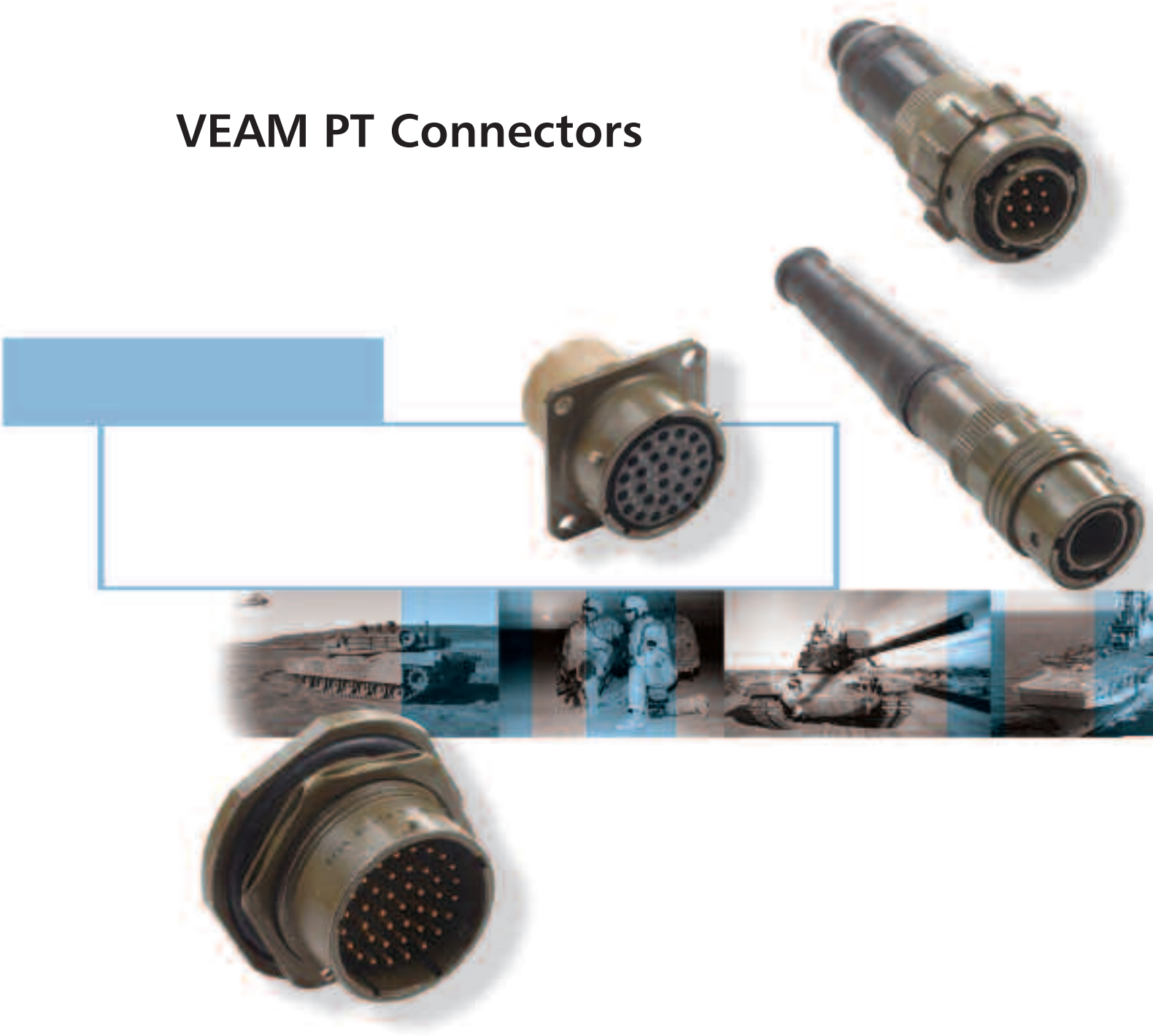
ITT

Electronic Components

# VEAM PT Connectors



*Engineered for life*

## Rack & Panel Connectors

ITT is the world leader in rack and panel connectors, offering unmatched variety of shell configurations and insert arrangements, materials, plating and contact options. Many of our standard and custom designs meet the stringent requirements of ARINC 600, ARINC 404 (MIL-C-81659), and MIL-DTL-83733 standards.

**www.ittcannon.com/rackandpanel**

## Circular/Filter/Hermetic Connectors

As a world leader in circular, filter and hermetic connectors, ITT can leverage its design and manufacturing expertise to fit virtually any application. Our expertise includes fast positive mating for a wide range of military applications, as well as numerous sizes and contact configuration for various harsh environments. ITT can also meet numerous specs, including NATO and MIL standards.

**www.ittcannon.com/circulars • www.ittcannon.com/filter • www.ittcannon.com/hermetics**

## D-Subminiature Connectors

Cannon invented D-sub connectors in 1952. Our family of D-Subs now includes combinations of signal, power and RF, as well as severe service sealed connectors. Cannon D-Subs are available with an extensive line of backshells and accessories and are one of the most economical shielded connector solutions available. Qualified to the MIL-DTL-24308 specification.

**www.ittcannon.com/dsubs**

## Fiber Optic Connectors and Cable Assemblies

Cannon fiber optic solutions provide an excellent performance/cost value. Performance can be tailored to the end system, and our use of superior materials and bonding agents provides highly effective solutions. Our wide variety of products includes fiber optic hybrid contacts, multi-channel, rack and panel, and hi-rel assemblies, including MIL and ARINC standard solutions.

**www.ittcannon.com/fiberoptics**

## Microminiature Connectors

Cannon microminiature connectors offer high performance and reliability with exceptional versatility. Available in rectangular, circular and strip configurations for countless applications, many of our connectors meet or exceed applicable requirements of the MIL-DTL-83513 specification.

**www.ittcannon.com/micro**

ITT's Electronic Components business (**www.ittcannon.com**) is an international supplier of connectors, interconnects, cable assemblies, I/O card kits and smart card systems. As a worldwide leader in connector technology for nearly a century, ITT offers one of the industry's broadest product offerings, manufacturing capability worldwide, fast time to market, high volume/high yield capacity, robust design and Value-Based Product Development and an extensive sales and customer support network.

ITT

## Company History

The Company was originally founded in 1955 by Thorn Electrical Industries as a specialist component manufacturer, and following an alliance with the Bendix Connector Division, Thorn Bendix was formed to lead the development of a variety of electrical connectors including the PT/PTSE range. In 1986 the company was acquired by FKI plc and in 1993 the Company was bought by the management team, becoming TEC Ltd, and processes expanded into the supply of specialized harnesses and assemblies.

In October 1999 the Company was acquired by LITTON INDUSTRIES as part of the VEAM Connector Operations Group and was subsequently sold to ITT Industries in 2003 and became part of the ITT Electronic Components Group.

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# VEAM PT Connectors

## Features and Benefits

Originally designed and manufactured by VEAM/TEC and now part of the ITT range, these connectors are made to the highest standards within the company's EN ISO 9001 quality systems. These multiple contact connectors offer equipment designers a high quality, miniature bayonet coupling connection whose components are already well established in the military markets such as fighting vehicles and communications. They are equally suitable for industrial applications where high reliability and cost effectiveness are prime requirements and the extensive range offers a compact, lightweight yet rugged solution for equipment design. The lightweight aluminum shells are plated to offer excellent corrosion resistance. Certain contact arrangements can also accommodate coaxial shielded contacts.

### PT Connectors

Our PT (Pattern 105) range fully conforms to the rigorous requirements of British Standard BS9522 F0017. They are also compatible and fully intermateable with connectors meeting the requirements of US military specification MIL-C-26482. The PT range has solder terminations suitable for wire and printed circuit board applications.

### PTSE Connectors

PTSE (Pattern 603) connectors fully conform to British Standard BS9522 N0001. As with the PT connectors they are compatible and fully intermateable with MIL-C-26482. The PTSE Connectors employ crimp front release rear removable contacts in a clip retention insert.

### CPT Connectors

The CPT range is a proprietary design and is a commercial version of the PTSE crimp contact connectors. They are intermateable and inter-changeable with the PT and PTSE and offer similar mechanical and electrical performance. Usually supplied with factory bonded prewired contacts for over moulding (see Audio/Specials section). They employ a distortable rubber insert contact retention system.

### Audio Connectors

The Audio Connectors are a development of the PT and CPT ranges. They are designed as lightweight, space saving connectors and are manufactured to meet the exacting requirements of modern and professional communications systems. All connectors have been approved by the Royal Signals and DERA Establishment, and have been used extensively on Clansman and Bowman radio systems for the UK Military.

### Special Requirements

ITT has facilities for the design and production of special connectors for specific purposes. Examples are connectors with inbuilt EMI suppression filters, co-axial shielded contacts, special coupling mechanisms plus many alternative shell materials and finishes can be supplied to suit various conditions and applications

## Features and Benefits

- Retained coupling nuts on plugs
- Heavy (arctic) ribbed coupling nuts available
- Many special variants/platings/materials
- Numerous contact arrangements from 2 to 61 contacts
- Alternate keyway polarization and insert orientations to prevent cross-plugging
- Available with grounding springs for EMC shielding
- Positive coupling 3 bayonet pin construction with audible mate
- Solder or crimp terminations
- Wide range of cable accessories

## Materials

| | |
|---|---|
| Shells: | High-grade aluminum alloy suitably plated |
| Insulator: | Polychloropene rubber/self extinguishing/resistant to hydraulic fluids, lubricants etc, |
| Contacts: | Gold plated high conductivity copper alloy |

## Environmental Ratings

| | |
|---|---|
| Temperature range | -55º to +125ºC |
| Humidity | 56 days |
| Low air pressure | 44 mbar |
| Vibration | 10 - 5000Hz, 0.75mm/10$g_n$ duration 30 hr |
| Shock | 981m/$s^2$ (100$_n$) for 6 ms |
| Bump | 390 m/$s^2$ (40$g_n$) 4000 bumps |
| Acceleration | 490 m/$s^2$ (50$g_n$) |
| Mechanical endurance | 500 matings |
| Salt mist | Severity 1 to BS2011 Kb (dependent on finish) |
| Sealing (PT series only) | <1 cm $^3$/h at 100 kN/$m^2$ (1 bar) |

## Electrical Ratings

| | |
|---|---|
| Proof voltage rating | 2100 or 3000V d.c. or a.c. peak |
| Insulation resistance | 5000MΩ minimum |
| Contact resistance | 5 mΩ maximum |
| Shell to shell continuity | 5 mΩ maximum (grounding spring styles) |
| Current rating | Contact size 20, 5 amps |
| @ 85º continuous | Contact size 16, 10 amps |
| | Contact size 12, 20 amps |

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

## Glossary of Terms

Shown below are some standard terms used to describe circular connectors and their features

**Shell**
The body of the connector

**Insert**
The dielectric or insulating inner core, holds contacts

**Coupling Nut**
Outer threaded or grooved ring which holds mated pair together

**Jam Nut**
Nut that holds receptacle to a panel

**Bayonet Coupling**
A non-threaded, triple ramp type of coupling

**Contacts**
The conductive element in a connector that makes the electrical connection between mated connectors

**Pin Contact***
Male half of a mated pair of contacts

**Socket Contact**
Female half of a mated pair of contacts

**Solder Contact**
A contact to which wire is joined by soldering

**Crimp Contact**
A contact to which wire is joined by mechanical compression

**Plug* (Free)**
The male half of a mating pair of connectors which may hold male or female insert/contacts

**Receptacle (Fixed)**
The female half of a mating pair of connectors which may hold male or female insert/contacts

**PCB contacts**
Contacts that can be soldered to a printed circuit board or flex circuit

**Plating**
The metal finish applied to contacts and or shell components (protective)

**Grommet**
Resilient part at back of insert (attached or separate) gives wire moisture seal

**Gland**
Resilient ring in rear accessory provides seal on wire jacket

**Sealing Plug**
Plastic peg placed in unused grommet holes to seal

**Grounding Fingers**
A metal strap around the plug shell for positive electrical shell to shell connection

**Hermetic**
A connector with fused glass insert for air tightness

**Mating/Un mating Forces**
Torque required to couple/uncouple a mating pair

**Backshell**
An accessory which threads to back of shell

**Strain Relief**
A type of accessory which clamps wires for support

**Potting Boot**
A type of accessory which forms a mould for potting compound

**EMI or RFI Backshell**
A type of accessory to terminate wire/cable shielding

**Interfacial Seal**
A resilient gasket on the face of pin inserts gives moisture seal

**Scoop Proof**
Is a feature on some ranges of connectors to prevent damage to the pin contacts when mating connector pairs

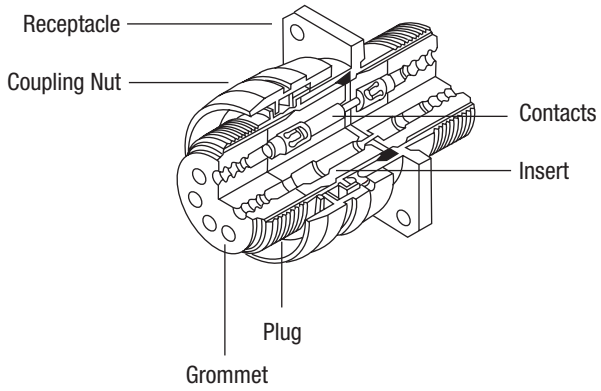
*Note: Male half always goes into female

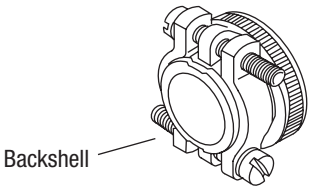
## Terminology: Cylindrical Connectors

The diagram opposite shows a typical cross-section of a mated pair of connectors, indicating the basic components.

### Basic Components:

1. Body (Shell)
2. Insert (Dielectric Contact Holder) Pin or Socket
3. Contact (Wire End Termination) (Signal Joining Part)
4. Accessories (Wire Seals, Cable Seals, Wire Support, etc.)



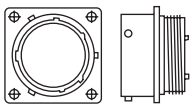




### Body Styles:

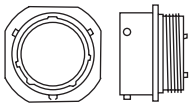
Coupling: Bayonet

Shell Sizes (typical):
8, 10, 12, 14, 16,
18, 20, 22, 24

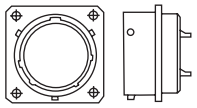
Wall Mount Recept.



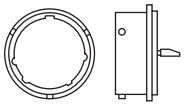
Cable Connecting Recept.



Box Mount Recept.

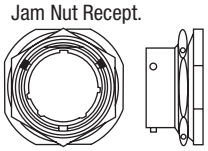


Solder Mount Recept. (Hermetic)

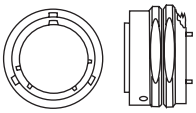


Not in PT

Jam Nut Recept.



Straight Plug



### Style Designation (Typical)

| Plug | Shell Styles | Plug | Shell Styles | Plug | Shell Styles |
|---|---|---|---|---|---|
| 06 | Straight | 00/33 | Wall Mount | 07 | Jam Nut |
| 08 | 90º | 01/44 | Cable Connecting | | |
| 55 | Straight less rear accessory (PT) | 02 | Box Mount (less rear accessory) | | |

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

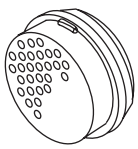
## Inserts

- Solder
- Crimp

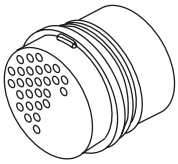
Metal Clip Retention
Distortable rubber retention

May include a soft front interfacial seal (Bonded) if dielectric is hard, and a rear sealing grommet separate or attached.

Insert (Pin or Socket)



Insert & Grommet Accessory



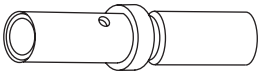
## Contacts

Contact sizes:

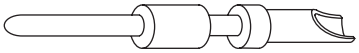
| Contact size | AWG Wire Size |
|---|---|
| 22D Not PT | 22-28 |
| 22M Not PT | 24-28 |
| 22 Not PT | 22-26 |
| 20 | 20-24 |
| 16 | 16-20 |
| 12 | 12-14 |
| 8 | 8-10 |
| 4 Not PT | 4-6 |
| 0 Not PT | 0-2 |

Pin Crimp*

Socket-Crimp*

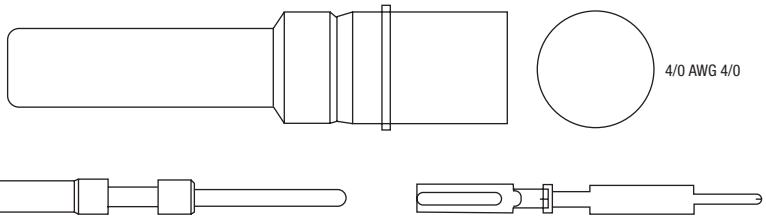


Pin-Solder



Socket-Solder

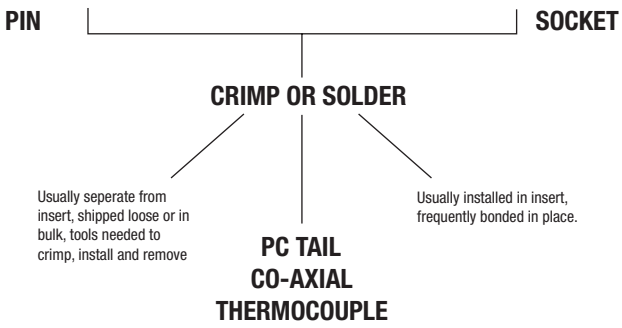
Size by Wire Gauge




PCB pin contact

PCB socket contact

**Crimps are removable*



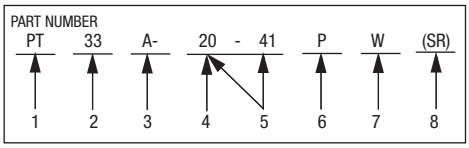
PT/PTSE Connectors

## PT Solder Connectors

Part Number Breakdown

**Part Number Nomenclature for Solder Connector**

To more easily illustrate ordering procedure, part number PT33A20 41PW(SR) is shown as follows:




*See code below:*

**1. Connector Families:**

PT designates standard olive drab Tri-Lock coupling connector. This is the Veam proprietary version of the MIL-C-26482 solder contact connector B59522F0017 (Pattern 105).

**2. Shell Styles:**

"33" designates wall mount receptacle.
"55" designates cable connecting plug.
"02" designates box mount receptacle.
"44" designates in line receptacle.
"06" designates cable connect plug with accessory
"07" designates jam nut receptacle.
"08" designates 90º plug.
PTB designates thru-bulkhead receptacle.

**3. Service Classes:**

"A" designates general duty back shell.
"E" designates environmental resisting with grommet and nut.
"P" designates potted with potting boot.
"W" designates compressing clamp and neoprene gland for moisture-proofing, multi-jacketed cables.
"H" designates hermetic seal receptacle.

**4.**"20" designates shell size. Shell sizes available are 8 through 24.

**5.**"20-41" designates insert arrangements.

**6.** "P" designates pin contacts. "S" for socket contacts.

**7.** "W" designates that insert is rotated in its shell from the standard position to alternate position W. The basic rotations are W, X, Y and Z. No letter required for normal (no rotation) position. The keyways can also be oriented in various positions. The basic rotations are B, C, E and F.

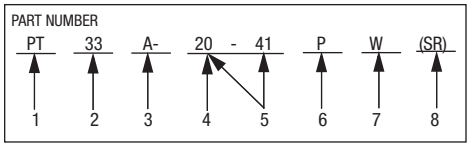
**8.** "SR" designates a strain relief clamp. Deviation suffixes would be inserted here. For example: (T01) Ribbed coupling Nut.

## PTSE Crimp Connectors

Part Number Breakdown

**Proprietary Part Number Construction for Crimp Connectors**

To more easily illustrate ordering procedure, part number PT33A20 41PW(SR) is shown as follows:




*See code below:*

**1. Connector Families:**

PT**SE designates standard olive drab Tri-Lock coupling connector with removable crimp contacts.

**2. Shell Styles:**

"33' designates wall mount receptacle.
"55" designates cable connecting plug.
"02" designates box mount receptacle.
"44" designates in line receptacle.
"06" designates cable connect plug with accessory
"07" designates jam nut receptacle.
"08" designates 90º plug.

**3. Service Classes:**

"SE" designates environmental crimp. The above are proprietary versions of the MIL-C-26482 crimp contact connector. The contact retention mechanism consists of a metal clip held in place by a nylon wafer.

**4.**"20" designates shell size. Shell sizes available are 8 through 24.

**5.**"20-41" designates insert arrangements.

**6.** "P" designates pin contacts. "S" for socket contacts.

**7.** "W" designates that insert is rotated in its shell from the standard position to alternate position W. The basic rotations are W, X, Y and Z. No letter required for normal (no rotation) position. The keyways can also be oriented in various positions. The basic rotations are B, C, E and F.

**8.** "SR" designates a strain relief clamp. Deviation suffixes would be inserted here. For example: (T01) Ribbed coupling Nut.

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

## CONTACT ARRANGEMENTS

| Contact Arrangements | Voltage Rating | Total Contacts | Contact Size | | | | | Plan forms available in the following range: | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 20 | 16 | 12 | coax | 8 | PT | PTSE | CPT | AUDIO ** |
| 8-2 | 1 | 2 | 2 | | | | | • | | • | |
| 8-3 | 1 | 3 | 3 | | | | | • | | • | |
| 8-4 | 1 | 4 | 4 | | | | | • | | • | • |
| 8-33 | 1 | 3 | 3 | | | | | • | • | • | • |
| 8-98 | 1 | 3 | 3 | | | | | • | • | • | • |
| 10-2 | 2 | 2 | | 2 | | | | • | ⊡ | • | • |
| 10-6 | 1 | 6 | 6 | | | | | • | • | • | • |
| 10-7 | 1 | 7 | 7 | | | | | • | ⊡ | • | • |
| SP 10-98 | 1 | 6 | 6 | | | | | • | | • | |
| SP 10-99 | 1 | 7 | 7 | | | | | • | | • | • |
| 12-3 | 2 | 3 | | 3 | | | | • | • | • | |
| SP 12-4 | 2 | 4 | 4 | 4 | | | | ⊡ | | ⊡ | |
| 12-8 | 1 | 8 | 8 | | | | | • | • | • | |
| 12-10 | 1 | 10 | 10 | | | | | • | • | • | • |
| 14-2 | 2 | 2 | | | 2 | | | • | • | • | |
| 14-5 | 2 | 5 | | 5 | | | | • | • | • | |
| 14-12 | 1 | 12 | 8 | 4 | | | | • | • | • | |
| 14-15 | 1 | 15 | 14 | 1 | | | | • | • | • | |
| SP 14-18 | 1 | 18 | 18 | | | | | ⊡ | ⊡ | ⊡ | |
| 14-19 | 1 | 19 | 19 | | | | | • | • | • | |
| SP 14-22 | 1 | 5 | 1 | | 4 | | | • | ⊡ | • | |
| SP 14-91 | * | 3 | 3 | | | | | • | | • | |
| 16-8 | 2 | 8 | | 8 | | | | • | • | • | |
| 16-23 | 1 | 23 | 22 | 1 | | | | • | • | • | |
| 16-26 | 1 | 26 | 26 | | | | | • | • | • | |
| SP 16-99 | 1 | 23 | 21 | 2 | | | | ⊡ | ⊡ | ⊡ | |
| 18-11 | 2 | 11 | | 11 | | | | • | • | • | |
| SP 18-28 | 1 | 28 | 26 | 2 | | | | ⊡ | ⊡ | ⊡ | |
| SP 18-30 | 1 | 30 | 29 | 1 | | | | ⊡ | | ⊡ | |
| 18-32 | 1 | 32 | 32 | | | | | • | • | • | |
| 18-50 | 2 | 2 | | | | | 2 | • | | • | |
| SP 18-80 | 2 | 8 | 6 | | | 2 | | ⊡ | | ⊡ | |
| SP 18-98 | 1 | 8 | 4 | | 4 | | | ⊡ | • | ⊡ | |
| 20-16 | 2 | 16 | | 16 | | | | • | • | | |
| SP 20-24 | 1 | 24 | 24 | | | | | ⊡ | | | |
| SP 20-25 | 1 | 25 | 25 | | | | | ⊡ | | | |
| SP 20-27 | 1 | 27 | 27 | | | | | ⊡ | | | |
| 20-39 | 1 | 39 | 37 | 2 | | | | ⊡ | ⊡ | | |
| 20-41 | 1 | 41 | 41 | | | | | • | • | | |
| SP 22-7 | coax | 7 | | | | 7 | | ⊡ | ⊡ | | |
| SP 22-9 | 1 | 9 | 4 | | 5 | | | | • | | |
| 22-21 | 2 | 21 | | 21 | | | | • | • | | |
| SP 22-32 | 1 | 32 | 32 | | | | | ⊡ | ⊡ | | |
| SP 22-34 | 1 | 34 | 34 | | | | | ⊡ | | | |
| SP 22-36 | 1 | 36 | 36 | | | | | ⊡ | ⊡ | | |
| SP 22-41 | 1 | 41 | 27 | 14 | | | | • | • | | |
| 22-55 | 1 | 55 | 55 | | | | | • | • | | |
| 24-61 | 1 | 61 | 61 | | | | | • | • | | |

KEY

• Preferred ranges

⊡ Non Preferred

• Consult ITT for other arrangements.

VOLTAGE RATING

1 2100 dc or ac peak

2 3000 dc or ac peak

* 5Kv rms

** See Audio Connectors (pages 00 & 00) for contact arrangements to shell style availability.

SP= Propriety to ITT Corporation

## Contact Arrangements - Preferred Ranges

8-2
2 X #20
1

8-3
3 X #20
1

8-4
4 X #20
1

CONTACT LEGEND

Contact Arrangement
Number of Contacts
Size of Contacts
Service Rating

8 12 16

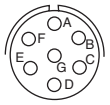
20 coax

8-33
3 X #20
1

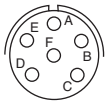
8-98
3 X #20
1

10-2
2 X #16
2

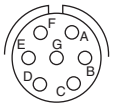
10-6
6 X #20
1



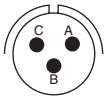
10-7
7 X #20
1



10-98
6 X #20
1

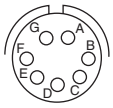


10-99
7 X #20
1

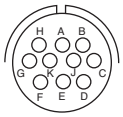


12-3
3 X #16
2

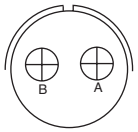
12-4
4 X #16
2



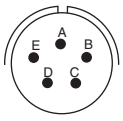
12-8
8 X #20
1



12-10
1 X #20
1



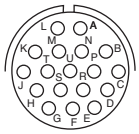
14-2
2 X #12
2



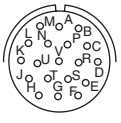
14-5
5 X #16
2

14-12
8 X #20
4 X #16
1

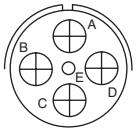
14-15
14 X #20
4 X #16
1



14-18
18 X #20
1



14-19
19 X #20
1

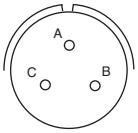


14-22
1 X #20
4 X #12
1

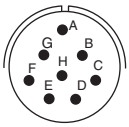
Dimensions shown in mm (inch)
Specifications and dimensions subject to change

# VEAM PT Connectors

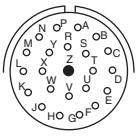
## Contact Arrangements - Preferred Ranges



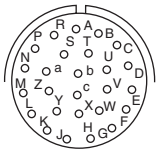

14-91
3 X #20
5 KV ms



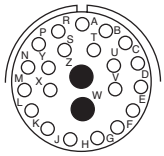

16-8
8 X #16
2



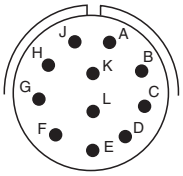
16-23
22 X #20
1 X #16
1



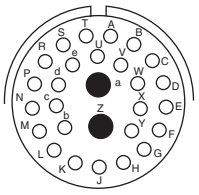
16-26
26 X #20
1



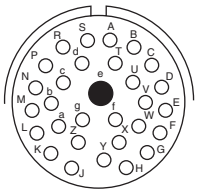
16-99
21 X #20
2 X #16
1



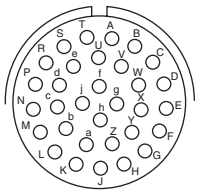

18-11
11 X #16
2



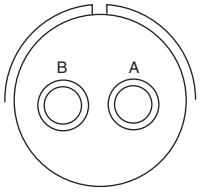
18-28
26 X #20
2 X #16
1



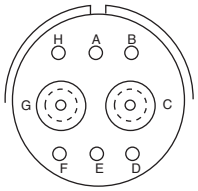
18-30
29 X #20
1 X #16
1



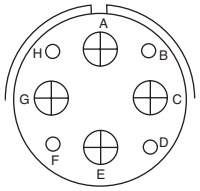
18-32
32 X #20
1



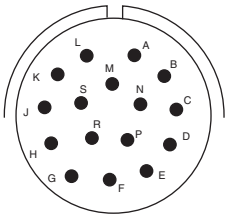

18-50
2 X #8
2



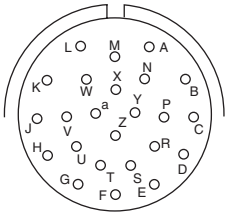

18-80
6 X #20
2 X #8 coax
2



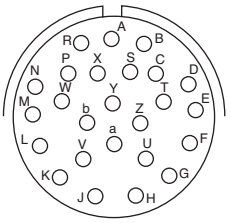

18-98
4 X #20
4 X #12
1



20-16
16 X #16
2



20-24
24 X #20
1



20-25
25 X #20
1

ITT

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

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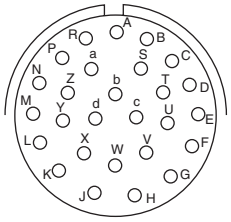
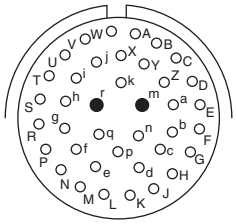
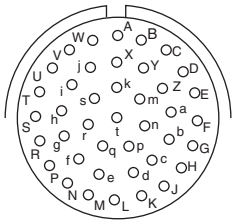
## Contact Arrangements - Preferred Ranges



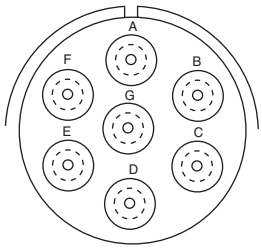
20-27
27 X #20
1



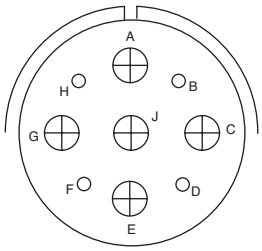
20-39
37 X #20
2 X #16
1



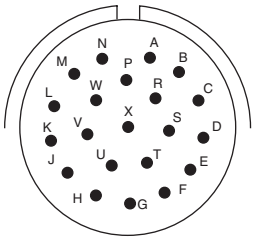
20-41
41 X #20
1



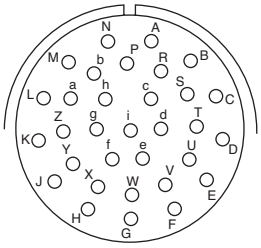
22-7
7
Coax



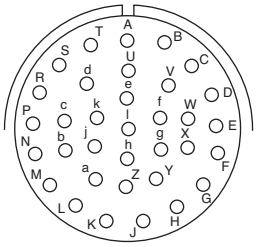
22-9
4 X #20
5 X #12
1



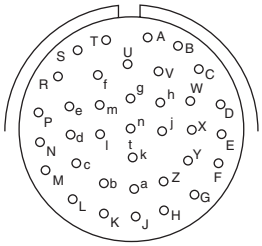
22-21
21 X #20
2



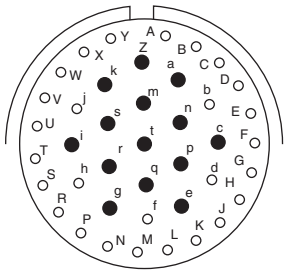
22-32
32 X #20
1



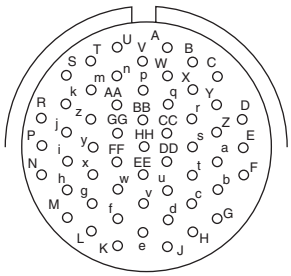
22-34
32 X #20
1



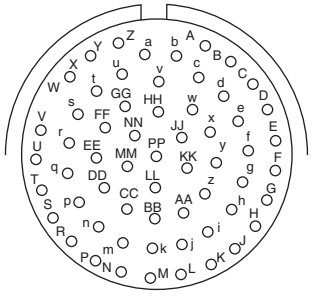
22-36
36 X #20
1



22-41
27 X #20
14 X #16
1



22-55
55 X #20
1



24-61
61 X #20
1

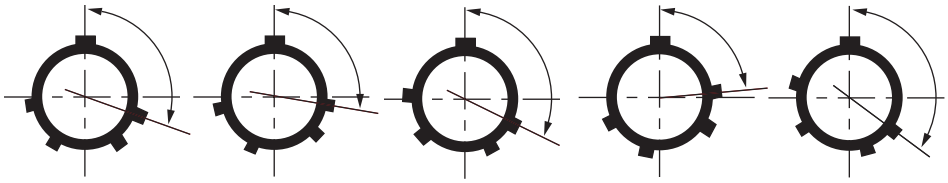
Dimensions shown in mm (inch)
Specifications and dimensions subject to change

# VEAM PT Connectors

## Polarization

To avoid cross plugging of similar connectors which may be adjacently mounted, polarization is achieved by shell key/keyways. Up to five alternative positions are available designated N, B, C, E or F. The Diagrams illustrate the angular variation of the keys with the master key being the datum point.

Where no specific polarization is requested, the neutral position N will always be applied.

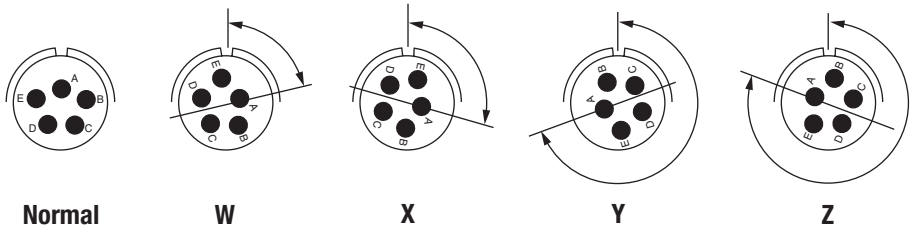



| Shell Size | Normal | B | C | E | F |
|---|---|---|---|---|---|
| 8 | 105⁰ | - | - | 182 | 82 |
| 10 | 105⁰ | 85 | 125 | 115 | 85 |
| 12 | 105⁰ | 89 | 121 | 115 | 85 |
| 14 | 105⁰ | 91 | 119 | 75 | 120 |
| 16 | 105⁰ | 93 | 117 | 75 | 120 |

| Shell Size | Normal | B | C | E | F |
|---|---|---|---|---|---|
| 18 | 105⁰ | 95 | 115 | 75 | 120 |
| 20 | 105⁰ | 95 | 115 | 75 | 120 |
| 22 | 105⁰ | 97 | 113 | 75 | 120 |
| 24 | 105⁰ | 97 | 113 | 75 | 120 |
| | | | | | |

## Insert Orientation

The diagrams below illustrates the angular displacement of the insert within the housing, for each orientation in the range. This method is non-preferred and is intended for replacement purposes only.




| | Availability | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | N | B | C | E | F | W | X | Y | Z |
| 8-2 | ▲ | | | ▲ | ▲ | ■ | ■ | | |
| 8-3 | ▲ | | | ▲ | ▲ | | | | |
| 8-4 | ▲ | | | ▲ | ▲ | ■ | | | |
| 8-33 | ▲ | | | ▲ | ▲ | ■ | | | |
| 8-98 | ▲ | | | ▲ | ▲ | | | | |
| | | | | | | | | | |
| 14-2 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 14-5 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| 14-12 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | | |
| 14-15 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| 14-18 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 14-19 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | |
| 14-22 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 14-91 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| | | | | | | | | | |
| 20-16 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| 20-24 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 20-25 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 20-27 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 20-39 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| 20-41 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | |
| | | | | | | | | | |
| | | | | | | | | | |

| | Availability | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | N | B | C | E | F | W | X | Y | Z |
| 10-2 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 10-6 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | | | |
| 10-7 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 10-98 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 10-99 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| | | | | | | | | | |
| 16-8 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| 16-23 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | | |
| 16-26 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | | ■ | ■ |
| 16-99 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| | | | | | | | | | |
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| | | | | | | | | | |
| | | | | | | | | | |
| 22-7 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | | |
| 22-9 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 22-21 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| 22-32 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 22-34 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 22-36 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| 22-41 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | |
| 22-55 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |

| | Availability | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | N | B | C | E | F | W | X | Y | Z |
| 12-3 | ▲ | ▲ | ▲ | ▲ | ▲ | | | ■ | |
| 12-4 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 12-8 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| 12-10 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| | | | | | | | | | |
| | | | | | | | | | |
| 18-11 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| 18-28 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| 18-30 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 18-32 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| 18-50 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| 18-80 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| 18-98 | ▲ | ▲ | ▲ | ▲ | ▲ | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 22-7 | ▲ | ▲ | ▲ | ▲ | ▲ | ■ | ■ | ■ | ■ |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

▲ Preferred type

□ Not Available

■ For replacement purposes only

N.B. Consult factory for availability of □contact arrangements not shown

ITT

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

www.ittcannon.com

## How To Order PT Jam nut connectors

| SERIES/ PREFIX | SHELL STYLE | CLASS | SHELL SIZE/ LAYOUT | CONTACT TYPE | polarization | PLATING/ MOD CODE |
|---|---|---|---|---|---|---|
| | NOTE 1 | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 4 | NOTE 5 |
| PT | 07 | A | (22-55) | S | (B) | (T69) |
| | 77 | E | | P | | |
| | | SE | | | | |

### How To Order

1 Select the shell style and classification eg. PT07E from following pages.

2 Add the shell size and contact arrangement eg. PT07E22 55 see pages xxx.

3 Add the contacts P=pins, S= sockets eg. PT07E22 55S.

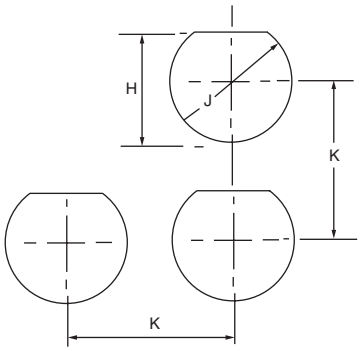
4 For polarization add the relevant letter (E, B, C, F) or for orientation add (W, X, Y, Z) from page 14. For normal orientation no letter required.

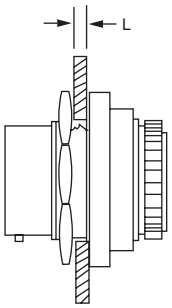
5 Add suffix as required from typical list below.

| | |
|---|---|
| No Code | Olive drab cadmium plate finish as standard (historically 014) |
| 023 | Electroless Nickel plating finish |
| T69 | Zinc Cobalt Olive drab plate finish GB62 |
| T61 | Zinc Cobalt Black plate finish (ROHS) |
| T21 | Marine ally Bronze (contact factory) |
| T62/T65/T66 | Pin tail contacts (contact factory) |

## PT07 Cutout Details

- Formed locking jam nut standard
- Solid locking nut available for size 8/10/12
- Drilled locking nut available at extra cost
- Circular lock nut with slots for size 8 available



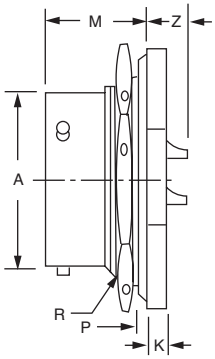

PT07
Mounted from rear

| Shell Size | H ±.005 | J Dia. ±.005 | K Min | L Min. | L Max. |
|---|---|---|---|---|---|
| 8 | .540 | .572 | .969 | .062 | .125 |
| 10 | .665 | .697 | 1.093 | .062 | .125 |
| 12 | .828 | .885 | 1.281 | .062 | .125 |
| 14 | .952 | 1.010 | 1.406 | .062 | .125 |
| 16 | 1.078 | 1.135 | 1.531 | .062 | .125 |
| 18 | 1.201 | 1.260 | 1.656 | .062 | .125 |
| 20 | 1.326 | 1.385 | 1.843 | .062 | .250 |
| 22 | 1.451 | 1.510 | 1.969 | .062 | .250 |
| 24 | 1.576 | 1.635 | 2.093 | .062 | .250 |

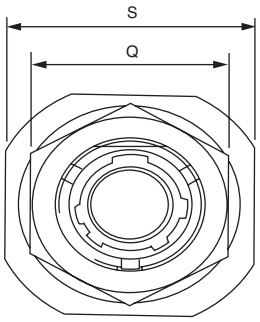
Dimensions shown in mm (inch)
Specifications and dimensions subject to change

# VEAM PT Connectors

## PT07A Jam Nut Receptacle without rear accessory thread (solder contacts)

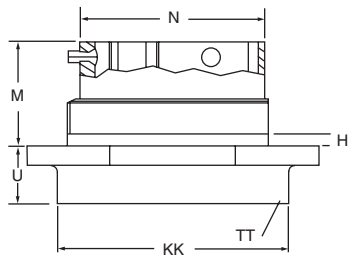


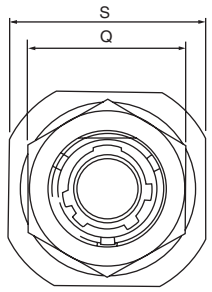

'A' General Duty




| Shell size | A diameter | Q diameter | M depth | T length | S diameter | K panel thickness | | R jam nut |
|---|---|---|---|---|---|---|---|---|
| tolerance | .003 (0.08) | .017 (0.43) | .031 (0.08) | max | max | min | max | thread |
| 8 | 0.47 | 0.750 | 0.696 | 0.191 | 0.956 | 0.06 | 0.13 | .5625-24 UNEF |
| 10 | 0.59 | 0.875 | 0.696 | 0.191 | 1.062 | 0.06 | 0.13 | .6875-24 UNEF |
| 12 | 0.75 | 1.062 | 0.696 | 0.191 | 1.250 | 0.06 | 0.13 | .8750-20 UNEF |
| 14 | 0.88 | 1.188 | 0.696 | 0.191 | 1.375 | 0.06 | 0.13 | 1.000-20 UNEF |
| 16 | 1.00 | 1.312 | 0.696 | 0.191 | 1.500 | 0.06 | 0.13 | 1.125-18 UNEF |
| 18 | 1.13 | 1.458 | 0.696 | 0.191 | 1.625 | 0.06 | 0.13 | 1.250-18 UNEF |
| 20 | 1.25 | 1.562 | 0.884 | 0.221 | 1.812 | 0.06 | 0.255 | 1.375-18 UNEF |
| 22 | 1.38 | 1.688 | 0.884 | 0.221 | 1.938 | 0.06 | 0.255 | 1.500-18 UNEF |
| 24 | 1.50 | 1.812 | 0.917 | 0.188 | 2.062 | 0.06 | 0.255 | 1.625-18 UNEF |

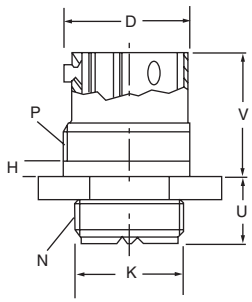
## PT07E Jam Nut Receptacle with internal rear accessory thread (solder contacts)

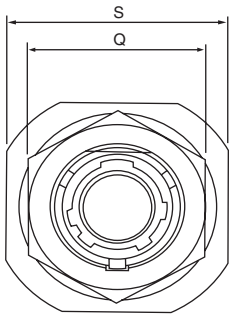



| Shell size | N diameter | Q diameter | M depth | T length | S diameter | H panel thickness | | G rear diameter | V jam nut |
|---|---|---|---|---|---|---|---|---|---|
| tolerance | .003 (0.08) | .017 (0.43) | .031 (0.08) | max | max | min | max | max | thread |
| 8 | 0.473 | 0.750 | 0.696 | 0.568 | 0.956 | 0.06 | 0.125 | 0.729 | .5625-24 UNEF |
| 10 | 0.590 | 0.875 | 0.696 | 0.568 | 1.062 | 0.06 | 0.125 | 0.854 | .6875-24 UNEF |
| 12 | 0.750 | 1.062 | 0.696 | 0.568 | 1.250 | 0.06 | 0.125 | 0.979 | .8750-20 UNEF |
| 14 | 0.875 | 1.188 | 0.696 | 0.568 | 1.375 | 0.06 | 0.125 | 1.104 | 1.000-20 UNEF |
| 16 | 1.000 | 1.312 | 0.696 | 0.568 | 1.500 | 0.06 | 0.125 | 1.229 | 1.125-18 UNEF |
| 18 | 1.125 | 1.458 | 0.696 | 0.568 | 1.625 | 0.06 | 0.125 | 1.354 | 1.250-18 UNEF |
| 20 | 1.250 | 1.562 | 0.884 | 0.63 | 1.812 | 0.06 | 0.250 | 1.510 | 1.375-18 UNEF |
| 22 | 1.375 | 1.688 | 0.884 | 0.63 | 1.938 | 0.06 | 0.250 | 1.635 | 1.500-18 UNEF |
| 24 | 1.500 | 1.812 | 0.917 | 0.66 | 2.062 | 0.06 | 0.250 | 1.760 | 1.625-18 UNEF |

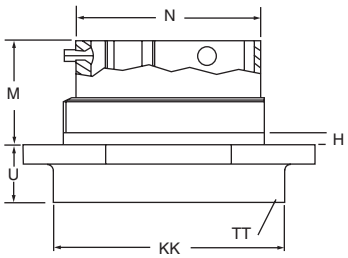
## PT77A Jam Nut Receptacle with external rear accessory thread (solder contacts)

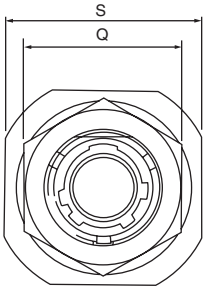



| Shell size<br>tolerance | D<br>diameter<br>.003 (0.08) | Q<br>diameter<br>.017 (0.43) | V<br>depth<br>.031 (0.08) | U<br>length<br>max | S<br>diameter<br>max | H<br>panel thickness<br>min | <br><br>max | K<br>rear diameter<br>max | P<br>jam nut<br>thread | N<br>rear access<br>thread |
|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.473 | 0.750 | 0.606 | 0.286 | 0.956 | 0.06 | 0.125 | 0.436 | .5625-24 UNEF | .4375-28 UNEF |
| 10 | 0.590 | 0.875 | 0.606 | 0.286 | 1.062 | 0.06 | 0.125 | 0.561 | .6875-24 UNEF | .5625-24 UNEF |
| 12 | 0.750 | 1.062 | 0.606 | 0.286 | 1.250 | 0.06 | 0.125 | 0.686 | .8750-20 UNEF | .6875-24 UNEF |
| 14 | 0.875 | 1.188 | 0.606 | 0.286 | 1.375 | 0.06 | 0.125 | 0.811 | 1.000-20 UNEF | .8125-20 UNEF |
| 16 | 1.000 | 1.312 | 0.606 | 0.286 | 1.500 | 0.06 | 0.125 | 0.936 | 1.125-18 UNEF | .9375-20 UNEF |
| 18 | 1.125 | 1.458 | 0.606 | 0.286 | 1.625 | 0.06 | 0.125 | 1.061 | 1.250-18 UNEF | 1.0625-18 UNEF |
| 20 | 1.250 | 1.562 | 0.764 | 0.306 | 1.812 | 0.06 | 0.250 | 1.186 | 1.375-18 UNEF | 1.1875-18 UNEF |
| 22 | 1.375 | 1.688 | 0.764 | 0.306 | 1.938 | 0.06 | 0.250 | 1.311 | 1.500-18 UNEF | 1.3125-18 UNEF |
| 24 | 1.500 | 1.812 | 0.782 | 0.306 | 2.062 | 0.06 | 0.250 | 1.436 | 1.625-18 UNEF | 1.4375-18 UNEF |

## PT07SE Jam nut Receptacle with internal rear accessory thread (crimp contacts supplied)



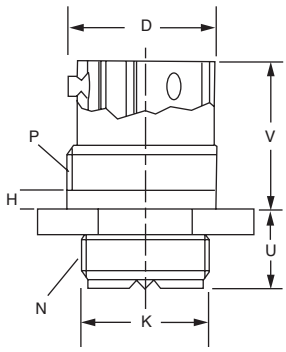



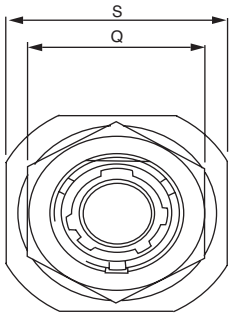

| Shell size<br>tolerance | N<br>diameter<br>.003 (0.08) | Q<br>diameter<br>.017 (0.43) | M<br>depth<br>.031 (0.08) | U<br>length<br>max | S<br>diameter<br>max | H<br>panel thickness<br>min | <br><br>max | KK<br>rear diameter<br>max | P<br>jam nut<br>thread | TT<br>rear internal<br>thread |
|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.473 | 0.750 | 0.696 | 0.376 | 0.956 | 0.06 | 0.125 | 0.719 | .5625-24 UNEF | .6250-28 UNEF |
| 10 | 0.590 | 0.875 | 0.696 | 0.376 | 1.062 | 0.06 | 0.125 | 0.844 | .6875-24 UNEF | .7500-24 UNEF |
| 12 | 0.750 | 1.062 | 0.696 | 0.376 | 1.250 | 0.06 | 0.125 | 0.969 | .8750-20 UNEF | .8750-24 UNEF |
| 14 | 0.875 | 1.188 | 0.696 | 0.376 | 1.375 | 0.06 | 0.125 | 1.094 | 1.000-20 UNEF | 1.000-20 UNEF |
| 16 | 1.000 | 1.312 | 0.696 | 0.376 | 1.500 | 0.06 | 0.125 | 1.219 | 1.125-18 UNEF | 1.125-20 UNEF |
| 18 | 1.125 | 1.458 | 0.696 | 0.376 | 1.625 | 0.06 | 0.125 | 1.344 | 1.250-18 UNEF | 1.250-18 UNEF |
| 20 | 1.250 | 1.562 | 0.884 | 0.391 | 1.812 | 0.06 | 0.250 | 1.500 | 1.375-18 UNEF | 1.375-18 UNEF |
| 22 | 1.375 | 1.688 | 0.884 | 0.391 | 1.938 | 0.06 | 0.250 | 1.625 | 1.500-18 UNEF | 1.500-18 UNEF |
| 24 | 1.500 | 1.812 | 0.917 | 0.411 | 2.062 | 0.06 | 0.250 | 1.750 | 1.625-18 UNEF | 1.625-18 UNEF |

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

# VEAM PT Connectors

## PT77SE Jam Nut Receptacle with external rear accessory thread (crimp contacts supplied loose)

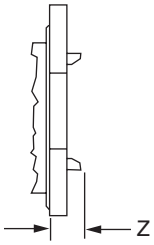



| Shell size | D diameter | Q diameter | V depth | U length | S diameter | H panel thickness | | K rear diameter | P jam nut | N rear access |
|---|---|---|---|---|---|---|---|---|---|---|
| tolerance | .003 (0.08) | .017 (0.43) | .031 (0.08) | max | max | min | max | max | thread | thread |
| 8 | 0.473 | 0.750 | 0.636 | 0.255 | 0.956 | 0.06 | 0.125 | 0.436 | .5625-24 UNEF | .4375-28 UNEF |
| 10 | 0.590 | 0.875 | 0.636 | 0.255 | 1.062 | 0.06 | 0.125 | 0.561 | .6875-24 UNEF | .5625-24 UNEF |
| 12 | 0.750 | 1.062 | 0.636 | 0.255 | 1.250 | 0.06 | 0.125 | 0.686 | .8750-20 UNEF | .6875-24 UNEF |
| 14 | 0.875 | 1.188 | 0.636 | 0.255 | 1.375 | 0.06 | 0.125 | 0.811 | 1.000-20 UNEF | .8125-20 UNEF |
| 16 | 1.000 | 1.312 | 0.636 | 0.255 | 1.500 | 0.06 | 0.125 | 0.936 | 1.125-18 UNEF | .9375-20 UNEF |
| 18 | 1.125 | 1.458 | 0.636 | 0.255 | 1.625 | 0.06 | 0.125 | 1.061 | 1.250-18 UNEF | 1.0625-18 UNEF |
| 20 | 1.250 | 1.562 | 0.794 | 0.275 | 1.812 | 0.06 | 0.250 | 1.186 | 1.375-18 UNEF | 1.1875-18 UNEF |
| 22 | 1.375 | 1.688 | 0.794 | 0.275 | 1.938 | 0.06 | 0.250 | 1.311 | 1.500-18 UNEF | 1.3125-18 UNEF |
| 24 | 1.500 | 1.812 | 0.812 | 0.275 | 2.062 | 0.06 | 0.250 | 1.436 | 1.625-18 UNEF | 1.4375-18 UNEF |

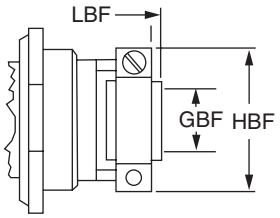
## PT Jam Nut Accessories

**07A**



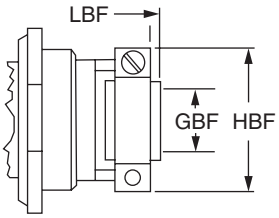

No Thread

**PT77A**



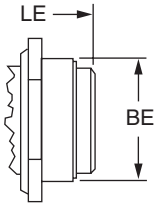

05-1778 Strain Relief Clamp
05-0120 SR and Grommet (see chart)

**PT07SE/77SE**



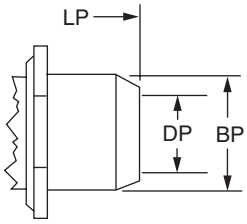

05-0186 SR Clamp

**PT77A**




05-0114 External
Grommet Clamp Nut

**PT07SE/77A**




05-2042 Potting Boot

**For dimensional data see accessories section on page's 33 to 39.**

**Protective caps are located on page 33.**

**For connector supplied complete with relevant accessory please use cross reference chart on page 42 or consult factory.**

ITT

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

www.ittcannon.com

## How to order Panel Mount Connectors

| SERIES/ PREFIX | SHELL STYLE | CLASS | SHELL SIZE/ LAYOUT | CONTACT TYPE | polarization | PLATING/ MOD CODE |
|---|---|---|---|---|---|---|
| | NOTE 1 | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 4 | NOTE 5 |
| PT | 02 | | (22-55) | S | (B) | (T69) |
| | 33 | A | | P | | |
| | 44 | SE | | | | |
| | B | | | | | |
| | 00 | obsolete | | | | |

### How To Order

1 Select the shell style and classification eg. PT02A from following pages.

2 Add the shell size and contact arrangement eg. PT02A22 55 see pages xxx.

3 Add the contacts P=pins, S= sockets eg. PT02A22 55S.

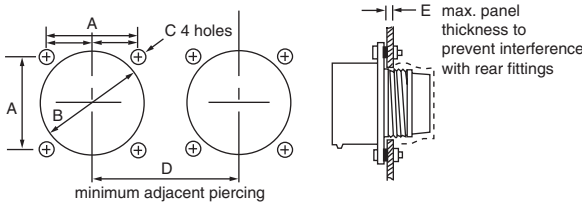
4 For polarization add the relevant letter (E, B, C, F) or for orientation add (W, X, Y, Z) from page 14. For normal orientation no letter required.

5 Add suffix as required from typical list below.

| | |
|---|---|
| No Code | Olive drab cadmium plate finish as standard (historically 014) |
| 023 | Electroless Nickel plating finish |
| T69 | Zinc Cobalt Olive drab plate finish GB62 |
| T61 | Zinc Cobalt Black plate finish (ROHS) |
| T21 | Marine ally Bronze (contact factory) |
| T62/T65/T66 | Pin tail contacts (contact factory) |

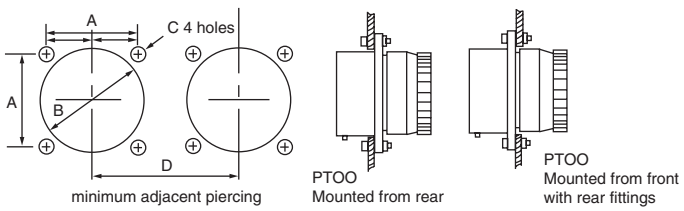
## Panel Mount Cut-Out Details

### Front Mount




| Shell Size | A t.p. | B Dia. +.000 —.010 | C Dia. +.004 —.002 | D Min. | E Max. |
|---|---|---|---|---|---|
| 8 | .594 | .458 | .120 | .843 | .100 |
| 10 | .719 | .583 | .120 | .969 | .100 |
| 12 | .812 | .708 | .120 | 1.062 | .100 |
| 14 | .906 | .833 | .120 | 1.156 | .100 |
| 16 | .969 | .958 | .120 | 1.250 | .100 |
| 18 | 1.062 | 1.083 | .120 | 1.343 | .100 |
| 20 | 1.156 | 1.208 | .120 | 1.469 | .160 |
| 22 | 1.250 | 1.333 | .120 | 1.593 | .160 |
| 24 | 1.375 | 1.458 | .147 | 1.718 | .100 |

### Rear Mount

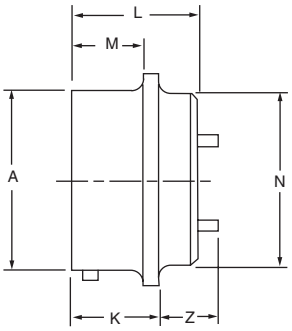


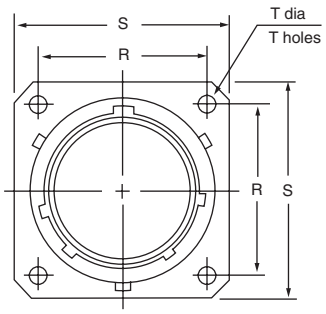

| Shell Size | A t.p. | C Dia. +.004 —.002 | D Min. | F Dia. +.000 —.010 | E Max. |
|---|---|---|---|---|---|
| 8 | .594 | .120 | .843 | .580 | .100 |
| 10 | .719 | .120 | .969 | .700 | .100 |
| 12 | .812 | .120 | 1.062 | .859 | .100 |
| 14 | .906 | .120 | 1.156 | .983 | .100 |
| 16 | .969 | .120 | 1.250 | 1.108 | .100 |
| 18 | 1.062 | .120 | 1.343 | 1.233 | .100 |
| 20 | 1.156 | .120 | 1.469 | 1.359 | .230 |
| 22 | 1.250 | .120 | 1.593 | 1.493 | .230 |
| 24 | 1.375 | .147 | 1.718 | 1.614 | .230 |

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

# VEAM PT Connectors

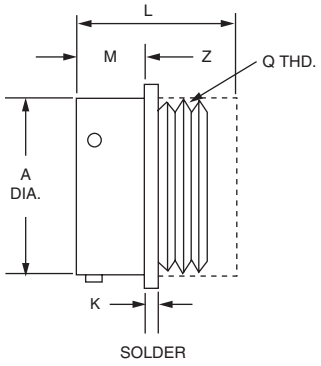
## PT02 Box Mount Receptacle without rear accessory thread (solder contacts)

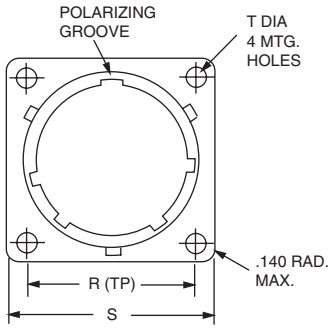



| Shell size | A diameter | M length | L depth | N rear diameter | R hole space | S width | T hole diameter |
|---|---|---|---|---|---|---|---|
| tolerance | .003 (0.08) | 0.01 | 0.825 | 0.01 | | 0.016 | 0.005 |
| 8 | 0.473 | 0.431 | 0.825 | 0.449 | 0.594 | 0.812 | 0.120 |
| 10 | 0.590 | 0.431 | 0.825 | 0.573 | 0.719 | 0.938 | 0.120 |
| 12 | 0.750 | 0.431 | 0.825 | 0.699 | 0.812 | 1.031 | 0.120 |
| 14 | 0.875 | 0.431 | 0.825 | 0.823 | 0.906 | 1.125 | 0.120 |
| 16 | 1.000 | 0.431 | 0.825 | 0.949 | 0.969 | 1.219 | 0.120 |
| 18 | 1.125 | 0.431 | 0.825 | 1.073 | 1.062 | 1.312 | 0.120 |
| 20 | 1.250 | 0.556 | 1.076 | 1.199 | 1.156 | 1.438 | 0.120 |
| 22 | 1.375 | 0.556 | 1.076 | 1.323 | 1.250 | 1.562 | 0.120 |
| 24 | 1.500 | 0.589 | 1.109 | 1.449 | 1.375 | 1.688 | 0.147 |

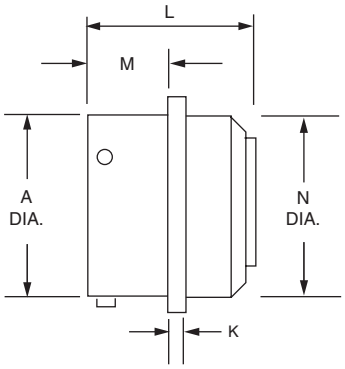
## PT33A Wall Mount Receptacle with external rear accessory thread (solder contacts)

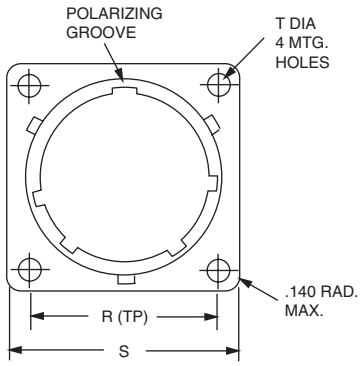



| Shell size | A diameter | M length | L depth | K thickness | Z length | KK rear diameter | R hole space | S width | Q thread |
|---|---|---|---|---|---|---|---|---|---|
| tolerance | .003 (0.08) | 0.01 | 0.020 | 0.01 | 0.04 | 0.01 | | | |
| 8 | 0.473 | 0.431 | 0.887 | 0.062 | 0.594 | 0.438 | 0.594 | 0.812 | .4375-28 UNEF |
| 10 | 0.590 | 0.431 | 0.887 | 0.062 | 0.394 | 0.562 | 0.719 | 0.938 | .5625-24 UNEF |
| 12 | 0.750 | 0.431 | 0.887 | 0.062 | 0.394 | 0.688 | 0.812 | 1.031 | .6875-24 UNEF |
| 14 | 0.875 | 0.431 | 0.887 | 0.062 | 0.394 | 0.812 | 0.906 | 1.125 | .8125-20 UNEF |
| 16 | 1.000 | 0.431 | 0.887 | 0.062 | 0.394 | 0.938 | 0.969 | 1.219 | .9375-20 UNEF |
| 18 | 1.125 | 0.431 | 0.887 | 0.062 | 0.394 | 1.062 | 1.062 | 1.312 | 1.0625-18 UNEF |
| 20 | 1.250 | 0.556 | 1.105 | 0.094 | 0.455 | 1.188 | 1.156 | 1.438 | 1.1875-18 UNEF |
| 22 | 1.375 | 0.556 | 1.105 | 0.094 | 0.455 | 1.312 | 1.250 | 1.562 | 1.3125-18 UNEF |
| 24 | 1.500 | 0.589 | 1.105 | 0.094 | 0.422 | 1.438 | 1.375 | 1.688 | 1.4375-18 UNEF |

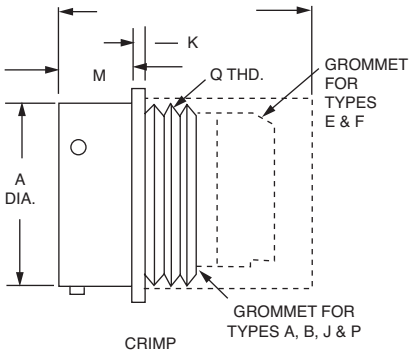
## PT02SE Box Mount Receptacle without rear accessory thread (crimp contacts)

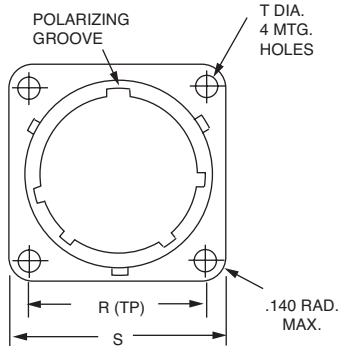



| Shell size<br>tolerance | A<br>diameter<br>.003 (0.08) | M<br>length<br>0.01 | L<br>depth<br>0.020 | K<br>thickness<br>0.01 | Z<br>length<br>0.04 | N<br>rear diameter<br>0.01 | R<br>hole space | S<br>width |
|---|---|---|---|---|---|---|---|---|
| 8 | 0.473 | 0.431 | 0.825 | 0.062 | 0.594 | 0.469 | 0.594 | 0.828 |
| 10 | 0.590 | 0.431 | 0.825 | 0.062 | 0.394 | 0.593 | 0.719 | 0.954 |
| 12 | 0.750 | 0.431 | 0.825 | 0.062 | 0.394 | 0.719 | 0.812 | 1.047 |
| 14 | 0.875 | 0.431 | 0.825 | 0.062 | 0.394 | 0.843 | 0.906 | 1.141 |
| 16 | 1.000 | 0.431 | 0.825 | 0.062 | 0.394 | 0.969 | 0.969 | 1.234 |
| 18 | 1.125 | 0.431 | 0.825 | 0.062 | 0.394 | 1.093 | 1.062 | 1.328 |
| 20 | 1.250 | 0.556 | 1.011 | 0.094 | 0.455 | 1.219 | 1.156 | 1.453 |
| 22 | 1.375 | 0.556 | 1.011 | 0.094 | 0.455 | 1.343 | 1.250 | 1.578 |
| 24 | 1.500 | 0.589 | 1.011 | 0.094 | 0.422 | 1.469 | 1.375 | 1.702 |

## PT33SE Receptacle with external rear accessory thread (crimp contacts supplied)



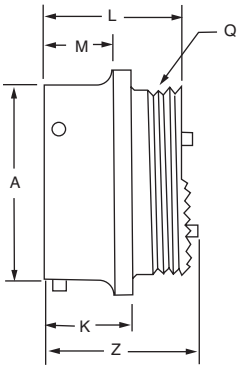



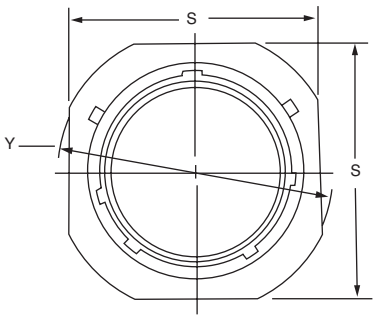

| shell size<br>tolerance | A<br>diameter<br>.003 (0.08) | M<br>length<br>0.016 | Z<br>length<br>0.04 | N<br>rear diameter<br>0.01 | Q<br>thread | S<br>width | R<br>hole space |
|---|---|---|---|---|---|---|---|
| 8 | 0.473 | 0.431 | 0.948 | 0.469 | .4375-28 UNEF | 0.828 | 0.594 |
| 10 | 0.590 | 0.431 | 0.948 | 0.593 | .5625-24 UNEF | 0.954 | 0.719 |
| 12 | 0.750 | 0.431 | 0.948 | 0.719 | .6875-24 UNEF | 1.047 | 0.812 |
| 14 | 0.875 | 0.431 | 0.948 | 0.843 | .8125-20 UNEF | 1.141 | 0.906 |
| 16 | 1.000 | 0.431 | 0.948 | 0.969 | .9375-20 UNEF | 1.234 | 0.969 |
| 18 | 1.125 | 0.431 | 0.948 | 1.093 | 1.0625-18 UNEF | 1.328 | 1.062 |
| 20 | 1.250 | 0.556 | 1.166 | 1.219 | 1.1875-18 UNEF | 1.453 | 1.156 |
| 22 | 1.375 | 0.556 | 1.166 | 1.343 | 1.3125-18 UNEF | 1.578 | 1.250 |
| 24 | 1.500 | 0.589 | 1.166 | 1.469 | 1.4375-18 UNEF | 1.703 | 1.375 |

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

# VEAM PT Connectors

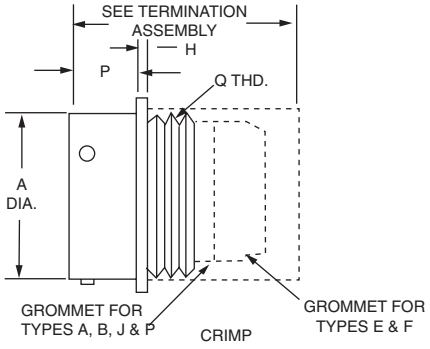
## PT44A Line Connecting Receptacle (no fixing holes) with rear accessory thread solder contacts

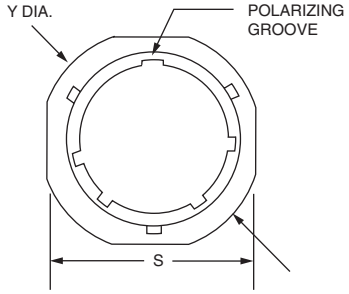



| Shell size | A diameter | M length | Y diameter | Z length | N rear diameter | Q thread | S width |
|---|---|---|---|---|---|---|---|
| tolerance | .003 (0.08) | 0.016 | 0.02 | 0.04 | 0.01 | | |
| 8 | 0.473 | 0.400 | 0.938 | 0.948 | 0.469 | .4375-28 UNEF | 0.812 |
| 10 | 0.590 | 0.400 | 1.062 | 0.948 | 0.593 | .5625-24 UNEF | 0.938 |
| 12 | 0.750 | 0.400 | 1.156 | 0.948 | 0.719 | .6875-24 UNEF | 1.031 |
| 14 | 0.875 | 0.400 | 1.25 | 0.948 | 0.843 | .8125-20 UNEF | 1.125 |
| 16 | 1.000 | 0.400 | 1.344 | 0.948 | 0.969 | .9375-20 UNEF | 1.219 |
| 18 | 1.125 | 0.400 | 1.438 | 0.948 | 1.093 | 1.0625-18 UNEF | 1.312 |
| 20 | 1.250 | 0.535 | 1.562 | 1.166 | 1.219 | 1.1875-18 UNEF | 1.438 |
| 22 | 1.375 | 0.535 | 1.688 | 1.166 | 1.343 | 1.3125-18 UNEF | 1.562 |
| 24 | 1.500 | 0.568 | 1.812 | 1.166 | 1.469 | 1.4375-18 UNEF | 1.688 |

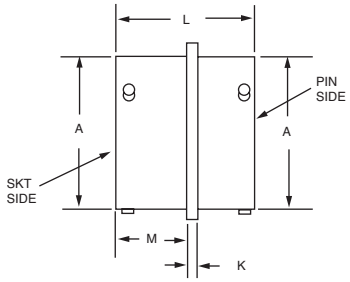
## PT44SE Line Connecting Receptacle (no fixing holes) with rear accessory thread (crimp contacts supplied)

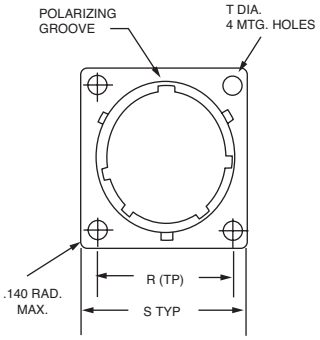



| Shell size | A diameter | P length | H panel thickness | S width | Y diameter | Q thread |
|---|---|---|---|---|---|---|
| tolerance | .003 (0.08) | 0.031 | 0.094 | | | |
| 8 | 0.473 | 0.400 | 0.094 | 0.828 | 0.958 | .4375-28 UNEF |
| 10 | 0.590 | 0.400 | 0.094 | 0.954 | 1.082 | .5625-24 UNEF |
| 12 | 0.750 | 0.400 | 0.094 | 1.047 | 1.176 | .6875-24 UNEF |
| 14 | 0.875 | 0.400 | 0.094 | 1.141 | 1.270 | .8125-20 UNEF |
| 16 | 1.000 | 0.400 | 0.094 | 1.234 | 1.364 | .9375-20 UNEF |
| 18 | 1.125 | 0.400 | 0.094 | 1.328 | 1.458 | 1.0625-18 UNEF |
| 20 | 1.250 | 0.535 | 0.115 | 1.453 | 1.582 | 1.1875-18 UNEF |
| 22 | 1.375 | 0.535 | 0.115 | 1.578 | 1.708 | 1.3125-18 UNEF |
| 24 | 1.500 | 0.535 | 0.115 | 1.703 | 1.832 | 1.4375-18 UNEF |

## PTB Thru Bulkhead Connector

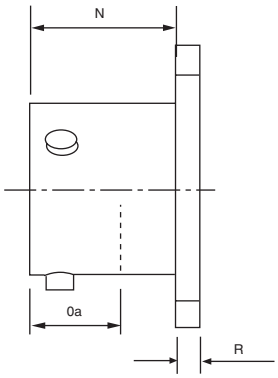


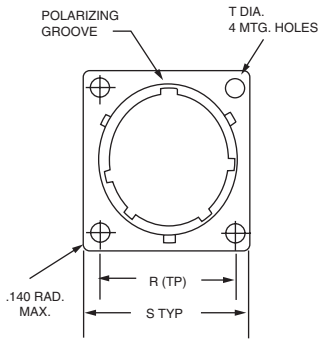




| shell size | A diameter | M length | L | S width | R hole space | K panel thickness |
|---|---|---|---|---|---|---|
| tolerance | .003 (0.08) | 0.031 | 1.125 | | | 0.016 |
| 8 | 0.473 | 0.562 | 1.125 | 0.828 | 0.594 | 0.062 |
| 10 | 0.590 | 0.562 | 1.125 | 0.954 | 0.719 | 0.062 |
| 12 | 0.750 | 0.562 | 1.125 | 1.047 | 0.812 | 0.062 |
| 14 | 0.875 | 0.562 | 1.125 | 1.141 | 0.906 | 0.062 |
| 16 | 1.000 | 0.562 | 1.125 | 1.234 | 0.969 | 0.062 |
| 18 | 1.125 | 0.562 | 1.125 | 1.328 | 1.062 | 0.062 |
| 20 | 1.250 | 0.688 | 1.406 | 1.453 | 1.156 | 0.094 |
| 22 | 1.375 | 0.688 | 1.406 | 1.578 | 1.250 | 0.094 |
| 24 | 1.500 | 0.688 | 1.406 | 1.703 | 1.375 | 0.009 |

This connector is a thru-bulkhead version with double faced non-removable pin and socket insert construction allowing mating from both ends for applications requiring the disconnection of a power source from either side of a panel, or where air leakage requirements are critical.

## Dummy Stowage Connector 05-0167-XX



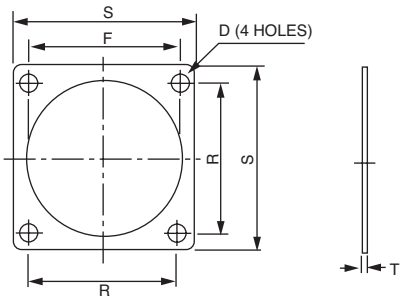




To complete receptacle part number replace xx with shell size and add plating mod code from “How to Order” section on page 19.

| Size | Diameter | N Depth | Oa Mating | R Thickness |
|---|---|---|---|---|
| 8 | 0.473 | 0.493 | 0.300 | 0.080 |
| 10 | 0.590 | 0.493 | 0.300 | 0.080 |
| 12 | 0.750 | 0.493 | 0.300 | 0.080 |
| 14 | 0.875 | 0.493 | 0.300 | 0.080 |
| 16 | 1.000 | 0.493 | 0.300 | 0.080 |
| 18 | 1.125 | 0.493 | 0.300 | 0.080 |
| 20 | 1.250 | 0.587 | 0.360 | 0.110 |
| 22 | 1.375 | 0.587 | 0.360 | 0.110 |
| 24 | 1.500 | 0.620 | 0.360 | 0.110 |

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

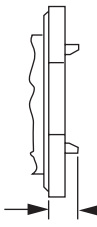
## Flange Mount Gaskets 05-0368-xx




| Size | Hole Diameter D | Hole to Hole R | Width S | Thick T |
|---|---|---|---|---|
| 8 | 0.13 | 0.594 | 0.812 | 0.031 |
| 10 | 0.13 | 0.719 | 0.958 | 0.031 |
| 12 | 0.13 | 0.813 | 1.031 | 0.031 |
| 14 | 0.13 | 0.906 | 1.123 | 0.031 |
| 16 | 0.13 | 0.969 | 1.219 | 0.031 |
| 18 | 0.13 | 1.065 | 1.312 | 0.031 |
| 20 | 0.13 | 1.156 | 1.438 | 0.031 |
| 22 | 0.13 | 1.250 | 1.565 | 0.031 |
| 24 | 0.13 | 1.373 | 1.658 | 0.031 |

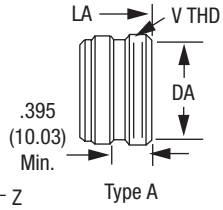
## PT Panel Mount Accessories

**02**



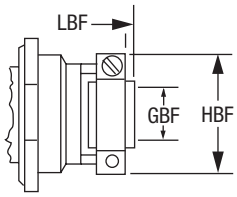

No Thread

**PT33A/44A**



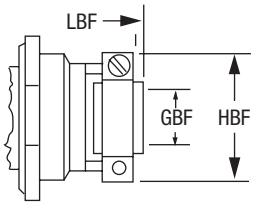

05-0532 adaptor

**PT33A/44A**



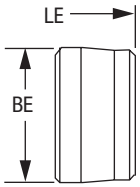

05-1778 strain relief clamp
05-0120 SR and grommet

**PT33SE/44SE**



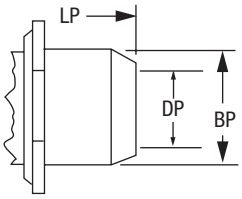

05-0186 SR Clamp

**PT33A/44A**



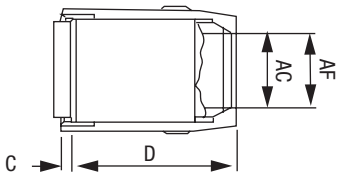

05-0114 external grommet clamp nut

**PT33SE/44SE**




05-2042 potting boot

**PT33A/44A**




05-2330 W sealing gland

**For dimensional data see accessories section on page's 33 to 39**

**Protective caps are located on page 33.**

**For connector supplied complete with relevant accessory please use cross reference chart on page 42 or consult factory**

## How To Order PT Plug Connectors

**PT plugs can be supplied with or without grounding springs, designated by G in part number.**
**Heavy ribbed (Arctic) coupling nuts are specified by adding T01 in mod code.**

| SERIES/ PREFIX | SHELL STYLE | CLASS | SHELL SIZE/ LAYOUT | CONTACT TYPE | polarization | PLATING/ MOD CODE |
|---|---|---|---|---|---|---|
| | NOTE 1 | NOTE 1 | NOTE 2 | NOTE 3 | NOTE 4 | NOTE 5 |
| PT | 55 | A | (22-55) | S | (B) | (T69) |
| PTG | | SE | | P | | |

### How To Order

1 Select the shell style and classification eg. PT55A from following pages.

2 Add the shell size and contact arrangement eg. PT55A22 55 see pages xxx.

3 Add the contacts P=pins, S= sockets eg. PT55A22 55S.

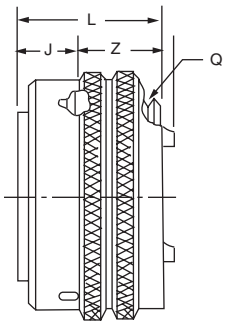
4 For polarization add the relevant letter (E, B, C, F) or for orientation add (W, X, Y, Z) from page 14. For normal orientation no letter required.

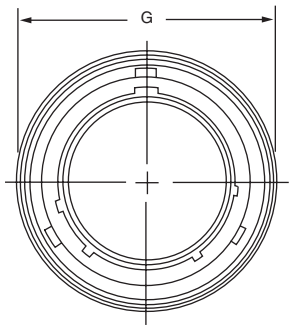
5 Add suffix as required from typical list below.

| | |
|---|---|
| No Code | Olive drab cadmium plate finish as standard (historically014) |
| 23 | Electroless Nickel plating finish |
| SR | Strain Relief |
| T01 | Ribbed coupling nut |
| T02 | Ribbed coupling nut and strain relief |
| T21 | Marine ally Bronze (contact factory) |
| T62/T65/T66 | Pin tail contacts (contact factory) |
| T69 | Zinc cobalt olive drab plate finish |

# VEAM PT Connectors

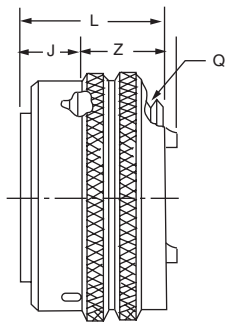
## PT55A Straight Plug with Solder Contacts

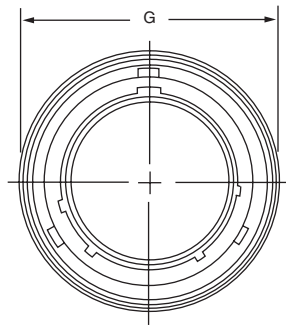



| Shell Size | G | J | Z | L | Q |
|---|---|---|---|---|---|
| | diameter | mate | depth | body | thread |
| tolerance | .003 (0.08) | 0.01 | | | |
| 8 | .765 | 0.353 | 0.594 | 0.906 | .4375-28 UNEF |
| 10 | .840 | 0.353 | 0.594 | 0.906 | .5625-24 UNEF |
| 12 | .999 | 0.353 | 0.594 | 0.906 | .6875-24 UNEF |
| 14 | 1.139 | 0.353 | 0.594 | 0.906 | .8125-20 UNEF |
| 16 | 1.261 | 0.353 | 0.594 | 0.906 | .9375-20 UNEF |
| 18 | 1.337 | 0.353 | 0.594 | 0.906 | 1.0625-18 UNEF |
| 20 | 1.477 | 0.415 | 0.672 | 1.062 | 1.1875-18 UNEF |
| 22 | 1.602 | 0.415 | 0.672 | 1.062 | 1.3125-18 UNEF |
| 24 | 1.723 | 0.415 | 0.672 | 1.125 | 1.4375-18 UNEF |

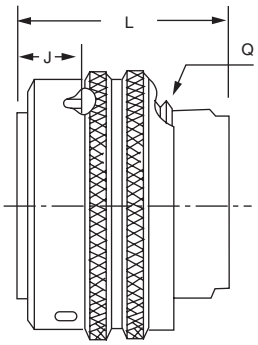
## PTG55A Straight Plug with Grounding Spring and Solder Contacts

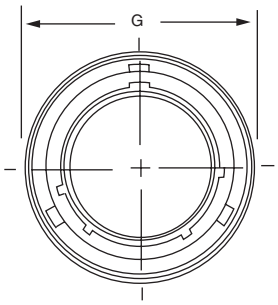



| Shell Size | G | J | Z | L | Q |
|---|---|---|---|---|---|
| | diameter | mate | depth | body | thread |
| tolerance | .003 (0.08) | 0.01 | | | |
| 8 | .765 | 0.353 | 0.594 | 0.906 | .4375-28 UNEF |
| 10 | .840 | 0.353 | 0.594 | 0.906 | .5625-24 UNEF |
| 12 | .999 | 0.353 | 0.594 | 0.906 | .6875-24 UNEF |
| 14 | 1.139 | 0.353 | 0.594 | 0.906 | .8125-20 UNEF |
| 16 | 1.261 | 0.353 | 0.594 | 0.906 | .9375-20 UNEF |
| 18 | 1.337 | 0.353 | 0.594 | 0.906 | 1.0625-18 UNEF |
| 20 | 1.477 | 0.415 | 0.672 | 1.062 | 1.1875-18 UNEF |
| 22 | 1.602 | 0.415 | 0.672 | 1.062 | 1.3125-18 UNEF |
| 24 | 1.723 | 0.415 | 0.672 | 1.125 | 1.4375-18 UNEF |

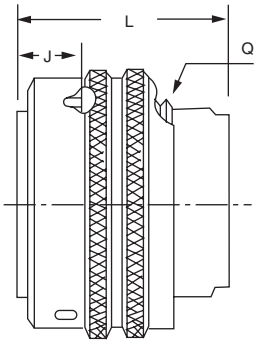
## PT55SE Straight Plug with Crimp Contacts

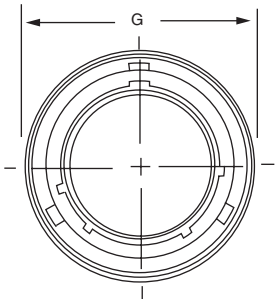



| Shell Size | G | J | L | Q |
|---|---|---|---|---|
| | diameter | mate | depth | thread |
| tolerance | .003 (0.08) | 0.01 | | |
| 8 | .765 | 0.353 | 1.900 | .4375-28 UNEF |
| 10 | .859 | 0.353 | 1.900 | .5625-24 UNEF |
| 12 | 1.031 | 0.353 | 1.900 | .6875-24 UNEF |
| 14 | 1.156 | 0.353 | 1.900 | .8125-20 UNEF |
| 16 | 1.281 | 0.353 | 1.987 | .9375-20 UNEF |
| 18 | 1.391 | 0.353 | 1.987 | 1.0625-18 UNEF |
| 20 | 1.531 | 0.415 | 2.087 | 1.1875-18 UNEF |
| 22 | 1.656 | 0.415 | 2.087 | 1.3125-18 UNEF |
| 24 | 1.776 | 0.415 | 2.149 | 1.4375-18 UNEF |

## PTG55SE Straight Plug with Grounding Fingers and Crimp Contacts



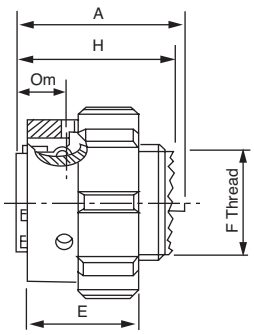



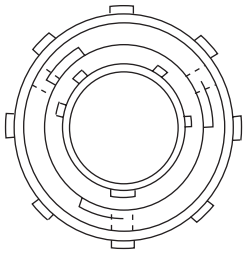

| Shell Size | G | J | L | Q |
|---|---|---|---|---|
| | diameter | mate | depth | thread |
| tolerance | .003 (0.08) | 0.01 | | |
| 8 | .765 | 0.353 | 1.900 | .4375-28 UNEF |
| 10 | .859 | 0.353 | 1.900 | .5625-24 UNEF |
| 12 | 1.031 | 0.353 | 1.900 | .6875-24 UNEF |
| 14 | 1.156 | 0.353 | 1.900 | .8125-20 UNEF |
| 16 | 1.281 | 0.353 | 1.987 | .9375-20 UNEF |
| 18 | 1.391 | 0.353 | 1.987 | 1.0625-18 UNEF |
| 20 | 1.531 | 0.415 | 2.087 | 1.1875-18 UNEF |
| 22 | 1.656 | 0.415 | 2.087 | 1.3125-18 UNEF |
| 24 | 1.776 | 0.415 | 2.149 | 1.4375-18 UNEF |

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

# VEAM PT Connectors

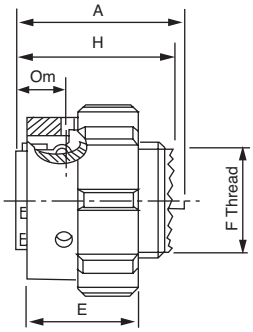
## PT55A (T01) Straight Plug with Ribbed Coupling Nut and Solder Contacts

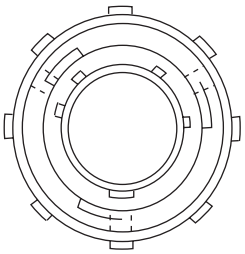


| Shell Size | B | D | Om | H | F |
|---|---|---|---|---|---|
| | diameter | coupling nut dia | mate | depth | thread |
| tolerance | .003 (0.08) | 0.038 | 0.01 | | |
| 8 | 0.64 | 0.825 | 0.301 | 0.906 | .4375-28 UNEF |
| 10 | 0.756 | 0.937 | 0.301 | 0.906 | .5625-24 UNEF |
| 12 | 0.940 | 1.109 | 0.301 | 0.906 | .6875-24 UNEF |
| 14 | 1.063 | 1.234 | 0.301 | 0.906 | .8125-20 UNEF |
| 16 | 1.197 | 1.437 | 0.301 | 0.906 | .9375-20 UNEF |
| 18 | 1.308 | 1.548 | 0.301 | 0.906 | 1.0625-18 UNEF |
| 20 | 1.430 | 1.67 | 0.301 | 1.062 | 1.1875-18 UNEF |
| 22 | 1.565 | 1.78 | 0.341 | 1.062 | 1.3125-18 UNEF |
| 24 | 1.678 | 1.905 | 0.341 | 1.125 | 1.4375-18 UNEF |

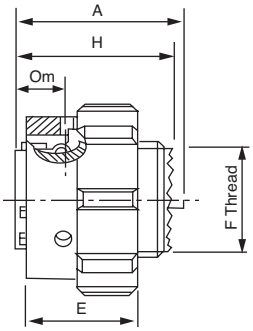
## PTG55A (T01) Straight Plug with Grounding Spring/Ribbed Coupling Nut and Solder Contacts

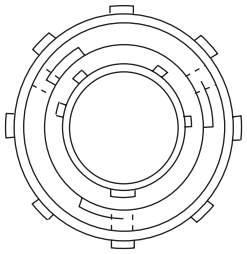


| Shell Size | B | D | Om | H | F |
|---|---|---|---|---|---|
| | diameter | coupling nut dia | mate | depth | thread |
| tolerance | .003 (0.08) | 0.038 | 0.01 | | |
| 8 | 0.64 | 0.825 | 0.301 | 0.906 | .4375-28 UNEF |
| 10 | 0.756 | 0.937 | 0.301 | 0.906 | .5625-24 UNEF |
| 12 | 0.940 | 1.109 | 0.301 | 0.906 | .6875-24 UNEF |
| 14 | 1.063 | 1.234 | 0.301 | 0.906 | .8125-20 UNEF |
| 16 | 1.197 | 1.437 | 0.301 | 0.906 | .9375-20 UNEF |
| 18 | 1.308 | 1.548 | 0.301 | 0.906 | 1.0625-18 UNEF |
| 20 | 1.430 | 1.67 | 0.301 | 1.062 | 1.1875-18 UNEF |
| 22 | 1.565 | 1.78 | 0.341 | 1.062 | 1.3125-18 UNEF |
| 24 | 1.678 | 1.905 | 0.341 | 1.125 | 1.4375-18 UNEF |

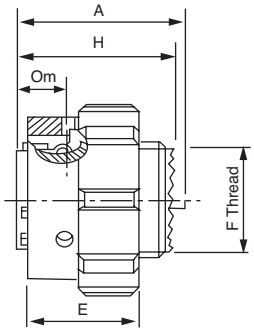
## PT55SE (T01) Straight Plug with Grounding Fingers/Ribbed Coupling Nut and Crimp Contacts

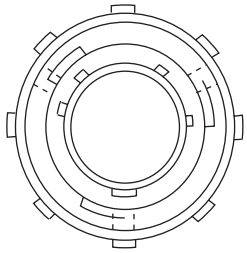


| Shell Size | B | D | Om | H | F |
|---|---|---|---|---|---|
| | diameter | coupling nut dia | mate | depth | thread |
| tolerance | .003 (0.08) | 0.038 | 0.01 | | |
| 8 | 0.765 | 0.825 | 0.353 | 1.900 | .4375-28 UNEF |
| 10 | 0.859 | 0.937 | 0.353 | 1.900 | .5625-24 UNEF |
| 12 | 1.031 | 1.109 | 0.353 | 1.900 | .6875-24 UNEF |
| 14 | 1.156 | 1.234 | 0.353 | 1.900 | .8125-20 UNEF |
| 16 | 1.281 | 1.437 | 0.353 | 1.978 | .9375-20 UNEF |
| 18 | 1.391 | 1.548 | 0.353 | 1.978 | 1.0625-18 UNEF |
| 20 | 1.531 | 1.67 | 0.415 | 2.087 | 1.1875-18 UNEF |
| 22 | 1.656 | 1.78 | 0.415 | 2.087 | 1.3125-18 UNEF |
| 24 | 1.776 | 1.905 | 0.415 | 2.149 | 1.4375-18 UNEF |

## PTG55SE (T01) Straight Plug with Grounding Fingers/Ribbed Coupling Nut and Crimp Contacts



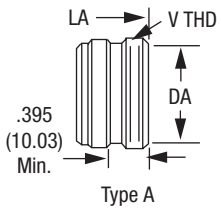



| Shell Size | B | D | Om | H | F |
|---|---|---|---|---|---|
| | diameter | coupling nut dia | mate | depth | thread |
| tolerance | .003 (0.08) | 0.038 | 0.01 | | |
| 8 | 0.765 | 0.825 | 0.353 | 1.900 | .4375-28 UNEF |
| 10 | 0.859 | 0.937 | 0.353 | 1.900 | .5625-24 UNEF |
| 12 | 1.031 | 1.109 | 0.353 | 1.900 | .6875-24 UNEF |
| 14 | 1.156 | 1.234 | 0.353 | 1.900 | .8125-20 UNEF |
| 16 | 1.281 | 1.437 | 0.353 | 1.978 | .9375-20 UNEF |
| 18 | 1.391 | 1.548 | 0.353 | 1.978 | 1.0625-18 UNEF |
| 20 | 1.531 | 1.67 | 0.415 | 2.087 | 1.1875-18 UNEF |
| 22 | 1.656 | 1.78 | 0.415 | 2.087 | 1.3125-18 UNEF |
| 24 | 1.776 | 1.905 | 0.415 | 2.149 | 1.4375-18 UNEF |

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

## PT Plug Accessories

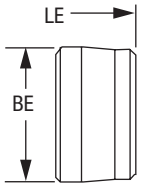
**PT55/PTG55**




Type A

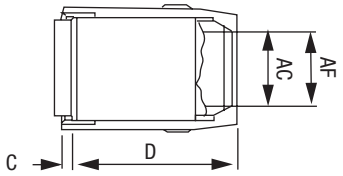
05-0532
adaptor

**PT55/PTG55**



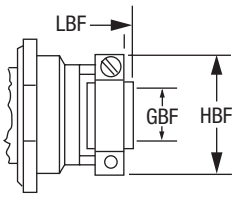

05-0114 external grommet
clamp nut

**PT55/PTG55**



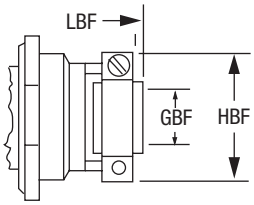

05-2330 W sealing gland

**PT55A/PTG55A**



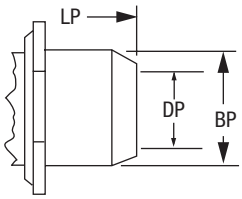

05-1778 strain relief clamp
05-0120 SR and grommet

**PT55SE/PTG55SE**




05-0186 SR Clamp

**PT55/PTSE/PTG55/PTSE**




05-2042 potting boot

**For dimensional data see accessories section on page's 33 to 39.**

**Strain relief clamps are not supplied with cable clamp grommet, which should be ordered separately from data on page 33.**

**For connector supplied complete with relevant accessory please use cross reference chart on page 42 or consult factory.**

**Protective caps are located on page 33.**

## CPT Connectors

- The CPT range is a proprietary design and is a commercial version of the PTSE crimp contact connectors, available in shell sizes 8 to 18.
- They are intermateable and interchangeable with PT and PTSE ranges and offer similar mechanical and electrical performance.
- Since they use standard PT hardware they are dimensionally similar to that range, and all relevant dimensions can be obtained from that section of this catalog.
- CPT connectors can be supplied with or without contacts. Details of CPT contacts can be found in the "contacts" section of this catalog.

## Available CPT variants in shell sizes 8 thru 18

- CPT77A jam nut receptacle with external rear accessory thread (crimp contacts)
- CPT07E jam nut receptacle with internal rear accessory thread (crimp contacts)
- CPT02 mount receptacle with without rear accessory thread (crimp contacts)
- CPT33A wall mount receptacle with external rear accessory thread (crimp contacts)
- CPT44A line connecting receptacle (no fixing holes) with rear accessory thread (crimp contacts)
- CPT55A straight plug with standard coupling nut (crimp contacts)
- CPT55AT01 straight plug with ribbed coupling nut (crimp contacts)
- CPTG55A straight plug with standard coupling nut/grounding spring (crimp contacts)
- CPTG55AT01 straight plug with ribbed coupling nut/grounding spring (crimp contacts)

## Crimp Contacts Insertion & Removal

### Insertion

Remove the connector rear accessories that may be fitted and thread them on to the cables. Locate wire and crimped contact in the tool, insert the contact in to the relevant contact cavity from the rear. Maintain alignment with the axis of the connector until the contact is located in the correct position. With PTSE connectors a slight click may be heard as the positive stop is felt. All contacts must be fitted and sealing plugs used behind any contacts that are not wired.

### Removal

Remove the connector back fittings. Align the tool over the front of the contact and maintain gentle pressure on the tool while pushing forward to eject the contact. With PTSE range the tip of the tool must locate in the contact retention device. Do not attempt to tilt or rotate the tool within the connector.

| Contacts | Insertion | Extraction Tool | Crimp Tool | Locator |
|---|---|---|---|---|
| 20 PTSE | 05-2231-20 | 05-2230-20 | M22520/1-01 | M22520/1-02 |
| 20 PTSE | 05-0407-20 | 05-2230-20 | M22520/1-01 | M22520/1-02 |
| 16 PTSE | 05-2231-20 | 05-2230-16 | M22520/1-01 | M22520/1-02 |
| 16 PTSE | 05-2231-20 | 05-2230-20 | M22520/1-01 | M22520/1-02 |
| 20&20/22CPT | 05-0484-20 | 05-0485-20 | 11-7295 | 05-0026 |
| 16CPT | 05-2231-16 | 05-2230-16 | 11-7295 | Supplied with tool |

Insertion Tools

A43240
Removal Kit

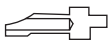
Crimp Tool

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

| PTSE CONTACTS | | SEALING PLUGS | | |
|---|---|---|---|---|
| size | Part Number | Part Number | Color | Wires Aw |
| 20 | Pin 05-1124 Socket 05-2376 | 05-2661-A20 | red | 24, 22 & 20 |
| 20 | Pin 05-1127 Socket 05-1128 | 05-2661-A20 | red | 24, 22 & 20 |
| 16 | Pin 05-1130 Socket 05-1131 | 05-2661-16 | blue | 18 & 16 |
| 12 | Pin 05-1133 Socket 05-1134 | 05-2661-12 | yellow | 14 & 12 |

| CPT CONTACTS | | | SEALING PLUGS | | |
|---|---|---|---|---|---|
| size | Part Number | Shell Size | Part Number | Color | Wires Awg |
| 20 | Pin 05-1136 Socket 05-1138 | 8-18 | 05-2661-A20 | red | 24, 22 & 20 |
| 20/22 | Pin 05-1171 Socket 05-1173 | 8-18 | 05-2661-A20 | red | 24, 22 & ?? |
| 16 | Pin 05-1142 Socket 05-1144 | 8-18 | 05-2661-16 | blue | 18 & 16 |

CPT contacts are available for Shellsizes 8 thru 18 only.

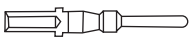


Size 20 solder contact
Nominal rating: 5 amps
Stripping length: 1/8”

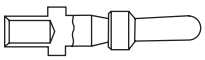
Size 16 solder contact
Nominal rating: 15 amps
Stripping length: 3/16”

Size 12 solder contact
Nominal rating: 24 amps
Stripping length: 3/16”

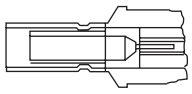
Size 20 contacts S.E. range
Nominal rating: 15 amps
Stripping length: _”



Size 16 contact S.E. range
Nominal rating: 15 amps
Stripping length: 1/4”



Size 12 contacts S.E. range
Nominal rating: 24 amps
Stripping length: 1/4”



Co axial contacts S.E. range
for RG. 180/U & RG. 195/U
cables or equivalents

## Accessories

### Panel Mount Protection Caps

| Shell Size | Wall/box c/w chain | Wall/box c/w cord | In-line c/w chain | In-line c/w cord | Cap only | N diameter .001 variance | Length .015 variance |
|---|---|---|---|---|---|---|---|
| 8 | 10-101960-8 | 05-0517-8 | 10-101961-8 | 05-0537-8 | 10-123094-8 | 0.734 | 0.562 |
| 10 | 10-101960-10 | 05-0517-10 | 10-101961-10 | 05-0537-10 | 10-123094-10 | 0.859 | 0.562 |
| 12 | 10-101960-12 | 05-0517-12 | 10-101961-12 | 05-0537-12 | 10-123094-12 | 1.000 | 0.562 |
| 14 | 10-101960-14 | 05-0517-14 | 10-101961-14 | 05-0537-14 | 10-123094-14 | 1.125 | 0.562 |
| 16 | 10-101960-16 | 05-0517-16 | 10-101961-16 | 05-0537-16 | 10-123094-16 | 1.250 | 0.562 |
| 18 | 10-101960-18 | 05-0517-18 | 10-101961-18 | 05-0537-18 | 10-123094-18 | 1.375 | 0.562 |
| 20 | 10-101960-20 | 05-0517-20 | 10-101961-20 | 05-0537-20 | 10-123094-20 | 1.500 | 0.562 |
| 22 | 10-101960-22 | 05-0517-22 | 10-101961-22 | 05-0537-22 | 10-123094-22 | 1.625 | 0.562 |
| 24 | 10-101960-24 | 05-0517-24 | 10-101961-24 | 05-0537-24 | 10-123094-24 | 1.750 | 0.602 |

### Jam Nut Protection Caps

| | Part Numbers | | | N diameter | Length |
|---|---|---|---|---|---|
| Shell Size | With Chain | With Cord | Cap Only | .001 Variance | .015 Variance |
| 8 | 10-101964-8 | 05-0527-8 | 10-123094-8 | 0.076 | 0.572 |
| 10 | 10-101964-10 | 05-0527-10 | 10-123094-10 | 0.816 | 0.572 |
| 12 | 10-101964-12 | 05-0527-12 | 10-123094-12 | 1.000 | 0.57 |
| 14 | 10-101964-14 | 05-0527-14 | 10-123094-14 | 1.128 | 0.572 |
| 16 | 10-101964-16 | 05-0527-16 | 10-123094-16 | 1.267 | 0.572 |
| 18 | 10-101964-18 | 05-0527-18 | 10-123094-18 | 1.367 | 0.572 |
| 20 | 10-101964-20 | 05-0527-20 | 10-123094-20 | 1.496 | 0.572 |
| 22 | 10-101964-22 | 05-0527-22 | 10-123094-22 | 1.624 | 0.572 |
| 24 | 10-101964-24 | 05-0527-24 | 10-123094-24 | 1.747 | 0.612 |

### Cable Clamp Grommets

| Size | Part |
|---|---|
| 8 | 10-36565-101 |
| 10 | 10-36565-122 |
| 12 | 10-36565-143 |
| 14 | 10-36565-163 |
| 16 | 10-36565-183 |
| 18 | 10-36565-203 |
| 20 | 10-36565-203 |
| 22 | 10-36565-244 |
| 24 | 10-36565-232 |

A molded resilient grommet that is designed for use in the jaws of all strain relief clamps, forming a firm grip on the cable sheath. The cable clamp grommet is always specified as a separate item when ordering the clamps.

### Plug Protection Caps

| Shell Size | With chain | With cord | Cap only | N diameter .001 variance | Length .015 variance |
|---|---|---|---|---|---|
| 8 | 05-0057-8 | 05-0507-8 | 05-0056-8 | 0.473 | 0.532 |
| 10 | 05-0057-10 | 05-0507-10 | 05-0056-10 | 0.590 | 0.532 |
| 12 | 05-0057-12 | 05-0507-12 | 05-0056-12 | 0.750 | 0.532 |
| 14 | 05-0057-14 | 05-0507-14 | 05-0056-14 | 0.875 | 0.532 |
| 16 | 05-0057-16 | 05-0507-16 | 05-0056-16 | 1.000 | 0.532 |
| 18 | 05-0057-18 | 05-0507-18 | 05-0056-18 | 1.125 | 0.532 |
| 20 | 05-0057-20 | 05-0507-20 | 05-0056-20 | 1.250 | 0.594 |
| 22 | 05-0057-22 | 05-0507-22 | 05-0056-22 | 1.375 | 0.594 |
| 24 | 05-0057-24 | 05-0507-24 | 05-0056-24 | 1.500 | 0.627 |

To complete protective cap part numbers add link length as follows + plate finish.

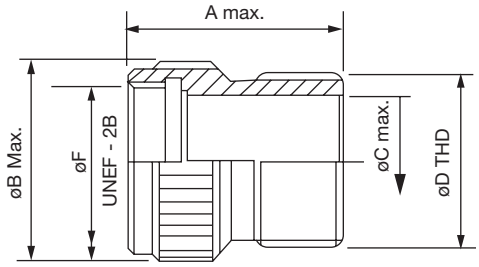
30=3" 35=3.5" 40=4" 45=4.5"
50=5" 60=6" 70=7" 80=8" etc.

Plate finish = see how to order section for each connector type for mod code required. ie 05-0527-8-70-T69 to receive jam nut receptacle cap with cord for size 8 with &" cord and zinc cobalt plate.

Protective caps are also available with ribbed grip feature, and in other materials such as Nylon 66 and Stainless Steel. Please consult factory.

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

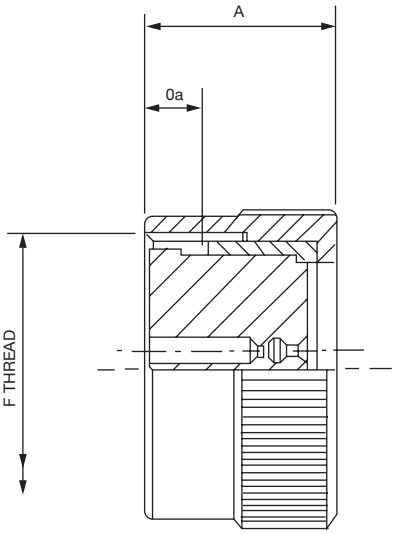
## A Threaded Type Adapter 05 0532 XX




To correctly specify accessory part number replace XX with shell size required and plating needed which can be found in How to order section of each connector type. ie 05 0532 8 T69

| Size | Front Thread F | Rear Thread D | Length A | Diameter B |
|---|---|---|---|---|
| 8 | 7/16 x 28UNEF | 1/2 x 28UNEF | 0.935 | 0.590 |
| 10 | 9/16 x 24UNEF | 5/8 x 24UNEF | 0.935 | 0.720 |
| 12 | 11/16 x 24UNEF | 3/4 x 20UNEF | 0.935 | 0.850 |
| 14 | 13/16 x 20UNEF | 7/8 x 20UNEF | 0.935 | 0.980 |
| 16 | 15/16 x 20UNEF | 1 x 20UNEF | 0.935 | 1.096 |
| 18 | 1 1/16 x 18UNEF | 1 3/16 x 18UNEF | 0.935 | 1.210 |
| 20 | 1 3/16 x 18UNEF | 1 3/16 x 18UNEF | 0.935 | 1.350 |
| 22 | 1 5/16 x 18UNEF | 1 7/16 x 18UNEF | 0.935 | 1.480 |
| 24 | 1 7/16 x 18unef | 1 7/16 x 18UNEF | 0.935 | 1.600 |

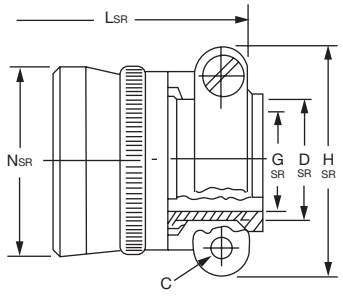
## E Type Grommet Clamp Nut 05 0114 XX XX




To correctly specify accessory part number replace XX with insert arrangement required and plating needed which can be found in How to order section of each connector type. ie 05 0114 8 98 T69

| Size | Front Thread F | Cable Diameter C | Length A | Diameter D |
|---|---|---|---|---|
| 8 | 7/16 x 28UNEF | 0.600 | 0.650 | 0.190 |
| 10 | 9/16 x 24UNEF | 0.730 | 0.650 | 0.190 |
| 12 | 11/16 x 24UNEF | 0.860 | 0.650 | 0.190 |
| 14 | 13/16 x 20UNEF | 0.990 | 0.650 | 0.190 |
| 16 | 15/16 x 20UNEF | 1.110 | 0.650 | 0.190 |
| 18 | 1 1/16 x 18UNEF | 1.240 | 0.650 | 0.190 |
| 20 | 1 3/16 x 18UNEF | 1.360 | 0.680 | 0.190 |
| 22 | 1 5/16 x 18UNEF | 1.480 | 0.680 | 0.190 |
| 24 | 1 7/16 x 18unef | 1.510 | 0.680 | 0.190 |

## Strain Relief Clamps

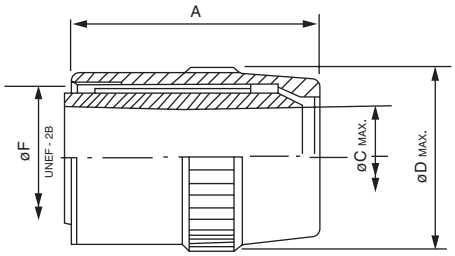



| 05-1778-XX | 05-0120-XX-XX | 05-1886-XX |
|---|---|---|
| Basic SR clamp | with Grommet | for SE connector |

To correctly specify accessory part number replace XX with shell size/insert layout required and plating needed which can be found in How to order section of each connector type. Cable clamp grommet sold separately. See page 33.

| Size | Front Thread | Diameter N | Max Clamp Width H | Cable Size G | Length L | Grommet P/N |
|---|---|---|---|---|---|---|
| 8 | 7/16 x 28UNEF | 0.550 | 0.812 | 0.125 | 1.761 | 10-36565-101 |
| 10 | 9/16 x 24UNEF | 0.675 | 0.875 | 0.188 | 1.761 | 10-36565-122 |
| 12 | 11/16 x 24UNEF | 0.803 | 1.000 | 0.312 | 1.761 | 10-36565-143 |
| 14 | 13/16 x 20UNEF | 0.920 | 1.125 | 0.375 | 1.761 | 10-36565-163 |
| 16 | 15/16 x 20UNEF | 0.047 | 1.188 | 0.500 | 1.893 | 10-36565-183 |
| 18 | 1 1/16 x 18UNEF | 1.165 | 1.438 | 0.625 | 1.893 | 10-36565-203 |
| 20 | 1 3/16 x 18UNEF | 1.290 | 1.438 | 0.625 | 2.081 | 10-36565-203 |
| 22 | 1 5/16 x 18UNEF | 1.418 | 1.719 | 0.750 | 2.081 | 10-36565-244 |
| 24 | 1 7/16 x 18unef | 1.543 | 1.750 | 0.800 | 2.143 | 10-36565-232 |

## W Type Sealing Gland 05 2330 XX

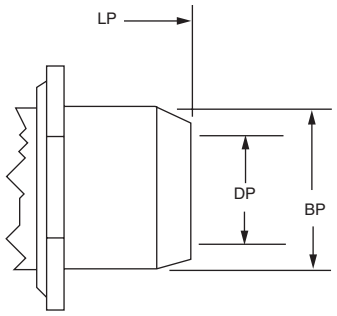



To correctly specify accessory part number replace XX with shell size required and plating needed which can be found in How to order section of each connector type. ie 05 2330 8 T69

| Size | Front Thread F | Cable Diameter C | Length A | Diameter D |
|---|---|---|---|---|
| 8 | 7/16 x 28UNEF | 0.230 | 1.055 | 0.560 |
| 10 | 9/16 x 24UNEF | 0.312 | 1.055 | 0.684 |
| 12 | 11/16 x 24UNEF | 0.442 | 1.155 | 0.810 |
| 14 | 13/16 x 20UNEF | 0.539 | 1.300 | 0.935 |
| 16 | 15/16 x 20UNEF | 0.614 | 1.524 | 1.060 |
| 18 | 1 1/16 x 18UNEF | 0.672 | 1.724 | 1.185 |
| 20 | 1 3/16 x 18UNEF | 0.744 | 1.925 | 1.310 |
| 22 | 1 5/16 x 18UNEF | 0.844 | 2.135 | 1.435 |
| 24 | 1 7/16 x 18unef | 0.890 | 2.175 | 1.560 |

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

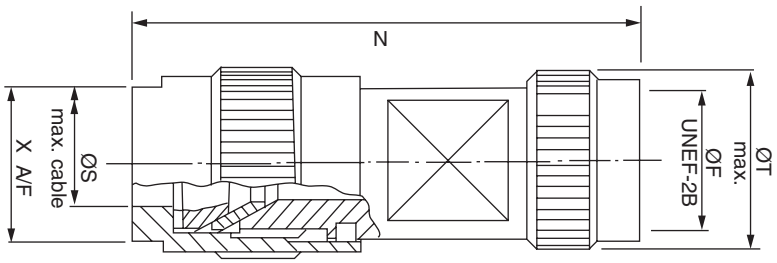
## P Type Potting Boot 05 2042 XX




To correctly specify accessory part number replace XX with shell size required and plating needed which can be found in How to order section of each connector type. ie 05 2042 8 T69

| Size | Front Thread F | Diameter B | Length L | Outlet Size D |
|---|---|---|---|---|
| 8 | 7/16 x 28UNEF | 0.608 | 1.526 | 0.317 |
| 10 | 9/16 x 24UNEF | 0.734 | 1.526 | 0.434 |
| 12 | 11/16 x 24UNEF | 0.858 | 1.526 | 0.548 |
| 14 | 13/16 x 20UNEF | 0.984 | 1.526 | 0.673 |
| 16 | 15/16 x 20UNEF | 1.110 | 1.526 | 0.798 |
| 18 | 1 1/16 x 18UNEF | 1.234 | 1.526 | 0.899 |
| 20 | 1 3/16 x 18UNEF | 1.360 | 1.646 | 1.024 |
| 22 | 1 5/16 x 18UNEF | 1.484 | 1.646 | 1.149 |
| 24 | 1 7/16 x 18unef | 1.610 | 1.646 | 1.274 |

## Straight Outlet for Def Stan Cable 05 2058 XX

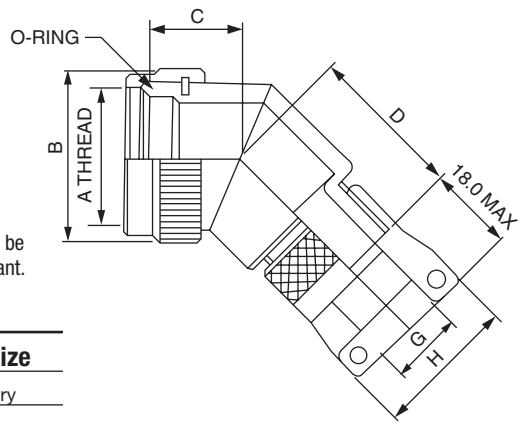



To correctly specify accessory part number replace XX with shell size required and plating needed which can be found in How to order section of each connector type. ie 05 2058 12 T69

| Size | Front Thread F | Diameter T | Length N | Max Cable Size |
|---|---|---|---|---|
| 8 | 7/16 x 28UNEF | 0.690 | 2.020 | 0.283 |
| 10 | 9/16 x 24UNEF | 0.760 | 2.020 | 0.343 |
| 12 | 11/16 x 24UNEF | 0.856 | 2.492 | 0.465 |
| 14 | 13/16 x 20UNEF | 1.044 | 2.516 | 0.492 |
| 16 | 15/16 x 20UNEF | 1.174 | 2.640 | 0.575 |
| 18 | Consult Factory | | | |
| 20 | 1 3/16 x 18UNEF | 1.404 | 2.640 | 0.657 |
| 22 | Consult Factory | | | |
| 24 | 1 7/16 x 18UNEF | 1.654 | 3.015 | 0.800 |

## 75 Degree Outlet with Strain Relief Clamp 995 7732 0XX

*(replacement part for 05-2060 75 degree outlet with sealing gland)*

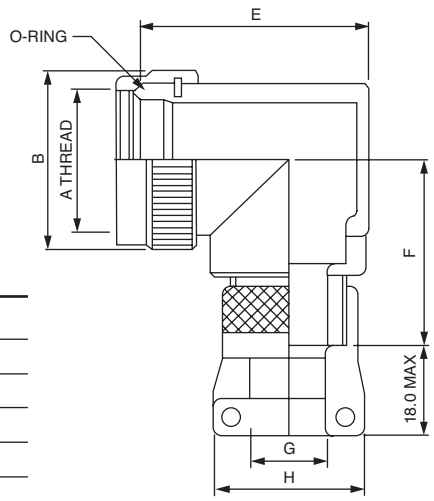



To correctly specify accessory part number replace XX with shell size required and plating needed which can be found in How to order section of each connector type. Original backshell was two part open Architecture variant. ie. 05 2060 16 T69

| Size | Front Thread A | Diameter B | Length D+18mm | Max Cable Size |
|---|---|---|---|---|
| 8 | 7/16 x 28UNEF | 17.3mm | 24.6mm | Consult Factory |
| 10 | 9/16 x 24UNEF | 20.3mm | 25.4mm | Consult Factory |
| 12 | 11/16 x 24UNEF | 23.8mm | 25.8mm | Consult Factory |
| 14 | 13/16 x 20UNEF | 26.8mm | 26.7mm | Consult Factory |
| 16 | 15/16 x 20UNEF | 29.8mm | 27.5mm | Consult Factory |
| 18 | Consult Factory | 33.3mm | 27.8mm | Consult Factory |
| 20 | 1 3/16 x 18UNEF | 36.3mm | 28.6mm | Consult Factory |
| 22 | Consult Factory | 39.8mm | 29.0mm | Consult Factory |
| 24 | 1 7/16 x 18UNEF | 42.8mm | 29.9mm | Consult Factory |

## 90 Degree 1 Piece Outlet with Strain Relief Clamp 995 7711 0XX

*(replacement part for 05-1774 two piece outlet with integral clamp)*



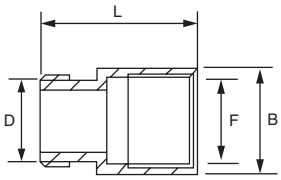

To correctly specify accessory part number replace XX with shell size required and plating needed which can be found in How to order section of each connector type. Original backshell was two part open Architecture variant. ie 05 1774 16 T69

| Size | Front Thread A | Diameter B | Length F+18mm | Max Cable Size |
|---|---|---|---|---|
| 8 | 7/16 x 28UNEF | 17.3mm | 24.6mm | Consult Factory |
| 10 | 9/16 x 24UNEF | 20.3mm | 25.4mm | Consult Factory |
| 12 | 11/16 x 24UNEF | 23.8mm | 25.8mm | Consult Factory |
| 14 | 13/16 x 20UNEF | 26.8mm | 26.7mm | Consult Factory |
| 16 | 15/16 x 20UNEF | 29.8mm | 27.5mm | Consult Factory |
| 18 | Consult Factory | 33.3mm | 27.8mm | Consult Factory |
| 20 | 1 3/16 x 18UNEF | 36.3mm | 28.6mm | Consult Factory |
| 22 | Consult Factory | 39.8mm | 29.0mm | Consult Factory |
| 24 | 1 7/16 x 18UNEF | 42.8mm | 29.9mm | Consult Factory |

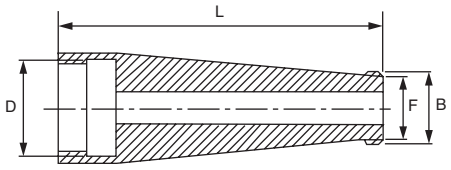
Dimensions shown in mm (inch)
Specifications and dimensions subject to change

## Special Accessories

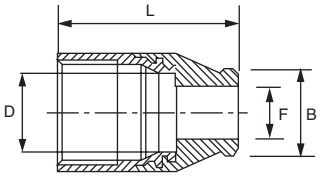
*(Contact factory for further examples)*



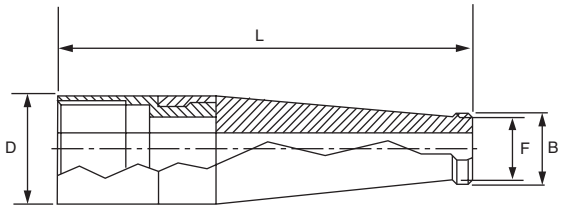

• 05-3226 screw-on direct harness Adapter




• 05-3228 long screw-on cable support




• 05-0564 short screw-on cable support



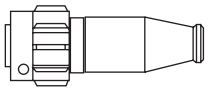
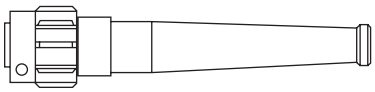
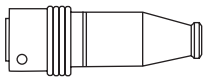
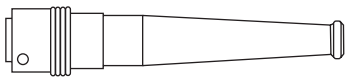

• 05-3229 long screw-on Adapter with screentrap

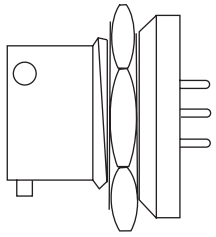
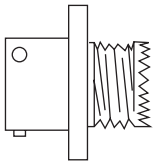
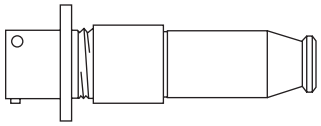
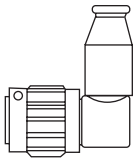
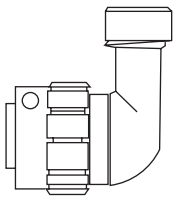
## Special Adapter Dimensions

| PART | SHELL SIZE | B DIAMETER | F THREAD | L LENGTH | D CABLE DIAMETER |
|---|---|---|---|---|---|
| 005-0364-81 | 8 | 0.593 | .5000 x 28unef | 1.185 | 0.195 |
| 05-0364-82 | 8 | 0.593 | .5000 x 28unef | 1.185 | 0.250 |
| 05-3226-1 | 8 | 0.593 | .5000 x 28unef | 0.997 | na |
| 05-3228-1 | 8 | 0.593 | .5000 x 28unef | 0.563 | 0.210 |
| 05-3228-11 | 8 | 0.593 | .5000 x 28unef | 2.1320 | 0.210 |
| 05-3228-2 | 8 | 0.593 | .5000 x 28unef | 0.563 | 0.250 |
| 05-3229-1 | 8 | 0.593 | .5000 x 28unef | 1.185 | 0.997 |
| 05-3229-11 | 8 | 0.593 | .5000 x 28unef | 2.760 | 0.997 |
| 05-3229-2 | 8 | 0.593 | .5000 x 28unef | 1.185 | 0.997 |
| 05-0364-101 | 10 | 0.719 | .6250 x 24unef | 1.360 | 0.195 |
| 05-0364-102 | 10 | 0.719 | .6250 x 24unef | 1.360 | 0.250 |
| 05-0364-103 | 10 | 0.719 | .6250 x 24unef | 1.360 | 0.281 |
| 05-0326-2 | 10 | 0.719 | .6250 x 24unef | 1.047 | na |
| 05-3228-10 | 10 | 0.719 | .6250 x 24unef | 2.088 | 0.317 |
| 05-3228-3 | 10 | 0.719 | .6250 x 24unef | 0.688 | 0.195 |
| 05-3228-4 | 10 | 0.719 | .6250 x 24unef | 0.688 | 0.250 |
| 05-3228-5 | 10 | 0.719 | .6250 x 24unef | 0.688 | 0.281 |
| 05-3228-7 | 10 | 0.719 | .6250 x 24unef | 2.088 | 0.215 |
| 05-3228-8 | 10 | 0.719 | .6250 x 24unef | 2.088 | 0.255 |
| 05-3228-9 | 10 | 0.719 | .6250 x 24unef | 2.088 | 0.290 |
| 05-3229-10 | 10 | 0.719 | .6250 x 24unef | 2.760 | 1.047 |
| 05-3229-3 | 10 | 0.719 | .6250 x 24unef | 1.360 | 1.047 |
| 05-3229-4 | 10 | 0.719 | .6250 x 24unef | 1.360 | 1.047 |
| 05-3229-5 | 10 | 0.719 | .6250 x 24unef | 1.360 | 1.047 |
| 05-3229-7 | 10 | 0.719 | .6250 x 24unef | 2.760 | 1.047 |
| 05-3229-8 | 10 | 0.719 | .6250 x 24unef | 2.760 | 1.047 |
| 05-3229-9 | 10 | 0.719 | .6250 x 24unef | 2.760 | 1.047 |
| 05-0364-123 | 12 | 0.843 | .7500 x 20unef | 1.310 | 0.385 |
| 05-3226-3 | 12 | 0.843 | .7500 x 20unef | 1.042 | na |
| 05-3228-6 | 12 | 0.843 | .7500 x 20unef | 0.643 | 0.385 |
| 05-3229-3 | 12 | 0.843 | .7500 x 20unef | 1.310 | 1.042 |

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

To complete Audio connector part numbers replace xx with insert arrangement, contact gender, orientation and plating finish.

| CONNECTOR STYLE | PART NUMBER & DESCRIPTION | CABLE | ARRANGEMENTS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 8-4 | 8-33 | 8-98 | 10-2 | 10-6 | 10-7 | 10-99 | 12-10 |
|  STRAIGHT PLUGS (bayonet coupling) | 05-0596-XX crimp contacts | Deft STAN 61-12 (pt 7) crimp contacts | | | | • | • | • | • | • |
| | 05-1311-XX crimp contacts for lightweight tinsel cable | SD3/229879 RSRE 040/01 | • | • | • | | • | • | • | |
| | 05-2041-XX solder contacts | | • | • | • | • | • | • | • | • |
|  STRAIGHT PLUG (bayonet coupling) | 05-1093-XX crimp contacts for lightweight tinsel cable | SD3/229879 RSRE 040/01 | | | | | • | • | • | |
| | 05-2467-XX crimp contacts non preferred use 051093 | Deft STAN 61-12 (pt 7) crimp contacts | | | | | • | • | • | |
|  STRAIGHT PLUGS (quick release) | 05-0943-XX crimp contacts | Deft STAN 61-12 (pt 7) crimp contacts | | | | | • | • | • | |
| | 05-1312-XX crimp contacts for lightweight tinsel cable | SD3/229879 RSRE 040/01 | | | | | • | • | • | |
| | 05-1630-XX crimp contacts non preferred use 05 1312 | SD4/24127 BS.6500 table 16 | | | | • | | | | |
|  STRAIGHT PLUG (quick release) | 05-2040-XX crimp contacts | SD3/229879 RSRE 040/01 | | | | | • | • | • | |
| | 05-2468-XX crimp contacts non preferred use 05 2040 | Deft STAN 61-12 (pt 7) crimp contacts | | | | | • | • | • | |

| CONNECTOR STYLE | PART NUMBER & DESCRIPTION | CABLE | ARRANGEMENTS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 8-4 | 8-33 | 8-98 | 10-2 | 10-6 | 10-7 | 10-99 | 12-10 |
|  PANEL MOUNTING RECEPTACLES (bayonet coupling) | 05-0599-XX solder contacts, 'O' ring seal, hexagonal nut only | OPEN WIRING | • | | | • | • | • | • | • |
| | 05-1626-XX solder contacts, hexagonal nut only | OPEN WIRING | • | | | | • | • | • | |
| | 05-2676-XX solder contacts, 'O' ring seal, hexagonal nut only non preferred use 05 0599 | OPEN WIRING | | | | • | • | • | • | • |
| | 05-1319-XX solder contacts, ring nut only | OPEN WIRING | • | • | • | | | | | |
|  PANEL MOUNTING RECEPTACLES | 05-1318-XX solder contacts, no fittings | OPEN WIRING | | | | | • | • | • | • |
|  LINE CONNECTING RECEPTACLES | 05-0771-XX crimp contacts | SD3/229879 RSRE 040/01 | | | | | • | • | • | |
| | 05-1941-XX solder contacts | Def STAN 61-12 (pt 4) 7-2-6C | | | | • | | • | • | |
|  90 DEGREE PLUG | 05-1320-XX crimp contacts for light-weight tinsel cable | SD3/229879 RSRE 040/01 | | | | | • | • | • | |
|  90 DEGREE PLUGS | 05-1505-XX solder contacts | Deft STAN 61-12 (pt 4) 7-2-6C | | | | • | | • | • | • |
| | 05-2049-XX solder contacts | SD4/246127 BS.6500 table 16 | | | | • | | | | |
| | 05-2339-XX solder contacts, and screen termination outlet | Deft STAN 61-12 (pt 4) 7-2-6C | | | | • | | • | • | • |

Dimensions shown in mm (inch)
Specifications and dimensions subject to change

# VEAM PT Connectors

## Connector Plus Crossreference

| | A TYPE ADAPTOR 05-0532-X | A TYPE SR CLAMP 05-1778-XX | E TYPE CLAMP NUT 05-0114-XX-XX | SE TYPE CLAMP NUT 05-0184-XX | E TYPE SR CLAMP 05-0120-XX-XX | SE TYPE SR CLAMP 05-0186-XX-XX | P TYPE POTTING BOOT 05-2042-XX | P TYPE SR CLAMP 05-1778-XX | W TYPE SEALING GLAND 05-2330-XX | STRAIGHT OUTLET 05-2058-XX-XX | SE STRAIGHT OUTLET 05-2309-XX-XX | 75 DEGREE OUTLET 05-2060-XX-XX | 75 DEGREE OUTLET 05-2311-XX-XX | A TYPE 90 DEGREE ELBOW 05-1774-XX | E TYPE 90 DEGREE ELBOW WITH GROMMET 05-1774-XX + |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PT55A** | PT06A | PT06A(SR) | PT06E | NA | PT06E(SR) | NA | PT06P | PT06P-SR | PT06W | PT66 | NA | PT88 | NA | PT08A | PT08E |
| **PT55A(T01)** | PT06A(T01) | PT06A(T01) | PTG06E(T01) | NA | PT06E(T01) | NA | PT06P(T01) | PT06P(T02) | PT06W(T01) | PT66(T01) | NA | PT88(T01) | NA | PT08A(T01) | PT08E(T01) |
| **CPT55A** | CPT06A | CPT06A(SR) | CPT06E | NA | CPT06E(SR) | NA | CPT06P | CPT06P(SR) | CPT06W | CPT66 | NA | CPT88 | NA | CPT08A | CPT08E |
| **CPT55A(T01)** | CPT06A(T01) | CPT06A(T01) | CPT06E(T01) | NA | CPT06E(T02) | NA | CPT06P(T01) | CPT06P(T02) | CPT06W(T01) | CPT66(T01) | NA | CPT88(T01) | NA | CPT08A(T01) | CPT08E(T01) |
| **PTG55A** | PTG06A | PTG06A(SR) | PT06E | NA | PTG06E(SR) | NA | PTG06P | PTG06P(SR) | PTG06W | PTG66 | NA | PTG88 | NA | PTG08A | PTG08E |
| **PTG55A(T01)** | PTG06A(T01) | PTG06A(T02) | PTG06E(T01) | NA | PTG06E(T01) | NA | PTG06P(T01) | PTG06P(T02) | PTG06W(T01) | PTG66(T01) | NA | PTG88(T01) | NA | PTG08A(T01) | PTG08E(T01) |
| **CPTG55A** | CPTG06A | CPTG06A(SR) | CPTG06E | NA | CPTG06E(SR) | NA | CPTG06P | CPTG06P(SR) | CPTG06W | CPTG66 | NA | CPTG88 | NA | CPTG08A | CPTG08E |
| **CPTG55A(T01)** | CPTG06A(T01) | CPTG06A(T02) | CPTG06E(T01) | NA | CPTG06E(T02) | NA | CPTG06P(T01) | CPTG06P(T02) | CPTG06W(T01) | CPTG66(T01) | NA | CPTG88(T01) | NA | CPTG08A(T01) | CPTG08E(T01) |
| **PT55SE** | NA | NA | NA | PT06SE | NA | PT06SE(SR) | PT06SP | NA | NA | NA | PT66SE | NA | PT88SE | PT08SE | NA |
| **PT55SE(T01)** | NA | NA | NA | PT06SE(T01) | NA | PT06SE(T02) | PT06SP(T01) | NA | NA | NA | PT66SE(T01) | NA | PT88SE(T01) | PT08SE(T01) | NA |
| **PTG55SE** | NA | NA | NA | PTG06SE | NA | PTG06SE(SR) | PTG06SP | NA | NA | NA | PTG66SE | NA | PTG88SE | PTG08SE | NA |
| **PTG55SE(T01)** | NA | NA | NA | PTG06SE(T01) | NA | PTG06SE(T02) | PTG06SP(T01) | NA | NA | NA | PTG66SE(T01) | NA | PTG88SE(T01) | PTG08SE(T01) | NA |
| **PT02** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PT33A** | PT00A | PT00A(SR) | PT00E | NA | PT00E(SR) | NA | PT00P | PT00P(SR) | PT00W | NA | NA | NA | NA | NA | NA |
| **CPT02** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **CPT33A** | CPT00A | CPT00A(SR) | CPT00E | NA | CPT00E(SR) | NA | CPT00P | CPT00P(SR) | CPT00W | NA | NA | NA | NA | NA | NA |
| **PT02SE** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PT33SE** | NA | NA | NA | PT00SE | NA | PT00SE(SR) | PT00SP | NA | NA | NA | NA | NA | NA | NA | NA |
| **PTB** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PT44A** | PT01A | PT01A(SR) | PT01E | NA | PT01E(SR) | NA | PT01P | PT01P(SR) | PT01W | NA | NA | NA | NA | NA | NA |
| **CPT44A** | CPT01A | CPT01A(SR) | CPT01E | NA | CPT01E(SR) | NA | CPT01P | CPT01P(SR) | CPT01W | NA | NA | NA | NA | NA | NA |
| **PT44SE** | NA | NA | NA | PT01SE | NA | PT01SE(SR) | PT01SP | NA | NA | NA | NA | NA | NA | NA | NA |
| **PT07A** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PT07E** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PT07SE** | NA | NA | NA | PT07SE | NA | PT07SE(SR) | PT07SP | NA | NA | NA | NA | NA | NA | NA | NA |
| **PT77A** | NA | NA | PT07E(T11) | NA | PT07E(T12) | NA | PT07P(T11) | NA | NA | NA | NA | NA | NA | NA | NA |
| **CPT77A** | NA | NA | CPT07E(T11) | NA | CPT07E(T12) | NA | CPT07P(T11) | NA | NA | NA | NA | NA | NA | NA | NA |
| **PT77SE** | NA | NA | NA | PT07SE(T11) | NA | PT07SE(T12) | PT07SP(T11) | NA | NA | NA | NA | NA | NA | NA | NA |

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Dimensions shown in mm (inch)
Specifications and dimensions subject to change

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**THIS NOTE MUST BE READ IN CONJUNCTION WITH THE PRODUCT DATA SHEET/CATALOG. FAILURE TO OBSERVE THE ADVICE IN THIS INFORMATION SHEET AND THE OPERATING CONDITIONS SPECIFIED IN THE PRODUCT DATA SHEET/ CATALOG COULD RESULT IN HAZARDOUS SITUATIONS.**

**1. MATERIAL CONTENT AND PHYSICAL FORM**

Electrical connectors do not usually contain hazardous materials. They contain conducting and non-conducting materials and can be divided into two groups.

a) Printed circuit types and low cost audio types which employ all plastic insulators and casings.

b) Rugged, Fire Barrier and High Reliability types with metal casings and either natural rubber, synthetic rubber, plastic or glass insulating materials. Contact materials vary with type of connector and also application and are usually manufactured from either: Copper, copper alloys, nickel, alumel, chromel or steel. In special applications, other alloys may be specified.

**2. FIRE CHARACTERISTICS AND ELECTRIC SHOCK HAZARD**

**There is no fire hazard when the connector is correctly wired and used within the specified parameters. Incorrect wiring or assembly of the connector or careless use of metal tools or conductive fluids, or transit damage to any of the component parts may cause electric shock or burns. Live circuits must not be broken by separating mated connectors as this may cause arcing, ionization and burning.** Heat dissipation is greater at maximum resistance in a circuit. Hot spots may occur when resistance is raised locally by damage, e.g. cracked or deformed contacts, broken strands of wire. Local overheating may also result from the use of the incorrect application tools or from poor quality soldering or slack screw terminals. Overheating may occur if the ratings in the product Data Sheet/Catalog are exceeded and can cause breakdown of insulation and hence electric shock. If heating is allowed to continue it intensifies by further increasing the local resistance through loss of temper of spring contacts, formation of oxide film on contacts and wires and leakage currents through carbonization of insulation and tracking paths. Fire can then result in the presence of combustible materials and this may release noxious fumes. Overheating may not be visually apparent. Burns may result from touching overheated components.

**3. HANDLING**

Care must be taken to avoid damage to any component parts of electrical connectors during installation and use. Although there are normally no sharp edges, care must be taken when handling certain components to avoid injury to fingers. Electrical connectors may be damaged in transit to the customers, and damage may result in creation of hazards. Products should therefore be examined prior to installation/use and rejected if found to be damaged.

**4. DISPOSAL**

Incineration of certain materials may release noxious or even toxic fumes.

**5. APPLICATION**

Connectors with exposed contacts should not be selected for use on the current supply side of an electrical circuit, because an electric shock could result from touching exposed contacts on an unmated connector. Voltages in excess of 30 V ac or 42.5 V dc are potentially hazardous and care should be taken to ensure that such voltages cannot be transmitted in any way to exposed metal parts of the connector body. The connector and wiring should be checked, before making live, to have no damage to metal parts or insulators, no solder blobs, loose strands, conducting lubricants, swarf, or any other undesired conducting particles. Circuit resistance and continuity check should be made to make certain that there are no high resistance joints or spurious conducting paths. Always use the correct application tools as specified in the Data Sheet/Catalog. Do not permit untrained personnel to wire, assemble or tamper with connectors. For operation voltage please see appropriate national regulations.

**IMPORTANT GENERAL INFORMATION**

**(i) Air and creepage paths/Operating voltage.** The admissible operating voltages depend on the individual applications and the valid national and other applicable safety regulations.

For this reason the air and creepage path data are only reference values. Observe reduction of air and creepage paths due to PC board and/or harnessing.

**(ii) Temperature**

All information given are temperature limits. The operation temperature depends on the individual application.

**(iii) Other important information**

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VPT-aug-07