	1.719	1.093

How to Order: 10-101971-XX X

Add desired  shell size  Add desired finish suffix†  
 "1" designates bright cadmium with clear chromate  
 "3" designates olive drab cadmium  
 "5" designates Alumilite®

Not for use with jam nut style connectors.



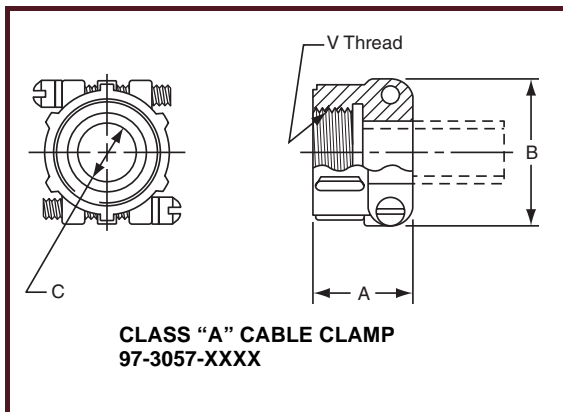
## CLASSES "A" & "P" STRAIN RELIEF CLAMP – FOR PT, SP, PC

Shell Size	B Max.	C Thread Class 2B	D Min.	G Max.	L +.010 -.020
8	.540	6-32 NC	.240	.812	.843
10	.665	6-32 NC	.302	.875	.843
12	.793	6-32 NC	.428	1.000	.843
14	.910	6-32 NC	.552	1.125	.843
16	1.037	6-32 NC	.614	1.188	.975
18	1.155	8-32 NC	.740	1.438	.975
20	1.281	8-32 NC	.740	1.438	1.007
22	1.408	8-32 NC	.928	1.719	1.007
24	1.533	8-32 NC	.938	1.719	1.007

How to Order: 10-101980-XX X

Add desired  shell size  Add desired finish suffix†  
 "1" designates bright cadmium with clear chromate  
 "3" designates olive drab cadmium  
 "5" designates Alumilite®

Not for use with jam nut style connectors.



## CLASS "A" CABLE CLAMPS – FOR PT, SP, PC

Shell Size	Amphenol® Part Number	A ±.031	B Max.	C Dia. Min.	V Thread
10	97-3057-1004	.795	.842	.3125	.6250-24
12	97-3057-1007	.850	.995	.4375	.7500-20
14	97-3057-1008	.920	1.120	.5625	.8750-20
16	97-3057-1010	.920	1.216	.6250	1.0000-20
18/20	97-3057-1012	.927	1.403	.7500	1.1875-18
22/24	97-3057-1016	1.015	1.683	.9375	1.4375-18

How to Order: Order by 97-3057-XXXX number listed above. Standard finish is olive drab zinc alloy. Consult Amphenol, Sidney, NY for alternate finishes.

† Standard accessory finishes are "1" bright cadmium with clear chromate for PC types, "3" olive drab cadmium for PT and MS/PT types, "5" Alumilite® for SP types. Electroless nickel plating is also available on some items; consult Amphenol, Sidney, NY

All dimensions for reference only.

ACCESSORIES & TOOLS

# PT, SP, MS/PT accessories – protection caps

**RECEPTACLE PROTECTION CAP FOR PT, SP, MS/PT CONNECTORS**

10-101960-XXX  
MS3181-XXX  
(Wall Receptacle)

10-101961-XXX  
(Cable Connecting Receptacle)

10-101964-XXX  
MS3181-XXX  
(Jam Nut Receptacle)

## RECEPTACLE PROTECTION CAPS – FOR PT, SP, MS/PT

Shell Size	B Dia. +.010 -.000	C Dia. +.010 -.000	G Dia. Max.	L +.020 -.000	X Std. & MS RA, CA, NA	X MS only RAL/CAL/NAL
6	.328	.454	.577	.563	3.000	5.000
8	.454	.578	.706	.563	3.000	5.000
10	.578	.703	.816	.563	3.000	5.000
12	.703	.891	1.000	.563	3.500	5.000
14	.844	1.016	1.128	.563	3.500	5.000
16	.969	1.141	1.257	.563	3.500	5.000
18	1.094	1.266	1.367	.563	3.500	5.000
20	1.219	1.391	1.496	.563	4.000	5.000
22	1.343	1.516	1.624	.563	4.000	5.000
24	1.453	1.614	1.747	.603	4.000	5.000

How to Order Proprietary Receptacle Caps:

Wall Receptacle Caps: 10-101960- XX X  
 Cable Connecting Receptacle Caps: 10-101961- XX X  
 Jam Nut Receptacle Caps: 10-101964- XX X

Add desired shell size \_\_\_\_\_  
 Add desired finish suffix†

“1” designates bright cadmium with clear chromate  
 “3” designates olive drab cadmium  
 “5” designates Alumilite®

Proprietary caps are supplied with standard bead chains only (as shown in drawing at left). For other chain options, an MS version cap should be ordered.

How to Order MS Version Receptacle Caps:

Wall Receptacle Caps: MS3181- XX -CA for sash chain  
 -CAL for long sash chain  
 -RA for rope chain  
 -RAL for long rope chain  
 Jam Nut Recept. Caps: MS3181- XX -NA for sash chain  
 -NAL for long sash chain

Shell size \_\_\_\_\_

MS versions are supplied with standard anodize finish only. For other finish options a proprietary cap should be ordered.

**PLUG PROTECTION CAP FOR PT, SP, MS/PT CONNECTORS**  
 MS3180-XXX  
 10-101957-XXX

## PLUG PROTECTION CAPS – FOR PT, SP, MS/PT

Shell Size	N Dia. +.001 -.005	L Dia. +.025 -.015	X Std. & MS CA, RA	X MS only CAL/RAL
6	.348	.532	3.000	5.000
8	.473	.532	3.000	5.000
10	.590	.532	3.000	5.000
12	.750	.532	3.500	5.000
14	.875	.532	3.500	5.000
16	1.000	.532	3.500	5.000
18	1.125	.532	3.500	5.000
20	1.250	.594	4.000	5.000
22	1.375	.594	4.000	5.000
24	1.500	.627	4.000	5.000

How to Order Proprietary Plug Caps: 10-101957-XX X

Add desired shell size \_\_\_\_\_  
 Add desired finish suffix†

“1” designates bright cadmium with clear chromate  
 “3” designates olive drab cadmium  
 “5” designates Alumilite®

Proprietary caps are supplied with standard bead chains only (as shown in drawing at left). For other chain options an MS version cap should be ordered.

How to Order MS Version Plug Caps: MS3180- XX

Shell size \_\_\_\_\_  
 -CA for sash chain  
 -CAL for long sash chain  
 -RA for rope chain  
 -RAL for long rope chain

† Standard accessory finishes are “1” bright cadmium with clear chromate for PC types, “3” olive drab cadmium for PT and MS/PT types, “5” Alumilite® for SP types. Electroless nickel plating is also available on some items; consult Amphenol, Sidney, NY

All dimensions for reference only.

# PC

## accessories – protection caps

**RECEPTACLE PROTECTION CAP  
FOR PC CONNECTORS**

**10-101950-XXX**      **10-101951-XXX**      **10-101956-XXX**  
**(Wall Receptacle)**      **(Cable Connecting Receptacle)**      **(Jam Nut Receptacle)**

### RECEPTACLE PROTECTION CAPS – FOR PC

Shell Size	A Thread Class 2B	B Dia. +.010 - .000	C Dia. +.010 - .000	G Max.	L Max.	X ±.250
6	.3750 DS	.328	.454	.520	.448	3.000
8	.5000 DS	.454	.578	.648	.448	3.000
10	.6250 DS	.578	.703	.776	.448	3.000
12	.7500 DS	.703	.891	.902	.448	3.500
14	.8750 DS	.844	1.016	1.030	.448	3.500
16	1.0000 DS	.969	1.141	1.157	.448	3.500
18	1.1250 DS	1.094	1.266	1.284	.448	3.500
20	1.2500 DS	1.219	1.391	1.412	.448	4.000
22	1.3750 DS	1.343	1.516	1.507	.448	4.000

How to Order Proprietary Receptacle Caps for PC connectors only:

Wall Receptacle Caps: 10-101950- XX X

Cable Connecting Receptacle Caps: 10-101951- XX X

Jam Nut Receptacle Caps: 10-101956- XX X

Add desired shell size \_\_\_\_\_

Add desired finish suffix† \_\_\_\_\_

“1” designates bright cadmium with clear chromate (standard for PC)

“3” designates olive drab cadmium

“5” designates Aluminite®

Caps for PC connectors are supplied only in proprietary versions with standard bead chains only (as shown in drawing at left).

**PLUG PROTECTION CAP  
FOR PC CONNECTORS  
10-101955-XXX**

### PLUG PROTECTION CAPS – FOR PC

Shell Size	A Thread Class 2A	B +.010 - .000	G Max.	L Max.	X ±.250
6	.3750 DS	.328	.399	.557	3.000
8	.5000 DS	.454	.526	.557	3.000
10	.6250 DS	.578	.643	.557	3.000
12	.7500 DS	.703	.770	.557	3.500
14	.8750 DS	.844	.897	.557	3.500
16	1.0000 DS	.969	1.025	.557	3.500
18	1.250 DS	1.094	1.152	.557	3.500
20	1.2500 DS	1.219	1.279	.557	4.000
22	1.3750 DS	1.343	1.416	.557	4.000

How to Order Proprietary Plug Caps for PC only: 10-101955-XX X

Add desired shell size \_\_\_\_\_

Add desired finish suffix† \_\_\_\_\_

“1” designates bright cadmium with clear chromate (standard for PC)

“3” designates olive drab cadmium

“5” designates Aluminite®

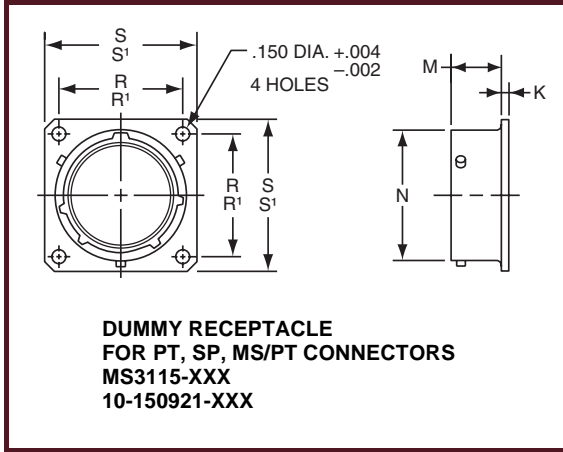
Caps for PC connectors are supplied only in proprietary versions with standard bead chains only (as shown in drawing at left).

† Standard accessory finishes are “1” bright cadmium with clear chromate for PC types, “3” olive drab cadmium for PT and MS/PT types, “5” Aluminite® for SP types. Electroless nickel plating is also available on some items; consult Amphe-nol, Sidney, NY

All dimensions for reference only.

# PT, SP, PC

accessories – dummy receptacles, “O” rings, plastic dust caps



## DUMMY RECEPTACLES – FOR PT, SP, MS/PT

Shell Size	K ±.010	M +.030 -.000	N +.001 -.005	Proprietary Version		MS Version	
				R ±.005	S ±.010	R <sup>1</sup> (TP)	S <sup>1</sup> (TP)
8	.062	.462	.473	.734	1.047	.594	.828
10	.062	.462	.590	.812	1.125	.719	.954
12	.062	.462	.750	.938	1.250	.812	1.047
14	.062	.462	.875	1.031	1.344	.906	1.141
16	.062	.462	1.000	1.125	1.438	.969	1.234
18	.062	.462	1.125	1.203	1.516	1.062	1.328
20	.062	.556	1.250	1.297	1.672	1.156	1.453
22	.062	.556	1.375	1.375	1.750	1.250	1.578
24	.062	.589	1.500	1.500	1.875	1.375	1.703

How to Order Proprietary Dummy Receptacles: 10-150921-XX X

Add desired shell size \_\_\_\_\_

Add desired finish suffix<sup>†</sup> \_\_\_\_\_

"1" designates bright cadmium with clear chromate

"3" designates olive drab cadmium

"5" designates Alumilite®

How to Order MS Version Dummy Receptacles: MS3115-XX X

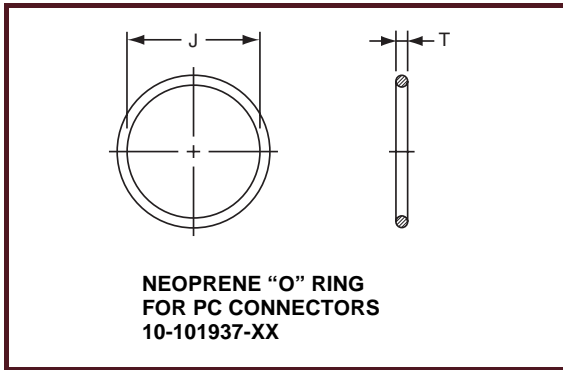
Add desired shell size \_\_\_\_\_

Add desired finish suffix<sup>†</sup> \_\_\_\_\_

-A designates Alumilite®

-L designates electroless nickel

-W designates olive drab cadmium



## NEOPRENE "O" RINGS – FOR PC

Shell Size	Amphenol® Part Number	J Dia. ±.010	T Dia. ±.003
6	10-101937-6	.172	.031
8	10-101937-8	.328	.031
10	10-101937-10	.406	.031
12	10-101937-12	.531	.031
14	10-101937-14	.641	.031
16	10-101937-16	.781	.031
18	10-101937-18	.906	.031
20	10-101937-20	.984	.031
22	10-101937-22	1.109	.031

How to order "O" rings: Order by 10- (Proprietary) only as shown in chart above.

## PLASTIC DUST CAPS

### FOR PT, SP

Shell Size	Plug Plastic Dust Cap	Receptacle Plastic Dust Cap
6	10-70500-8	10-70506-8S
8	10-70506-12	10-70506-10
10	10-70500-12	10-70506-12
12	10-70506-16	10-70506-14
14	10-70506-18	10-70506-16
16	10-70506-20	10-70506-18
18	10-70506-22	10-70506-20
20	10-70506-24	10-79506-22
22	10-70524-1	10-70506-24
24	10-70506-28	10-70524-1

### FOR PC

Shell Size	Plug Plastic Dust Cap	Receptacle Plastic Dust Cap
6	10-70576-6	10-70576-8
8	10-70576-8	10-70500-8
10	10-70500-8	10-70500-10
12	10-70500-10	10-70500-12
14	10-70500-12	10-70500-14
16	10-70500-14	10-70500-16
18	10-70576-18	10-70500-18
20	10-70576-20	10-70500-20
22	10-70576-22	10-70500-22

How to Order Plastic Dust Caps:

To the basic order number add the dust cap size to match connector plug or receptacle shell size, as shown in the tables above.

Example: 10-70506-12 would be the correct order number for a plastic dust cap for a PT00 receptacle, shell size 10.

All dimensions for reference only.

# Application Tools

## “SE”, “CE”

The following data includes information pertaining to the application tools for crimping, inserting and removing size 20, 16, and 12 contacts incorporated in Amphenol® Miniature Cylindrical Connectors.

All crimping tools included are the “full cycling” type, and when used as specified by the manufacturer, provide reliable crimped wire to contact termination.

Tool frames and turret heads are available from approved tool manufacturers; consult Amphenol, Sidney, NY for listings.

Assembly instructions are available online at [www.amphenol-aerospace.com](http://www.amphenol-aerospace.com)

See the following:

L-786 for SE assembly instructions

L-658 for CE assembly instructions

L-555 for solder type instructions

### CRIMPING TOOLS

**FOR PT-SE, SP-SE, PC-SE, MS/PT-SE  
(MIL-C-26482, Series 1) Connectors**

Contact Size	MS Tool Part Number	
	Tool Frame	Turret Head
20	M22520/1-01	M22520/1-02
16	M22520/1-01	M22520/1-02
12	M22520/1-01	M22520/1-02

**FOR PT-CE, SP-CE, PC-CE (Proprietary)  
Connectors**

Contact Size	MS Tool Part Number	
	Tool Frame	Turret Head
20	M22520/1-01*	*
16	M22520/1-01*	*

\* Use Daniels TH254 or equivalent

### INSERTION/REMOVAL TOOLS

**FOR PT-SE, SP-SE, PC-SE, MS/PT-SE  
(MIL-C-26482, Series 1) Connectors**

Contact Size	Insertion Tool			Removal Tool	
	Amphenol® Contact Insertion Pliers	Amphenol® Contact Insertion Tool	MS Part Number Contact Insertion Tool	Amphenol® Contact Removal Tool	MS Part Number Contact Removal Tool
20	11-8107-20	11-7401-20	M81969/17-03	11-7880-20	M81969/19-07
16	11-8107-16	11-7401-16	M81969/17-04	11-7880-16	M81969/19-08
12	–	–	M81969/17-05	–	M81969/19-09

**FOR PT-CE, SP-CE, PC-CE (Proprietary)  
Connectors**

Contact Size	Insertion/Removal Tool	
	Contact Insertion Pliers	Contact Removal Tool Kit
20	11-6782	11-6900
16	11-6781	11-6900

# Contacts - Power and Thermocouple Crimp for miniature cylindrical connectors

The following tables provide part number information for crimp contacts used in Amphenol® Miniature Cylindrical Connectors. For additional information, consult Amphenol, Sidney, NY.

## CRIMP CONTACTS for MIL-C-26482, Series 1 (PT-SE, SP-SE) Connectors

Contact Size	Accommodates Wire Size	Pins		Sockets	
		MS Number	Amphenol® Proprietary Number	MS Number	Amphenol® Proprietary Number
20	20, 22 & 24 AWG	M39029/31-240	10-314980-20P	M39029/32-259	LP-597820-355
16	16, 18 & 20 AWG	M39029/31-228	10-314980-16P	M39029/32-247	10-257982-16F
12	12 & 14 AWG	M39029/31-235	10-807100-125	M39029/32-254	10-807103-125
20-16	16 AWG		10-330930-20F		10-807155-205
16-20	20 AWG		10-330932-16F		10-330933-16F
12-10	12 AWG		10-330938-12F		10-330939-12F

## CRIMP CONTACTS for PT-CE (Proprietary) Connectors

Contact Size	Accommodates Wire Size	Pins	Sockets
		Amphenol® Proprietary Number	Amphenol® Proprietary Number
20	20, 22 & 24 AWG	10-189000-20F	10-597817-351
20-16	16 AWG	10-195962-20F	10-195963-20F
16	16, 18 & 20 AWG	10-189004-16F	10-189006-16F

## THERMOCOUPLE CONTACTS for Miniature Connectors

Size	Material	Pins Proprietary Part Number		Sockets Proprietary Part Number	
		CE	SE	CE	SE
16 Crimp Termination	Chromel	10-252900-21P	10-330940-21P	10-252900-21S	10-330940-21S
	Alumel	10-252900-22P	10-330940-22P	10-252900-22S	10-330940-22S
	Iron				
	Constantan				
20 Crimp Termination	Chromel	10-252900-1P	10-330940-1P	10-252900-1S	10-330940-1S
	Alumel	10-252900-2P	10-330940-2P	10-252900-2S	10-330940-2S
	Iron	10-252900-3P	10-330940-3P	10-252900-3S	10-330940-3S
	Constantan	10-252900-4P	10-330940-4P	10-252900-4S	10-330940-4S
20 Solder Termination††	Chromel	10-314910-1P		10-314910-1S	
	Alumel	10-314910-2P		10-314910-2S	
	Iron	10-314910-3P		10-314910-3S	
	Constantan	10-314910-4P		10-314910-4S	

†† Listed are insertable/removable contacts; however, it is intended that contacts be terminated with solder. For additional thermocouple contact information, consult Amphenol, Sidney, NY.

See L-776 for thermocouple contact termination instructions. These are online at [www.amphenol-aerospace.com](http://www.amphenol-aerospace.com)

For PCB contacts for miniature connectors, see page 20.

# Coaxial Contacts

## for miniature cylindrical connectors

Amphenol® Miniature Connectors can incorporate shielded coax contacts. The Miniature family is built around MIL-C-26482 specifications, with Mil-approved and proprietary styles offered. Normal operating voltage for Miniature cylindricals with power only contacts is up to 1,000 VAC (RMS) at sea level.

### Miniature Cylindricals offer these features for contact termination flexibility:

- Several insert arrangements that can incorporate:
  - Size 8 & 12 Crimp Coax contacts for Crimp type
  - Size 8 & 12 Solder Coax contacts for Solder type
- Wide selection of connector shell styles and sizes
- Standard power contact options within the various connector styles include: solder type, crimp front release, crimp rear release
- Coax contacts are designed to the same high performance standards as power contacts. Coax and power contacts may be intermixed with no degradation of connector reliability.
- No mis-mating or cross-plugging with insert rotation and keyway polarization.

### GENERAL ORDERING INFORMATION

Amphenol Miniature Cylindricals are normally supplied with a full complement of power contacts, separately packaged. Coax contacts are ordered by part number as referenced in the part number charts on the following pages of this catalog, and are substituted for the power contacts at the time of the cable or equipment assembly. If the application is for coax only, the connector may be ordered *less contacts* and no power contacts will be supplied.

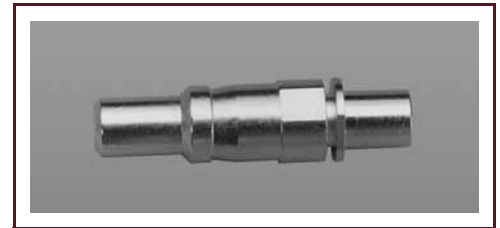
Installation instructions for the coax contacts for Miniature Connectors are provided in Amphenol documents as follows: L-633 for solder type; L-613 for SE type; L-660 for CE type.

### HOW TO ORDER:

- A. Select the coax contacts designed for the cable being used from the applicable charts in this catalog for each Miniature type (solder, SE or CE).
- B. Select a connector insert from those shown on pages 60-63 which will accommodate the quantity and size of coaxial contacts needed plus any power contacts required. Note: Size 8S and 12S contacts are used with connector inserts through shell size 18 only. For larger connector shell sizes, use size 8L contacts.
- C. Determine the Miniature Cylindrical type, shell style, finish, service class and insert rotation required for your application.
- D. Consult Amphenol, Sidney NY with the pertinent cable, contact, insert arrangement and connector style choices for complete connector part number.



**Solder Coax Contact**  
for use in Miniature Solder Type Connectors



**Pin Crimp Coax Contact**  
for use in Miniature Crimp SE Type Connectors



**Socket Crimp Coax Contact**  
for use in Miniature Crimp SE Type Connectors