Amphenol® Miniature Cylindrical Connectors

12-070-10

Amphenol

Table of Contents

This catalog covers the complete line of Amphenol® Miniature Cylindrical Connectors. MS approved and proprietary configurations are included to give the user the largest selection of miniature cylindrical connectors available in the market place.

The catalog is divided by connector series and is prefixed with an overview of the characteristics of each series to help the user in determining selections.

If more information is needed concerning the connectors covered in this publication, or if there are special application needs, please contact:

Amphenol Corporation
Amphenol Aerospace
40-60 Delaware Avenue
Sidney, New York 13838-1395
Telephone: 607-563-5011
Fax: 607-563-5351

NOTE:
The connector products in this brochure were formerly known as Bendix® products. These products are now manufactured and sold under the Amphenol® brand name. The name “Amphenol” will replace the name “Bendix” on products and literature in the future.

Amphenol Aerospace is a Certified ISO 9001 Manufacturer

Amphenol® Miniature Cylindrical
Proprietary/MIL-C-26482, Series 1, 2

PTS-DR MIL-C-26482,Series 2

PT MIL-C-26482, Series 1

PT-SE MIL-C-26482, Series 1

SP

DESIGN CHARACTERISTICS

- **Medium size, widely used cylindrical**
- **Operating voltage to 1,000 VAC (RMS) at sea level**
- **Environment resistant**
- **Quick positive three point bayonet lock coupling system**
- **Visual confirmation of complete coupling**
- **Five key/keyway polarization**
- **PT solder is UL Approved under file #E115497, Section 5**

CUSTOMER OPTIONS

- **Seven mounting styles provide optimum design flexibility**
- **Ten shell sizes 6 through 24**
- **Solder or crimp front or rear release contacts**
- **Size 20 through 12 contacts accept wire sizes 20 through 12 AWG**
- **Various finishes provide protection in a wide variety of corrosive and mechanical environments**
  - Availability of zinc cobalt* non-cadmium plating
- **Coaxial and thermocouple contact options**
- **Hermetic seal (glass fused) receptacles**
- **Double stub threaded coupling series available**
- **Alternate positioning**

Amphenol® Miniature Cylindrical connectors offer twice the number of contacts in just half the size of a Standard connector. These miniature connectors, are available in several series, each with varying design characteristics and customer options to meet cost considerations and provide maximum design flexibility. Three of the Miniature Family series are MS approved. The MS/PT and MS/PT-SE are qualified to MIL-C-26482, Series 1; the MS-PTS-DR is qualified to MIL-C-26482, Series 2.

The Miniature family consists of four basic series: PTS-DR, PT, SP and PC. In all series, pin and socket contacts are machined from low loss copper alloy and gold plated to eliminate contact corrosion and provide an indefinite shelf life. All series incorporate closed entry socket contacts. The PTS-DR series is provided with removable crimp contacts and employs a dielectric retention system to maintain contact position. The other basic series, PT, SP and PC are provided with factory installed solder contacts. Printed circuit board contacts are available in the PT Series box mount and jam nut style receptacles.

The PT, SP and PC series are also available with removable crimp contacts incorporating either of two types of retention systems. The suffix “SE” or “CE” refers to the type of retention system employed. MS approved “SE” types utilize a spring tower retention system, while the proprietary “CE” types utilize a nylon wafer retention system to maintain contact position.

Hermetically sealed receptacles are available in the PT and PC series.

* For more information on zinc cobalt plating for connectors ask for Amphenol Product Data Sheet #172.

Amphenol® Miniature Cylindrical connector selection guide

The accompanying chart is provided to assist the user in selecting the appropriate type of miniature connector to meet the application requirements. Further information can be found in specific sections of this catalog.

CHARACTERISTICS		Solder				Crimp								
		PT	MS/ PT	SP	PC	MS/ PTS-DR	PTS-DR	MS/ PT-SE	PT-SE	SP-SE	PC-SE	PT-CE	SP-CE	PC-CE
Intermateable†		o	o	o	X	o	o	o	o	o	X	o	o	X
Contacts	Solder	•	•	•	•									
	Crimp RI/FR							•	•	•	•	•	•	•
	Crimp RI/RR					•	•							
Contact Retention System	Non-Removable	•	•	•	•									
	Removable					•	•	•	•	•	•	•	•	•
Coupling	Bayonet	•	•	•		•	•	•	•	•		•	•	
	Threaded				•						•			•
Standard Finishes††	Olive Drab Cadmium (003)	•	•					•	•			•		
	Electroless Nickel (023)					•	•							
	Anodic Coated (005)			•						•			•	
	Bright Cadmium (001)				•						•			•
Temperature Range	Resilient Dielectric (125°C)	•	•	•	•			•	•	•	•	•	•	•
	Hard Dielectric (175°C & 200°C)					•	•							
Wide Mounting Flange				•						•			•	
Hermetic Seal		•	•	•	•									
SHELL STYLE AVAILABILITY														
Wall Mounting Receptacle “00”		•	•	•	•	•	•	•	**•	•	•	•	•	
Cable Connecting Receptacle “01” ***		•	•		•	•	•	•	•		•	•		•
Box Mounting Receptacle “02”		*•	•	•	*•			•	**•	•	•	•	•	
Straight Plug “06”		•	•	•	•	•	•	•	•	•	•	•	•	•
Jam Nut Receptacle “07”		*•	*•	•	*•	•	•	•	•	•	•	•	•	•
Thru-bulkhead Receptacle “TB”		•		•										
Solder Mount Receptacle “I”		*•	*•		*•									
90° Plug “08”								•		•	•	•	•	

RI/FR = Rear Insertion/Front Releasable
RI/RR = Rear Insertion/Rear Releasable

† o intermates with o
X intermates with X

†† Optional finishes available. See “how to order” sections.

* Available in hermetic version

** Dual mounting holes

*** This connector style is sometimes referred to as a cable connecting “plug.” It does, however, mate with either a straight or 90 degree plug.

PTS-DR
MS/PTS-DR
installation
data

Amphenol® PTS-DR, MS/PTS-DR

Proprietary/MIL-C-26482, Series 2 crimp type

wall mounting receptacle

cable connecting receptacle*

straight plug

jam nut receptacle

The Amphenol® PTS-DR Series, unique in miniature cylindrical connectors, incorporates a dielectric retention system. This system allows for rear insertion and rear removal of crimp contacts and provides a closed entry, hard face socket contact insert design to preclude the possibility of probe damage.

The Amphenol® PTS-DR is available in an MS version in accordance with MIL-C-26482, Series 2, Classes A, L and W.

Standard plating is electroless nickel alloy. Two optional finishes, hard anodic Alumilite® coating or olive drab cadmium over nickel, are also available.

Shell components are aluminum. Dependable 5 key/keyway polarization with bayonet lock coupling is incorporated to aid and assure positive mating.

Insert assembly is a 200°C sandwich which has excellent electrical and temperature characteristics. Contrasting letter designations are used on insert faces to insure visibility. A silicone interfacial seal wafer is featured on the mating face of pin inserts. This assures complete electrical isolation of pins when connector halves are mated. In addition, a silicone main joint gasket is installed in the receptacles for moisture sealing between connector halves. A silicone grommet provides moisture sealing of wires at rear of the connector.

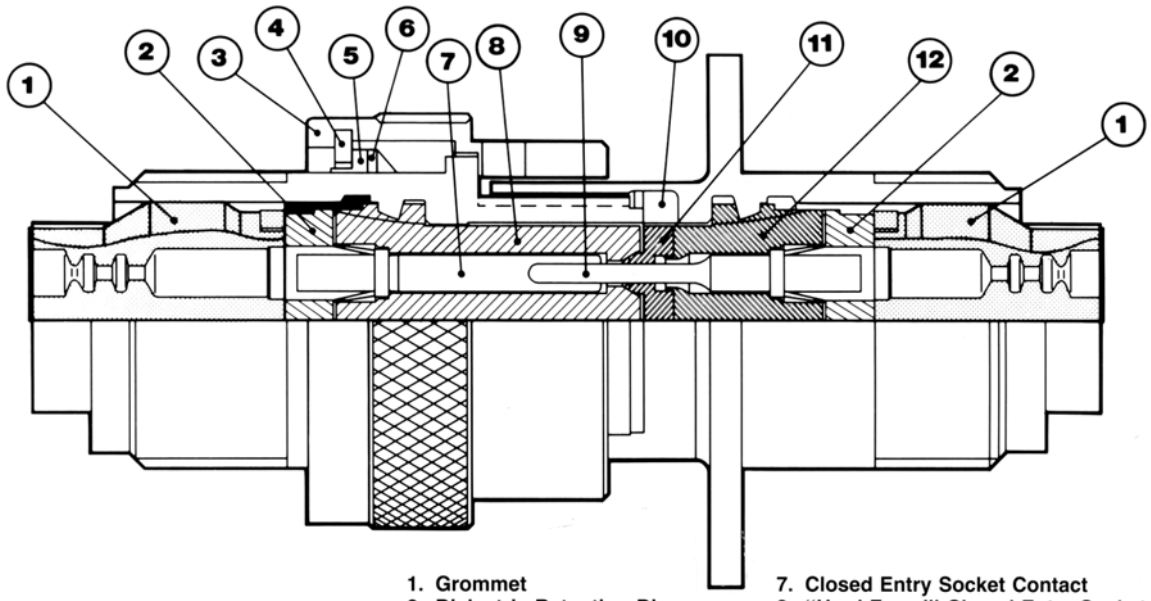
Contacts for the PTS-DR and MS/PTS-DR are crimp type. Standard contacts come in size 12, 16 and 20 and are manufactured from high grade copper alloy with gold plating. Contacts are qualified to MIL-C-39029.

The Amphenol® PTS-DR Series is intermateable and intermountable with existing PT and MIL-C-26482, Series 1 connectors and has a temperature capability to 392°F (200°C).

Various PTS-DR connector styles including plugs with RFI grounding features, cable connecting receptacles, or wide flange wall mount receptacles are available. Consult Amphenol, Sidney, NY for additional information.

Refer to pages 66-71 for insert arrangement availability.

* This connector style is sometimes referred to as a cable connecting “plug.” It does, however, mate with either a straight or 90 degree plug.



1. Grommet
2. Dielectric Retention Disc
3. Coupling Nut Assembly
4. Snap Ring
5. Skid Washer
6. Waved Washer
7. Closed Entry Socket Contact
8. "Hard Faced" Closed Entry Socket Insert
9. Pin Contact
10. Shell to Shell Sealing Gasket
11. Interfacial Seal (Silicone)
12. Pin Insert (Polyamide-imide)

PTS-DR, MS/PTS-DR

Contact Specifications*				
Contact Size	Test Current	Maximum Millivolt Drop†	Crimp Well Diameter	Nominal Well Depth
20	7.5	55	.049 ±.001	.166
16	13.0	49	.067 ±.001	.267
12	23.0	42	.100 ±.002	.267

Service Rating**					
Service Rating	Recommended Operating AC Voltage at Sea Level	Test Voltage AC (RMS), 60 cps			
		Sea Level	50,000 ft.	70,000 ft.	110,000 ft.
I	600	1,500	500	375	200
II	1,000	2,300	750	500	200

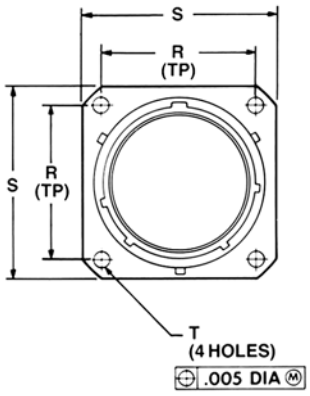
* Contact ratings as stated are test ratings only. The connector may not withstand full rated current through all contacts continuously.

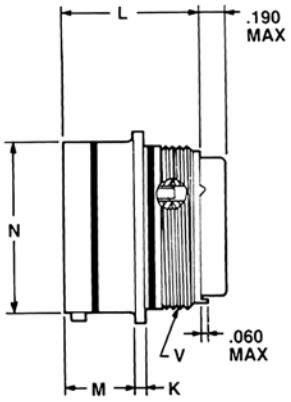
** Service Rating I is comparable to MS rating A. Miniature connectors rated Service Rating I will provide a minimum flashover voltage at sea level of 2,000 volts AC (RMS). Service Rating II is comparable to MS Service Rating D, and will provide a minimum flashover voltage of 2,800 volts AC (RMS) at sea level.

† Silver-plated wire per MIL-C-26482.

Please note that the electrical data given is not an establishment of electrical safety factors. This is left entirely in the designer's hands as he can best determine which peak voltage, switching surges, transients, etc. can be expected in a particular circuit.

PTS00 DR (MS3470), (MS3472)*
wall mounting receptacle





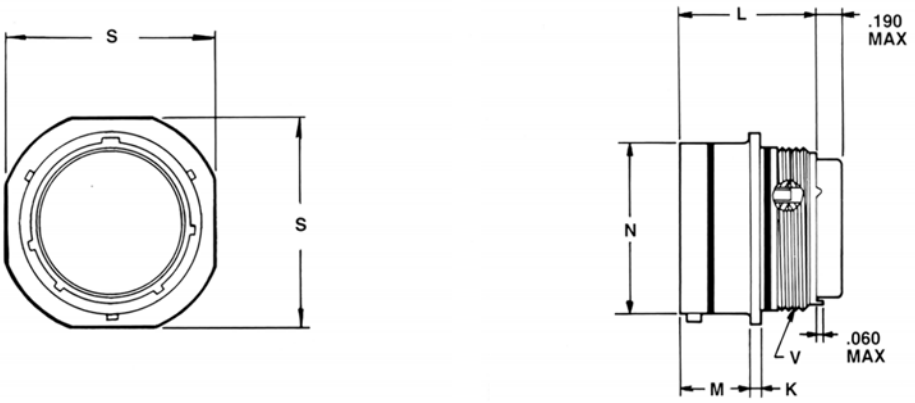
PTS00DRL -XX-XXX
*** PTPS00DRL-XX-XXX**
MS3470XX-XXX
*** MS3472XX-XXX**

To complete part number see how to order on page 12.
* Wide flange version

Shell Size	Receptacle Front View						Receptacle Side View					
	MS3470 (PTS00)			MS3472 (PTPS00)					MS3470 (PTS00)	MS3472 (PTPS00)		
	R (TP)	S +.011 –.010	T Dia ±.005	R (TP)	S +.011 –.010	T Dia. ±.005	K +.011 –.010	L Max.	M +.005 –.000	M +.010 –.000	N Dia +.001 –.005	V Thread Class 2A UNEF (Plated)
8	.594	.812	.120	.734	1.047	.150	.062	1.156	.453	.462	.473	.5000-20
10	.719	.938	.120	.812	1.125	.150	.062	1.156	.453	.462	.590	.6250-24
12	.812	1.031	.120	.938	1.250	.150	.062	1.156	.453	.462	.750	.7500-20
14	.906	1.125	.120	1.031	1.344	.150	.062	1.156	.453	.462	.875	.8750-20
16	.969	1.219	.120	1.125	1.438	.150	.062	1.156	.453	.462	1.000	1.0000-20
18	1.062	1.312	.120	1.203	1.516	.150	.062	1.156	.453	.462	1.125	1.0625-18
20	1.156	1.438	.120	1.297	1.672	.150	.094	1.219	.556	.556	1.250	1.1875-18
22	1.250	1.562	.120	1.375	1.750	.150	.094	1.219	.556	.556	1.375	1.3125-18
24	1.375	1.688	.147	1.500	1.875	.150	.094	1.219	.589	.589	1.500	1.4375-18

All dimensions for reference only.

PTS01 DR (MS3471)
cable connecting receptacle



PTS01DRL-XX-XXX
MS3471XX-XXX

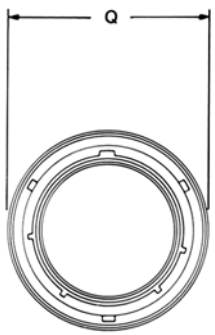
PTS01DRL-XX-XXX
MS3471XX-XXX

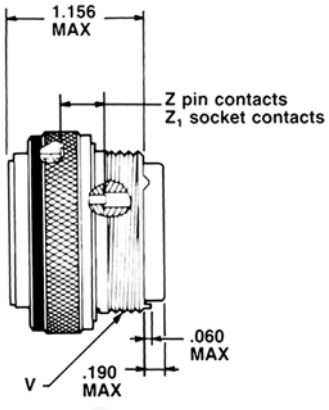
Note: This connector style is sometimes referred to as a cable connecting “plug”. It does, however, mate with either a straight or 90 degree plug.
To complete part number see how to order on page 12.

Shell Size	Receptacle Front View	Receptacle Side View				
	S +.011 −.010	K +.011 −.010	L Max.	M +.005 −.000	N Dia +.001 −.005	V Thread Class 2A UNEF (Plated)
8	.812	.062	1.156	.453	.473	.5000-20
10	.938	.062	1.156	.453	.590	.6250-24
12	1.031	.062	1.156	.453	.750	.7500-20
14	1.125	.062	1.156	.453	.875	.8750-20
16	1.219	.062	1.156	.453	1.000	1.0000-20
18	1.312	.062	1.156	.453	1.125	1.0625-18
20	1.438	.094	1.219	.556	1.250	1.1875-18
22	1.562	.094	1.219	.556	1.375	1.3125-18
24	1.688	.094	1.219	.589	1.500	1.4375-18

All dimensions for reference only.

PTS06 DR (MS3475)*, (MS3476)
straight plug





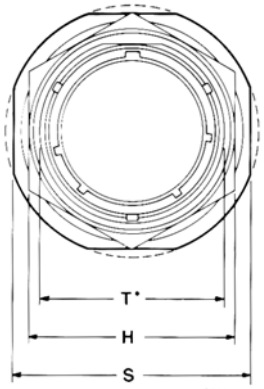
PTS06DRL-XX-XXX
*** PTGS06DRL-XX-XXX**
MS3476XX-XXX
*** MS3475XX-XXX**

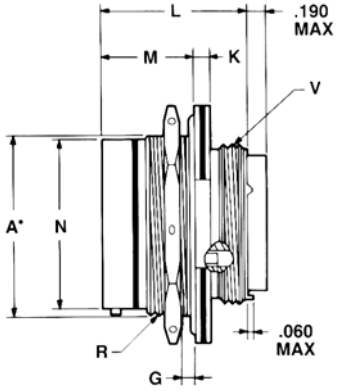
To complete part number see how to order on page 12.
*With grounding fingers

Shell Size	Plug Front View	Plug Side View					
	Q Dia. Max.	Modified Major Dia.	V Thread Class 2A UNEF (Plated)	Z ±.031 Contact Size		Z^1 ±.031 Contact Size	
				20	16	20	16
8	.782	.476 – .470	.5000-20	.430	.511	.384	.475
10	.926	.604 – .600	.6250-24	.430	.511	.384	.475
12	1.043	.728 – .724	.7500-20	.430	.511	.384	.475
14	1.183	.853 – .849	.8750-20	.430	.511	.384	.475
16	1.305	.978 – .974	1.0000-20	.430	.511	.384	.475
18	1.391	1.034 – 1.030	1.0625-18	.430	.511	.384	.475
20	1.531	1.158 – 1.154	1.1875-18	.369	.460	.323	.414
22	1.656	1.283 – 1.279	1.3125-18	.369	.460	.323	.414
24	1.777	1.408 – 1.404	1.4375-18	.369	.460	.323	.414

All dimensions for reference only.

PTS07 DR (MS3474)
jam nut receptacle





PTS07DRL-XX-XXX
MS3474XX-XXX

To complete part number see how to order on page 12.
• "D" shaped mounting hole dimensions

Shell Size	Receptacle Front View			Receptacle Side View							
	H +.017 −.016	S +.011 −.010	T• Dia. +.010 −.000	A• +.000 −.010	G Max.	K +.006 −.010	L Max.	M +.005 −.000	N Dia. +.001 −.005	R Thread Class 2A UNEF (Plated)	V Thread Class 2A UNEF (Plated)
8	.750	.938	.572	.542	.187	.107	1.141	.691	.473	.5625-24	.5000-20
10	.875	1.062	.697	.669	.187	.107	1.141	.691	.590	.6875-24	.6250-24
12	1.062	1.250	.884	.830	.187	.107	1.141	.691	.750	.8750-20	.7500-20
14	1.188	1.375	1.009	.955	.187	.107	1.141	.691	.875	1.0000-20	.8750-20
16	1.312	1.500	1.134	1.084	.187	.107	1.141	.691	1.000	1.1250-18	1.0000-20
18	1.438	1.625	1.259	1.208	.187	.107	1.141	.691	1.125	1.2500-18	1.0625-18
20	1.562	1.812	1.384	1.333	.250	.107	1.203	.754	1.250	1.3750-18	1.1875-18
22	1.688	1.938	1.509	1.459	.250	.107	1.203	.754	1.375	1.5000-18	1.3125-18
24	1.812	2.062	1.634	1.580	.219	.107	1.203	.754	1.500	1.6250-18	1.4375-18

All dimensions for reference only.

PTS-DR, MS/PTS-DR
how to order

PTS-DR

To more easily illustrate ordering procedure, part number PTS00DRL-18-32PW( ) is shown as follows:

PTS	00	DR	L	–	18	–	32	P	W	( )
1	2	3	4		5		6	7	8	9

See code below:

1. Connector Type
   Electroless nickel alloy plate 200°C, conductive finish standard
   "PTS" designates bayonet lock connector
   "PTGS" designates plug with grounding fingers
   "PTPS" designates wall mounting receptacle with wide flange
2. Shell Style
   "00" designates wall mounting receptacle
   "01" designates cable connecting receptacle*
   "06" designates straight plug
   "07" designates jam nut receptacle
3. Retention System
   "DR" designates dielectrically retained contacts
4. Service Class
   "L" designates fluid resistant, environmental
   Class "E" has been superceded by Class "L"
5. Shell Size
   "18" designates shell size. Shell sizes 8 through 24 available.
6. Insert Arrangement
   "18 – 32" designates insert arrangement. Refer to pages 66-71 for insert availability.
7. Contacts
   "P" designates pin contacts
   "S" designates socket contacts
8. Insert Rotation
   "W", "X", "Y", "Z" designate that insert is rotated in its shell from "normal" position. No letter required for normal (no rotation) position.
9. Finish Variation Suffix
   Indicate optional finishes as follows:
   (005) Anodic coating - Alumilite® (200°C)
   (014) Olive drab cadmium plate over nickel (175°C)
   (023) Electroless nickel (standard on PTS-DR) (200°C)

MS/PTS-DR
MIL-C-26482, Series 2

Part number MS3470L18-32PW is shown as follows:

MS	347	0	L	18	–	32	P	W
1	2	3	4	5		6	7	8

See code below:

1. "MS" designates Military Standard
2. Specification Number
   "347" designates basic family number for MIL-C-26482, Series 2 crimp type
3. Shell Style
   "0" designates narrow flange wall mounting receptacle
   "1" designates cable connecting receptacle*
   "2" designates wide flange wall mounting receptacle
   "4" designates jam nut receptacle
   "5" designates plug with grounding fingers
   "6" designates straight plug
4. Service Class
   "A" designates grommet seal; 200°C, non-conductive anodic coating
   "L" designates fluid resistant, 200°C, conductive electroless nickel finish
   "W" designates fluid resistant, 175°C, olive drab cadmium over nickel, conductive finish, 500 hour salt spray
5. Shell Size
   "18" designates shell size. Shell sizes 8 through 24 available.
6. Insert Arrangement
   "18 – 32" designates insert arrangement. Refer to pages 66-71 for insert availability.
7. Contact Configuration
   "P" designates pin contacts
   "S" designates socket contacts
8. Insert Rotation
   "W", "X", "Y", "Z" designate that insert is rotated in its shell from "normal" position. No letter for normal (no rotation) position.

* This connector style is sometimes referred to as a cable connecting "plug". It does, however, mate with either a straight or 90 degree plug.

PT
SP
MS/PT
installation data

Amphenol® PT, SP, MS/PT

Proprietary/MIL-C-26482, Series 1 solder type

wall mounting receptacle

cable connecting receptacle*

box mounting receptacle

straight plug

jam nut receptacle

thru bulkhead receptacle

Amphenol® solder contact miniature cylindrical connectors meet the most critical application needs. Design versatility combined with high reliability performance makes these series of Miniature Cylindrical Connectors ideal for environmental sealing or pressurized applications.

The MS/PT Series is qualified to MIL-C-26482, Series 1 and has all the outstanding design characteristics and quality of the PT Series. The SP Series is a modification of the PT, providing special shells with a wide mounting flange for back panel mounting.

A corrosion resistant electrically conductive finish of cadmium plate with an olive drab chromate after-treatment is used on the PT and MS/PT. The SP is given a durable non-conductive hard anodic "Alumilite"® coating which provides abrasion protection and resistance to corrosion.

Shell components for these series are aluminum. The dependable 5 key/keyway polarization with bayonet lock coupling assures positive mating with no chance of cross plugging. Spring tension provided by a wave washer in the coupling nut ensures maintenance of interfacial seal between mating halves.

Both the insert and main joint gasket are molded from resilient neoprene. This provides excellent moisture sealing at the gasket and superior electrical isolation of the contact in the insert.

Both pins and sockets are machined from a copper alloy and are gold plated. This gold plating eliminates contact corrosion and offers an indefinite shelf life. Socket contacts for these series are a closed entry design. Printed circuit board contacts are also available.

The PT, SP and MS/PT Series are intermateable and intermountable with all existing Miniature Cylindrical Series connectors except for the threaded coupling PC Series.

PT Solder is UL approved under file #E115497, Section 5.

Refer to pages 66-71 for insert arrangement availability.

PT, SP, MS/PT

Contact Specifications				
Contact Size	Test Current	Maximum Millivolt Drop†	Solder Well Diameter	Solder Well Depth
20	7.5	55	.046 $^{+.004}_{-.000}$	.125 $^{+.031}_{-.000}$
16	13.0	50	.078 $^{+.005}_{-.003}$	.188 $^{+.031}_{-.000}$

Service Rating					
Service Rating	Recommended Operating AC Voltage at Sea Level	Test Voltage AC (RMS), 60 cps			
		Sea Level	50,000 ft.	70,000 ft.	110,000 ft.
I	600	1,500	500	375	200
II	1,000	2,300	750	500	200

† Silver plated wire per MIL-C-26482

* This connector style is sometimes referred to as a cable connecting "plug." It does, however, mate with a straight or 90 degree plug.

PT, SP Service Classes

PT and SP connectors are available in the service classes listed below. Each class, with the exception of hermetic, offers one or more means of terminating or supporting a cable or wire bundle. Class “W” is not available in the SP Series.

“A”	General duty; back shell is threaded for conduit attachment of MS3057 cable clamp
“A” (SR)	General duty, with strain relief clamp for cable or wire bundle support
“C”	Pressurized receptacle; less than 1 cu. in. per hour leakage at 30 psi over a temperature range of –65°F to +257°F
“E”	Environmental resistant connectors - supplied with a multi-holed grommet and clamping nut for moisture-proofing individual open wires
“E” (SR)	Environmental resistant strain relief clamp and grommet for moisture proofing individual wires; provides added wire bundle support
“J”	Same as “W” class except with strain relief
“P”	Translucent nylon boot for retaining customer-applied potting compounds; held in place by a threaded ring
“P” (SR)	Strain relief clamp suitable for retaining customer applied potting compounds, with provision for wire support
“W”	Compressing clamp and neoprene gland for moisture proofing multi-conductor jacketed cables. Telescoping sleeves (MS 3420A) can be used to adapt to cables smaller than minimum close-down.
“H”*	Hermetically sealed with compression glass inserts

MS/PT Service Classes

The MS/PT Miniature connector is available in the following certified service classes:

“E”	Environmental resistant connectors - supplied with a multi-holed grommet and clamping nut for moisture-proofing individual open wires
“F”	Grommet seal with strain relief clamp
“P”	Translucent nylon boot for retaining customer-applied potting compounds; held in place by a threaded ring

* Refer to pages 24-27 for Hermetic versions.

“A” general duty

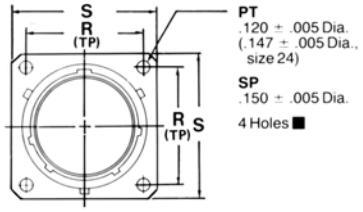
“E” (SR), MS / “F” strain relief

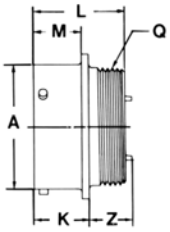
“E” MS / “E” open wire seal

“P”, MS / “P” potting boot

“W” cable seal

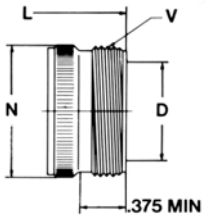
PT00 (MS3110)
SP00
wall mounting receptacle





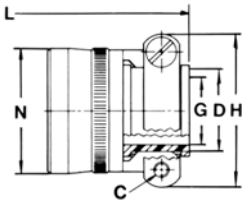
TERMINATION ASSEMBLIES

"A" General Duty/ "C" Pressurized"



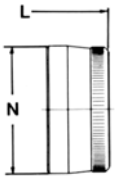
PT00A-XX-XXX
SP00A-XX-XXX
PT00C-XX-XXX

"A" (SR), "E" (SR), "P" (SR), MS / "F" Strain Relief



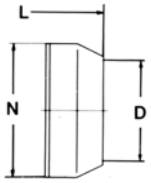
PT00A-XX-XXX (SR)
SP00A-XX-XXX (SR)
PT00E-XX-XXX (SR)
SP00E-XX-XXX (SR)
PT00P-XX-XXX (SR)
SP00P-XX-XXX (SR)
MS3110F-XX-XXX

"E" Open Wire Seal



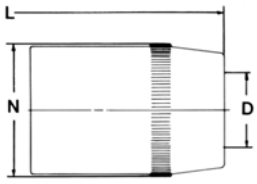
PT00E-XX-XXX
SP00E-XX-XXX
MS3110E-XX-XXX

"P" Potting Boot



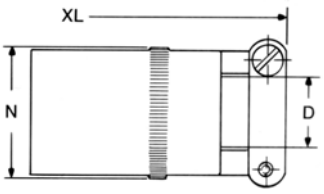
PT00P-XX-XXX
SP00P-XX-XXX
MS3110P-XX-XXX

"W" Cable Seal



PT00W-XX-XXX

"J" Cable Seal



PT00J-XX-XXX
MS3110J-XX-XXX

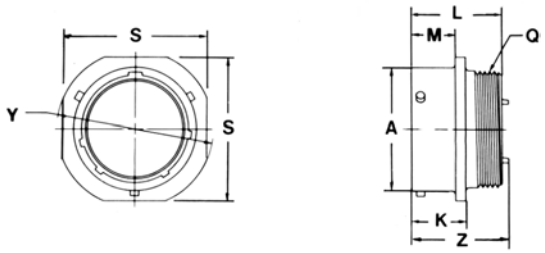
To complete part number see how to order on page 28.
■ (MMC) located within .0025 of (TP)

Shell Size	Receptacle Front View R (TP) PT	R (TP) SP	S Max. PT	S Max. SP	Receptacle Side View A +.001 –.005	K +.020 –.010 PT	K +.020 –.010 SP	L Max.	M +.010 –.000 PT	M +.010 –.000 SP	Q Thread Class 2A	Z Max. PT	Z Max. SP	Class "A", "C" D Min.	L Max.	N Max.	V Thread Class A
6	.469	.641	.688	.953	.348	.493	.524	.906	.431	.462	.3125-32 NEF	.468	.438	.175	1.553	.462	.3750-32 NEF
8	.594	.734	.812	1.047	.473	.493	.524	.906	.431	.462	.4375-28 UNEF	.468	.438	.297	1.553	.590	.5000-28 UNEF
10	.719	.812	.938	1.125	.590	.493	.524	.906	.431	.462	.5625-24 NEF	.468	.438	.421	1.553	.717	.6250-24 NEF
12	.812	.938	1.031	1.250	.750	.493	.524	.906	.431	.462	.6875-24 NEF	.468	.438	.546	1.553	.834	.7500-20 UNEF
14	.906	1.031	1.125	1.344	.875	.493	.524	.906	.431	.462	.8125-20 UNEF	.468	.438	.663	1.553	.970	.8750-20 UNEF
16	.969	1.125	1.219	1.438	1.000	.493	.524	.906	.431	.462	.9375-20 UNEF	.468	.438	.787	1.553	1.088	1.0000-20 UNEF
18	1.062	1.203	1.312	1.516	1.125	.493	.524	.906	.431	.462	1.0625-18 NEF	.531	.438	.879	1.553	1.216	1.1875-18 NEF
20	1.156	1.297	1.438	1.672	1.250	.650	.650	1.125	.556	.556	1.1875-18 NEF	.531	.531	1.014	1.703	1.332	1.1875-18 NEF
22	1.250	1.375	1.562	1.750	1.375	.650	.650	1.125	.556	.556	1.3125-18 NEF	.531	.531	1.134	1.703	1.460	1.4375-18 NEF
24	1.375	1.500	1.688	1.875	1.500	.683	.683	1.188	.589	.589	1.4375-18 NEF	.498	.498	1.259	1.765	1.585	1.4375-18 NEF

Shell Size	Class "A" (SR), "E" (SR), "P" (SR), MS / "F" C Thread	D Min.	G Max.	H Max.	L Max.	N Max.	Class "E", MS / "E" L Max.	N Max.	Class "P", MS / "P" D Min.	L Max.	N Max.	Class "W", "J" D Closed	D Free	L Max.	N Max.	XL Max.
6	–	–	–	–	–	–	1.266	.440	.192	1.438	.484	–	–	–	–	–
8	6-32	.240	.125	.812	1.922	.550	1.266	.560	.317	1.438	.608	.168	.230	1.705	.547	2.271
10	6-32	.302	.188	.875	1.922	.675	1.266	.685	.434	1.438	.734	.205	.312	1.705	.675	2.271
12	6-32	.428	.312	1.000	1.922	.803	1.266	.813	.548	1.438	.858	.338	.442	1.848	.812	2.411
14	6-32	.552	.375	1.125	1.922	.920	1.266	.930	.673	1.438	.984	.416	.539	2.040	.940	2.599
16	6-32	.615	.500	1.188	2.047	1.047	1.266	1.057	.798	1.438	1.110	.550	.616	2.256	1.067	2.943
18	8-32	.740	.625	1.438	2.078	1.165	1.266	1.175	.899	1.438	1.234	.600	.672	2.486	1.194	3.172
20	8-32	.740	.625	1.438	2.344	1.290	1.516	1.301	1.024	1.656	1.360	.635	.747	2.922	1.322	3.610
22	8-32	.928	.750	1.625	2.344	1.418	1.516	1.430	1.149	1.656	1.484	.670	.846	3.086	1.449	3.766
24	8-32	.990	.800	1.719	2.406	1.543	1.578	1.555	1.274	1.717	1.610	.740	.894	3.310	1.576	3.985

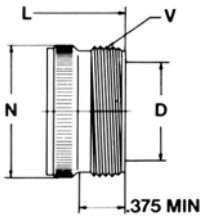
All dimensions for reference only.

PT01 (MS3111)
cable connecting receptacle



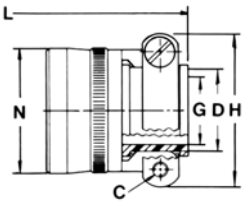
TERMINATION ASSEMBLIES

"A" General Duty



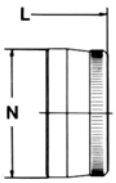
PT01A-XX-XXX

"A" (SR), "E" (SR), "P" (SR), MS / "F" Strain Relief



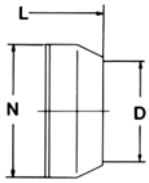
PT01A-XX-XXX (SR)
PT01E-XX-XXX (SR)
PT01P-XX-XXX (SR)
MS3111F-XX-XXX

"E" Open Wire Seal



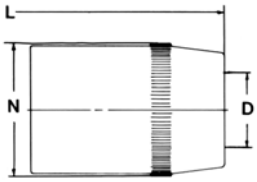
PT01E-XX-XXX
MS3111E-XX-XXX

"P" Potting Boot



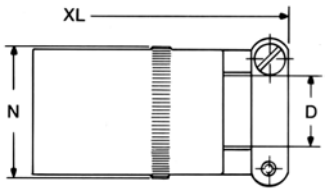
PT01P-XX-XXX
MS3111P-XX-XXX

"W" Cable Seal



PT01W-XX-XXX

"J" Cable Seal



PT01J-XX-XXX
MS3111J-XX-XXX

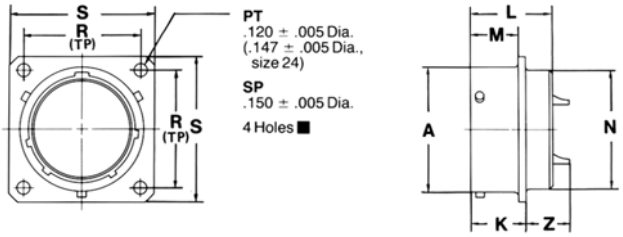
Note: This connector style is sometimes referred to as a cable connecting "plug".
It does, however, mate with either a straight or 90 degree plug.
To complete part number see how to order on page 28.

Shell Size	Recept. Front View		Receptacle Side View						Class "A",			
	S ±.020	Y ±.020	A +.001 −.005	K +.020 −.010	L Max.	M +.016 −.000	Q Thread Class 2A	Z Max.	D Min.	L Max.	N Max.	V Thread Class A
6	.688	.812	.348	.494	.906	.400	.3125-32 NEF	.948	.175	1.553	.462	.3750-32 NEF
8	.812	.938	.473	.494	.906	.400	.4375-28 UNEF	.948	.297	1.553	.590	.5000-28 UNEF
10	.938	1.062	.590	.494	.906	.400	.5625-24 NEF	.948	.421	1.553	.717	.6250-24 NEF
12	1.031	1.156	.750	.494	.906	.400	.6875-24 NEF	.948	.546	1.553	.834	.7500-20 UNEF
14	1.125	1.250	.875	.494	.906	.400	.8125-20 UNEF	.948	.663	1.553	.970	.8750-20 UNEF
16	1.219	1.344	1.000	.494	.906	.400	.9375-20 UNEF	.948	.787	1.553	1.088	1.0000-20 UNEF
18	1.312	1.438	1.125	.494	.906	.400	1.0625-18 NEF	.948	.879	1.553	1.216	1.1875-18 NEF
20	1.438	1.562	1.250	.650	1.125	.535	1.1875-18 NEF	1.166	1.041	1.703	1.332	1.1875-18 NEF
22	1.562	1.688	1.375	.650	1.125	.535	1.3125-18 NEF	1.166	1.135	1.703	1.460	1.4375-18 NEF
24	1.688	1.812	1.500	.683	1.188	.568	1.4375-18 NEF	1.166	1.259	1.765	1.585	1.4375-18 NEF

Shell Size	Class "A" (SR), "E" (SR), "P" (SR), MS / "F"						Class "E", MS / "E"		Class "P", MS / "P"			Class "W", "J"				
	C Thread	D Min.	G Max.	H Max.	L Max.	N Max.	L Max.	N Max.	D Min.	L Max.	N Max.	D Closed	D Free	L Max.	N Max.	XL Max.
6	–	–	–	–	–	–	1.266	.440	.192	1.438	.484	–	–	–	–	–
8	6-32	.240	.125	.812	1.922	.550	1.266	.560	.317	1.438	.608	.168	.230	1.705	.547	2.271
10	6-32	.302	.188	.875	1.922	.675	1.266	.685	.434	1.438	.734	.205	.312	1.705	.675	2.271
12	6-32	.428	.312	1.000	1.922	.803	1.266	.813	.548	1.438	.858	.338	.442	1.848	.812	2.411
14	6-32	.552	.375	1.125	1.922	.920	1.266	.930	.673	1.438	.984	.416	.539	2.040	.940	2.599
16	6-32	.615	.500	1.188	2.047	1.047	1.266	1.057	.798	1.438	1.110	.550	.616	2.256	1.067	2.943
18	8-32	.740	.625	1.438	2.078	1.165	1.266	1.175	.899	1.438	1.234	.600	.672	2.486	1.194	3.172
20	8-32	.740	.625	1.438	2.344	1.290	1.516	1.301	1.024	1.656	1.360	.635	.747	2.922	1.322	3.610
22	8-32	.928	.750	1.625	2.344	1.418	1.516	1.430	1.149	1.656	1.484	.670	.846	3.086	1.449	3.766
24	8-32	.990	.800	1.719	2.406	1.543	1.578	1.555	1.274	1.717	1.610	.740	.894	3.310	1.576	3.985

All dimensions for reference only.

PT02 (MS3112)
SP02
box mounting receptacle



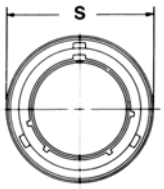
PT02A-XX-XXX
SP02A-XX-XXX
* **PT02C-XX-XXX**
* **SP02C-XX-XXX**
* **PT02E-XX-XXX**
* **SP02E-XX-XXX**
MS3112E-XX-XXX
* **PT02P-XX-XXX**
* **SP02P-XX-XXX**
MS3112P-XX-XXX
* **PT02W-XX-XXX**
* **SP02W-XX-XXX**

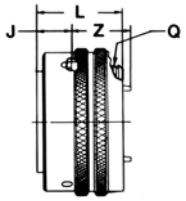
To complete part number see how to order on page 28.
■ (MMC) located within .0025 of (TP)
* The PT02 and SP02 box mounting receptacles are made only to complete a series; no provision is made for accessories or potting on the rear skirt.

Shell Size	Receptacle Front View				Receptacle Side View								
	R (TP)		S		A +.001 −.005	K +.020 −.010		L Max.	M +.010 −.000		N Dia. Max.	Z Max.	
	PT	SP	PT	SP		PT	SP		PT	SP		PT	SP
6	.469	.641	.688	.953	.348	.493	.524	.825	.431	.462	.323	.465	.438
8	.594	.734	.812	1.047	.473	.493	.524	.825	.431	.462	.449	.465	.438
10	.719	.812	.938	1.125	.590	.493	.524	.825	.431	.462	.573	.465	.438
12	.812	.938	1.031	1.250	.750	.493	.524	.825	.431	.462	.699	.465	.438
14	.906	1.031	1.125	1.344	.875	.493	.524	.825	.431	.462	.823	.465	.438
16	.969	1.125	1.219	1.438	1.000	.493	.524	.825	.431	.462	.949	.465	.438
18	1.062	1.203	1.312	1.516	1.125	.493	.524	.825	.431	.462	1.073	.465	.438
20	1.156	1.297	1.438	1.672	1.250	.650	.650	1.076	.556	.556	1.199	.526	.531
22	1.250	1.375	1.562	1.750	1.375	.650	.650	1.076	.556	.556	1.323	.526	.531
24	1.375	1.500	1.688	1.875	1.500	.683	.683	1.109	.589	.589	1.449	.493	.497

All dimensions for reference only.

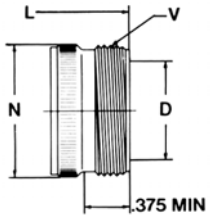
PT06 (MS3116)
SP06
straight plug





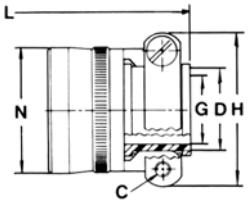
TERMINATION ASSEMBLIES

"A" General Duty



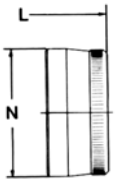
PT06A-XX-XXX
SP06A-XX-XXX
PTG06A-XX-XXX

"A" (SR), "E" (SR), "P" (SR), MS / "F" Strain Relief



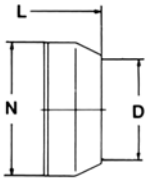
PT06A-XX-XXX (SR)
SP06A-XX-XXX (SR)
PTG06A-XX-XXX (SR)
PT06E-XX-XXX (SR)
SP06E-XX-XXX (SR)
PTG06E-XX-XXX (SR)
PT06P-XX-XXX (SR)
SP06P-XX-XXX (SR)
PTG06P-XX-XXX (SR)
MS3116F-XX-XXX

"E" Open Wire Seal



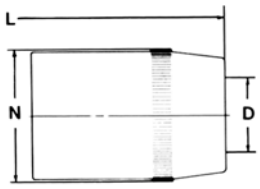
PT06E-XX-XXX
SP06E-XX-XXX
PTG06E-XX-XXX
MS3116E-XX-XXX

"P" Potting Boot



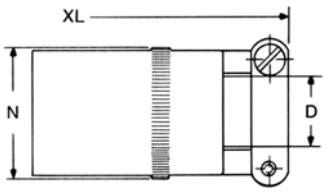
PT06P-XX-XXX
SP06P-XX-XXX
PTG06P-XX-XXX
MS3116P-XX-XXX

"W" Cable Seal



PT06W-XX-XXX
SP06W-XX-XXX
PTG06W-XX-XXX

"J" Cable Seal



PT06J-XX-XXX
MS31163-XX-XXX

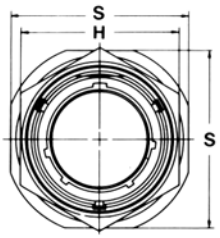
To complete part number see how to order on page 28.

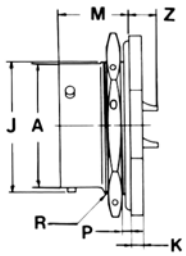
Shell Size	Plug Front View	Plug Side View				Class "A"			
	S Max.	J	L Max.	Q Thread Class 2A	Z Max.	D Min.	L Max.	N Max.	V Thread Class A
6	.625	.353	.906	.3125-32 NEF	.594	.175	1.609	.462	.3750-32 NEF
8	.750	.353	.906	.4375-28 UNEF	.594	.297	1.609	.590	.5000-28 UNEF
10	.859	.353	.906	.5625-24 NEF	.594	.421	1.609	.717	.6250-24 NEF
12	1.013	.353	.906	.6875-24 NEF	.594	.546	1.609	.834	.7500-20 UNEF
14	1.156	.353	.906	.8125-20 UNEF	.594	.663	1.609	.970	.8750-20 UNEF
16	1.281	.353	.906	.9375-20 UNEF	.594	.787	1.609	1.088	1.0000-20 UNEF
18	1.319	.353	.906	1.0625-18 NEF	.594	.879	1.609	1.216	1.1875-18 NEF
20	1.531	.415	1.062	1.1875-18 NEF	.672	1.014	1.656	1.332	1.1875-18 NEF
22	1.656	.415	1.062	1.3125-18 NEF	.672	1.135	1.656	1.460	1.4375-18 NEF
24*	1.776	.415	1.125	1.4375-18 NEF	.672	1.259	1.750	1.587	1.4375-18 NEF

Shell Size	Class "A" (SR), "E" (SR), "P" (SR), MS / "F"						Class "E", MS / "E"		Class "P", MS / "P"			Class "W", "J"				
	C Thread	D Min.	G ±.010	H Max.	L Max.	N Max.	L Max.	N Max.	D Min.	L Max.	N Max.	D Closed	D Free	L Max.	N Max.	XL Max.
6	–	–	–	–	–	–	1.266	.440	.192	1.526	.484	–	–	–	–	–
8	6-32	.240	.125	.812	1.906	.550	1.266	.560	.317	1.526	.608	.168	.230	1.705	.547	2.271
10	6-32	.302	.188	.875	1.906	.675	1.266	.685	.434	1.526	.734	.205	.312	1.705	.675	2.271
12	6-32	.428	.312	1.000	1.906	.803	1.266	.813	.548	1.526	.858	.338	.442	1.848	.812	2.411
14	6-32	.552	.375	1.125	1.906	.920	1.266	.930	.673	1.526	.984	.416	.539	2.040	.940	2.599
16	6-32	.615	.500	1.188	2.047	1.047	1.266	1.057	.798	1.526	1.110	.550	.616	2.256	1.067	2.943
18	8-32	.740	.625	1.438	2.078	1.165	1.266	1.175	.899	1.526	1.234	.600	.672	2.486	1.194	3.172
20	8-32	.740	.625	1.438	2.250	1.290	1.438	1.301	1.024	1.546	1.360	.635	.747	2.844	1.322	3.610
22	8-32	.928	.750	1.625	2.250	1.418	1.438	1.430	1.149	1.546	1.484	.670	.846	3.000	1.449	3.766
24*	8-32	.990	.800	1.750	2.312	1.543	1.500	1.555	1.274	1.656	1.610	.740	.894	3.210	1.576	3.985

* Available in PT06 only
All dimensions for reference only.

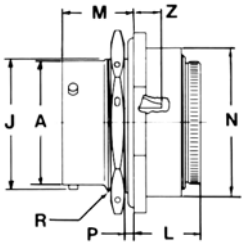
PT07 (MS3114)
SP07
jam nut receptacle





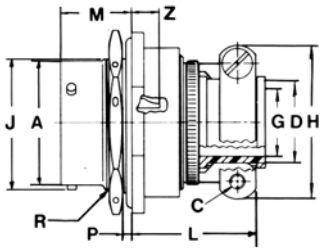
TERMINATION ASSEMBLIES

"E" Open Wire Seal



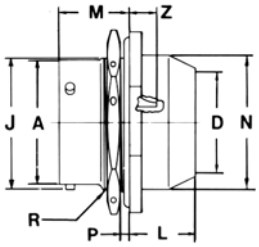
PT07E-XX-XXX
SP07E-XX-XXX
MS3114E-XX-XXX

"A" (SR), "E" (SR), "P" (SR), MS / "F" Strain Relief



PT07A-XX-XXX (SR)
SP07A-XX-XXX (SR)
PT07E-XX-XXX (SR)
MS3114F-XX-XXX

"P" Potting Boot



PT07P-XX-XXX
MS3114P-XX-XXX

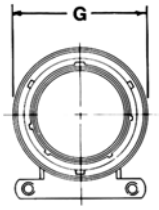
To complete part number see how to order on page 28.

Shell Size	Recept. Front View		Receptacle Side View								Class "E", MS / "E"						
	H ±.016	S	A Dia. +.001 −.005	J Flat +.000 −.010	K +.011 −.010	M	P Panel Thickness Min.	P Panel Thickness Max.	R Thread Class 2A	Z	L Max. PT	L Max. SP	M PT	M SP	N Max.	Z ±.040 PT	Z ±.040 SP
6	.625	.812	.348	.405	.125	.696	.062	.125	.4375-28 UNEF	.231	.568	.630	.696	.634	.604	.191	.253
8	.750	.938	.473	.530	.125	.696	.062	.125	.5625-24 NEF	.231	.568	.630	.696	.634	.729	.191	.253
10	.875	1.062	.590	.655	.125	.696	.062	.125	.6875-24 NEF	.231	.568	.630	.696	.634	.854	.191	.253
12	1.062	1.250	.750	.818	.125	.696	.062	.125	.8750-20 UNEF	.231	.568	.630	.696	.634	.979	.191	.253
14	1.188	1.375	.875	.942	.125	.696	.062	.125	1.0000-20 UNEF	.231	.568	.630	.696	.634	1.104	.191	.253
16	1.312	1.500	1.000	1.066	.125	.696	.062	.125	1.1250-18 NEF	.231	.568	.630	.696	.634	1.229	.191	.253
18	1.438	1.625	1.125	1.191	.125	.696	.062	.125	1.2500-18 NEF	.231	.568	.630	.696	.634	1.354	.191	.253
20	1.562	1.812	1.250	1.316	.156	.884	.062	.250	1.3750-18 NEF	.261	.630	.692	.884	.822	1.510	.221	.283
22	1.688	1.938	1.375	1.441	.156	.884	.062	.250	1.5000-18 NEF	.261	.630	.692	.884	.822	1.635	.221	.283
24	1.816	2.062	1.500	1.566	.156	.917	.062	.250	1.6250-18 NEF	.228	.660	.722	.917	.855	1.760	.188	.250

Shell Size	Class "A" (SR), "P" (SR), MS / "F"							Class "E" (SR)						Class "P", MS / "P"				
	C Thread	D Max.	G	H	L PT	L SP	M	C Thread	D Max.	G	H	L	M	D Max.	L +.010 −.026	M	N	Z
6	–	–	–	–	–	–	–	–	–	–	–	–	–	.202	.593	.696	.484	.191
8	6-32	.250	.125	.781	1.062	1.078	.696	6-32	.250	.125	.775	1.029	.696	.327	.593	.696	.608	.191
10	6-32	.312	.188	.844	1.062	1.078	.696	6-32	.312	.188	.837	1.029	.696	.444	.593	.696	.734	.191
12	6-32	.438	.312	.969	1.062	1.078	.696	6-32	.438	.312	.963	1.029	.696	.558	.593	.696	.858	.191
14	6-32	.562	.375	1.094	1.062	1.078	.696	6-32	.562	.375	1.087	1.029	.696	.683	.593	.696	.984	.191
16	6-32	.625	.500	1.156	1.188	1.203	.696	6-32	.625	.500	1.150	1.161	.696	.808	.593	.696	1.110	.191
18	8-32	.750	.625	1.406	1.188	1.203	.696	8-32	.750	.625	1.400	1.161	.696	.909	.593	.696	1.234	.191
20	8-32	.750	.625	1.406	1.250	1.266	.884	8-32	.750	.625	1.400	1.224	.884	1.034	.718	.884	1.360	.221
22	8-32	.938	.750	1.594	1.250	1.266	.884	8-32	.938	.750	1.587	1.224	.884	1.159	.718	.884	1.484	.221
24*	8-32	1.000	.800	1.594	1.250	–	.917	8-32	1.000	.800	1.681	1.320	.917	1.284	.718	.917	1.610	.188

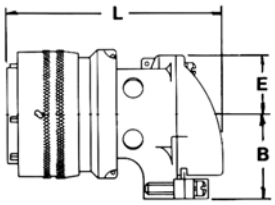
* Size 24 strain relief available in PT only. All dimensions for reference only.

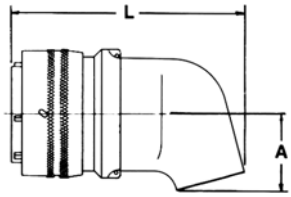
PT08 E
SP08 E
90 degree plug



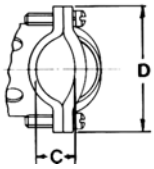
TERMINATION ASSEMBLIES

"E" Open Wire Seal, "E" (SR) Strain Relief

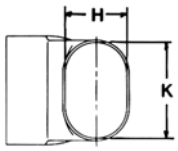




"P" Potting Boot 75 degrees
PT08E-XX-XXX
SP08E-XX-XXX
PT08E-XX-XXX (SR)



SP08E-XX-XXX (SR)
PT08P-XX-XXX



SP08P-XX-XXX

To complete part number see how to order on page 28.

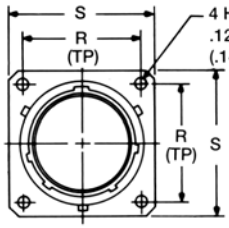
All lockwire holes are .044 Dia. Min.

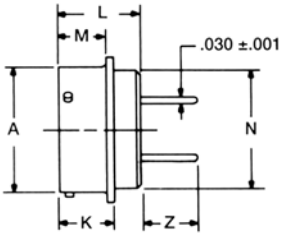
Shell Size	Plug Front View	Plug Side View								
		Class "E", "E" (SR)					Class "P"			
	G Dia. Max.	B ±.031	C +.010 −.025	D ±.062	E +.047 −.025	L ±.057	A ±.025	H ±.015	K ±.015	L Max.
8	.796	.655	.169	.941	.339	1.786	.469	.312	.438	1.656
10	.921	.749	.170	1.191	.393	1.880	.547	.438	.562	1.781
12	1.046	.812	.264	1.191	.450	1.965	.625	.516	.688	1.843
14	1.171	.905	.310	1.254	.519	2.113	.734	.625	.781	1.953
16	1.297	1.030	.330	1.316	.583	2.315	.750	.656	.890	2.000
18	1.422	1.015	.444	1.562	.621	2.423	.781	.703	1.000	2.046
20	1.562	1.077	.510	1.625	.683	2.695	.859	.766	1.125	2.218
22	1.672	1.139	.515	1.719	.739	2.742	.906	.812	1.234	2.265
24	1.797	1.265	.656	1.751	.797	2.980	1.169	.918	1.374	2.624

All dimensions for reference only.

PT Connectors with Printed Circuit Board Contacts

Box Mounting Receptacle (PT02) with PCB Contacts



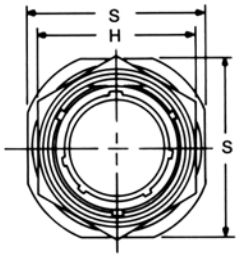


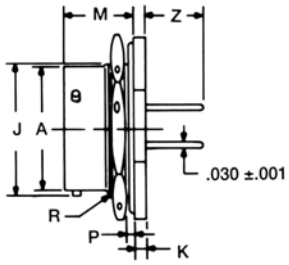
Order by applicable 71- part number in chart below; add insert arrangement number. Refer to insert availability on pages 66-71.
■ (MMC) located within .0025 of (TP)

Shell Size	Part Number PT02 with PCB Contacts	Receptacle Front View		Receptacle Side View					
		R (TP)	S	A +.001 −.005	K +.020 −.010	L Max.	M +.010 −.000	N Dia. Max.	Z +.040 −.050
6	71-590120-XXX	.469	.688	.348	.493	.825	.431	.323	.380
8	71-590121-XXX	.594	.812	.473	.493	.825	.431	.449	.380
10	71-590122-XXX	.719	.938	.590	.493	.825	.431	.573	.380
12	71-590123-XXX	.812	1.031	.750	.493	.825	.431	.699	.380
14	71-590124-XXX	.906	1.125	.875	.493	.825	.431	.823	.380
16	71-590125-XXX	.969	1.219	1.000	.493	.825	.431	.949	.380
18	71-590126-XXX	1.062	1.312	1.125	.493	.825	.431	1.073	.380
20	71-590127-XXX	1.156	1.438	1.250	.650	1.076	.556	1.199	.286
22	71-590128-XXX	1.250	1.562	1.375	.650	1.076	.556	1.323	.286
24	71-590129-XXX	1.375	1.688	1.500	.683	1.109	.589	1.449	.253

All dimensions for reference only.

Jam Nut Receptacle (PT07) with PCB Contacts



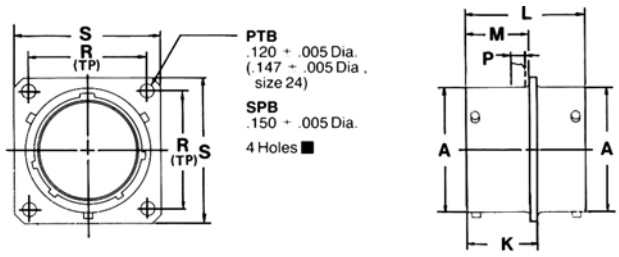


Order by applicable 71- part number in chart below; add insert arrangement number. Refer to insert availability on pages 66-71.

Shell Size	Part Number PT07 with PCB Contacts	Receptacle Front View		Receptacle Side View							
		H ±.016	S	A Dia. +.001 −.005	J Flat +.000 −.010	K +.011 −.010	M	P Panel Thickness Min.	P Panel Thickness Max.	R Thread Class 2A	Z +.025 −.035
6	71-533720-XXX	.625	.812	.348	.405	.125	.696	.062	.125	.4375-28 UNEF	.376
8	71-533721-XXX	.750	.938	.473	.530	.125	.696	.062	.125	.5625-24 NEF	.376
10	71-533722-XXX	.875	1.062	.590	.655	.125	.696	.062	.125	.6875-24 NEF	.376
12	71-533723-XXX	1.062	1.250	.750	.818	.125	.696	.062	.125	.8750-20 UNEF	.376
14	71-533724-XXX	1.188	1.375	.875	.942	.125	.696	.062	.125	1.0000-20 UNEF	.376
16	71-533725-XXX	1.312	1.500	1.000	1.066	.125	.696	.062	.125	1.1250-18 NEF	.376
18	71-533726-XXX	1.438	1.625	1.125	1.191	.125	.696	.062	.125	1.2500-18 NEF	.376
20	71-533727-XXX	1.562	1.812	1.250	1.316	.156	.884	.062	.250	1.3750-18 NEF	.367
22	71-533728-XXX	1.688	1.938	1.375	1.441	.156	.884	.062	.250	1.5000-18 NEF	.367
24	71-533729-XXX	1.816	2.062	1.500	1.566	.156	.917	.062	.250	1.6250-18 NEF	.334

All dimensions for reference only.

PTB
SPB
thru bulkhead receptacle



*** PTB-XX-XXX**
*** SPB-XX-XXX**

* To complete part number add desired arrangement number (refer to page 66 for insert availability) and add "PS"; Example: PTB-18-32PS. If a rotation is required, use PTB-18-32PS and add W, X, Y or Z. Example: PTB-18-32 PSW. The socket end of the insert always appears at the "P" dimension end of shell.

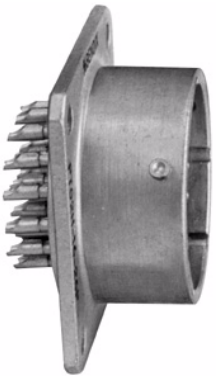
■ (MMC) located within .0025 of (TP)

Shell Size	Receptacle Front View				Receptacle Side View					
	R (TP)		S		A +.001 −.005	K +.016 −.000	L ±.005	M +.010 −.000	P Max.	
	PTB	SPB	PTB	SPB					PTB	SPB
6	.469	.641	.688	.953	.348	.625	1.050	.562	.125	.188
8	.594	.734	.812	1.047	.473	.625	1.050	.562	.125	.188
10	.719	.812	.938	1.125	.590	.625	1.050	.562	.125	.188
12	.812	.938	1.031	1.250	.750	.625	1.050	.562	.125	.188
14	.906	1.031	1.125	1.344	.875	.625	1.050	.562	.125	.188
16	.969	1.125	1.219	1.438	1.000	.625	1.050	.562	.125	.188
18	1.062	1.203	1.312	1.516	1.125	.625	1.050	.562	.125	.188
20	1.156	1.297	1.438	1.672	1.250	.781	1.330	.688	.125	.312
22	1.250	1.375	1.562	1.750	1.375	.781	1.330	.688	.125	.312
24	1.375	1.500	1.688	1.875	1.500	.781	1.330	.688	.125	.312

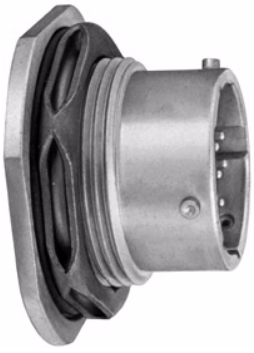
All dimensions for reference only.

PT
hermetic

solder mounting receptacle



box mounting receptacle



jam nut receptacle

Three shell styles are available in the hermetic PT series:

- **PTIH (MS3113H)**
- **PT02H**
- **PT07H (MS3114H)**

These hermetic connectors are only available with solder cup or flat eyelet pin contacts in the MS/PT version. Socket contacts are available in some proprietary PT versions. Other design characteristics of the PT hermetic connector series are as follows:

Shell sizes: 8 through 24 (tin plated)

Contact count: 2 through 61. Refer to page 66 for insert availability for hermetics.

Current: 5.0 amp each #20 contact
10 amp each #16 contact
17 amp each #12 contact

Contacts are tin plated for PT; gold is optional

Dielectric Withstanding Voltage (sea level):
1500 volts (RMS) 60 cps, Service Rating I
2300 volts (RMS) 60 cps, Service Rating II

Compression glass inserts, permanently lettered

Helium Leakage: Less than 1.0 X 10^{-6} cc/sec. at 15 psi differential

Physical Shock: 100 G's

Vibration: Exceeds MIL-E-5272 Procedure II

Thermal Shock: No deterioration or failure after 5 cycles at –55°F to +257°F

Intermateability: Mates with MS3116 and PT06

Refer to pages 66-71 for insert arrangement availability.

PTIH (MS3113H)
hermetic solder mounting receptacle

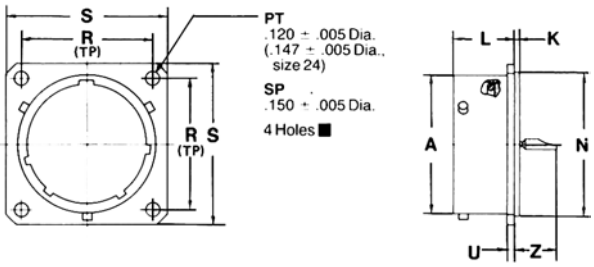
* PTIH-XX-XXX
** PTIY-XX-XXX
** MS3113H-XXCXXX
† PTIH-XX-XXX (100)
†† PTIY-XX-XXX (100)
†† MS3113H-XXYXXX

To complete part number see how to order on page 28.
* Solder cup pin contacts without interfacial seal
** Solder cup pin contacts with interfacial seal
† Flat eyelet pin contacts without interfacial seal
†† Flat eyelet pin contacts with interfacial seal

Shell Size	Recept. Front View	Receptacle Side View				
	G Dia. Max.	A Dia. +.001 −.005	L +.025 −.016	N Dia. +.001 −.005	W +.011 −.010	Z Max.
6	.511	.348	.447	.438	.094	.386
8	.636	.473	.447	.562	.094	.386
10	.761	.590	.447	.672	.094	.386
12	.855	.750	.447	.781	.094	.386
14	.980	.875	.447	.906	.094	.386
16	1.105	1.000	.447	1.031	.094	.386
18	1.229	1.125	.447	1.156	.094	.386
20	1.323	1.250	.509	1.250	.094	.386
22	1.449	1.375	.509	1.375	.125	.418
24	1.574	1.500	.542	1.500	.125	.418

All dimensions for reference only.

PT02H
hermetic box mounting receptacle



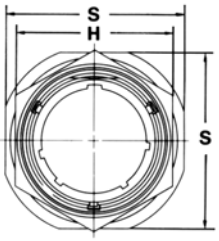
* **PT02H-XX-XXX**
** **PT02Y-XX-XXX**
† **PT02H-XX-XXX (100)**
†† **PT02Y-XX-XXX (100)**

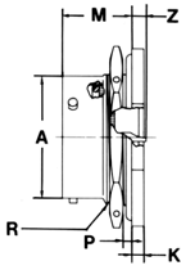
To complete part number see how to order on page 28.
* Solder cup pin contacts without interfacial seal
** Solder cup pin contacts with interfacial seal
† Flat eyelet pin contacts without interfacial seal
†† Flat eyelet pin contacts with interfacial seal
■ (MMC) located within .0025 of (TP)

Shell Size	Receptacle Front View		Receptacle Side View					
	R (TP)	S ±.016	A Dia. +.001 −.005	K ±.015	L +.025 −.015	N Dia. +.001 −.005	U +.011 −.010	Z Max.
6	.469	.688	.348	.047	.494	.438	.062	.344
8	.594	.812	.473	.047	.494	.562	.062	.344
10	.719	.938	.590	.047	.494	.672	.062	.344
12	.812	1.031	.750	.047	.494	.781	.062	.344
14	.906	1.125	.875	.047	.494	.906	.062	.344
16	.969	1.219	1.000	.047	.494	1.031	.062	.344
18	1.062	1.312	1.125	.047	.494	1.156	.062	.344
20	1.156	1.438	1.250	.047	.556	1.250	.062	.344
22	1.250	1.562	1.375	.079	.556	1.375	.062	.377
24	1.375	1.688	1.500	.079	.588	1.500	.062	.377

All dimensions for reference only.

PT07H (MS3114H)
hermetic jam nut receptacle





* PT07H-XX-XXX
** PT07Y-XX-XXX
** MS3114H-XXCXXX
† PT07H-XX-XXX (100)
†† PT07Y-XX-XXX (100)
†† MS3114H-XXYXXX

To complete part number see how to order on page 28.
* Solder cup pin contacts without interfacial seal
** Solder cup pin contacts with interfacial seal
† Flat eyelet pin contacts without interfacial seal
†† Flat eyelet pin contacts with interfacial seal

Shell Size	Receptacle Front View		Receptacle Side View						
	S +.016	H Hex +.017 –.016	A +.001 –.005	K +.043 –.016	M +.031 –.000	P Panel Thickness		R Thread Class 2A	Z Max.
						Max.	Min.		
6	.812	.625	.348	.094	.696	.125	.062	.4375-28 UNEF	.206
8	.938	.750	.473	.094	.696	.125	.062	.5625-24 NEF	.206
10	1.062	.875	.590	.094	.696	.125	.062	.6875-24 NEF	.206
12	1.250	1.062	.750	.094	.696	.125	.062	.8750-20 UNEF	.206
14	1.375	1.188	.875	.094	.696	.125	.062	1.0000-20 UNEF	.206
16	1.500	1.312	1.000	.094	.696	.125	.062	1.1250-18 NEF	.206
18	1.625	1.438	1.125	.094	.696	.125	.062	1.2500-18 NEF	.206
20	1.812	1.562	1.250	.125	.884	.250	.062	1.3750-18 NEF	.081
22	1.938	1.688	1.375	.125	.884	.250	.062	1.5000-18 NEF	.081
24	2.062	1.812	1.500	.125	.917	.250	.062	1.6250-18 NEF	.048

All dimensions for reference only.

PT, SP, MS/PT
how to order

PT, SP

To more easily illustrate ordering procedure, part number PT00A-20-41PW(SR) is shown as follows:

PT	00	A	-	20	-	41	P	W	(SR)
1	2	3		4		5	6	7	8

See code below:

1. Connector Type
   - "PT" designates standard olive drab, electrically conductive cadmium plated bayonet lock connector with solder contacts
   - "SP" designates electrically non-conductive, hard anodic coated bayonet lock connector with solder contacts and larger flange and mounting holes for back panel mounting
   - "PTG" designates plug with grounding fingers
2. Shell Style
   - "00" designates wall mounting receptacle
   - "01" designates cable connecting receptacle**
   - "02" designates box mounting receptacle
   - "06" designates straight plug
   - "07" designates jam nut receptacle
   - "08" designates 90 degree plug cable support
   - "B" designates thru bulkhead receptacle (pressurized)
   - "I" designates solder mount receptacle (Hermetic only)
3. Service Classes
   - "A" designates general duty back shell
   - "C" designates pressurized receptacle
   - "E" designates environmental resisting open wire seal with grommet and nut
   - "J" designates clamp assembly for moisture proofing multi-jacketed cables, with strain relief
   - "P" designates potted with potting boot
   - "W" designates clamp assembly for moisture proofing multi-jacketed cables
   - "H" designates hermetic* without interfacial seal
   - "Y" designates hermetic* with interfacial seal
4. Shell Size
   "20" designates shell size. Shell sizes 6 through 24 available.
5. Insert Arrangement
   "20 - 41" designates insert arrangement. Refer to pages 66-71 for insert availability.
6. Contacts
   "P" designates pin contacts
   "S" designates socket contacts
   For ordering connectors with printed circuit board contacts, see pg. 22.
7. Insert Rotation
   "W", "X", "Y", "Z" designate that insert is rotated in its shell from "normal position. No letter required for normal (no rotation) position.
8. "SR" designates a strain relief clamp.
   Indicate optional finishes as follows:
   - (003) olive drab cadmium plate (standard on "PT")
   - (005) anodic coating - Alumilite® (standard on "SP")
   - (014) olive drab cadmium plate over nickel
   - (023) electroless nickel
   - (024) olive drab zinc cobalt plating
   - (025) non-conductive black zinc cobalt plating
   - (027) conductive black zinc cobalt plating
   - (424) electroless nickel finish with strain relief
   - (466) olive drab zinc cobalt plating with strain relief
   - (470) non-conductive black zinc cobalt plating with strain relief
   - (476) conductive black zinc cobalt plating with strain relief
   - (100) Suffix added for flat eyelet pin contacts in hermetic versions

MS/PT
MIL-C-26482, Series 1

Part number MS3110E20-41PW is shown as follows:

MS	311	0	E	20	-	41	P	W
1	2	3	4	5		6	7	8

For Hermetic connectors part number MS3113H20Y41PW is shown as follows:

MS	311	3	H	20 Y 41	P	W
1	2	3	4	5, 6	7	8

See code below:

1. "MS" designates Military Standard
2. Specification Number
   "311" designates basic family number for MIL-C-26482, Series 1 solder type
3. Shell Style
   - "0" designates wall mounting receptacle
   - "1" designates cable connecting receptacle**
   - "2" designates box mounting receptacle
   - "3" designates solder mount receptacle (hermetic only)
   - "4" designates jam nut receptacle
   - "6" designates straight plug
4. Service Class
   - "E" designates environmental resisting connector
   - "F" designates environmental resisting connectors with strain relief
   - "J" designates clamp assembly for moisture proofing multi-jacketed cables, with strain relief
   - "P" designates potted type with potting boot
   - "H" designates hermetic
5. Shell Size
   "20" designates shell size. Shell sizes 8 through 24 available.
6. Insert Arrangement
   "20-41" designates arrangement. Refer to pages 66-71 for insert availability.

   Hermetic version
   "20Y41" designates insert arrangement; specify "Y" for flat eyelet pin contacts, or "C" for solder cup pin contacts
7. Contact Configuration
   "P" designates pin contacts
   "S" designates socket contacts
8. Insert Rotation
   "W", "X", "Y", "Z" designate that insert is rotated in its shell from "normal" position. No letter required for normal (no rotation) position.

* Hermetic connectors are supplied with tin plated shells.

** This connector style is sometimes referred to as a cable connecting "plug". It does, however, mate with either a straight or 90 degree plug.

PT-SE
SP-SE
MS/PT-SE
installation data

Amphenol® PT-SE, SP-SE, MS/PT-SE
Proprietary/MIL-C-26482, Series 1 crimp type

wall mounting receptacle

cable connecting receptacle*

box mounting receptacle

straight plug

jam nut receptacle

Amphenol® SE crimp type miniature connectors provide performance and versatility needed for applications demanding high reliability and crimp removable contacts. These crimp contacts are rear insertable/front release and are held in position by an MS approved spring tower retention system.

The MS/PT-SE Series is qualified to MIL-C-26482, Series 1 and has all the outstanding design characteristics and quality of the PT Series.

The SP-SE Series is a modification of the PT-SE, providing special shells with a wide mounting flange for back panel mounting.

A corrosion resistant electrically conductive finish of cadmium plate with an olive drab chromate after-treatment is used on the PT-SE and MS/PT-SE. The SP-SE is given a durable non-conductive hard anodic "Alumilite"® coating which provides abrasion protection and resistance to corrosion.

Shell components for these series are aluminum. The dependable 5 key/keyway polarization with bayonet lock coupling assures positive mating with no chance of cross plugging. Spring tension provided by a wave washer in the coupling nut ensures maintenance of interfacial seal between mating halves.

Both the insert and main joint gasket are molded from resilient neoprene. This provides excellent moisture sealing at the gasket and superior electrical isolation of the contact in the insert.

Both pins and sockets are machined from a copper alloy and are gold plated. This gold plating eliminates contact corrosion and offers an indefinite shelf life. Socket contacts for these series are a closed entry design.

The PT-SE, SP-SE and MS/PT-SE Series are intermateable and intermountable with all existing Miniature Cylindrical Series connectors except for the threaded coupling PC Series.

Refer to pages 66-71 for insert arrangement availability.

* This connector style is sometimes referred to as a cable connecting "plug". It does, however, mate with either a straight or 90 degree plug.

PT-SE. SP-SE, MS/PT-SE

Contact Specifications				
Contact Size	Test Current	Maximum Millivolt Drop†	Crimp Well Diameter	Minimum Well Depth
20	7.5	55	.049 ±.001	.267
16	13.0	49	.067 ±.001	.236
12	23.0	42	.100 ±.002	.236

Service Rating					
	Recommended Operating AC Voltage at Sea Level	Test Voltage AC (RMS), 60 cps			
Service Rating		Sea Level	50,000 ft.	70,000 ft.	110,000 ft.
I	600	1,500	500	375	200
II	1,000	2,300	750	500	200

† Silver plated wire per MIL-C-26482

PT-SE and SP-SE Service Classes

PT-SE and SP-SE connectors are available in the three service classes listed below.

"SE" Open wire sealing - environmental resistant, with a nut and grommet for moisture proofing individual wires

"SE" (SR) Strain relief clamp - environmental resistant strain relief clamp and grommet for moisture proofing individual wires; provides added wire bundle support

"SP" Translucent nylon boot for retaining customer applied potting compounds; held in place by a threaded ring

MS/PT-SE Service Classes

MS-SE series connectors are available in the following certified service classes:

"E" Open wire sealing - environmental resisting connectors are supplied with a multi-hole grommet and clamping nut for moisture proofing individual open wires

"F" Environmental resistant strain relief clamp and grommet for moisture proofing individual wires; provides added wire bundle support

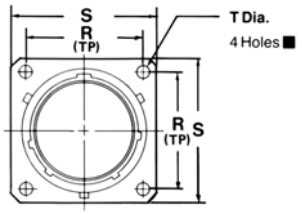
"P" Potting applications - these connectors are supplied with a translucent nylon boot for retention of customer applied potting compound

"SE", MS / "E" open wire seal

"SE" (SR), MS / "F" strain relief clamp

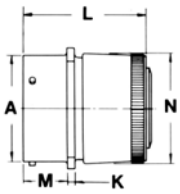
"SP", MS / "P" potting boot

PT00 SE (MS3120)
SP00 SE
wall mounting receptacle



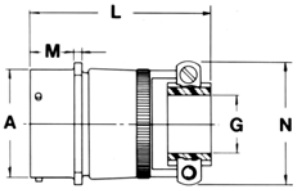
TERMINATION ASSEMBLIES

"SE" Open Wire Seal



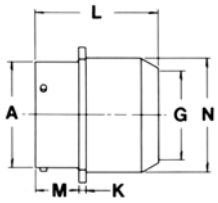
PT00SE-XX-XXX
SP00SE-XX-XXX
MS3120E-XX-XXX

"SE" (SR), MS / "F" Strain Relief



PT00SE-XX-XXX (SR)
SP00SE-XX-XXX (SR)
MS3120F-XX-XXX

"SP" Potting Boot



PT00SP-XX-XXX
SP00SP-XX-XXX

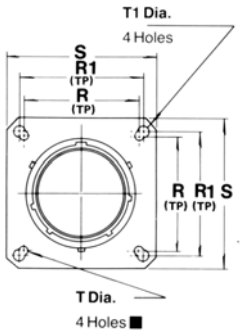
To complete part number see how to order on page 40.
■ (MMC) located within .005 of (TP)

Shell Size	Receptacle Front View						Receptacle Side View					
	R (TP)		S Max.		T Dia. ± .005		A Dia. +.001 −.005	K ±.016	M +.010 −.000		P* Max. Panel Thickness	
	PT	SP	PT	SP	PT	SP			PT	SP	PT	SP
8	.594	–	.828	–	.120	–	.473	.062	.431	–	.094	–
10	.719	.812	.954	1.141	.120	.150	.590	.062	.431	.462	.094	.125
12	.812	.938	1.047	1.266	.120	.150	.750	.062	.431	.462	.094	.125
14	.906	1.031	1.141	1.360	.120	.150	.875	.062	.431	.462	.094	.125
16	.969	1.125	1.234	1.453	.120	.150	1.000	.062	.431	.462	.094	.125
18	1.062	1.203	1.328	1.532	.120	.150	1.125	.062	.431	.462	.094	.125
20	1.156	1.297	1.453	1.688	.120	.150	1.250	.094	.556	.556	.219	.219
22	1.250	1.375	1.578	1.766	.120	.150	1.375	.094	.556	.556	.219	.219
24	1.375	1.500	1.703	1.891	.147	.150	1.500	.094	.589	.589	.219	.219

Shell Size	Class "SE", MS / "E"		Class "SE" (SR), MS / "F"			Class "SP", MS / "P"		
	L Max.	N Dia. Max	G Dia.	L Max.	N Max.	G Dia.. Max.	L Max.	N Dia. Max.
8	1.328	.560	.125	2.422	.781	–	–	–
10	1.328	.704	.188	2.422	.844	.444	1.656	.734
12	1.328	.825	.312	2.422	.969	.558	1.656	.858
14	1.328	.954	.375	2.422	1.094	.683	1.656	.984
16	1.328	1.080	.500	2.537	1.156	.808	1.656	1.110
18	1.328	1.204	.625	2.537	1.406	.909	1.656	1.234
20	1.359	1.330	.625	2.824	1.406	1.034	1.750	1.360
22	1.359	1.454	.750	2.824	1.594	1.159	1.750	1.484
24	1.422	1.580	.800	2.900	1.688	1.284	1.782	1.610

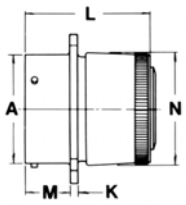
* Back panel mounting
All dimensions for reference only.

MF00 SE (MS3128)
wall mounting receptacle



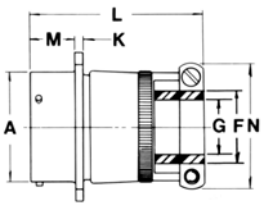
TERMINATION ASSEMBLIES

MS / "E" Open Wire Seal



MF00SE-XX-XXX
MS3128E-XX-XXX

MS / "F" Strain Relief



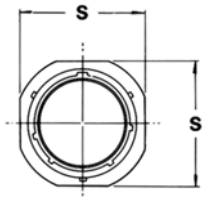
MF00SE-XX-XXX (SR)
MS3128F-XX-XXX

To complete part number see how to order on page 40.
■ (MMC) located within .0025 of (TP)

Shell Size	Receptacle Front View					Receptacle Side View								
									Class MS / "E"		Class MS / "F"			
	R	R^1	S Max.	T Dia. ±.005	T^1 Dia. ±.005	A Dia. +.001 −.005	K ±.016	M +.010 −.000	L Max.	N Max.	F Min.	G Dia.	L Max.	N Max.
10	.719	.812	1.141	.120	.150	.590	.062	.462	1.328	.685	.297	.188	1.906	.891
12	.812	.938	1.266	.120	.150	.750	.062	.462	1.328	.813	.422	.312	1.906	1.016
14	.906	1.031	1.360	.120	.150	.875	.062	.462	1.328	.930	.547	.375	1.906	1.141
16	.969	1.125	1.453	.120	.150	1.000	.062	.462	1.328	1.057	.609	.500	2.000	1.203
18	1.062	1.203	1.532	.120	.150	1.125	.062	.462	1.328	1.175	.734	.625	2.000	1.469
20	1.156	1.297	1.688	.120	.150	1.250	.094	.556	1.359	1.301	.734	.625	2.172	1.469
22	1.250	1.375	1.766	.120	.150	1.375	.094	.556	1.359	1.428	.922	.750	2.172	1.656
24	1.375	1.500	1.891	.147	.150	1.500	.094	.589	1.422	1.533	.984	.800	2.234	1.750

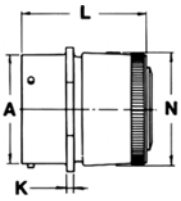
All dimensions for reference only.

PT01 SE (MS3121)
SP01 SE
cable connecting receptacle



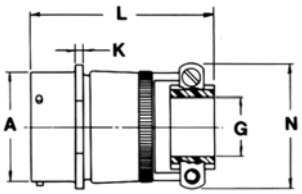
TERMINATION ASSEMBLIES

"SE", "E", MS / "E" Open Wire Seal



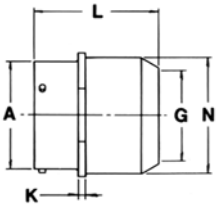
PT01SE-XX-XXX
SP01SE-XX-XXX
MS3121E-XX-XXX

"SE" (SR), MS / "F" Strain Relief



PT01SE-XX-XXX (SR)
SP01SE-XX-XXX (SR)
MS3121F-XX-XXX

"SP", "P", MS / "P" Potting Boot



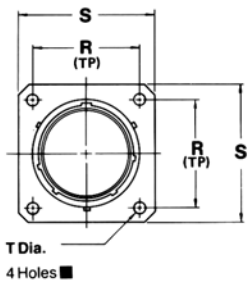
PT01SP-XX-XXX
SP01SP-XX-XXX
MS3121P-XX-XXX

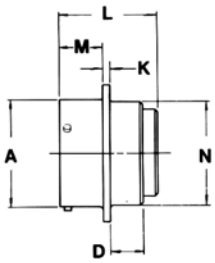
Note: This connector style is sometimes referred to as a cable connecting "plug".
It does, however, mate with either a straight or 90 degree plug.
To complete part number see how to order on page 40.

Shell Size	Receptacle Front View	Receptacle Side View									
		Class "SE", MS / "E"				Class "SE" (SR), MS / "F"			Class "SP", MS / "P"		
	S Max.	A Dia. +.001 –.005	K ±.018	L Max.	N Dia. Max.	G Dia.	L Max.	N Max.	G Dia.	L Max.	N Dia. Max.
8	.812	.473	.094	1.522	.560	.125	2.422	.828	–	–	–
10	.955	.590	.094	1.522	.685	.188	2.422	.891	.444	1.656	.734
12	1.048	.750	.094	1.522	.813	.312	2.422	1.016	.558	1.656	.858
14	1.142	.875	.094	1.522	.930	.375	2.422	1.141	.683	1.656	.984
16	1.236	1.000	.094	1.522	1.057	.500	2.537	1.203	.808	1.656	1.110
18	1.329	1.125	.094	1.522	1.175	.625	2.537	1.469	.909	1.656	1.234
20	1.455	1.250	.115	1.709	1.301	.625	2.824	1.469	1.034	1.750	1.360
22	1.579	1.375	.115	1.709	1.428	.750	2.824	1.656	1.159	1.750	1.484
24	1.709	1.500	.115	1.709	1.555	.800	2.900	1.750	1.284	1.782	1.610

All dimensions for reference only.

PT02 SE (MS3122)
SP02 SE
box mounting receptacle





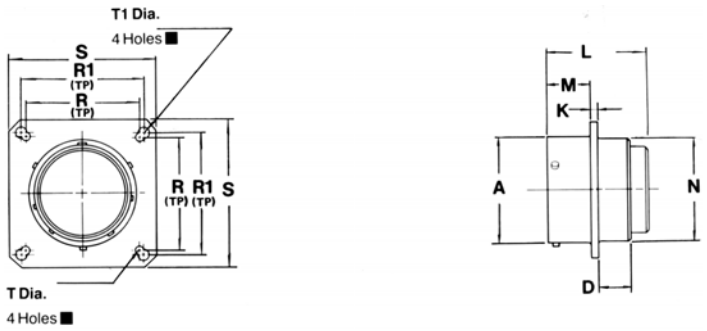
PT02SE-XX-XXX
SP02SE-XX-XXX
MS3122E-XX-XXX

To complete part number see how to order on page 40.
■ (MMC) located within .0025 of (TP)

Shell Size	Receptacle Front View						Receptacle Side View							
	R		S Max.		T Dia. ±.005		A Dia. +.001 −.005	D Max.		K ±.016	L Max.	M +.010 −.000		N Dia. +.011 −.000
	PT	SP	PT	SP	PT	SP		PT	SP			PT	SP	
8	.594	–	.828	–	.120	–	.473	.312	–	.062	1.296	.431	–	.438
10	.719	.812	.954	1.141	.120	.150	.590	.312	.219	.062	1.296	.431	.462	.562
12	.812	.938	1.047	1.266	.120	.150	.750	.312	.219	.062	1.296	.431	.462	.688
14	.906	1.031	1.141	1.360	.120	.150	.875	.312	.219	.062	1.296	.431	.462	.812
16	.969	1.125	1.234	1.453	.120	.150	1.000	.312	.219	.062	1.296	.431	.462	.938
18	1.062	1.203	1.328	1.532	.120	.150	1.125	.312	.219	.062	1.296	.431	.462	1.062
20	1.156	1.297	1.453	1.688	.120	.150	1.250	.406	.344	.094	1.358	.556	.556	1.188
22	1.250	1.375	1.578	1.766	.120	.150	1.375	.406	.344	.094	1.358	.556	.556	1.312
24	1.375	1.500	1.703	1.891	.147	.150	1.500	.406	.344	.094	1.358	.589	.589	1.438

All dimensions for reference only.

MF02 SE (MS3127)
box mounting receptacle



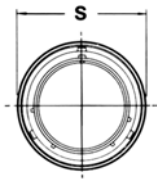
MF02SE-XX-XXX
MS3127E-XX-XXX

To complete part number see how to order on page 40.
■ (MMC) located within .0025 of (TP)

Shell Size	Receptacle Front View						Receptacle Side View				
	N Dia. +.011 −.000	R	R[1]	S Max.	T ±.005	T[1] ±.005	A Dia. +.001 −.005	D Max.	K ±.016	L Max.	M +.010 −.000
10	.562	.719	.812	1.141	.120	.150	.590	.219	.062	1.266	.462
12	.688	.812	.938	1.266	.120	.150	.750	.219	.062	1.266	.462
14	.812	.906	1.031	1.360	.120	.150	.875	.219	.062	1.266	.462
16	.938	.969	1.125	1.453	.120	.150	1.000	.219	.062	1.266	.462
18	1.062	1.062	1.203	1.532	.120	.150	1.125	.219	.062	1.266	.462
20	1.188	1.156	1.297	1.688	.120	.150	1.250	.344	.094	1.328	.556
22	1.312	1.250	1.375	1.766	.120	.150	1.375	.344	.094	1.328	.556
24	1.438	1.375	1.500	1.891	.147	.150	1.500	.344	.094	1.328	.589

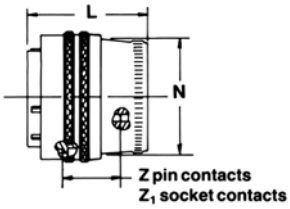
All dimensions for reference only.

PT06 SE (MS3126)
SP06 SE
straight plug



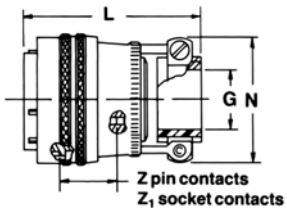
TERMINATION ASSEMBLIES

"SE", "E", MS / "E" Open Wire Seal



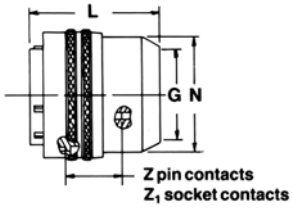
PT06SE-XX-XXX
SP06SE-XX-XXX
PTG06SE-XX-XXX
MS3126E-XX-XXX

"SE" (SR), MS / "F" Strain Relief



PT06SE-XX-XXX (SR)
SP06SE-XX-XXX (SR)
PTG06SE-XX-XXX (SR)
MS3126F-XX-XXX (SR)

"SP", "P", MS / "P" Potting Boot



PT06SP-XX-XXX
SP06SP-XX-XXX
PTG06SP-XX-XXX
MS3126P-XX-XXX

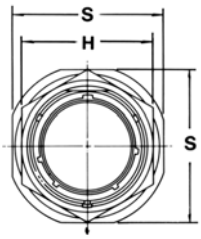
To complete part number see how to order on page 40.

Shell Size	Plug Front View	Plug Side View									
				Class "SE", MS / "E"		Class "SE" (SR), MS / "F"			Class "SP", MS / "P"		
	S Dia. Max.	Z ±.045	Z[1] ±.045	L Max.	N Max.	G Dia.	L Max.	N Max.	G Dia.	L Max.	N Dia. Max.
8*	.734	.640	.579	1.328	.540	.125	2.413	.828	.327	1.750	.578
10	.859	.640	.579	1.328	.685	.188	2.413	.891	.444	1.750	.734
12	1.031	.640	.579	1.328	.813	.312	2.413	1.016	.558	1.750	.858
14	1.156	.640	.579	1.328	.930	.375	2.413	1.141	.683	1.750	.984
16	1.281	.640	.579	1.328	1.057	.500	2.528	1.203	.808	1.750	1.110
18	1.391	.640	.579	1.328	1.175	.625	2.528	1.469	.909	1.750	1.234
20	1.531	.640	.579	1.297	1.301	.625	2.753	1.469	1.034	1.750	1.360
22	1.656	.640	.579	1.297	1.428	.750	2.753	1.656	1.159	1.750	1.484
24	1.777	.640	.579	1.359	1.533	.800	2.830	1.750	1.284	1.766	1.610

* PT-SE, MS-SE and MS-SP only.

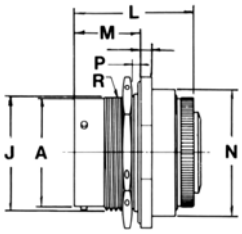
All dimensions for reference only.

PT07 SE (MS3124)
SP07 SE
jam nut receptacle



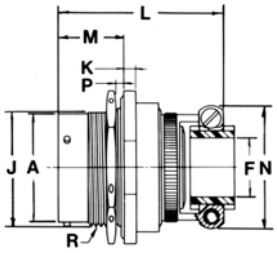
TERMINATION ASSEMBLIES

"SE", "E", MS / "E" Open Wire Seal



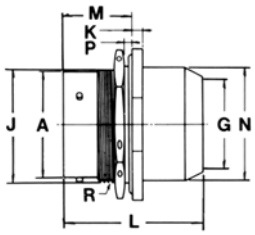
PT07SE-XX-XXX
SP07SE-XX-XXX
MS3124E-XX-XXX

"SE" (SR), MS / "F" Strain Relief



PT07SE-XX-XXX (SR)
SP07SE-XX-XXX (SR)
MS3124F-XX-XXX

"SP", "P", MS / "P" Potting Boot



PT07SP-XX-XXX
SP07SP-XX-XXX
MS3124P-XX-XXX

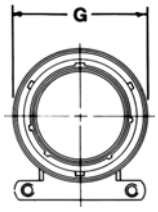
To complete part number see how to order on page 40.
All lockwire holes are .044 Dia. Min.

Shell Size	Receptacle Front View		Receptacle Side View						
	H Hex Max.	S Max.	A Dia. +.001 –.005	J Flat +.000 –.010	K +.011 –.010	M ±.005	P Panel Thickness Min.	P Panel Thickness Max.	R Thread Class 2A
8	.767	.954	.473	.530	.125	.696	.062	.125	.5625-24 UNEF
10	.892	1.078	.590	.655	.125	.696	.062	.125	.6875-24 NEF
12	1.079	1.266	.750	.818	.125	.696	.062	.125	.8750-20 UNEF
14	1.205	1.391	.875	.942	.125	.696	.062	.125	1.0000-20 UNEF
16	1.329	1.516	1.000	1.066	.125	.696	.062	.125	1.1250-18 NEF
18	1.455	1.641	1.125	1.191	.125	.696	.062	.125	1.2500-18 NEF
20	1.579	1.828	1.250	1.316	.156	.884	.062	.250	1.3750-18 NEF
22	1.705	1.954	1.375	1.441	.156	.884	.062	.250	1.5000-18 NEF
24	1.829	2.078	1.500	1.566	.156	.917	.062	.250	1.6250-18 NEF

Shell Size	Class "SE", MS / "E"		Class "SE" (SR), MS / "F"				Class "SP", MS /"P"		
	L Max.	N Max.	F Min.	G Dia. Free	L Max.	N Max.	G Dia.	L Max.	N Dia. Max.
8	1.438	.749	.234	.125	1.922	.828	–	–	–
10	1.438	.874	.297	.188	1.922	.891	.444	1.656	.734
12	1.438	.999	.422	.312	1.922	1.016	.558	1.656	.858
14	1.438	1.124	.547	.375	1.922	1.141	.683	1.656	.984
16	1.438	1.249	.609	.500	2.000	1.203	.808	1.656	1.110
18	1.438	1.374	.734	.625	2.000	1.469	.909	1.656	1.234
20	1.625	1.530	.734	.625	2.172	1.469	1.034	1.922	1.360
22	1.625	1.655	.922	.750	2.172	1.656	1.159	1.922	1.484
24	1.688	1.780	.984	.800	2.234	1.750	1.284	1.951	1.610

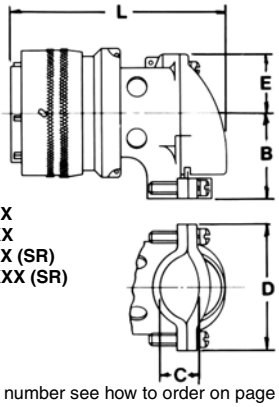
All dimensions for reference only.

PT08 SE
SP08 SE
90 degree plug



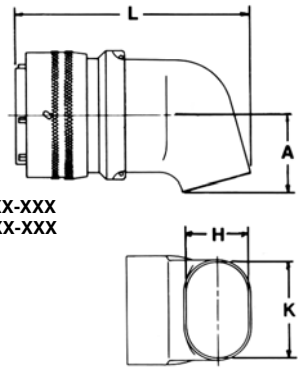
TERMINATION ASSEMBLIES

"SE" Open Wire Seal, "SE" (SR) Strain Relief



PT08SE-XX-XXX
SP08SE-XX-XXX
PT08SE-XX-XXX (SR)
SP08SEE-XX-XXX (SR)

"SP" Potting Boot 75 degrees



PT08SP-XX-XXX
SP08SP-XX-XXX

To complete part number see how to order on page 40.
All lockwire holes are .044 Dia. Min.

Shell Size	Plug Front View	Plug Side View								
		Class "SE", "SE" (SR)					Class "SP"			
	G Dia. Max.	B ±.031	C +.010 −.025	D ±.062	E +.047 −.025	L Max.	A ±.025	H ±.015	K ±.015	L Max.
10	.921	.749	.170	1.191	.393	2.137	.547	.438	.562	2.031
12	1.046	.812	.264	1.191	.450	2.222	.625	.516	.688	2.093
14	1.171	.905	.310	1.254	.519	2.370	.734	.625	.781	2.203
16	1.297	1.030	.330	1.316	.583	2.572	.750	.656	.890	2.250
18	1.422	1.015	.444	1.562	.621	2.680	.781	.703	1.000	2.296
20	1.562	1.077	.510	1.625	.683	2.753	.859	.766	1.125	2.343
22	1.672	1.139	.515	1.719	.739	2.799	.906	.812	1.234	2.390
24	1.797	1.250	.656	1.750	.787	3.037	1.181	.918	1.374	2.624

All dimensions for reference only.

PT-SE, SP-SE, MS/PT-SE
how to order

PT-SE, SP-SE

To more easily illustrate ordering procedure, part number PT00SE-20-41PW(SR) is shown as follows:

PT	00	SE	-	20	-	41	P	W	(SR)
1	2	3		4		5	6	7	8

See code below:

1. Connector Type
   - "PT" designates standard olive drab, electrically conductive cadmium plated, bayonet lock connector
   - "MF" designates standard olive drab, electrically conductive cadmium plated, bayonet lock connector with dual mounting holes
   - "SP" designates electrically non-conductive, hard anodic coated, bayonet lock connector with larger flange and mounting holes for back panel mounting
   - "PTG" designates plug with grounding fingers
2. Shell Style
   - "00" designates wall mounting receptacle
   - "01" designates cable connecting receptacle*
   - "02" designates box mounting receptacle
   - "06" designates straight plug
   - "07" designates jam nut receptacle
   - "08" designates 90 degree plug
3. Service Classes
   - "SE" designates environmental crimp
   - "SP" designates potted type crimp

   Both of the above are Amphenol proprietary versions of the MIL-C-26482, Series 1 crimp contact connector and offer 15 lbs. contact retention for size 20 contacts; 25 lbs. for size 16 contacts.
4. Shell Size
   "20" designates shell size. Shell sizes 8 through 24 available.
5. Insert Arrangement
   "20 - 41" designates insert arrangement. Refer to pages 66-71 for insert availability.
6. Contacts
   "P" designates pin contacts
   "S" designates socket contacts
7. Insert Rotation
   "W", "X", "Y", "Z" designate that insert is rotated in its shell from "normal" position. No letter required for normal (no rotation) position.
8. "SR" designates a strain relief clamp.
   Indicate optional finishes as follows:
   - (003) olive drab cadmium plate (standard on "PT")
   - (005) anodic coating - Alumilite® (standard on "SP")
   - (014) olive drab cadmium plate over nickel
   - (023) electroless nickel
   - (024) olive drab zinc cobalt plating
   - (025) non-conductive black zinc cobalt plating
   - (027) conductive black zinc cobalt plating
   - (424) electroless nickel finish with strain relief
   - (466) olive drab zinc cobalt plating with strain relief
   - (470) non-conductive black zinc cobalt plating with strain relief
   - (476) conductive black zinc cobalt with strain relief

MS/PT-SE
MIL-C-26482, Series 1

To more easily illustrate ordering procedure, part number MS3120E20-41PW is shown as follows:

MS	312	0	E	20	–	41	P	W
1	2	3	4	5		6	7	8

See code below:

1. "MS" designates Military Standard
2. Specification Number
   "312" designates basic family for MIL-C-26482, Series 1 crimp type
3. Shell Style
   - "0" designates wall mounting receptacle
   - "1" designates cable connecting receptacle*
   - "2" designates box mounting receptacle
   - "4" designates jam nut receptacle
   - "6" designates straight plug
   - "7" designates box mounting receptacle with dual mounting holes
   - "8" designates wall mounting receptacle with dual mounting holes
4. Service Class
   - "E" designates environmental resisting connector
   - "F" designates environmental resisting connector with strain relief
   - "P" designates potted type with potting boot
5. Shell Size
   "20" designates shell size. Shell sizes 8 through 24 available
6. Insert Arrangement
   "20 - 41" designates insert arrangement. Refer to pages 66-71 for insert availability.
7. Contacts
   "P" designates pin contacts
   "S" designates socket contacts
8. Insert Rotation
   "W", "X", "Y", "Z" designate that insert is rotated in its shell from the "normal" position. No letter required for normal (no rotation) position.

* This connector style is sometimes referred to as a cable connecting "plug". It does, however, mate with either a straight or 90 degree plug.

PT-CE
SP-CE
installation data

Amphenol® PT-CE, SP-CE
crimp type

wall mounting receptacle

cable connecting receptacle*

box mounting receptacle

straight plug

jam nut receptacle

Amphenol® CE crimp type miniature connectors provide performance and versatility needed for applications demanding high reliability and crimp removable contacts. These crimp contacts are rear insertable/front release and are held in position by a nylon wafer retention system.

The SP-CE Series is a modification of the PT-CE, providing special shells with a wide mounting flange for back panel mounting.

A corrosion resistant electrically conductive finish of cadmium plate with an olive drab chromate after-treatment is used on the PT-CE. The SP-CE is given a durable nonconductive hard anodic "Alumilite"® coating which provides abrasion protection and resistance to corrosion.

Shell components for these versions are aluminum. The dependable 5 key/keyway polarization with bayonet lock coupling assures positive mating with no chance of cross plugging. Spring tension provided by a wave washer in the coupling nut ensures maintenance of interfacial seal between mating halves.

Both the insert and main joint gasket are molded from resilient neoprene. This provides excellent moisture sealing at the gasket and superior electrical isolation of the contact in the insert.

Both pins and sockets are machined form a copper alloy and are gold plated. This gold plating eliminates contact corrosion and offers an indefinite shelf life. Socket contacts for these series are a closed entry design.

The PT-CE and SP-CE Series are intermateable and intermountable with all existing Miniature Cylindrical Series connectors except for the threaded coupling PC Series.

Refer to pages 66-71 for insert arrangement availability.

PT-CE, SP-CE

Contact Specifications				
Contact Size	Test Current	Maximum Millivolt Drop†	Crimp Well Diameter	Minimum Well Depth
20	7.5	55	.045 $^{+.002}_{-.001}$	.359
16	13.0	49	.063 $^{+.004}_{-.001}$	.234

Service Rating					
Service Rating	Recommended Operating AC Voltage at Sea Level	Test Voltage AC (RMS), 60 cps			
		Sea Level	50,000 ft.	70,000 ft.	110,000 ft.
I	600	1,500	500	375	200
II	1,000	2,300	750	500	200

† Silver plated wire per MIL-C-26482

* This connector style is sometimes referred to as a cable connecting "plug." It does, however, mate with a straight or 90 degree plug.

PT-CE, and SP-CE Service Classes

PT-CE and SP-CE Connectors are available in the three service classes listed below.

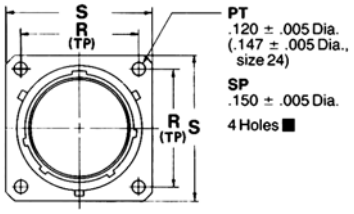
"CE"	Open wire sealing – environmental resistant, with a nut and grommet for moisture proofing individual wires.
"CE" (SR)	Strain relief clamp – environmental resistant strain relief clamp and grommet for moisture proofing individual wires; provides added wire bundle support.
"CP"	Translucent nylon boot for retaining customer applied potting compounds; held in place by a threaded ring.

"CE" open wire seal

"CE" (SR) strain relief

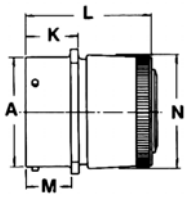
"CP" potting boot

PT00 CE
SP00 CE
wall mounting receptacle



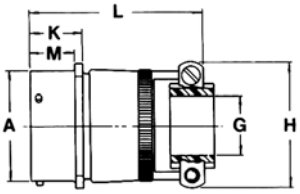
TERMINATION ASSEMBLIES

"CE" Open Wire Seal



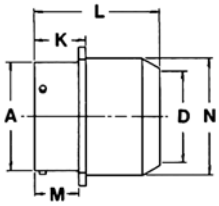
PT00CE-XX-XXX
SP00CE-XX-XXX

"CE" (SR) Strain Relief



PT00CE-XX-XXX (SR)
SP00CE-XX-XXX (SR)

"CP" Potting Boot



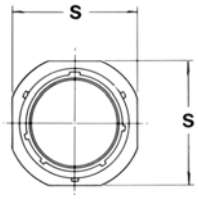
PT00CP-XX-XXX
SP00CP-XX-XXX

To complete part number see how to order on page 50.
■ (MMC) located within .005 Dia. of (TP)

Shell Size	Receptacle Front View				Receptacle Side View													
	R (TP)		S ±.016		A Dia. +.001 –.005	K +.025 –.010		M +.010 –.000		Class "CE"		Class "CE" (SR)			Class "CP"			
										L Max.	N Dia. Max.	G Dia.	H Max.	L Max.	D Dia.	L Max.		N Dia. Max.
	PT	SP	PT	SP		PT	SP	PT	SP							PT	SP	
6	.469	.641	.688	.953	.348	.493	.524	.431	.462	1.468	.440	–	–	–	–	–	–	–
8	.594	.734	.812	1.047	.473	.493	.524	.431	.462	1.468	.560	.125	.797	2.031	.327	1.683	1.594	.608
10	.719	.812	.938	1.125	.590	.493	.524	.431	.462	1.468	.685	.188	.859	2.031	.444	1.683	1.594	.734
12	.812	.938	1.031	1.250	.750	.493	.524	.431	.462	1.468	.813	.312	.984	2.031	.558	1.683	1.594	.858
14	.906	1.031	1.125	1.344	.875	.493	.524	.431	.462	1.468	.930	.375	1.109	2.031	.683	1.683	1.594	.984
16	.969	1.125	1.219	1.438	1.000	.493	.524	.431	.462	1.468	1.057	.500	1.172	2.156	.808	1.683	1.594	1.110
18	1.062	1.203	1.312	1.516	1.125	.493	.524	.431	.462	1.468	1.175	.625	1.422	2.156	.909	1.683	1.594	1.234
20	1.156	1.297	1.438	1.672	1.250	.650	.650	.556	.556	1.562	1.301	.625	1.422	2.266	1.034	1.750	1.656	1.360
22	1.250	1.375	1.562	1.750	1.375	.650	.650	.556	.556	1.562	1.428	.750	1.609	2.266	1.159	1.750	1.656	1.484
24	1.375	1.500	1.688	1.875	1.500	.683	.683	.589	.589	1.625	1.555	.800	1.703	2.328	1.284	1.782	1.656	1.610

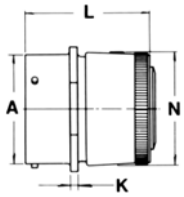
All dimensions for reference only.

PT01 CE
cable connecting receptacle



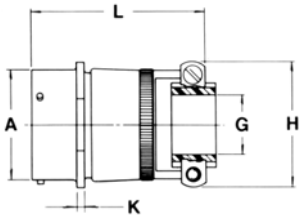
TERMINATION ASSEMBLIES

"CE" Open Wire Seal



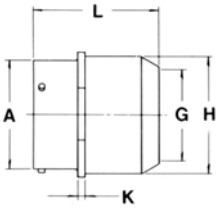
PT01CE-XX-XXX
SP01CE-XX-XXX

"CE" (SR) Strain Relief



PT01CE-XX-XXX (SR)
SP01CE-XX-XXX (SR)

"CP" Potting Boot



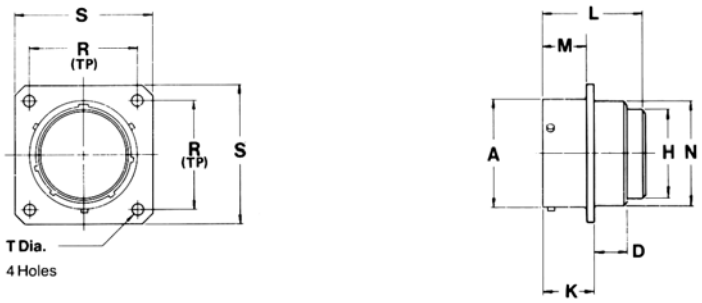
PT01CP-XX-XXX

Note: This connector style is sometimes referred to as a cable connecting "plug". It does, however, mate with either a straight or 90 degree plug.
To complete part number see how to order on page 50.

Shell Size	Receptacle Front View	Receptacle Side View									
				Class "CE"		Class "CE" (SR)			Class "CP"		
	S ±.016	A Dia. +.001 −.005	K ±.016	L Max.	N Dia.	G Dia.	H Dia.	L Max.	D Dia. Min.	L Max.	N Dia. Max.
6	.688	.348	.094	1.468	.440	–	–	–	–	–	–
8	.812	.473	.094	1.468	.560	.125	.797	1.982	.327	1.702	.608
10	.938	.590	.094	1.468	.685	.188	.859	1.982	.444	1.702	.734
12	1.031	.750	.094	1.468	.813	.312	.984	1.982	.558	1.702	.858
14	1.125	.875	.094	1.468	.930	.375	1.109	1.982	.683	1.702	.984
16	1.219	1.000	.094	1.468	1.057	.500	1.172	2.114	.808	1.702	1.110
18	1.312	1.125	.094	1.468	1.175	.625	1.422	2.114	.909	1.702	1.234
20	1.438	1.250	.115	1.562	1.301	.625	1.422	2.207	1.034	1.796	1.360
22	1.562	1.375	.115	1.562	1.428	.750	1.609	2.207	1.159	1.796	1.484
24	1.688	1.500	.115	1.625	1.555	.800	1.703	2.219	1.284	1.827	1.610

All dimensions for reference only.

PT02 CE
SP02 CE
box mounting receptacle



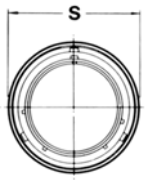
PT02CE-XX-XXX
SP02CE-XX-XXX
PT02CP-XX-XXX
SP02CP-XX-XXX

To complete part number see how to order on page 50.
■ (MMC) located within .005 of (TP)

Shell Size	Receptacle Front View						Receptacle Side View									
	R		S ±.016		T Dia. ±.005		A Dia +.001 −.005	D		H Dia. Max.	K +.025 −.010		L Max.	M +.010 −.000		N Dia. Max.
	PT	SP	PT	SP	PT	SP		PT	SP		PT	SP		PT	SP	
8	.594	.734	.812	1.047	.120	.150	.473	.344	.312	.317	.493	.524	1.250	.431	.462	.449
10	.719	.812	.938	1.125	.120	.150	.590	.344	.312	.441	.493	.524	1.250	.431	.462	.573
12	.812	.938	1.031	1.250	.120	.150	.750	.344	.312	.566	.493	.524	1.250	.431	.462	.699
14	.906	1.031	1.125	1.344	.120	.150	.875	.344	.312	.683	.493	.524	1.250	.431	.462	.823
16	.969	1.125	1.219	1.438	.120	.150	1.000	.344	.312	.808	.493	.524	1.250	.431	.462	.949
18	1.062	1.203	1.312	1.516	.120	.150	1.125	.344	.312	.899	.493	.524	1.250	.431	.462	1.073
20	1.156	1.297	1.438	1.672	.120	.150	1.250	.406	.406	1.034	.650	.650	1.312	.556	.556	1.199
22	1.250	1.375	1.562	1.750	.120	.150	1.375	.406	.406	1.155	.650	.650	1.312	.556	.556	1.323
24	1.375	1.500	1.688	1.875	.147	.150	1.500	.436	.436	1.279	.683	.683	1.312	.589	.589	1.449

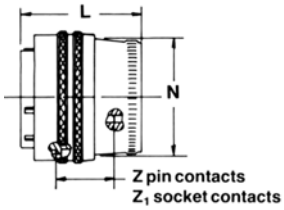
All dimensions for reference only.

PT06 CE
SP06 CE
straight plug



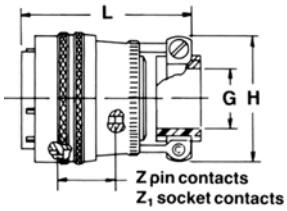
TERMINATION ASSEMBLIES

"CE" Open Wire Seal



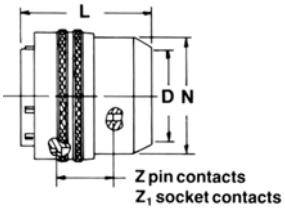
PT06CE-XX-XXX
SP06CE-XX-XXX

"CE" (SR) Strain Relief



PT06CE-XX-XXX (SR)
SP06CE-XX-XXX (SR)

"CP" Potting Boot



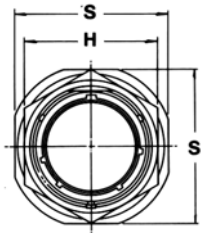
PT06CP-XX-XXX
SP06CP-XX-XXX

To complete part number see how to order on page 50.

Shell Size	Plug Front View	Plug Side View									
	S Dia. Max.	Z +.035 –.040	Z[1] +.035 –.040	Class "CE"		Class "CE" (SR)			Class "CP"		
				L Max.	N Dia.	G Dia.	H Max.	L Max.	D Dia.	L Max.	N Dia. Max.
6	.609	.772	.631	1.457	.440	–	–	–	–	–	–
8	.734	.772	.631	1.457	.560	.125	.797	2.019	.327	1.707	.608
10	.844	.772	.631	1.457	.685	.188	.859	2.019	.444	1.707	.734
12	1.016	.772	.631	1.457	.813	.312	.984	2.019	.558	1.707	.858
14	1.141	.772	.631	1.457	.930	.375	1.109	2.019	.683	1.707	.984
16	1.266	.772	.631	1.457	1.057	.500	1.172	2.144	.808	1.707	1.110
18	1.375	.772	.631	1.457	1.175	.625	1.422	2.144	.909	1.707	1.234
20	1.516	.710	.569	1.487	1.301	.625	1.422	2.175	1.034	1.707	1.360
22	1.641	.710	.569	1.487	1.428	.750	1.609	2.175	1.159	1.707	1.484
24	1.761	.710	.569	1.550	1.555	.800	1.703	2.237	1.284	1.832	1.610

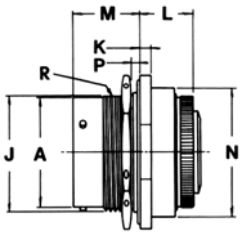
All dimensions for reference only.

PT07 CE
SP07 CE
jam nut receptacle



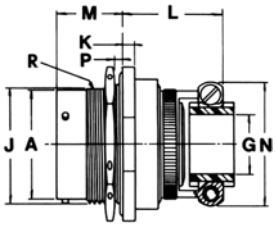
TERMINATION ASSEMBLIES

"CE" Open Wire Seal



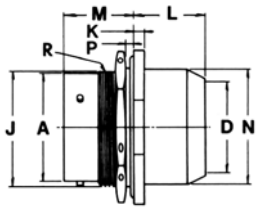
PT07CE-XX-XXX
SP07CE-XX-XXX

"CE" (SR) Strain Relief



PT07CE-XX-XXX (SR)
SP07CE-XX-XXX (SR)

"CP" Potting Boot



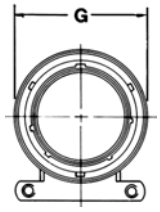
PT07CP-XX-XX
SP07CP-XX-XXX

To complete part number see how to order on page 50.
All lockwire holes are .044 Dia. Min.

Shell Size	Receptacle Front View		Receptacle Side View													
							Panel Thickness		Class "CE"		Class "CE" (SR)			Class "CP"		
	H Hex. +.017 –.016	S ±.016	A Dia. +.001 –.005	J Flat +.000 –.010	K ±.016	M ±.005	Min.	Max.	L Max.	N Max.	G Dia.	L Max.	N Max.	D Dia. Min.	L Max.	N Dia. Max.
8	.750	.938	.473	.530	.125	.696	.062	.125	.827	.730	.125	1.297	.797	.327	.875	.608
10	.875	1.062	.590	.655	.125	.696	.062	.125	.827	.855	.188	1.297	.859	.444	.875	.734
12	1.062	1.250	.750	.818	.125	.696	.062	.125	.827	.980	.312	1.297	.984	.558	.875	.858
14	1.188	1.375	.875	.942	.125	.696	.062	.125	.827	1.105	.375	1.297	1.109	.683	.875	.984
16	1.312	1.500	1.000	1.066	.125	.696	.062	.125	.827	1.230	.500	1.422	1.172	.808	.875	1.110
18	1.438	1.625	1.125	1.191	.125	.696	.062	.125	.827	1.355	.625	1.422	1.422	.909	.875	1.234
20	1.562	1.812	1.250	1.316	.156	.884	.062	.250	.733	1.511	.625	1.328	1.422	1.034	.969	1.360
22	1.688	1.938	1.375	1.441	.156	.884	.062	.250	.733	1.636	.750	1.328	1.609	1.159	.969	1.484
24	1.812	2.062	1.500	1.566	.156	.917	.062	.250	.762	1.761	.800	1.422	1.703	1.284	.969	1.610

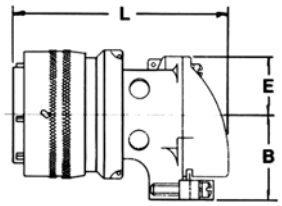
All dimensions for reference only.

PT08 CE
SP08 CE
90 degree plug

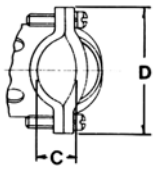


TERMINATION ASSEMBLIES

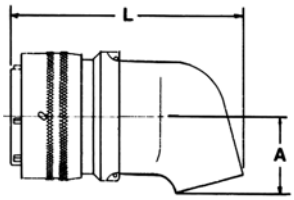
"CE" Open Wire Seal, "CE" (SR) Strain Relief



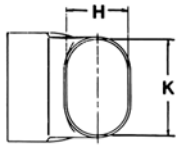
PT08CE-XX-XXX
SP08CE-XX-XXX
PT08CE-XX-XXX (SR)
SP08CE-XX-XXX (SR)



"CP" Potting Boot 75°



PT08CP-XX-XXX
SP08CP-XX-XXX



To complete part number see how to order on page 50.
All lockwire holes are .044 Dia. Min.

Shell Size	Plug Front View	Plug Side View								
		Class "CE", "CE" (SR)					Class "CP"			
	G Dia. Max.	B ±.031	C +.010 −.025	D ±.062	E +.047 −.025	L ±.057	A ±.025	H ±.015	K ±.015	L Max.
8	.796	.655	.169	.941	.339	1.986	.469	.312	.438	1.906
10	.921	.749	.170	1.191	.393	2.080	.547	.438	.562	2.031
12	1.046	.812	.264	1.191	.450	2.165	.625	.516	.688	2.093
14	1.171	.905	.310	1.254	.519	2.313	.734	.625	.781	2.203
16	1.297	1.030	.330	1.316	.583	2.515	.750	.656	.890	2.250
18	1.422	1.015	.444	1.562	.621	2.623	.781	.703	1.000	2.296
20	1.562	1.077	.510	1.625	.683	2.739	.859	.766	1.125	2.343
22	1.672	1.139	.515	1.719	.739	2.785	.906	.812	1.234	2.390
24	1.797	1.265	.656	1.751	.797	3.024	1.169	.918	1.374	2.624

All dimensions for reference only.

PT-CE, SP-CE
how to order

PT-CE, SP-CE

To more easily illustrate ordering procedure, part number PT00CE-20-41PW (SR) is shown as follows:

PT	00	CE	–	20	–	41	P	W	(SR)
1	2	3		4		5	6	7	8

See code below:

1. Connector Type
   "PT" designates standard electrically conductive olive drab cadmium plated bayonet lock connector
   "SP" designates electrically non-conductive, hard anodic coated bayonet lock connector with large flange and mounting holes for back panel mounting.
2. Shell Style
   "00" designates wall mounting receptacle
   "01" designates cable connecting receptacle*
   "02" designates box mounting receptacle
   "06" designates straight plug
   "07" designates jam nut receptacle
   "08" designates 90° plug
3. Service Class
   "CE" designates environmental crimp
   "CP" designates potted type crimp
   Both of the above are Amphenol® proprietary versions of the MIL-C-26482, Series 1 crimp contact connector and offer 7 lbs. contact retention for size 20 contacts; 9 lbs for size 16 contacts.
4. Shell Size
   "20" designates shell size. Shell sizes 6 through 24 available.
5. Insert Arrangement
   "20 – 41" designates insert arrangement. Refer to pages 66-71 for insert availability.
6. Contacts
   "P" designates pin contacts.
   "S" designates socket contacts.
7. Insert Rotation
   "W", "X", "Y", "Z" designate that insert is rotated in its shell from the "normal" position. No letter required for normal (no rotation) position.
8. "(SR)" designates strain relief clamp.
   Indicate optional finishes as follows:
   (003) olive drab cadmium plate (standard on "PT")
   (005) anodic coating - Alumilite® (standard on "SP")
   (014) olive drab cadmium plate over nickel
   (023) electroless nickel
   (024) olive drab zinc cobalt plating
   (025) non-conductive black zinc cobalt plating
   (027) conductive black zinc cobalt plating
   (424) electroless nickel finish with strain relief
   (466) olive drab zinc cobalt plating with strain relief
   (470) non-conductive black zinc cobalt plating with strain relief
   (476) conductive black zinc cobalt with strain relief

* This connector style is sometimes referred to as a cable connecting "plug". It does, however, mate with either a straight or 90 degree plug.

PC
installation data

Amphenol® PC, PC-SE*, PC-CE*
solder and crimp type

wall mounting receptacle

cable connecting receptacle**

box mounting receptacle

straight plug

jam nut receptacle

Amphenol® PC Series threaded coupling miniature cylindrical connectors are offered with solder contacts (PC) or crimp contacts (PC-SE) and (PC-CE) versions. The "SE" type utilizes a spring tower retention system while the "CE" type utilizes a nylon wafer retention system to maintain contact position. The PC double stub threaded coupling system cannot be cross threaded, and is mechanically assisted while engaging and disengaging.

Shell components are aluminum. Bright cadmium plating to QQ-P-416 with a clear chromate after-treatment provides a golden colored conductive finish. Single key/keyway polarization represents maximum simplicity in a design proven in millions of AN connectors.

Both pins and sockets are machined from a copper alloy and are gold plated. This gold plating eliminates contact corrosion and offers an indefinite shelf life. Socket contacts for these series are a closed entry design.

Both the insert and main joint gasket are molded from resilient neoprene. This provides excellent moisture sealing at the gasket and superior electrical insulation of the contacts in the insert.

The PC, PC-SE, and PC-CE types are only intermateable and intermountable within the PC threaded coupling series. The data provided in this catalog pertains to the PC solder type; for information on PC-SE and PC-CE consult Amphenol, Sidney, NY.

Refer to pages 66-71 for insert arrangement availability.

PC

Contact Specifications				
Contact Size	Test Current	Maximum Millivolt Drop†	Solder Well Diameter	Solder Well Depth
20	7.5	55	.046 $^{+.004}_{-.000}$	.125 $^{+.031}_{-.000}$
16	13.0	50	.078 $^{+.005}_{-.003}$	.188 $^{+.031}_{-.000}$

Service Rating					
Service Rating	Recommended Operating AC Voltage at Sea Level	Test Voltage AC (RMS), 60 cps			
		Sea Level	50,000 ft.	70,000 ft.	110,000 ft.
I	600	1,500	500	375	200
II	1,000	2,300	750	500	200

* Consult Amphenol, Sidney, NY for information on PC-SE and PC-CE types.
† Silver plated wire per MIL-C-26482

**This connector style is sometimes referred to as a cable connecting "plug". It does, however, mate with either a straight or 90 degree plug.

PC Service Classes

PC connectors are available in the service classes listed below. Each class except the hermetic seal receptacle has one or more means of terminating or supporting a cable or wire bundle.

"A"	General duty; back shell is threaded for conduit attachment of MS3057 cable clamp.
"A" (SR)	General duty; with strain relief clamp for cable or wire bundle support.
"C"	Pressurized receptacle; less than 1 cu. in. per hour leakage at 30 psi over a temperature range of –65°F to +257°F in accordance with BSC-C1P specification.
"E"	Environment resistant; with nut and grommet for moisture proofing individual wires.
"E" (SR)	Environment resistant strain relief clamp and grommet for moisture proofing individual wires; provides added wire bundle support.
"P"	Translucent nylon boot for retaining customer applied potting compounds; held in place by a threaded ring.
"P" (SR)	Strain relief clamp suitable for retaining customer applied potting compounds, with provision for wire support.
"W"	Compressing clamp and neoprene gland for moisture proofing multi-conductor jacketed cables. Telescoping sleeves (MS 3420A) can be used to adapt to cables smaller than minimum close down.
"H"*	Hermetically sealed with compression glass inserts.

*Refer to page 59 for Hermetic Versions.

"A" general duty

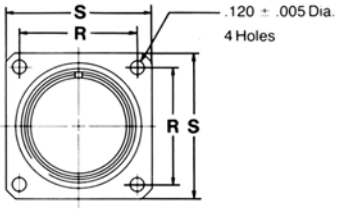
"E" (SR) strain relief

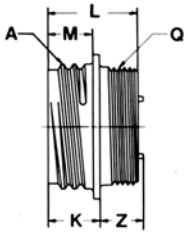
"E" open wire seal

"P" potting boot

"W" cable seal

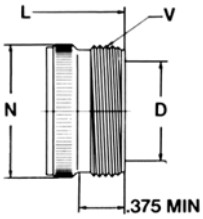
PC00
wall mounting receptacle





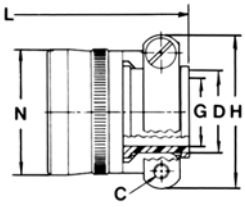
TERMINATION ASSEMBLIES

"A" General Duty/ "C" Pressurized



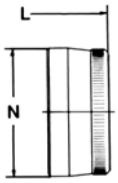
PC00A-XX-XXX
PC00C-XX-XXX

"A" (SR), "E" (SR), "P" (SR) Strain Relief



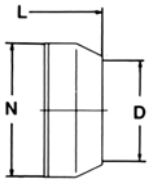
PC00A-XX-XXX (SR)
PC00E-XX-XXX (SR)

"E" Open Wire Seal



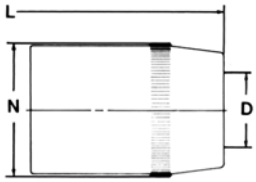
PC00E-XX-XXX

"P" Potting Boot



PC00P-XX-XXX

"W" Cable Seal



PC00W-XX-XXX

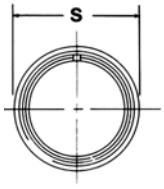
To complete part number see how to order on page 63.

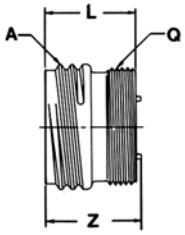
Shell Size	Receptacle Front View R ±.005	Receptacle Front View S ±.010	Receptacle Side View A Thread Class 2A	K Max.	L Max.	M +.000 −.010	Q Thread Class 2A	Z Max.	Class "A", "C" D Min.	Class "A", "C" L Max.	Class "A", "C" N Max.	Class "A", "C" V Thread Class 2A
6	.469	.688	.3750 DS	.490	.875	.416	.3125-32 NEF	.466	.175	1.528	.462	.3750-32 NEF
8	.594	.812	.5000 DS	.490	.875	.416	.4375-28 UNEF	.466	.297	1.528	.590	.5000-28 UNEF
10	.719	.938	.6250 DS	.490	.875	.416	.5625-24 NEF	.466	.421	1.528	.717	.6250-24 NEF
12	.812	1.031	.7500 DS	.490	.875	.416	.6875-24 NEF	.466	.546	1.528	.834	.7500-20 UNEF
14	.906	1.125	.8750 DS	.490	.875	.416	.8125-20 UNEF	.466	.663	1.528	.970	.8750-20 UNEF
16	.969	1.219	1.0000 DS	.490	.875	.416	.9375-20 UNEF	.466	.787	1.528	1.088	1.0000-20 UNEF
18	1.062	1.312	1.1250 DS	.490	.875	.416	1.0625-18 UNEF	.466	.879	1.528	1.216	1.1875-18 NEF
20	1.156	1.438	1.2500 DS	.584	1.031	.479	1.1875-18 NEF	.527	1.014	1.588	1.332	1.1875-18 NEF
22	1.250	1.562	1.3750 DS	.584	1.031	.479	1.3125-18 NEF	.527	1.135	1.588	1.460	1.4375-18 NEF

Shell Size	Class "A" (SR), "E" (SR), "P" (SR) C Thread	D Min.	G Dia.	H Max.	L Max.	N Max.	Class "E" L Max.	N Max.	Class "P" D Min.	L Max.	N Max.	Class "W" D Closed	D Free	L Max.	N Max.
6	–	–	–	–	–	–	1.250	.440	.192	1.406	.484	–	–	–	–
8	6-32	.240	.125	.812	1.922	.550	1.250	.560	.317	1.406	.608	.168	.230	1.680	.547
10	6-32	.302	.188	.875	1.922	.675	1.250	.685	.434	1.406	.734	.205	.312	1.680	.675
12	6-32	.428	.312	1.000	1.922	.803	1.250	.813	.548	1.406	.858	.338	.442	1.823	.812
14	6-32	.552	.375	1.125	1.922	.920	1.250	.930	.673	1.406	.984	.416	.539	2.015	.940
16	6-32	.615	.500	1.188	2.047	1.047	1.250	1.057	.798	1.406	1.110	.550	.616	2.231	1.067
18	8-32	.740	.625	1.438	2.078	1.165	1.250	1.175	.899	1.406	1.234	.600	.672	2.461	1.194
20	8-32	.740	.625	1.438	2.344	1.290	1.434	1.301	1.024	1.562	1.360	.635	.747	2.835	1.322
22	8-32	.928	.750	1.719	2.344	1.418	1.434	1.430	1.149	1.562	1.484	.670	.846	2.999	1.449

All dimensions for reference only.

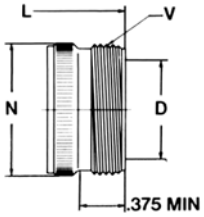
PC01
cable connecting receptacle





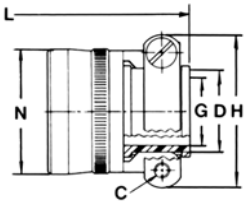
TERMINATION ASSEMBLIES

"A" General Duty



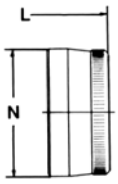
PC01A-XX-XXX

"A" (SR), "E" (SR), "P" (SR) Strain Relief



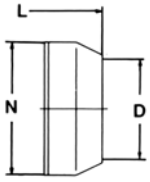
PC01A-XX-XXX (SR)
PC01E-XX-XXX (SR)
PC01P-XX-XXX (SR)

"E" Open Wire Seal



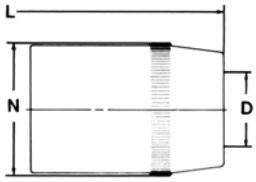
PC01E-XX-XXX

"P" Potting Boot



PC01P-XX-XXX

"W" Cable Seal



PC01W-XX-XXX

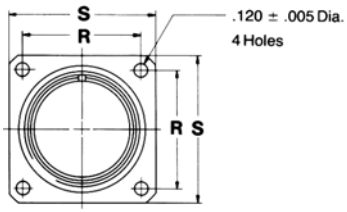
Note: This connector style is sometimes referred to as a cable connecting "plug".
It does, however, mate with either a straight or 90 degree plug.
To complete part number see how to order on page 63.

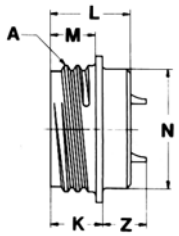
Shell Size	Recept. Front View	Receptacle Side View							
						Class "E"			
	S Max.	A Thread Class 2A	L Max.	Q Thread Class 2A	Z Max.	D Min.	L Max.	N Max.	V Thread Class 2A
6	.442	.3750 DS	.875	.3125-32 NEF	.924	.175	1.518	.462	.3750-32 NEF
8	.570	.5000 DS	.875	.4375-28 UNEF	.924	.297	1.518	.590	.5000-28 UNEF
10	.697	.6250 DS	.875	.5625-24 NEF	.924	.421	1.518	.717	.6250-24 NEF
12	.814	.7500 DS	.875	.6875-24 NEF	.924	.546	1.518	.834	.7500-20 UNEF
14	.950	.8750 DS	.875	.8125-20 UNEF	.924	.663	1.518	.970	.8750-20 UNEF
16	1.068	1.0000 DS	.875	.9375-20 UNEF	.924	.787	1.518	1.088	1.0000-20 UNEF
18	1.196	1.1250 DS	.875	1.0625-18 NEF	.924	.879	1.518	1.216	1.1875-18 NEF
20	1.312	1.2500 DS	1.031	1.1875-18 NEF	1.081	1.014	1.578	1.332	1.1875-18 NEF
22	1.440	1.3750 DS	1.031	1.3125-18 NEF	1.081	1.135	1.578	1.460	1.4375-18 NEF

Shell Size	Class "A" (SR), "E" (SR), "P" (SR)						Class "E"		Class "P"			Class "W"			
	C Thread	D Min.	G Dia.	H Max.	L Max.	N Max.	L Max.	N Max.	D Min.	L Max.	N Max.	D		L Max.	N Max.
												Closed	Free		
6	–	–	–	–	–	–	1.250	.440	.192	1.406	.484	–	–	–	–
8	6-32	.240	.125	.812	1.922	.550	1.250	.560	.317	1.406	.608	.168	.230	1.680	.547
10	6-32	.302	.188	.875	1.922	.675	1.250	.685	.434	1.406	.734	.205	.312	1.680	.675
12	6-32	.428	.312	1.000	1.922	.803	1.250	.813	.548	1.406	.858	.338	.442	1.823	.812
14	6-32	.552	.375	1.125	1.922	.920	1.250	.930	.673	1.406	.984	.416	.539	2.015	.940
16	6-32	.615	.500	1.188	2.047	1.047	1.250	1.057	.798	1.406	1.110	.550	.616	2.231	1.067
18	8-32	.740	.625	1.438	2.078	1.165	1.250	1.175	.899	1.406	1.234	.600	.672	2.461	1.194
20	8-32	.740	.625	1.438	2.344	1.290	1.434	1.301	1.024	1.562	1.360	.635	.747	2.835	1.322
22	8-32	.928	.750	1.719	2.344	1.418	1.434	1.430	1.149	1.562	1.484	.670	.846	2.999	1.449

All dimensions for reference only.

PC02
box mounting receptacle





PC02A-XX-XXX
*** PC02C-XX-XXX**
*** PC02E-XX-XXX**
*** PC02P-XX-XXX**
*** PC02W-XX-XXX**

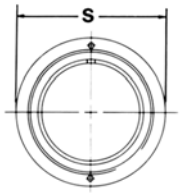
To complete part number see how to order on page 63.

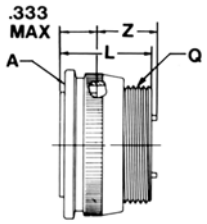
* The PC02 Box Mounting Receptacle is made only to complete a series and no provision is made for accessories or potting on the rear skirt.

Shell Size	Receptacle Front View		Receptacle Side View					
	R ±.005	S ±.010	A Thread Class 2A	K +.020 −.010	L Max.	M +.010 −.000	N Max.	Z Max.
6	.469	.688	.3750 DS	.469	.801	.406	.323	.466
8	.594	.812	.5000 DS	.469	.801	.406	.449	.466
10	.719	.938	.6250 DS	.469	.801	.406	.573	.466
12	.812	1.031	.7500 DS	.469	.801	.406	.699	.466
14	.906	1.125	.8750 DS	.469	.801	.406	.823	.466
16	.969	1.219	1.0000 DS	.469	.801	.406	.949	.466
18	1.062	1.312	1.1250 DS	.469	.801	.406	1.073	.466
20	1.156	1.438	1.2500 DS	.562	.988	.469	1.199	.527
22	1.250	1.562	1.3750 DS	.562	.988	.469	1.323	.527

All dimensions for reference only.

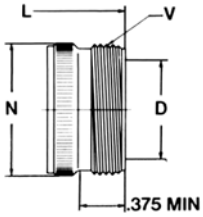
PC06
straight plug





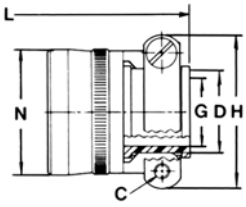
TERMINATION ASSEMBLIES

"A" General Duty



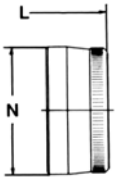
PC06A-XX-XXX

"A" (SR), "E" (SR), "P" (SR) Strain Relief



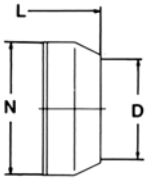
PC06A-XX-XXX (SR)
PC06E-XX-XXX (SR)
PC06P-XX-XXX (SR)

"E" Open Wire Seal



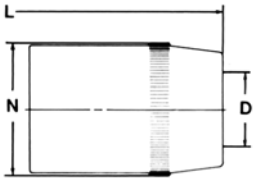
PC06E-XX-XXX

"P" Potting Boot



PC06P-XX-XXX

"W" Cable Seal



PC06W-XX-XXX

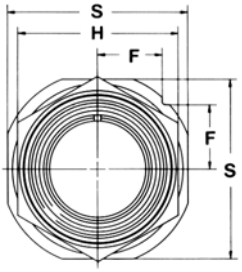
To complete part number see how to order on page 63.

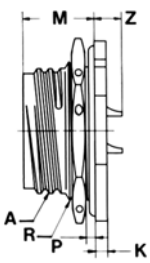
Shell Size	Plug Front View	Plug Side View							
						Class "A"			
	S Max.	A Thread Class 2B	L Max.	Q Thread Class 2A	Z Max.	D Min.	L Max.	N Max.	V Thread Class 2A
6	.604	.3750 DS	.875	.3125-32 NEF	.627	.175	1.534	.462	.3750-32 NEF
8	.729	.5000 DS	.875	.4375-28 UNEF	.627	.297	1.534	.590	.5000-28 UNEF
10	.854	.6250 DS	.875	.5625-24 NEF	.627	.421	1.534	.717	.6250-24 NEF
12	.979	.7500 DS	.875	.6875-24 NEF	.627	.546	1.534	.834	.7500-20 UNEF
14	1.104	.8750 DS	.875	.8125-20 UNEF	.627	.663	1.534	.972	.8750-20 UNEF
16	1.229	1.0000 DS	.875	.9375-20 UNEF	.627	.787	1.534	1.088	1.0000-20 UNEF
18	1.354	1.1250 DS	.875	1.0625-18 UNEF	.627	.879	1.534	1.216	1.1875-18 NEF
20	1.478	1.2500 DS	1.031	1.1875-18 NEF	.783	1.014	1.613	1.332	1.1875-18 NEF
22	1.604	1.3750 DS	1.031	1.3125-18 NEF	.783	1.135	1.613	1.460	1.4375-18 NEF

Shell Size	Class "A" (SR), "E" (SR), "P" (SR)						Class "E"		Class "P"			Class "W"			
	C Thread	D Min.	G Dia.	H Max.	L Max.	N Max.	L Max.	N Max.	D Min.	L Max.	N Max.	D		L Max.	N Max.
												Closed	Free		
6	–	–	–	–	–	–	1.250	.440	.192	1.406	.484	–	–	–	–
8	6-32	.240	.125	.812	1.906	.550	1.250	.560	.317	1.406	.608	.168	.230	1.680	.547
10	6-32	.302	.188	.875	1.906	.675	1.250	.685	.434	1.406	.734	.205	.312	1.680	.675
12	6-32	.428	.312	1.000	1.906	.803	1.250	.813	.548	1.406	.858	.338	.442	1.823	.812
14	6-32	.552	.375	1.125	1.906	.920	1.250	.930	.673	1.406	.984	.416	.539	2.015	.940
16	6-32	.615	.500	1.188	2.047	1.047	1.250	1.057	.798	1.406	1.110	.550	.616	2.231	1.067
18	8-32	.740	.625	1.438	2.078	1.165	1.250	1.175	.899	1.406	1.234	.600	.672	2.461	1.194
20	8-32	.740	.625	1.438	2.250	1.290	1.434	1.301	1.024	1.562	1.360	.635	.747	2.835	1.322
22	8-32	.928	.750	1.719	2.250	1.418	1.434	1.430	1.149	1.562	1.484	.670	.846	2.999	1.449

All dimensions for reference only

PC07
jam nut receptacle

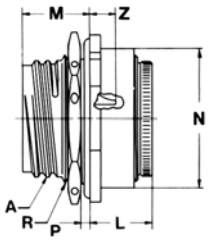




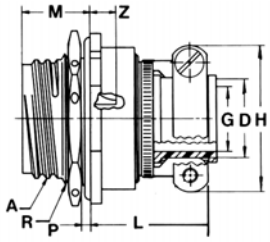
"A" General Duty/
"C" Pressurized Receptacle
PC07A-XX-XXX
PC07C-XX-XXX

TERMINATION ASSEMBLIES
"A" (SR), "E" (SR) Strain Relief

"E" Open Wire Seal

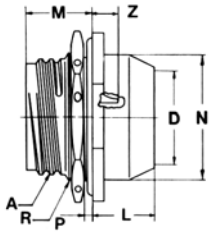


PC07E-XX-XXX



PC07A-XX-XXX (SR)
PC07E-XX-XXX (SR)

"P" Potting Boot



PC07P-XX-XXX

To complete part number see how to order on page 63.

Shell Size	Receptacle Front View			Receptacle Side View Class "A", "C"						
	F ±.010	H Hex ±.016	S ±.010	A Thread Class 2A	K +.016 −.010	M ±.010	P Panel Thickness Min.	P Panel Thickness Max.	R Thread Class 2A	Z Max.
6	.286	.625	.812	.3750 DS	.125	.671	.062	.125	.4375-28 UNEF	.232
8	.331	.750	.938	.5000 DS	.125	.671	.062	.125	.5625-24 NEF	.232
10	.375	.875	1.062	.6250 DS	.125	.671	.062	.125	.6875-24 NEF	.232
12	.442	1.062	1.250	.7500 DS	.125	.671	.062	.125	.8750-20 UNEF	.232
14	.486	1.188	1.375	.8750 DS	.125	.671	.062	.125	1.0000-20 UNEF	.232
16	.530	1.312	1.500	1.0000 DS	.125	.671	.062	.125	1.1250-18 NEF	.232
18	.573	1.438	1.625	1.1250 DS	.125	.671	.062	.125	1.2500-18 NEF	.232
20	.641	1.562	1.812	1.2500 DS	.156	.797	.062	.250	1.3750-18 NEF	.262
22	.685	1.688	1.938	1.3750 DS	.156	.797	.062	.250	1.5000-18 NEF	.262

Shell Size	Class "E"		Class "A" (SR), "E" (SR)					Class "P"		
	L Max.	N Max.	C Thread	G Dia.	H Max.	L Max.	P Min.	D Min.	L Max.	N Max.
6	.692	.605	–	–	–	–	–	.192	.665	.484
8	.692	.730	6-32	.125	.812	1.096	.240	.317	.665	.608
10	.692	.855	6-32	.188	.875	1.096	.302	.434	.665	.734
12	.692	.980	6-32	.312	1.000	1.096	.428	.548	.665	.858
14	.692	1.105	6-32	.375	1.125	1.096	.552	.673	.665	.984
16	.692	1.230	6-32	.500	1.188	1.228	.651	.798	.665	1.110
18	.692	1.355	8-32	.625	1.438	1.228	.740	.899	.665	1.234
20	.754	1.511	8-32	.625	1.438	1.291	.740	1.024	.790	1.360
22	.754	1.636	8-32	.750	1.625	1.291	.928	1.149	.790	1.484

All dimensions for reference only

PC
hermetic

Three shell styles are available in the hermetic PC series:

- **PCIH**
- **PC02H**
- **PC07H**

These hermetic connectors are available with solder cup pin or socket contacts. Other design characteristics of the PC hermetic connector series are as follows:

Shell Size: 6 thru 22. (tin plated)

Contact count: 2 through 61. Refer to page 66 for insert availability for hermetics.

Current: 5.0 amp, each #20 contact;
10 amp, each #16 contact;
17 amp, each #12 contact.

Contacts: Fabricated from high nickel alloy and tin plated.

Dielectric Withstanding Voltage (sea level):
1500 volts (RMS) 60 cps Service Rating I;
2300 volts (RMS) 60 cps Service Rating II.

Compression glass inserts, permanently lettered.

Helium Leakage: Less than 1.0 X 10^{-6} cc/sec.
at 15 psi differential.

Physical Shock: 100 G's.

Vibration: Exceeds MIL-E-5272 Procedure II.

Thermal Shock: No deterioration or failure after 5 cycles at –55 °F to +257°F.

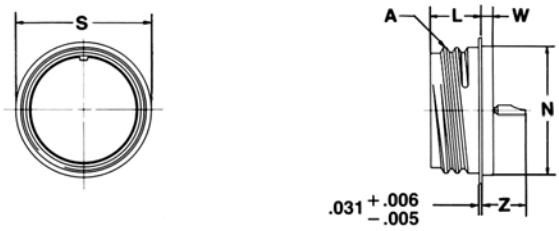
Refer to pages 66-71 for insert arrangement availability.

solder mounting receptacle

box mounting receptacle

jam nut receptacle

PCIH
hermetic solder mounting receptacle



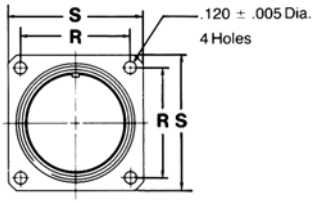
*** PCIH-XX-XXX**
**** PCIY-XX-XXX**

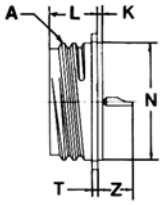
To complete part number see how to order on page 63.
* Solder cup pin contacts without interfacial seal.
** Solder cup pin contacts with interfacial seal

Shell Size	Receptacle Front View	Receptacle Side View				
	S Dia. Max.	A Thread Class 2A	L +.025 −.016	N Dia. +.000 −.005	W +.011 −.010	Z Max.
6	.511	.3750 DS	.422	.438	.094	.387
8	.636	.5000 DS	.422	.562	.094	.387
10	.761	.6250 DS	.422	.672	.094	.387
12	.855	.7500 DS	.422	.781	.094	.387
14	.980	.8750 DS	.422	.906	.094	.387
16	1.105	1.0000 DS	.422	1.031	.094	.387
18	1.229	1.1250 DS	.422	1.156	.094	.387
20	1.323	1.2500 DS	.422	1.250	.094	.387
22	1.439	1.3750 DS	.422	1.375	.125	.418

All dimensions for reference only.

PC02H
hermetic box mounting receptacle





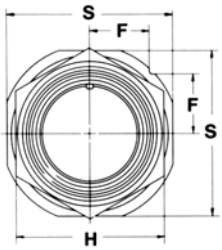
*** PC02H-XX-XXX**
**** PC02Y-XX-XXX**

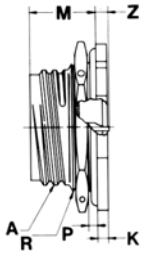
To complete part number see how to order on page 63.
* Solder cup pin contacts without interfacial seal.
** Solder cup pin contacts with interfacial seal

Shell Size	Receptacle Front View		Receptacle Side View					
	R ±.005	S ±.010	A Thread Class 2A	K ±.016	L +.010 –.000	N Dia. +.000 –.005	T ±.010	Z Max.
6	.469	.688	.3750 DS	.047	.469	.438	.062	.344
8	.594	.812	.5000 DS	.047	.469	.562	.062	.344
10	.719	.938	.6250 DS	.047	.469	.672	.062	.344
12	.812	1.031	.7500 DS	.047	.469	.781	.062	.344
14	.906	1.125	.8750 DS	.047	.469	.906	.062	.344
16	.969	1.219	1.0000 DS	.047	.469	1.031	.062	.344
18	1.062	1.312	1.1250 DS	.047	.469	1.156	.062	.344
20	1.156	1.438	1.2500 DS	.047	.469	1.250	.062	.344
22	1.250	1.562	1.3750 DS	.078	.469	1.375	.062	.377

All dimensions for reference only.

PC07H
hermetic jam nut receptacle





*** PC07H-XX-XXX**
**** PC07Y-XX-XXX**

To complete part number see how to order on page 63.
* Solder cup pin contacts without interfacial seal.
** Solder cup pin contacts with interfacial seal

Shell Size	Receptacle Front View			Receptacle Side View						
	F +.010	H Hex. ±.016	S +.010	A Thread Class 2A	K +.000 −.016	M ±.020	Panel Thickness Min	Panel Thickness Max.	R Thread Class 2A	Z +.010
6	.286	.625	.812	.3750 DS	.094	.671	.062	.125	.4375-28 UNEF	.129
8	.331	.750	.938	.5000 DS	.094	.671	.062	.125	.5625-24 NEF	.129
10	.375	.875	1.062	.6250 DS	.094	.671	.062	.125	.6875-24 NEF	.129
12	.442	1.062	1.250	.7500 DS	.094	.671	.062	.125	.8750-20 UNEF	.129
14	.486	1.188	1.375	.8750 DS	.094	.671	.062	.125	1.0000-20 UNEF	.129
16	.530	1.312	1.500	1.0000 DS	.094	.671	.062	.125	1.1250-18 NEF	.129
18	.573	1.438	1.625	1.1250 DS	.094	.671	.062	.125	1.2500-18 NEF	.129
20	.641	1.562	1.812	1.2500 DS	.125	.797	.062	.250	1.3750-18 NEF	.034
22	.685	1.688	1.938	1.3750 DS	.125	.797	.062	.250	1.5000-18 NEF	.034

All dimensions for reference only.

PC
how to order

PC, PC-SE*, PC-CE*

To more easily illustrate ordering procedure, part number PC00A-20-41PW (SR) is shown as follows:

PC	00	A	–	20	–	41	P	W	(SR)
1	2	3		4		5	6	7	8

See code below:

1. Connector Type
   "PC" designates bright cadmium plated with clear chromate after treatment, threaded coupling connector
2. Shell Style
   "00" designates wall mounting receptacle
   "01" designates cable connecting receptacle†
   "02" designates box mounting receptacle
   "06" designates straight plug
   "07" designates jam nut receptacle
   "I" designates solder-mount receptacle (hermetic only)
3. Service Class
   "A" designates general duty back shell
   "C" designates pressurized receptacle
   "E" designates environmental resisting open wire seal with grommet and nut
   "P" designates potted with potting boot
   "W" designates clamp assembly for moisture proofing, multi-jacketed cables
   "H" designates hermetic** seal (without interfacial seal)
   "Y" designates hermetic** seal (with interfacial seal)
4. Shell Size
   "20" designates shell size. Shell sizes 6 through 24 available.
5. Insert Arrangement
   "20 – 41" designates insert arrangement. Refer to pages 66-71 for insert availability.
6. Contacts
   "P" designates pin contacts.
   "S" designates socket contacts.
7. Insert Rotation
   "W", "X", "Y", "Z" designate that insert is rotated in its shell from the "normal" position. No letter required for normal (no rotation) position.
8. "(SR)" designates strain relief clamp.
   Indicate optional finishes as follows:
   (001) bright cadmium (standard on "PC")
   (003) olive drab cadmium plate
   (005) anodic coating - Alumilite®
   (011) chromate treated (Iridite 14-2)
   (014) olive drab cadmium plate over nickel
   (023) electroless nickel

* Consult Amphenol, Sidney, NY for availability.
** Hermetic connectors are supplied with tin plated shells.
† This connector style is sometimes referred to as a cable connecting "plug". It does, however, mate with either a straight or 90 degree plug.

Miniature Cylindrical
specials

breakaway twist pull

geophysical miniature

filter

QDP

“Breakaway Twist Pull”

Designed to provide quick disconnect of connector plug and receptacle with an axial pull, the breakaway concept incorporates MIL-C-26482 receptacles with specially designed plugs with a release mechanism. Mating is accomplished in normal fashion while disconnect is by an axial pull on the coupling nut via lanyard or other means, or by manual rotation.

Catalog 12-160

Geophysical Miniature Cylindrical

Designed for the Geophysical Industry’s rugged environments, the Amphenol® Geophysical Series connector has custom features that provide reliability in extreme temperature and moisture conditions.
The unique shell design provides stronger shells along with an anodized (nonconductive) finish for greater salt, corrosion and abrasion resistance Coupling nuts are manufactured with round detent holes and are sold separately for greater customer flexibility.

Product Data Sheet No. 146

Filter

Designed to provide EMI protection for sensitive circuits, each circuit is individually filtered within the connector, eliminating the need for costly and bulky exterior network filters. Filter contacts are available in MF, HF, VHF and UHF ranges and are intermateable and intermountable with MIL-C-26482 connectors.

Catalog 12-120

QDP

Amphenol® QDP connectors utilize the contact size and density of the Miniature cylindrical PT-SE Series and the ruggedness of the QWLD types. The QDP combines desirable environmental, electrical and mechanical features of both types. Specifically, PT-SE standard inserts (sizes 10 through 24), are put in QWLD type shells. Accessories other than protection caps are identical with those listed in the QWLD catalog section (12-052).

Product Data Sheet 65

Miniature Cylindrical
insert arrangements, accessories and tools

Amphenol® Miniature Cylindrical
insert availability

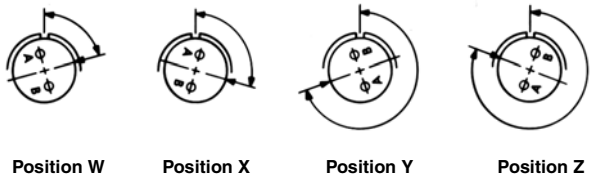
Insert Arrangement	MS/PT	PT	SP	PC	Hermetic PT MS-PT PC	MS/PT-SE PT-SE SP-SE PC-SE	PT-CE SP-CE PC-CE	PTS-DR MS/PTS-DR	Total Contacts	Contact Size					
										20	16	12	Coax 12	Coax 8	Service Rating
6-1		X	X	X	X*				1	1					I
8-2	X	X	X	X	X		X		2	2					I
8-3	X	X	X	X	X		X		3	3					I
8-4	X	X	X	X	X		X		4	4					I
8-33		X	X	X	X	X		X	3	3					I
8-98		X	X	X				X	3	3					I
10-5		X	X	X	X*				5	5					I
10-6	X	X	X	X	X	X	X	X	6	6					I
10-98	X	X	X	X	X*		X		6	6					I
12-3	X	X	X	X	X	X	X	X	3		3				II
12-4		X			X*				4		4				I
12-8	X	X	X	X	X*	X	X	X	8	8					I
12-10	X	X	X	X	X	X	X	X	10	10					I
12-14		X	X	X					14	14					I
14-4								X	4			4			I
14-5	X	X	X	X	X	X	X	X	5		5				II
14-12	X	X	X	X	X	X	X	X	12	8	4				I
14-15	X	X	X	X	X	X	X	X	15	14	1				I
14-18	X	X	X	X	X*	X	X	X	18	18					I
14-19	X	X	X	X	X	X	X	X	19	19					I
14-22						X*			5	1		4			I
14-91 HV		X	X	X		X*			3	3					**
16-8	X	X	X	X	X	X	X	X††	8		8				II
16-23	X	X	X	X		X	X	X††	23	22	1				I
16-26	X	X	X	X	X	X	X	X	26	26					I
16-76†††						X*			14	8		1	5		***
16-99	X	X	X	X		X			23	21	2				I
18-5		X	X	X		X*			5			5			II
18-8								X††	8			8			I
18-11	X	X	X	X	X	X	X	X	11		11				II
18-30	X	X	X	X	X*	X	X		30	29	1				I
18-32	X	X	X	X	X	X	X	X	32	32					I
18-71						X*			9		8			1	Coax
18-76							X		4				3	1	II
18-80		X	X	X			X		8	6				2	II
18-91 HV						X*	X		6	6					**
20-16	X	X	X	X	X	X	X	X	16		16				II
20-24	X	X	X	X					24	24					I
20-25		X	X	X					25	25					I
20-27	X	X	X	X			X		27	27					I
20-39	X	X	X	X	X	X	X	X	39	37	2				I
20-41	X	X	X	X	X	X	X	X	41	41					I
20-70							X		14	10				4	Coax
20-90 HV		X	X	X					7	7					I
22-7		X	X	X		X*			7					7	I
22-21	X	X	X	X	X	X	X	X	21		21				II
22-25						X*			25		25				I
22-32	X	X	X	X			X		32	32					I
22-34	X	X	X	X			X		34	34					I
22-36		X	X	X			X		36	36					I
22-41	X	X	X	X	X	X	X	X	41	27	14				I
22-55	X	X	X	X	X	X	X	X	55	55					I
22-71							X		9	2				7	Coax
22-78†††						X*			7					7	Coax
22-96						X*			7			7†			II
24-31		X	X	X			X	X	31		31				I
24-61	X	X	X	X	X	X	X	X	61	61					I

* Not available in MS version
** Flashover voltage 5,000 VAC (RMS)
*** 1500 VAC (RMS)
† Size 12 contacts for #10 wire
†† Not presently tooled
††† Contacts must be ordered separately

Amphenol® Miniature Cylindrical
alternate positioning

To avoid cross-plugging problems in applications requiring the use of more than one miniature cylindrical connector of the same size and arrangement, alternate insert rotations are available as indicated in the accompanying chart.

As shown in the diagram below, the front face of the pin insert is rotated within the shell in a clockwise direction from the normal shell key. The socket insert would be rotated counterclockwise the same number of degrees in respect to the normal shell key.



Position W Position X Position Y Position Z

Views looking into front face of pin insert or rear of socket insert.

Insert Rotation					
Shell Size	Insert Arrangement	Degrees			
		W	X	Y	Z
6	6-1	–	–	–	–
8	8-2*	58	122	–	–
8	8-3	60	210	–	–
8	8-4*	45	–	–	–
8	8-33*	90	–	–	–
8	8-98	–	–	–	–
10	10-5*	45	151	180	270
10	10-6*	90	–	–	–
10	10-98*	90	180	240	270
12	12-3*	–	–	180	–
12	12-4*	38	–	–	–
12	12-8	90	112	203	292
12	12-10*	60	155	270	295
12	12-14	–	–	–	–
14	14-4*	45	–	–	–
14	14-5*	40	92	184	273
14	14-12*	43	90	–	–
14	14-15*	17	110	155	234
14	14-18*	15	90	180	270
14	14-19*	30	165	315	–
14	14-22	45	–	–	–
14	14-91	–	60	–	–
16	16-8*	54	152	180	331
16	16-23	158	270	–	–
16	16-26*	60	–	275	338
16	16-76	–	–	–	–
16	16-99*	66	156	223	340
18	18-5	55	97	263	315
18	18-8	180	–	–	–
18	18-11*	62	119	241	340
18	18-30*	180	193	285	350
18	18-32*	85	138	222	265
18	18-71	18	108	127	215
18	18-76	–	–	–	–
18	18-80	45	90	135	160
18	18-91HV	90	180	240	270
20	20-16*	238	318	333	347
20	20-24	70	145	215	290
20	20-25	72	144	216	288
20	20-27	72	144	216	288
20	20-39*	63	144	252	333
20	20-41*	45	126	225	–
20	20-70	63	135	222	335
20	20-90	45	135	225	315
22	22-7	19	41	–	–
22	22-21*	16	135	175	349
22	22-25	60	125	211	336
22	22-32	72	145	215	288
22	22-34	62	142	218	298
22	22-36	72	144	216	288
22	22-41	39	135	264	–
22	22-55*	30	142	226	314
22	22-71	33	191	236	270
22	22-78	19	41	–	–
22	22-96*	19	41	–	–
24	24-31	90	225	255	–
24	24-61*	90	180	270	324

* Available in Hermetic Class

Amphenol® Miniature Cylindrical
insert arrangements

front face of pin inserts illustrated






Insert Arrangement	**6-1**	**8-2**	**8-3**	**8-4**	**8-33**	**8-98**
Service Rating	**I**	**I**	**I**	**I**	**I**	**I**
Number of Contacts	**1**	**2**	**3**	**4**	**3**	**3**
Contact Size	**20**	**20**	**20**	**20**	**20**	**20**






Insert Arrangement	**10-5**	**10-6**	**10-98**	**12-3**	**12-4**	**12-8**
Service Rating	**I**	**I**	**I**	**II**	**I**	**I**
Number of Contacts	**5**	**6**	**6**	**3**	**4**	**8**
Contact Size	**20**	**20**	**20**	**16**	**16**	**20**




Insert Arrangement	**12-10**	**12-14**	**14-4**	**14-5**
Service Rating	**I**	**I**	**I**	**II**
Number of Contacts	**10**	**14**	**4**	**5**
Contact Size	**20**	**20**	**12**	**16**

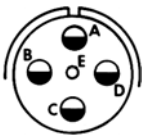



Insert Arrangement	**14-12**	**14-15**	**14-18**	**14-19**
Service Rating	**I**	**I**	**I**	**I**
Number of Contacts	**8 4**	**14 1**	**18**	**19**
Contact Size	**20 16**	**20 16**	**20**	**20**

For contact legend see page 71.

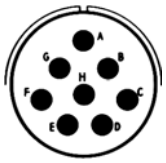
Amphenol® Miniature Cylindrical
insert arrangements

front face of pin inserts illustrated



Insert Arrangement	**14-22**
Service Rating	**I**
Number of Contacts	**1 4**
Contact Size	**20 12**

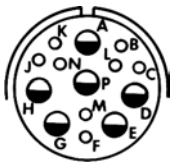
Insert Arrangement	**14-91 HV**
Service Rating	**Flashover 5,000 VAC (RMS)**
Number of Contacts	**3**
Contact Size	**20**



Insert Arrangement	**16-8**
Service Rating	**II**
Number of Contacts	**8**
Contact Size	**16**

Insert Arrangement	**16-23**
Service Rating	**I**
Number of Contacts	**22 1**
Contact Size	**20 16**

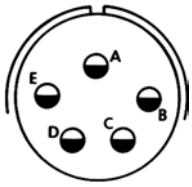
Insert Arrangement	**16-26**
Service Rating	**I**
Number of Contacts	**26**
Contact Size	**20**



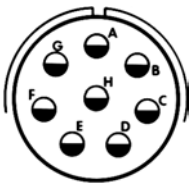
Insert Arrangement	**16-76**
Service Rating	**Flashover 1.500 VAC (RMS)**
Number of Contacts	**8 1 5**
Contact Size	**20 12* 12 Coax***

*Contact Positions Optional

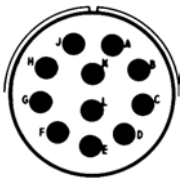
Insert Arrangement	**16-99**
Service Rating	**I**
Number of Contacts	**21 2**
Contact Size	**20 16**



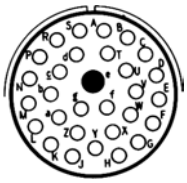
Insert Arrangement	**18-5**
Service Rating	**II**
Number of Contacts	**5**
Contact Size	**12**



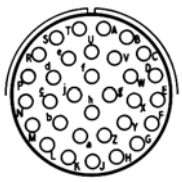
Insert Arrangement	**18-8**
Service Rating	**I**
Number of Contacts	**8**
Contact Size	**12**



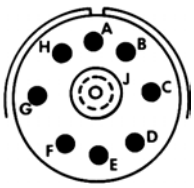
Insert Arrangement	**18-11**
Service Rating	**II**
Number of Contacts	**11**
Contact Size	**16**



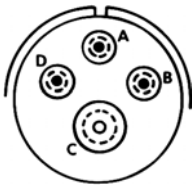
Insert Arrangement	**18-30**
Service Rating	**I**
Number of Contacts	**29 1**
Contact Size	**20 16**



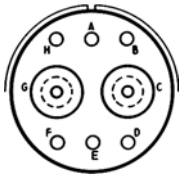
Insert Arrangement	**18-32**
Service Rating	**I**
Number of Contacts	**32**
Contact Size	**20**



Insert Arrangement	**18-71**
Service Rating	**Coax**
Number of Contacts	**1 8**
Contact Size	**8 Coax 16**



Insert Arrangement	**18-76**
Service Rating	**II**
Number of Contacts	**3 1**
Contact Size	**12 Coax 8 Coax**

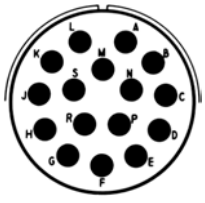


Insert Arrangement	**18-80**
Service Rating	**II A, B, D, E, F, H**
Number of Contacts	**6 2**
Contact Size	**20 8 Coax**

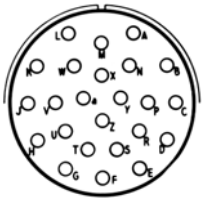
Insert Arrangement	**18-91 HV**
Service Rating	**Flashover 5,000 VAC (RMS)**
Number of Contacts	**6**
Contact Size	**20**

Amphenol® Miniature Cylindrical
insert arrangements

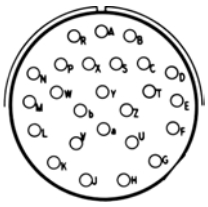
front face of pin inserts illustrated



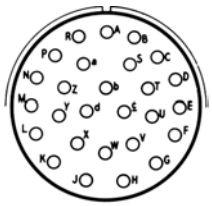
Insert Arrangement	**20-16**
Service Rating	**II**
Number of Contacts	**16**
Contact Size	**16**



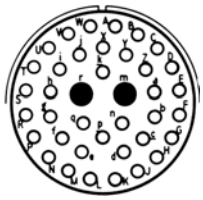
Insert Arrangement	**20-24**
Service Rating	**I**
Number of Contacts	**24**
Contact Size	**20**



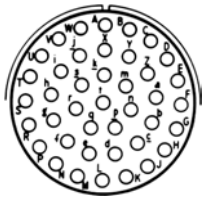
Insert Arrangement	**20-25**
Service Rating	**I**
Number of Contacts	**25**
Contact Size	**20**



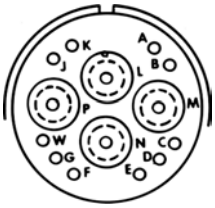
Insert Arrangement	**20-27**
Service Rating	**I**
Number of Contacts	**27**
Contact Size	**20**



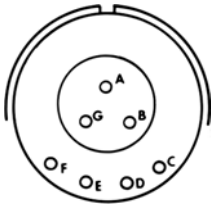
Insert Arrangement	**20-39**
Service Rating	**I**
Number of Contacts	**37 2**
Contact Size	**20 16**



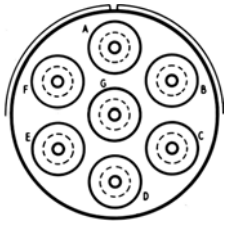
Insert Arrangement	**20-41**
Service Rating	**I**
Number of Contacts	**41**
Contact Size	**20**



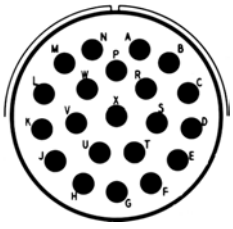
Insert Arrangement	**20-70**
Service Rating	**Coax**
Number of Contacts	**10 4**
Contact Size	**20 8 Coax**



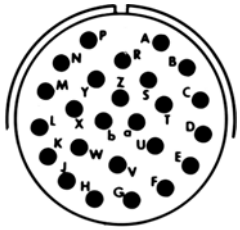
Insert Arrangement	**20-90**
Service Rating	**I**
Number of Contacts	**7**
Contact Size	**20**



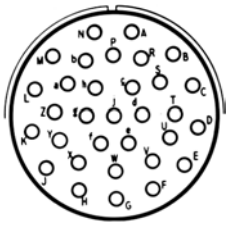
Insert Arrangement	**22-7**
Service Rating	**I**
Number of Contacts	**7**
Contact Size	**8 Coax**



Insert Arrangement	**22-21**
Service Rating	**II**
Number of Contacts	**21**
Contact Size	**16**



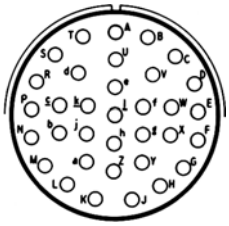
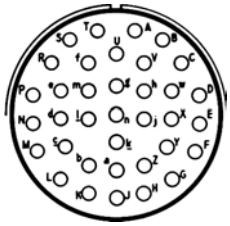
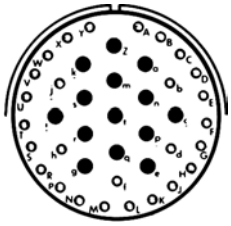
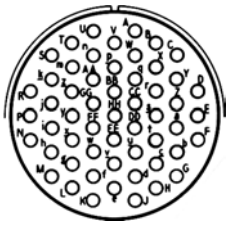
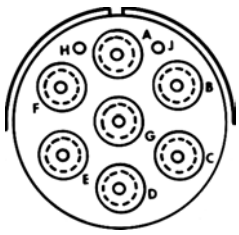
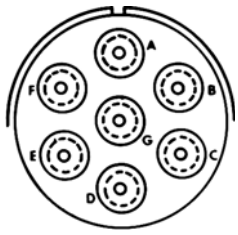
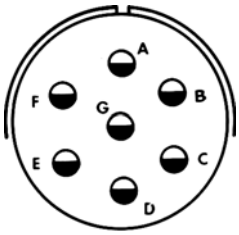
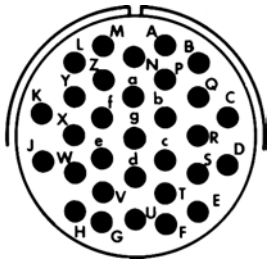
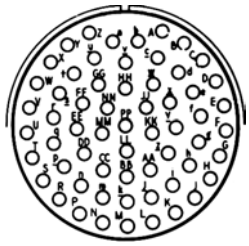
Insert Arrangement	**22-25**
Service Rating	**I**
Number of Contacts	**25**
Contact Size	**16**



Insert Arrangement	**22-32**
Service Rating	**I**
Number of Contacts	**32**
Contact Size	**20**

Amphenol® Miniature Cylindrical
insert arrangements

front face of pin inserts illustrated

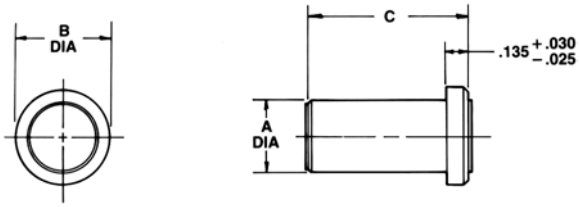
			
Insert Arrangement	**22-34**	**22-36**	**22-41**
Service Rating	**I**	**I**	**I**
Number of Contacts	**34**	**36**	**27 14**
Contact Size	**20**	**20**	**20 16**
			
Insert Arrangement	**22-55**	**22-71**	**22-78**
Service Rating	**I**	**Coax**	**I**
Number of Contacts	**55**	**2 7**	**7**
Contact Size	**20**	**20 8 Coax**	**8 Coax**
			
Insert Arrangement	**22-96**	**24-31**	**24-61**
Service Rating	**II**	**I**	**I**
Number of Contacts	**7**	**31**	**61**
Contact Size	**12 for #10 wire**	**16**	**20**

Contact Legend

Symbol	Contact Size
	20
	16
	12
	HV
	12 Coax
	8 Coax

PTS-DR, PT, SP, PC

accessories – sealing plugs, flange gaskets, potting boots

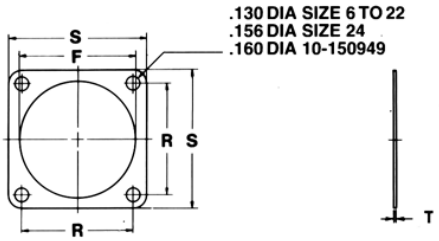


SEALING PLUG
MS27488-XX
10-405996-XX

SEALING PLUGS – FOR PTS-DR, 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.

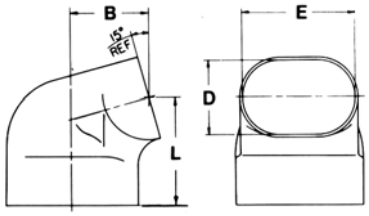


MOUNTING FLANGE GASKET
10-101949-XX
10-150949-XX

MOUNTING FLANGE GASKETS – FOR PT, SP, PC

Shell Size	PT, PC 10-101949 R ±.010	PT, PC 10-101949 S ±.010	SP 10-150949 R ±.010	SP 10-150949 S ±.010	PT, SP, PC 10-101949 10-150949 F +.016 −.000	PT, SP, PC 10-101949 10-150949 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 BOOT
10-101988-XX

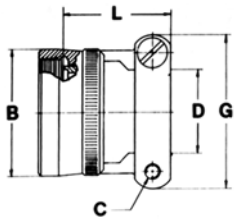
75° POTTING BOOTS – FOR PT, SP, PC

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



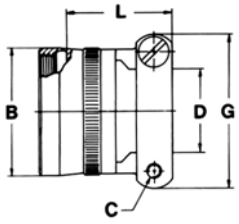
CLASS "E" STRAIN RELIEF CLAMP
10-101971-XX

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.



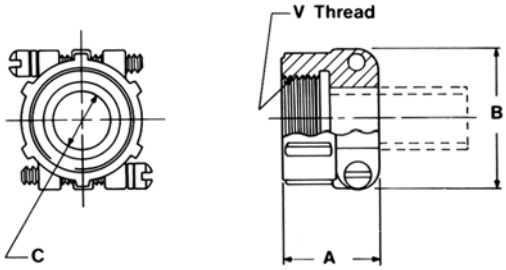
CLASSES "A" & "P" STRAIN RELIEF CLAMP
10-101980-XX

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 CLAMP
97-3057-XXXX

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

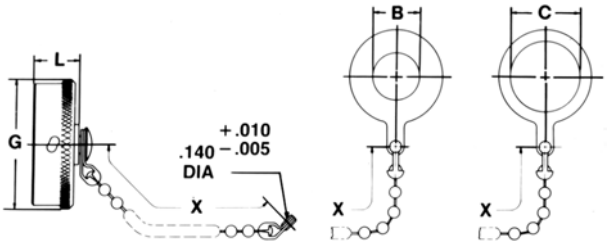
Shell Size	Amphenol® Part Number	A ±.031	B Max.	C Dia. Min.	V Thread
10	97-3057-1004	.795	.842	.3125	.6250-24
12	97-3057-1007	.850	.995	.4375	.7500-20
14	97-3057-1008	.920	1.120	.5625	.8750-20
16	97-3057-1010	.920	1.216	.6250	1.0000-20
18/20	97-3057-1012	.927	1.403	.7500	1.1875-18
22/24	97-3057-1016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

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 Recept.)

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 Ref. RA, CA, NA	X Ref. 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®

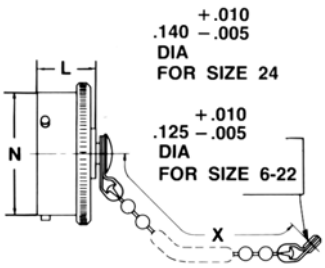
Proprietary caps are supplied with standard bead chains only (as shown in drawing at left). For other chain options, an MS version cap should be ordered.

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 black 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 ±.250 CA, RA	X 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 -CA for sash chain
-CAL for long sash chain
-RA for rope chain
-RAL for long rope chain

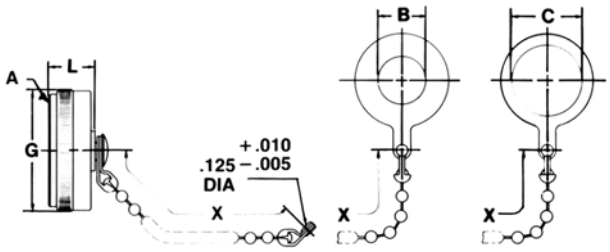
Shell size

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

† 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 (Wall Receptacle) **10-101951-XXX (Cable Connecting Recept.)** **10-101956-XXX (Jam Nut Receptacle)**

RECEPTACLE PROTECTION CAPS – FOR PC

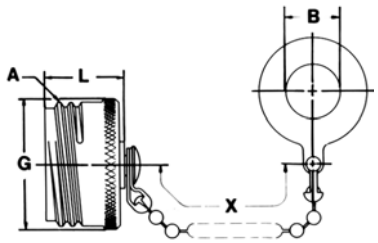
Shell Size	A Thread Class 2B	B Dia. +.010 –.000	C Dia. +.010 –.000	G Max.	L Max.	X ±.250
6	.3750 DS	.328	.454	.520	.448	3.000
8	.5000 DS	.454	.578	.648	.448	3.000
10	.6250 DS	.578	.703	.776	.448	3.000
12	.7500 DS	.703	.891	.902	.448	3.500
14	.8750 DS	.844	1.016	1.030	.448	3.500
16	1.0000 DS	.969	1.141	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 Alumilite®

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 Alumilite®

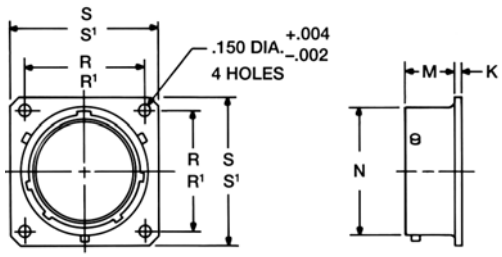
Caps for PC connectors are supplied only in proprietary versions with standard bead chains only (as shown in drawing at left).

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

All dimensions for reference only.

PT, SP, PC

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



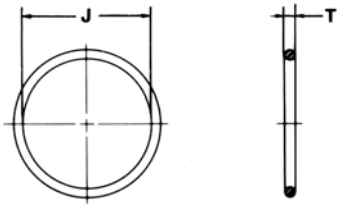
DUMMY RECEPTACLE
FOR PT, SP, MS/PT CONNECTORS
MS3115-XXX
10-150921-XXX

DUMMY RECEPTACLES – FOR PT, SP, MS/PT

Shell Size	K ±.010	M +.030 −.000	N +.001 −.005	Proprietary Version R ±.005	Proprietary Version S ±.010	MS Version R[1] (TP)	MS Version S[1] (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†
  - “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†
  - -A designates Alumilite®
  - -L designates electroless nickel
  - -W designates olive drab cadmium



NEOPRENE “O” RING
FOR PC CONNECTORS
10-101937-XX

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 PTS-DR

Shell Size	Plug Plastic Dust Cap	Receptacle Plastic Dust Cap
8	10-70506-12	10-70506-10S
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	10-70506-22
22	10-70524-1	10-70506-24
24	10-70506-28	10-70576-24

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
"DR", "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.

CRIMPING TOOLS

FOR PTS-DR (MIL-C-26482, Series 2) Connectors

Contact Size	MS Tool Part Number	
	Tool Frame	Turret Head
20	M22520/1-01	M22520/1-02
20	M22520/2-01	M22520/2-02
16	M22520/1-01	M22520/1-02
12	M22520/1-01	M22520/1-02

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 PTS-DR (MIL-C-26482, Series 2) Connectors

Contact Size	Insertion/Removal Tool		
	Amphenol® Part Number	Color Code†	Military Part Number
20	10-538988-201	red/white	M81969/14-11
16	10-538988-16	blue/white	M81969/14-03
12	10-538988-12	yellow/white	M81969/14-04

† White end of tool is for removal

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	–	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
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 2 (PTS-DR) Connectors

Contact Size	Pins			Sockets		
	MS Number	Amphenol® Proprietary Number	Supersedes MS Number	MS Number	Amphenol® Proprietary Number	Supersedes MS Number
20	M39029/4-110	LP-497006-205	M39029/4-20-20	M39029/5-115	LP-597805-355	M39029/5-20-20
16	M39029/4-111	10-497006-165	M39029/4-16-16	M39029/5-116	10-597253-161	M39029/5-16-16
12	M39029/4-113	10-807300-125	M39029/4-12-12	M39029/5-118	10-807301-125	M39029/5-12-12

Complete instructions for providing reliable crimped wire to contact terminations and inserting crimp contacts in MIL-C-26482, Series 2 Connectors are available in Publication L-1033.

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

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

* PT-SE/SP-SE size 20 contact accommodating size 16 AWG wire.
** PT-SE/SP-SE size 16 contact accommodating size 20 AWG wire.
*** PT-SE/SP-SE size 12 contact accommodating size 10 AWG wire.

CRIMP CONTACTS for PT-CE (Proprietary) Connectors

Contact Size	Pins	Sockets
	Amphenol® Proprietary Number	Amphenol® Proprietary Number
20	10-189000-20F	10-597817-351
20-16†	10-195962-20F	10-195963-20F
16	10-189004-16F	10-189006-16F

† PT-CE size 20 contact accommodating size 16 AWG wire.

THERMOCOUPLE CONTACTS for Miniature Connectors

Size	Material	Pins Proprietary Part Number		Sockets Proprietary Part Number	
		CE	SE	CE	SE
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.