

# Commercial and Industrial Product Catalog



## COMPANY PROFILE

SOURIAU is a world-leading supplier of high performance interconnect solutions for severe environments.

The company designs, manufactures and markets standard electrical, fiber optic connectors and complex interconnect systems. SOURIAU was established in 1917 and has the industrial, aeronautical, defense and space activities of SOURIAU, JUPITER and BURNDY.

The dedicated end markets for the company's products are aerospace, defense, railways and industrial markets. The group's products are engineered and manufactured in USA and Dominican Republic, Europe and Morocco, India and Japan, and sold by a worldwide sales and marketing organization. The group employs 1400 people all over the world.

### Laboratory & test center

SOURIAU has its own independent test center recognized by many National Standard Laboratories.

This center carries-out validation or qualification programs complying with : MIL-Standard – CECC – GSFC – VDE – SCC –EN – CSA – UL –

The laboratory has the capabilities to perform testing in compliance with the above mentioned standards as follow : electrical, environmental, mechanical.

### Design & Development

SOURIAU continues its strong commitment to invest in design and development to provide innovative solutions.

Our company is structured into cross functional teams of scientists, engineers and technicians working closely with customers to bring new products to market.

More than 6% of our sales are invested in new product development.

### Quality Assurance

Quality is a key objective for SOURIAU focusing on :

Total customer satisfaction

The widespread application of a Quality Assurance System that spans all processes, is consistent throughout the company and meets the requirements ISO9001 / ISO14001 / MIL-STD790 / NATO AQAP110 / BOEING D1-9001 / AS-9100

Souriau reserves the right to make any engineering refinements, alterations or improvements deemed necessary on its products. The dimensions appearing in this catalogue are thus subject to change without notice. When dimensions are critical detailed drawings should be requested.

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## Trim Trio



## 26482 Series 1



## Push Pull

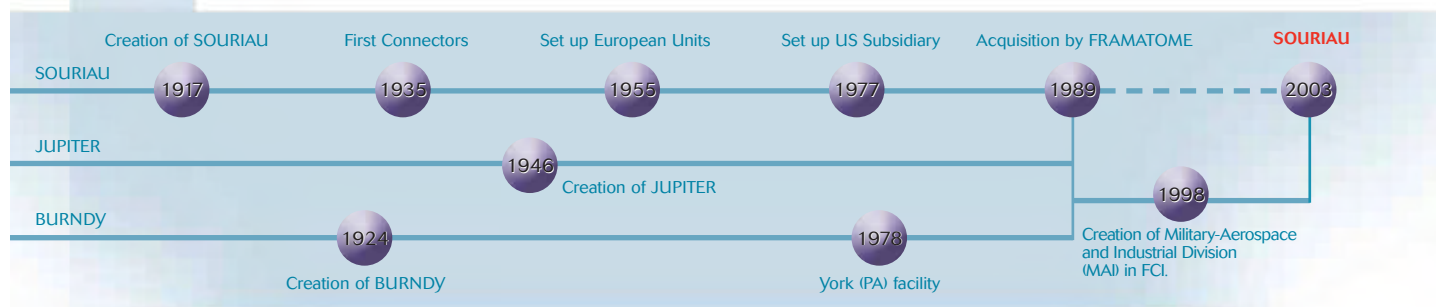




## History

- 1917** Mr SOURIAU creates a small company with about 20 employees based in 5,000 sq. ft building dedicated to repairing automotive magneto's.
- 1924** Burn DIBNER forms BURNDY Engineering Company and revolutionizes overhead power distribution market with T Connectors and bar taps.
- 1935** First development and production of SOURIAU electrical connector lines.
- 1978** BURNDY opens York (PA) facility to produce TRIM-TRIO and stamped and formed terminals.
- 1989** Acquisition of SOURIAU/JUPITER and BURNDY Corp. by FRAMATOME with creation of FCI.
- 1998** Création within FCI of an autonomous Division (MAI) - Military/Aerospace and Industrial integrating:  
**SOURIAU:** Aerospace and industrial connectors  
**JUPITER:** Marine and heavy industry connectors  
**BURNDY:** Industrial TRIM TRIO range and proprietary aerospace connectors
- 2003** AXA Private Equity together with the Management acquire MAI Division of FCI.

## Main Dates



## Laboratory & Test Center



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The laboratory has the capabilities to perform testing in compliance with the above mentioned standards as follows :

- electrical • environmental • mechanical

## Design & Development



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## Quality Assurance



MRP II, Class A

Quality is a key objective for SOURIAU focusing on :

- Total Customer Satisfaction.
- The widespread application of a Quality Assurance system that spans all processes, is consistent throughout the company and meets the requirements of ISO 9001/ ISO 14001/MIL-STD 790 /NATO AQAP 110 / BOEING D1-9000 / AS-9100



# Operations

## An International Presence



- A local presence in each of our markets with highly trained sales engineers working closely with each customer.
- Standard-MIL and TRIM-TRIO connectors are available through a worldwide distribution network.

Each Business Unit has full responsibility for design and production of its product lines, providing improved reactivity and commitment to our customers.

### North America

#### York, PA USA

Located in YORK (PA), is dedicated to Aerospace, Industrial and R/F connectors

#### Santiago, Dominican Republic

Assembly plant serving the North American market.

### Europe

#### Sarthe, France

Located 120 miles west of Paris, 2 units are responsible for all standard Mil-Aero and Industrial product lines.

#### Tangier, Morocco

Assembly plant serving the European market.

#### Marolles en Brie, France

Located 20 miles south of Paris this unit is responsible for very severe environment connectors and systems.

*Marolles plant*



### Japan

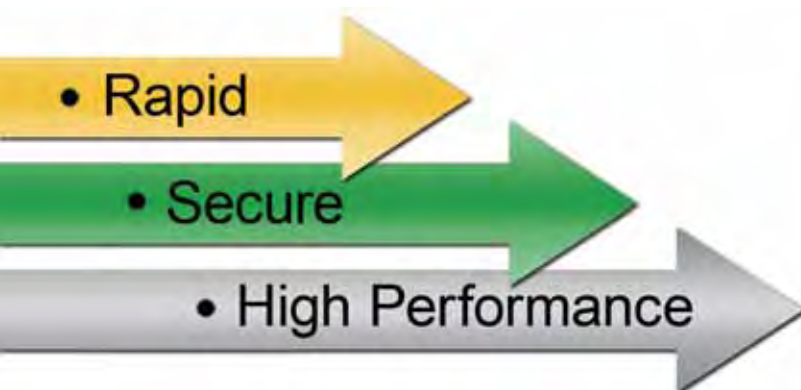
#### Tokyo, Japan

located in Tokyo, is responsible for industrial products, particularly for railways and machine tool markets.





## TRIM TRIO™ Connectors



# Commercial and Industrial Product Catalog



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# New UTO-UTOW series



## New UTO – UTOW series:

- The exclusive new product range in the TRIM TRIO broadband.
- Aesthetic and top class performances

## UTO – UTOW series major technical features & benefits

### • Full metal bayonet connector

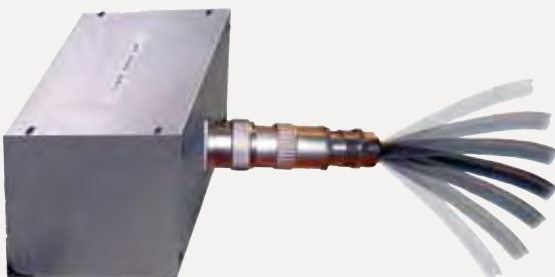
- Enabling 500 mating-unmating without wear out
- Secure locking device: audible “click” when mating



### • Dynamic IP68\*

Connector will remain IP68 even when:

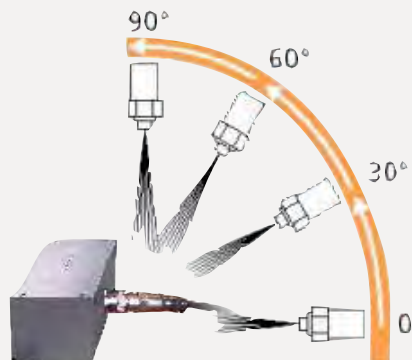
- Pulling on the cable
- Bending the cable



- \* With appropriate back shell
- \* Exists also in IP67 version

### • Dynamic IP69K\*

Connector withstands high pressure water cleaning.



- \* With appropriate back shell

### • High salt spray resistance\*

- Can be used in severe environment

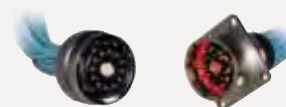
- \* Exists in 48 and 96 hours salt spray version
- \* Higher salt spray resistance (e.g. 200 or 500 hours) upon request

### • RoHS compliant

- Cadmium and lead free materials are used

### • In accordance with following standards

- UTO is Ethernet Cat5e compatible (consult factory)
- UTO-UTOW ranges are upgradeable to highspeed solutions



# New UTV ruggedized series



## New UTV series:

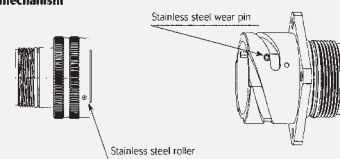
- The ruggedized product range in the TRIM TRIO broadband.
- Using size 16 signal and size 12 & 8 power contacts for up to 30 Amps per contact.

## UTV series major technical features & benefits

### • Ruggedized full metal reverse bayonet connector

- Enabling 500 mating-unmating without wear out
- Secure locking device
  - Audible “click” when mating
  - Visible yellow dot to indicate end of mating cycle

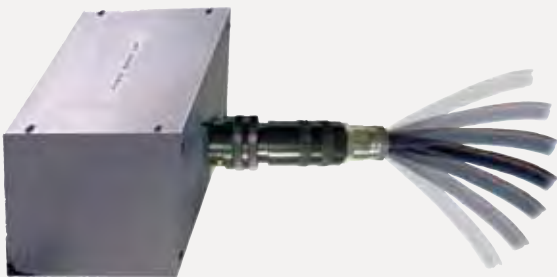
Robustness and high reliability  
of the locking mechanism



### • Dynamic IP68\*

Connector will remain IP68 even when:

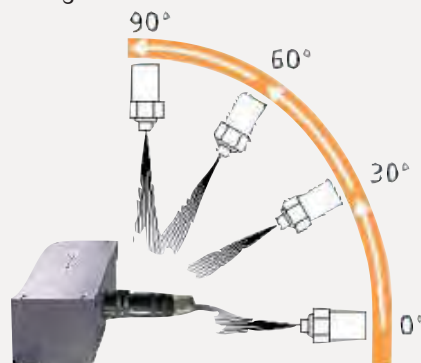
- Pulling on the cable
- Bending the cable



- \* With appropriate back shell and grommet
- \* Exists also in IP67 version

### • Dynamic IP69K\*

Connector withstands high pressure water cleaning.



- \* With appropriate back shell and grommet

### • Up to 500 hours salt spray resistance

- Can be used in very severe environment

### • Cadmium and lead free materials are used

### • In accordance with following standards

- Completely intermountable with VG95234: the MS5015 reverse bayonet connectors

# TRIM TRIO™ Overview



## TRIM TRIO ➤ The flagship of Souriau's industrial connectors

Historically, TRIM TRIO connectors were developed in the 60's and are derived from MIL standards, but using size 16 contacts (1.6mm). From the 60's and forward, the product ranges have evolved into various sub series and different design-variations. In parallel with the size 16 contacts, there also has been an evolution on high density versions using size 20 contacts (1.0mm) and on mixed signal / power versions using size 16 contacts in combination with size 12 (2.4mm) and size 8 (3.6mm) contacts.

This TRIM TRIO interconnection system catalog gives an overview of the following products:

- **Standard TRIM TRIO using size 16 contacts (1.6mm)**
- **High Density TRIM TRIO using size 20 contacts (1.0mm)**
- **Mixed power / signal versions and Heavy Duty connectors**



### • **Standard TRIM TRIO** **Using size 16 contacts**

Standard TRIM TRIO using size 16 contacts (1.6mm pin diameter) is a versatile industrial range of connectors in which a variety of 3 removable snap-lock contact styles can be mixed and matched.

From machined or stamped & formed wire contacts to coaxial or fiber solutions can be offered with our TRIO of contact styles. In fact, the beauty of the standard TRIM TRIO system means that any TRIM TRIO contact can be used in any contact position in any TRIM TRIO connector.

The versatile range offers many options in rectangular and circular connectors from low cost plastic to top class metal solutions. This interchangeability offers boundless design possibilities with a large commonality throughout the entire range.

The commonality in the system is established in:

- Contact performance and wire range.
- Configuration of contact cavities in the housings.
- Crimp tooling
- Assembly procedures.
- Quality assurance procedures.
- Field service and maintenance.
- Personnel training.



### **The keyword in the TRIM TRIO interconnection system is SERV:**

- Standardization
- Economy.
- Reliability
- Versatility

This word explain why the TRIM TRIO name is so well known, and its connectors are used all over the world.

The physical characteristics and performances are appreciated in numerous fields of applications:

- Test and measurement
- Robotics
- Process control, handling equipment
- Factory automation and motor drives
- Public transportation, traffic control
- Medical instrumentation, telecom
- ... etc

More then ever before, businesses are relying on robust and environmental TRIM TRIO solutions to help them being successful.

The flagship TRIM TRIO has an international presence with engineering; customer service and a worldwide distribution network. It is supported by highly trained sales engineers working closely with each customer. Our emphasis includes customer satisfaction and 'just-in-time' to ensure fast delivery to our key customers.

TRIM TRIO continues its strong commitment to invest in design and development. We provide new solutions to perform faster, easier, safer and more reliably.



### • **High Density TRIM TRIO** **Using size 20 contacts**

High Density TRIM TRIO (UTOW/UTS) using size 20 contacts (1.0mm pin diameter) are metal circular ranges with bayonet coupling system in which a variety of 2 removable snap-lock contact styles are used.

Both machined or stamped & formed contacts can be mixed and matched in the same housing.

UTOW receptacle connectors feature the same panel cut-out dimensions as the MIL-C-26482 series 1 connectors.

There are 3 basic reasons for a customer to use UTOW/UTS connectors.

- Higher contact density: allows weight and space savings
- The "best in class" performance characteristics with an IP68/ 69K waterproof bayonet connection
- Cost saving!!! Not only on individual connector cost, but UTOW/UTS offers reeled, stamped & formed contacts that provide the ultimate answer to customers for overall applied cost for installation.



### • **Mixed Power / Signal TRIM TRIO** • **Ruggedized TRIM TRIO connectors UTV**

Mixed Power / Signal TRIM TRIO connectors using mixed contacts for power versions up till 44 Amp is a range of connectors to meet application specific requirements. It is an extension of the long established and popular TRIM TRIO connectors offering additional features.

**Ruggedized UTV circular connectors series** is an enhanced version of the VG 95234 connector standard but remains completely intermountable with VG 95234: the MS 5015 reverse bayonet system. Following TRIM TRIO contacts are used in the UTV series:

- Size 16 contacts (1.6mm)
- Size 12 contacts (2.4mm)
- Size 8 contacts (3.6mm)



# Overview - Circular size 16



## FULL PLASTIC CIRCULAR CONNECTOR



### Description

Full plastic circular connector with rugged plastic bayonet coupling system

### Range

Shell sizes: 8  
Contact arrangements: 10 (3 to 48)

### Features

Derived from MIL - C 26482  
Intermateable with UTO / UTG  
IP65 (waterprotected version)  
Min 250 matings/unmatings  
2 VDE versions

### Accessories

Different type of cable clamps  
Dustcaps  
Discrimination pins

## HIGH MATING CYCLE CONNECTOR



### Description

Plastic circular connector with metal quick mating feature (push-pull)

### Range

Shell sizes: 5  
Contact arrangements: 5 (4 to 46)

### Features

Min 5000 matings/unmatings  
Quick and easy mating with latching system

### Accessories

Cable clamp

## PLASTIC CONNECTOR WITH METAL COUPLING



### Description

Plastic circular connector with metal bayonet coupling system

### Range

Shell sizes: 8  
Contact arrangements: 11 (3 to 48)

### Features

Derived from MIL - C 26482  
Intermateable with UTO / UTP  
IP65 (waterprotected version)  
Min 500 matings/unmatings  
3 VDE versions

### Accessories

Different types of cable clamps  
Dustcaps  
Discrimination pins

## PLASTIC SEALED CONNECTOR



### Description

Plastic circular connector with environmental sealing

### Range

Shell Size: 3  
Contact arrangements: 9 (3 to 19)

### Features

Sealed to IP 68/69K  
Min 250 mating/unmatings  
Jamnut receptacle for efficient panel seal  
RoHS compliant

### Accessories

Color coded rings for cable identification  
Sealing caps

## METAL CIRCULAR CONNECTOR



### Description

Metal circular connector with metal bayonet coupling system

### Range

Shell sizes: 8  
Contact arrangements: 8 (4 to 48)

### Features (see also page 2)

Derived from MIL - C 26482  
Intermateable with UTG / UTP  
2 levels of water protection:  
Dynamic IP67/IP69K and IP68/IP69K  
Suitable for EMC requirements  
Min 500 matings/unmatings  
2 levels of salt spray: 48 and 96h  
Higher salt spray (200/500h) upon request  
Cat5e ethernet compatible  
Back shells with metric cable glands  
RoHS compliant

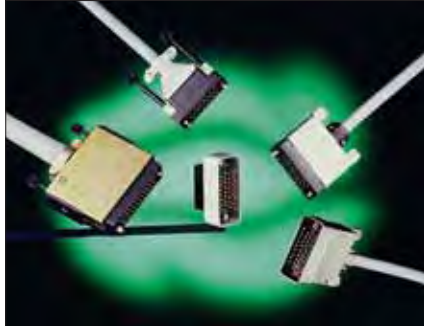
### Accessories

Different types of cable clamps  
Shielded cable clamp  
Dustcaps  
Discrimination pins

# Overview - Rectangular size 16



## HIGH PERFORMANCE CABLE CONNECTOR



### Description

High performance rectangular cable connector

### Range

Shell sizes: 9  
Contact arrangements: 9 to 75

### Features

Per MIL - C 28748  
Intermateable with MSO

### Accessories

Different types of cable clamps  
Guide and jackscrew pins  
Pin protection shrouds  
Discrimination pins

*new*

## COMPOSITE LEVER-LOCKING CONNECTOR



### Description

Cable (MSG + MB) and boardmount (MSG) connectors with lever locking system.

### Range

Shell sizes: 1 for MSG  
1 for MB  
Contact arrangements: 50 + 59 for MSG  
52 for MB

### Features

Lever locking system – easy mating  
MSG is 19" rack mountable  
Polarization features available  
Anti jack knife system on MB

## HIGH PERFORMANCE BOARDMOUNT CONNECTOR



### Description

Rectangular boardmount connector to mate with MS-M cable connectors

### Range

Shell sizes: 5  
Contact arrangements: 5 straight (9 to 75)  
3 right angle (9,18,34)

### Features

Solid machined or stamped and formed contacts  
Intermateable with MS-M

### Accessories

Guide and jackscrew pins  
Discrimination pins

## PLASTIC PANEL AND CABLE CONNECTOR



### Description

Low cost rectangular cable connectors for cable to cable and cable to panel applications

### Range

Shell sizes: 10  
Contact arrangements: 10 (2 to 36)

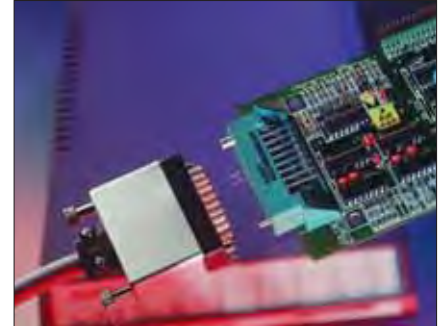
### Features

Intermateable with SMS Boardmount  
Moulded-on cable hood  
No extra hardware required  
Positive locking with retaining latches  
Discrimination cavities in between contact cavities

### Accessories

Pin protection shrouds  
Discrimination pins  
Tie wraps

## V35 - DTE/DCE



### Description

Rectangular cable and boardmount connector for V.35 DTE/DCE interface applications

### Range

1 shell size with 34 contact positions  
straight and right angle boardmount connector

### Features

In compliance with international standards of ISO 2593 for TSS V.35 interfacing  
Solid machined or stamped and formed contacts for boardmount connector  
Shielded cable and boardmount connectors available

### Accessories

Different type of cable clamps (incl. shielded)  
Guide and jackscrew pins  
Pin protection shrouds and discrimination pins

## PLASTIC PC BOARDMOUNT CONNECTOR



### Description

Low cost rectangular boardmount connector to mate with SMS cable connectors

### Range

Shell sizes: 10  
Contact arrangements: 10 straight (2 to 36)  
4 right angle (3,6,12,18)

### Features

Solid machined or stamped and formed contacts  
No extra hardware required  
Intermateable with SMS cable connectors  
Discrimination cavities in between contact cavities

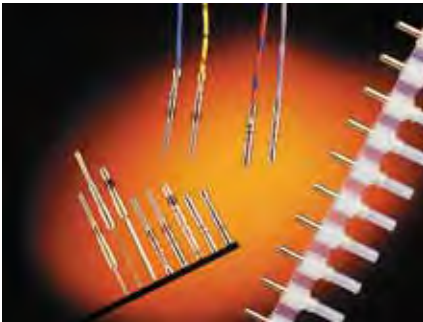
### Accessories

Discrimination pins

# Overview - Contacts size 16



## SCREW MACHINED (size 16)



### Description

Machined Snap in pin and socket contacts for heavy duty top performance requirements.

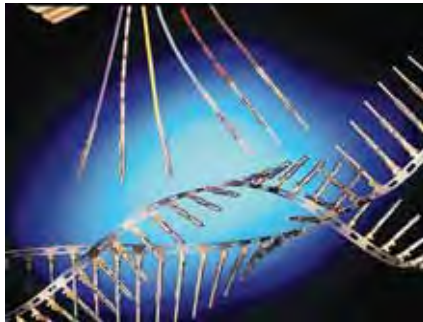
### Range

30 to 14 AWG – 0.05 to 2.5 mm<sup>2</sup>  
Crimp, PC Boardmount, Handsolder  
Wire wrap, Grounding contacts

### Features

Current rating: 13 Amps  
Plating: Gold or Tin  
Colour coded for different wire sizes

## STAMPED & FORMED (size 16)



### Description

Two piece strip formed snap in pin and socket contacts.

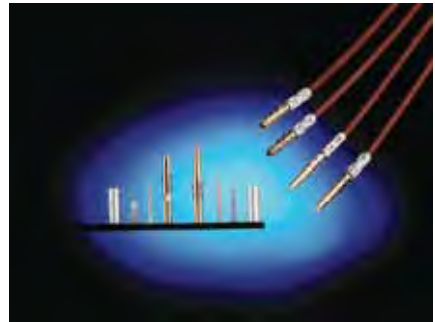
### Range

26 to 14 AWG – 0.13 to 2.0 mm<sup>2</sup>  
Crimp.

### Features

Current rating: 13 Amps  
Plating: Gold or Tin

## COAXIAL (size 16)



### Description

Snap in pin and socket coaxial contacts for a wide range of coaxial and twisted pair cables.

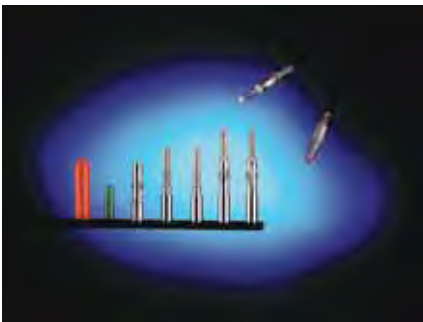
### Range

Multi piece or Monocrimp design.  
Typical coaxial cables are: RG161, RG178, RG179, RG188.

### Features

Plating: Gold

## Fiber optic (size 16)



### Description

Snap in pin and socket Fiber optic contacts for the integration of optical links.

### Range

Plastic optical Fiber (POF):  
1mm core and 2.2mm jacket.  
Plastic clad Fiber (PCF):  
230 µm core and 2.2 mm jacket  
Multimode Silica Fiber:  
50/125 µm type 1.5mm (or 900 µm) jacket.

### Features

Socket contact is spring loaded to avoid any air gap between the optical faces.

# Overview - size 20 connectors + contacts



## METAL CIRCULAR CONNECTOR



### Description

Metal circular connector with metal bayonet coupling system.

### Range

Shell sizes: 8  
Contact arrangements: 8 (6 to 61)

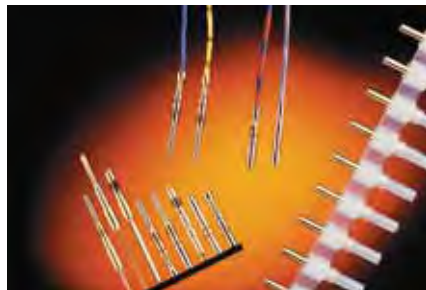
### Features (see also page 2)

2 levels of water protection:  
Dynamic IP67/IP69K and IP68/IP69K  
Suitable for EMC requirements  
Min 500 matings/unmatings  
2 levels of salt spray: 48 and 96h  
Higher salt spray (200/500h) upon request  
Back shells with metric cable glands  
RoHS compliant

### Accessories

Different types of cable clamps  
Shielded cable clamp  
Dustcaps  
Discrimination pins

## SCREW MACHINED CONTACTS (size 20)



### Description

Machined Snap in pin and socket contacts for heavy duty top performance requirements.

### Range

26 to 18 AWG – 0.13 to 1.0 mm<sup>2</sup>  
Crimp and PC Boardmount

### Features

Current rating: 7.5 Amps  
Plating: Gold

## PLASTIC SEALED CONNECTOR



### Description

Plastic circular connector with environmental sealing

### Range

Shell Size: 3  
Contact arrangements: 9 (3 to 19)

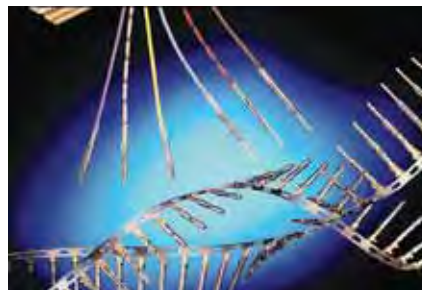
### Features

Sealed to IP 68/69K  
Min 250 mating/unmatings  
Jamnut receptacle for efficient panel seal  
RoHS compliant

### Accessories

Color coded rings for cable identification  
Sealing caps

## STAMPED AND FORMED CONTACTS (size 20)



### Description

Two piece strip formed snap in pin and socket contacts.

### Range

26 to 20 AWG – 0.13 to 0.5 mm<sup>2</sup>  
Crimp.

### Features

Current rating: 5 Amps  
Plating: Gold

# Overview - mixed power signal/ruggedized



## MIXED POWER AND SIGNAL



### Description

Power connectors are connectors to meet mixed power / signal requirements. This range of power connectors is an extension of the long established and popular TRIM TRIO connector series

## UTV SERIES



### Description

Ruggedized metal circular connector for heavy duty applications

### Range

Shell sizes: 8  
Contacts arrangements: 9 (7 to 60)

### Features

Completely intermountable with VG95237: the MS5015 reverse bayonet connectors.  
2 levels of waterprotection:  
Dynamic IP67/69K and IP68/69K  
Up to 500 h salt spray.

### Accessories

Straight back shells  
Right angle back shells  
Grommets and filler plugs

## POWER CONTACTS



### Description

Machined snap in pin and sockets contacts for power applications

### Range

Size 12 contacts:  
20 to 14 AWG – 0.5 to 2.5 mm<sup>2</sup>  
Size 8 contacts:  
16 to 8 AWG – 1.5 to 10 mm<sup>2</sup>

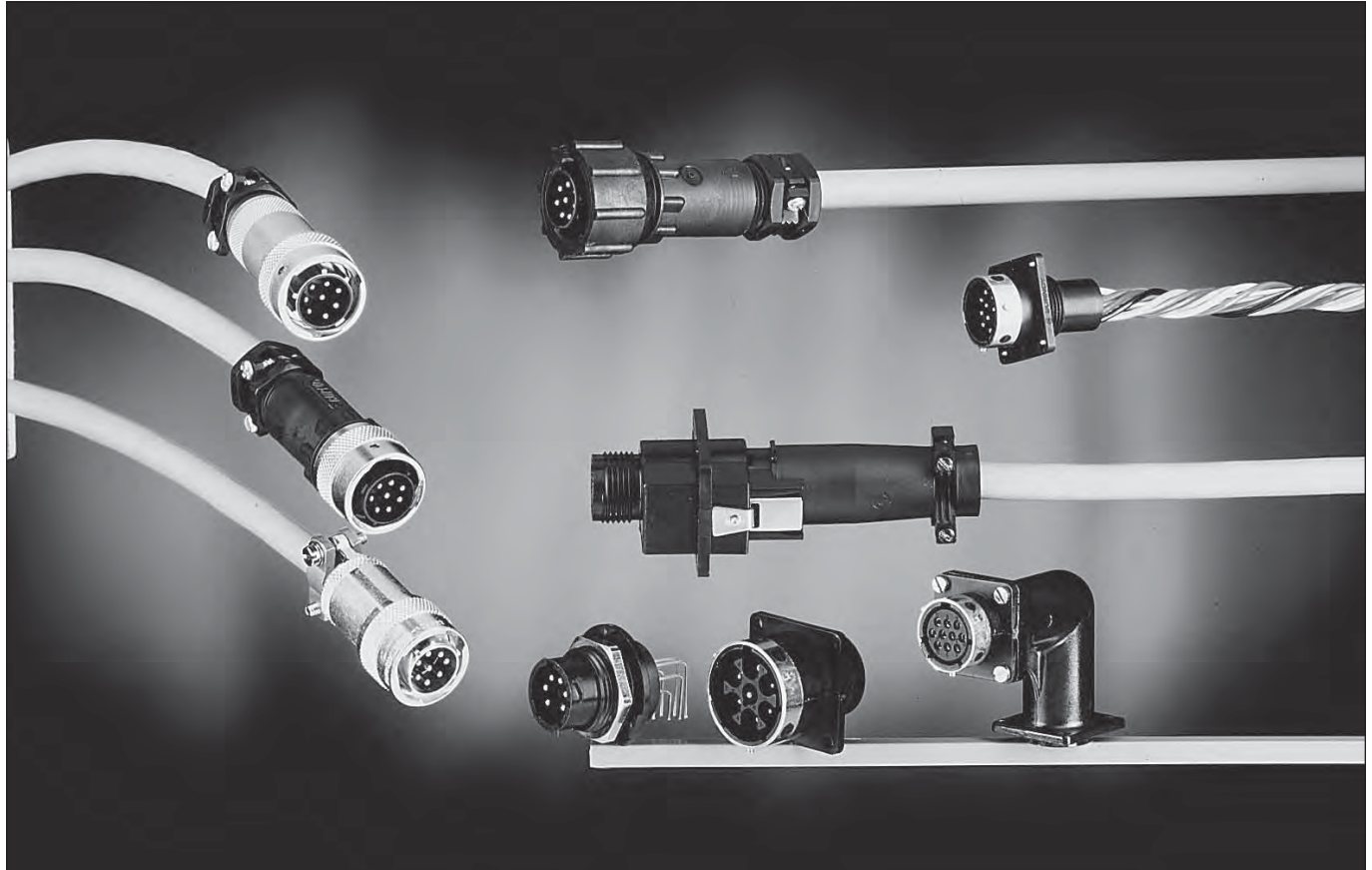
### Features

Current rating: 26 Amps for size 12 contacts  
44 Amps for size 8 contacts  
Plating: Gold or Silver for size 12 contacts  
Gold for size 8 contacts

# Circular



## Overview Circular TRIM TRIO connectors



**Circular TRIM TRIO connectors are a wide and versatile range that are offered in many options from low cost plastic to top class metal solutions.**

This section gives an overview on available circular connectors for:

**1. Bayonet connectors derived from MIL-C-26482 series 1 but using size 16 contacts (1.6mm).**

- UTP - Full plastic version.
- UTG - Plastic connector with metal bayonet coupling system.
- UTO - Metal circular connector offering top class performance characteristics.

**2. High density bayonet connectors using size 20 contacts (1.0mm).**

- UTOW - Metal circular connector offering top class performance characteristics.

**3. Mixed power / signal connectors.**

- A range of connectors with contact arrangements offered with a mix of signal and power contacts up to 44 A.

**4. Push-pull connectors using size 16 contacts (1.6mm).**

- MBG – Plastic connector with metal quick mating feature.

# Circular - Overview



## TRIM TRIO Insert arrangements and moulded-in contact identification

~ Viewed from front face of male connector ~

| Shell size | Contact # 16 (Ø 1,6) | Contact # 20 (Ø 1,0) | VDE versions<br>Mixed power / signal versions         |                                                         |
|------------|----------------------|----------------------|-------------------------------------------------------|---------------------------------------------------------|
| 10         | <p>10-4</p>          | <p>10-6</p>          | <p>10-3 VDE<br/>3 x # 16 (Ø 1,6)<br/>Group C 250V</p> | <p>10-3W3<br/>3 x # 16 (Ø 1,6)<br/>3 x # 20 (Ø 1,0)</p> |
| 12         | <p>12-8</p>          | <p>12-10</p>         | <p>12-3<br/>3 x # 12 (Ø 2,4)</p>                      |                                                         |
| 14         | <p>14-12</p>         | <p>14-19</p>         | <p>14-8<br/>4 x # 12 (Ø 2,4)<br/>4 x # 16 (Ø 1,6)</p> |                                                         |
| 16         | <p>16-19</p>         | <p>16-26</p>         |                                                       |                                                         |
| 18         | <p>18-23</p>         | <p>18-32</p>         | <p>18-7 VDE<br/>Group C 380V<br/>7 x # 16 (Ø 1,6)</p> | <p>18-7<br/>2 x # 12 (Ø 2,4)<br/>5 x # 16 (Ø 1,6)</p>   |

# Circular - Overview



| Shell size | Contact # 16 (Ø 1,6) | Contact # 20 (Ø 1,0) | VDE versions<br>Mixed power / signal versions           |
|------------|----------------------|----------------------|---------------------------------------------------------|
| 20         | <p>20-28</p>         | <p>20-41</p>         | <p>20-20 VDE<br/>20 x # 16 (Ø 1,6)<br/>Group C 660V</p> |
| 22         | <p>22-35</p>         | <p>22-55</p>         |                                                         |
| 24         | <p>24-48</p>         | <p>24-61</p>         | <p>24-7<br/>7 x # 8 (Ø 3,6)<br/>2 x # 16 (Ø 1,6)</p>    |
|            |                      |                      | <p>24-11<br/>4 x # 8 (Ø 3,6)<br/>7 x # 16 (Ø 1,6)</p>   |

- UTP
- ▲ UTG
- UTO + Ethernet cat 5e
- UTOW

Contact identification positions shown are for mating face of pin contact connectors and wire face of socket contact connectors.

[illegible]

# Full Plastic Sealed Connectors



## Description

### **IP68 / IP69K plastic circular connector with rapid locking system**

“UTS” is the latest addition to the well known TRIM TRIO® interconnect system.

‘UTS’ is a range of Industrial circular multiway connectors available in 3 shell sizes and 9 contact arrangements.

The keywords for the new UTS are: Rapid – Secure – High performance



Rapid refers to the bayonet coupling system and the total installed cost starting with the rapid wiring & cabling and ending with easy integration into the customer's equipment. Rapid also refers to the total service on price request, samples and production deliveries.



The bayonet coupling system together with the secure and versatile TRIM TRIO® contacts offer confidence and reliability to both the connection and the customer's equipment.

Moreover, UTS is part of the well known TRIM TRIO® interconnect system with its more than 40 years of field experience.



Extreme performance against water ingress, even in dynamic situations. This, in combination with a rapid and secure bayonet locking system makes UTS suitable for any high performance application.

UTS provides a connection that is faster, easier, safer and more reliable. It makes :

# Full Plastic Sealed Connectors



## Rapid and secure locking system

- ➡ Ultimate environmental protection in demanding applications
- ➡ Reduced operator fatigue
- ➡ Bayonet coupling system ensures proper mating
- ➡ Easy to connect in difficult places
- ➡ Reduced operator fatigue
- ➡ Labor savings

Quick mating with 1/3 turn with an audible & tactile "click"



## Ergonomic plug design with maximized cabling space and minimized connector length



**O-ring seal** to guarantee sealing between plug and backshell

«**Easy grip**» bayonet coupling ring to allow quick and secure mating

**Colored rings** available for visual identification  
(See accessories page 15)

# Full Plastic Sealed Connectors



## Rapid and secure panel mounting

**Rear panel** mount solution suitable for pre-harnessing and PCB mounting

**Captive** panel seal to prevent misalignment

**Robust jam nut** to guarantee a rapid, secure and vibration proof panel mounting

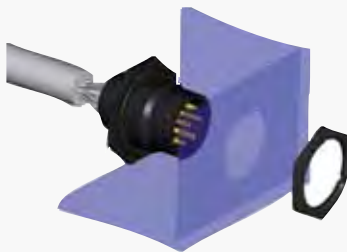
**O-ring seal** to guarantee sealing between receptacle and plug

**D-shape panel cut** to ensure correct mounting and to prevent the connector from rotating

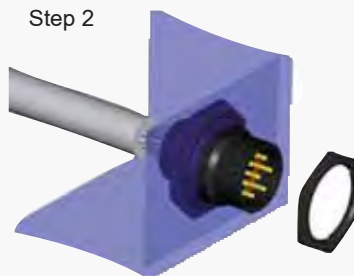


### Assembly procedure of jam nut receptacle

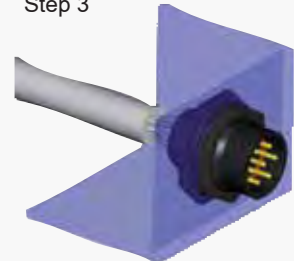
Step 1



Step 2



Step 3



## PCB receptacle...low profile with rapid installation features

**Low profile housing** to limit space between panel and PCB

**Metal hold down clips** to lock the connector easily on the PCB and to release stress on solder joints

**Pre-assembled PCB contacts**  
- machined or stamped versions available

- different solder tail lengths possible  
- different plating options

**Stand-offs** to allow cleaning after soldering



# Full Plastic Sealed Connectors



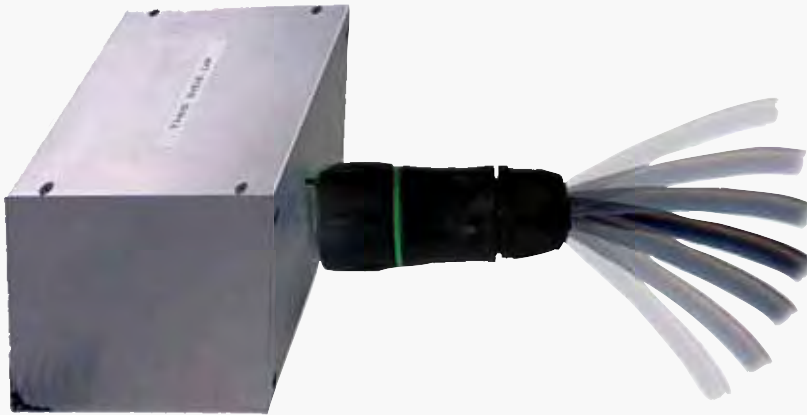
## Extreme environmental sealing performance

➡ **IP68 / IP69K sealing ... even in dynamic situations**

➡ **Dynamic IP68\***

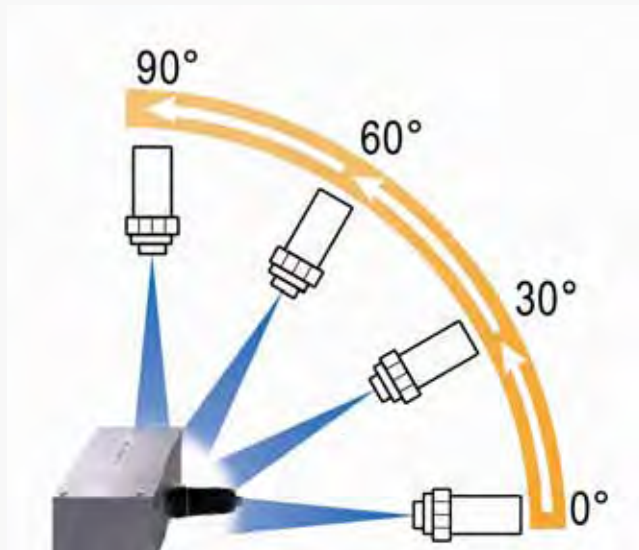
Connector will remain IP68 even when:

- Pulling on the cable
- Bending the cable



➡ **Dynamic IP69K\***

Connector withstands high pressure water cleaning



\* See table page 16 for more details

# Full Plastic Sealed Connectors

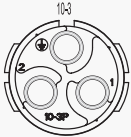
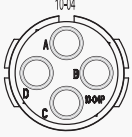
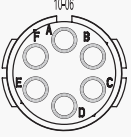
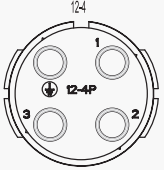
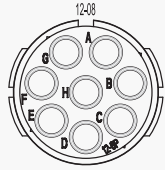
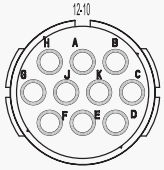
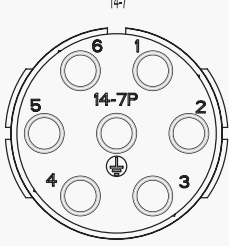
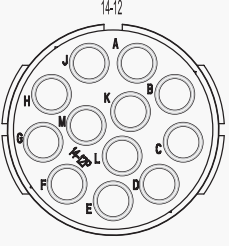
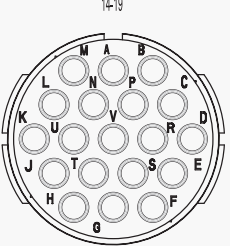


## Multiple contact arrangements with VDE 0110 performances

### Multiple contact arrangements within same connector size

- Different levels of current and rated voltages per VDE 0110
- Available in male and female genders
- Custom version available upon request such as:
  - Mixed contact sizes
  - Power versions
  - High speed versions (RJ45, USB, BNC)

### UTS insert arrangements, contact size, rated voltage per VDE 0110 & current ratings

| Contact size         | # 16 (dia. 1.6mm)                                                                   |                                                                                      | #20 (dia. 1.0mm)                                                                      |
|----------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Rated voltage        | 250 V                                                                               | 125 V                                                                                | 125 V                                                                                 |
| Overtoltage category | III                                                                                 | III                                                                                  | III                                                                                   |
| Pollution degree     | 3                                                                                   | 3                                                                                    | 3                                                                                     |
| Size 10              |  |  |  |
|                      | Number of contacts                                                                  | 3 (2+ grounding)                                                                     | 4                                                                                     |
|                      | Max current (per contact)                                                           | 13A (machined + stamped)                                                             | 13A (machine + stamped)                                                               |
| Size 12              |  |  |  |
|                      | Number of contacts                                                                  | 4 (3 + grounding)                                                                    | 8                                                                                     |
|                      | Max current (per contact)                                                           | 13A (machined + stamped)                                                             | 13A (machine + stamped)                                                               |
| Size 14              |  |  |  |
|                      | Number of contacts                                                                  | 7 (6 + grounding)                                                                    | 12                                                                                    |
|                      | Max current (per contact)                                                           | 13A (machined + stamped)                                                             | 13A (machined + stamped)                                                              |
|                      |                                                                                     |                                                                                      | 7.5A (machined)/ 5A (stamped)                                                         |

# Full Plastic Sealed Connectors



## Rapid and secure panel mounting

**Rear panel** mount solution suitable for pre-harnessing and PCB mounting

**Captive** panel seal to prevent misalignment

**Robust jam nut** to guarantee a rapid, secure and vibration proof panel mounting

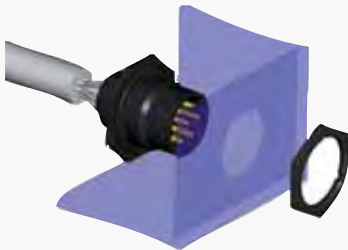
**D-shape panel cut** to ensure correct mounting and to prevent the connector from rotating

**O-ring seal** to guarantee sealing between receptacle and plug

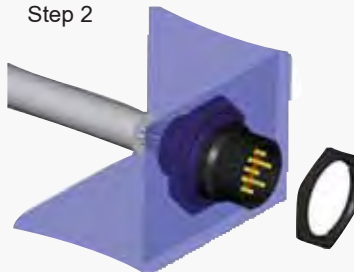


### Assembly procedure of jam nut receptacle

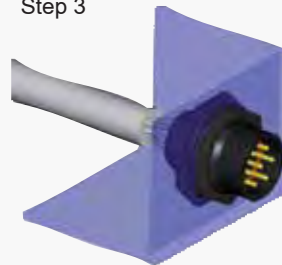
Step 1



Step 2



Step 3



## PCB receptacle...low profile with rapid installation features

**Low profile housing** to limit space between panel and PCB

**Metal hold down clips** to lock the connector easily on the PCB and to release stress on solder joints

**Pre-assembled PCB contacts**  
- machined or stamped versions available  
- different solder tail lengths possible  
- different plating options

**Stand-offs** to allow cleaning after soldering



# Full Plastic Sealed Connectors



## Technical characteristics

### MECHANICAL

- Durability: 250 matings & unmatings
- Vibration resistance: Per CEI 60512-4
- Thermal shock: Per MIL-STD1344 method 1003

### ELECTRICAL

- Insulation resistance: 5000 MΩ min
- Test potential: 2000 VAC
- As per VDE specifications (see page 8 for more details)

### ENVIRONMENTAL

- Operating temp: -40°C to + 105°C
- Flammability rating: UL94V0 and NFF16101 level 2
- Sealing (mated): Dynamic IP68 – 10m under water for 1 week per IEC60529  
Dynamic IP69K per DIN40050
- UV resistant
- Salt spray: 500 hours

### MATERIAL

- Connectors + Backshell: Thermoplastic



### PLATING (only for PCB version)

- Plating for machined contacts: min 0.4 μ gold all over
- Plating for stamped contacts: Min 0.4 μ gold in contact area  
3 – 5 μ tin on solder tail

Other platings upon request

### CONTACT ACCOMMODATION

- “UTS” connectors accept TRIM TRIO® size 16 or size 20 (depending on arrangement)  
removable snap-lock contacts
- Refer to TRIM TRIO® catalog for details
- Contacts to be ordered separately (except PCB versions)

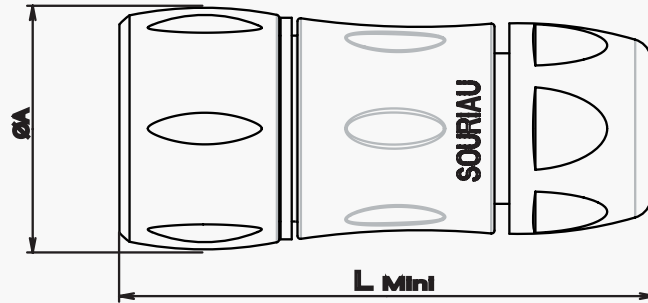
In accordance with UL requirements

# Full Plastic Sealed Connectors



## Cable plug with backshell for pin and socket contacts

UTS6JC...P / UTS6JC...S)



Each plug has 2 seals to cover the specified cable range (See table below).

The standard seal is preassembled

The second seal is supplied as loose piece together with a plug.

| PN for pin contact | PN for socket | NB contacts | Shell size | L    | Ø A  | Ø Cable range                         |
|--------------------|---------------|-------------|------------|------|------|---------------------------------------|
| UTS6JC103P         | UTS6JC103S    | 3           | 10         | 63.2 | 26.2 | 1.5 to 5.0<br>2.5 to 8.00 (standard)  |
| UTS6JC104P         | UTS6JC104S    | 4           |            |      |      |                                       |
| UTS6JC106P         | UTS6JC106S    | 6           |            |      |      |                                       |
| UTS6JC124P         | UTS6JC124S    | 4           | 12         | 66.7 | 29.7 | 3.0 to 9.0<br>5.0 to 12.0 (standard)  |
| UTS6JC128P         | UTS6JC128S    | 8           |            |      |      |                                       |
| UTS6JC1210P        | UTS6JC1210S   | 10          |            |      |      |                                       |
| UTS6JC147P         | UTS6JC147S    | 7           | 14         | 71.5 | 34.6 | 5.0 to 12.0<br>7.0 to 14.0 (standard) |
| UTS6JC1412P        | UTS6JC1412S   | 12          |            |      |      |                                       |
| UTS6JC1419P        | UTS6JC1419S   | 19          |            |      |      |                                       |

Color coding ring is optional (See page 15).

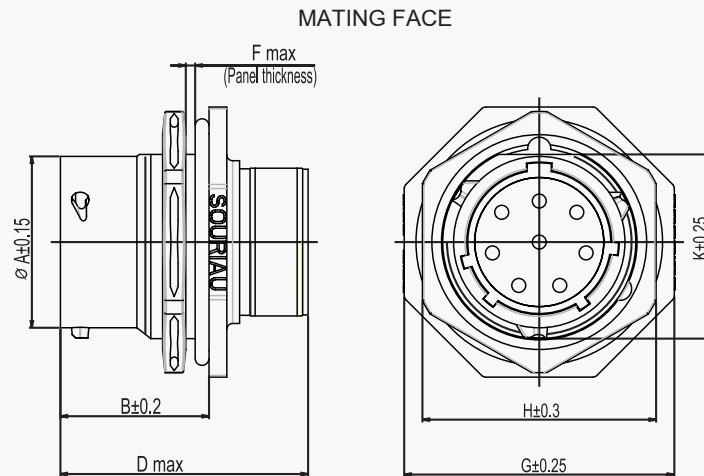
Notes : All dimensions are in mm.

Dimensions are not contractual and may be subject to modifications.

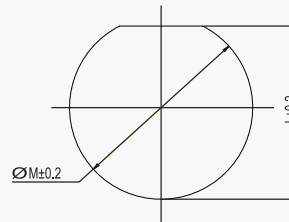
# Full Plastic Sealed Connectors



## Jam nut receptacle (wire version) for pin and socket contacts (UTS7...P / UTS7...S)



PANEL CUT OUT



| PN for pin contact | PN for socket | NB contacts | Shell size | Ø A  | B    | D Max | F Max | G    | H    | K    | L    | Ø M  |
|--------------------|---------------|-------------|------------|------|------|-------|-------|------|------|------|------|------|
| UTS7103P           | UTS7103S      | 3           | 10         | 14.9 | 19.3 | 33.9  | 3.2   | 27.0 | 22.2 | 16.6 | 16.5 | 17.7 |
| UTS7104P           | UTS7104S      | 4           |            |      |      |       |       |      |      |      |      |      |
| UTS7106P           | UTS7106S      | 6           |            |      |      |       |       |      |      |      |      |      |
| UTS7124P           | UTS7124S      | 4           | 12         | 19.0 | 19.3 | 33.9  | 3.2   | 31.8 | 27.0 | 20.8 | 21.2 | 22.5 |
| UTS7128P           | UTS7128S      | 8           |            |      |      |       |       |      |      |      |      |      |
| UTS71210P          | UTS71210S     | 10          |            |      |      |       |       |      |      |      |      |      |
| UTS7147P           | UTS7147S      | 7           | 14         | 22.2 | 19.3 | 33.9  | 3.2   | 34.9 | 30.2 | 23.9 | 24.3 | 25.7 |
| UTS71412P          | UTS71412S     | 12          |            |      |      |       |       |      |      |      |      |      |
| UTS71419P          | UTS71419S     | 19          |            |      |      |       |       |      |      |      |      |      |

Color coding ring is optional (See page 15).

Notes : All dimensions are in mm

Dimensions are not contractual and may be subject to modifications.

# Full Plastic Sealed Connectors

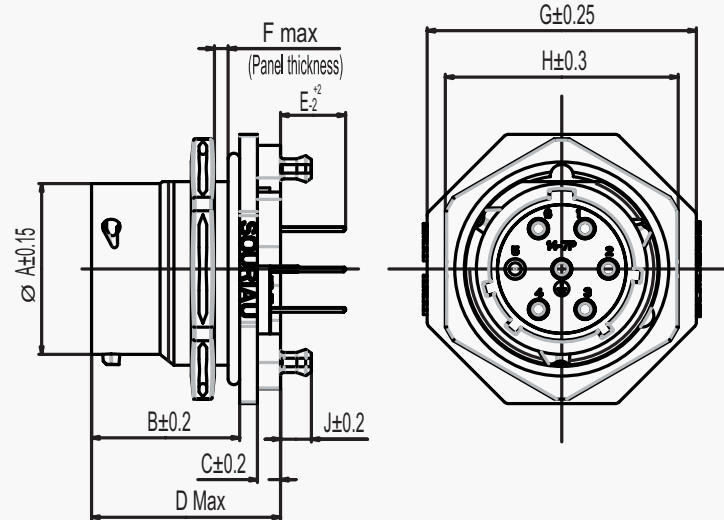


## PCB jam nut receptacle for male contacts

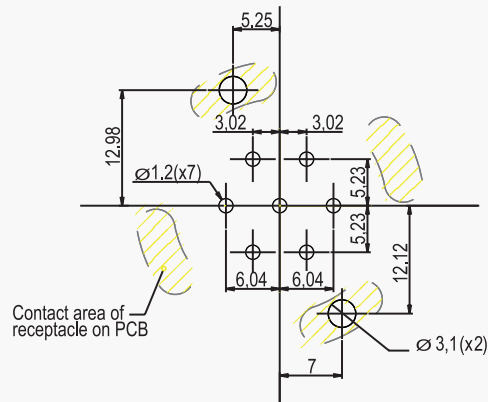
UTS714PSE4K9



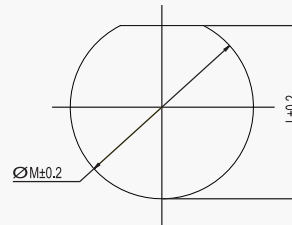
MATING FACE



DRILLING PATTERN



PANEL CUT OUT



| Shell size | $\varnothing A$ | B    | C | D Max | E   | F   | G    | H    | J | L    | $\varnothing M$ |
|------------|-----------------|------|---|-------|-----|-----|------|------|---|------|-----------------|
| 14         | 22.2            | 19.3 | 3 | 24.5  | 3.6 | 3.2 | 34.9 | 30.2 | 4 | 24.3 | 25.7            |

Other arrangements upon request.

Stamped and formed contacts.

Plating:

K9 (std) = Min 0.4 $\mu$  Gold in contact area, 3 - 5 $\mu$  Tin on solder tail

T = 3 - 5 $\mu$  Tin all over

Notes : All dimensions are in mm.

Dimensions are not contractual and may be subject to modifications.

# Full Plastic Sealed Connectors



## Accessories

### Receptacle sealing cap



#### Part numbers

Size 10: UTS10DCG  
Size 12: UTS12DCG  
Size 14: UTS14DCG

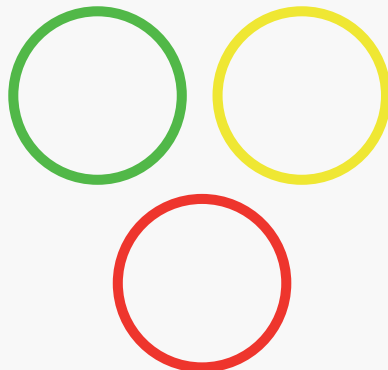
### Plug sealing cap



#### Part numbers

Size 10: UTS610DCG  
Size 12: UTS612DCG  
Size 14: UTS614DCG

### Color coding rings



#### Part numbers for receptacle

Size 10: UTS710CCR\*  
Size 12: UTS712CCR\*  
Size 14: UTS714CCR\*  
\* Add G for Green, Y for Yellow, R for Red

#### Part numbers for receptacle

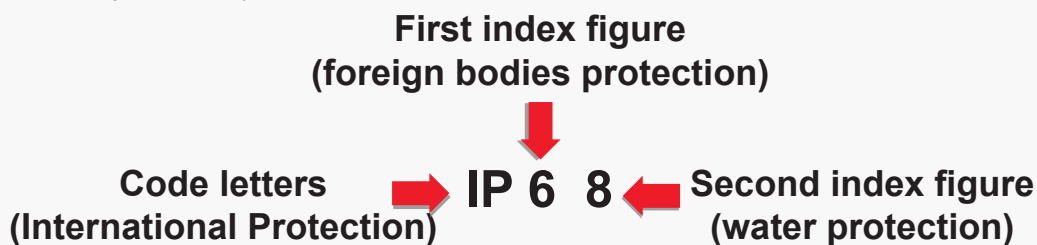
Size 10: UTS610CCR\*  
Size 12: UTS612CCR\*  
Size 14: UTS614CCR\*  
\* Add G for Green, Y for Yellow, R for Red

# Full Plastic Sealed Connectors



## What is sealing and how it is specified

- The connector's housing, sealing and locking mechanism protect the connection from external influences such as mechanical shocks, foreign bodies, humidity, dust, water and other fluids.
- The degree of protection is explained in IEC 60529, DIN EN60529 (DIN 40050) standards that categorize connections according to foreign body and water protection.
- The degree of protection is indicated by IP (International Protection) followed by 2 digits (See example below):



| First Index | Degree of protection                                                                                                                                               | Second Index | Degree of protection                                                                                       |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------|
| 0           | No protection against accidental contact.<br>No protection against solid foreign bodies.                                                                           | 0            | No protection against water.                                                                               |
| 1           | Protection against contacts with any large area by hand and against large solid foreign bodies with a diameter bigger than 50mm.                                   | 1            | Drip-proof.<br>Protection against vertical water drips.                                                    |
| 2           | Protection against contacts with the fingers.<br>Protection against solid foreign bodies with a diameter bigger than 12mm.                                         | 2            | Drip-proof.<br>Protection against water drips up to a 15° angle.                                           |
| 3           | Protection against tools, wires or similar objects with a diameter bigger than 2.5mm..<br>Protection against small solid bodies with a diameter bigger than 2.5mm. | 3            | Spray-proof.<br>Protection against diagonal water drips up to a 60° angle.                                 |
| 4           | As 3 however diameter is bigger than 1mm.                                                                                                                          | 4            | Splash-proof.<br>Protection against splashed water from all directions.                                    |
| 5           | Full protection against contacts. Protection against interior injurious dust deposits.                                                                             | 5            | Hose-proof.<br>Protection against water (out of a nozzle) from all directions.                             |
| 6           | Total protection against contacts. Protection against penetration of dust.                                                                                         | 6            | Protection against temporary flooding.                                                                     |
|             |                                                                                                                                                                    | 7            | Protection against temporary immersions.                                                                   |
|             |                                                                                                                                                                    | 8            | Protection against water pressure.<br>Pressure to be specified by supplier.                                |
|             |                                                                                                                                                                    | 9K           | High pressure hose-proof.<br>Protection against high pressure water (out of a nozzle) from all directions. |

UTS offers high sealing performance IP68 / IP69K...  
Even in dynamic situations.

SOURIAU reserves the right to make any engineering refinements, alterations or improvements deemed necessary on its products.  
The dimensions appearing in this catalogue are thus subject to change without notice. When dimensions are critical detailed drawings should be requested.

# Full Plastic Circular Connector



## UTP SERIES

### Description

"UTP" full plastic industrial circular connectors are a range of multiway connectors.

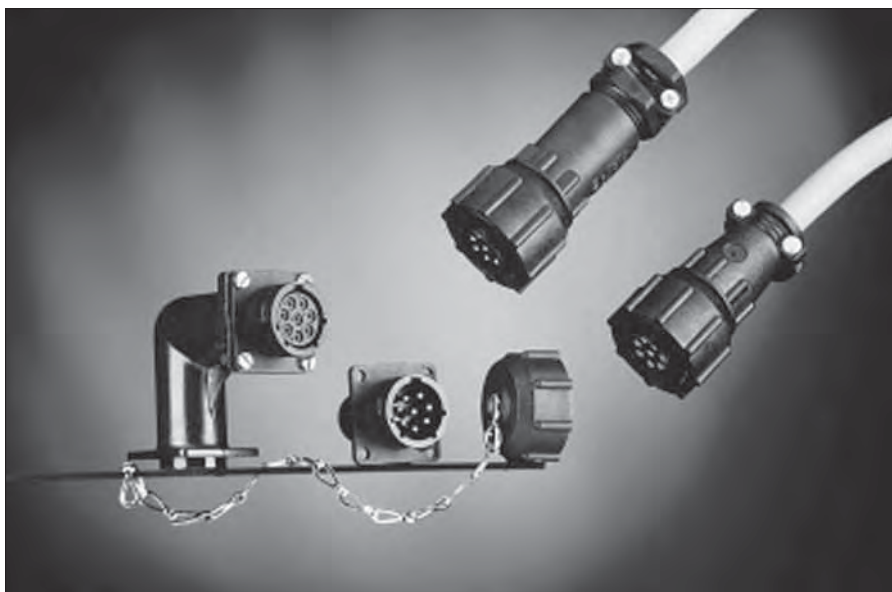
"UTP" provides the complete answer to the need for economical lightweight, robust circular connectors and is unique in offering a plastic bayonet coupling ring incorporating a metal wave spring, which locks with an audible positive "click".

It is available in 8 shell sizes, 10 insert arrangements all interchangeable, interchangeable and intermountable with the TRIM TRIO "UTO" (full metal) and "UTG" (plastic with metal coupling ring) industrial connector families.

### Features and benefits

- Available in 8 shell sizes and 10 insert

- arrangements incl. 2 VDE versions.
- Available in plug and receptacle versions for both male and female contacts.
- Connectors and accessories are moulded from highly durable glass-filled thermoplastic.
- Flammability rating: UL94-V0.
- Plastic bayonet ring:
  - Vibration proof thermoplast
  - Metal wave spring loaded.
  - Locks with audible positive "click"
  - UL recognized File Nr.: E238675



### Performance characteristics

|                                                                                                                |                            |
|----------------------------------------------------------------------------------------------------------------|----------------------------|
| Operating temperature:                                                                                         | -55°C to +125°C            |
| Insulation resistance:                                                                                         | 5000 MΩ min.               |
| Test potential:                                                                                                | 2000 VAC                   |
| Durability:                                                                                                    | 250 matings and unmatings. |
| Degree of protection per DIN 40050: IP65 in mated condition. "H" version used with water protected backshells. |                            |

### Construction

Connector, Bayonet ring and accessories  
 Gass filled thermoplast UL94-V0  
 Colour: black  
 Coupling spring: Spring steel

### Contact accommodation

- "UTP" connectors accept TRIM TRIO size 16 removable snap-lock contacts (see contacts section)
- Contacts to be ordered separately.

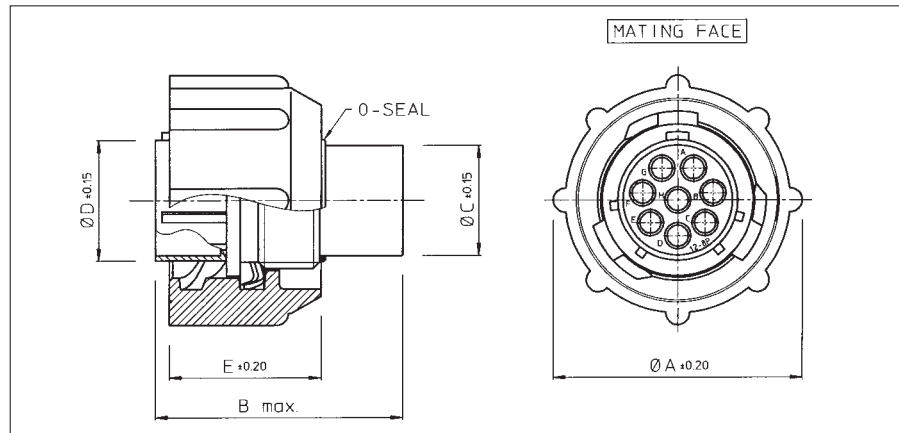
## How to order

| Connector family :         |                                                                                         | UTP | 0 | 14 | 12 | P | H | -- |
|----------------------------|-----------------------------------------------------------------------------------------|-----|---|----|----|---|---|----|
|                            |                                                                                         | UTP | 6 | 14 | 12 | S |   | -- |
| <b>Body variation:</b>     | 0 : Wall mounting receptacle<br>6 : Cable plug                                          |     |   |    |    |   |   |    |
| <b>Shell size:</b>         |                                                                                         |     |   |    |    |   |   |    |
| <b>Insert arrangement:</b> |                                                                                         |     |   |    |    |   |   |    |
| <b>Type of contacts:</b>   | P : Pin contacts<br>S : Socket contacts                                                 |     |   |    |    |   |   |    |
| <b>Application</b>         | No letter : Standard version<br>H : Water protected version (only receptacle)           |     |   |    |    |   |   |    |
| <b>Design variation</b>    | No letter : Moulded-in contact marking (standard version)<br>Others : Specials versions |     |   |    |    |   |   |    |

# Full Plastic Circular Connector



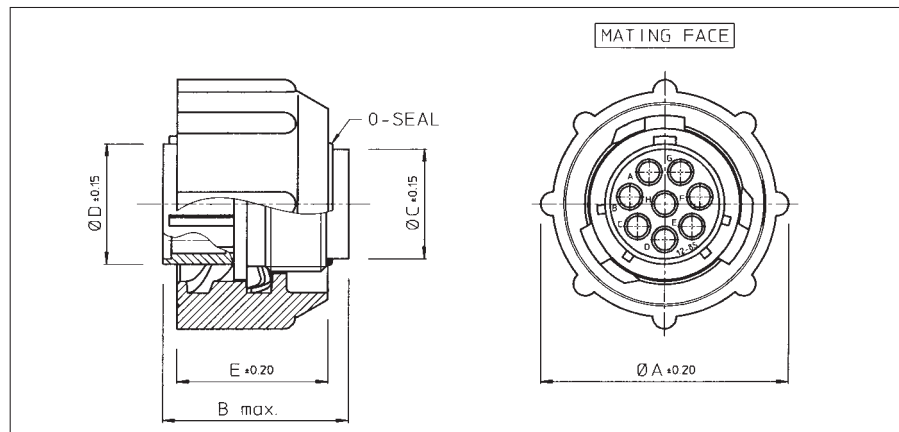
## Cable plug for pin contacts (UTP6- - -P)



| Part number                     | Shell size | Ø A ±0.2 | B max.      | Ø C ±0.15 | Ø D ±0.15 | Ø E ±0.2 |
|---------------------------------|------------|----------|-------------|-----------|-----------|----------|
| <b>UTP6104P / UTP6103PVDE</b>   | <b>10</b>  | 26.7     | 31.8        | 10.9      | 12.2      | 19.1     |
| <b>UTP6128P</b>                 | <b>12</b>  | 31.4     |             | 13.8      | 15.1      |          |
| <b>UTP61412P</b>                | <b>14</b>  | 34.5     |             | 17.0      | 18.3      |          |
| <b>UTP61619P</b>                | <b>16</b>  | 37.8     |             | 19.9      | 21.5      |          |
| <b>UTP61823P / UTP6187PVDEU</b> | <b>18</b>  | 40.8     | 31.8 / 33.0 | 22.4      | 24.0      |          |
| <b>UTP62028P</b>                | <b>20</b>  | 43.9     | 31.8        | 25.6      | 27.2      |          |
| <b>UTP62235P</b>                | <b>22</b>  | 47.0     |             | 28.5      | 30.4      |          |
| <b>UTP62448P</b>                | <b>24</b>  | 50.1     |             | 31.7      | 33.5      |          |

Part numbers are suitable for both standard and IP65 water protection versions.

## Cable plug for socket contacts (UTP6- - -S)



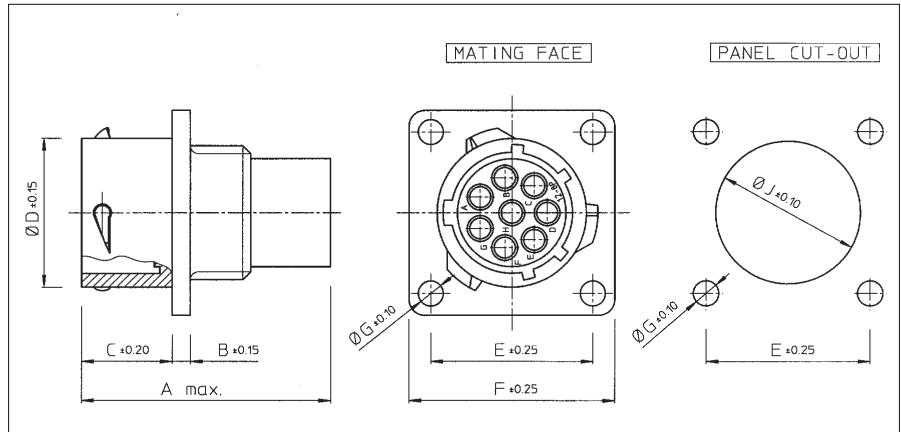
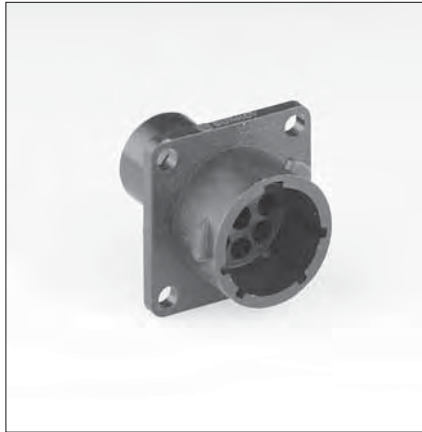
| Part number                     | Shell size | Ø A ±0.2 | B max.       | Ø C ±0.15 | Ø D ±0.15 | Ø E ±0.2 |
|---------------------------------|------------|----------|--------------|-----------|-----------|----------|
| <b>UTP6104S / UTP6103SVDE</b>   | <b>10</b>  | 26.7     | 23.9 / 26.75 | 10.9      | 12.2      | 19.1     |
| <b>UTP6128S</b>                 | <b>12</b>  | 31.4     | 23.9         | 13.8      | 15.1      |          |
| <b>UTP61412S</b>                | <b>14</b>  | 34.5     |              | 17.0      | 18.3      |          |
| <b>UTP61619S</b>                | <b>16</b>  | 37.8     |              | 19.9      | 21.5      |          |
| <b>UTP61823S / UTP6187SVDEU</b> | <b>18</b>  | 40.8     | 23.9 / 29.0  | 22.4      | 24.0      |          |
| <b>UTP62028S</b>                | <b>20</b>  | 43.9     | 24.9         | 25.6      | 27.2      |          |
| <b>UTP62235S</b>                | <b>22</b>  | 47.0     |              | 28.5      | 30.4      |          |
| <b>UTP62448S</b>                | <b>24</b>  | 50.1     | 26.2         | 31.7      | 33.5      |          |

Part numbers are suitable for both standard and IP65 water protection versions.

# Full Plastic Circular Connector



## Wall mounting receptacle for pin contacts (UTP0- - - -P)

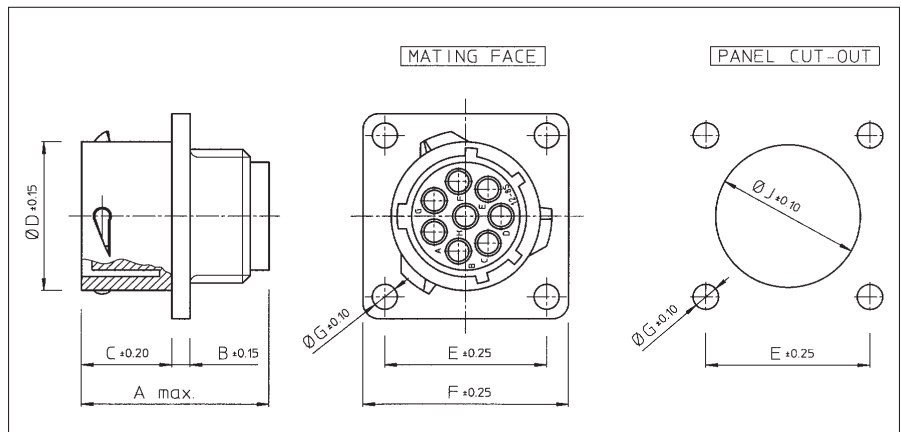


| Part number              | Shell size | A max.    | B ±0.15 | C ±0.2    | Ø D ±0.15 | E ±0.25 | F ±0.25 | Ø G ±0.1 | Ø J ±0.1 |
|--------------------------|------------|-----------|---------|-----------|-----------|---------|---------|----------|----------|
| UTP0104P / UTP0103PVDE   | 10         | 31.7      | 2.3     | 11.3      | 15.0      | 18.3    | 23.8    | 3.2      | 15.1     |
| UTP0128P                 | 12         |           |         |           | 19.0      | 20.6    | 26.2    |          | 18.2     |
| UTP01412P                | 14         |           |         |           | 22.2      | 23.0    | 28.6    |          | 21.4     |
| UTP01619P                | 16         |           |         |           | 25.3      | 24.6    | 31.0    |          | 24.6     |
| UTP01823P / UTP0187PVDEU | 18         | 31.7/34.0 | 2.5     | 11.3/17.9 | 28.5      | 27.0    | 33.3    | 3.2      | 27.8     |
| UTP02028P                | 20         | 33.3      |         | 14.5      | 31.7      | 29.4    | 36.5    |          | 30.9     |
| UTP02235P                | 22         |           |         |           | 34.9      | 31.8    | 39.7    |          | 34.1     |
| UTP02448P                | 24         |           |         |           | 15.3      | 38.0    | 34.9    | 42.9     | 3.9      |

For IP65 waterprotected version add "H" behind "P" e.g. UTP01412PH

A square flange sealing has to be ordered separately to guarantee a sealing with the equipment. Refer to "Circular accessories" section (UTFD--).

## Wall mounting receptacle for socket contacts (UTP0- - - -S)



| Part number              | Shell size | A max.    | B ±0.15 | C ±0.2    | Ø D ±0.15 | E ±0.25 | F •0.25 | Ø G ±0.1 | Ø J ±0.1 |
|--------------------------|------------|-----------|---------|-----------|-----------|---------|---------|----------|----------|
| UTP0104S / UTP0103SVDE   | 10         | 24.3/27.6 | 2.3     | 11.3      | 15.0      | 18.3    | 23.8    | 3.2      | 15.1     |
| UTP0128S                 | 12         | 24.3      |         |           | 19.0      | 20.6    | 26.2    |          | 18.2     |
| UTP01412S                | 14         |           |         |           | 22.2      | 23.0    | 28.6    |          | 21.4     |
| UTP01619S                | 16         |           |         |           | 25.3      | 24.6    | 31.0    |          | 24.6     |
| UTP01823S / UTP0187SVDEU | 18         | 24.3/30.4 | 2.5     | 11.3/17.9 | 28.5      | 27.0    | 33.3    | 3.2      | 27.8     |
| UTP02028S                | 20         | 27.0      |         |           | 14.5      | 31.7    | 29.4    |          | 36.5     |
| UTP02235S                | 22         | 28.0      | 3.5     | 15.3      |           | 34.9    | 31.8    |          | 39.7     |
| UTP02448S                | 24         | 30.4      |         |           | 38.0      | 34.9    | 42.9    | 3.9      | 37.3     |

For IP65 waterprotected version add "H" behind "S" e.g. UTP01412SH

A square flange sealing has to be ordered separately to guarantee a sealing with the equipment. Refer to "Circular accessories" section (UTFD--).

[illegible]

# Plastic Connector with Metal Coupling



## UTG SERIES

### Description

"UTG" Metalok Bantam plastic industrial circular connectors with metal coupling are a range of multiway connectors to provide the complete answer to the need for lightweight, robust circular connectors. They are available in 8 shell sizes, 11 insert arrangements **all intermateable, interchangeable and intermountable** with the TRIM TRIO "UTO" and "UTP" industrial connector families.

### Features and benefits

- Available in 8 shell sizes and 11 insert arrangements incl. 3 VDE versions.
- Available in plug and receptacle versions

for both male and female contacts.

- Connectors and accessories are moulded from highly durable glass-filled thermoplastic.
- Flammability rating: UL94-V0.
- Metal bayonet ring:
  - Metal wave spring loaded.
  - Locks with audible positive "click"
  - Assures 500 matings and unmatings
  - UL recognized file Nr.: E238675



### Performance characteristics

|                                                                                                               |                                   |
|---------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Operating temperature:                                                                                        | -55°C to +125°C                   |
| Insulation resistance:                                                                                        | 5000 MΩ min.                      |
| Test potential:                                                                                               | 2000 VAC                          |
| Durability:                                                                                                   | Up to 1000 matings and unmatings. |
| Vibration resistance:                                                                                         | Per MIL-STD202 method 204         |
| Thermal shock:                                                                                                | Per MIL-STD202 method 207         |
| Degree of protection per DIN 40050: IP65 in mated condition. "H" version used with waterprotected backshells. |                                   |

### Construction

|                  |                                  |
|------------------|----------------------------------|
| Connector body   | Glass filled thermoplast UL94-V0 |
| Colour:          | black                            |
| Coupling ring:   | Nickel plated brass              |
| Tri-lock pins:   | Stainless steel                  |
| Coupling spring: | Spring steel                     |

### Contact accommodation

- "UTG" connectors accept TRIM TRIO size 16 removable snap-lock contacts (see contact section)
- Contacts to be ordered separately.

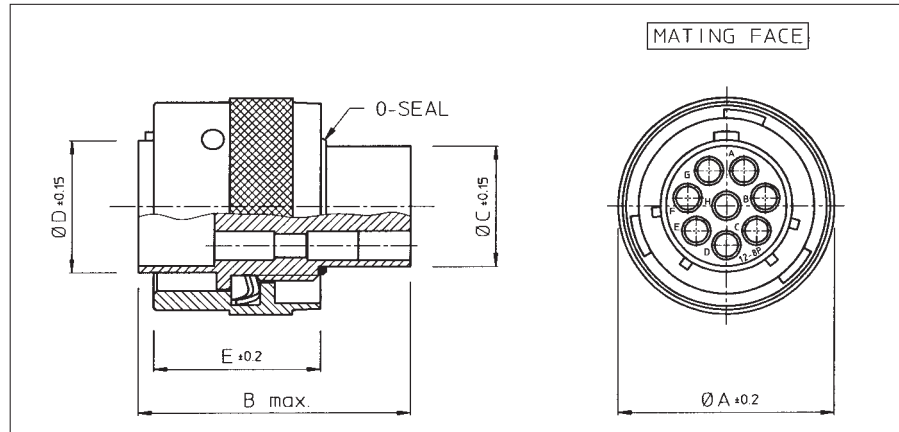
## How to order

| Connector family :         |                                                                                                       | UTG | 0 | 14 | 12 | P | N | H | -- |
|----------------------------|-------------------------------------------------------------------------------------------------------|-----|---|----|----|---|---|---|----|
|                            |                                                                                                       | UTG | 6 | 14 | 12 | S |   |   | -- |
| <b>Body variation:</b>     | <b>0</b> : Wall mounting receptacle<br><b>6</b> : Cable plug<br><b>1</b> : Free hanging receptacle    |     |   |    |    |   |   |   |    |
| <b>Shell size:</b>         |                                                                                                       |     |   |    |    |   |   |   |    |
| <b>Insert arrangement:</b> |                                                                                                       |     |   |    |    |   |   |   |    |
| <b>Type of contacts:</b>   | <b>P</b> : Pin contacts<br><b>S</b> : Socket contacts                                                 |     |   |    |    |   |   |   |    |
| <b>Plating</b>             | <b>N</b> : Nickelplated bayonet ring                                                                  |     |   |    |    |   |   |   |    |
| <b>Application</b>         | <b>No letter</b> : Standard version<br><b>H</b> : Water protected version (only receptacle)           |     |   |    |    |   |   |   |    |
| <b>Design variation</b>    | <b>No letter</b> : Moulded-in contact marking (standard version)<br><b>Others</b> : Specials versions |     |   |    |    |   |   |   |    |

# Plastic Connector with Metal Coupling



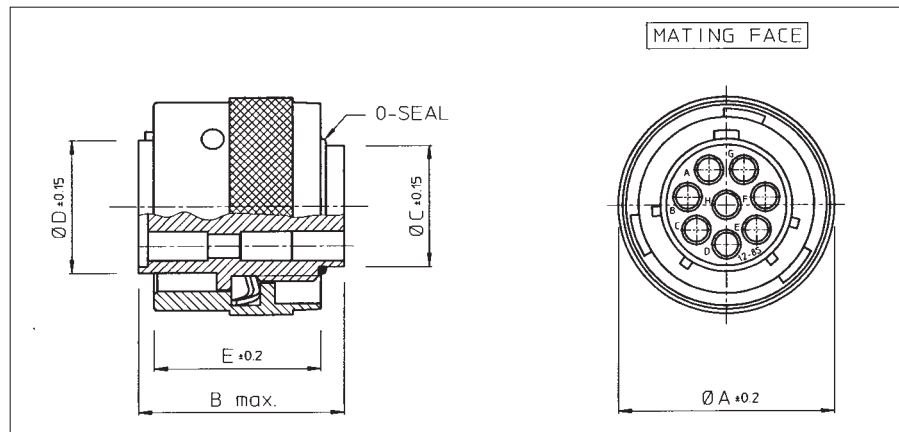
## Cable plug for pin contacts (UTG6- - - -PN)



| Part number                       | Shell size | Ø A ±0.2 | B max.      | Ø C ±0.15 | Ø D ±0.15 | E ±0.2 |
|-----------------------------------|------------|----------|-------------|-----------|-----------|--------|
| <b>UTG6104PN / UTG6103PNVDE</b>   | <b>10</b>  | 21.6     | 31.8        | 10.9      | 12.2      | 19.1   |
| <b>UTG6128PN</b>                  | <b>12</b>  | 24.8     |             | 13.8      | 15.1      |        |
| <b>UTG61412PN</b>                 | <b>14</b>  | 28.0     |             | 17.0      | 18.3      |        |
| <b>UTG61619PN</b>                 | <b>16</b>  | 31.2     |             | 19.9      | 21.5      |        |
| <b>UTG61823PN / UTG6187PNVDEU</b> | <b>18</b>  | 34.3     | 31.8 / 33.0 | 22.4      | 24.0      |        |
| <b>UTG62028PN / UTG62020PN</b>    | <b>20</b>  | 37.5     | 31.8 / 35.3 | 25.6      | 27.2      |        |
| <b>UTG62235PN</b>                 | <b>22</b>  | 40.7     | 31.8        | 26.5      | 30.4      |        |
| <b>UTG62448PN</b>                 | <b>24</b>  | 43.9     |             | 31.7      | 33.5      |        |

Part numbers are suitable for both standard and IP65 water protection versions.

## Cable plug for socket contacts (UTG6- - - -SN)



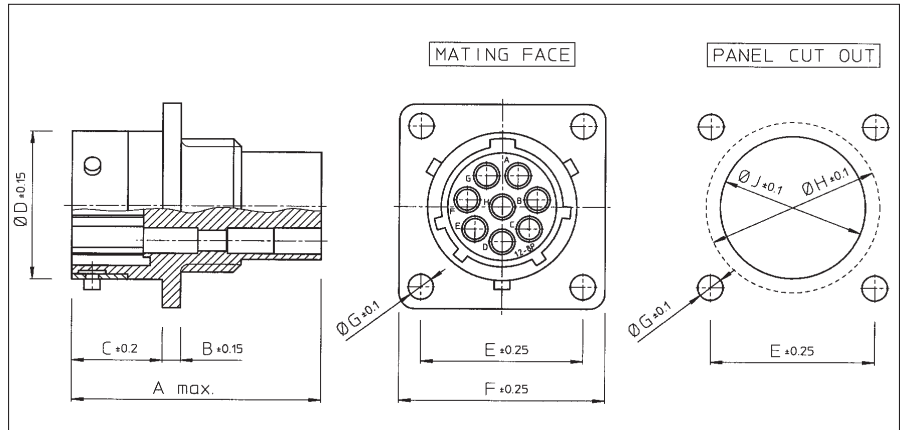
| Part number                       | Shell size | Ø A ±0.2 | B max.       | Ø C ±0.15 | Ø D ±0.15 | E ±0.2 |
|-----------------------------------|------------|----------|--------------|-----------|-----------|--------|
| <b>UTG6104SN / UTG6103SNVDE</b>   | <b>10</b>  | 21.6     | 23.9 / 26.75 | 10.9      | 12.2      | 19.1   |
| <b>UTG6128SN</b>                  | <b>12</b>  | 24.8     | 23.9         | 13.8      | 15.1      |        |
| <b>UTG61412SN</b>                 | <b>14</b>  | 28.0     |              | 17.0      | 18.3      |        |
| <b>UTG61619SN</b>                 | <b>16</b>  | 31.2     |              | 19.9      | 21.5      |        |
| <b>UTG61823SN / UTG6187SNVDEU</b> | <b>18</b>  | 34.3     | 23.9 / 29.0  | 22.4      | 24.0      |        |
| <b>UTG62028SN / UTG62020SN</b>    | <b>20</b>  | 37.5     | 24.9         | 25.6      | 27.2      |        |
| <b>UTG62235SN</b>                 | <b>22</b>  | 40.7     |              | 28.5      | 30.4      |        |
| <b>UTG62448SN</b>                 | <b>24</b>  | 43.9     | 26.2         | 31.7      | 33.5      |        |

Part numbers are suitable for both standard and IP65 water protection versions.

# Plastic Connector with Metal Coupling



## Wall mounting receptacle for pin contacts (UTG0- - - -P)

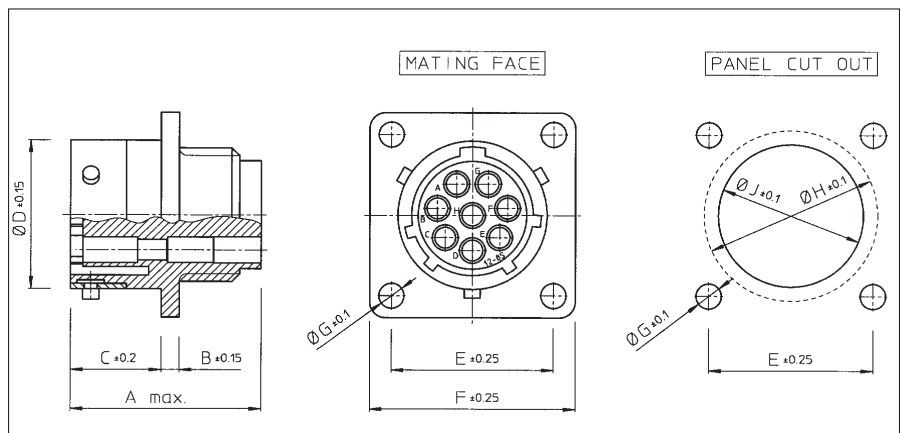


| Part number              | Shell size | A max.    | B ±0.15 | C ±0.2    | Ø D ±0.15 | E ±0.25 | F ±0.25 | Ø G ±0.1 | Ø H ±0.1 | Ø J ±0.1 |
|--------------------------|------------|-----------|---------|-----------|-----------|---------|---------|----------|----------|----------|
| UTG0104P / UTG0103PVDE   | 10         | 31.7      | 2.3     | 11.3      | 15.0      | 18.3    | 23.8    | 3.2      | 17.3     | 15.1     |
| UTG0128P                 | 12         |           |         |           | 19.0      | 20.6    | 26.2    |          | 21.8     | 18.2     |
| UTG01412P                | 14         |           |         |           | 22.2      | 23.0    | 28.6    |          | 25.0     | 21.4     |
| UTG01619P                | 16         |           |         |           | 25.3      | 24.6    | 31.0    |          | 28.1     | 24.6     |
| UTG01823P / UTG0187PVDEU | 18         | 31.7/34.0 | 2.5     | 11.3/17.9 | 28.5      | 27.0    | 33.3    |          | 31.3     | 27.8     |
| UTG02028P / UTG02020P    | 20         | 33.3/34.3 |         |           | 31.7      | 29.4    | 36.5    |          | 34.5     | 30.9     |
| UTG02235P                | 22         | 33.3      | 3.5     | 15.3      | 34.9      | 31.8    | 39.7    | 3.9      | 37.7     | 34.1     |
| UTG02448P                | 24         |           |         |           | 38.0      | 34.9    | 42.9    |          | 40.9     | 37.3     |

For IP65 waterprotected version add "H" behind "P" e.g. UTG01412PH

A square flange sealing has to be ordered separately to guarantee a sealing with the equipment. Refer to "Circular accessories" section (UTFD--).

## Wall mounting receptacle for socket contacts (UTG0- - - -S)



| Part number              | Shell size | A max.    | B ±0.15 | C ±0.2    | Ø D ±0.15 | E ±0.25 | F ±0.25 | Ø G ±0.1 | Ø H ±0.1 | Ø J ±0.1 |
|--------------------------|------------|-----------|---------|-----------|-----------|---------|---------|----------|----------|----------|
| UTG0104S / UTG0103SVDE   | 10         | 24.3/27.6 | 2.3     | 11.3      | 15.0      | 18.3    | 23.8    | 3.2      | 17.3     | 15.1     |
| UTG0128S                 | 12         | 24.3      |         |           | 19.0      | 20.6    | 26.2    |          | 21.8     | 18.2     |
| UTG01412S                | 14         |           |         |           | 22.2      | 23.0    | 28.6    |          | 25.0     | 21.4     |
| UTG01619S                | 16         |           |         |           | 25.3      | 24.6    | 31.0    |          | 28.1     | 24.6     |
| UTG01823S / UTG0187SVDEU | 18         | 24.3/30.4 | 2.5     | 11.3/17.9 | 28.5      | 27.0    | 33.3    |          | 31.3     | 27.8     |
| UTG02028S / UTG02020S    | 20         | 27.0      |         |           | 31.7      | 29.4    | 36.5    |          | 34.5     | 30.9     |
| UTG02235S                | 22         | 28.0      | 3.5     | 14.5      | 34.9      | 31.8    | 39.7    | 3.9      | 37.7     | 34.1     |
| UTG02448S                | 24         | 30.4      |         |           | 38.0      | 34.9    | 42.9    |          | 40.9     | 37.3     |

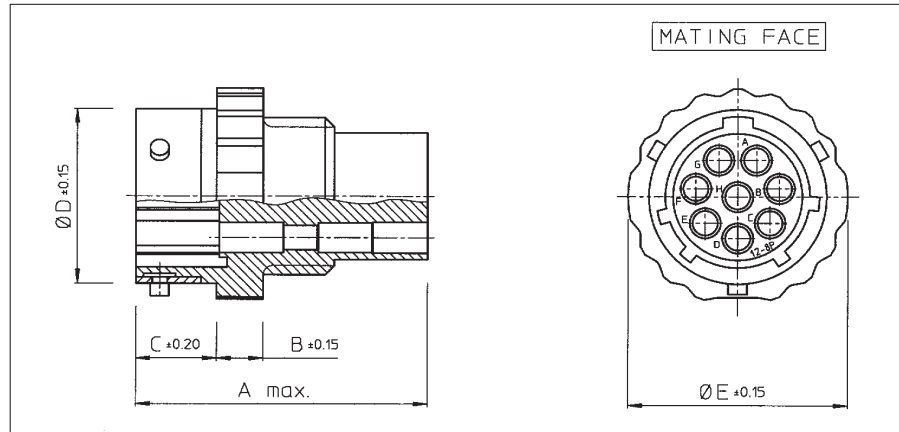
For IP65 waterprotected version add "H" behind "S" e.g. UTG01412SH

A square flange sealing has to be ordered separately to guarantee a sealing with the equipment. Refer to "Circular accessories" section (UTFD--).

# Plastic Connector with Metal Coupling



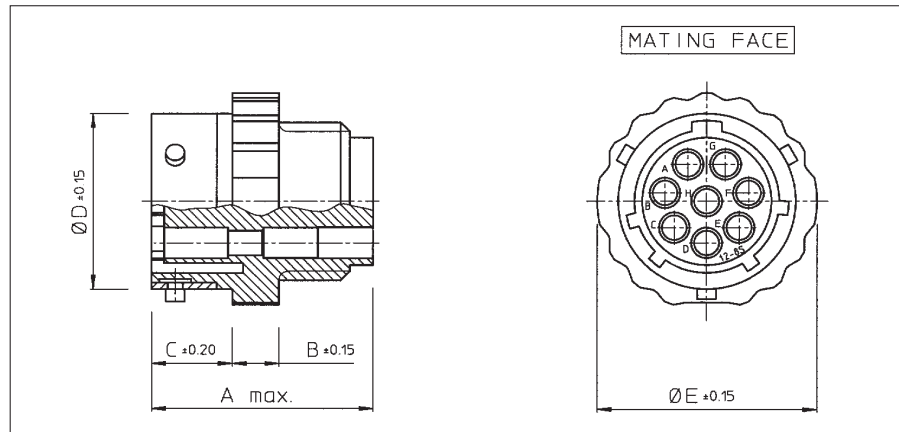
## Free hanging receptacle for pin contacts (UTG1- - -P)



| Part number                     | Shell size | A max.    | B ±0.15 | C ±0.2     | Ø D ±0.15 | Ø E ±0.15 |
|---------------------------------|------------|-----------|---------|------------|-----------|-----------|
| <b>UTG1104P / UTG1103PVDE</b>   | <b>10</b>  | 31.7      | 5.0     | 8.65       | 15.0      | 19.5      |
| <b>UTG1128P</b>                 | <b>12</b>  |           |         |            | 19.0      | 23.5      |
| <b>UTG11412P</b>                | <b>14</b>  |           |         |            | 22.2      | 27.0      |
| <b>UTG11619P</b>                | <b>16</b>  |           |         |            | 25.3      | 30.0      |
| <b>UTG11823P / UTG1187PVDEU</b> | <b>18</b>  | 31.7/34.0 |         | 8.65/15.35 | 28.5      | 33.0      |
| <b>UTG12028P / UTG12020P</b>    | <b>20</b>  | 33.3/34.3 |         | 12.05      | 31.7      | 36.5      |
| <b>UTG12235P</b>                | <b>22</b>  | 33.3      |         | 13.85      | 34.9      | 39.5      |
| <b>UTG12448P</b>                | <b>24</b>  |           |         |            | 38.0      | 42.5      |

For IP65 waterprotected version add "H" behind "P" e.g. UTG11412PH

## Free hanging receptacle for socket contacts (UTG1- - -S)



| Part number              | Shell size | A max.    | B ±0.15 | C ±0.2     | Ø D ±0.15 | Ø E ±0.15 |
|--------------------------|------------|-----------|---------|------------|-----------|-----------|
| UTG1104S / UTG1103SVDE   | 10         | 24.3/27.6 | 5.0     | 8.65       | 15.0      | 19.5      |
| UTG1128S                 | 12         | 24.3      |         |            | 19.0      | 23.5      |
| UTG11412S                | 14         |           |         |            | 22.2      | 27.0      |
| UTG11619S                | 16         |           |         |            | 25.3      | 30.0      |
| UTG11823S / UTG1187SVDEU | 18         | 24.3/30.4 |         | 8.65/15.35 | 28.5      | 33.0      |
| UTG12028S / UTG12020S    | 20         | 25.9      |         | 12.05      | 31.7      | 36.5      |
| UTG12235S                | 22         |           |         | 34.9       | 39.5      |           |
| UTG12448S                | 24         |           |         | 13.85      | 38.0      | 42.5      |

For IP65 waterprotected version add "H" behind "S" e.g. UTG11412SH

# new Metal Circular Connector

Dynamic IP68 / IP69K  
High salt spray resistance  
RoHS compliant



## UTO SERIES

### Description

"UTO" industrial circular connectors are a range of multiway connectors available in 8 shell sizes and 8 insert arrangements all interchangeable, interchangeable and intermountable with the TRIM TRIO "UTG" and "UTP industrial connector families.

"UTO" is equipped with identical shells from military connectors complying to MIL-C-26482 spec.

Strong and rugged built to resist every environmental and mechanical requirement for indoor and outdoor applications.

Amongst several characteristics, "UTO" offers possibilities on: Shielding, High levels on sealing and salt spray. UTO is also the perfect solution to connect cat5e Ethernet applications in combination with other signals, using the same TRIM TRIO contacts (consult factory for more info).



### Features and benefits (see p2)

- Suitable for shielding applications
- Available in 8 shell sizes and 8 insert arrangements.
- Available in plug and receptacle versions for both male and female contacts.
- Different insert orientations possible.
- Plastic inserts with flammability rating: UL94-V0.
- **2 levels of water protection:** Dynamic IP67 and IP68 both versions are IP69K
- **2 levels of salt spray:** 48h and 96h Higher salt spray resistance (200/500h) upon request
- Cat5e Ethernet compatible. Can be combined with other signals offering the advantage to use same contacts (consult factory).
- UL recognition in process.
- Metal bayonet ring:
  - Metal wave spring loaded
  - Locks with audible positive "click"
  - Assures 500 matings and unmatings
- RoHS compliant

### Performance characteristics

|                                                                                                                                        |                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Operating temp:                                                                                                                        | -40°C to +105°C                                                                                       |
| Insulation resistance:                                                                                                                 | 5000 MΩ min.                                                                                          |
| Test potential:                                                                                                                        | 2000 VAC                                                                                              |
| Durability:                                                                                                                            | Up to 2000 matings and unmatings.                                                                     |
| Vibration resistance:                                                                                                                  | Per MIL-STD202 method 204                                                                             |
| Thermal shock:                                                                                                                         | Per MIL-STD202 method 207                                                                             |
| Corrosion:                                                                                                                             | Salt spray per MIL-STD 202 method 101<br>48h (standard version)<br>96h (black anodised coupling ring) |
| Higher salt spray resistance (200/500h) upon request                                                                                   |                                                                                                       |
| Shielding effectiveness: 95 dB at 1 Mhz                                                                                                |                                                                                                       |
| Degree of water protection per DIN 40050:<br>Dynamic IP67 / IP68 / IP69K in mated condition and in combination with sealed back shell. |                                                                                                       |

### Construction

|                                          |
|------------------------------------------|
| Shells: Zinc alloy                       |
| Backshells and cable glands: Brass       |
| Coupling ring: Aluminium alloy           |
| Coupling spring: Spring stainless steel  |
| Insert: Glass-filled thermoplast UL94-V0 |
| RoHS compliant                           |

### Contact accommodation

- "UTO" connectors accept TRIM TRIO size 16 crimp-type removable snap-lock contacts (see contacts section)
- Contacts to be ordered separately.

### How to order

|                             | UTO                                                                                                                                                                              | 0 | 14 | 12 | P | - | H or H6 | -- | -- |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|----|----|---|---|---------|----|----|
|                             | UTO                                                                                                                                                                              | 6 | 14 | 12 | S | - | H       |    |    |
| <b>Body variation:</b>      | <b>0</b> : Wall mounting receptacle<br><b>6</b> : Cable plug<br><b>7</b> : Jam nut receptacle for rear panel mounting                                                            |   |    |    |   |   |         |    |    |
| <b>Shell size:</b>          |                                                                                                                                                                                  |   |    |    |   |   |         |    |    |
| <b>Insert arrangement:</b>  |                                                                                                                                                                                  |   |    |    |   |   |         |    |    |
| <b>Type of contacts:</b>    | <b>P</b> : Pin contacts<br><b>S</b> : Socket contacts                                                                                                                            |   |    |    |   |   |         |    |    |
| <b>Insert polarisation:</b> | <b>No letter</b> : Standard version<br><b>W, X, Y, Z:</b> Different orientations (consult factory)                                                                               |   |    |    |   |   |         |    |    |
| <b>Application:</b>         | <b>H</b> : Standard version, water protected IP 67 & IP 69K<br><b>H6</b> : Water protected IP 68 & IP 69K (only needed for wall mounting & jam nut receptacles)                  |   |    |    |   |   |         |    |    |
| <b>Design variation:</b>    | <b>No letter</b> : Standard version<br><b>Others</b> : Special versions                                                                                                          |   |    |    |   |   |         |    |    |
| <b>Plating:</b>             | <b>No letter</b> : Standard is nickel plating (48h salt spray)<br><b>01:</b> Black anodised jam nut (96h salt spray)<br><b>02:</b> Black anodised coupling ring (96h salt spray) |   |    |    |   |   |         |    |    |

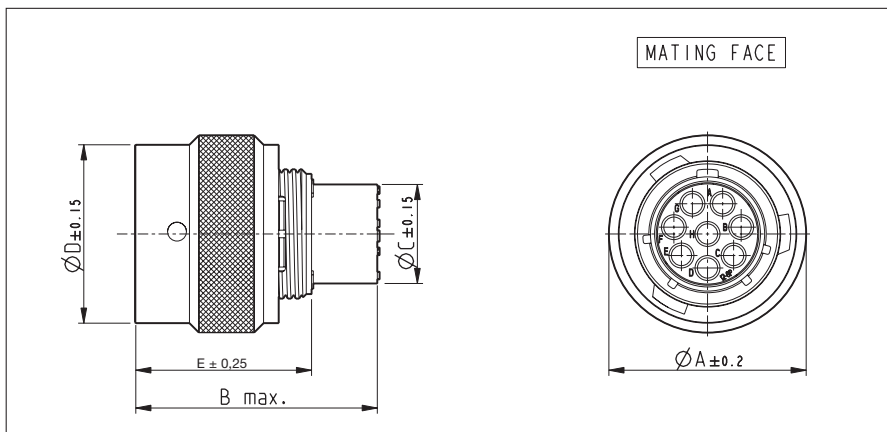
new

# Metal Circular Connector

Dynamic IP68 / IP69K  
High salt spray resistance  
RoHS compliant



## Cable plug for pin contacts (UT06- - -PH)

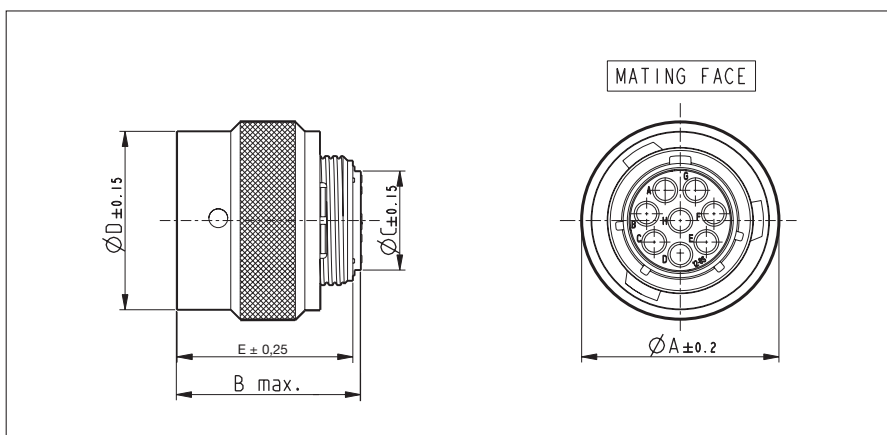


| Part number | Shell size | Ø A ±0.2 | B max. | Ø C ±0.15 | Ø D ±0.15 | E ±0.25 |
|-------------|------------|----------|--------|-----------|-----------|---------|
| UT06104PH   | 10         | 21.80    | 33.00  | 10.2      | 20.00     | 23.25   |
| UT06128PH   | 12         | 26.10    |        | 13.4      | 23.60     |         |
| UT061412PH  | 14         | 29.30    |        | 16.7      | 26.80     |         |
| UT061619PH  | 16         | 32.45    |        | 19.7      | 30.00     |         |
| UT061823PH  | 18         | 35.25    |        | 21.7      | 33.30     |         |
| UT062028PH  | 20         | 38.80    | 25.20  | 24.9      | 36.55     | 25.20   |
| UT062235PH  | 22         | 42.00    |        | 28.1      | 39.50     |         |
| UT062448PH  | 24         | 45.05    |        | 31.2      | 42.60     |         |

Part numbers are suitable for both IP67 and IP68 water protection

For 96h salt spray version add "02" behind "H" e.g. UT061412PH02 (only bayonet ring will be black anodised)

## Cable plug for socket contacts (UT06- - -SH)



| Part number | Shell size | Ø A ±0.2 | B max. | Ø C ±0.15 | Ø D ±0.15 | E ±0.25 |
|-------------|------------|----------|--------|-----------|-----------|---------|
| UT06104SH   | 10         | 21.80    | 33.00  | 10.2      | 20.00     | 23.25   |
| UT06128SH   | 12         | 26.10    |        | 13.4      | 23.60     |         |
| UT061412SH  | 14         | 29.30    |        | 16.7      | 26.80     |         |
| UT061619SH  | 16         | 32.45    |        | 19.7      | 30.00     |         |
| UT061823SH  | 18         | 35.25    |        | 21.7      | 33.30     |         |
| UT062028SH  | 20         | 38.80    | 27.30  | 24.9      | 36.55     | 25.20   |
| UT062235SH  | 22         | 42.00    |        | 28.1      | 39.50     |         |
| UT062448SH  | 24         | 45.05    |        | 31.2      | 42.60     |         |

Part numbers are suitable for both IP67 and IP68 water protection

For 96h salt spray version add "02" behind "H" e.g. UT061412SH02 (only bayonet ring will be black anodised)

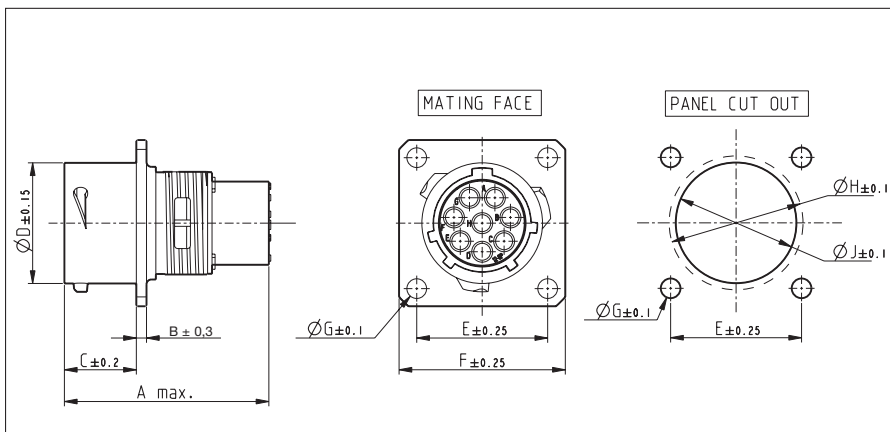
new

# Metal Circular Connector

Dynamic IP68 / IP69K  
High salt spray resistance  
RoHS compliant



## Wall mounting receptacle for pin contacts (UT00----PH/PH6)

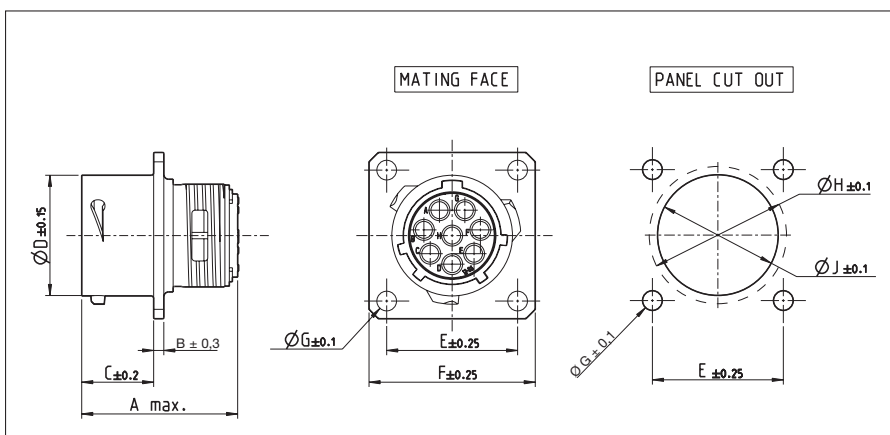


| Part number |             | Shell size | A max. | B $\pm 0.3$ | C $\pm 0.2$ | $\varnothing D \pm 0.15$ | E $\pm 0.25$ | F $\pm 0.25$ | $\varnothing G \pm 0.1$ | $\varnothing H \pm 0.1$ | $\varnothing J \pm 0.1$ |
|-------------|-------------|------------|--------|-------------|-------------|--------------------------|--------------|--------------|-------------------------|-------------------------|-------------------------|
| IP67        | IP68        |            |        |             |             |                          |              |              |                         |                         |                         |
| UT00104PH   | UT00104PH6  | 10         | 33.23  | 1.6         | 11.35       | 15.0                     | 18.3         | 23.8         | 3.2                     | 17.3                    | 14.2                    |
| UT00128PH   | UT00128PH6  | 12         |        |             |             | 19.0                     | 20.6         | 26.2         |                         | 21.8                    | 18.4                    |
| UT001412PH  | UT001412PH6 | 14         |        |             |             | 22.2                     | 23.0         | 28.6         |                         | 25.0                    | 21.5                    |
| UT001619PH  | UT001619PH6 | 16         |        |             |             | 25.3                     | 24.6         | 31.0         |                         | 28.1                    | 24.6                    |
| UT001823PH  | UT001823PH6 | 18         |        |             |             | 28.5                     | 26.9         | 33.3         |                         | 31.3                    | 27.8                    |
| UT002028PH  | UT002028PH6 | 20         | 34.75  | 2.4         | 14.55       | 31.7                     | 29.4         | 36.5         | 3.9                     | 34.5                    | 30.9                    |
| UT002235PH  | UT002235PH6 | 22         |        |             |             | 34.9                     | 31.8         | 39.7         |                         | 37.7                    | 34.1                    |
| UT002448PH  | UT002448PH6 | 24         |        |             |             | 38.0                     | 34.9         | 42.9         |                         | 40.9                    | 37.3                    |

Part numbers are suitable for both 48h and 96h salt spray.

A square sealing has to be ordered separately to guarantee a sealing with equipment. Refer to "Circular accessories" section (UTFD--).

## Wall mounting receptacle for socket contacts (UT00----SH/SH6)



| Part number |             | Shell size | A max. | B $\pm 0.3$ | C $\pm 0.2$ | $\varnothing D \pm 0.15$ | E $\pm 0.25$ | F $\pm 0.25$ | $\varnothing G \pm 0.1$ | $\varnothing H \pm 0.1$ | $\varnothing J \pm 0.1$ |
|-------------|-------------|------------|--------|-------------|-------------|--------------------------|--------------|--------------|-------------------------|-------------------------|-------------------------|
| IP67        | IP68        |            |        |             |             |                          |              |              |                         |                         |                         |
| UT00104SH   | UT00104SH6  | 10         | 25.20  | 1.6         | 11.35       | 15.0                     | 18.3         | 23.8         | 3.2                     | 17.3                    | 14.2                    |
| UT00128SH   | UT00128SH6  | 12         |        |             |             | 19.0                     | 20.6         | 26.2         |                         | 21.8                    | 18.4                    |
| UT001412SH  | UT001412SH6 | 14         |        |             |             | 22.2                     | 23.0         | 28.6         |                         | 25.0                    | 21.5                    |
| UT001619SH  | UT001619SH6 | 16         |        |             |             | 25.3                     | 24.6         | 31.0         |                         | 28.1                    | 24.6                    |
| UT001823SH  | UT001823SH6 | 18         |        |             |             | 28.5                     | 26.9         | 33.3         |                         | 31.3                    | 27.8                    |
| UT002028SH  | UT002028SH6 | 20         | 29.00  | 2.4         | 14.55       | 31.7                     | 29.4         | 36.5         | 3.9                     | 34.5                    | 30.9                    |
| UT002235SH  | UT002235SH6 | 22         |        |             |             | 34.9                     | 31.8         | 39.7         |                         | 37.7                    | 34.1                    |
| UT002448SH  | UT002448SH6 | 24         |        |             |             | 38.0                     | 34.9         | 42.9         |                         | 40.9                    | 37.3                    |

Part numbers are suitable for both 48h and 96h salt spray.

A square sealing has to be ordered separately to guarantee a sealing with equipment. Refer to "Circular accessories" section (UTFD--).

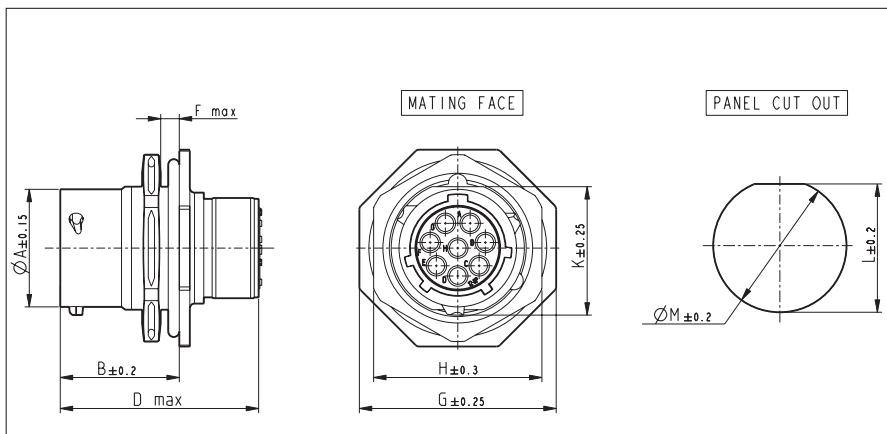
new

# Metal Circular Connector

Dynamic IP68 / IP69K  
High salt spray resistance  
RoHS compliant



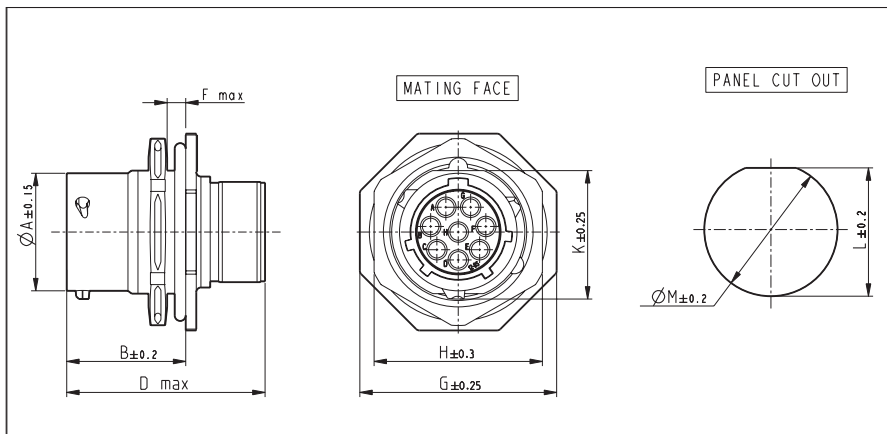
## Jam nut receptacle for pin contacts (UT07---PH/PH6) - suitable for rear panel mounting



| Part number |             | Shell size | Ø A<br>± 0.15 | B<br>± 0.2 | D<br>Max. | F<br>Max. | G<br>± 0.25 | H<br>± 0.3 | K<br>± 0.25 | L<br>± 0.2 | Ø M<br>± 0.2 |
|-------------|-------------|------------|---------------|------------|-----------|-----------|-------------|------------|-------------|------------|--------------|
| IP67        | IP68        |            |               |            |           |           |             |            |             |            |              |
| UT07104PH   | UT07104PH6  | 10         | 14.9          | 19.30      | 33.90     | 3.2       | 27.0        | 22.2       | 16.6        | 17.0       | 17.7         |
| UT07128PH   | UT07128PH6  | 12         | 19.0          |            |           |           | 31.8        | 27.0       | 20.8        | 21.2       | 22.5         |
| UT071412PH  | UT071412PH6 | 14         | 22.2          |            |           |           | 34.9        | 30.2       | 23.9        | 24.3       | 25.7         |
| UT071619PH  | UT071619PH6 | 16         | 25.3          |            |           |           | 38.1        | 33.3       | 27.1        | 27.5       | 28.7         |
| UT071823PH  | UT071823PH6 | 18         | 28.5          |            |           |           | 41.3        | 36.5       | 30.3        | 30.6       | 32.0         |
| UT072028PH  | UT072028PH6 | 20         | 31.7          | 24.70      | 39.00     | 6.4       | 46.1        | 39.7       | 33.4        | 33.8       | 35.2         |
| UT072235PH  | UT072235PH6 | 22         | 34.9          |            |           |           | 49.2        | 42.9       | 36.6        | 37.0       | 38.4         |
| UT072448PH  | UT072448PH6 | 24         | 38.0          |            |           |           | 53.4        | 46.0       | 39.8        | 40.1       | 41.5         |

For 96h salt spray version add "01" at the end of the part number e.g. UT071412PH601 (only jam nut will be black anodised)

## Jam nut receptacle for socket contacts (UT07---SH/SH6) - suitable for rear panel mounting



| Part number |             | Shell size | Ø A<br>± 0.15 | B<br>± 0.2 | D<br>Max. | F<br>Max. | G<br>± 0.25 | H<br>± 0.3 | K<br>± 0.25 | L<br>± 0.2 | Ø M<br>± 0.2 |
|-------------|-------------|------------|---------------|------------|-----------|-----------|-------------|------------|-------------|------------|--------------|
| IP67        | IP68        |            |               |            |           |           |             |            |             |            |              |
| UT07104SH   | UT07104SH6  | 10         | 14.9          | 19.30      | 33.00     | 3.2       | 27.0        | 22.2       | 16.6        | 17.0       | 17.7         |
| UT07128SH   | UT07128SH6  | 12         | 19.0          |            |           |           | 31.8        | 27.0       | 20.8        | 21.2       | 22.5         |
| UT071412SH  | UT071412SH6 | 14         | 22.2          |            |           |           | 34.9        | 30.2       | 23.9        | 24.3       | 25.7         |
| UT071619SH  | UT071619SH6 | 16         | 25.3          |            |           |           | 38.1        | 33.3       | 27.1        | 27.5       | 28.7         |
| UT071823SH  | UT071823SH6 | 18         | 28.5          |            |           |           | 41.3        | 36.5       | 30.3        | 30.6       | 32.0         |
| UT072028SH  | UT072028SH6 | 20         | 31.7          | 24.70      | 39.00     | 6.4       | 46.1        | 39.7       | 33.4        | 33.8       | 35.2         |
| UT072235SH  | UT072235SH6 | 22         | 34.9          |            |           |           | 49.2        | 42.9       | 36.6        | 37.0       | 38.4         |
| UT072448SH  | UT072448SH6 | 24         | 38.0          |            |           |           | 53.4        | 46.0       | 39.8        | 40.1       | 41.5         |

For 96h salt spray version add "01" at the end of the part number e.g. UT071412PH601 (only jam nut will be black anodised)

new

# Metal Circular Connector

Dynamic IP68 / IP69K  
High salt spray resistance  
RoHS compliant

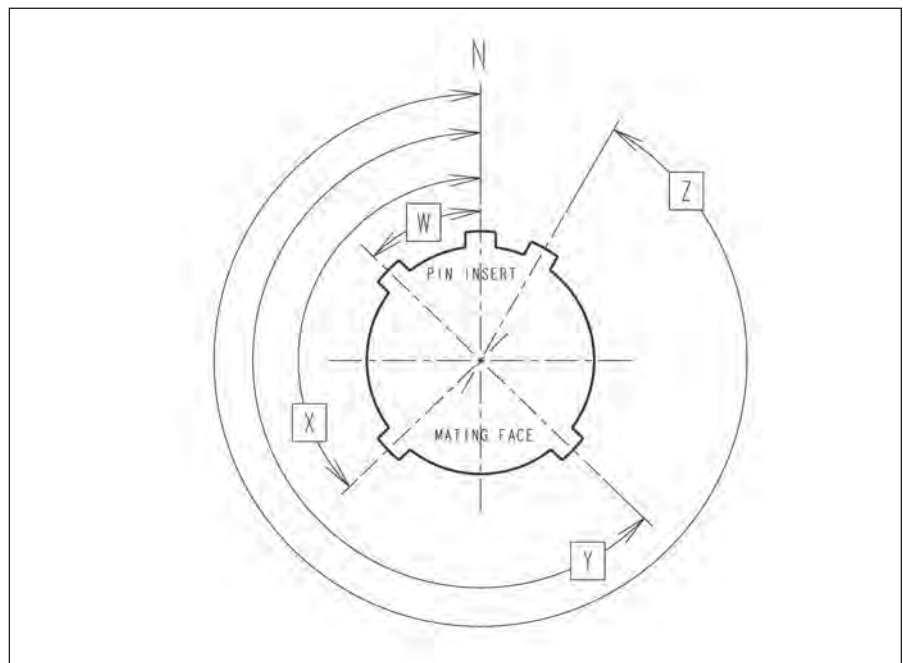


## Insert rotation positions

The table shows possible insert rotation positions.  
5 positions N,W,X,Y and Z differ in the degree of rotation for the various connectors sizes.  
The table indicates the exact degree of rotation.

Note: Insert rotation positions are optional (consult factory)

| Shell size | Contact number | Insert rotation positions |     |     |     |
|------------|----------------|---------------------------|-----|-----|-----|
|            |                | W                         | X   | Y   | Z   |
| 10         | 4              | 45                        | -   | -   | -   |
| 12         | 8              | 26                        | -   | -   | -   |
| 14         | 12             | 60                        | -   | -   | -   |
| 16         | 19             | 30                        | 165 | -   | 315 |
| 18         | 23             | -                         | 158 | -   | 270 |
| 20         | 28             | 79                        | -   | 259 | -   |
| 22         | 35             | 13                        | 162 | 198 | 265 |
| 24         | 48             | 60                        | 120 | 189 | 351 |



## Extra O-seals for wall mounting (UT00) and jam nut (UT07) receptacle connectors

An extra O-seal must be mounted on the receptacle connectors when a backshell is used.  
This to guarantee the IP68 sealing level

| Part number   | Shell size |
|---------------|------------|
| UT010REARSEAL | 10         |
| UT012REARSEAL | 12         |
| UT014REARSEAL | 14         |
| UT016REARSEAL | 16         |
| UT018REARSEAL | 18         |
| UT020REARSEAL | 20         |
| UT022REARSEAL | 22         |
| UT024REARSEAL | 24         |

## This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

new

# High Density Metal Circular Connector



## UTOW SERIES

### Description

"UTOW" industrial circular connectors are a range of multi way connectors available in 8 shell sizes and 8 high density insert arrangements.

"UTOW" wall mounting receptacle connectors have the same panel cut-out dimensions as the MIL-C-26482 series I specifications.

Strong and rugged built to resist every environmental and mechanical requirement for indoor and outdoor applications.

Amongst several characteristics, "UTOW" offers possibilities on: Shielding, high levels on sealing and salt spray.

### Features and benefits (see p2)

- Suitable for EMC requirements.
- Available in 8 shell sizes and 8 insert arrangements.
- Available in plug and receptacle version for both male and female contacts.
- Different insert orientations possible
- Plastic inserts with flammability rating: UL94-V0.
- **2 levels of water protection:** Dynamic IP67 and IP68 both versions are IP69K
- **2 levels of salt spray:** 48h and 96h Higher salt spray resistance (200/500h) upon request
- Higher salt spray (200/500h) upon request.
- UL recognition in process.
- Metal bayonet ring:
  - Metal wave spring loaded
  - Locks with audible positive "click"
  - Assures 500 matings and unmatings
- RoHS compliant

### How to order



### Performance characteristics

|                                           |                                                                                                                                                               |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating temperature:                    | -40°C to +105°C                                                                                                                                               |
| Insulation resistance:                    | 5000 MΩ min.                                                                                                                                                  |
| Test potential:                           | 1500 VAC                                                                                                                                                      |
| Durability:                               | 500 matings and unmatings.                                                                                                                                    |
| Vibration resistance:                     | Per MIL-STD202 method 204                                                                                                                                     |
| Thermal shock:                            | Per MIL-STD202 method 207                                                                                                                                     |
| Corrosion:                                | Salt spray per MIL-STD 202 method 101<br>48h (standard version)<br>96h (black anodised coupling ring)<br>Higher salt spray resistance (200/500h) upon request |
| Shielding effectiveness:                  | 65 dB at 10 Mhz                                                                                                                                               |
| Degree of water protection per DIN 40050: | Dynamic IP67 / IP68 / IP69K in mated condition and in combination with sealed back shell                                                                      |

### Construction

|                         |                                  |
|-------------------------|----------------------------------|
| Shells and accessories: | Zinc alloy                       |
| Coupling ring:          | Aluminium alloy                  |
| Coupling spring:        | Spring stainless steel           |
| Insert:                 | Glass-filled thermoplast UL94-V0 |
| Finish:                 | Nickel plated                    |
| RoHS compliant          |                                  |

### Contact accommodation

- "UTOW" connectors accept TRIM TRIO size 20 crimp-type removable snap-lock contacts (see contacts section)
- Contacts to be ordered separately

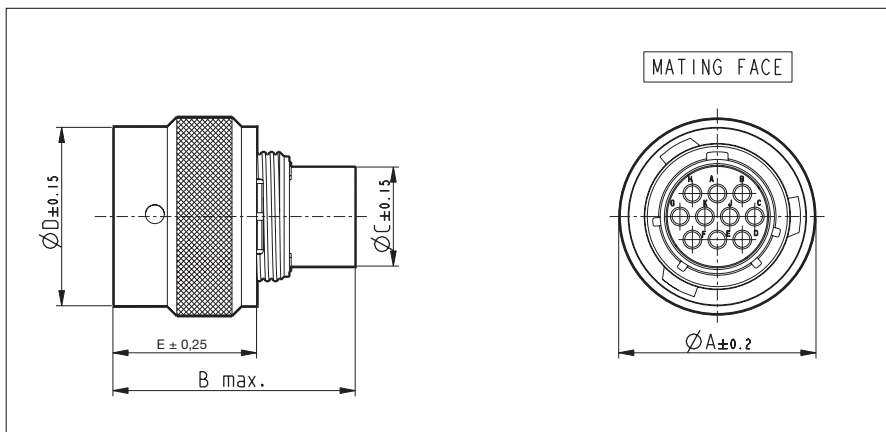
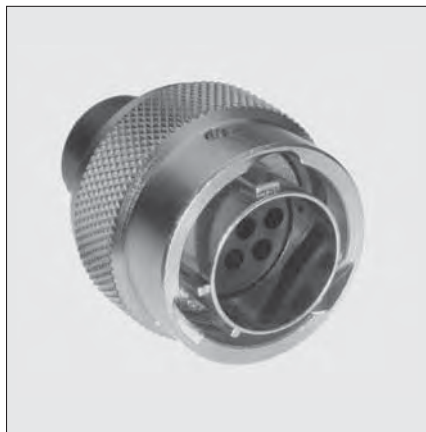
| Connector family:            | UTOW                                                                                                                                                                                | 0 | 16 | 26 | P | - | H or H6 | -- | - |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|----|----|---|---|---------|----|---|
|                              | UTOW                                                                                                                                                                                | 6 | 16 | 26 | S | - | H       | -- | - |
| <b>Body variation :</b>      | <b>0 :</b> Wall mounting receptacle<br><b>6 :</b> Cable plug<br><b>7 :</b> Jam nut receptacle for rear panel mounting                                                               |   |    |    |   |   |         |    |   |
| <b>Shell size :</b>          |                                                                                                                                                                                     |   |    |    |   |   |         |    |   |
| <b>Insert arrangement :</b>  |                                                                                                                                                                                     |   |    |    |   |   |         |    |   |
| <b>Type of contacts :</b>    | <b>P :</b> Pin contacts<br><b>S :</b> Socket contacts                                                                                                                               |   |    |    |   |   |         |    |   |
| <b>Insert polarisation :</b> | <b>No letter :</b> Standard version<br><b>W, X, Y, Z :</b> Different orientations (consult factory)                                                                                 |   |    |    |   |   |         |    |   |
| <b>Application :</b>         | <b>H :</b> Standard version, water protection IP 67 & IP 69K<br><b>H6 :</b> Water protected IP 68 & IP 69K (only needed for wall mounting & jam nut receptacles)                    |   |    |    |   |   |         |    |   |
| <b>Design variation :</b>    | <b>No letter :</b> Standard version<br><b>Others :</b> Special versions                                                                                                             |   |    |    |   |   |         |    |   |
| <b>Plating :</b>             | <b>No letter :</b> standard is nickel plating (48h salt spray)<br><b>01 :</b> Black anodised, jam nut (96h salt spray)<br><b>02 :</b> Black anodised coupling ring (96h salt spray) |   |    |    |   |   |         |    |   |

new

# High Density Metal Circular Connector



## Cable plug for pin contacts (UTOW6----PH)

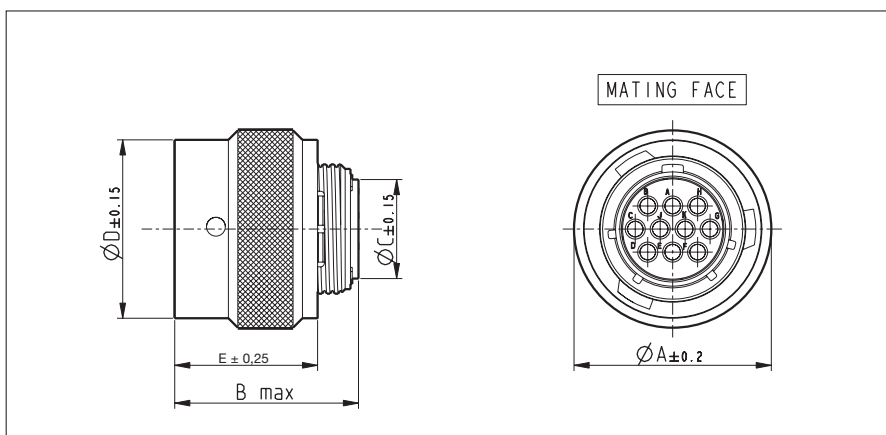


| Part number | Shell size | $\varnothing A \pm 0.2$ | B max. | $\varnothing C \pm 0.15$ | $\varnothing D \pm 0.15$ | $E \pm 0.25$ |
|-------------|------------|-------------------------|--------|--------------------------|--------------------------|--------------|
| UTOW6106PH  | 10         | 21.80                   | 33.00  | 10.2                     | 20.00                    | 19.00        |
| UTOW61210PH | 12         | 26.10                   |        | 13.4                     | 23.60                    |              |
| UTOW61419PH | 14         | 29.30                   |        | 16.7                     | 26.80                    |              |
| UTOW61626PH | 16         | 32.45                   |        | 19.7                     | 30.00                    |              |
| UTOW61832PH | 18         | 35.25                   |        | 21.7                     | 33.30                    |              |
| UTOW62041PH | 20         | 38.80                   |        | 24.9                     | 36.55                    |              |
| UTOW62255PH | 22         | 42.00                   |        | 28.1                     | 39.50                    |              |
| UTOW62461PH | 24         | 45.05                   |        | 31.2                     | 42.60                    |              |

Part numbers are suitable for both IP67 and IP68 water protection

For 96h salt spray version add "02" behind "H" e.g. UTOW61419PH02 (only bayonet ring will be black anodised)

## Cable plug for socket contacts (UTOW6----SH)



| Part number | Shell size | $\varnothing A \pm 0.2$ | B max. | $\varnothing C \pm 0.15$ | $\varnothing D \pm 0.15$ | $E \pm 0.25$ |
|-------------|------------|-------------------------|--------|--------------------------|--------------------------|--------------|
| UTOW6106SH  | 10         | 21.80                   | 25.30  | 10.2                     | 20.00                    | 19.00        |
| UTOW61210SH | 12         | 26.10                   |        | 13.4                     | 23.60                    |              |
| UTOW61419SH | 14         | 29.30                   |        | 16.7                     | 26.80                    |              |
| UTOW61626SH | 16         | 32.45                   |        | 19.7                     | 30.00                    |              |
| UTOW61832SH | 18         | 35.25                   | 27.30  | 21.7                     | 33.30                    |              |
| UTOW62041SH | 20         | 38.80                   |        | 24.9                     | 36.55                    |              |
| UTOW62255SH | 22         | 42.00                   |        | 28.1                     | 39.50                    |              |
| UTOW62461SH | 24         | 45.05                   |        | 31.2                     | 42.60                    |              |

Part numbers are suitable for both IP67 and IP68 water protection

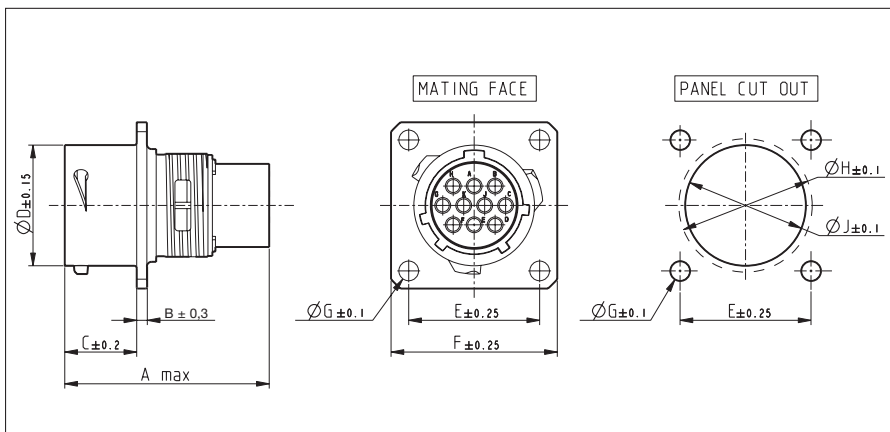
For 96h salt spray version add "02" behind "H" e.g. UTOW61419SH02 (only bayonet ring will be black anodised)

new

# High Density Metal Circular Connector



## Wall mounting receptacle for pin contacts (UTOW0---PH/PH6)

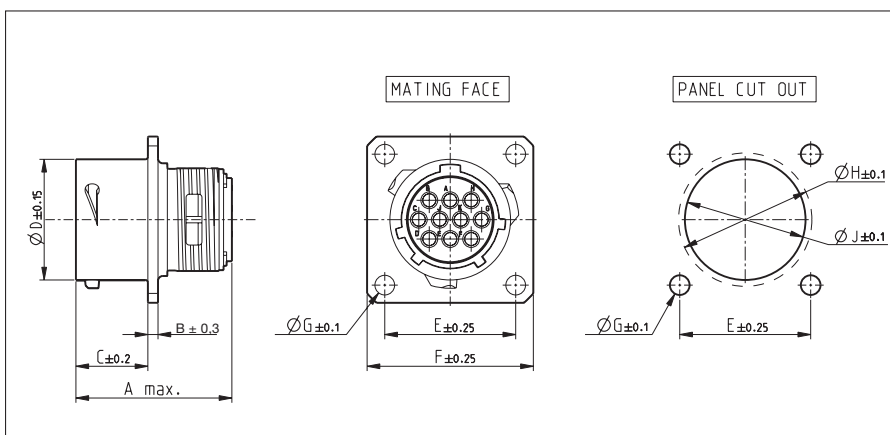


| Part number |              | Shell size | A max. | B ± 0.3 | C ± 0.2 | Ø D ± 0.15 | E ± 0.25 | F ± 0.25 | Ø G ± 0.1 | Ø H ± 0.1 | Ø J ± 0.1 |
|-------------|--------------|------------|--------|---------|---------|------------|----------|----------|-----------|-----------|-----------|
| IP67        | IP68         |            |        |         |         |            |          |          |           |           |           |
| UTOW0106PH  | UTOW0106PH6  | 10         | 33.23  | 1.6     | 11.35   | 15.0       | 18.3     | 23.8     | 3.2       | 17.3      | 14.2      |
| UTOW01210PH | UTOW01210PH6 | 12         |        |         |         | 19.0       | 20.6     | 26.2     |           | 21.8      | 18.4      |
| UTOW01419PH | UTOW01419PH6 | 14         |        |         |         | 22.2       | 23.0     | 28.6     |           | 25.0      | 21.5      |
| UTOW01626PH | UTOW01626PH6 | 16         |        |         |         | 25.3       | 24.6     | 31.0     |           | 28.1      | 24.6      |
| UTOW01832PH | UTOW01832PH6 | 18         |        |         |         | 28.5       | 26.9     | 33.3     |           | 31.3      | 27.8      |
| UTOW02041PH | UTOW02041PH6 | 20         | 34.75  | 2.4     | 14.55   | 31.7       | 29.4     | 36.5     | 3.9       | 34.5      | 30.9      |
| UTOW02255PH | UTOW02255PH6 | 22         |        |         |         | 34.9       | 31.8     | 39.7     |           | 37.7      | 34.1      |
| UTOW02461PH | UTOW02461PH6 | 24         |        |         |         | 38.0       | 34.9     | 42.9     |           | 40.9      | 37.3      |

Part numbers are suitable for both 48hrs and 96h salt spray.

A square sealing has to be ordered separately to guarantee a sealing with equipment. Refer to "Circular accessories" section (UTFD--).

## Wall mounting receptacle for socket contacts (UTOW0---SH/SH6)



| Part number |              | Shell size | A max. | B ± 0.3 | C ± 0.2 | Ø D ± 0.15 | E ± 0.25 | F ± 0.25 | Ø G ± 0.1 | Ø H ± 0.1 | Ø J ± 0.1 |
|-------------|--------------|------------|--------|---------|---------|------------|----------|----------|-----------|-----------|-----------|
| IP67        | IP68         |            |        |         |         |            |          |          |           |           |           |
| UTOW0106SH  | UTOW0106SH6  | 10         | 25.20  | 1.6     | 11.35   | 15.0       | 18.3     | 23.8     | 3.2       | 17.3      | 14.2      |
| UTOW01210SH | UTOW01210SH6 | 12         |        |         |         | 19.0       | 20.6     | 26.2     |           | 21.8      | 18.4      |
| UTOW01419SH | UTOW01419SH6 | 14         |        |         |         | 22.2       | 23.0     | 28.6     |           | 25.0      | 21.5      |
| UTOW01626SH | UTOW01626SH6 | 16         |        |         |         | 25.3       | 24.6     | 31.0     |           | 28.1      | 24.6      |
| UTOW01832SH | UTOW01832SH6 | 18         |        |         |         | 28.5       | 26.9     | 33.3     |           | 31.3      | 27.8      |
| UTOW02041SH | UTOW02041SH6 | 20         | 29.00  | 2.4     | 14.55   | 31.7       | 29.4     | 36.5     | 3.9       | 34.5      | 30.9      |
| UTOW02255SH | UTOW02255SH6 | 22         |        |         |         | 34.9       | 31.8     | 39.7     |           | 37.7      | 34.1      |
| UTOW02461SH | UTOW02461SH6 | 24         |        |         |         | 38.0       | 34.9     | 42.9     |           | 40.9      | 37.3      |

Part numbers are suitable for both 48hrs and 96h salt spray.

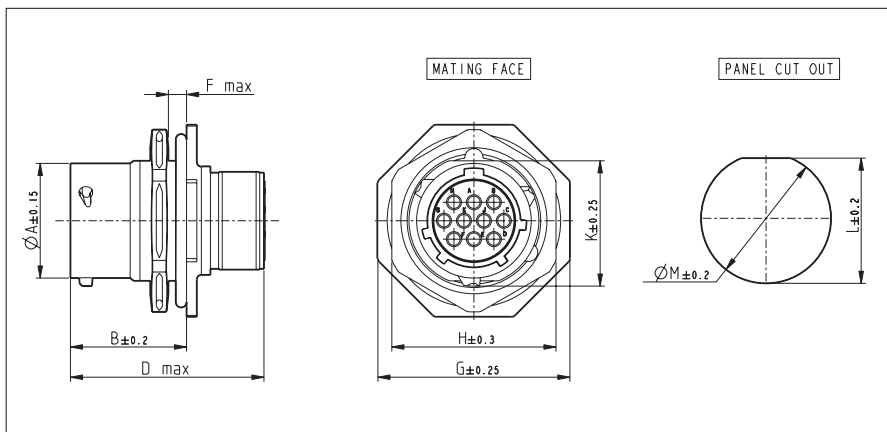
A square sealing has to be ordered separately to guarantee a sealing with equipment. Refer to "Circular accessories" section (UTFD--).

new

# High Density Metal Circular Connector



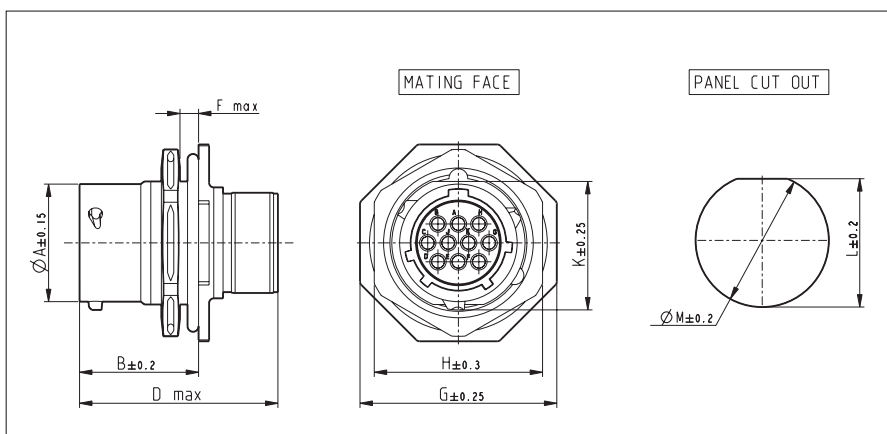
## Jam nut receptacle for pin contacts (UTOW7---PH/PH6) - suitable for rear panel mounting



| Part number |              | Shell size | $\varnothing A$<br>$\pm 0.15$ | B<br>$\pm 0.2$ | D<br>Max. | F<br>Max. | G<br>$\pm 0.25$ | H<br>$\pm 0.3$ | K<br>$\pm 0.2$ | L<br>$\pm 0.2$ | $\varnothing M$<br>$\pm 0.2$ |
|-------------|--------------|------------|-------------------------------|----------------|-----------|-----------|-----------------|----------------|----------------|----------------|------------------------------|
| IP67        | IP68         |            |                               |                |           |           |                 |                |                |                |                              |
| UTOW7106PH  | UTOW7106PH6  | 10         | 14.9                          | 19.30          | 33.90     | 3.2       | 27.0            | 22.2           | 16.6           | 17.0           | 17.7                         |
| UTOW71210PH | UTOW71210PH6 | 12         | 19.0                          |                |           |           | 31.8            | 27.0           | 20.8           | 21.2           | 22.5                         |
| UTOW71419PH | UTOW71419PH6 | 14         | 22.2                          |                |           |           | 34.9            | 30.2           | 23.9           | 24.3           | 25.7                         |
| UTOW71626PH | UTOW71626PH6 | 16         | 25.3                          |                |           |           | 38.1            | 33.3           | 27.1           | 27.5           | 28.7                         |
| UTOW71832PH | UTOW71832PH6 | 18         | 28.5                          |                |           |           | 41.3            | 36.5           | 30.3           | 30.6           | 32.0                         |
| UTOW72041PH | UTOW72041PH6 | 20         | 31.7                          | 24.70          | 39.00     | 6.4       | 46.1            | 39.7           | 33.4           | 33.8           | 35.2                         |
| UTOW72255PH | UTOW72255PH6 | 22         | 34.9                          |                |           |           | 49.2            | 42.9           | 36.6           | 37.0           | 38.4                         |
| UTOW72461PH | UTOW72461PH6 | 24         | 38.0                          |                |           |           | 53.4            | 46.0           | 39.8           | 40.1           | 41.5                         |

For 96h salt spray version add "01" at the end of the part number e.g. UTOW71419PH601 (only jam nut will be black anodised)

## Jam nut receptacle for socket contacts (UTOW7---SH/SH6) - suitable for rear panel mounting



| Part number |              | Shell size | $\varnothing A$<br>$\pm 0.15$ | B<br>$\pm 0.2$ | D<br>Max. | F<br>Max. | G<br>$\pm 0.25$ | H<br>$\pm 0.3$ | K<br>$\pm 0.2$ | L<br>$\pm 0.2$ | $\varnothing M$<br>$\pm 0.2$ |
|-------------|--------------|------------|-------------------------------|----------------|-----------|-----------|-----------------|----------------|----------------|----------------|------------------------------|
| IP67        | IP68         |            |                               |                |           |           |                 |                |                |                |                              |
| UTOW7106SH  | UTOW7106SH6  | 10         | 14.9                          | 19.30          | 33.00     | 3.2       | 27.0            | 22.2           | 16.6           | 17.0           | 17.7                         |
| UTOW71210SH | UTOW71210SH6 | 12         | 19.0                          |                |           |           | 31.8            | 27.0           | 20.8           | 21.2           | 22.5                         |
| UTOW71419SH | UTOW71419SH6 | 14         | 22.2                          |                |           |           | 34.9            | 30.2           | 23.9           | 24.3           | 25.7                         |
| UTOW71626SH | UTOW71626SH6 | 16         | 25.3                          |                |           |           | 38.1            | 33.3           | 27.1           | 27.5           | 28.7                         |
| UTOW71832SH | UTOW71832SH6 | 18         | 28.5                          |                |           |           | 41.3            | 36.5           | 30.3           | 30.6           | 32.0                         |
| UTOW72041SH | UTOW72041SH6 | 20         | 31.7                          | 24.70          | 39.00     | 6.4       | 46.1            | 39.7           | 33.4           | 33.8           | 35.2                         |
| UTOW72255SH | UTOW72255SH6 | 22         | 34.9                          |                |           |           | 49.2            | 42.9           | 36.6           | 37.0           | 38.4                         |
| UTOW72461SH | UTOW72461SH6 | 24         | 38.0                          |                |           |           | 53.4            | 46.0           | 39.8           | 40.1           | 41.5                         |

For 96h salt spray version add "01" at the end of the part number e.g. UTOW71419PH601 (only jam nut will be black anodised)

new

# High Density Metal Circular Connector



## Insert rotation positions

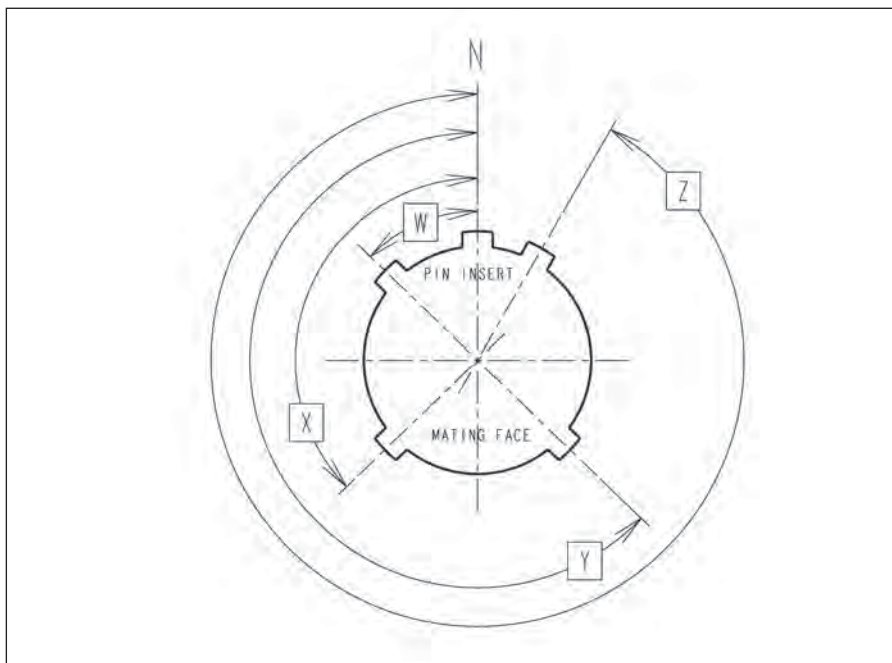
The table shows possible insert rotation positions.

5 positions N, W, X, Y and Z differ in the degree of rotation for the various connectors sizes.

The table indicates the exact degree of rotation.

Note: Insert rotation positions are optional (consult factory)

| Shell size | Contact number | Insert rotation positions |     |     |     |
|------------|----------------|---------------------------|-----|-----|-----|
|            |                | W                         | X   | Y   | Z   |
| 10         | 6              | 90                        | -   | -   | -   |
| 12         | 10             | 60                        | 155 | 270 | 295 |
| 14         | 19             | 30                        | 165 | 315 | -   |
| 16         | 26             | 60                        | -   | 275 | 338 |
| 18         | 32             | 85                        | 138 | 222 | 265 |
| 20         | 41             | 45                        | 126 | 225 | -   |
| 22         | 55             | 30                        | 142 | 226 | 314 |
| 24         | 61             | 90                        | 180 | 270 | 324 |



## Extra 0-seals for wall mounting (UT0W0) and jam nut (UT0W7) receptacle connectors

An extra 0-seal must be mounted on the receptacle connectors when a backshell is used. This to guarantee the IP68 sealing level

| Part number   | Shell size |
|---------------|------------|
| UT010REARSEAL | 10         |
| UT012REARSEAL | 12         |
| UT014REARSEAL | 14         |
| UT016REARSEAL | 16         |
| UT018REARSEAL | 18         |
| UT020REARSEAL | 20         |
| UT022REARSEAL | 22         |
| UT024REARSEAL | 24         |

**new**

# High Density Metal Circular Connector



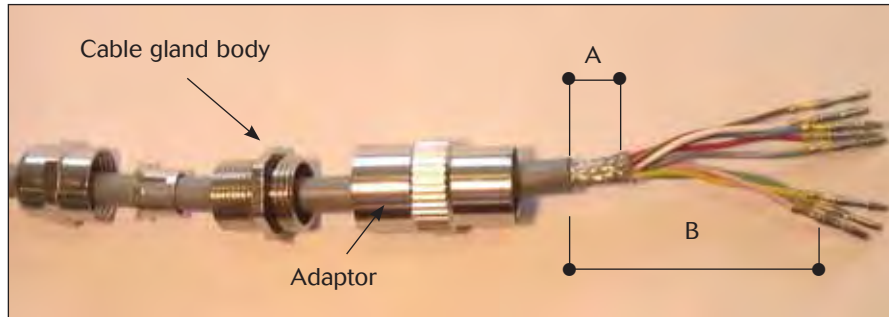
## Notes

[illegible]

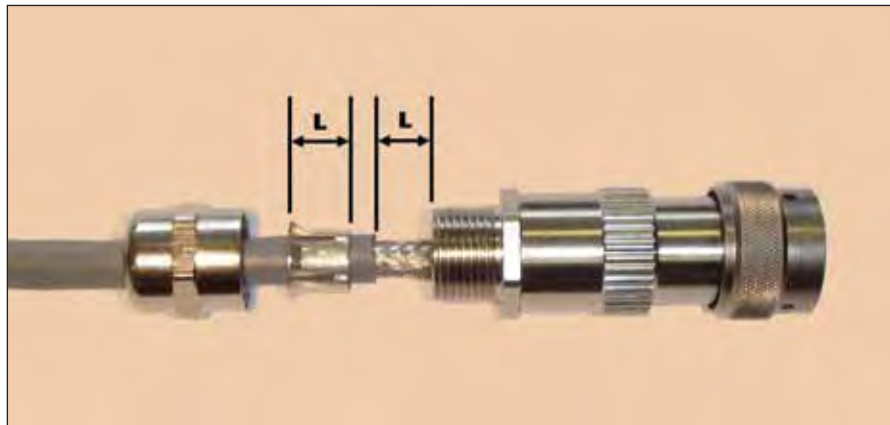
# Shielded Connectors



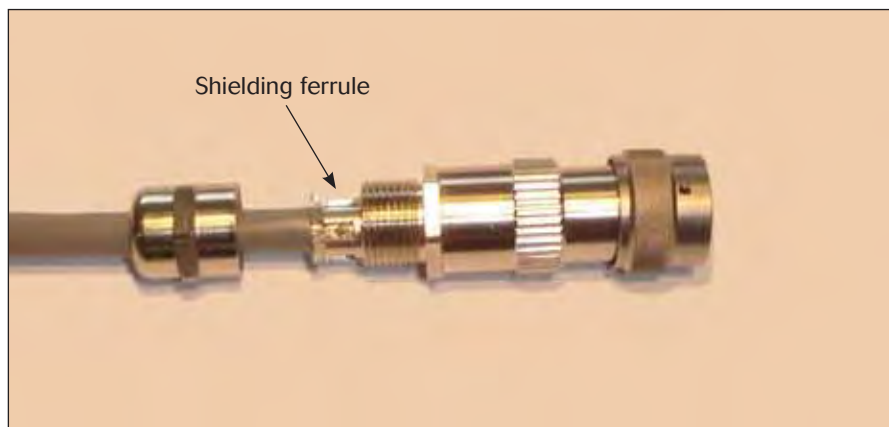
## How to assemble shielded connectors...



1. Put all the parts over the cable as shown on the picture.
2. Keep about 10mm of the shielding (dim A)
3. The total strip length (dim B) of the outer jacket has to be defined practically. This length is defined by the length of the adaptor, the cable gland body, type of contacts, the gender of the plug connector and the dim. L as shown on picture 2.
4. The strip length of the individual wires is defined in the different contact sections.



5. Put the contacts in the corresponding cavities
6. Screw / tighten the adaptor and the cable gland body. The max tightening torque is indicated in the table below.
7. Make sure the dim L is kept after the assembly of the adaptor and the cable gland body. This dimension is needed to allow repair of the harnessing. It will also release the stress on the contacts when the assembly of the cable clamp is finished.

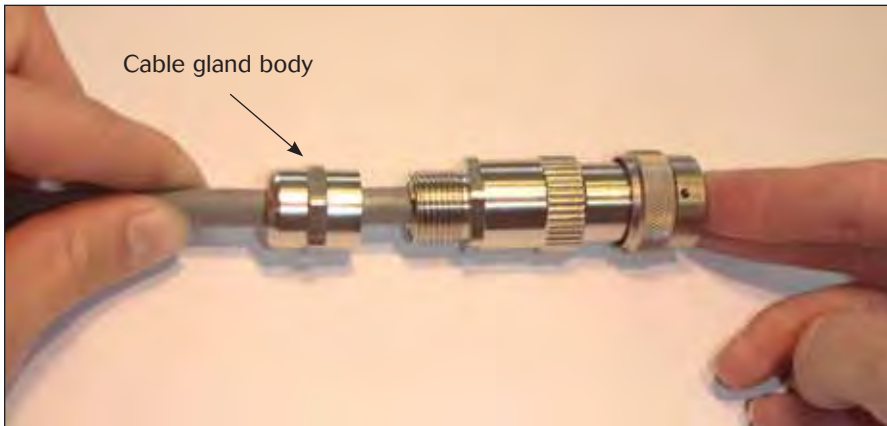


8. Carefully slide the shielding ferrule until is positioned over the shielding and as close as possible to the cable jacket.
9. Make sure that the shielding ferrule is correctly polarised. This polarisation is a feature to avoid twisting of the cable during the tightening of the cable gland.

# Shielded Connectors



## How to assemble shielded connectors... (con't)



10. Manually push the shielding ferrule inside the cable gland body.
11. Make sure the shielding ferrule does not slide over the cable jacket.
12. Hold the cable in this position prior to the assembly of the cable gland hood.



13. Hold the cable in the same position as explained above and tighten the cable gland hood. The max tightening torque is indicated in the table below.
14. To ease the tightening operation, an empty receptacle connector can be used when fixed in a bench.
15. Make sure that the cable is not twisted during the tightening operation.

## Max tightening torques in Nm

| Shell size | Cable gland body | Cable gland hood |
|------------|------------------|------------------|
| <b>10</b>  | 6                | 5                |
| <b>12</b>  | 10               | 8                |
| <b>14</b>  | 10               | 8                |
| <b>16</b>  | 14               | 12               |
| <b>18</b>  | 14               | 12               |
| <b>20</b>  | 24               | 20               |
| <b>22</b>  | 24               | 20               |
| <b>24</b>  | 24               | 20               |

Above tightening torques are indicative and have to be adjusted in accordance to the cable diameter and application.

# Ruggedized Reverse Bayonet Connectors

Dynamic IP68 / IP69K  
Up to 500 hr salt spray  
VG95234 intermountable

## UTV SERIES

**Completely** *new*  
**intermountable with**  
**VG 95234 :**  
**the MS 5015 reverse**  
**bayonet connectors**

## Description

This connector series is an enhanced version of the VG 95234 connector standard but remains completely intermountable with VG 95234 : the MS 5015 reverse bayonet connectors.



## Features and benefits (see also page 3)

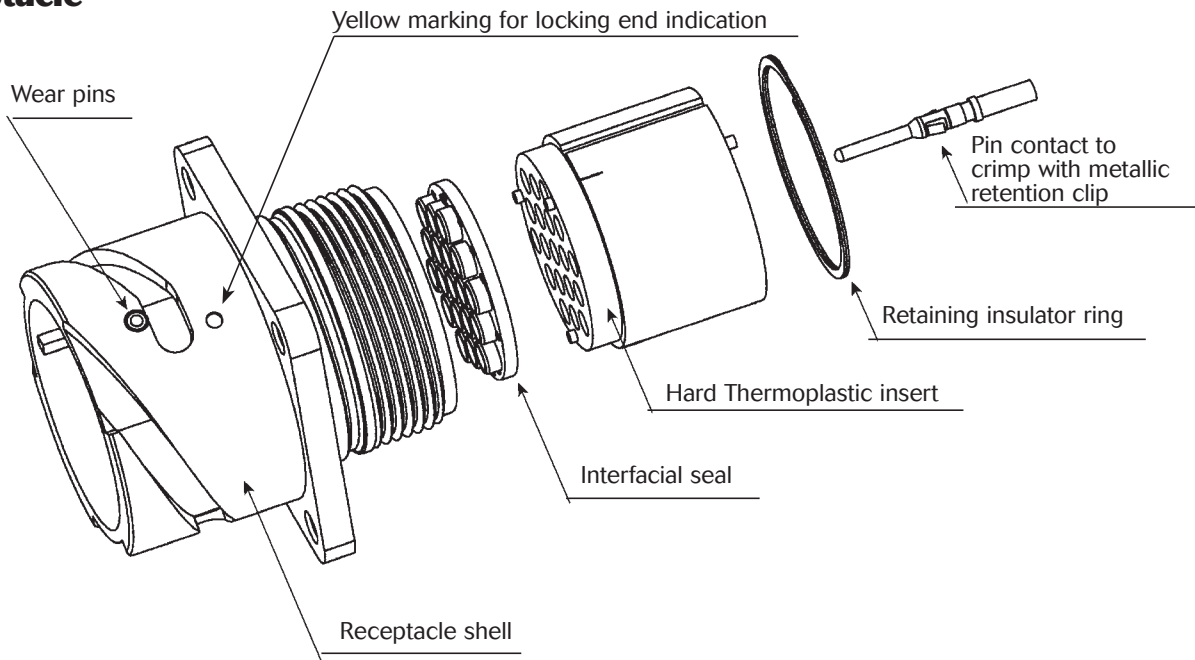
- An interfacial seal is present on the male inserts to extend the creepage distance and to have a better sealing when the connector is mated.
- The insulator is retained into the plug or receptacle shell by a metallic retaining ring which can be removed with a small screwdriver. Once removed, user can defined insulator orientation.
- Contacts gauge 8, 12 or 16 are machined crimp contacts, removable thanks to a clip on the contact.
- No tools are needed to insert contacts into the insulator. An extraction tool is available to extract the contacts. The tool is engaged by the front face of the connector and the contacts are rear released.
- Contacts are crimped thanks to very common toolings.
- The connector is rated 2 levels of water protection (see page 3):  
Dynamic IP67/IP68/IP69K when mated and used with suitable accessories, a grommet or a sealed back shell.
- This connector can be supplied fully assembled or in component form (please consult us).
- Corrosion spray resistance is rated up to 500 hours salt spray
- Cadmium and lead free materials are used

# Ruggedized Reverse Bayonet Connector

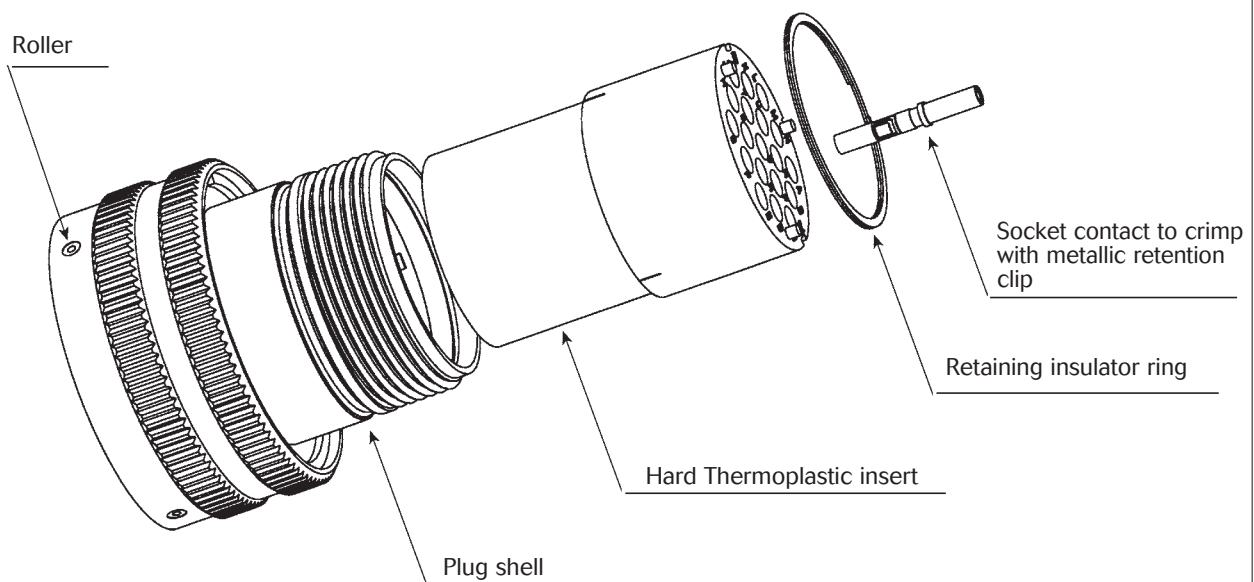


## Description

### Receptacle



### Plug



# Ruggedized Reverse Bayonet Connector



## Technical Features

### Mechanical

- Mechanical endurance : 500 mating and unmating
- Minimum retention force of the contact in the insulator :
  - 70 N for contacts # 16 (1.6 mm)
  - 90 N for contacts # 12 (2.4 mm)
  - 110 N for contacts # 8 (3.6 mm)

Minimum values with a maximum displacement of the contact of 0.3 mm (following NFF 61030)

- Retention of the insulator in the shell : (following MIL-C-26482G Series 2 class L standard)
- Bayonet coupling mechanism - Coupling torque : following VG 95234
- Vibrations : following NFF 61030  
Sinus vibrations : 10 - 100 Hz  
Acceleration : 2 g
- Shocks : Acceleration = 30 g  
Duration = 18 ms following NFF 61030
- Impact strength (free fall of the plug).  
The connector plug is subjected to a free fall test. The height of drop is 0.75 m.  
No mechanical damage.

### Electrical

- Contact resistance :
  - 2.5 mΩ maxi for contact # 16
  - 1.3 mΩ maxi for contact # 12
  - 0.9 I maxi for contact # 8 following NFF 61030
- Maximum current per contact :
  - 15 Amps for contact # 16
  - 20 Amps for contact # 12
  - 30 Amps for contact # 8
- Withstanding voltage :
  - 2550 Vrms for layouts # 16
  - 3250 Vrms for layouts # 12 and 8
- Insulation resistance :
  - $\geq 5000 \text{ M}\Omega$  under 500 Vcc
  - $\geq 4000 \text{ M}\Omega$  under 220 Vcc
- Electrical continuity of the shells :  
20 mΩ maximum
- In mated conditions (interfacial seal is compression)  
minimum creepage distance = minimum insulation distance in the air :
  - 9 mm minimum for layouts with contacts # 16
  - 12 mm minimum for layouts with contacts # 12 or # 8

### Environmental

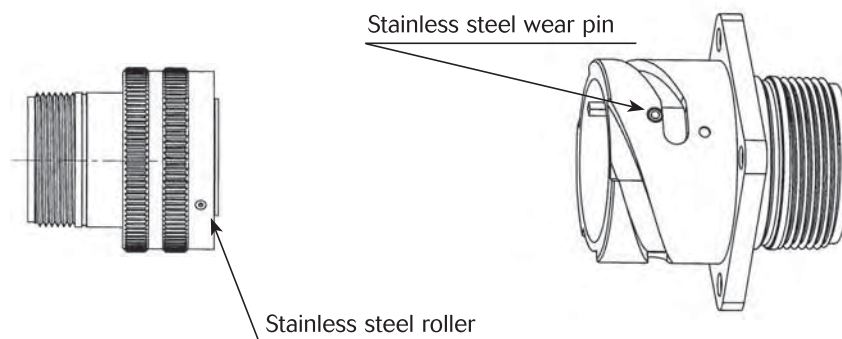
- Climatic category :  $-40^{\circ}\text{C} +100^{\circ}\text{C}$   
Dry heat test :  $+100^{\circ}\text{C}$  during 96 h
- Corrosion spray resistance : up to 500 hours salt spray
- Damp heat : 21 days,  $40^{\circ}\text{C}$ , 95% relative humidity
- The connector is rated 2 levels of water protection (see page 3):  
Dynamic IP67/IP68/IP69K when mated and used with suitable accessories, a grommet or a sealed back shell.
- Cadmium and lead free materials are used

### Material

- Shell in aluminium alloy with black zinc cobalt plating
- Insulator : hard thermoplastic with glass fiber
- O'ring and interfacial seal in silicone
- Retaining insulator ring in carbon steel

This full product range is qualified by ALSTOM, RATP and SNCF.

### Robustness and high reliability of the locking mechanism



# Ruggedized Reverse Bayonet Connector



## Connectors Ordering Information (without contacts and accessories)

**Shells, backshells, contacts and accessories have to be ordered separately**

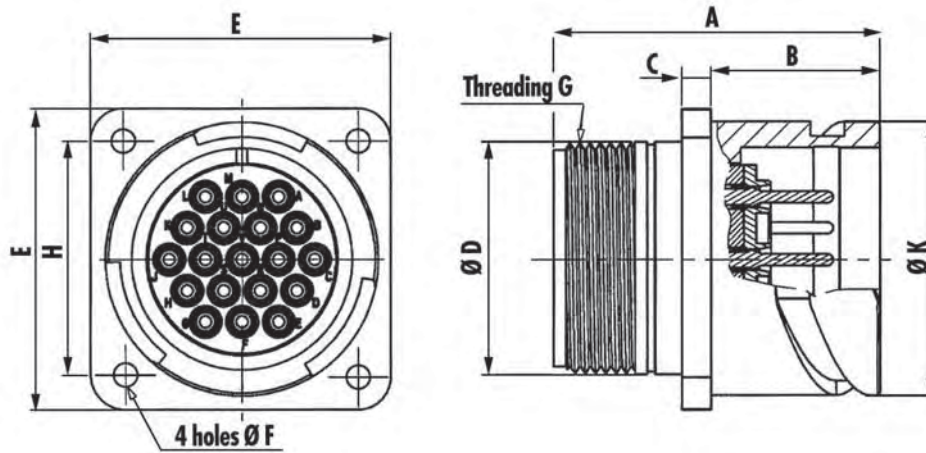
|                                                                                                    |          |           |             |          |          |           |
|----------------------------------------------------------------------------------------------------|----------|-----------|-------------|----------|----------|-----------|
| <b>UTV</b>                                                                                         | <b>B</b> | <b>22</b> | <b>– 14</b> | <b>P</b> | <b>N</b> | <b>--</b> |
| <b>Series</b>                                                                                      |          |           |             |          |          |           |
| <b>Shell type</b>                                                                                  |          |           |             |          |          |           |
| Rear mounting receptacle                                                                           | <b>B</b> |           |             |          |          |           |
| Plug                                                                                               | <b>D</b> |           |             |          |          |           |
| Rear mounting receptacle for PC tails<br>contact # 16 contacts mounted                             | <b>C</b> |           |             |          |          |           |
| <b>Shell size : 18 - 20 -22 - 24 - 28 - 32 - 36 - 40</b>                                           |          |           |             |          |          |           |
| <b>Layouts</b>                                                                                     |          |           |             |          |          |           |
| <b>Contact type : P - Pin<br/>S - Socket</b>                                                       |          |           |             |          |          |           |
| <b>Insert Orientation : N ; W ; X ; Y ; Z or 0</b><br>0 = for insulator not installed in the shell |          |           |             |          |          |           |
| <b>Modification Code :</b><br><i>Please consult us</i>                                             |          |           |             |          |          |           |

**Nota : Please consult us if you want to order the connector in component form (shell and insert).**

# Ruggedized Reverse Bayonet Connector

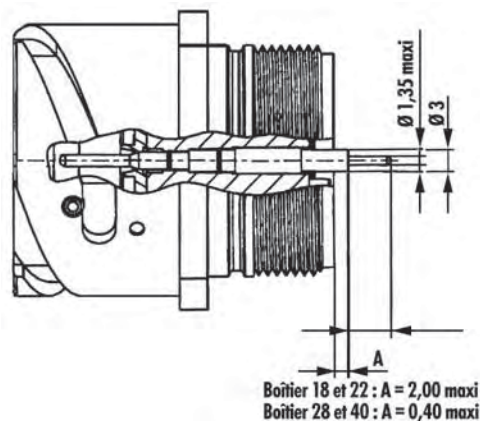


## Connector Dimensions Receptacle



| Shell size | A Max | B 0/+0.4 | C ±0.2 | ØD Max | E ±0.3 | ØF 0/+0.15 | Threading G Class 2A | H ±0.1 | ØK -0.15/0 |
|------------|-------|----------|--------|--------|--------|------------|----------------------|--------|------------|
| 18         | 45.50 | 23.05    | 4.00   | 25.50  | 35.00  | 3.25       | 1"x20 UNEF           | 27.00  | 30.80      |
| 20         | 45.50 | 23.05    | 4.00   | 28.70  | 38.00  | 3.25       | 1 1/8"x18 UNEF       | 29.40  | 34.20      |
| 22         | 45.50 | 23.05    | 4.00   | 31.90  | 41.00  | 3.25       | 1 1/4"x18 UNEF       | 31.80  | 37.40      |
| 24         | 48.00 | 23.05    | 4.00   | 35.20  | 44.50  | 3.75       | 1 3/8"x18 UNEF       | 34.90  | 40.90      |
| 28         | 48.00 | 24.05    | 4.00   | 41.50  | 50.80  | 3.75       | 1 5/8"x18 UNE        | 39.70  | 46.70      |
| 32         | 48.00 | 24.05    | 4.00   | 47.90  | 57.00  | 4.35       | 1 7/8"x16 UN         | 44.50  | 53.40      |
| 36         | 48.00 | 24.05    | 4.00   | 52.50  | 63.50  | 4.35       | 2 1/16"x16 UNS       | 49.20  | 59.60      |
| 40         | 48.00 | 24.05    | 4.00   | 59.00  | 70.00  | 4.35       | 2 5/16"x16 UN        | 55.50  | 65.50      |

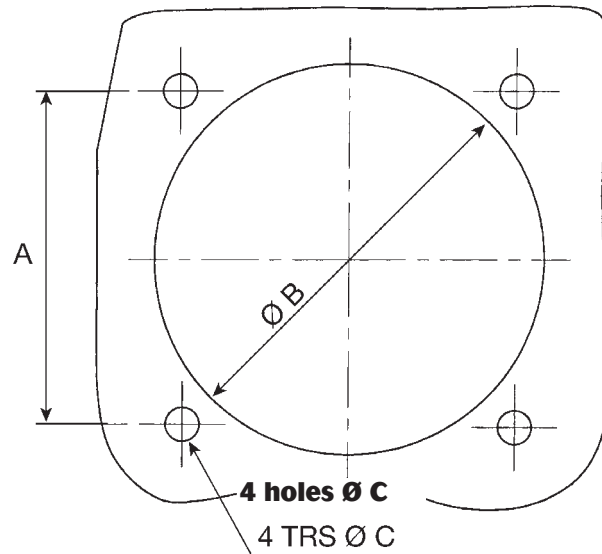
## Receptacle with PC tails contact # 16



# Ruggedized Reverse Bayonet Connector



## Panel Cutout



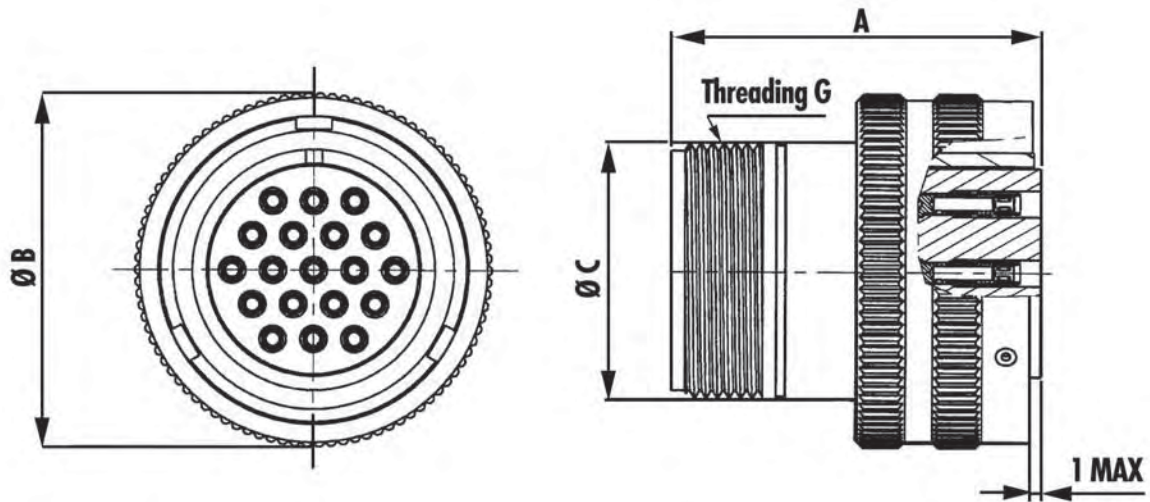
| Shell size | A<br>$\pm 0.15$ | B<br>0/+0.3 | C<br>$\pm 0.10$ | Maximum thickness of the panel<br>for rear mounting |
|------------|-----------------|-------------|-----------------|-----------------------------------------------------|
| 18         | 27              | 31,2        | 3,4             | 3                                                   |
| 20         | 29,4            | 34,6        | 3,4             | 3                                                   |
| 22         | 31,8            | 37,8        | 3,4             | 3                                                   |
| 24         | 34,9            | 41,3        | 3,9             | 3                                                   |
| 28         | 39,7            | 47,1        | 3,9             | 3                                                   |
| 32         | 44,5            | 53,8        | 4,5             | 3                                                   |
| 36         | 49,2            | 60          | 4,5             | 3                                                   |
| 40         | 55,5            | 66,4        | 4,5             | 3                                                   |

**Note :** The above panel cut-out enables front mounting of all receptacles.

# Ruggedized Reverse Bayonet Connector



## Plug

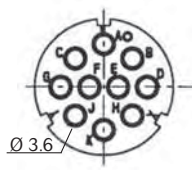
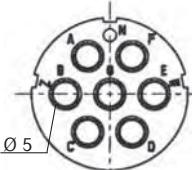
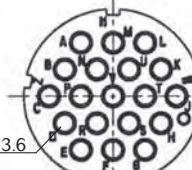
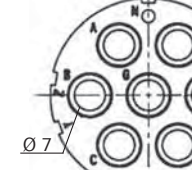
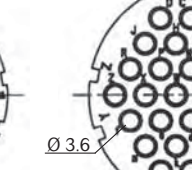


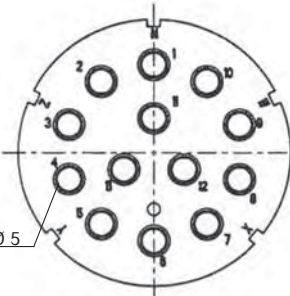
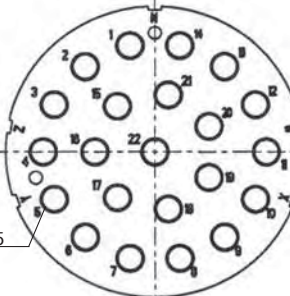
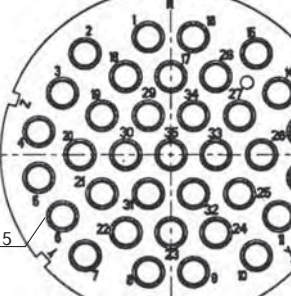
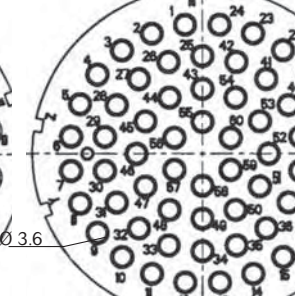
| Shell size | A Max | B Max | C Max | Threading G Class 2A |
|------------|-------|-------|-------|----------------------|
| 18         | 45.60 | 37.30 | 25.50 | 1" x 20 UNEF         |
| 20         | 45.60 | 41.50 | 28.70 | 1 1/8" x 18 UNEF     |
| 22         | 45.60 | 44.00 | 31.90 | 1 1/4" x 18 UNEF     |
| 24         | 45.60 | 48.50 | 35.20 | 1 3/8" x 18 UNEF     |
| 28         | 48.10 | 55.30 | 41.50 | 1 5/8" x 18 UNEF     |
| 32         | 48.10 | 62.00 | 47.90 | 1 7/8" x 16 UN       |
| 36         | 48.10 | 66.80 | 52.50 | 2 1/6" x 16 UNS      |
| 40         | 48.10 | 74.50 | 59.00 | 2 5/16" x 16 UN      |

# Ruggedized Reverse Bayonet Connector



## Layouts (marking on front face of female insulator)

| 18-19                                                                             | 20-15                                                                             | 22-14                                                                             | 24-10                                                                              | 28-21                                                                               |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| 10 contacts # 16                                                                  | 7 contacts # 12                                                                   | 19 contacts # 16                                                                  | 7 contacts # 8                                                                     | 37 contacts # 16                                                                    |

| 32 A13                                                                             | 36 A22                                                                             | 40 A35                                                                              | 40 A60                                                                               |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |  |  |
| 13 contacts # 12                                                                   | 22 contacts # 12                                                                   | 35 contacts # 12                                                                    | 60 contacts # 16                                                                     |

**Note :** For other layouts: consult factory.

## Alternative insert orientation positions

A perspective view of a cylindrical connector assembly. A label 'Key' points to a small rectangular feature on the inner circumference of the outer shell. The assembly consists of an outer shell with four mounting holes and an inner component with a series of concentric rings.

A cross-sectional view of the connector assembly. A label 'Angular Position N' points to the top of the assembly. Three coordinate axes are shown: 'Z' points upwards, 'Y' points to the left, and 'X' points to the right. The internal structure shows a grid of circular elements (pins or contacts) arranged in a circular pattern.

|         | Angular displacement of insert |    |     |     |     | Insulator weight (g) |        |
|---------|--------------------------------|----|-----|-----|-----|----------------------|--------|
| Layouts | N                              | W  | X   | Y   | Z   | Male                 | Female |
| 18-19   | 0                              | -  | 120 | 240 | -   | 10                   | 16     |
| 20-15   | 0                              | 80 | -   | -   | 280 | 13                   | 21     |
| 22-14   | 0                              | 80 | -   | -   | 280 | 16                   | 25     |
| 24-10   | 0                              | 80 | 110 | 250 | 280 | 19                   | 31     |
| 28-21   | 0                              | 80 | 110 | 250 | 280 | 27                   | 40     |
| 32-A13  | 0                              | 65 | 130 | 230 | 295 | 45                   | 75     |
| 36-A22  | 0                              | 80 | 110 | 250 | 280 | 53                   | 88     |
| 40-A35  | 0                              | 70 | 130 | 230 | 290 | 61                   | 99     |
| 40-A60  | 0                              | 80 | 110 | 250 | 280 | 63                   | 100    |

# Ruggedized Reverse Bayonet Connector



## Accessories

### Backshells ordering information

| Series                                                        | UTV<br>UTV | J<br>C | S<br>S | 18<br>22 | – 00<br>– 14 | 00<br>00 | M |
|---------------------------------------------------------------|------------|--------|--------|----------|--------------|----------|---|
| Backnut                                                       |            | R      |        |          |              |          |   |
| Cable clamp                                                   |            | C      |        |          |              |          |   |
| Backshell for PMA tube                                        |            | S      |        |          |              |          |   |
| Cable clamp with sealing gland                                |            | J      |        |          |              |          |   |
| Cable clamp with sealing gland (trumpet)                      |            | K      |        |          |              |          |   |
| Cable clamp with sealing gland for shielding                  |            | T      |        |          |              |          |   |
| S - Straight backshell E - Elbow backshell                    |            |        |        |          |              |          |   |
| Shell size : 18 - 20 - 22 - 24 - 28 - 32 - 36 - 40            |            |        |        |          |              |          |   |
| Layout (grommet included) or 00 (without grommet)             |            |        |        |          |              |          |   |
| Adaptor type : 10 - long 00 - short                           |            |        |        |          |              |          |   |
| Grommet type : M for male or L for female (if grommet needed) |            |        |        |          |              |          |   |



Plug cap: F  
ex: VGE1Fxx (xx = shell size)

receptacle cap: E  
ex: VGE1Exx (xx = shell size)

### Adaptor ordering information

| Series                                             | UTV | P | S | 18 | – 00 | 00 |
|----------------------------------------------------|-----|---|---|----|------|----|
| P - Adaptor with PG outlet*                        |     |   |   |    |      |    |
| S - Adaptor for straight backshell                 |     |   |   |    |      |    |
| Shell size : 18 - 20 - 22 - 24 - 28 - 32 - 36 - 40 |     |   |   |    |      |    |
| Adaptor type : 10 - long 00 - short                |     |   |   |    |      |    |

\* For metric threading: consult factory

# Ruggedized Reverse Bayonet Connector



## Accessories

### Grommet (only when needed on spare parts)

Grommet are delivered with a conical ring

| Layout | Grommet type | Part number | Wire insulator diameter (mm) |        |
|--------|--------------|-------------|------------------------------|--------|
|        |              |             | Mini                         | Maxi * |
| 18-19  | male         | UTVM18-1900 | 1,2                          | 2,95   |
| 18-19  | female       | UTVL18-1900 | 1,2                          | 2,95   |
| 20-15  | male         | UTVM20-1500 | 1,2                          | 3,6    |
| 20-15  | female       | UTVL20-1500 | 1,2                          | 3,6    |
| 22-14  | male         | UTVM22-1400 | 1,2                          | 2,95   |
| 22-14  | female       | UTVL22-1400 | 1,2                          | 2,95   |
| 24-10  | male         | UTVM24-1000 | 4,2                          | 6,2    |
| 24-10  | female       | UTVL24-1000 | 4,2                          | 6,2    |
| 28-21  | male         | UTVM28-2100 | 1,2                          | 2,95   |
| 28-21  | female       | UTVL28-2100 | 1,2                          | 2,95   |
| 32A13  | male         | UTVM32A1300 | 1,2                          | 3,6    |
| 32A13  | female       | UTVL32A1300 | 1,2                          | 3,6    |
| 36A22  | male         | UTVM36A2200 | 1,2                          | 3,6    |
| 36A22  | female       | UTVL36A2200 | 1,2                          | 3,6    |
| 40A35  | male         | UTVM40A3500 | 1,2                          | 3,6    |
| 40A35  | female       | UTVL40A3500 | 1,2                          | 3,6    |
| 40A60  | male         | UTVM40A6000 | 1,2                          | 2,95   |
| 40A60  | female       | UTVL40A6000 | 1,2                          | 2,95   |

\* Please consult us if your wire has an insulation diameter over these values, we will propose you another grommet.

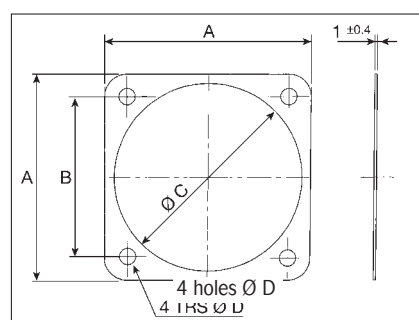


### Grommet filler plug

| Contact size | Part number | Color | Photo                                                                                 |
|--------------|-------------|-------|---------------------------------------------------------------------------------------|
| # 16<br># 12 | 8500-479    | blue  |  |

## Panel gasket

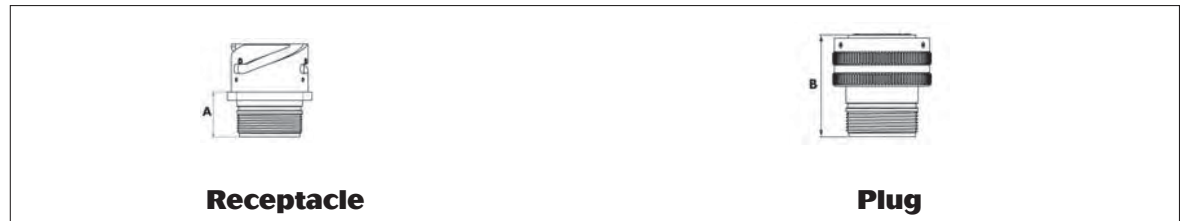
| Shell size | Part number | Dimensions |         |          |            |
|------------|-------------|------------|---------|----------|------------|
|            |             | A ± 0.5    | B ± 0.2 | C 0/+0.3 | Ø D 0/+0.3 |
| 20         | UTVG20      | 38         | 29.4    | 34.2     | 4.2        |
| 22         | UTVG22      | 41         | 31.8    | 37.4     | 4.2        |
| 24         | UTVG24      | 44.5       | 34.9    | 40.9     | 4.2        |
| 28         | UTVG28      | 50.8       | 39.7    | 46.7     | 5.1        |
| 32         | UTVG32      | 57         | 44.5    | 53.4     | 5.1        |
| 36         | UTVG36      | 63.5       | 49.2    | 59.6     | 5.1        |
| 40         | UTVG40      | 69.9       | 55.5    | 65.5     | 5.1        |



# Ruggedized Reverse Bayonet Connector



## Synoptic of straight backshells (for IP67 applications)



|                    |              |              |                        |                        |                                |                                |                                                                     |                                                                     |                                              |                                              |
|--------------------|--------------|--------------|------------------------|------------------------|--------------------------------|--------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------|----------------------------------------------|
|                    |              |              |                        |                        |                                |                                |                                                                     |                                                                     |                                              |                                              |
|                    |              | +            | +                      | +                      | +                              | +                              | +                                                                   | +                                                                   | +                                            | +                                            |
|                    |              |              |                        |                        |                                |                                |                                                                     |                                                                     |                                              |                                              |
| <b>Description</b> | Backnut      | Cable clamp  | Backshell for PMA tube | Backshell for PMA tube | Cable clamp with sealing gland | Cable clamp with sealing gland | Cable clamp with sealing gland (trumpet shape to avoid cable wound) | Cable clamp with sealing gland (trumpet shape to avoid cable wound) | Cable clamp with sealing gland for shielding | Cable clamp with sealing gland for shielding |
| <b>Ref</b>         | UTV RS****00 | UTV CS****00 | UTV SS****10           | UTV SS****00           | UTV JS****10                   | UTV JS****00                   | UTV KS****10                                                        | UTV KS****00                                                        | UTV TS****10                                 | UTV TS****00                                 |

## Synoptic of adaptors

|                    |                             |                              |
|--------------------|-----------------------------|------------------------------|
|                    |                             |                              |
| <b>Description</b> | Long adaptor with PG outlet | Short adaptor with PG outlet |
| <b>Ref</b>         | UTV PS**0010                | UTV PS**0000                 |

**NB: IP68 backshells are available under request**

# Ruggedized Reverse Bayonet Connector



## Dimensions

|          | Shell 18           |                    | Shell 20           |                    | Shell 22           |                    | Shell 24           |                    | Shell 28           |                    | Shell 32           |                    | Shell 36           |                    | Shell 40                    |                    |
|----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-----------------------------|--------------------|
|          | with<br>grommet    | without<br>grommet | with<br>grommet    | without<br>grommet | with<br>grommet    | without<br>grommet | with<br>grommet    | without<br>grommet | with<br>grommet    | without<br>grommet | with<br>grommet    | without<br>grommet | with<br>grommet    | without<br>grommet | with<br>grommet             | without<br>grommet |
|          | ****<br>=<br>18-19 | ****<br>=<br>18-00 | ****<br>=<br>20-15 | ****<br>=<br>20-00 | ****<br>=<br>22-14 | ****<br>=<br>22-00 | ****<br>=<br>24-10 | ****<br>=<br>24-00 | ****<br>=<br>28-21 | ****<br>=<br>28-00 | ****<br>=<br>32A13 | ****<br>=<br>32A00 | ****<br>=<br>36A22 | ****<br>=<br>36A00 | ****<br>=<br>40A35<br>40A60 | ****<br>=<br>40A00 |
| <b>A</b> | 22,5               |                    | 22,5               |                    | 22,5               |                    | 22,5               |                    | 24                 |                    | 24                 |                    | 24                 |                    | 24                          |                    |
| <b>B</b> | 45,6               |                    | 45,6               |                    | 45,6               |                    | 45,6               |                    | 48,1               |                    | 48,1               |                    | 48,1               |                    | 48,1                        |                    |
| <b>C</b> | 18                 |                    | 18                 |                    | 18                 |                    | 18                 |                    | 17                 |                    | 17                 |                    | 17                 |                    | 17                          |                    |
| <b>D</b> | 44                 |                    | 44                 |                    | 44                 |                    | 44                 |                    | 47                 |                    |                    |                    |                    |                    |                             |                    |
| <b>E</b> | 28,5               |                    | 28,5               |                    | 26                 |                    | 26                 |                    | 23                 |                    |                    |                    |                    |                    |                             |                    |
| <b>F</b> | 48,6               |                    | 48,6               |                    | 48,6               |                    | 48,6               |                    | 58                 |                    | 48                 |                    | 48                 |                    | 48                          |                    |
| <b>G</b> | 34                 |                    | 34                 |                    | 34                 |                    | 34                 |                    | 33                 |                    | 33                 |                    | 33                 |                    | 33                          |                    |
| <b>H</b> | 35,5               |                    | 35,5               |                    | 38,5               |                    | 38,5               |                    | 38,5               |                    | 38,5               |                    | 52                 |                    | 46                          |                    |
| <b>K</b> | PMA17              |                    | PMA17              |                    | PMA23              |                    | PMA23              |                    | PMA29              |                    | PMA29              |                    | PMA36              |                    | PMA48                       |                    |
| <b>M</b> | 23                 |                    | 23                 |                    | 31                 |                    | 31                 |                    | 31,5               |                    | 31,5               |                    | 37,5               |                    | 45                          |                    |
| <b>N</b> | 7/12               |                    | 9/14               |                    | 10/18              |                    | 10/18              |                    | 14/24              |                    | 14/24              |                    | 22/30              |                    | 25/35                       |                    |
| <b>P</b> | 30                 |                    | 31,5               |                    | 38,5               |                    | 38,5               |                    | 45                 |                    | 45                 |                    | 51,5               |                    | 57                          |                    |
| <b>S</b> | 33,5               |                    | 33,5               |                    | 43                 |                    | 43                 |                    | 52                 |                    | 52                 |                    |                    |                    |                             |                    |
| <b>T</b> | 8/12,5             |                    | 10/14,5            |                    | 13,5/18            |                    | 13,5/18            |                    | 17/24              |                    | 17/24              |                    |                    |                    |                             |                    |
| <b>U</b> | 4/15,5             |                    | 7/15,5             |                    | 9/15,5             |                    | 8,5/19,5           |                    | 9,5/19,5           |                    |                    |                    |                    |                    |                             |                    |
|          | PG13,5             |                    | PG16               |                    | PG 21              |                    | PG21               |                    | PG29               |                    | PG29               |                    | PG36               |                    | PG42                        |                    |

**Note :** Dimensions are not contractual and may be subject to modifications.

⇒ All backshells are compatible with a grommet and a conical ring.

⇒ For cable or PMA tube diameter not included in the above chart please consult us.

### Example of rear dimensions calculation of a shell size 18 connector with a sealing gland cable clamp backshell without grommet and with a long adaptor

Backshell P/N : UTV JS 18 00 10

### Rear dimensions receptacle + backshell :

$$A + F + M = 94,1 \text{ mm}$$

# Ruggedized Reverse Bayonet Connector



## Synoptic of elbow backshells (IP67 applications)

**Receptacle**

**Plug**

|                    |                        |                                |                                                                     |                                              |
|--------------------|------------------------|--------------------------------|---------------------------------------------------------------------|----------------------------------------------|
|                    | +                      | +                              | +                                                                   | +                                            |
|                    |                        |                                |                                                                     |                                              |
| <b>Description</b> | Backshell for PMA tube | Cable clamp with sealing gland | Cable clamp with sealing gland (trumpet shape to avoid cable wound) | Cable clamp with sealing gland for shielding |
| <b>Part number</b> | UTV SE****00           | UTV JE****00                   | UTV KE****00                                                        | UTV TE****00                                 |

**Receptacle**

**Plug**

+

|                    |              |
|--------------------|--------------|
| <b>Description</b> | Cable clamp  |
| <b>Part number</b> | UTV CE****00 |

**NB: IP68 backshells are available upon request**

# Ruggedized Reverse Bayonet Connector



## Dimensions

|          | Shell 18        |                    | Shell 20        |                    | Shell 22        |                    | Shell 24        |                    | Shell 28        |                    | Shell 32        |                    | Shell 36        |                    | Shell 40                 |                    |
|----------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|--------------------|--------------------------|--------------------|
|          | with<br>grommet | without<br>grommet | with<br>grommet | without<br>grommet | with<br>grommet | without<br>grommet | with<br>grommet | without<br>grommet | with<br>grommet | without<br>grommet | with<br>grommet | without<br>grommet | with<br>grommet | without<br>grommet | with<br>grommet          | without<br>grommet |
|          | ****<br>= 18-19 | ****<br>= 18-00    | ****<br>= 20-15 | ****<br>= 20-00    | ****<br>= 22-14 | ****<br>= 22-00    | ****<br>= 24-10 | ****<br>= 24-00    | ****<br>= 28-21 | ****<br>= 28-00    | ****<br>= 32A13 | ****<br>= 32A00    | ****<br>= 36A22 | ****<br>= 36A00    | ****<br>= 40A35<br>40A60 | ****<br>= 40A40    |
| <b>A</b> | 22,5            |                    | 22,5            |                    | 22,5            |                    | 22,5            |                    | 24              |                    | 24              |                    | 24              |                    | 24                       |                    |
| <b>B</b> | 45,6            |                    | 45,6            |                    | 45,6            |                    | 45,6            |                    | 48,1            |                    | 48,1            |                    | 48,1            |                    | 48,1                     |                    |
| <b>C</b> | 44              |                    | 43,5            |                    | 43,5            |                    | 46              |                    | 41              |                    |                 |                    |                 |                    |                          |                    |
| <b>D</b> | 26              |                    | 25,5            |                    | 17,5            |                    | 20              |                    | 18              |                    |                 |                    |                 |                    |                          |                    |
| <b>E</b> | 28,5            |                    | 28,5            |                    | 26              |                    | 26              |                    | 23              |                    |                 |                    |                 |                    |                          |                    |
| <b>F</b> | 43              |                    | 44              |                    | 44              |                    | 49              |                    | 46              |                    | 59              |                    | 60              |                    |                          |                    |
| <b>H</b> | 35,5            |                    | 35,5            |                    | 38,5            |                    | 38,5            |                    | 38,5            |                    | 38,5            |                    | 46              |                    |                          |                    |
| <b>K</b> | PMA 17          |                    | PMA 17          |                    | PMA 23          |                    | PMA 23          |                    | PMA 29          |                    | PMA 36          |                    | PMA 36          |                    |                          |                    |
| <b>M</b> | 23              |                    | 23              |                    | 31              |                    | 31              |                    | 31,5            |                    | 31,5            |                    | 37,5            |                    |                          |                    |
| <b>N</b> | 7/12            |                    | 9/14            |                    | 10/18           |                    | 10/18           |                    | 14/24           |                    | 14/24           |                    | 22/30           |                    |                          |                    |
| <b>P</b> | 30              |                    | 31,5            |                    | 38,5            |                    | 38,5            |                    | 45              |                    | 45              |                    | 51,5            |                    |                          |                    |
| <b>S</b> | 33,5            |                    | 33,5            |                    | 43              |                    | 43              |                    | 52              |                    | 52              |                    |                 |                    |                          |                    |
| <b>T</b> | 8/12,5          |                    | 10/14,5         |                    | 13,5/18         |                    | 13,5/18         |                    | 17/24           |                    | 17/24           |                    |                 |                    |                          |                    |
| <b>U</b> | 4/15,5          |                    | 7/15,5          |                    | 9/15,5          |                    | 8,5/19,5        |                    | 9,5/19,5        |                    |                 |                    |                 |                    |                          |                    |
|          | PG 13,5         |                    | PG 16           |                    | PG 21           |                    | PG 21           |                    | PG 29           |                    | PG 29           |                    | PG 36           |                    | PG 42                    |                    |

**Note :** Dimensions are not contractual and may be subject to modifications.

⇒ All backshells are compatible with a grommet and a conical ring.

⇒ For cable or PMA tube diameter not included in the above chart please consult us.

# Ruggedized Reverse Bayonet Connector



## Tooling Data

| Contact size | Contact type | Contact Ø mm | Contact Part number | Contact Size    |       | Crimp tool          | Locator                | Extraction tool |
|--------------|--------------|--------------|---------------------|-----------------|-------|---------------------|------------------------|-----------------|
|              |              |              |                     | mm <sup>2</sup> | AWG   |                     |                        |                 |
| #16          | Male         | 1.6          | RM16M23K            | 0.52 - 1.50     | 20-16 | MH860 (M22520/7-01) | MH86164G               | RX2025GE1       |
| #16          | Female       | 1.6          | RC16M23K            | 0.52 - 1.50     | 20-16 | MH860 (M22520/7-01) | MH86164G               | RX2025GE1       |
| #16          | Male         | 1.6          | RM14M30K            | 2.50            | 14    | AF8 (M22520/3-1)    | TP1142 (selector on 8) | RX2025GE1       |
| #16          | Female       | 1.6          | RC14M30K            | 2.50            | 14    | AF8 (M22520/3-1)    | TP1142 (selector on 8) | RX2025GE1       |
| #12          | Male         | 2.4          | 8291 1437 NA        | 0.50            | 20    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Female       | 2.4          | 8291 1436 A         | 0.50            | 20    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Male         | 2.4          | 8291 1435 NA        | 0.75 - 1.00     | 18    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Female       | 2.4          | 8291 1434 A         | 0.75 - 1.00     | 18    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Male         | 2.4          | 8291 1463 NA        | 1.50            | 16    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Female       | 2.4          | 8291 1462 A         | 1.50            | 16    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Male         | 2.4          | 8291 1465 NA        | 2.50            | 14    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Female       | 2.4          | 8291 1464 A         | 2.50            | 14    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Male         | 2.4          | 8291 1437 NK        | 0.50            | 20    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Female       | 2.4          | 8291 1436 K         | 0.50            | 20    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Male         | 2.4          | 8291 1435 NK        | 0.75 - 100      | 18    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Female       | 2.4          | 8291 1434 K         | 0.75 - 100      | 18    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Male         | 2.4          | 8291 1463 NK        | 1.50            | 16    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Female       | 2.4          | 8291 1462 K         | 1.50            | 16    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Male         | 2.4          | 8291 1465 NK        | 2.50            | 14    | M317                | VGE10077A              | 5106.021.09.24  |
| #12          | Female       | 2.4          | 8291 1464 K         | 2.50            | 14    | M317                | VGE10077A              | 5106.021.09.24  |
| #8           | Male         | 3.6          | 8291 3601 A         | 1.50            | 16    | M317                | VGE10078A              | 5106.021.09.36  |
| #8           | Female       | 3.6          | 8291 3600 A         | 1.50            | 16    | M317                | VGE10078A              | 5106.021.09.36  |
| #8           | Male         | 3.6          | 8291 3603 A         | 2.50            | 14    | M317                | VGE10078A              | 5106.021.09.36  |
| #8           | Female       | 3.6          | 8291 3602 A         | 2.50            | 14    | M317                | VGE10078A              | 5106.021.09.36  |
| #8           | Male         | 3.6          | 8291 3605 A         | 4.00            | 12    | M317                | VGE10078A              | 5106.021.09.36  |
| #8           | Female       | 3.6          | 8291 3604 A         | 4.00            | 12    | M317                | VGE10078A              | 5106.021.09.36  |
| #8           | Male         | 3.6          | 8291 3607 A         | 6.00            | 10    | M317                | VGE10078A              | 5106.021.09.36  |
| #8           | Female       | 3.6          | 8291 3606 A         | 6.00            | 10    | M317                | VGE10078A              | 5106.021.09.36  |

For detailed information on crimp tooling: see crimp tooling section.

[illegible]

# Mixed Power and Signal



## Description

Power connectors are circular connectors to meet mixed power and signal requirements. This range of power connectors is an extension of the long established and popular TRIM TRIO connector series shown in this catalogue, but with the advantage of offering a number of additional features

## Features and benefits

- Connectors suitable for mixed power / signal application.
- Design in flexibility of TRIM TRIO.



## Our Design flexibilities are virtually unlimited on:

- **Contact arrangements**
- **Mixed contact lay-outs**
- **Power versions**
- **Hybrid contacts arrangements**
- **Filtered connectors**
- **High speed solutions**
- **Robust designs**
- **Higher corrosion withstandings**
- ...

The next pages are listing some of the mixed power / signal TRIM TRIO connector configurations.

It is intended to give you a general idea of our design capabilities.

As the creation of mixed power / signal TRIM TRIO connectors is an ongoing process, we advise you to contact our nearest SOURIAU sales office if you have specific connector needs.

Our design flexibility is virtually unlimited, so we are always willing to consider any customised design.

Separate data sheets with more detailed technical info of the listed mixed power / signal TRIM TRIO versions are available.

# Mixed Power and Signal



## UT0/UTG size 10-3W3 with: 3 contacts #20 (1.0mm) 3 standard TRIM TRIO contacts

### Description

UT0/UTG size 10-3W3 is a standard shell size 10 connector with a modified insert arrangement to accept:  
3 TRIM TRIO #20 (1.0mm) contacts  
3 TRIM TRIO #16 (1.6mm) contacts

### Typical performance characteristics

- For characteristics, refer to UTG/UT0 series and Contact sections

### Available part numbers:

| Part number  | Shell size | Description                                       |
|--------------|------------|---------------------------------------------------|
| UTG1103W3S   | 10         | Free hanging receptacle for socket contacts       |
| UTG6103W3PN  |            | Cable plug connector for pin contacts             |
| UT01103W3SH6 |            | Metal free hanging receptacle for socket contacts |

For dimensions or others characteristics, refer to section UTG/UT0 with corresponding shell size or refer to the technical drawings



### Contact accommodation

- #20 cavities accept the #20 TRIM TRIO size 16 crimp type removable snap-lock contacts (see contacts section)
- #16 cavities accept the #16 TRIM TRIO crimp type removable snap-lock contacts (see contacts section)
- Contacts to be ordered separately.

## UTG size 12-3 with 3 power contacts.

### Description

UTG size 12-3 is a standard shell size 12 connector with a modified insert arrangement to accept  
3 power contacts #12 (2.4mm).  
It also offers 3 extra discrimination cavities that accept the SMSPE3 discrimination pins.

### Typical performance characteristics

- Power contacts #12 (2.4mm) for up to 26 Amp
- For further characteristics, refer to UTG series and power contacts 8291 series.

### Available part numbers:

| Part number                 | Shell size | Description                                                       |
|-----------------------------|------------|-------------------------------------------------------------------|
| UTG0123S                    | 12         | Panel mount receptacle for socket contacts.                       |
| UTG0123SH                   |            | Panel mount receptacle for socket contacts – IP65 waterprotection |
| UTG0123P (consult factory)  |            | Panel mount receptacle for pin contacts.                          |
| UTG0123PH (consult factory) |            | Panel mount receptacle for pin contacts – IP65 waterprotection    |
| UTG6123SN (consult factory) |            | Cable plug connector for socket contacts.                         |
| UTG6123PN                   |            | Cable plug connector for pin contacts.                            |

For dimensions or others characteristics, refer to section UTG with corresponding shell size or refer to the technical drawings



### Contact accommodation

- Power cavities accept the 8291 power contacts (see power contacts 8291 section)
- Contacts to be ordered separately.

# Mixed Power and Signal



## UTG size 14-8 with 4 power & 4 standard TRIM TRIO contacts.

### Description

UTG size 14-8 is a standard shell size 14 connector with a modified insert arrangement to accept  
4 power contacts #12 (2.4mm) and  
4 TRIM TRIO #16 (1.6mm) signal contacts.

### Typical performance characteristics

- Power contacts #12 (2.4mm) for up to 26 Amp
- Per VDE 0110 (refer to technical drawings)
- For further characteristics, refer to UTG series and power contacts 8291 series.

### Available part numbers:

| Part number                       | Shell size | Description                                                       |
|-----------------------------------|------------|-------------------------------------------------------------------|
| <b>UTG0148P24PVDE</b>             | <b>14</b>  | Panel mount receptacle for pin contacts.                          |
| <b>UTG0148P24PHVDE</b>            |            | Panel mount receptacle for pin contacts – IP65 waterprotection    |
| UTG0148P24SVDE (consult factory)  |            | Panel mount receptacle for socket contacts.                       |
| UTG0148P24SHVDE (consult factory) |            | Panel mount receptacle for socket contacts – IP65 waterprotection |
| <b>UTG6148P24SNVDE</b>            |            | Cable plug connector for socket contacts.                         |
| UTG6148P24PNVDE (consult factory) |            | Cable plug connector for pin contacts.                            |

For dimensions or other characteristics, refer to section UTG with corresponding shell size or refer to the technical drawings



### Contact accommodation

- Signal cavities accept the TRIM TRIO size 16 crimp-type removable snap-lock contacts (see contacts section)
- Power cavities accept the 8291 power contacts (see power contacts 8291 section)
- Contacts to be ordered separately.

## UTG size 18-7 with 2 power & 5 standard TRIM TRIO contacts.

### Description

UTG size 18-7 is a standard shell size 18 connector with a modified insert arrangement to accept  
2 power contacts #12 (2.4mm) and  
5 TRIM TRIO #16 (1.6mm) signal contacts.

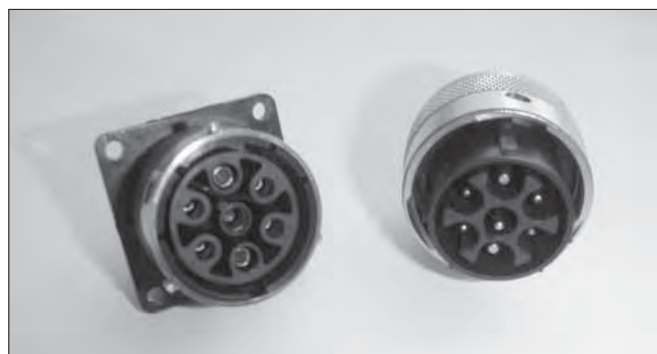
### Typical performance characteristics

- Power contacts #12 (2.4mm) for up to 26 Amp
- Per VDE 0110 Group C – 380V.
- 2 mating levels.
- For further characteristics, refer to UTG series and power contacts 8291 series.

### Available part numbers:

| Part number           | Shell size | Description                                                       |
|-----------------------|------------|-------------------------------------------------------------------|
| <b>UTG0187PVDE34</b>  | <b>18</b>  | Panel mount receptacle for pin contacts.                          |
| <b>UTG0187PHVDE34</b> |            | Panel mount receptacle for pin contacts – IP65 waterprotection    |
| <b>UTG0187SVDE34</b>  |            | Panel mount receptacle for socket contacts.                       |
| <b>UTG0187SHVDE34</b> |            | Panel mount receptacle for socket contacts – IP65 waterprotection |
| <b>UTG6187PNVDE34</b> |            | Cable plug connector for pin contacts.                            |
| <b>UTG6187SNVDE34</b> |            | Cable plug connector for socket contacts.                         |

For dimensions or other characteristics, refer to section UTG with corresponding shell size or refer to the technical drawings



### Contact accommodation

- Signal cavities accept the TRIM TRIO size 16 crimp-type removable snap-lock contacts (see contacts section)
- Power cavities accept the 8291 power contacts (see power contacts 8291 section)
- Contacts to be ordered separately.

# Mixed Power and Signal



## UTG size 24-7 with 7 power & 2 standard TRIM TRIO contacts.

### Description

UTG size 24-7 is a standard shell size 24 connector with a modified insert arrangement to accept 7 power contacts #8 (3.6mm) and 2 TRIM TRIO #16 (1.6mm) signal contacts.

### Typical performance characteristics

- Power contacts #8 (3.6mm) for up to 44 Amp
- VDE 0110 Group C – 660V.
- UL recognized file Nr.: E238675
- Central power cavity is advanced for grounding purposes.
- For further characteristics, refer to UTG series and power contacts 8291 series.

### Available part numbers:

| Part number      | Shell size | Description                                                       |
|------------------|------------|-------------------------------------------------------------------|
| <b>UTG0247P</b>  | <b>24</b>  | Panel mount receptacle for pin contacts.                          |
| <b>UTG0247PH</b> |            | Panel mount receptacle for pin contacts – IP65 waterprotection    |
| <b>UTG0247S</b>  |            | Panel mount receptacle for socket contacts.                       |
| <b>UTG0247SH</b> |            | Panel mount receptacle for socket contacts – IP65 waterprotection |
| <b>UTG6247PN</b> |            | Cable plug connector for pin contacts.                            |
| <b>UTG6247SN</b> |            | Cable plug connector for socket contacts.                         |

For dimensions or other characteristics, refer to section UTG with corresponding shell size or refer to the technical drawings



### Contact accommodation

- Signal cavities accept the TRIM TRIO size 16 crimp-type removable snap-lock contacts (see contacts section)
- Power cavities accept the 8291 power contacts (see power contacts 8291 section)
- Contacts to be ordered separately.

## UTG size 24-11 with 4 power & 7 standard TRIM TRIO contacts.

### Description

UTG size 24-11 is a standard shell size 24 connector with a modified insert arrangement to accept 4 power contacts #8 (3.6mm) and 7 TRIM TRIO #16 (1.6mm) signal contacts.

### Typical performance characteristics

- Power contacts #12 (2.4mm) for up to 26 Amp
- Per VDE 0110 (refer to technical drawings)
- For further characteristics, refer to UTG series and power contacts 8291 series..

### Available part numbers:

| Part number                         | Shell size | Description                                                       |
|-------------------------------------|------------|-------------------------------------------------------------------|
| <b>UTG02411P</b>                    | <b>24</b>  | Panel mount receptacle for pin contacts.                          |
| <b>UTG02411PH</b>                   |            | Panel mount receptacle for pin contacts – IP65 waterprotection    |
| <b>UTG02411S (consult factory)</b>  |            | Panel mount receptacle for socket contacts.                       |
| <b>UTG02411SH (consult factory)</b> |            | Panel mount receptacle for socket contacts – IP65 waterprotection |
| <b>UTG62411SN</b>                   |            | Cable plug connector for socket contacts.                         |
| <b>UTG62411PN (consult factory)</b> |            | Cable plug connector for pin contacts.                            |

For dimensions or other characteristics, refer to section UTG with corresponding shell size or refer to the technical drawings



### Contact accommodation

- Signal cavities accept the TRIM TRIO size 16 crimp-type removable snap-lock contacts (see contacts section)
- Power cavities accept the 8291 power contacts (see power contacts 8291 section)
- Contacts to be ordered separately.

# Circular Boardmount Versions



## **UTP7 size 12-8 for boardmount applications**

### **Description**

UTP7 size 12-8 is a standard jam nut receptacle size 12 connector with pre-assembled TRIM TRIO #16 (1.6mm) dipsolder contacts

### **Performance characteristics**

Refer to technical drawings

### **Available part numbers (consult factory):**

Different part number are available with:

- Male or female contacts
- Machined or stamped and formed contacts
- Different solder tail lengths

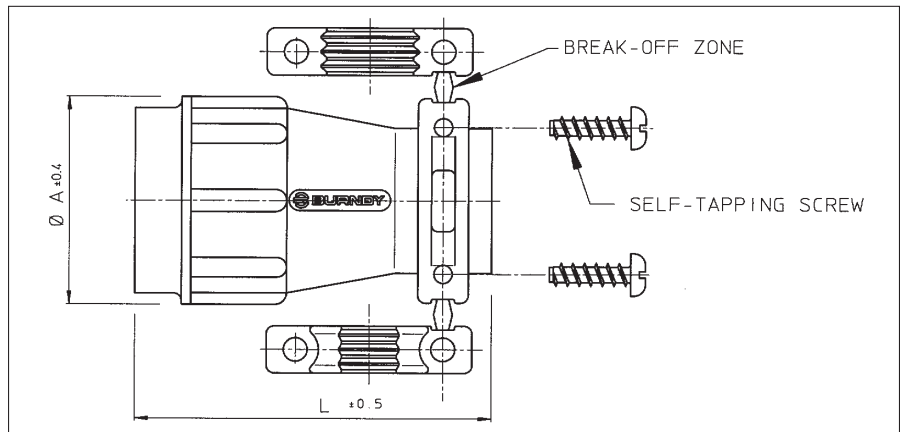


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# Circular Accessories



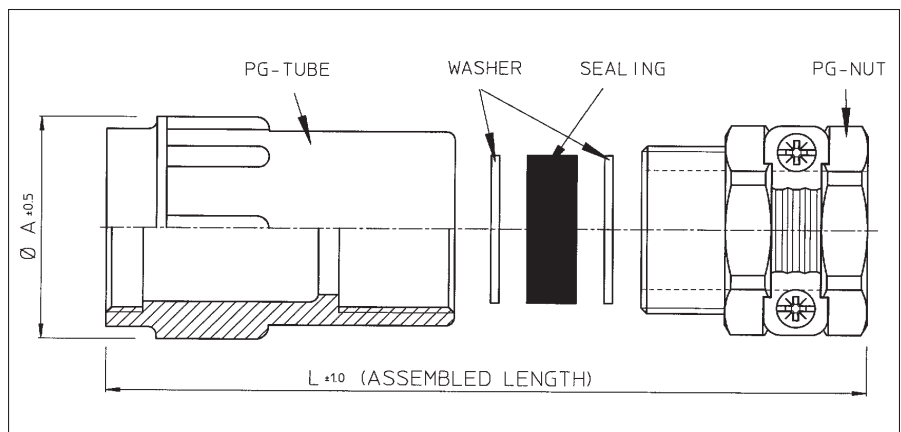
## Plastic cable clamp with strain relief (UTG--AC)



| Part number    | Shell size | Cable range $\varnothing$ | $\varnothing A \pm 0.4$ | $L \pm 0.5$ |
|----------------|------------|---------------------------|-------------------------|-------------|
| <b>UTG10AC</b> | <b>10</b>  | 3.0 - 8.7                 | 21.0                    | 40.0        |
| <b>UTG12AC</b> | <b>12</b>  | 3.0 - 12.8                | 24.0                    | 40.0        |
| <b>UTG14AC</b> | <b>14</b>  | 4.0 - 13.8                | 27.0                    | 46.0        |
| <b>UTG16AC</b> | <b>16</b>  | 5.0 - 17.0                | 30.2                    | 46.0        |
| <b>UTG18AC</b> | <b>18</b>  | 5.0 - 19.0                | 33.3                    | 50.0        |
| <b>UTG20AC</b> | <b>20</b>  | 5.0 - 21.0                | 36.5                    | 55.0        |
| <b>UTG22AC</b> | <b>22</b>  | 5.0 - 23.0                | 39.7                    | 60.0        |
| <b>UTG24AC</b> | <b>24</b>  | 8.0 - 27.0                | 42.9                    | 65.0        |

For threading specifications see last page of this section "Circular accessories"

## Plastic cable clamp with strain relief nut for waterprotected (IP65) applications (UTG--PG)



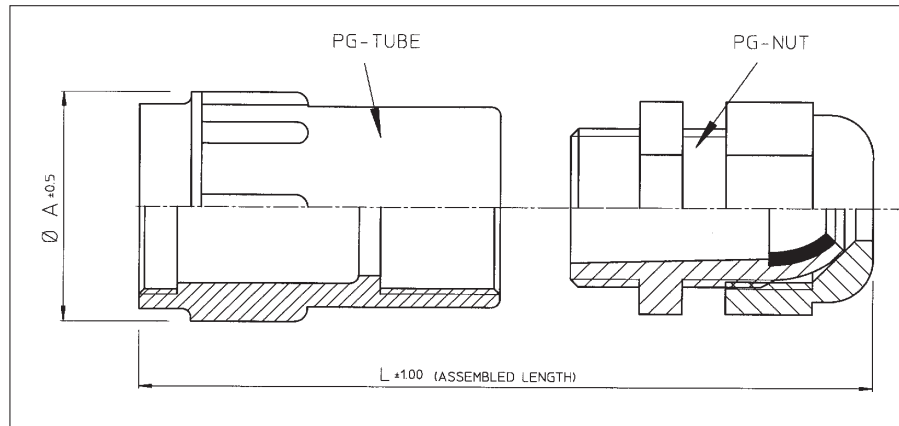
| Part number    | Shell size | Sealing*<br>outer dia x inner dia's | $L \pm 1$ | $A \pm 0.5$ |
|----------------|------------|-------------------------------------|-----------|-------------|
| <b>UTG10PG</b> | <b>10</b>  | 13.5 x 5 x 8                        | 54        | 21.0        |
| <b>UTG12PG</b> | <b>12</b>  | 16 x 7 x 10.5 x 13 x 16             | 57        | 24.0        |
| <b>UTG14PG</b> | <b>14</b>  | 18.5 x 7 x 10.5 x 13 x 16           | 62        | 27.0        |
| <b>UTG16PG</b> | <b>16</b>  | 20.5 x 8 x 10.5 x 13 x 16           | 68        | 30.2        |
| <b>UTG18PG</b> | <b>18</b>  | 20.5 x 8 x 10.5 x 13 x 16           | 71        | 33.3        |
| <b>UTG20PG</b> | <b>20</b>  | 26 x 11 x 15 x 18 x 22              | 82        | 36.5        |
| <b>UTG22PG</b> | <b>22</b>  | 26 x 11 x 15 x 18 x 22              | 88        | 39.7        |
| <b>UTG24PG</b> | <b>24</b>  | 35 x 19 x 23 x 27 x 31              | 103       | 42.9        |

\*In order to accommodate different cable dia's, the sealing exists of different layers which can be pulled out easily. Cable clamp has a PG style cable gland. For threading specifications see last page of this section "Circular accessories"

# Circular Accessories



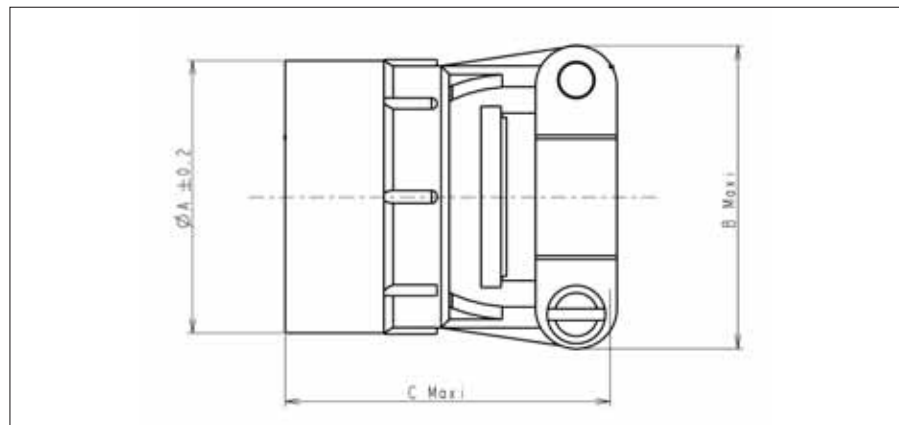
## Plastic cable clamp with strain relief nut for waterprotected (IP65) applications (UTG--ST)



| Part number | Shell size | Cable range | Dia. A $\pm 0.5$ | L $\pm 1$ |
|-------------|------------|-------------|------------------|-----------|
| UTG10ST     | 10         | 2 - 6       | 21.0             | 64        |
| UTG12ST     | 12         | 3 - 7       | 24.0             | 64        |
| UTG14ST     | 14         | 6 - 9       | 27.0             | 69        |
| UTG16ST     | 16         | 9 - 16      | 30.2             | 72        |
| UTG18ST     | 18         |             | 33.3             | 76        |
| UTG20ST     | 20         |             | 36.5             | 80        |
| UTG22ST     | 22         |             | 39.7             | 86        |
| UTG24ST     | 24         | 13 - 20     | 42.9             | 91        |

Cable clamp has a PG style cable gland. For threading specifications see last page of this section "Circular"

## Metal cable clamp with strain relief (UT0--AC)



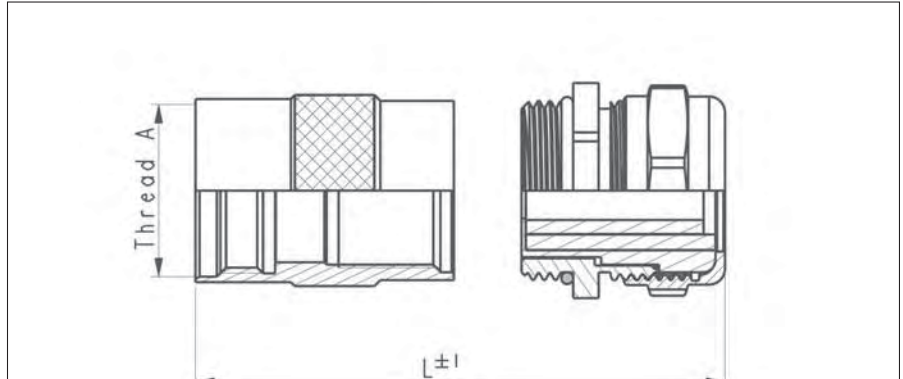
| Part number | Shell size | Max cable dia. Excl. sealing | $\varnothing A \pm 0.2$ | B maxi | C maxi |
|-------------|------------|------------------------------|-------------------------|--------|--------|
| UT010AC     | 10         | 5.0                          | 16.3                    | 21.6   | 31.0   |
| UT012AC     | 12         | 8.2                          | 19.4                    | 25.0   | 31.5   |
| UT014AC     | 14         | 10.0                         | 22.5                    | 27.4   | 34.0   |
| UT016AC     | 16         | 13.0                         | 25.8                    | 29.4   | 34.0   |
| UT018AC     | 18         | 16.0                         | 29.2                    | 35.2   | 31.4   |
| UT020AC     | 20         | 16.0                         | 32.5                    | 35.2   | 32.0   |
| UT022AC     | 22         | 19.3                         | 35.7                    | 41.1   | 31.0   |
| UT024AC     | 24         | 20.6                         | 38.8                    | 42.4   | 31.0   |

For threading specifications see last page of this section "Circular accessories"

# Circular Accessories



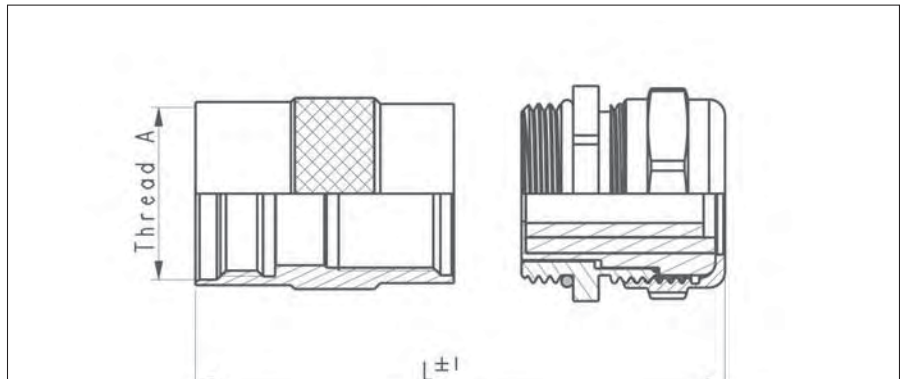
**Short cable clamp with strain relief nut for waterprotected applications (IP68). (UT0--JCS)**  
**Long cable clamp with strain relief nut for waterprotected applications (IP68). (UT0--JC)**



| Part number   |              | Shell size | Clamping range<br>(Ø en mm) min / max | L ± 1         |              | Thread A                   |
|---------------|--------------|------------|---------------------------------------|---------------|--------------|----------------------------|
| Short version | Long version |            |                                       | Short version | Long version |                            |
| UT010JCS      | UT010JC      | 10         | 03 / 06                               | 48.5          | 60.5         | 9/16 – 24 UNEF Class 2A    |
| UT012JCS      | UT012JC      | 12         | 06 / 10                               | 49.5          | 61.5         | 11/16 – 24 UNEF Class 2A   |
| UT014JCS      | UT014JC      | 14         | 06 / 10                               | 53.5          | 67.5         | 13/16 – 20 UNEF Class 2A   |
| UT016JCS      | UT016JC      | 16         | 9.5 / 14                              | 62.5          | 73.5         | 15/16 – 20 UNEF Class 2A   |
| UT018JCS      | UT018JC      | 18         | 9.5 / 14                              | 65.5          | 76.0         | 1" 1/16 – 18 UNEF Class 2A |
| UT020JCS      | UT020JC      | 20         | 11.5 / 18                             | 70.5          | 84.0         | 1" 3/16 – 18 UNEF Class 2A |
| UT022JCS      | UT022JC      | 22         | 11.5 / 18                             | 76.5          | 88.0         | 1" 5/16 – 18 UNEF Class 2A |
| UT024JCS      | UT024JC      | 24         | 11.5 / 18                             | 82.0          | 92.0         | 1" 7/16 – 18 UNEF Class 2A |

Cable clamp has a Metric style cable gland. For threading specifications see last page of this section "Circular accessories"

**Short cable clamp with large strain relief nut for waterprotected applications (IP68). (UT0--JCSL)**  
**Long cable clamp with large strain relief nut for waterprotected applications (IP68). (UT0--JCL)**



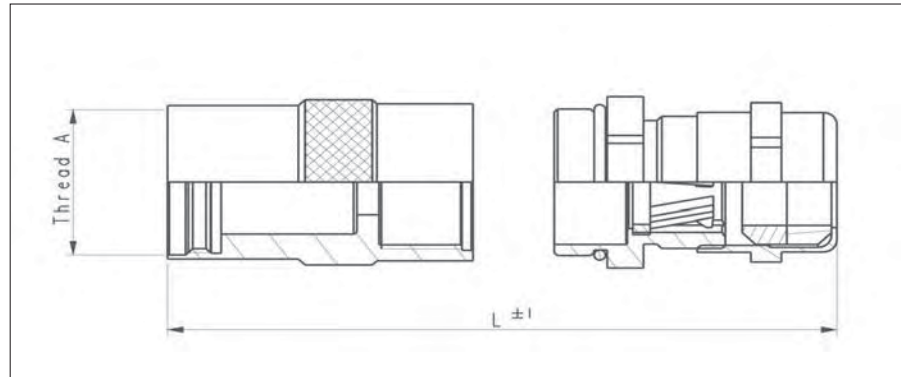
| Part number   |              | Shell size | Clamping range<br>(Ø en mm) min / max | L ± 1         |              | Thread A                   |
|---------------|--------------|------------|---------------------------------------|---------------|--------------|----------------------------|
| Short version | Long version |            |                                       | Short version | Long version |                            |
| UT010JCSL     | UT010JCL     | 10         | 05 / 08                               | 49.5          | 61.5         | 9/16 – 24 UNEF Class 2A    |
| UT012JCSL     | UT012JCL     | 12         | 08 / 12                               | 49.5          | 62.5         | 11/16 – 24 UNEF Class 2A   |
| UT014JCSL     | UT014JCL     | 14         | 08 / 12                               | 54.5          | 68.5         | 13/16 – 20 UNEF Class 2A   |
| UT016JCSL     | UT016JCL     | 16         | 11.5 / 18                             | 68.5          | 79.5         | 15/16 – 20 UNEF Class 2A   |
| UT018JCSL     | UT018JCL     | 18         | 11.5 / 18                             | 71.5          | 82.0         | 1" 1/16 – 18 UNEF Class 2A |
| UT020JCSL     | UT020JCL     | 20         | 15 / 24                               | 77.5          | 91.0         | 1" 3/16 – 18 UNEF Class 2A |
| UT022JCSL     | UT022JCL     | 22         | 15 / 24                               | 83.5          | 95.0         | 1" 5/16 – 18 UNEF Class 2A |
| UT024JCSL     | UT024JCL     | 24         | 15 / 24                               | 89.0          | 99.0         | 1" 7/16 – 18 UNEF Class 2A |

Cable clamp has a Metric style cable gland. For threading specifications see last page of this section "Circular accessories"

# Circular Accessories



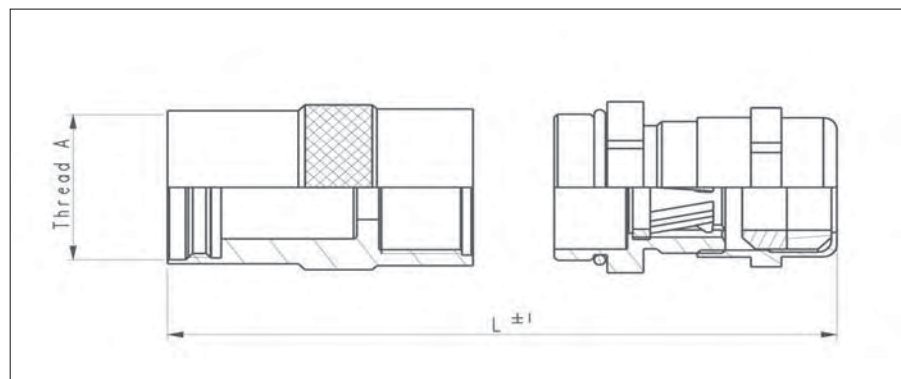
**Short shielded cable clamp with strain relief nut for waterprotected applications (IP68). (UT0S----JCS)**  
**Long shielded cable clamp with strain relief nut for waterprotected applications (IP68). (UT0S----JC)**



| Part number   |              | Shell size | Clamping range<br>(Ø en mm) min / max | L ± 1         |              | Thread A                   |
|---------------|--------------|------------|---------------------------------------|---------------|--------------|----------------------------|
| Short version | Long version |            |                                       | Short version | Long version |                            |
| UT0S10JCS     | UT0S10JC     | 10         | 04 / 6.5                              | 58.5          | 70.5         | 9/16 – 24 UNEF Class 2A    |
| UT0S12JCS     | UT0S12JC     | 12         | 07 / 10.5                             | 61.5          | 74.5         | 11/16 – 24 UNEF Class 2A   |
| UT0S14JCS     | UT0S14JC     | 14         | 07 / 10.5                             | 66.5          | 80.5         | 13/16 – 20 UNEF Class 2A   |
| UT0S16JCS     | UT0S16JC     | 16         | 10 / 14.5                             | 72.5          | 83.5         | 15/16 – 20 UNEF Class 2A   |
| UT0S18JCS     | UT0S18JC     | 18         | 10 / 14.5                             | 75.5          | 86.0         | 1" 1/16 – 18 UNEF Class 2A |
| UT0S20JCS     | UT0S20JC     | 20         | 13.5 / 18                             | 84.5          | 97.5         | 1" 3/16 – 18 UNEF Class 2A |
| UT0S22JCS     | UT0S22JC     | 22         | 13.5 / 18                             | 90.0          | 101.5        | 1" 5/16 – 18 UNEF Class 2A |
| UT0S24JCS     | UT0S24JC     | 24         | 13.5 / 18                             | 95.5          | 105.5        | 1" 7/16 – 18 UNEF Class 2A |

Cable clamp has a Metric style cable gland. For threading specifications see last page of this section "Circular accessories"

**Short shielded cable clamp with large strain relief nut for waterprotected applications (IP68). (UT0S----JCSL)**  
**Long shielded cable clamp with large strain relief nut for waterprotected applications (IP68). (UT0S----JCL)**



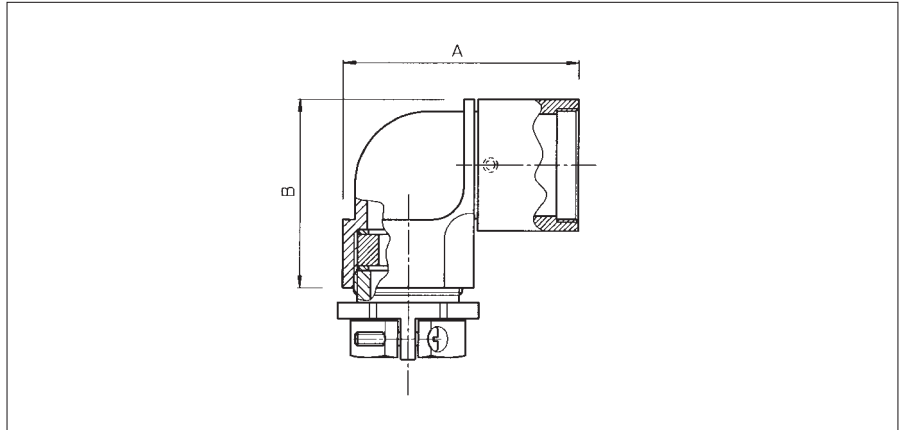
| Part number   |              | Shell size | Clamping range<br>(Ø en mm) min / max | L ± 1         |              | Thread A                   |
|---------------|--------------|------------|---------------------------------------|---------------|--------------|----------------------------|
| Short version | Long version |            |                                       | Short version | Long version |                            |
| UT0S10JCSL    | UT0S10JCL    | 10         | 05 / 8.5                              | 59.5          | 71.5         | 9/16 – 24 UNEF Class 2A    |
| UT0S12JCSL    | UT0S12JCL    | 12         | 08 / 12.5                             | 61.5          | 74.5         | 11/16 – 24 UNEF Class 2A   |
| UT0S14JCSL    | UT0S14JCL    | 14         | 08 / 12.5                             | 66.5          | 80.5         | 13/16 – 20 UNEF Class 2A   |
| UT0S16JCSL    | UT0S16JCL    | 16         | 13.5 / 18                             | 82.5          | 93.5         | 15/16 – 20 UNEF Class 2A   |
| UT0S18JCSL    | UT0S18JCL    | 18         | 13.5 / 18                             | 85.5          | 96.0         | 1" 1/16 – 18 UNEF Class 2A |
| UT0S20JCSL    | UT0S20JCL    | 20         | 17 / 24                               | 93.0          | 106.5        | 1" 3/16 – 18 UNEF Class 2A |
| UT0S22JCSL    | UT0S22JCL    | 22         | 17 / 24                               | 99.0          | 110.5        | 1" 5/16 – 18 UNEF Class 2A |
| UT0S24JCSL    | UT0S24JCL    | 24         | 17 / 24                               | 104.5         | 114.5        | 1" 7/16 – 18 UNEF Class 2A |

Cable clamp has a Metric style cable gland. For threading specifications see last page of this section "Circular accessories"

# Circular Accessories



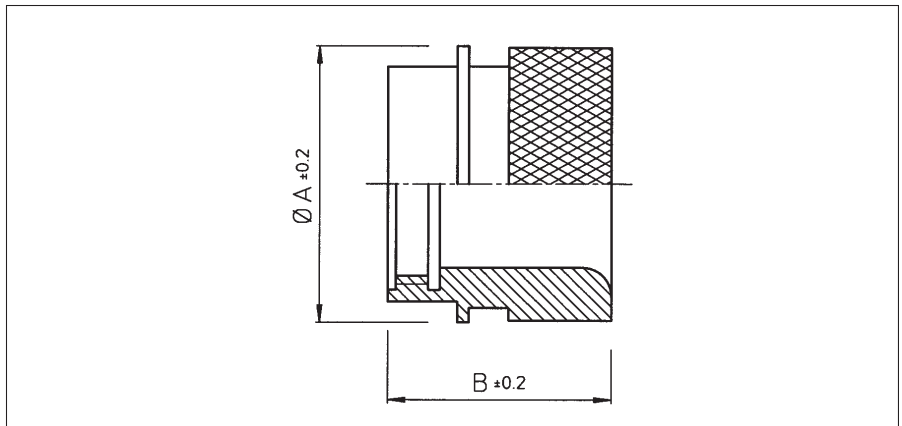
## Metal right angle cable clamp with strain relief nut (UTG--LPGN / UT0--LPGN)



| Part number<br>For UTP / UTG | Part number<br>For UT0 / UT0W | Shell<br>size | A max | B max | Cable range               |
|------------------------------|-------------------------------|---------------|-------|-------|---------------------------|
| <b>UTG10LPGN</b>             | <b>UT010LPGN</b>              | <b>10</b>     | 48.0  | 30.0  | 13.5 x 5 x 8              |
| <b>UTG12LPGN</b>             | <b>UT012LPGN</b>              | <b>12</b>     | 50.0  | 33.5  | 16 x 7 x 10.5 x 13        |
| <b>UTG14LPGN</b>             | <b>UT014LPGN</b>              | <b>14</b>     | 52.0  | 36.5  | 18.5 x 7 x 10.5 x 13 x 16 |
| <b>UTG16LPGN</b>             | <b>UT016LPGN</b>              | <b>16</b>     | 55.0  | 39.5  | 20.5 x 8 x 10.5 x 13 x 16 |
| <b>UTG18LPGN</b>             | <b>UT018LPGN</b>              | <b>18</b>     | 60.0  | 46.0  | 20.5 x 8 x 10.5 x 13 x 16 |
| <b>UTG20LPGN</b>             | <b>UT020LPGN</b>              | <b>20</b>     | 58.0  | 47.0  | 26 x 11 x 15 x 18 x 22    |
| <b>UTG22LPGN</b>             | <b>UT022LPGN</b>              | <b>22</b>     | 58.0  | 48.5  | 26 x 11 x 15 x 18 x 22    |
| <b>UTG24LPGN</b>             | <b>UT024LPGN</b>              | <b>24</b>     | 67.0  | 54.5  | 35 x 19 x 23 x 27 x 31    |

Cable clamp has a PG style cable gland. For threading specifications see last page of this section "Circular accessories"

## Metal shrink boot adaptor (UTG--AD) for UTP and UTG



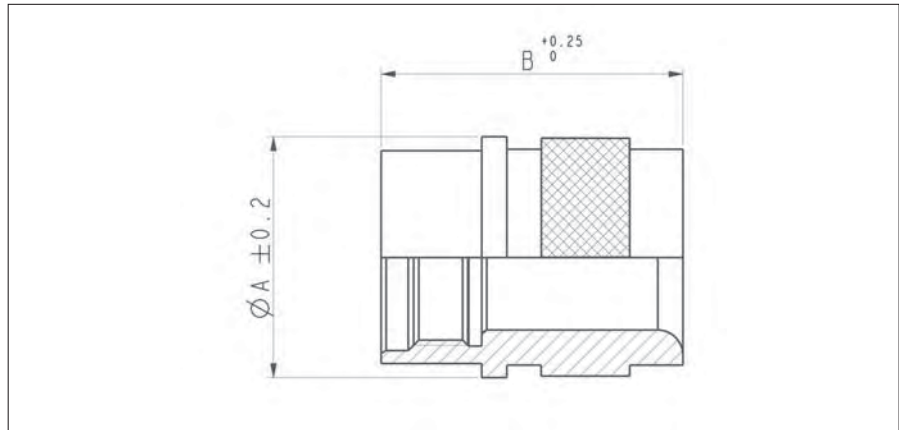
| Part number    | Shell size | Ø A ±0.2 | B    |
|----------------|------------|----------|------|
| <b>UTG10AD</b> | <b>10</b>  | 21.0     | 19.2 |
| <b>UTG12AD</b> | <b>12</b>  | 24.0     |      |
| <b>UTG14AD</b> | <b>14</b>  | 27.0     |      |
| <b>UTG16AD</b> | <b>16</b>  | 30.0     | 21.5 |
| <b>UTG18AD</b> | <b>18</b>  | 33.3     |      |
| <b>UTG20AD</b> | <b>20</b>  | 36.5     | 22.8 |
| <b>UTG22AD</b> | <b>22</b>  | 39.7     |      |
| <b>UTG24AD</b> | <b>24</b>  | 42.9     | 21.9 |

Standard plating is anodised black. For tin plating add "T" at the end of the part number e.g. UTG12ADT  
For threading specifications see last page of this section "Circular accessories"

# Circular Accessories



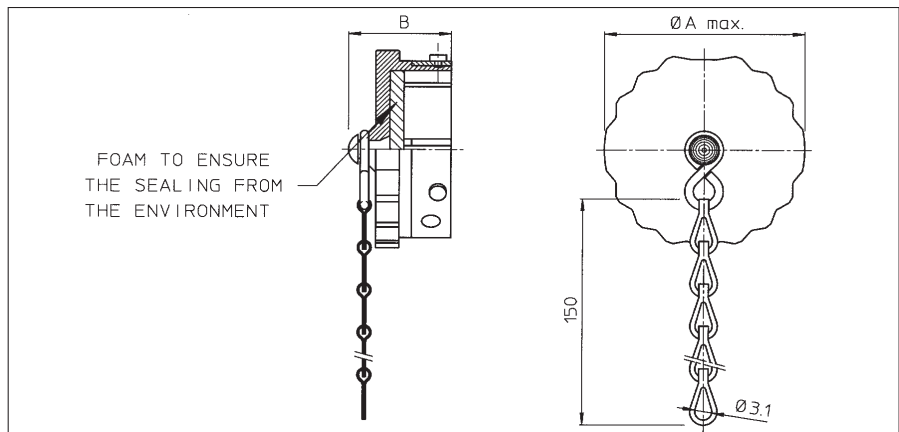
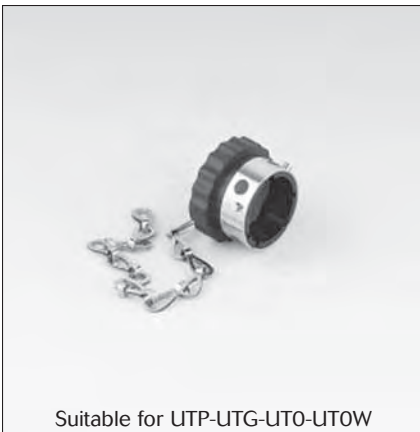
## Metal shrink boot adaptor for UTO and UTOW



| Part number | Shell size | $\varnothing A \pm 0.2$ | B    |
|-------------|------------|-------------------------|------|
| UT010AD     | 10         | 21                      | 24.7 |
| UT012AD     | 12         | 24                      |      |
| UT014AD     | 14         | 27                      |      |
| UT016AD     | 16         | 30                      | 27   |
| UT018AD     | 18         | 33.3                    |      |
| UT020AD     | 20         | 36.5                    |      |
| UT022AD     | 22         | 39.7                    |      |
| UT024AD     | 24         | 42.9                    |      |

For threading specifications see last page of this section "Circular accessories"

## Environmental dustcap for plugs (UTG6--DCG)



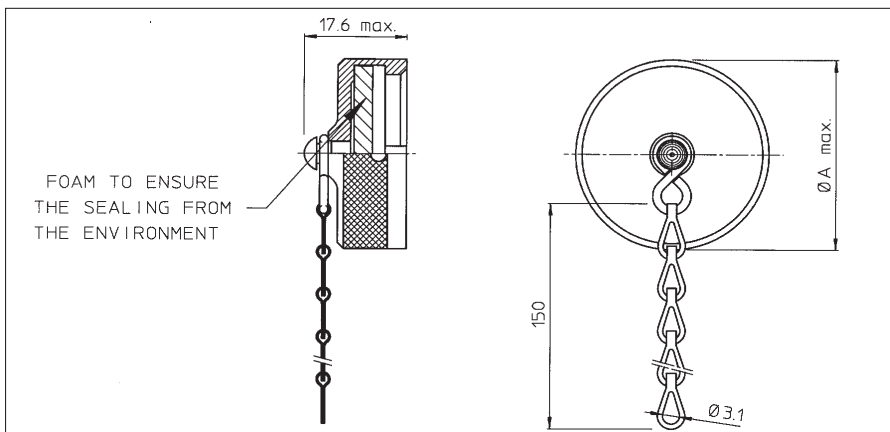
| Part number | Shell size | A max. | B    |
|-------------|------------|--------|------|
| UTG610DCG   | 10         | 20.0   | 20.8 |
| UTG612DCG   | 12         | 24.0   |      |
| UTG614DCG   | 14         | 27.5   |      |
| UTG616DCG   | 16         | 30.5   |      |
| UTG618DCG   | 18         | 33.5   |      |
| UTG620DCG   | 20         | 36.5   | 22.5 |
| UTG622DCG   | 22         | 40.0   |      |
| UTG624DCG   | 24         | 43.0   |      |

For dustcap without chain skip "G" e.g. UTG612DC

# Circular Accessories



## Metal environmental dustcap for receptacles (UT0--DCG)

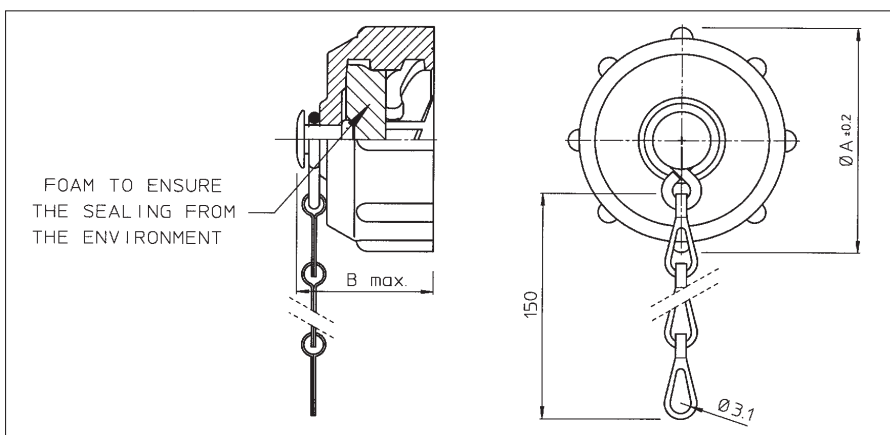


| Part number | Shell size | A max. |
|-------------|------------|--------|
| UT010DCG    | 10         | 20.8   |
| UT012DCG    | 12         | 24.9   |
| UT014DCG    | 14         | 28.1   |
| UT016DCG    | 16         | 31.3   |
| UT018DCG    | 18         | 34.4   |
| UT020DCG    | 20         | 37.6   |
| UT022DCG    | 22         | 40.8   |
| UT024DCG    | 24         | 43.9   |

For dustcap without chain skip "G" e.g. UTG12DC

For jam dustcap consult factory

## Plastic environmental dustcap for receptacles (UTP--DCG)



| Part number | Shell size | $\varnothing A \pm 0.2$ | B max. |
|-------------|------------|-------------------------|--------|
| UTP10DCG    | 10         | 26.7                    | 19.3   |
| UTP12DCG    | 12         | 31.4                    | 20.0   |
| UTP14DCG    | 14         | 34.5                    | 20.2   |
| UTP16DCG    | 16         | 37.8                    |        |
| UTP18DCG    | 18         | 40.8                    |        |
| UTP20DCG    | 20         | 43.9                    | 21.8   |
| UTP22DCG    | 22         | 47.0                    |        |
| UTP24DCG    | 24         | 50.1                    |        |

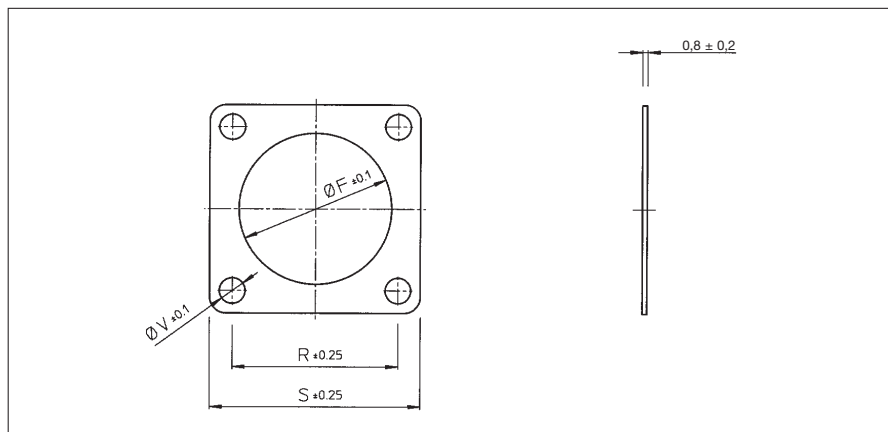
For dustcap without chain skip "G" e.g. UTP12DC

For jam dustcap consult factory

# Circular Accessories



## Sealing for wall mounting receptacle (UTFD1-B)



| Part number    | Shell size | $\varnothing F \pm 0.1$ | $R \pm 0.25$ | $S \pm 0.25$ | $\varnothing V$ |
|----------------|------------|-------------------------|--------------|--------------|-----------------|
| <b>UTFD12B</b> | <b>10</b>  | 15.9                    | 18.3         | 23.8         | 3.3             |
| <b>UTFD13B</b> | <b>12</b>  | 19.0                    | 20.6         | 26.2         |                 |
| <b>UTFD14B</b> | <b>14</b>  | 22.2                    | 23.0         | 28.6         |                 |
| <b>UTFD15B</b> | <b>16</b>  | 25.4                    | 24.6         | 31.0         |                 |
| <b>UTFD16B</b> | <b>18</b>  | 28.6                    | 27.0         | 33.3         |                 |
| <b>UTFD17B</b> | <b>20</b>  | 31.8                    | 29.4         | 36.5         |                 |
| <b>UTFD18B</b> | <b>22</b>  | 34.9                    | 31.8         | 39.7         |                 |
| <b>UTFD19B</b> | <b>24</b>  | 38.1                    | 34.9         | 42.9         | 4.0             |

## Adaptors for flexible cable protection systems (conduits)



Adaptors for flexible cable protections systems that fit to the TRIM TRIO circular connectors are available from cable protection systems manufacturers (e.g. PMA).

2 solutions are offered:

- UNEF Adaptors that fit directly onto the connectors (left picture)
- METRIC Adaptors that fit onto the metal cable clamp tubes as indicated on pages 43 and 44 (right picture)

These types of adaptors offer extra protection to single wire applications (electrical, coax, Fiber optic ... etc.)

Note: the adaptors are not available from Souriau. They must be ordered directly from the manufacturers



## Cable gland threadings used on cable clamps

| Shell size | Thread size on connectors | PG threading | Metric threading |
|------------|---------------------------|--------------|------------------|
| <b>10</b>  | 9/16 - 24 UNEF            | PG9          | M16 x 1.5        |
| <b>12</b>  | 11/16 - 24 UNEF           | PG11         | M20 x 1.5        |
| <b>14</b>  | 13/16 - 20 UNEF           | PG13.5       | M20 x 1.5        |
| <b>16</b>  | 15/16 - 20 UNEF           | PG16         | M25 x 1.5        |
| <b>18</b>  | 1-1/16 - 18 UNEF          | PG16         | M25 x 1.5        |
| <b>20</b>  | 1-3/16 - 18 UNEF          | PG21         | M32 x 1.5        |
| <b>22</b>  | 1-5/16 - 18 UNEF          | PG21         | M32 x 1.5        |
| <b>24</b>  | 1-7/16 - 18 UNEF          | PG29         | M32 x 1.5        |

# 5000 Mating Cycle Plastic Connector



## MBG SERIES

### Description

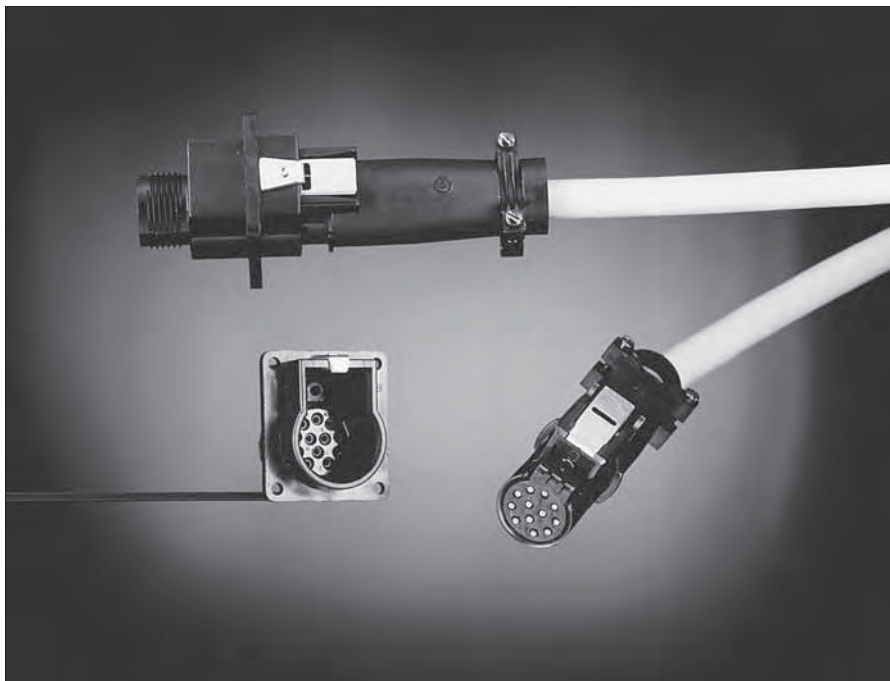
The BANTAMATE II cylindrical plastic connector has been designed for use in applications requiring a high number of mating cycles and rapid connections and disconnections. BANTAMATE II meets minimum durability requirements of **5000 mating/unmating cycles** by using a unique contact wiping system consisting of a lubricant saturated foam pad bonded to a spring loaded stripper plate within the receptacle or plug. On mating, the stripper plate is pushed deep into the connector wiping a thin film of lubricant onto the male contacts. A distinctive shape provides mating ease in blind or difficult to reach applications. Some typical applications would include test equipment, medical diagnostic equipment, or any of the hardware interconnections found in the modern electronic office.

### Features and benefits

- 5000 mating / unmating cycles
- Lubricated male contacts with spring actuated foam plate
- Quick and easy installation with latching mechanism
- Easy mating due to the positive polarisation, even in blind spots
- Unmated male contacts are protected by the spring actuated plate
- Available with 4, 12, 19, 30, and 46 contact positions.
- Applicable for front or rear panel mounting as well as free hanging applications
- UL recognized File nr.: E238675
- CSA certified LR54977

### Performance characteristics

Operating temperature: -55°C to +125°C  
Insulation



|                     |                              |
|---------------------|------------------------------|
| resistance:         | 5000 MΩ min.                 |
| Test potential:     | 2000 VAC                     |
| Durability:         | Min. 5000 matings cycles     |
| Vibration           | 5-50Hz, 0,5 dA; 8 hours axis |
| Thermal resistance: | 5 cycles -55°C to +105°C     |
| Thermal shock:      | 5 cycles -55°C to +105°C     |
| Humidity:           | 10 days at 85% RH, +85°C     |

### Construction

|                                   |                                  |
|-----------------------------------|----------------------------------|
| Connector body and strain relief: | Glass filled thermoplast UL94-V0 |
| Colour:                           | black                            |
| Locking latch and hook:           | Stainless steel, passivated      |
| Compression                       |                                  |
| Spring:                           | Music wire, Nickel plated        |
| Lubricating pad:                  | Polyurethane foam                |
| Rivet:                            | Brass, Tin plated                |
| Strain relief screws:             | Steel, Cadmium plated            |

### Contact accommodation

- "MBG" connectors accept TRIM TRIO size 16 removable snap-lock contacts (see contact section)
- Contacts to be ordered separately.

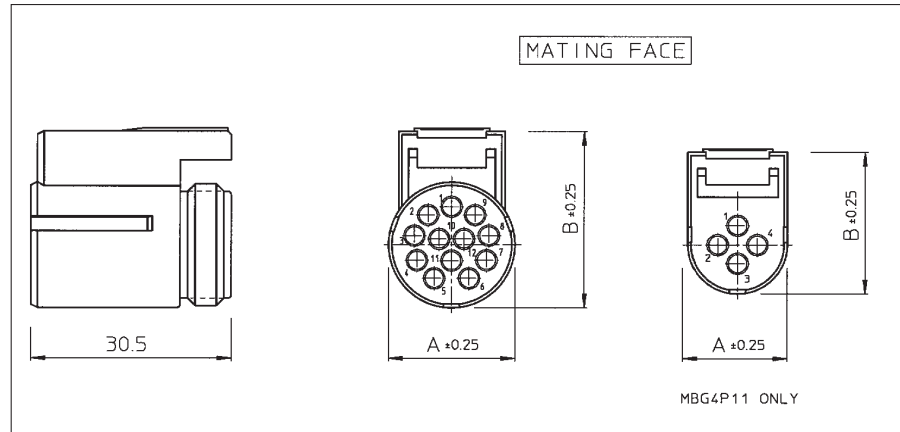
## How to order

| Connector family           | MBG                                                                                                                   | 12 | P | 1 |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------|----|---|---|
| <b>Insert arrangement:</b> | 4, 12, 19, 30, 46 positions                                                                                           |    |   |   |
| <b>Body variation:</b>     | <b>P:</b> Plug body<br><b>R:</b> Receptacle body<br><b>S:</b> Strain relief                                           |    |   |   |
| <b>Design variation:</b>   | <b>1:</b> Standard version with male contacts in receptacle<br><b>11:</b> Reversed version with male contacts in plug |    |   |   |

# 5000 Mating Cycle Plastic Connector

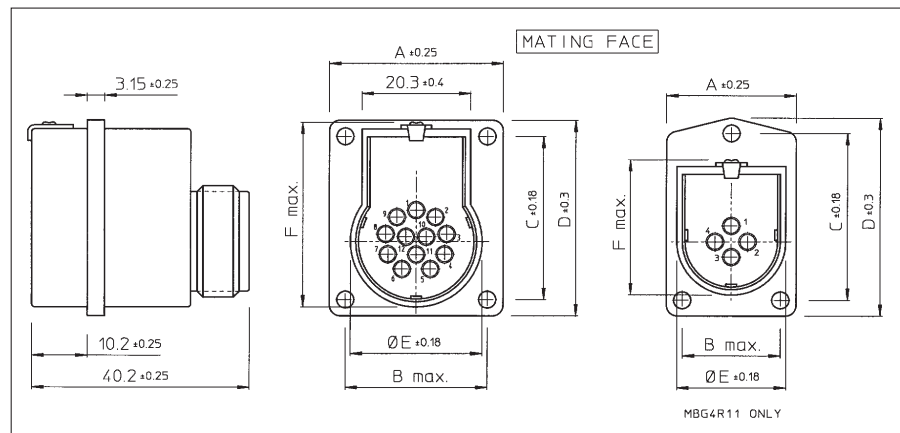


**Female plug connector for socket contacts (MBG--P1) - Standard version**  
**Male plug connector for pin contacts (MBG--P11) - Reversed version**



| Part number<br>Female plug | Part number<br>Male plug | $\varnothing A \pm 0.25$ | $B \pm 0.25$ |
|----------------------------|--------------------------|--------------------------|--------------|
| <b>MBG4P1</b>              | <b>MBG4P11</b>           | 15.08                    | 21.90        |
| <b>MBG12P1</b>             | <b>MBG12P11</b>          | 19.43                    | 27.25        |
| <b>MBG19P1</b>             | <b>MBG19P11</b>          | 22.83                    | 30.53        |
| <b>MBG30P1</b>             | <b>MBG30P11</b>          | 27.94                    | 35.51        |
| <b>MBG46P1</b>             | <b>MBG46P11</b>          | 34.42                    | 41.91        |

**Panel mounting male receptacle connector for pin contacts (MBG--R1) - Standard version**  
**Panel mounting female receptacle connector for socket contacts (MBG--R11) - Reversed version**

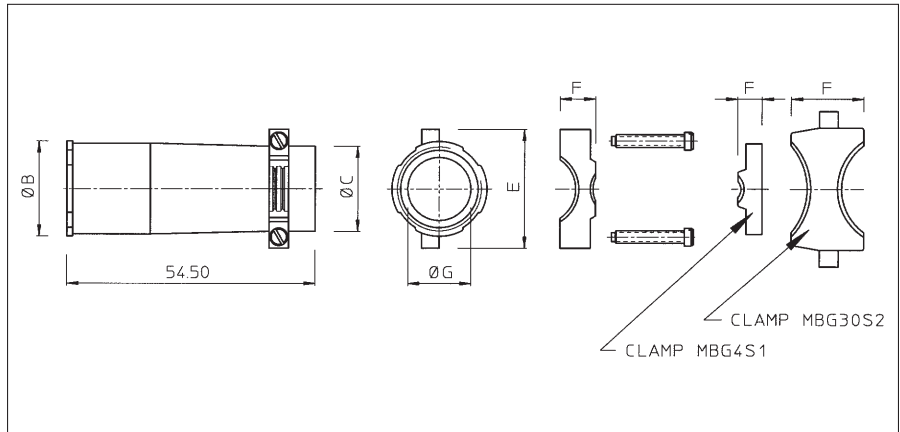


| Part number<br>Male receptacle | Part number<br>Female receptacle | $\varnothing A \pm 0.25$ | $B \text{ max.}$ | $C \pm 0.18$ | $D \pm 0.30$ | $\varnothing E \pm 0.18$ | $F \text{ max.}$ |
|--------------------------------|----------------------------------|--------------------------|------------------|--------------|--------------|--------------------------|------------------|
| <b>MBG4R1</b>                  | <b>MBG4R11</b>                   | 23.90                    | 18.08            | 31.45        | 37.36        | 20.07                    | 29.46            |
| <b>MBG12R1</b>                 | <b>MBG12R11</b>                  | 32.49                    | 26.54            | 30.76        | 36.86        | 24.64                    | 34.93            |
| <b>MBG19R1</b>                 | <b>MBG19R11</b>                  | 32.44                    | 26.54            | 34.04        | 40.13        | 27.86                    | 38.10            |
| <b>MBG30R1</b>                 | <b>MBG30R11</b>                  | 35.61                    | 28.65            | 38.00        | 44.91        | 33.10                    | 43.31            |
| <b>MBG46R1</b>                 | <b>MBG46R11</b>                  | 42.24                    | 35.13            | 46.94        | 54.05        | 39.70                    | 49.61            |

# 5000 Mating Cycle Plastic Connector

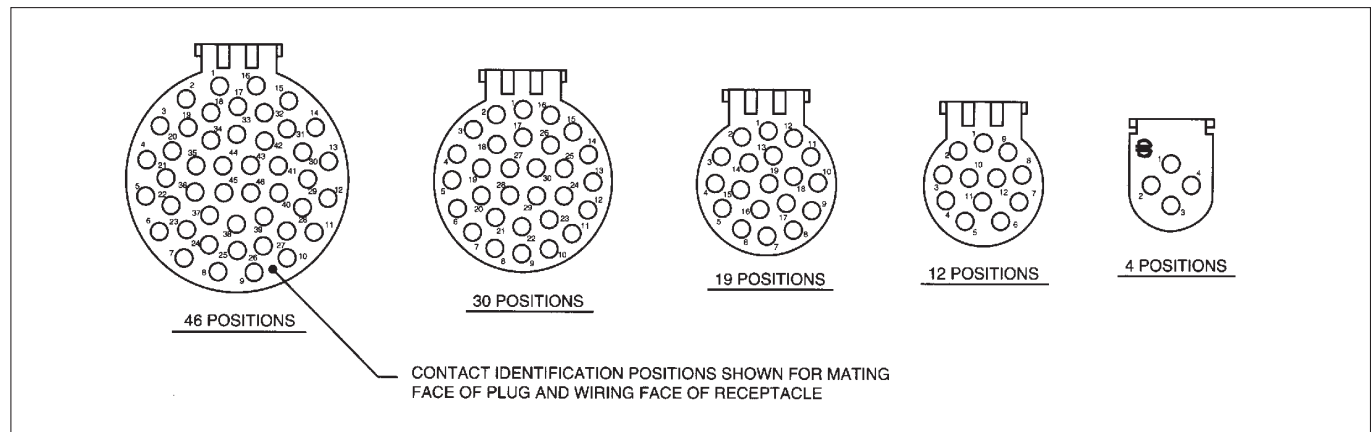


## Strain relief (MBG--S1)



| Part number    | Ø-C           | Ø-D  | E    | F    | Cable range Ø G<br>side A | Cable range Ø G<br>side B |
|----------------|---------------|------|------|------|---------------------------|---------------------------|
| <b>MBG4S1</b>  | 12.2          | 15.0 | 20.1 | 5.3  | 8.51/6.35                 | —                         |
| <b>MBG12S1</b> | 18.8          | 21.1 | 26.4 | 7.9  | 11.30/7.65                | 14.99/11.38               |
| <b>MBG19S1</b> | 21.3          | 24.4 | 29.0 | 9.4  | 13.08/8.66                | 17.53/13.12               |
| <b>MBG30S1</b> | 26.7          | 29.0 | 34.5 | 16.3 | 19.02/15.88               | 22.86/19.05               |
| <b>MBG30S2</b> | 26.7          | 29.0 | 34.5 | 15.9 | 12.67/10.01               | 15.85/12.70               |
| <b>MBG46S1</b> | Not available |      |      |      |                           |                           |

## Insert arrangements and moulded-in contact identification

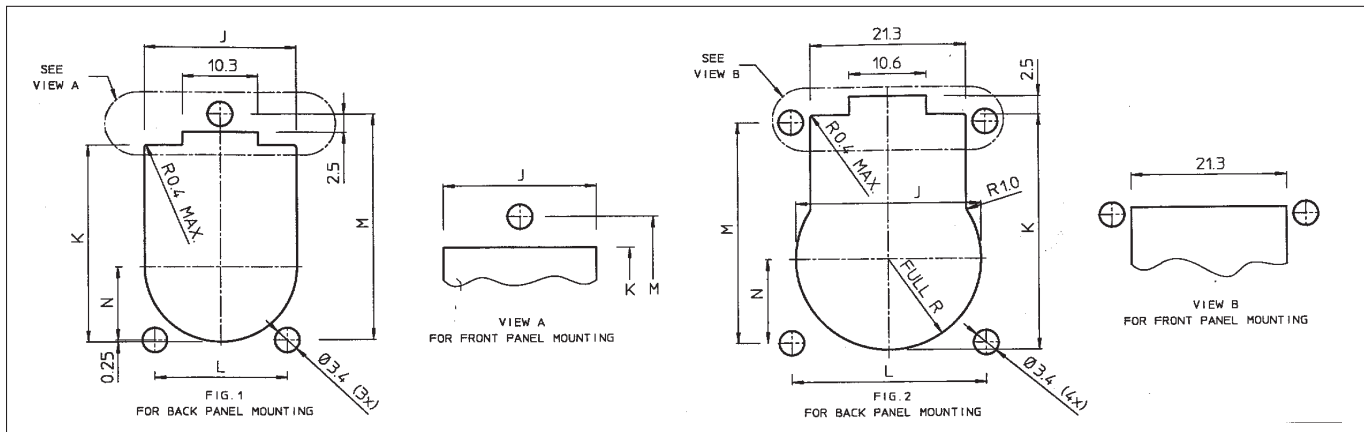


Contact identification positions shown are for mating face of plug and wiring face of receptacle.

# 5000 Mating Cycle Plastic Connector

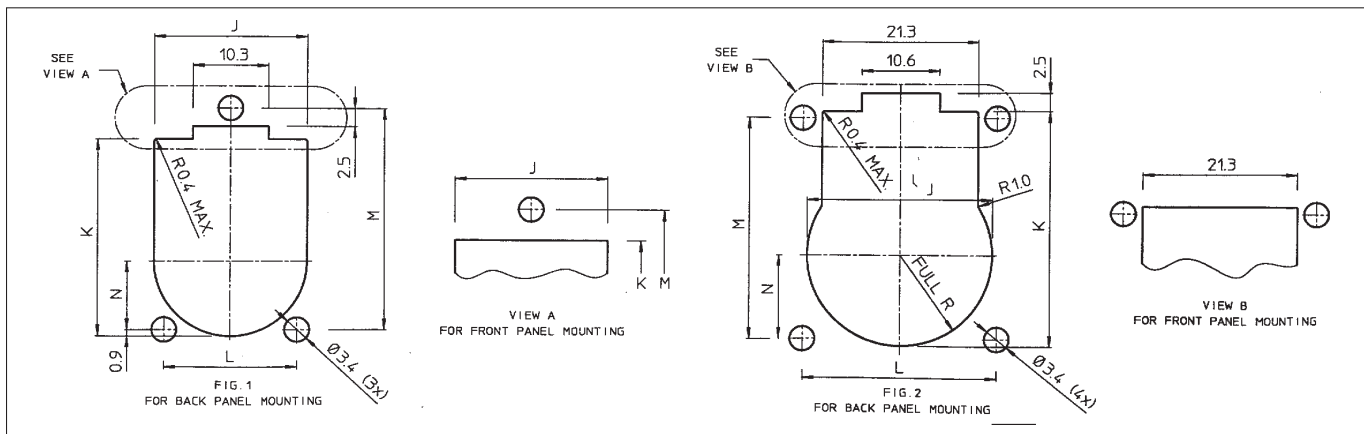


## Panel cut-out dimensions for receptacle - Standard version (MBG--R1)



| Part number | Fig. | J     | K     | L     | M     | N     |
|-------------|------|-------|-------|-------|-------|-------|
| MBG4R1      | 1    | 20.86 | 27.41 | 18.08 | 31.45 | 10.16 |
| MBG12R1     | 2    | 25.30 | 32.74 | 26.54 | 30.76 | 11.65 |
| MBG19R1     | 2    | 28.50 | 35.89 |       | 34.04 | 13.32 |
| MBG30R1     | 2    | 33.73 | 40.97 | 28.65 | 38.00 | 15.49 |
| MBG46R1     | 2    | 40.36 | 47.22 | 35.13 | 46.94 | 18.85 |

## Panel cut-out dimensions for receptacle - Reversed version (MBG--R11)

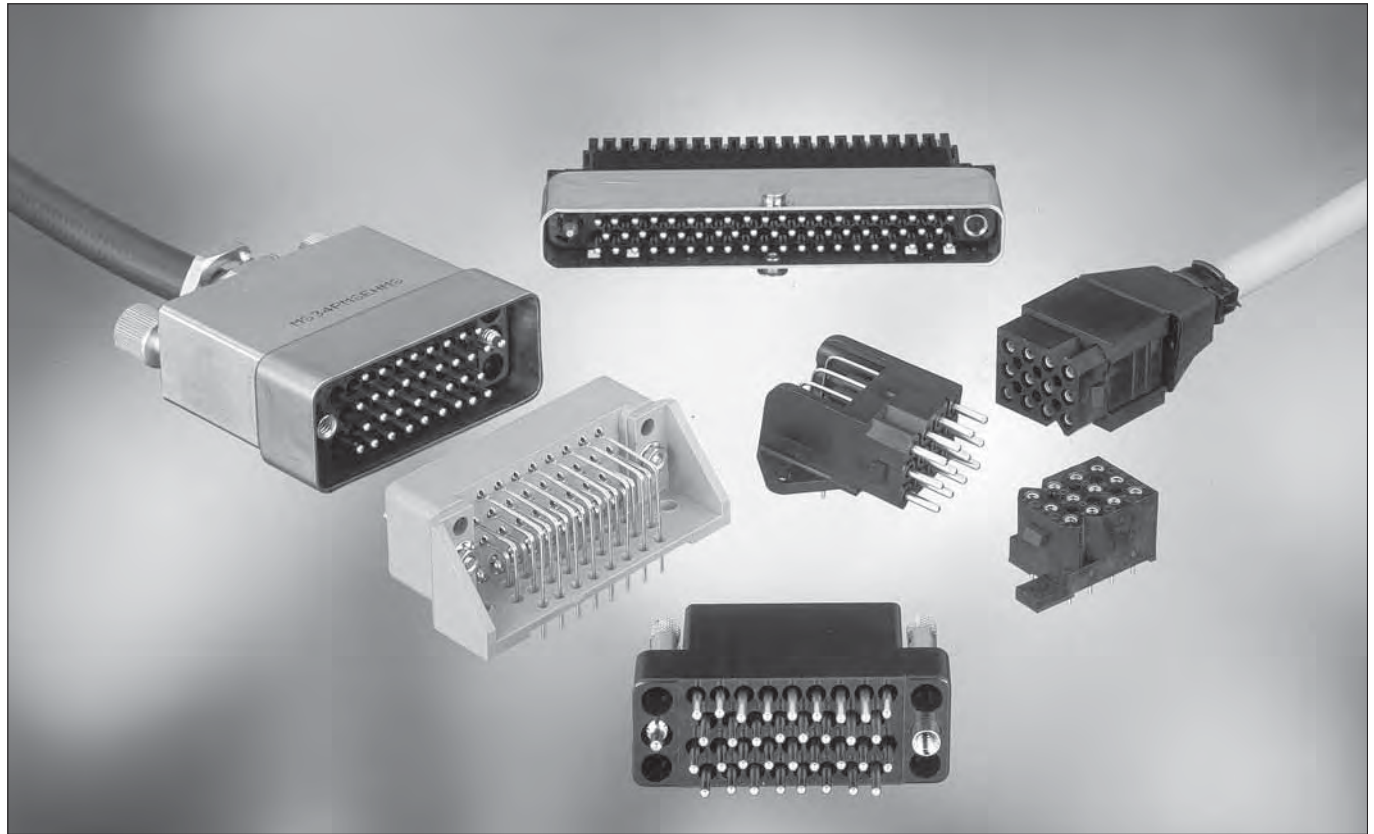


| Part number | Fig. | J     | K     | L     | M     | N     |
|-------------|------|-------|-------|-------|-------|-------|
| MBG4R11     | 1    | 20.86 | 27.41 | 18.08 | 31.45 | 10.16 |
| MBG12R11    | 2    | 25.30 | 32.74 | 26.54 | 30.76 | 11.65 |
| MBG19R11    | 2    | 28.50 | 35.89 |       | 34.04 | 13.32 |
| MBG30R11    | 2    | 33.73 | 40.97 | 28.65 | 38.00 | 15.49 |
| MBG46R11    | 2    | 40.36 | 47.22 | 35.13 | 46.94 | 18.85 |

# Rectangular



## Overview rectangular TRIM TRIO connectors



**Rectangular TRIM TRIO connectors are a wide and versatile range that are offered in many options from low cost plastic to top class metal solutions.**

This section gives an overview on available rectangular connectors for:

### **1. Connectors with jackscrew locking using size 16 contacts (1.6mm).**

- MSM – High performance cable connectors.
- MS0 – High performance boardmount connectors.
- V.35 – DTE/DCE interface connectors.

### **2. Connectors with lever locking using size 16 contacts (1.6mm).**

- MSG – low profile version.
- MB – Robust version.

### **3. Connectors with quick mating feature using size 16 contacts (1.6mm).**

- SMS – Cable connectors.
- SMS – Boardmount connectors.
- SMS – Low profile pinheader cable and boardmount connectors.

### **4. Mixed power / signal + heavy duty and drawer connectors using size 16 contacts (1.6mm).**

- A range of connectors with contact arrangements offered with a mix of signal and power contacts up to 26 A.
- Robust heavy duty connectors.
- Drawer connector.

[illegible]

# High Performance Hyfen Rectangular Cable Connectors



## MS-M SERIES

### Description

MSM rectangular connectors offers an extremely reliable, rugged, and versatile connection system . They are a range of multiway connectors available in 9 sizes from 9 to 75 positions. MS-M cable connectors can be offered with a full range of hardware and accessories. Guiding pins and sockets, turnable jackscrews, a variety of cable hoods, pin protection shrouds and discrimination pins make this connector range a truly versatile system.

### Features and benefits

- Connectors supplied pre-assembled except for panel mount versions.
- Available in 14-20-26-34-42-50-75 and 104 positions.
- **34 contact positions suitable for V.35 applications (see V.35 section)**
- Full range of accessories available including hoods, strain relief clamps, guide pins, jackscrews and pin protection shrouds.
- MS-M hyfen complies with NFC 93426 - HE 621-622 and MIL-C-28748 specifications.
- UL recognized File Nr.: E238675

### Performance characteristics

Operating temperature: -55°C to +125°C



|                        |                              |
|------------------------|------------------------------|
| Insulation resistance: | 5000 MΩ min.                 |
| Test potential:        | 2000 VAC                     |
| Durability:            | 500 matings and unmatings.   |
| Vibration resistance   | Per MIL-STD 202 method 204   |
| Shock:                 | Per MIL-C-STD 202 method 207 |

### Construction

Connector Material : Glass filled Phenolic  
Flammability rating : UL94-V0

|                      |                                                                                 |
|----------------------|---------------------------------------------------------------------------------|
| Hoods:               | Aluminium alloy<br>gold chromate or anodized<br>Polyamide 6.6 - black - UL94-V2 |
| Cable clamps:        | Stainless steel                                                                 |
| Polarizing hardware: | Brass nickel plated                                                             |
| Shrouds:             | Aluminium alloy<br>gold chromate or anodized                                    |

### Contact accommodation

- "MS-M" Hyfen connectors accept TRIM TRIO size 16 removable snap-lock contacts (see contact section)
- Contacts to be ordered separately.

## How to order

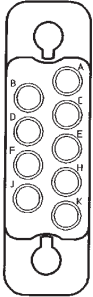
|                                  |                                                                             |          |        |        |            |         |          |          |
|----------------------------------|-----------------------------------------------------------------------------|----------|--------|--------|------------|---------|----------|----------|
| Connector family                 | MS<br>MS                                                                    | 34<br>34 | P<br>P | M<br>M | 124<br>120 | S<br>S- | GE<br>-- | 16<br>-- |
| Contact arrangement              |                                                                             |          |        |        |            |         |          |          |
| Type of housing:                 | P: plug body for male contacts<br>R: Receptacle housing for female contacts |          |        |        |            |         |          |          |
| N° 16 contact                    |                                                                             |          |        |        |            |         |          |          |
| Design variation                 |                                                                             |          |        |        |            |         |          |          |
| Pin protection shroud            |                                                                             |          |        |        |            |         |          |          |
| GE = plastic turnable jackscrews |                                                                             |          |        |        |            |         |          |          |
| Code for special variations      |                                                                             |          |        |        |            |         |          |          |

# High Performance Hyfen Rectangular Cable Connectors

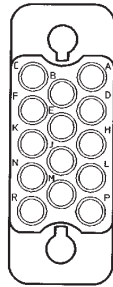


## Contact arrangement

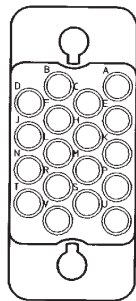
9 POS.



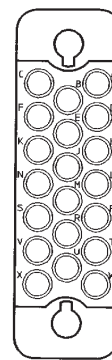
14 POS.



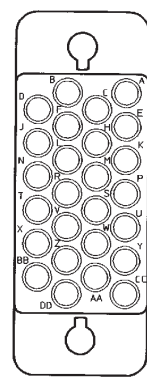
18 POS.



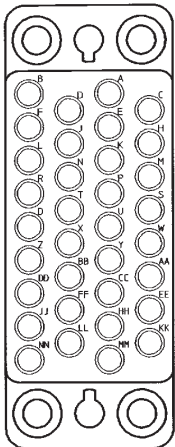
20 POS.



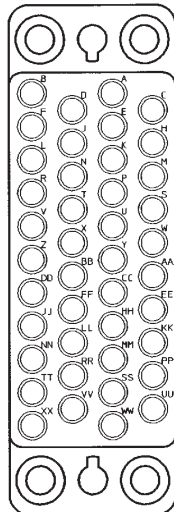
26 POS.



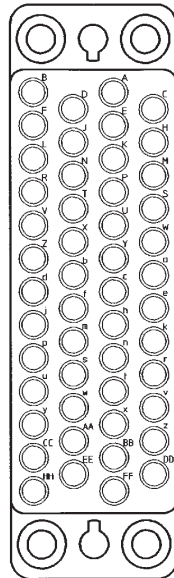
34 POS.



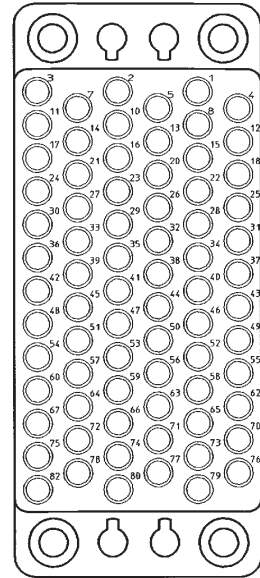
42 POS.



50 POS.



75 POS.



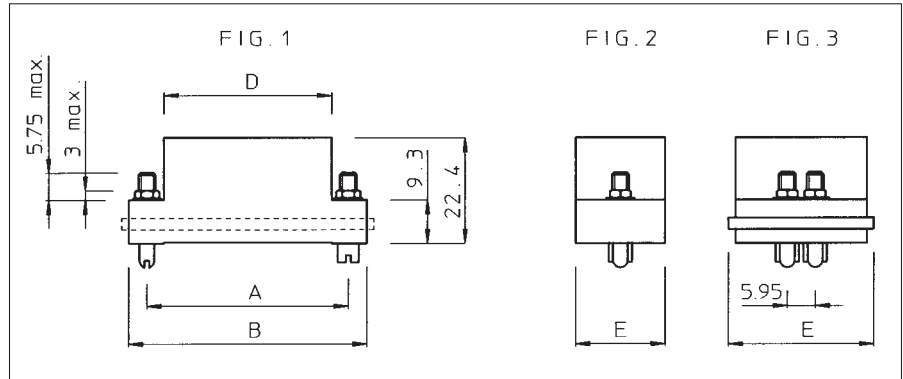
The contact position identification letters or numbers shown in the above diagrams apply to MS-M plug and receptacle connectors. Dimensionally, corresponding types of plug and receptacle mouldings are the same and differ only in that the contact position lettering/numbering of the plug (MS-PM) is a mirror image of that of the receptacle (MS-RM). Note that pins and/or sockets can be used in either the plug or receptacle moulding.

Note: Contact identification is shown for wiring face of the receptacle and mating face at plug connector.

# High Performance Hyfen Rectangular Cable Connectors



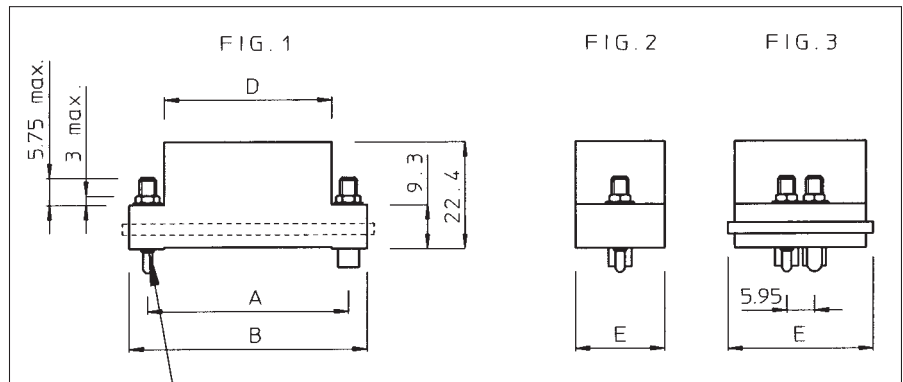
## Panel mount connectors with guiding hardware (MS--M1GE00)



| Connector size | Part number                    |                                        | A     | B     | D     | E     | Fig. |
|----------------|--------------------------------|----------------------------------------|-------|-------|-------|-------|------|
|                | Plug version for male contacts | Receptacle version for female contacts |       |       |       |       |      |
| 9              | MS9PM1GE00                     | MS9RM1GE00                             | 25.4  | 33.3  | 20.5  | 9.5   | 1-2  |
| 14             | MS14PM1(*)GE00                 | MS14RM1(*)GE00                         | 23.8  | 31.8  | 20.1  | 11.7  |      |
| 18             | MS18PM1GE00                    | MS18RM1GE00                            | 25.4  | 33.3  | 20.5  | 14.2  |      |
| 20             | MS20PM1(*)GE00                 | MS20RM1(*)GE00                         | 31.75 | 39.65 | 27.95 | 11.7  |      |
| 26             | MS26PM1(*)GE00                 | MS26RM1(*)GE00                         | 33.3  | 41.3  | 27.2  | 15.0  |      |
| 34             | MS34PM1(*)GE00                 | MS34RM1(*)GE00                         | 42.8  | 50.8  | 35.7  | 19.05 |      |
| 42             | MS42PM1(*)GE00                 | MS42RM1(*)GE00                         | 50.55 | 58.65 | 42.95 | 18.95 |      |
| 50             | MS50PM1(*)GE00                 | MS50RM1(*)GE00                         | 57.95 | 65.85 | 50.85 | 18.95 | 1-3  |
| 75             | MS75PM1(*)GE00                 | MS75RM1(*)GE00                         |       |       |       | 28.1  |      |

(\*) Complete part number with "S" for connector with protective shroud.

## Panel mount connectors with fixed jackscrew hardware (MS--M58GE00)



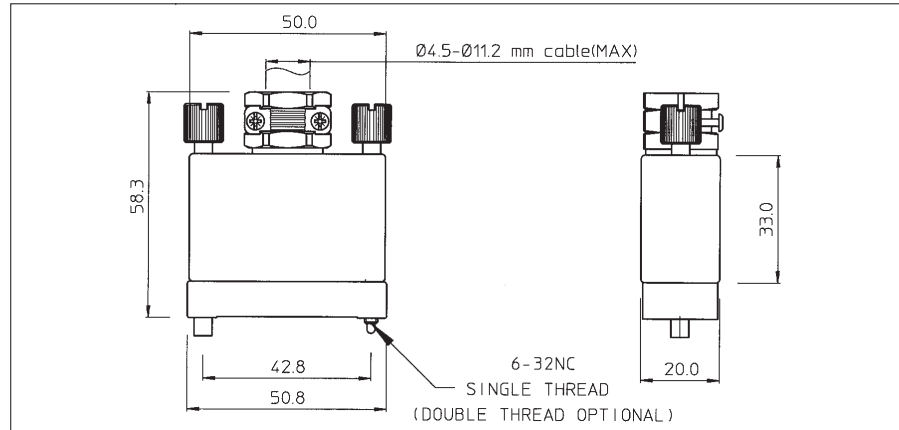
| Connector size | Part number                    |                                        | A     | B     | D     | E     | Fig. |
|----------------|--------------------------------|----------------------------------------|-------|-------|-------|-------|------|
|                | Plug version for male contacts | Receptacle version for female contacts |       |       |       |       |      |
| 9              | MS9PM58GE00                    | MS9RM58GE00                            | 25.4  | 33.3  | 20.5  | 9.5   | 1-2  |
| 14             | MS14PM58(*)GE00                | MS14RM58(*)GE00                        | 23.8  | 31.8  | 20.1  | 11.7  |      |
| 18             | MS18PM58GE00                   | MS18RM58GE00                           | 25.4  | 33.3  | 20.5  | 14.2  |      |
| 20             | MS20PM58(*)GE00                | MS20RM58(*)GE00                        | 31.75 | 39.65 | 27.95 | 11.7  |      |
| 26             | MS26PM58(*)GE00                | MS26RM58(*)GE00                        | 33.3  | 41.3  | 27.2  | 15.0  |      |
| 34             | MS34PM58(*)GE00                | MS34RM58(*)GE00                        | 42.8  | 50.8  | 35.7  | 19.05 |      |
| 42             | MS42PM58(*)GE00                | MS42RM58(*)GE00                        | 50.55 | 58.65 | 42.95 | 18.95 |      |
| 50             | MS50PM58(*)GE00                | MS50RM58(*)GE00                        | 57.95 | 65.85 | 50.85 | 18.95 | 1-3  |
| 75             | MS75PM58(*)GE00                | MS75RM58(*)GE00                        |       |       |       | 28.1  |      |

(\*) Complete part number with "S" for connector with protective shroud.

# High Performance Hyfen Rectangular Cable Connectors



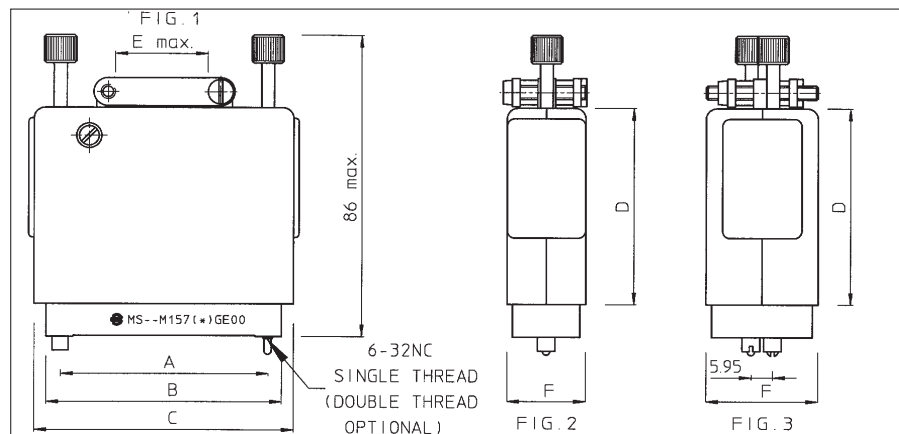
## MS34 Cable connector with 1 piece metal suitcase hood (MS34--MEHM)



| Part number                    |                                        | Description                                                                         |
|--------------------------------|----------------------------------------|-------------------------------------------------------------------------------------|
| Plug version for male contacts | Receptacle version for female contacts |                                                                                     |
| <b>MS34PMEHM</b>               | <b>MS34RMEHM</b>                       | Anodised hood, plastic strain relief and turnable hardware.                         |
| <b>MS34PMSEHM</b>              | <b>MS34RMSEHM</b>                      | Shielded version with nickel plated hood, metal strain relief and turnable hardware |
| <b>MS34PMEHMMET1</b>           | <b>MS34RMEHMMET1</b>                   | Version with spring loaded jackscrews                                               |

(\*) Complete part number with "S" for connector with protective shroud.

## Cable connector with Alu die cast hood (MS-M157GE00)



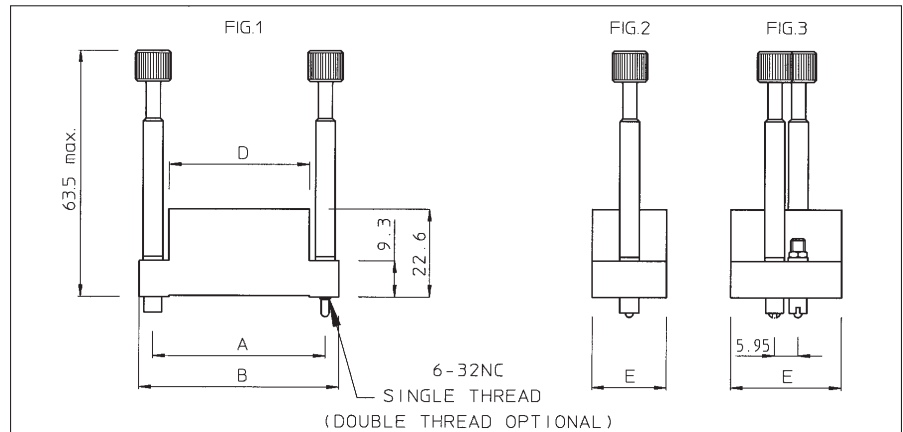
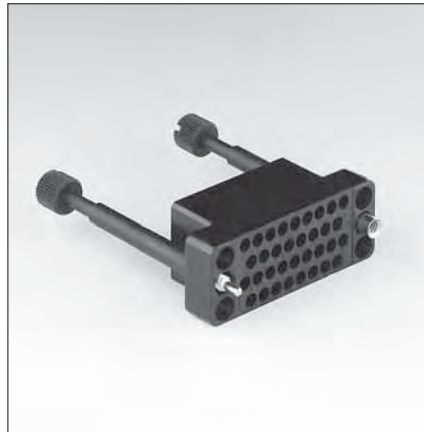
| Connector size | Part number                    |                                        | A     | B     | C    | D    | E max. | F    | Fig. |
|----------------|--------------------------------|----------------------------------------|-------|-------|------|------|--------|------|------|
|                | Plug version for male contacts | Receptacle version for female contacts |       |       |      |      |        |      |      |
| <b>50</b>      | <b>MS50PM157GE00</b>           | <b>MS50RM157GE00</b>                   | 57.95 | 65.85 | 73.0 | 56.0 | 20.0   | 22.2 | 1-2  |
| <b>75</b>      | <b>MS75PM157GE00</b>           | <b>MS75RM157GE00</b>                   | 57.95 | 65.85 | 73.0 | 56.0 | 25.0   | 31.2 | 1-3  |

(\*) Complete part number with "S" for connector with protective shroud.

# High Performance Hyfen Rectangular Cable Connectors



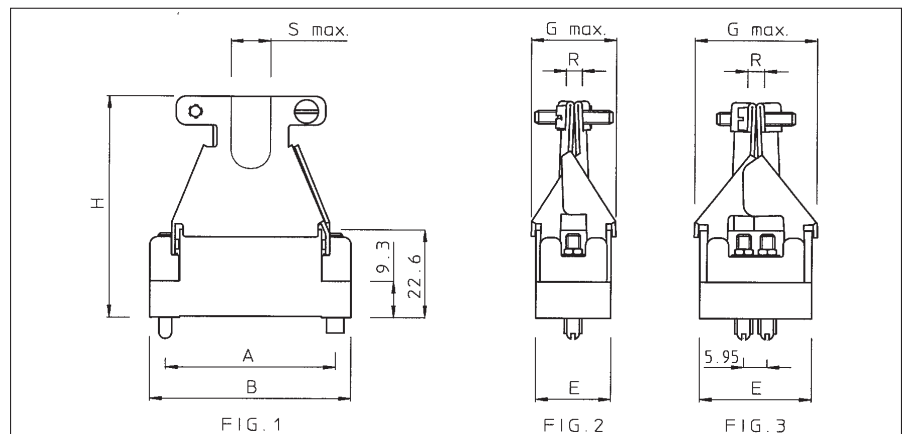
## Cable connector without strain relief and turnable jackscrew hardware (MS-M007GE00)



| Connector size | Plug version for male contacts | Receptacle version for female contacts | A     | B     | D     | E     | Fig. |
|----------------|--------------------------------|----------------------------------------|-------|-------|-------|-------|------|
| 9              | MS9PM007GE00                   | MS9RM007GE00                           | 25.4  | 33.3  | 20.5  | 9.5   | 1-2  |
| 14             | MS14PM007(*)GE00               | MS14RM007(*)GE00                       | 23.8  | 31.8  | 20.1  | 11.7  |      |
| 18             | MS18PM007GE00                  | MS18RM007GE00                          | 25.4  | 33.3  | 20.5  | 14.2  |      |
| 20             | MS20PM007(*)GE00               | MS20RM007(*)GE00                       | 31.75 | 39.65 | 27.95 | 11.7  |      |
| 26             | MS26PM007(*)GE00               | MS26RM007(*)GE00                       | 33.3  | 41.3  | 27.2  | 15.0  |      |
| 34             | MS34PM007(*)GE00               | MS34RM007(*)GE00                       | 42.8  | 50.8  | 35.7  | 19.05 |      |
| 42             | MS42PM007(*)GE00               | MS42RM007(*)GE00                       | 50.55 | 58.65 | 42.95 | 18.95 |      |
| 50             | MS50PM007(*)GE00               | MS50RM007(*)GE00                       | 57.95 | 65.85 | 50.85 | 18.95 | 1-3  |
| 75             | MS75PM007(*)GE00               | MS75RM007(*)GE00                       |       |       |       | 28.1  |      |

(\*) Complete part number with "S" for connector with protective shroud.

## Cable connector with metal butterfly hood and guiding hardware (MS--M120GE00)



| Connector size | Part number                    |                                        | A    | B    | E     | G max. | H    | S max. | R max. | Fig. |
|----------------|--------------------------------|----------------------------------------|------|------|-------|--------|------|--------|--------|------|
|                | Plug version for male contacts | Receptacle version for female contacts |      |      |       |        |      |        |        |      |
| 34             | MS34PM120(*)GE00               | MS34RM120(*)GE00                       | 42.8 | 50.8 | 19.05 | 22.2   | 56.7 | 10     | 13     | 1-2  |

(\*) Complete part number with "S" for connector with protective shroud.

## This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

# High Performance Rectangular Boardmount Connectors



## MSO SERIES

### Description

The MSO series, derived from the MSM series, is for straight or right-angled application on a printed circuit board. Pre-assembled MSO connectors with pin or socket N(16 contacts are intermateable with the existing MSM rectangular cable connectors.

The N° 16 TRIM TRIO .0625" (1.6mm) diameter contacts are available in either solid machined or stamped and formed versions.

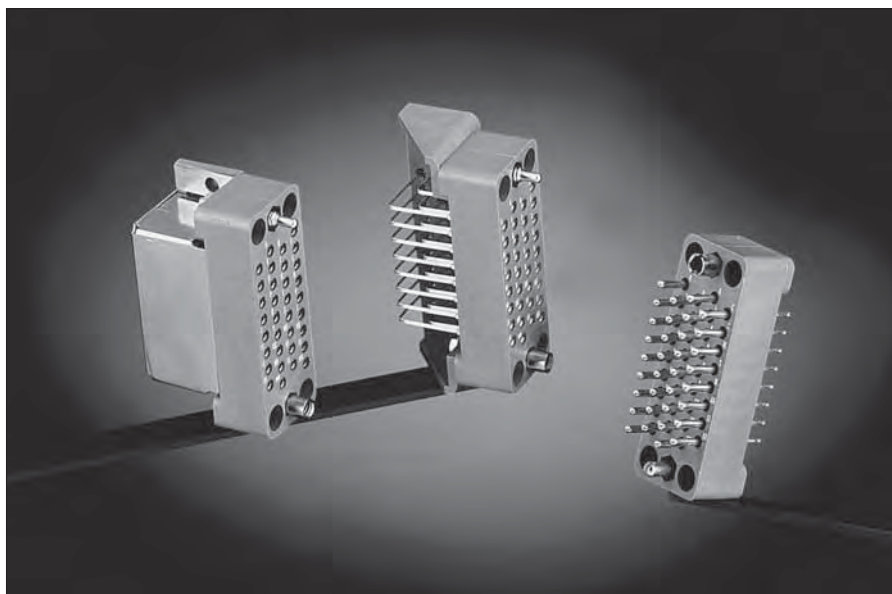
The polarizing hardware can be delivered in either guiding or jackscrew versions.

### Features and benefits

- Connectors supplied pre-assembled with dip solder contacts.
- Contacts available in solid machined or stamped and formed version.
- Available in 9-18-34-50-75 positions.
- For right-angled versions, there is a choice of 9-18 and 34 contact positions.
- 34 contact positions suitable for V.35 applications (see section V.35)
- Polarising hardware prevent mismatching.
- UL94-V0 rated thermoplast.

### Performance characteristics

|                        |                                                             |
|------------------------|-------------------------------------------------------------|
| Operating temperature: | -55°C to +125°C                                             |
| Current rating:        | 5 Amp for stamped contacts<br>7.5 Amp for machined contacts |
| Contact resistance:    | ≤ 3 mΩ                                                      |
| Insulation resistance: | 5000 M min.                                                 |
| Test potential:        | 2000 VAC                                                    |
| Durability:            | 500 matings and unmatings.                                  |



### Construction

Connector Material : Glass filled polysulfone  
Flammability rating : UL94-V0

Polarizing hardware: Brass nickel plated

Contacts: High conductive copper alloy

### Plating table

Plating for solid machined contacts:

No digit (std) = Min. 0.4 μ Gold all over,  
over Nickel.

T = 3 - 5μ Tin all over

Plating for Stamped and formed contacts :

K9 (std) = Min. 0.4μ Gold in contact area,  
3 - 5μ SnPb on solder tail.

T = 3 - 5μ Tin all over

### Intermateability

- "MSO" with pre-assembled contacts are intermateable with the "MSM" rectangular cable connectors equipped with TRIM TRIO crimp-type removable snap-lock contacts.

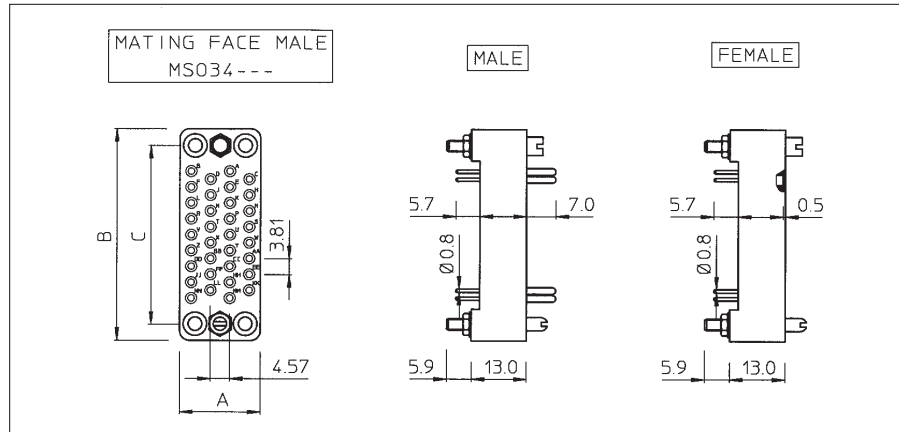
## How to order

| Connector family    |                                                                                          | MSO | 34 | M | R | G | 58 | SE1 | K9 |
|---------------------|------------------------------------------------------------------------------------------|-----|----|---|---|---|----|-----|----|
| Contact arrangement |                                                                                          |     |    |   |   |   |    |     |    |
| N° 16 contacts      |                                                                                          |     |    |   |   |   |    |     |    |
| Type of housing     | <b>P:</b> Plug body with male contacts<br><b>R:</b> Receptacle body with female contacts |     |    |   |   |   |    |     |    |
| Contact termination | <b>K:</b> straight dipsolder<br><b>G:</b> Right angle dipsolder                          |     |    |   |   |   |    |     |    |
| Type of hardware    | <b>1:</b> Guide pin and socket<br><b>58:</b> Threaded jackscrew pin and socket           |     |    |   |   |   |    |     |    |
| Design variation    | <b>E1:</b> Solid machined contacts<br><b>SE1:</b> stamped and formed contacts            |     |    |   |   |   |    |     |    |
| Plating indication  |                                                                                          |     |    |   |   |   |    |     |    |

# High Performance Rectangular Boardmount Connectors



## Straight boardmount with guiding hardware (MSO--M-K1--)



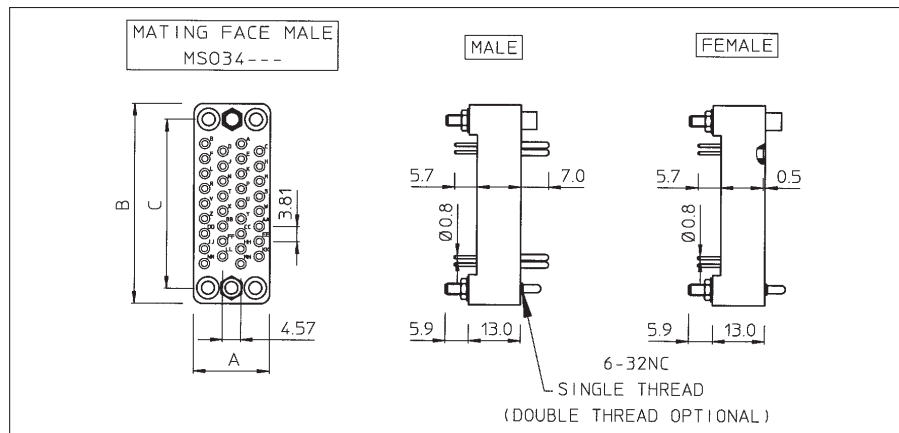
| connector<br>size | Part number                             |             |                                             |                | A    | B    | C    |
|-------------------|-----------------------------------------|-------------|---------------------------------------------|----------------|------|------|------|
|                   | Version with<br>solid machined contacts |             | Version with<br>stamped and formed contacts |                |      |      |      |
|                   | male                                    | female      | male                                        | female         |      |      |      |
| 9                 | MSO9MPK1E1                              | MSO9MRK1E1  | MSO9MPK1SE1K9                               | MSO9MRK1SE1K9  | 9.5  | 33.3 | 25.4 |
| 18                | MSO18MPK1E1                             | MSO18MRK1E1 | MSO18MPK1SE1K9                              | MSO18MRK1SE1K9 | 15.2 |      |      |
| 34                | MSO34MPK1E1                             | MSO34MRK1E1 | MSO34MPK1SE1K9                              | MSO34MRK1SE1K9 | 19.0 | 50.8 | 42.8 |
| 50                | MSO50MPK1E1                             | MSO50MRK1E1 | MSO50MPK1SE1K9                              | MSO50MRK1SE1K9 | 18.9 | 65.8 | 57.9 |
| 75                | MSO75MPK1E1                             | MSO75MRK1E1 | MSO75MPK1SE1K9                              | MSO75MRK1SE1K9 | 19.4 |      |      |

For other platings: See plating table.

Other solder tail lengths on request

Selective loading on request

## Straight boardmount with jackscrew hardware (MSO--M-K58--)



| connector<br>size | Part number                             |              |                                             |                 | A    | B    | C    |
|-------------------|-----------------------------------------|--------------|---------------------------------------------|-----------------|------|------|------|
|                   | Version with<br>solid machined contacts |              | Version with<br>stamped and formed contacts |                 |      |      |      |
|                   | male                                    | female       | male                                        | female          |      |      |      |
| 9                 | MSO9MPK58E1                             | MSO9MRK58E1  | MSO9MPK58SE1K9                              | MSO9MRK58SE1K9  | 9.5  | 33.3 | 25.4 |
| 18                | MSO18MPK58E1                            | MSO18MRK58E1 | MSO18MPK58SE1K9                             | MSO18MRK58SE1K9 | 15.2 |      |      |
| 34                | MSO34MPK58E1                            | MSO34MRK58E1 | MSO34MPK58SE1K9                             | MSO34MRK58SE1K9 | 19.0 | 50.8 | 42.8 |
| 50                | MSO50MPK58E1                            | MSO50MRK58E1 | MSO50MPK58SE1K9                             | MSO50MRK58SE1K9 | 18.9 | 65.8 | 57.9 |
| 75                | MSO75MPK58E1                            | MSO75MRK58E1 | MSO75MPK58SE1K9                             | MSO75MRK58SE1K9 | 19.4 |      |      |

For other platings: See plating table.

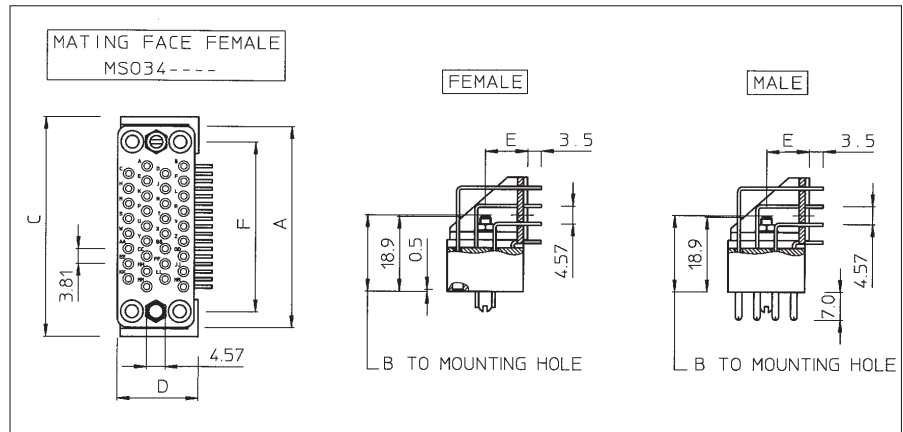
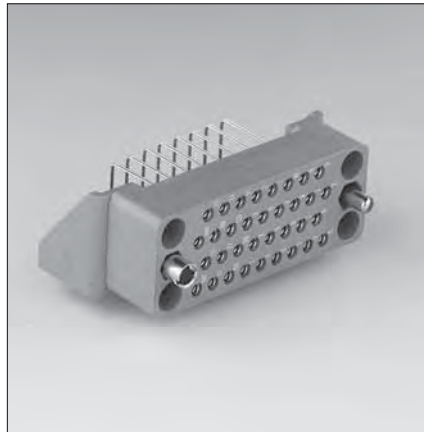
Other solder tail lengths on request

Selective loading on request

# High Performance Rectangular Boardmount Connectors



## Right angle boardmount with guiding hardware (MSO--M-G1--)



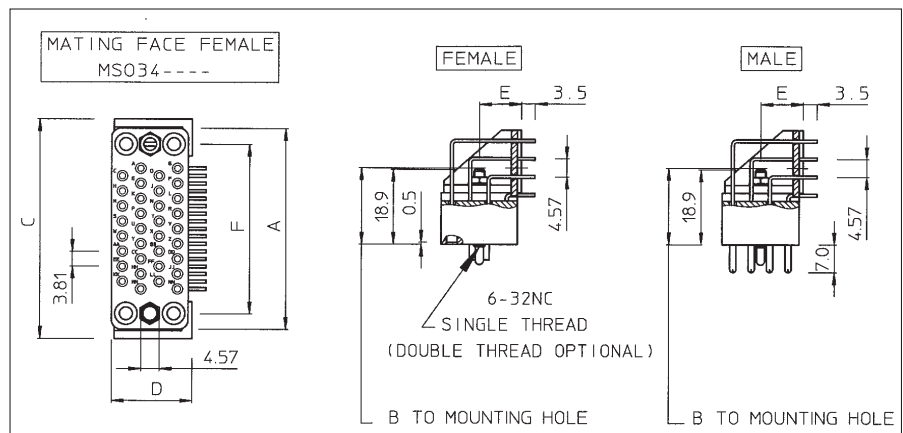
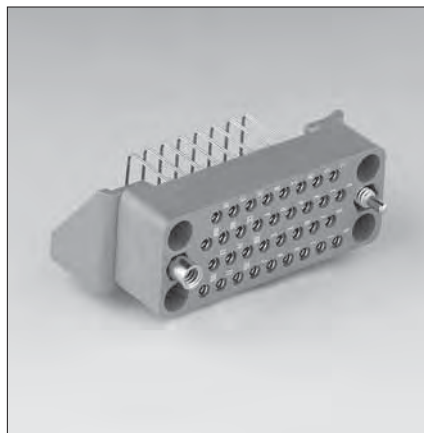
| connector size | Version with solid machined contacts |             | Version with stamped and formed contacts |                | A    | B    | C    | D    | E    | F    |
|----------------|--------------------------------------|-------------|------------------------------------------|----------------|------|------|------|------|------|------|
|                | male                                 | female      | male                                     | female         |      |      |      |      |      |      |
| 9              | MSO9MPG1E1                           | MSO9MRG1E1  |                                          |                | 33.3 | 23.0 | 38.0 | 16.0 | 10.0 | 25.4 |
| 18             | MSO18MPG1E1                          | MSO18MRG1E1 |                                          |                |      |      |      | 18.0 |      |      |
| 34             | MSO34MPG1E1                          | MSO34MRG1E1 | MSO34MPG1SE1K9                           | MSO34MRG1SE1K9 | 50.8 | 19.3 | 55.5 | 20.5 | 10.5 | 42.8 |

For other platings: See plating table.

Other solder tail lengths on request

Selective loading on request

## Right angle boardmount with jackscrew hardware (MSO--M-G58--)



| connector size | Version with solid machined contacts |              | Version with stamped and formed contacts |                 | A    | B    | C    | D    | E    | F    |
|----------------|--------------------------------------|--------------|------------------------------------------|-----------------|------|------|------|------|------|------|
|                | male                                 | female       | male                                     | female          |      |      |      |      |      |      |
| 9              | MSO9MPG58E1                          | MSO9MRG58E1  |                                          |                 | 33.3 | 23.0 | 38.0 | 16.0 | 10.0 | 25.4 |
| 18             | MSO18MPG58E1                         | MSO18MRG58E1 |                                          |                 |      |      |      | 18.0 |      |      |
| 34             | MSO34MPG58E1                         | MSO34MRG58E1 | MSO34MPG58SE1K9                          | MSO34MRG58SE1K9 | 50.8 | 19.3 | 55.5 | 20.5 | 10.5 | 42.8 |

For other platings: See plating table.

Other solder tail lengths on request

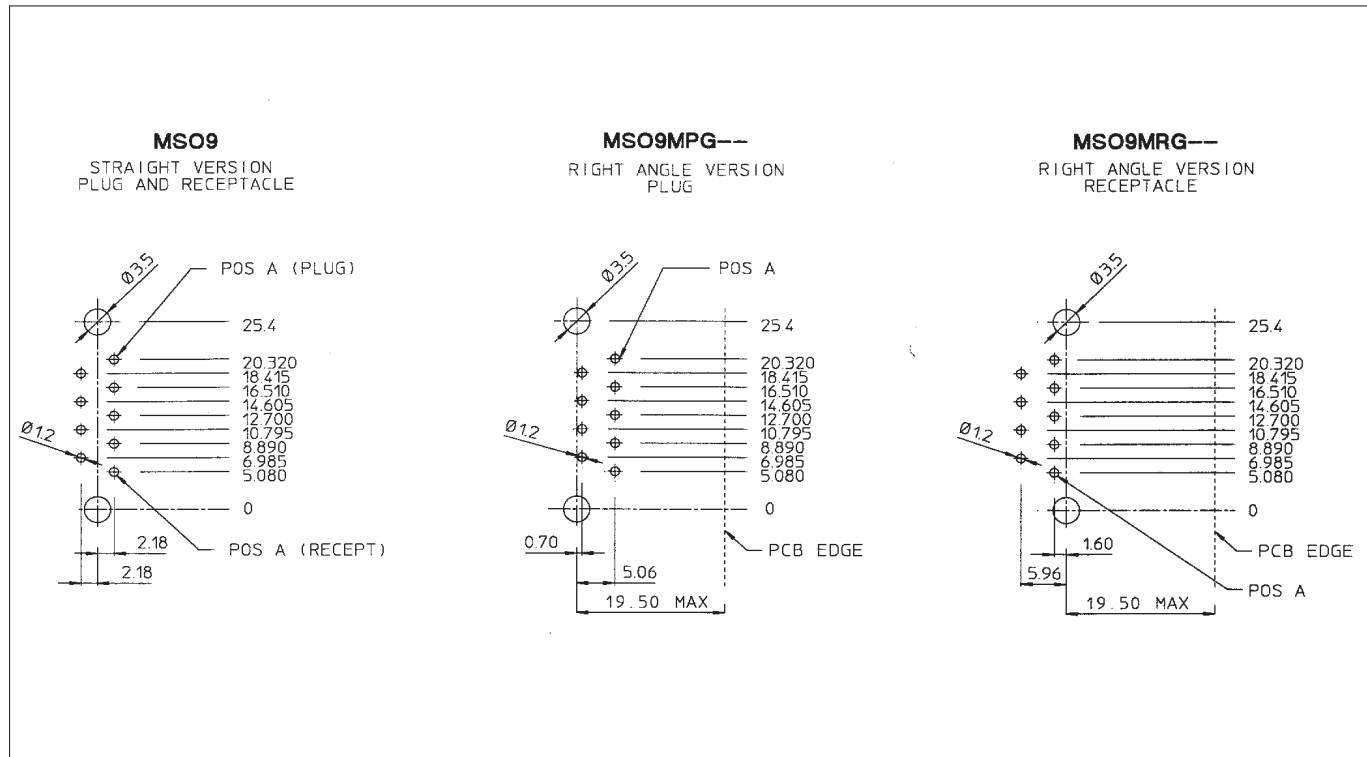
Selective loading on request

# High Performance Rectangular Boardmount Connectors

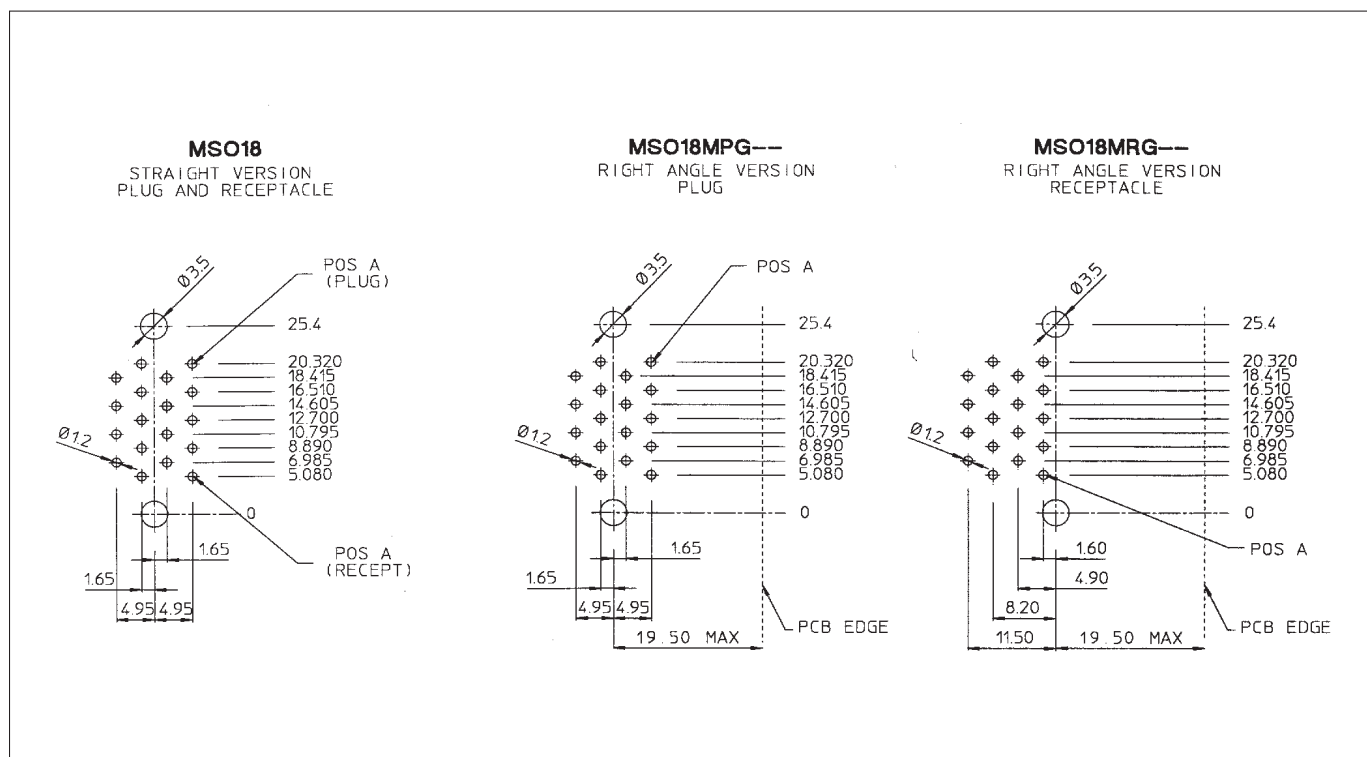


## MSO recommended drilling hole pattern

### Size 9



### Size 18

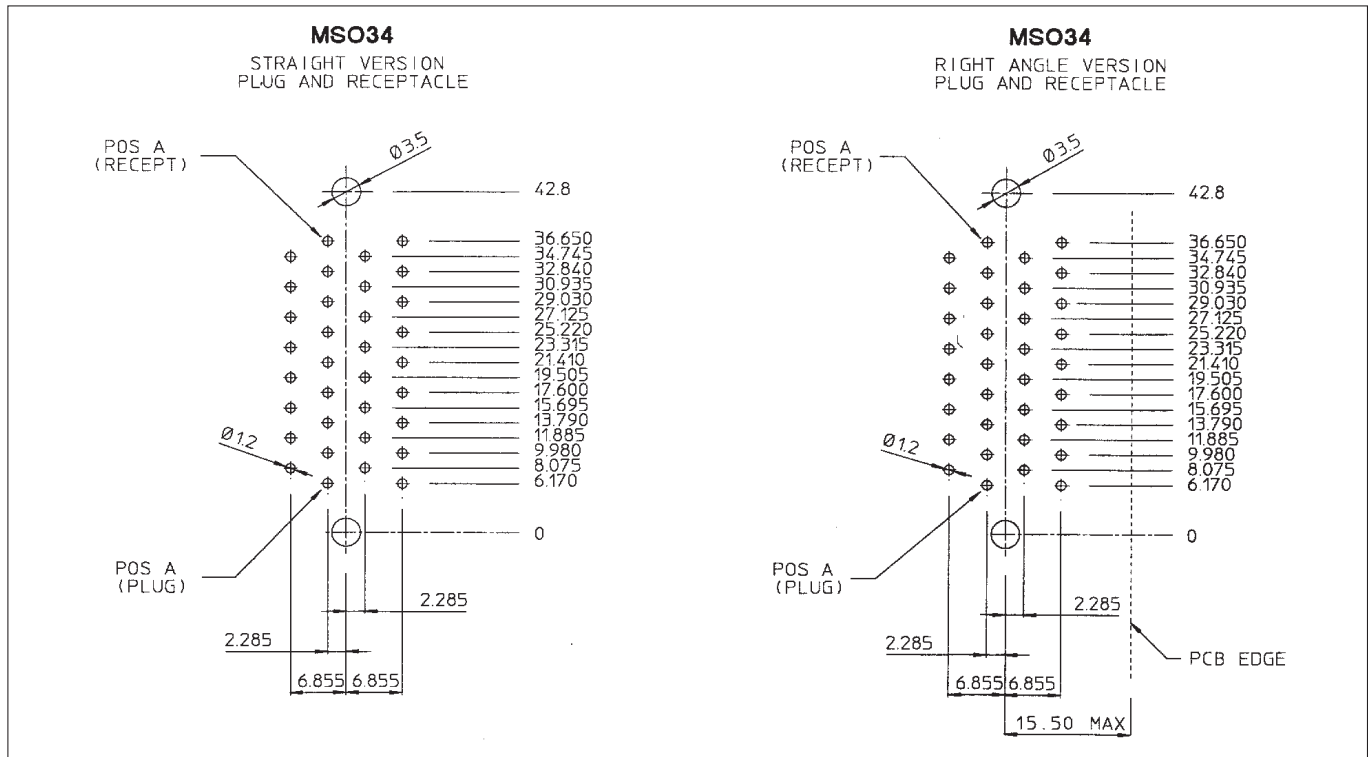


# High Performance Rectangular Boardmount Connectors

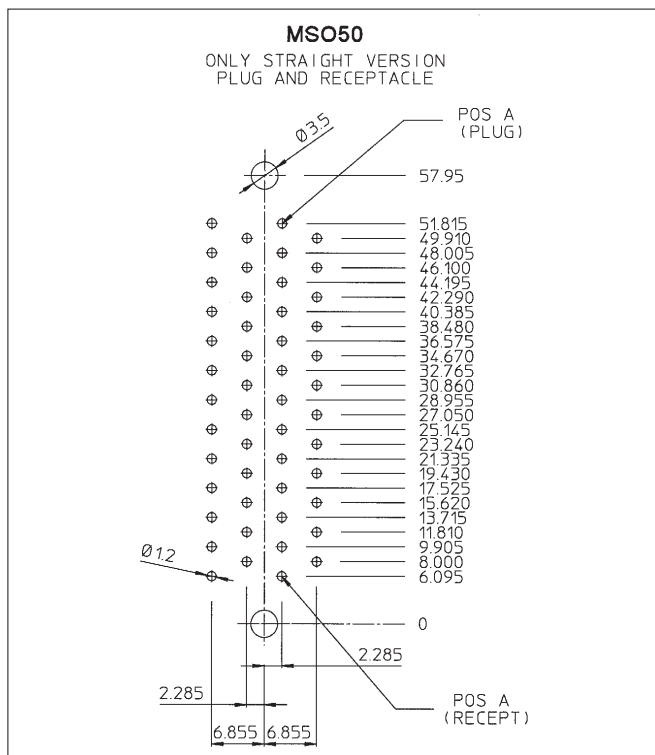


## MSO recommended drilling hole pattern

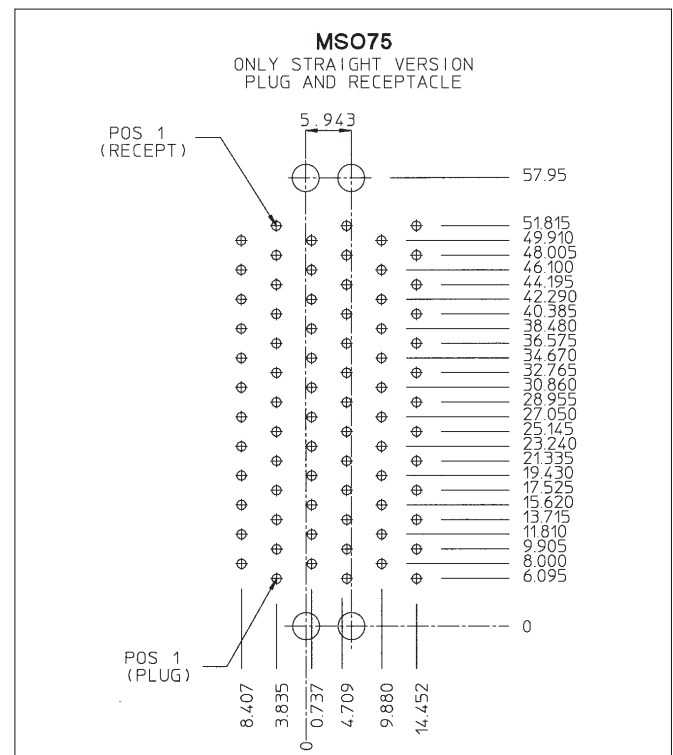
### Size 34



### Size 50



### Size 75



[illegible]

# V.35 - Interface connectors



## V.35 DTE/DCE Interface connectors

### Description

The Telecommunications Standardization Sector TSS V.35, formerly CCITT V.35 is the international standard termed "Data Transmission at 48 Kbps using 60-108 Khz Group-Band Circuits. It makes use of a 34 contact connection system specially designed to be used for DTE/DCE that interface to high speed digital carriers found in computer, modem and telecommunication industries.

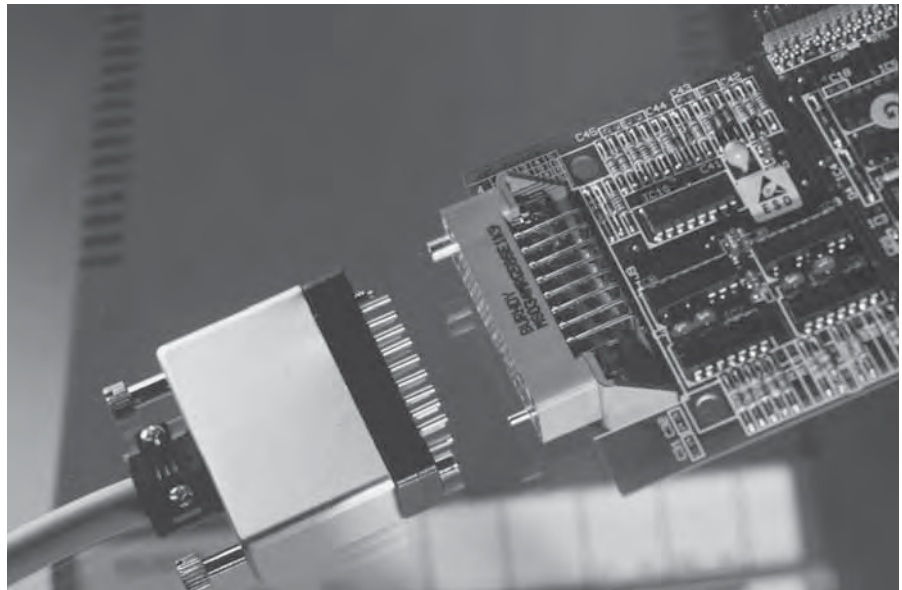
Being part of the TRIM TRIO wide range of high reliable rectangular connectors, **MSO34** (boardmount connectors) and **MS34** (cable connectors) are in complete compliance to this specification.

To meet this specification, insulators have been manufactured with 34 contact positions which can be loaded with the international accepted N° 16 TRIM TRIO .0625" (1.6mm) diameter contacts. The boardmount connectors (**MSO34**) are available in straight and right angle versions equipped with either solid machined or stamped and formed male / female contacts.

The cable connectors (**MS34**) can be offered with a full range of hardware and accessories. Guiding pins and sockets, turnable jackscrew system, different cable hoods with strain relief, pin protection shrouds and discrimination pins make this connector range as complete as possible.

### Features and benefits

- Complete compliance with International Standards of ISO 2593 for TTS V.35 (formerly CCITT V.35) interfacing.
- In compliance with NFC 93426 - HE621-622 and MIL-C-28748 specifications.
- UL recognised.
- UL94-V0 rated thermoplastic
- Boardmount connectors supplied pre-assembled with dipsolder contacts in either:
  - Male or female contacts.
  - Machined or stamped and formed contacts
  - Straight or right angle
- Stamped and formed contacts have selective tin plating on solder tails, thus eliminating extra flux operations.
- Selective loading possible on request.
- Right angle version equipped with true position location wafer.
- Hold-down feature available



### Intermateability

All the references mentioned are perfectly intermateable, provided that 1 mated pair exists out of a plug half and a receptacle half.

Mated pairs can be made for following applications:

- Cable to cable
- Cable to panel
- Cable to straight or right-angled boardmount

#### Technical data on MSO34 PC-Boardmount connectors

### Performance characteristics

|                        |                                                             |
|------------------------|-------------------------------------------------------------|
| Operating temperature: | -55°C to +125°C                                             |
| Current rating:        | 5 Amp for stamped contacts<br>7.5 Amp for machined contacts |
| Contact resistance:    | ≤ 3mΩ                                                       |
| Insulation resistance: | 5000 MΩ min.                                                |
| Test potential:        | 2000 VAC                                                    |
| Durability:            | 500 matings and unmatings.                                  |

### Plating table

Plating for solid machined contacts:

**No digit (std)** = Min. 0.4μ Gold all over, over Nickel.

T = 3 - 5μ Tin all over

Plating for Stamped and formed contacts :

**K9 (std)** = Min. 0.4μ Gold in contact area, 3 - 5μ SnPb on solder tail.

T = 3 - 5μ Tin all over

### Construction

Material : Glass-reinforced thermoplastic  
Flammability rating : UL94-V0  
Polarising hardware: Brass nickel plated  
Contacts: High conductive copper alloy

#### Technical data on MS34 Cable connectors

### Performance characteristics

|                        |                            |
|------------------------|----------------------------|
| Operating temperature: | -55°C to +125°C            |
| Insulation resistance: | 5000 MΩ min.               |
| Test potential:        | 2000 VAC                   |
| Durability:            | 500 matings and unmatings. |
| Vibration resistance:  | Per MIL-STD 202 method 204 |
| Shock:                 | Per MIL-STD 202 method 207 |

### Contact accommodation

- "MS" Cable connectors accept TRIM TRIO size 16 removable snap-lock contacts (see contact section)
- Contacts to be ordered separately

### Construction

Connector body: Glass-reinforced Phenolic  
Flammability rating : UL94-V0  
Cable hoods: Aluminium alloy or Polyamide 6.6  
Cable clamps: Stainless steel  
Protection Shrouds: Aluminium alloy  
Polarising hardware: Brass nickel plated

# V.35 - Interface connectors

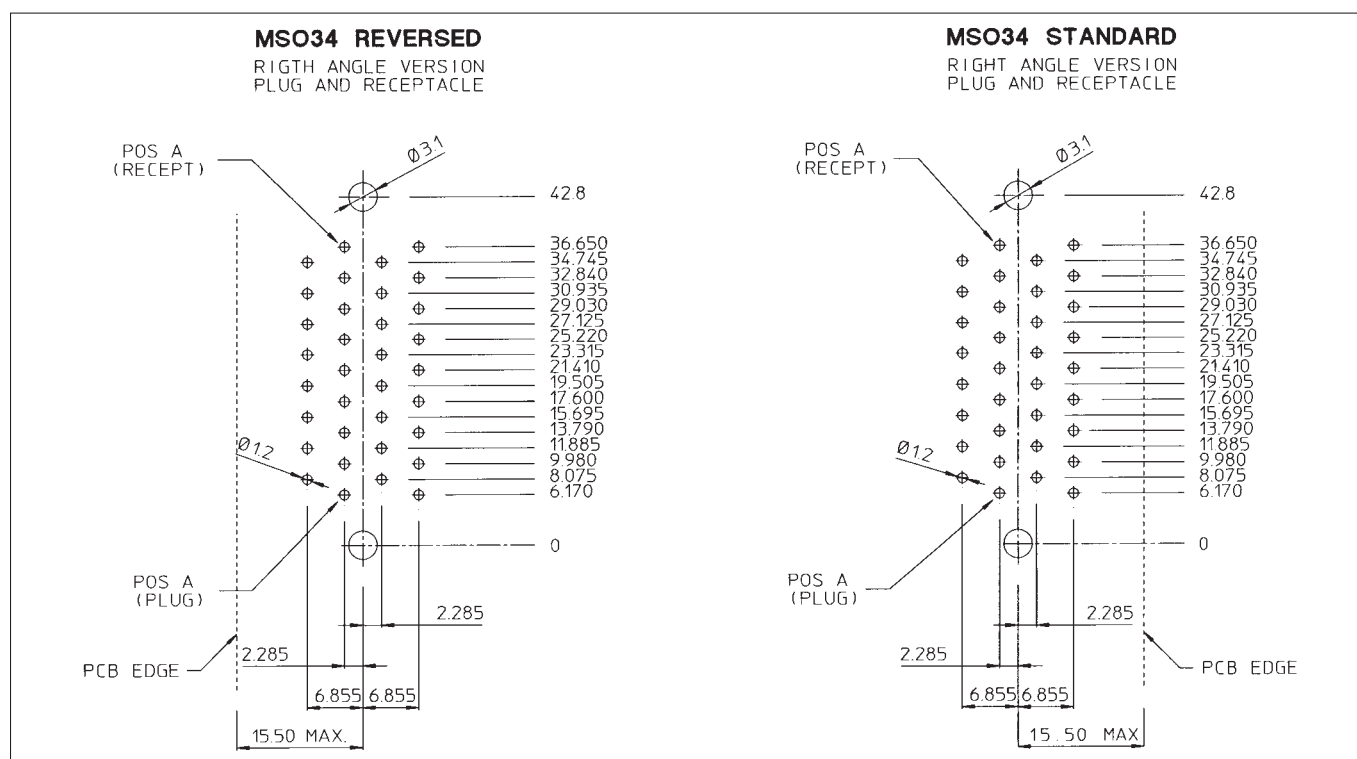


## How to order

|                            |                                                                                                                                             |           |          |          |          |           |            |           |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|----------|----------|-----------|------------|-----------|
| <b>Connector family</b>    | <b>MSO</b>                                                                                                                                  | <b>34</b> | <b>M</b> | <b>R</b> | <b>G</b> | <b>58</b> | <b>SE1</b> | <b>K9</b> |
| <b>Contact arrangement</b> |                                                                                                                                             |           |          |          |          |           |            |           |
| <b>N° 16 contacts</b>      |                                                                                                                                             |           |          |          |          |           |            |           |
| <b>Type of housing</b>     | <b>P:</b> Plug body with male contacts<br><b>R:</b> Receptacle body with female contacts                                                    |           |          |          |          |           |            |           |
| <b>Contact termination</b> | <b>K:</b> straight dipsolder<br><b>G:</b> Right angle dipsolder<br><b>H:</b> Reversed version                                               |           |          |          |          |           |            |           |
| <b>Type of hardware</b>    | <b>1:</b> Guide pin and socket<br><b>58:</b> Threaded jackscrew pin and socket                                                              |           |          |          |          |           |            |           |
| <b>Design variation</b>    | <b>E1:</b> Solid machined contacts<br><b>SE1:</b> Stamped and formed contacts<br><b>SL1:</b> Metal bracket<br><b>SEH1:</b> Hold down rivets |           |          |          |          |           |            |           |
| <b>Plating indication</b>  |                                                                                                                                             |           |          |          |          |           |            |           |

## MSO34 recommended drilling hole pattern

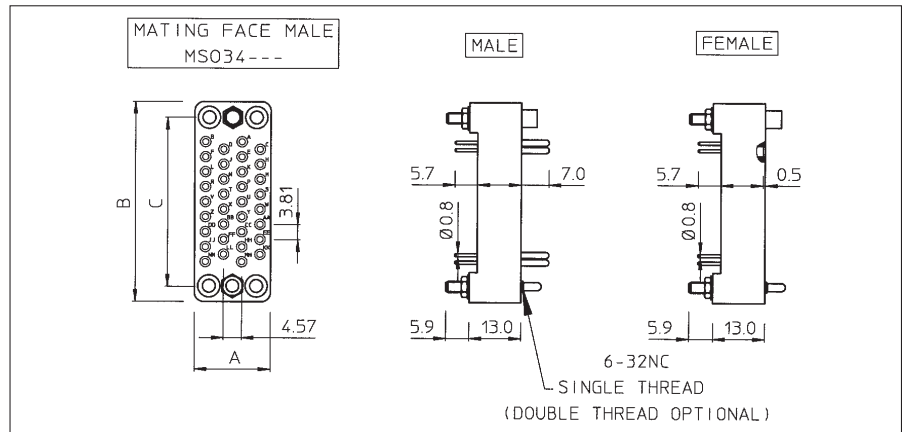
### Size 34



# V.35 - Interface connectors



## MSO34 Straight boardmount connectors



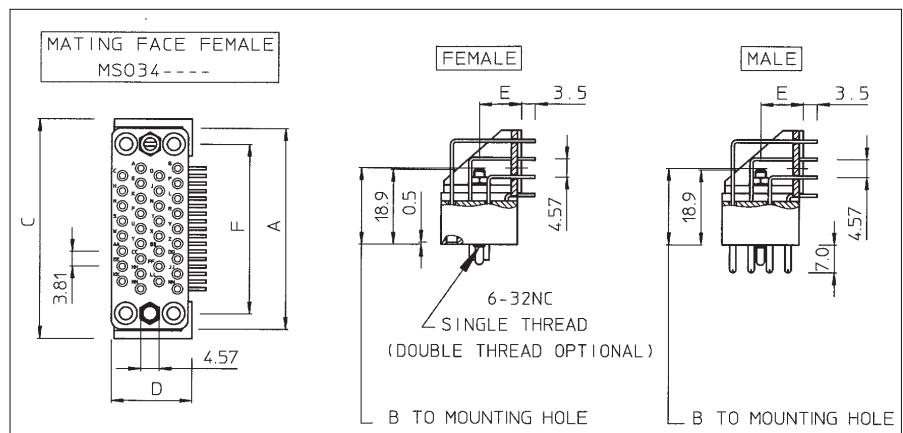
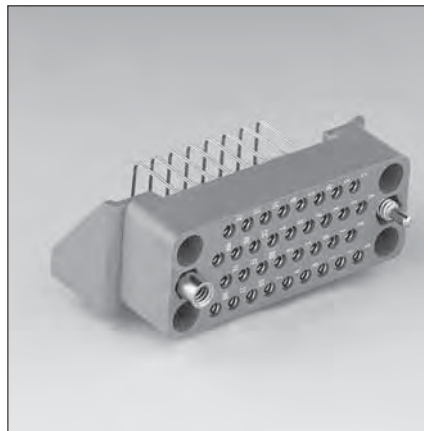
| Part number                          |                                          | Description                                         |
|--------------------------------------|------------------------------------------|-----------------------------------------------------|
| Version with solid machined contacts | Version with stamped and formed contacts |                                                     |
| <b>MSO34MPK1E1</b>                   | <b>MSO34MPK1SE1K9</b>                    | Guide pin, guide socket and male contacts           |
| <b>MSO34MRK1E1</b>                   | <b>MSO34MRK1SE1K9</b>                    | Guide pin, guide socket and female contacts         |
| <b>MSO34MPK58E1</b>                  | <b>MSO34MPK58SE1K9</b>                   | Jackscrew pin, jackscrew socket and male contacts   |
| <b>MSO34MRK58E1</b>                  | <b>MSO34MRK58SE1K9</b>                   | Jackscrew pin, jackscrew socket and female contacts |

For other platings: See plating table

Other solder tail lengths on request

Selective loading on request

## MSO34 Right-angled boardmount connectors



| Part number                          |                                          | Description                                         |
|--------------------------------------|------------------------------------------|-----------------------------------------------------|
| Version with solid machined contacts | Version with stamped and formed contacts |                                                     |
| <b>MSO34MPG1E(*)1</b>                | <b>MSO34MPG1SE(*)1K9</b>                 | Guide pin, guide socket and male contacts           |
| <b>MSO34MRG1E(*)1</b>                | <b>MSO34MRG1SE(*)1K9</b>                 | Guide pin, guide socket and female contacts         |
| <b>MSO34MPG58E(*)1</b>               | <b>MSO34MPG58SE(*)1K9</b>                | Jackscrew pin, jackscrew socket and male contacts   |
| <b>MSO34MRG58E(*)1</b>               | <b>MSO34MRG58SE(*)1K9</b>                | Jackscrew pin, jackscrew socket and female contacts |

For other platings: See plating table

Other solder tail lengths on request

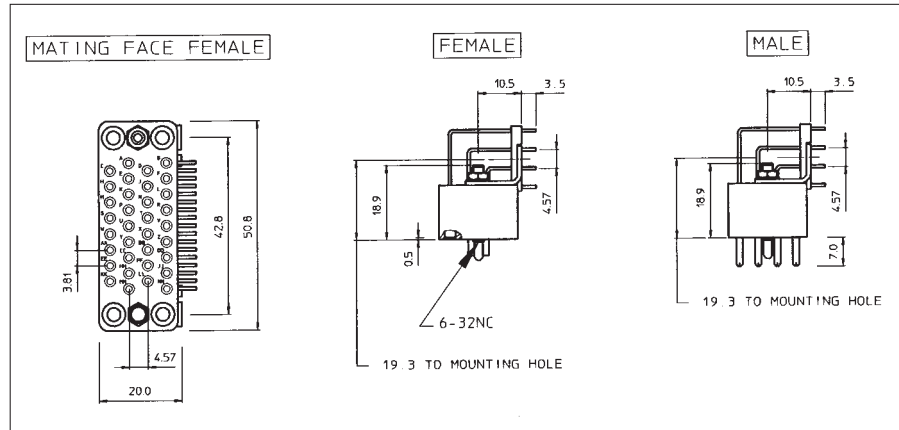
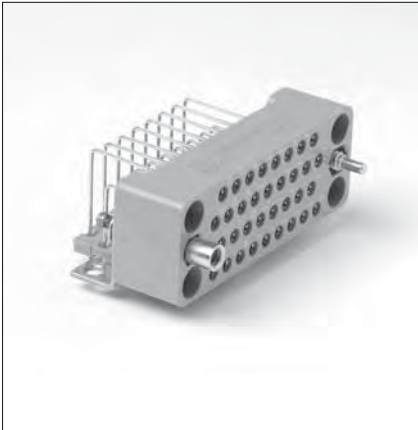
Selective loading on request

(\*) Complete part number with "H" for connector with hold down rivets

# V.35 - Interface connectors



## MSO34 Right-angled boardmount connectors – Standard version with metal brackets



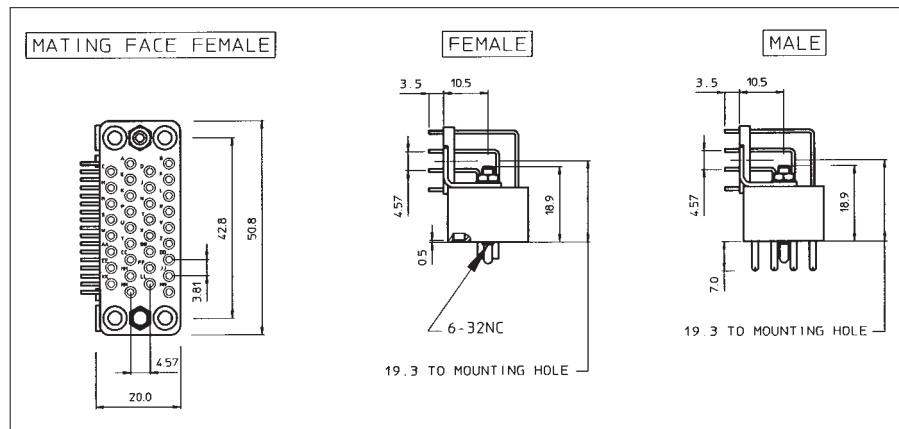
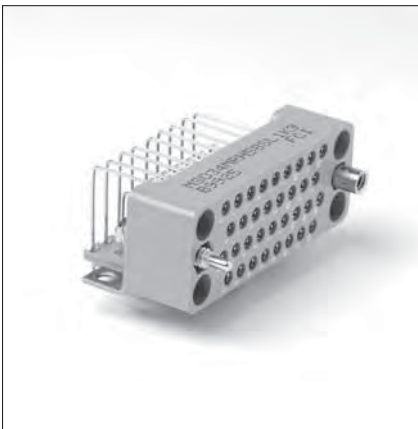
| Part number<br>Version with<br>stamped and formed contacts | Description                                         |
|------------------------------------------------------------|-----------------------------------------------------|
| <b>MSO34MPG1SL1K9</b>                                      | Guide pin, guide socket and male contacts           |
| <b>MSO34MRG1SL1K9</b>                                      | Guide pin, guide socket and female contacts         |
| <b>MSO34MPG58SL1K9</b>                                     | Jackscrew pin, jackscrew socket and male contacts   |
| <b>MSO34MRG58SL1K9</b>                                     | Jackscrew pin, jackscrew socket and female contacts |

For other platings: See plating table

Other solder tail lengths on request

Selective loading on request

## MSO34 Right-angled boardmount connectors – Reversed version with metal brackets



| Part number<br>Version with<br>stamped and formed contacts | Description                                         |
|------------------------------------------------------------|-----------------------------------------------------|
| <b>MSO34MPH1SL1K9</b>                                      | Guide pin, guide socket and male contacts           |
| <b>MSO34MRH1SL1K9</b>                                      | Guide pin, guide socket and female contacts         |
| <b>MSO34MPH58SL1K9</b>                                     | Jackscrew pin, jackscrew socket and male contacts   |
| <b>MSO34MRH58SL1K9</b>                                     | Jackscrew pin, jackscrew socket and female contacts |

For other platings: See plating table

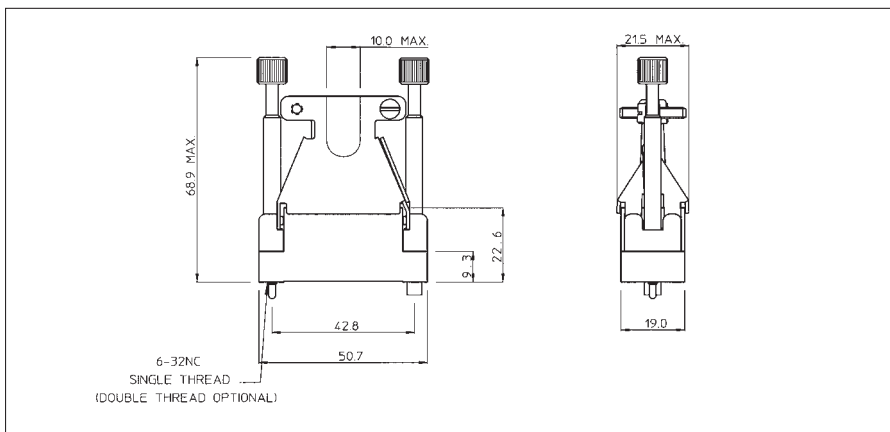
Other solder tail lengths on request

Selective loading on request

# V.35 - Interface connectors



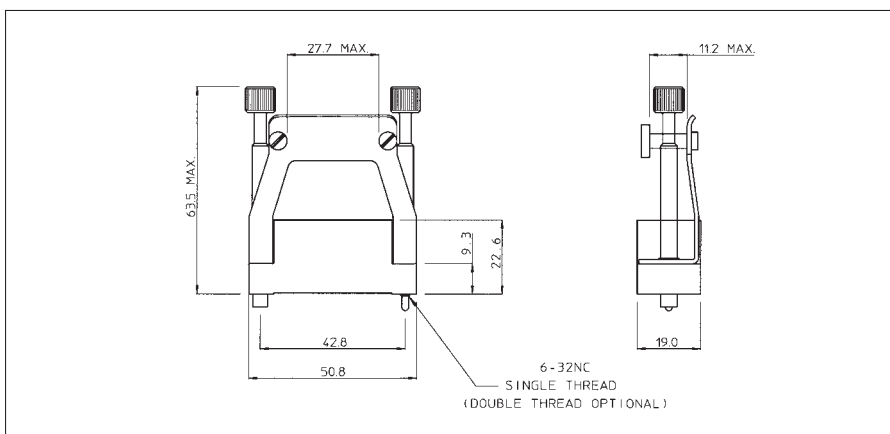
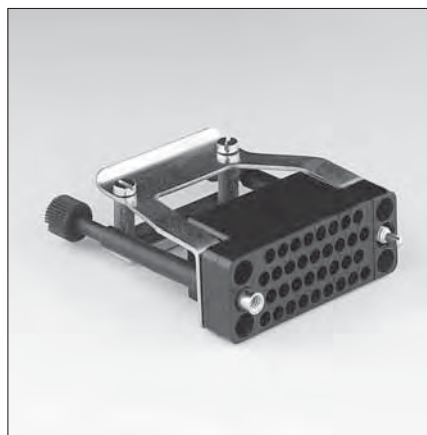
## MS34 Cable connectors with metal butterfly hood



| Part number                |                              | Description                                                                  |
|----------------------------|------------------------------|------------------------------------------------------------------------------|
| Version with male contacts | Version with female contacts |                                                                              |
| <b>MS34PM120(*)GE00</b>    | <b>MS34RM120(*)GE00</b>      | Guide pin, guide socket and butterfly hood.                                  |
| <b>MS34PM140(*)GE00</b>    | <b>MS34RM140(*)GE00</b>      | Jackscrew pin , jackscrew socket and butterfly hood.                         |
| <b>MS34PM124(*)GE00</b>    | <b>MS34RM124(*)GE00</b>      | Turnable jackscrew pin, turnable jackscrew socket and butterfly hood.        |
| <b>MS34PM1(*)GE00</b>      | <b>MS34RM1(*)GE00</b>        | Guide pin and guide socket. No strain relief hood                            |
| <b>MS34PM58(*)GE00</b>     | <b>MS34RM58(*)GE00</b>       | Jackscrew pin and jackscrew socket. No strain relief hood.                   |
| <b>MS34PM007(*)GE00</b>    | <b>MS34RM007(*)GE00</b>      | Turnable jackscrew pin and turnable jackscrew socket. No strain relief hood. |

(\*) Complete catalogue number with " S " for connector with protective shroud.

## MS34 Cable connectors with cable clamp



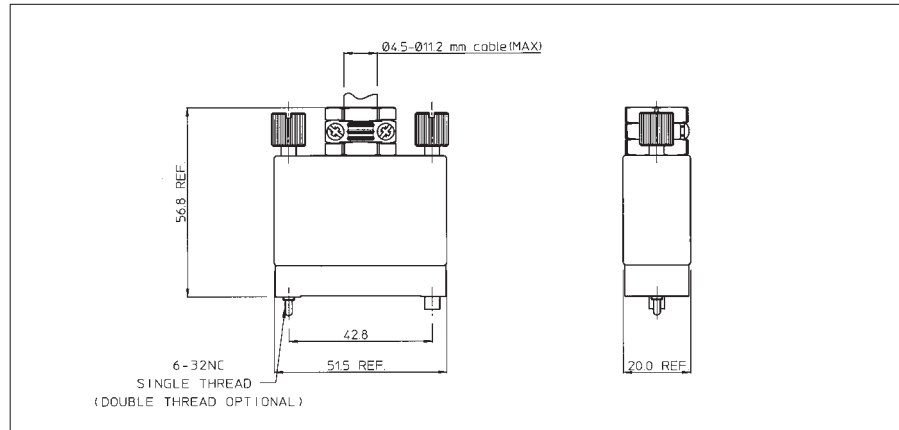
| Part number                |                              | Description                                                        |
|----------------------------|------------------------------|--------------------------------------------------------------------|
| Version with male contacts | Version with female contacts |                                                                    |
| <b>MS34PM117(*)GE00</b>    | <b>MS34RM117(*)GE00</b>      | Guide pin, guide socket and cable clamp                            |
| <b>MS34PM127(*)GE00</b>    | <b>MS34RM127(*)GE00</b>      | Jackscrew pin, jackscrew socket and cable clamp                    |
| <b>MS34PM107(*)GE10</b>    | <b>MS34RM107(*)GE10</b>      | Turnable jackscrew pin, turnable jackscrew socket and cable clamp. |

(\*) Complete catalogue number with "S" for connector with protective shroud.

# V.35 - Interface connectors



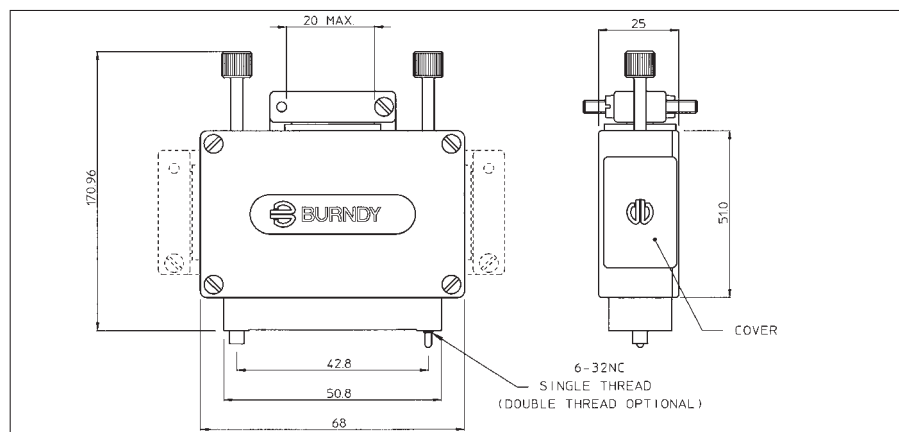
## MS34 Cable connectors with metal suitcase hood



| Part number                |                              | Description                                                                          |
|----------------------------|------------------------------|--------------------------------------------------------------------------------------|
| Version with male contacts | Version with female contacts |                                                                                      |
| <b>MS34PMEHM(*)</b>        | <b>MS34RMEHM(*)</b>          | Anodised hood, plastic strain relief and turnable hardware.                          |
| <b>MS34PMSEHM(*)</b>       | <b>MS34RMSEHM(*)</b>         | Shielded version with nickel plated hood, metal strain relief and turnable hardware. |
| <b>MS34PMEHMMET1</b>       | <b>MS34RMEHMMET1</b>         | Version with spring loaded jackscrews                                                |

(\*) Complete catalogue number with " S " for connector with protective shroud.

## MS34 Cable connectors with plastic suitcase hood



| Part number                |                              | Description                                                                  |
|----------------------------|------------------------------|------------------------------------------------------------------------------|
| Version with male contacts | Version with female contacts |                                                                              |
| <b>MS34PMEH2(*)</b>        | <b>MS34RMEH2(*)</b>          | Guide pin, guide socket and plastic suitcase hood.                           |
| <b>MS34PMEH3(*)</b>        | <b>MS34RMEH3(*)</b>          | Jackscrew pin, jackscrew socket and plastic suitcase hood.                   |
| <b>MS34PMEH0(*)</b>        | <b>MS34RMEH0(*)</b>          | Turnable jackscrew pin, turnable jackscrew socket and plastic suitcase hood. |

(\*) Complete catalogue number with "S" for connector with protective shroud.

# High Performance Low Profile Rectangular Connectors



## MSG SERIES

### Description

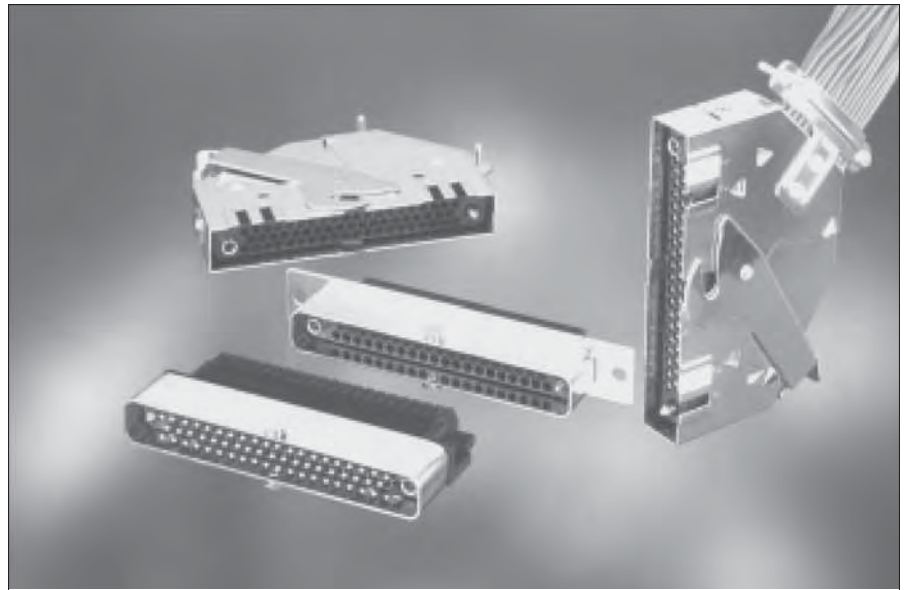
MSG Series connectors is a 50 and 59 position low profile, compact design rectangular I/O connector. MSG has been developed for industrial and railway control equipments which require a easy handling and high density connector. In addition to its panel mount version, a PCB mount version has been especially designed to fit 19 inch Euro-rack system.

### Features and benefits

- Connectors supplied pre-assembled.
- Available in 50 and 59 contact versions.
- PCB mount version fully equipped with male contacts. Selective contact loading optional.
- Accessories : polarizing screws (receptacle)  
polarizing plate (plug)  
dust cap (plug)

### Performance characteristics

|                        |                 |
|------------------------|-----------------|
| Operating temperature: | -55°C to +125°C |
| Insulation resistance: | 5000 MΩ min.    |



|                    |                                              |
|--------------------|----------------------------------------------|
| Test potential:    | 2000 VAC                                     |
| Current rating:    | 7.5A - cable to PCB<br>13A - cable to cable  |
| Creepage distance: | 2.5mm (50 positions)<br>2.2mm (59 positions) |
| Durability:        | 500 matings and unmatings.                   |
| Vibration:         | Per JIS-C STD 0040                           |
| Salt Spray:        | Per JIS-C STD 0023                           |

### Construction

|                       |                          |
|-----------------------|--------------------------|
| Connector Material :  | Glass filled thermoplast |
| Flammability rating : | UL94-V0                  |
| Hoods, skirts :       | Steel, nickel plated     |
| Cable clamps:         | Steel, nickel plated     |

|                       |                           |
|-----------------------|---------------------------|
| Guiding hardware:     | Stainless steel           |
| Contacts receptacle : | Copper alloy (Au over Ni) |

### Contact accommodation

- "MSG" Rectangular connectors accept TRIM TRIO size 16 crimp-type removable contacts (see contact section)
- For the plug connector and the panel mount receptacle, contacts have to be ordered separately.

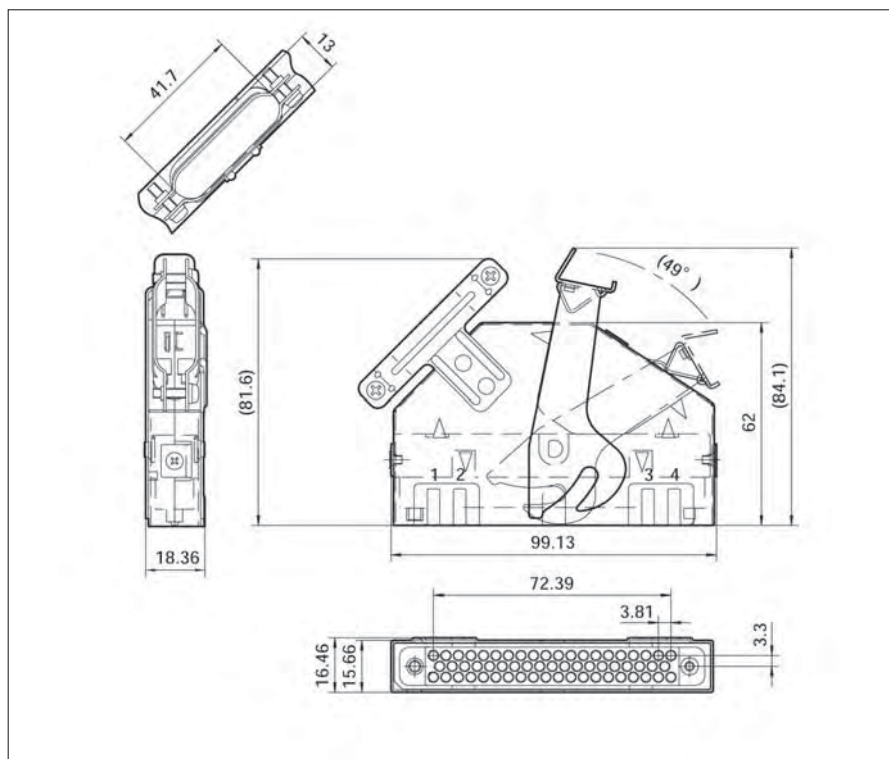
## How to order

| Number of contacts | Part number  | Description                                     |
|--------------------|--------------|-------------------------------------------------|
| 59                 | MSG59P-L11   | Plug for cable up                               |
|                    | MSG59P-L21   | Plug for cable down                             |
|                    | MSG59R-PL110 | Panel mount receptacle                          |
|                    | MSG59R-RL111 | Right angle PCB mount receptacle without flange |
|                    | MSG59R-FL111 | Right angle PCB mount receptacle with flange    |
| 50                 | MSG50P-L11   | Cable plug                                      |
|                    | MSG50RG-L111 | Right angle PCB mount receptacle with flange    |

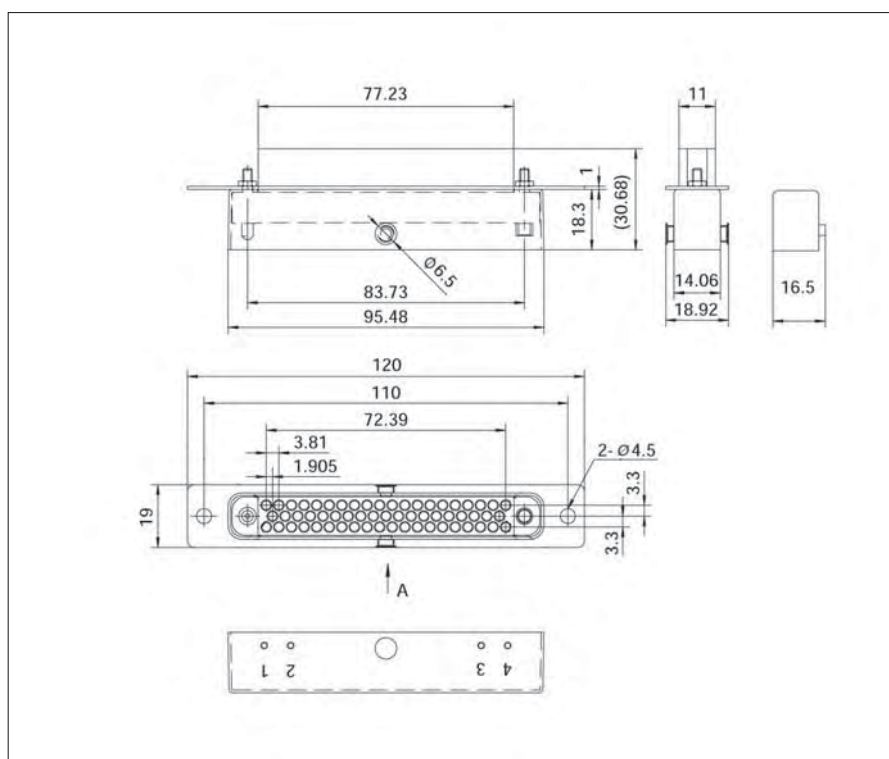
# High Performance Low Profile Rectangular Connectors



**Plug connector with metal hood (MSG59P-L11)**



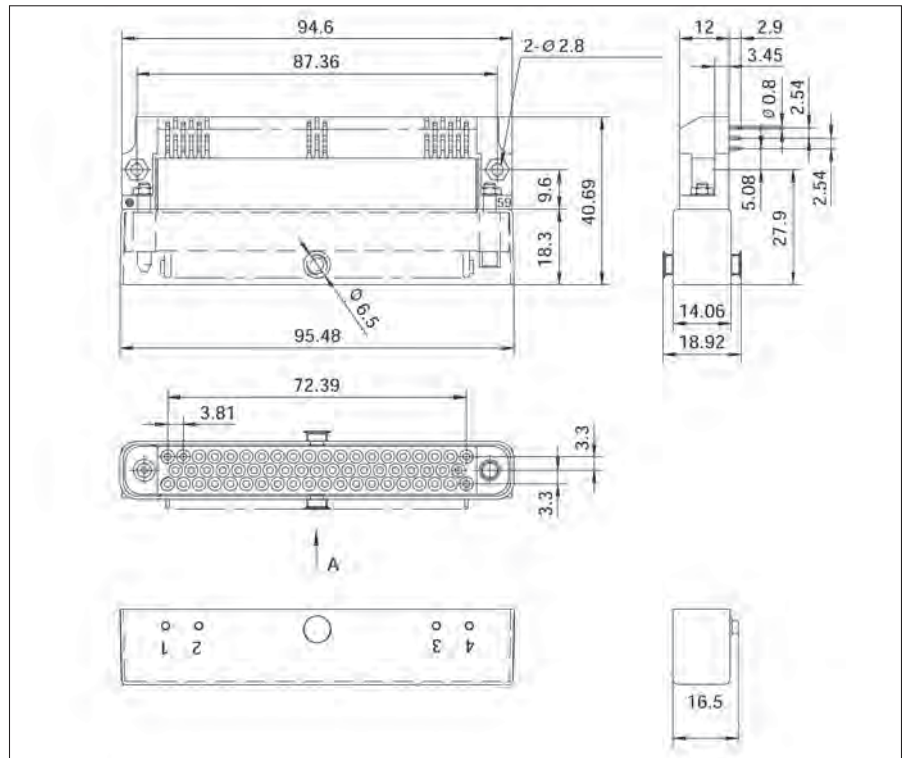
**Panel mount receptacle (MSG59RP-L110)**



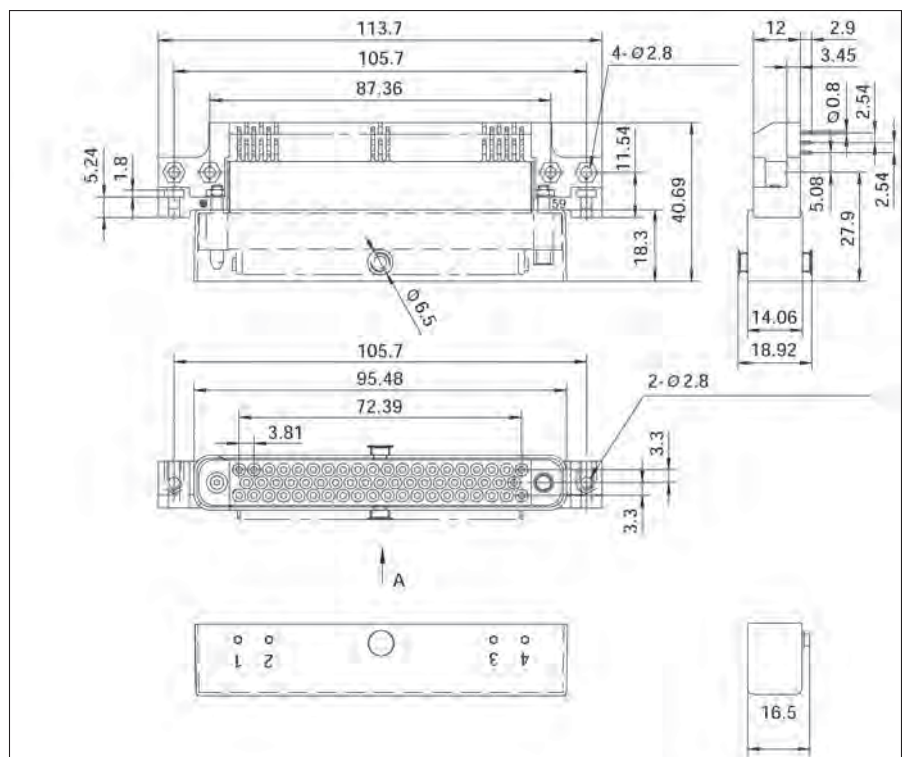
# High Performance Low Profile Rectangular Connectors



**Right angle PCB mount receptacle without flange (MSG59RR-L111)**



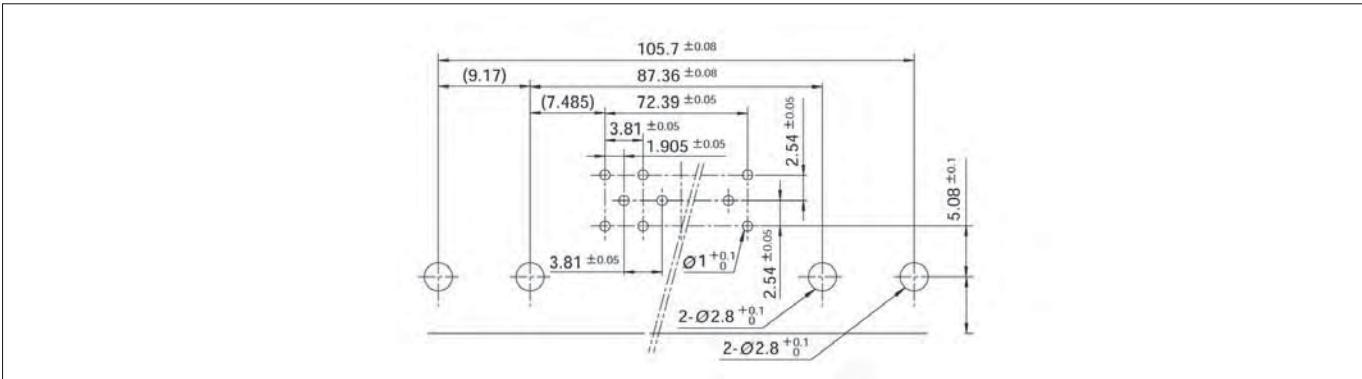
**Right angle PCB mount receptacle with flange (MSG59RF-L111)**



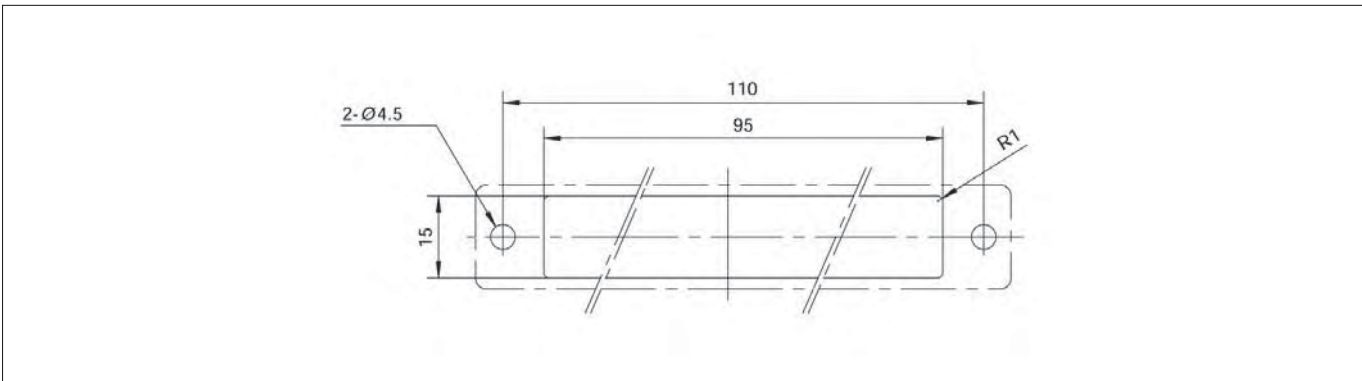
# High Performance Low Profile Rectangular Connectors



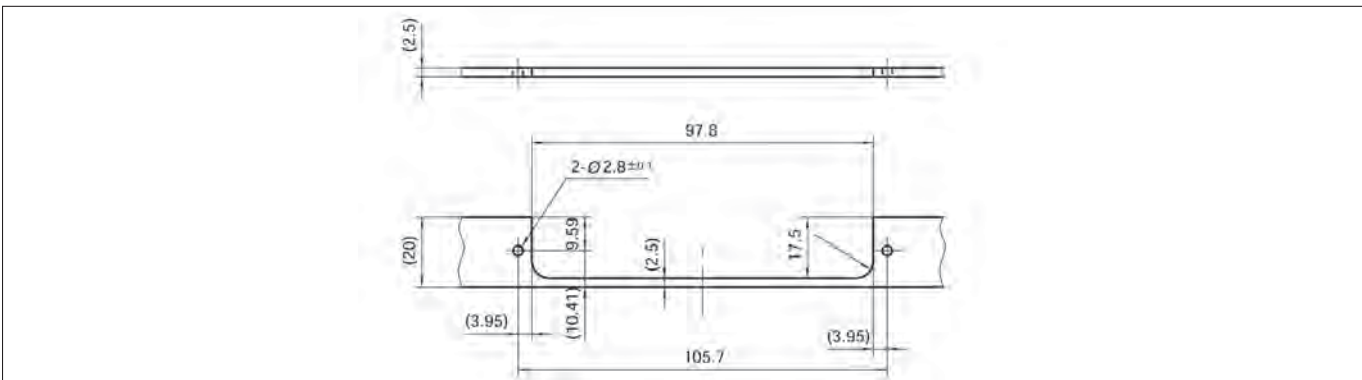
## MSG59 recommended drilling hole pattern (for PCB) (MSG59RR-L111, MSG59RF-L111)



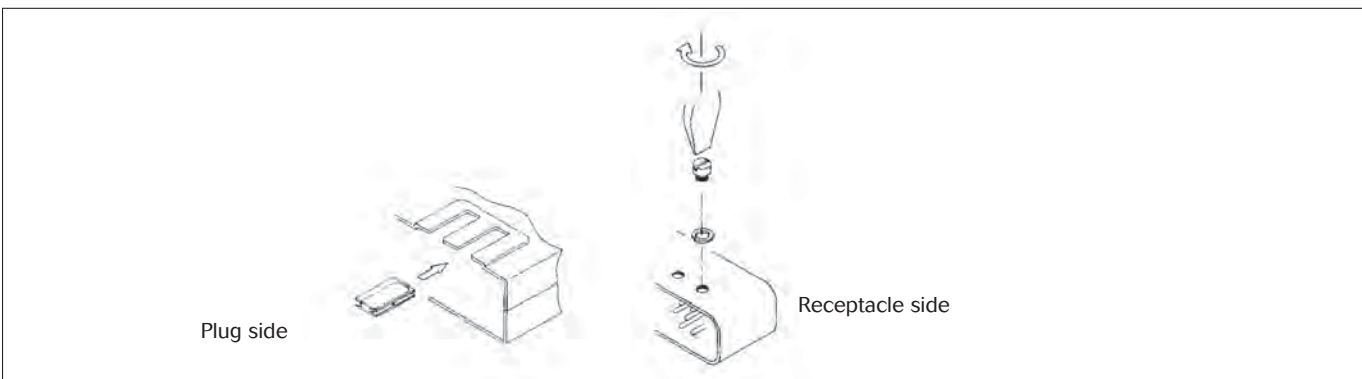
## MSG59 recommended panel cut-out (front mount) (MSG59RR-L110)



## MSG59 recommended for front mount (MSG59RR-L111, MSG59RF-L111)



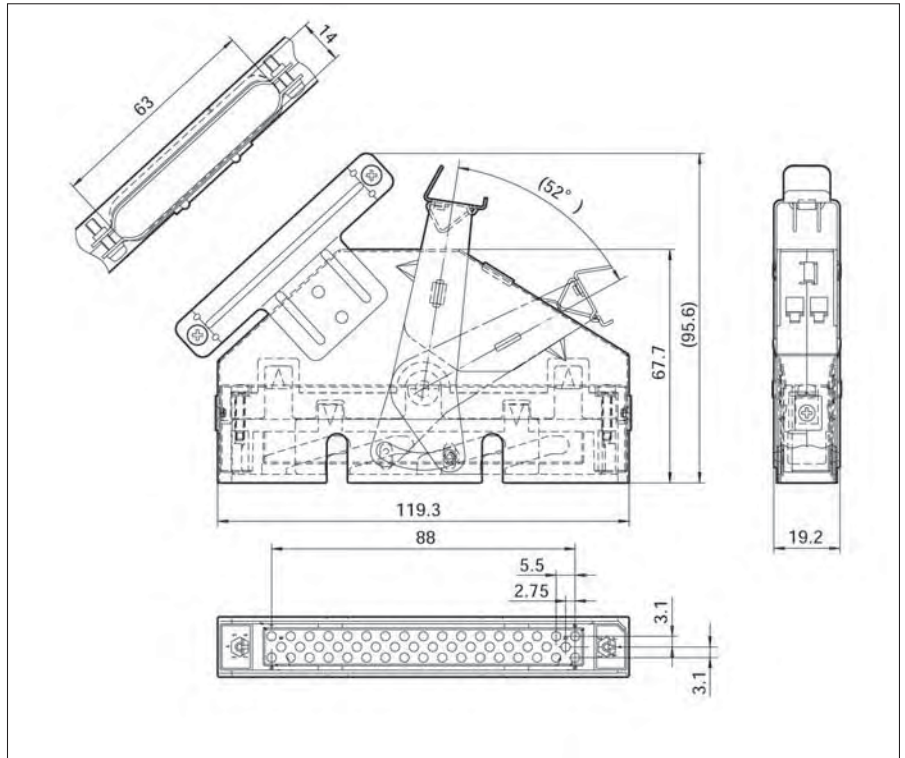
## Polarizing hardware



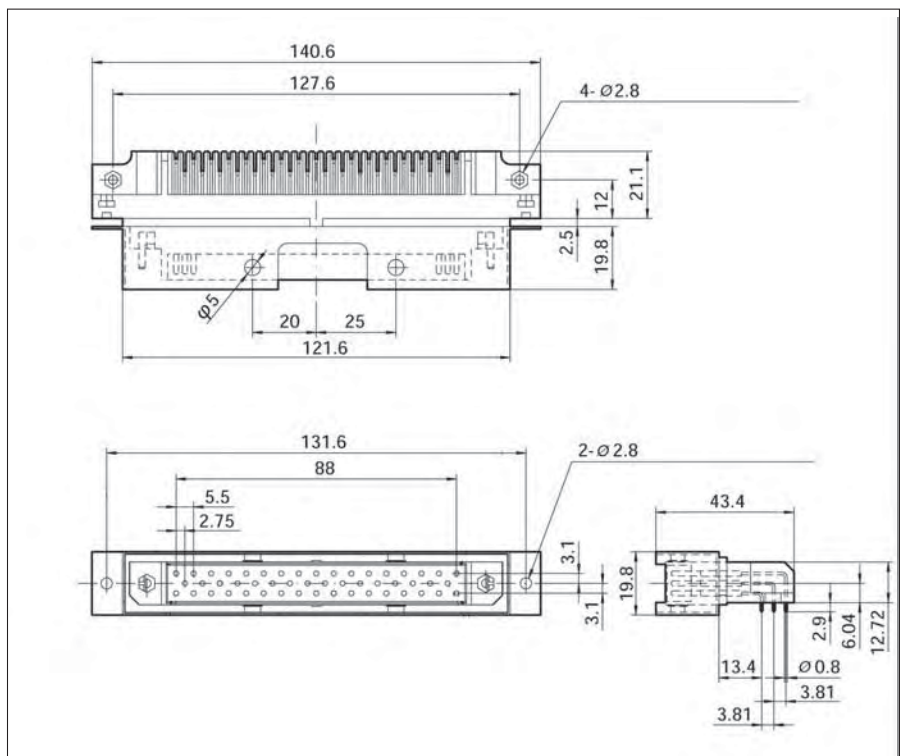
# High Performance Low Profile Rectangular Connectors



**(MSG50P-L11)**



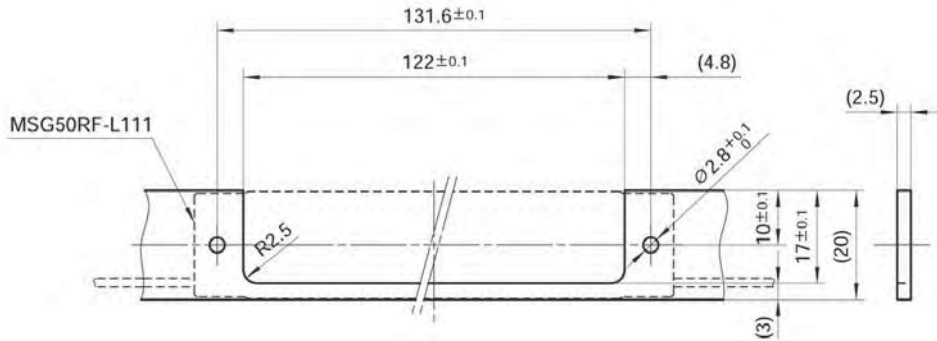
**(MSG50RF-L111)**



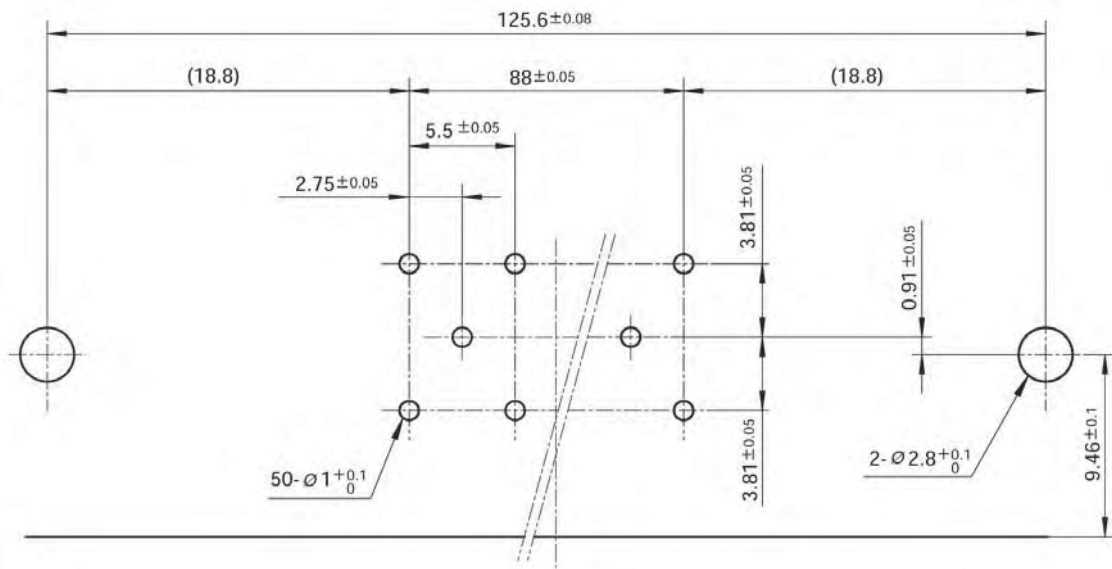
# High Performance Low Profile Rectangular Connectors



**(MSG50RF-L111)**



**(MSG50RF-L111)**



# Robust Lever Locking Connector



## MB SERIES

### Description

- 52 contact, rectangular, one action lever locking connector
- Same receptacle can be front or rear mounted
- 2 cable clamp orientations available: perpendicular or parallel to mating face
- Anti Jack knife system, guide plate on plug and wide entry docket contact for a smooth and reliable mating
- Adapted to shielded cable
- Easy assembly

### Application

- Signalling

### Mechanical

- Hood: Steel, Nickel plated
- Lever: stainless steel
- Grip and insulator: glass filled PBT
- Contact body: copper
- Contact plating: consult us
- Endurance: 500 mating/unmating operations
- Vibration: per JIS C 0040



### Electrical

- Withstanding voltage 2000 Veff
- Insulation resistance: 5000M
- Current rating: 13A
- Contact accommodation: standard TRIM TRIO size 16 contacts

### Environmental

- Temperature range: -55°C + 125°C
- Flammability rating: UL94V0

## How to order

### Receptacle

|                    |                                      |    |   |    |   |   |   |
|--------------------|--------------------------------------|----|---|----|---|---|---|
| Basic series       | MB                                   | 52 | R | -L | 1 | 1 | 0 |
| Number of contacts | 52                                   |    |   |    |   |   |   |
| Receptacle:        |                                      |    |   |    |   |   |   |
| Lever type:        |                                      |    |   |    |   |   |   |
| Contact type:      | 1: TRIM TRIO contact                 |    |   |    |   |   |   |
| Cable clamp:       | 1: Lever down; 2: Lever up           |    |   |    |   |   |   |
| Variation:         | 0: contacts to be ordered separately |    |   |    |   |   |   |

### Plug

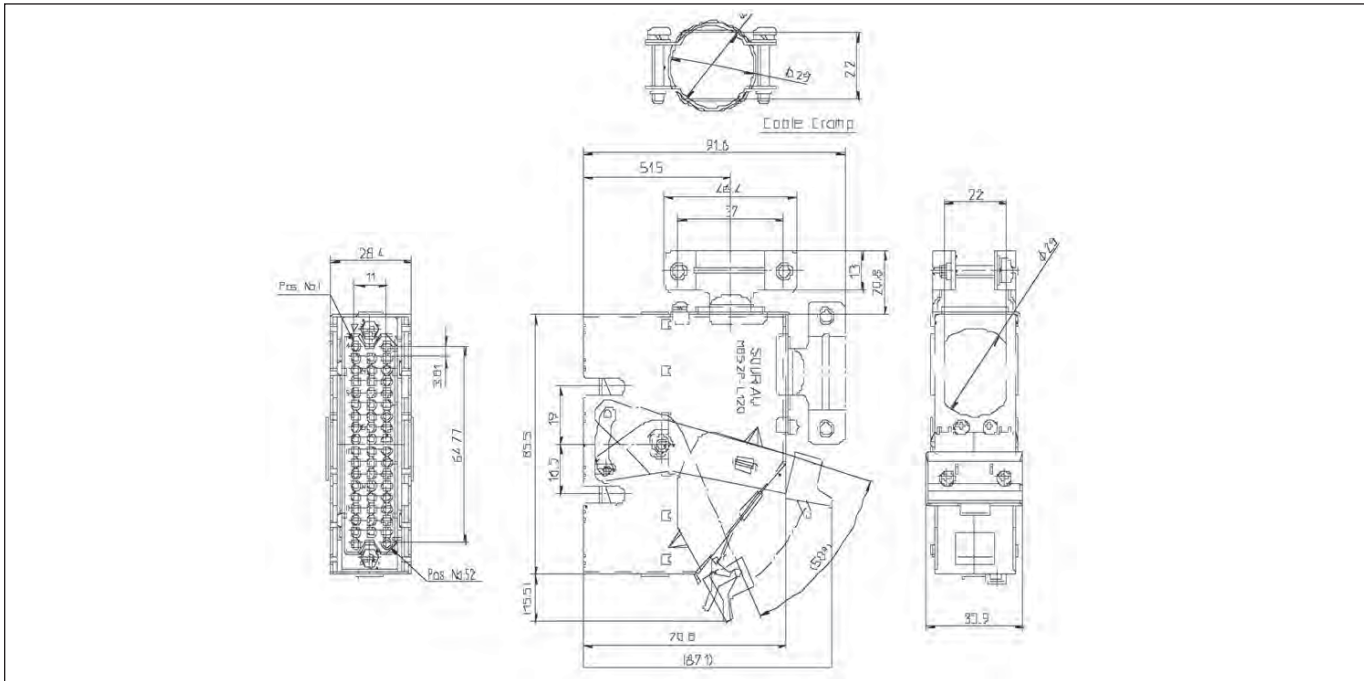
|                    |                                              |    |   |    |   |   |   |
|--------------------|----------------------------------------------|----|---|----|---|---|---|
| Basic series       | MB                                           | 52 | P | -L | 1 | 1 | 0 |
| Number of contacts | 52                                           |    |   |    |   |   |   |
| Plug               |                                              |    |   |    |   |   |   |
| Lever              |                                              |    |   |    |   |   |   |
| Cable clamp:       | 1: Lever down; 2: Lever up                   |    |   |    |   |   |   |
| Cable direction    | 1: Parallel; 2: Perpendicular to mating face |    |   |    |   |   |   |
| Variation          | 0                                            |    |   |    |   |   |   |

# Robust Lever Locking Connector

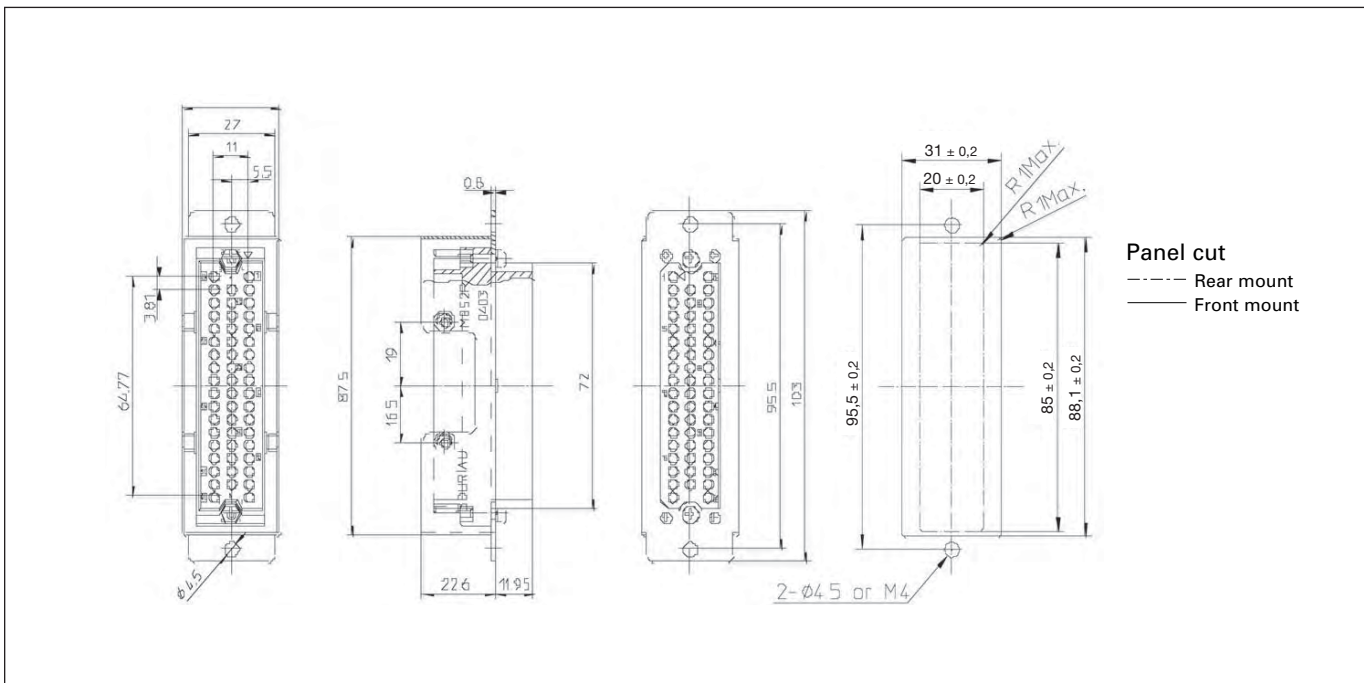


## Dimensions

### Plug MB52P-L120



### Receptacle MB52R-L110



# Plastic Panel and Cable Connectors



## SMS - QIKMATE SERIES

### Description

The versatile "SMS" Qikmate panel and cable connectors are a highly cost-effective system approach to solving the constant demand for more cost effective interconnection techniques.

It is a range of multiway connectors using N° 16 TRIM TRIO .0625" (1.6mm) diameter contacts and available in 10 contact arrangements from 2 to 36 positions. Having no additional hardware, Panel receptacle connectors snap and lock into panel cutouts and cable plugs quick connect and disconnect with positive retention locks.

Cable plug connectors also feature pin-protection skirts, positive polarisation and can be supplied with or without integrated strain relief hoods.

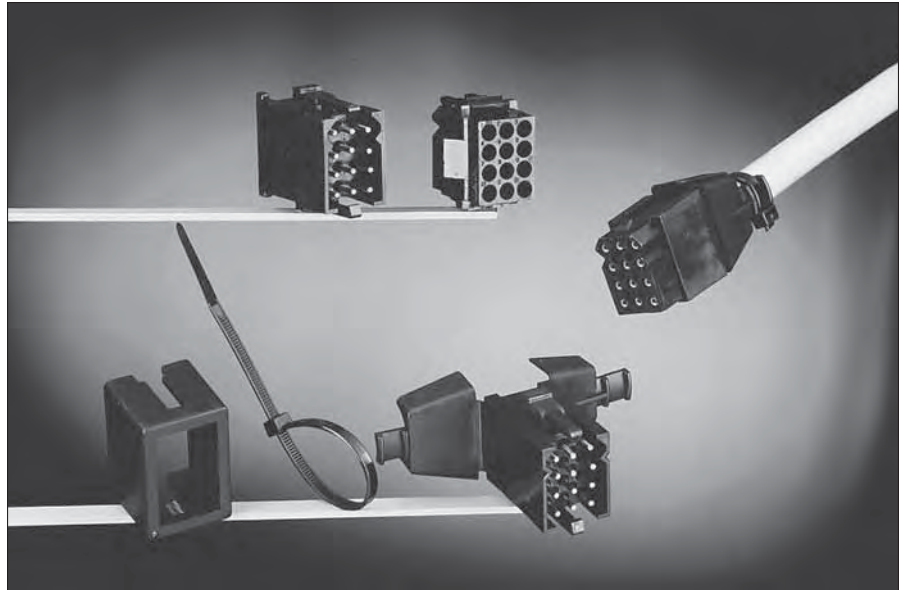
Cable receptacle connectors (only with integrated strain relief hoods) are developed to mate with cable plug connectors thus offering solutions for cable to cable applications.

### Features and benefits

- Available in 10 contact arrangements.
- Self mountable panel receptacle with positive housing retention.
- Cable plugs with retaining latches for positive locking.
- Cable plug has pin protection skirt to prevent damage of male contacts
- Positive polarization keys prevent mismatching.
- Cable plug and receptacle have integrated strain relief hood which can take a wide range of cables.
- Cable plug and receptacle have discrimination cavities in between contact cavities, thus offering discrimination without contact loss.
- UL recognized File Nr.: E238675

### Performance characteristics

Operating



temperature: -55°C to +105°C

Insulation

resistance: 5000 MΩ min.

Test potential: 2000 VAC

Durability: 500 matings and unmatings.

### Construction

Material : Polyamide 6.6

Flammability rating : UL94-V2

### Contact accommodation

- "SMS" Qikmate connectors accept TRIM TRIO size 16 removable snap-lock contacts (see contact section)
- Contacts to be ordered separately.

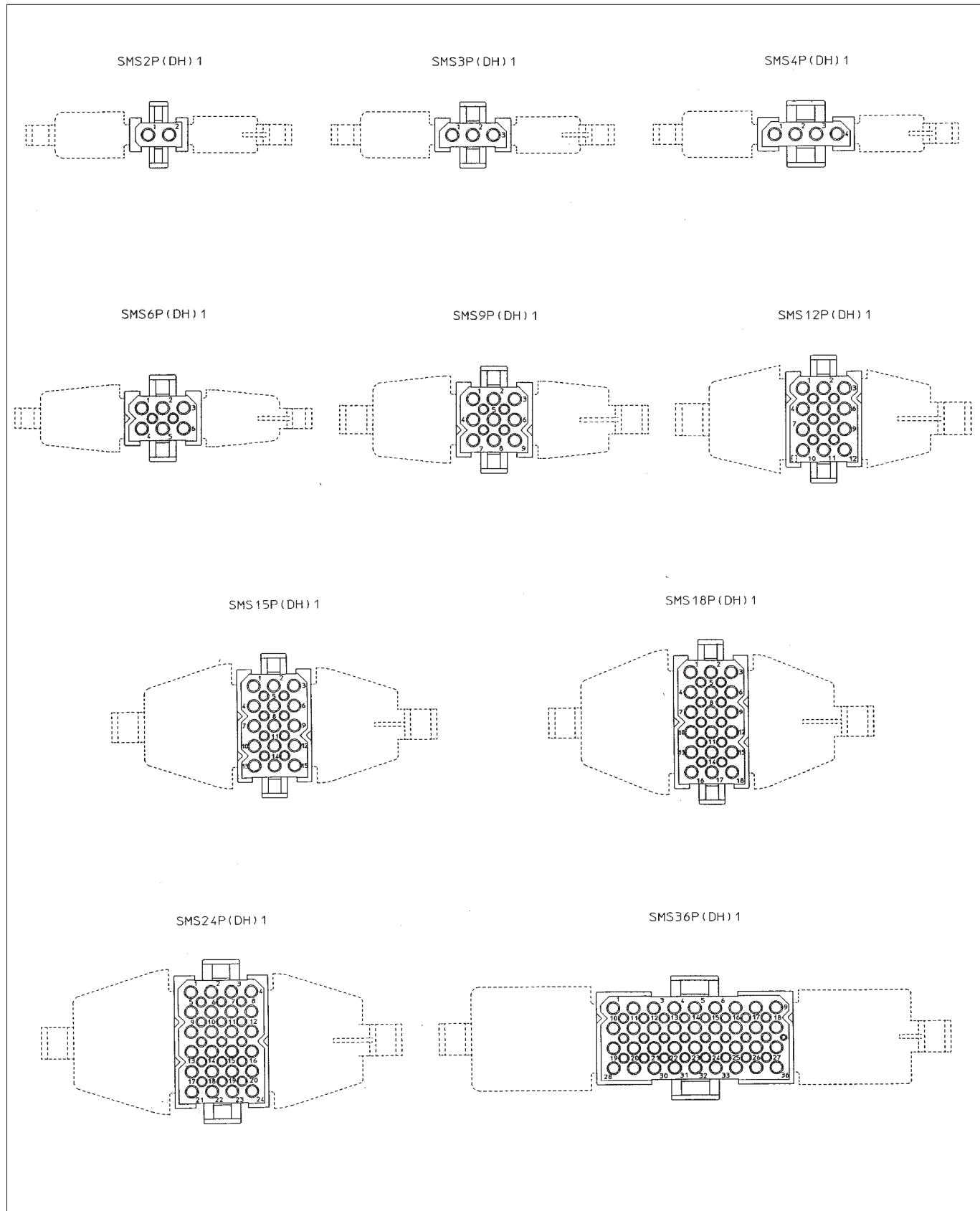
### How to order

| Connector family    |       | SMS<br>SMS                                          | 12<br>12 | PDH1<br>P1 |
|---------------------|-------|-----------------------------------------------------|----------|------------|
| Contact arrangement |       |                                                     |          |            |
| Body variation:     | R1:   | Panel mount receptacle                              |          |            |
|                     | P1:   | Cable plug without strain relief hood               |          |            |
|                     | PDH1: | Cable plug with integrated strain relief hood       |          |            |
|                     | RDH1: | Cable receptacle with integrated strain relief hood |          |            |

# Plastic Panel and Cable Connectors



## Contact arrangements for cable plug connectors (SMS--P1 and SMS--PDH1)

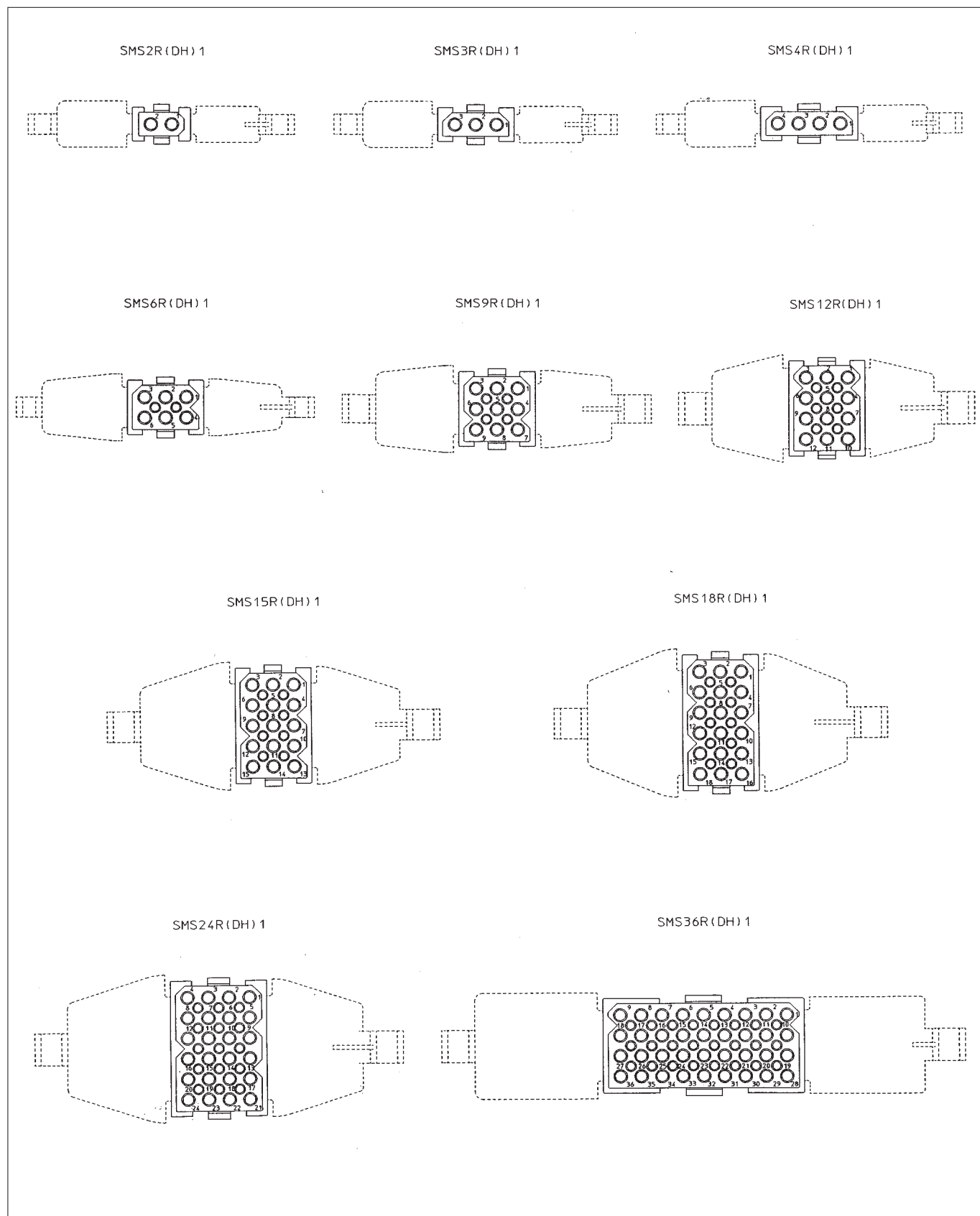


Contact identifications shown are for mating face. Contact identifications of wiring face are identical as shown on the receptacle arrangements

# Plastic Panel and Cable Connectors



## Contact arrangements for cable and panel mount receptacle connectors (SMS--R1 and SMS--RDH1)



Contact identifications shown are for mating face. Contact identifications of wiring face are identical as shown on the plug arrangements

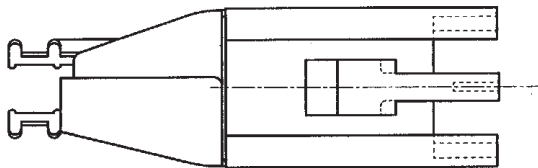
# Plastic Panel and Cable Connectors



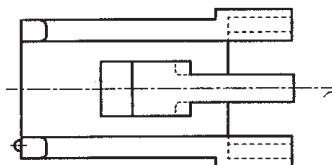
## SMS - Standard Qikmate intermateability chart

### INTERMATEABILITY

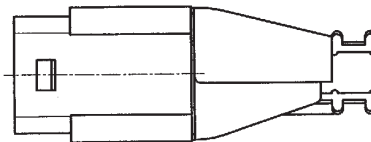
SMS--PDH1  
(PLUG WITH MOULDED  
ON CABLE HOODS)



SMS--P1  
(PLUG WITHOUT MOULDED  
ON CABLE HOODS)



SMS--RDH1  
(RECEPTACLE WITH MOULDED  
ON CABLE HOODS)



STRAIGHT BOARDMOUNT  
FEMALE

SMS--GE3 MACHINED CONTACT  
SMS--R/SE3 STAMPED CONTACT

MALE

SMS--GE4 MACHINED CONTACT  
SMS--R/SE4 STAMPED CONTACT

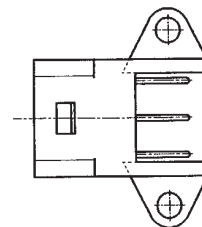


RIGHT ANGLE BOARDMOUNT  
FEMALE

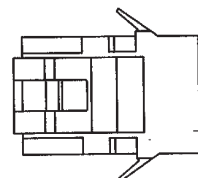
SMS--GE5 MACHINED CONTACT  
SMS--SE5 STAMPED CONTACT

MALE

SMS--GE6 MACHINED CONTACT  
SMS--SE6 STAMPED CONTACT



(ONLY IN SIZES  
3, 6, 12 AND 18)

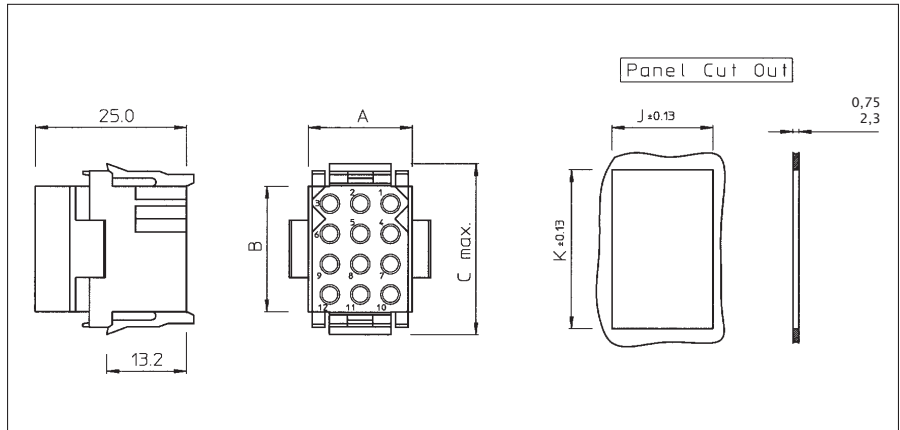
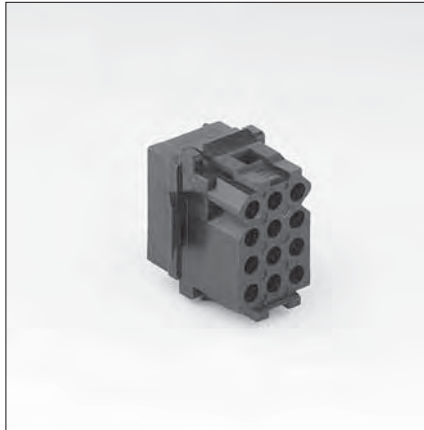


SMS--R-1  
(PANEL MOUNT  
RECEPTACLE)

# Plastic Panel and Cable Connectors

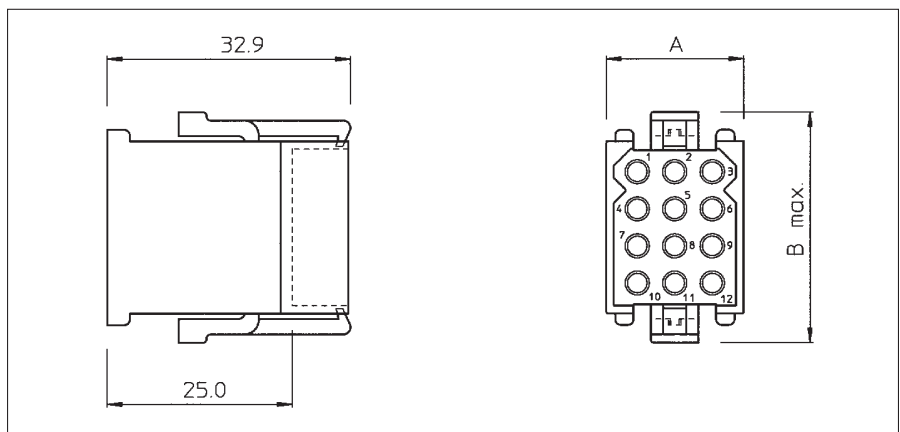
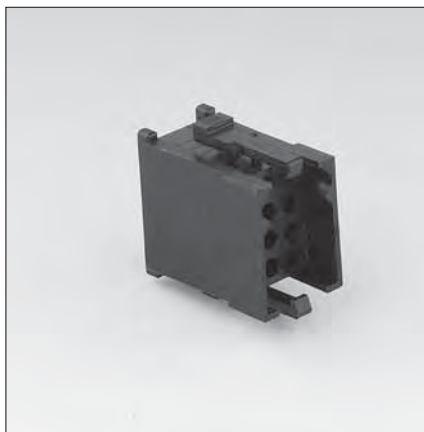


## Panel mount receptacle (SMS--R1)



| Part number | Number of contact pos. | A    | B    | C max. | J $\pm 0.13$ | K $\pm 0.13$ |
|-------------|------------------------|------|------|--------|--------------|--------------|
| SMS2R1      | 2                      | 11.0 | 5.8  | 15.2   | 11.4         | 11.6         |
| SMS3R1      | 3                      | 16.2 |      |        | 16.5         |              |
| SMS4R1      | 4                      | 21.2 |      |        | 21.7         |              |
| SMS6R1      | 6                      | 16.2 | 10.9 | 20.3   | 16.5         | 16.7         |
| SMS9R1      | 9                      |      | 16.0 | 25.4   | 16.7         | 21.6         |
| SMS12R1     | 12                     |      | 21.1 | 30.5   |              | 26.7         |
| SMS15R1     | 15                     |      | 26.2 | 35.6   |              | 31.8         |
| SMS18R1     | 18                     |      | 31.2 | 40.6   |              | 36.9         |
| SMS24R1     | 24                     | 21.2 | 21.1 | 30.5   | 21.7         | 26.7         |
| SMS36R1     | 36                     | 46.6 |      |        | 47.1         |              |

## Cable plug without strain relief hood (SMS--P1)

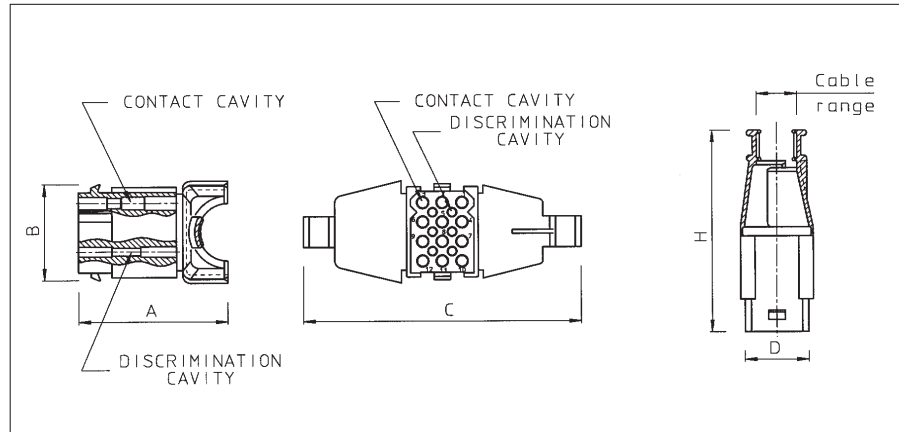


| Part number | Number of contact pos. | A    | C max. |
|-------------|------------------------|------|--------|
| SMS2P1      | 2                      | 15.0 | 17.8   |
| SMS3P1      | 3                      | 18.6 |        |
| SMS4P1      | 4                      | 23.7 |        |
| SMS6P1      | 6                      | 18.6 | 22.9   |
| SMS9P1      | 9                      |      | 27.9   |
| SMS12P1     | 12                     |      | 33.0   |
| SMS15P1     | 15                     |      | 38.1   |
| SMS18P1     | 18                     |      | 43.2   |
| SMS24P1     | 24                     | 23.7 | 33.0   |
| SMS36P1     | 36                     | 49.1 |        |

# Plastic Panel and Cable Connectors

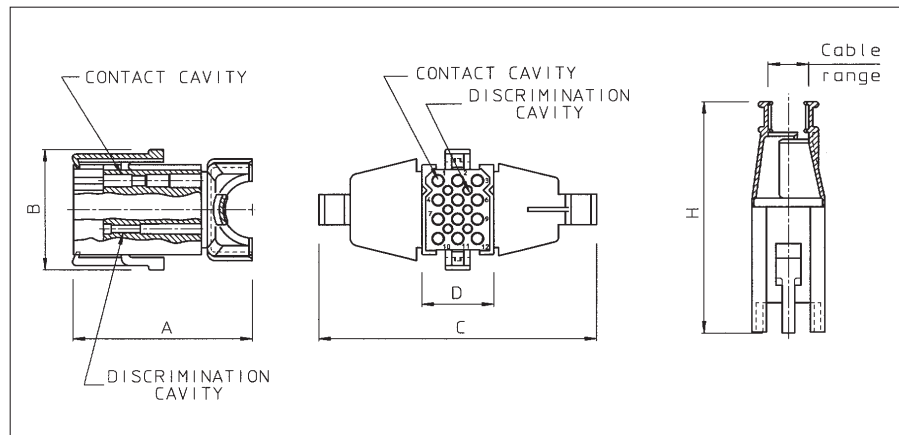


## Cable receptacle with integrated strain relief hood ( SMS--RDH1 )



| Part number<br>contact | Number of<br>disrimi-<br>pos. | Number of<br>nation pos. | A    | B    | C     | D    | H    | Cable<br>range | Recommen-<br>ded unirap<br>cable tie |
|------------------------|-------------------------------|--------------------------|------|------|-------|------|------|----------------|--------------------------------------|
| SMS2RDH1               | 2                             | 0                        | 31.6 | 9.9  | 64.8  | 11.1 | 49.2 | 0.5 - 8.4      | TF4D                                 |
| SMS3RDH1               | 3                             | 0                        | 35.1 |      | 69.0  | 16.2 |      | 0.8 - 7.3      |                                      |
| SMS4RDH1               | 4                             | 0                        | 38.2 |      | 74.4  | 21.2 |      | 1.5 - 10.0     |                                      |
| SMS6RDH1               | 6                             | 2                        | 34.6 | 15.0 | 72.6  | 16.2 | 50.9 | 1.7 - 9.2      | TF5D                                 |
| SMS9RDH1               | 9                             | 4                        | 35.8 | 20.0 | 75.3  |      | 52.2 | 3.9 - 14.3     |                                      |
| SMS12RDH1              | 12                            | 6                        | 38.1 | 25.1 | 72.0  |      | 52.7 | 4.0 - 15.0     |                                      |
| SMS15RDH1              | 15                            | 8                        | 35.9 | 30.2 | 81.3  |      | 55.2 | 5.0 - 16.2     |                                      |
| SMS18RDH1              | 18                            | 10                       | 36.1 | 35.3 |       |      |      | 5.8 - 20.3     |                                      |
| SMS24RDH1              | 24                            | 15                       | 39.7 | 25.1 | 90.4  | 21.2 | 57.2 | 7.1 - 20.4     |                                      |
| SMS36RDH1              | 36                            | 24                       | 54.6 |      | 128.0 | 46.6 | 63.3 | 8.8 - 24.5     |                                      |

## Cable plug with integrated strain relief hood ( SMS--PDH1 )



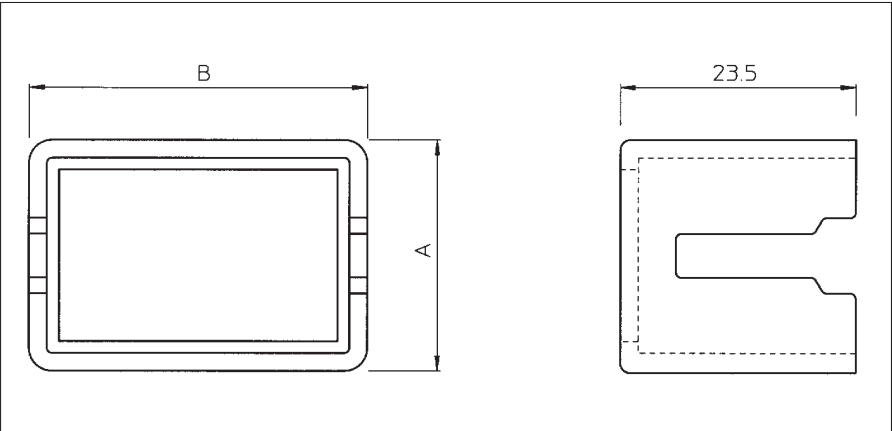
| Part number<br>contact | Number of<br>disrimi-<br>pos. | Number of<br>nation pos. | A    | B    | C     | D    | H    | Cable<br>range | Recommen-<br>ded unirap<br>cable tie |
|------------------------|-------------------------------|--------------------------|------|------|-------|------|------|----------------|--------------------------------------|
| SMS2PDH1               | 2                             | 0                        | 39.5 | 16.4 | 64.8  | 14.1 | 57.1 | 0.5 - 8.4      | TF4D                                 |
| SMS3PDH1               | 3                             | 0                        | 43.0 |      | 69.0  | 18.6 |      | 0.8 - 7.3      |                                      |
| SMS4PDH1               | 4                             | 0                        | 46.1 |      | 74.4  | 23.7 |      | 1.5 - 10.0     |                                      |
| SMS6PDH1               | 6                             | 2                        | 42.5 | 21.5 | 72.6  | 18.6 | 58.8 | 1.7 - 9.2      | TF5D                                 |
| SMS9PDH1               | 9                             | 4                        | 43.7 | 26.7 | 75.3  |      | 60.1 | 3.9 - 14.3     |                                      |
| SMS12PDH1              | 12                            | 6                        | 46.0 | 31.7 | 72.0  |      | 60.6 | 4.0 - 15.0     |                                      |
| SMS15PDH1              | 15                            | 8                        | 43.8 | 36.7 | 81.3  |      | 63.1 | 5.0 - 16.2     |                                      |
| SMS18PDH1              | 18                            | 10                       | 44.0 | 41.8 |       |      |      | 5.8 - 20.3     |                                      |
| SMS24PDH1              | 24                            | 15                       | 47.6 |      | 90.4  | 23.7 | 65.1 | 7.1 - 20.4     |                                      |
| SMS36PDH1              | 36                            | 24                       | 62.5 | 31.7 | 128.0 | 49.1 | 71.2 | 8.8 - 24.5     |                                      |

# Plastic Panel and Cable Connectors



## Accessories for standard Qikmate connectors

### Pin protection shroud for panel mount receptacle (SMS--CSB1)



When pins are inserted into the panelmount receptacle half (SMS--R1) of the QIKMATE connector, an optional pin protection shroud can be installed. The shroud is mounted at the same time as the receptacle by holding the shroud against the mating side of the panel with both cutouts lined up. The receptacle is then inserted in place, trapping the shroud between the receptacle and panel. The use of the pin protection shroud reduces the allowable thickness of the panel from 2.3 to 1.6 mm max.

| Part number | Number of contact positions | A    | B    |
|-------------|-----------------------------|------|------|
| SMS2CSB1    | 2                           | 19.8 | 18.8 |
| SMS3CSB1    | 3                           | 23.4 |      |
| SMS4CSB1    | 4                           | 28.4 |      |
| SMS6CSB1    | 6                           | 23.4 | 23.9 |
| SMS9CSB1    | 9                           |      | 29.0 |
| SMS12CSB1   | 12                          |      | 34.0 |
| SMS15CSB1   | 15                          |      | 39.1 |
| SMS18CSB1   | 18                          |      | 44.2 |
| SMS24CSB1   | 24                          | 28.4 | 34.0 |
| SMS36CSB1   | 36                          | 54.1 |      |

### Strain relief hoods (SMS--H1)



Separate strain relief hoods are available for all standard plugs SMS--P1. The hoods consist of identical halves that snap into position on the plug and are secured in place with the cable tie drawn tightly around the cable entry collar. Catalog numbers designate a complete hood (2 halves) SMS--H1. The cable tie is not included (TF4D – TF5D). Two three and four position hoods are single piece units.

### Discrimination pins

For discrimination pins on both standard Qikmate and Qikmate Pin Headers cable and boardmount: See accessories section.

[illegible]

# Plastic PC Boardmount Connectors



## SMS - BOARDMOUNT QIKMATE SERIES

### Description

These PC boardmount connectors enable QIKMATE and preassembled TRIM TRIO contacts to be PC board mounted, using conventional solder production techniques. They will then mate with the standard QIKMATE plugs.

Straight boardmount QIKMATE is available in 10 insert arrangements from 2 to 36 positions.

Right-angled boardmount QIKMATE is available in 3, 6, 12 and 18 positions.

All boardmount connectors are supplied fully loaded with pin or socket contacts, either in solid machined or stamped and formed contacts.

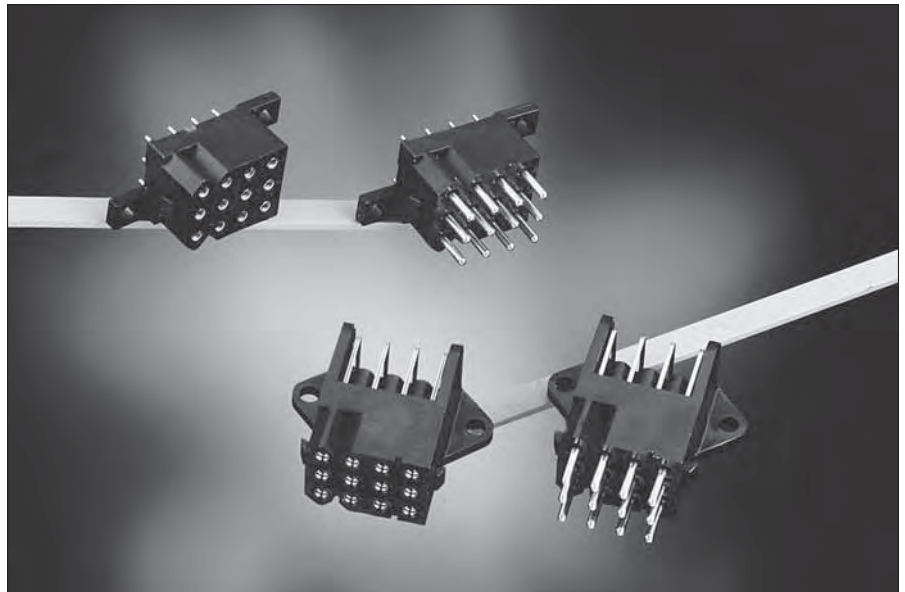
Stamped and formed contact have selective tin plating on the solder tails, thus eliminating flux operations.

### Features and benefits

- Straight versions available in 10 contact arrangements from 2 to 36 positions
- Right-angled versions available in 3, 6, 12 and 18 positions.
- All versions are available with:
  - Pin or socket contacts
  - Stamped and formed or solid machined contacts.
- Some boardmount connectors have discrimination cavities in between contact cavities, thus offering discrimination without contact loss.
- UL recognized File Nr.: E238675

### Performance characteristics

Operating



temperature: -55°C to +125°C

Insulation

resistance: 5000 MΩ min.

Test potential: 2000 VAC

Current rating: 5 Amp for stamped contacts  
7.5 Amp for machined contacts

Durability: 500 matings and unmatings.

### Construction

Connector body: Glass filled thermoplast UL94-V0

Contacts: High conductive copper alloy

### Plating table

Plating for solid machined contacts:

**No digit (std)** = Min. 0.4μ Gold all over, over Nickel.

T = 3 - 5μ Tin all over

Plating for Stamped and formed contacts :

**K9 (std)** = Min. 0.4μ Gold in contact area, 3 - 5μ Tin on solder tail.

T = 3 - 5μ Tin all over

### Intermateability

- "SMS" Qikmate boardmount connectors with preassembled TRIM TRIO size 16 boardmount contacts are intermateable only with the "SMS" Qikmate cable plug connectors equipped with TRIM TRIO crimp type removable snap-lock contacts (see contact section)

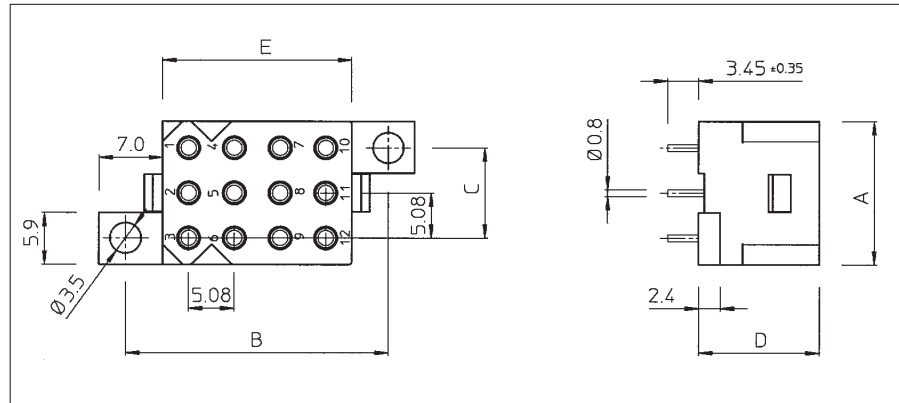
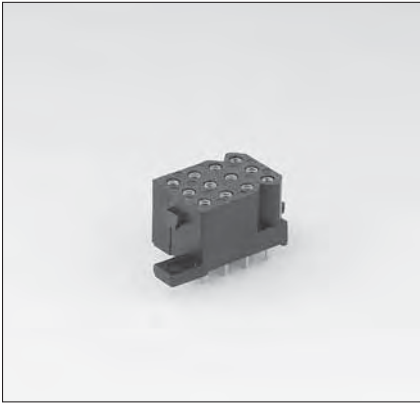
## How to order

| Connector family    |                                                                                                                                                                                            | SMS | 12 | GE | 3 | —  |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|----|---|----|
|                     |                                                                                                                                                                                            | SMS | 12 | SE | 3 | K9 |
| Contact arrangement |                                                                                                                                                                                            |     |    |    |   |    |
| Contact type:       | GE: Solid machined contacts<br>SE: Stamped and formed contacts                                                                                                                             |     |    |    |   |    |
| Design variation:   | 3: Straight boardmount with female contacts<br>4: Straight boardmount with male contacts<br>5: Right angle boardmount with female contacts<br>6: Right angle boardmount with male contacts |     |    |    |   |    |
| Plating indication  |                                                                                                                                                                                            |     |    |    |   |    |

# Plastic PC Boardmount Connectors



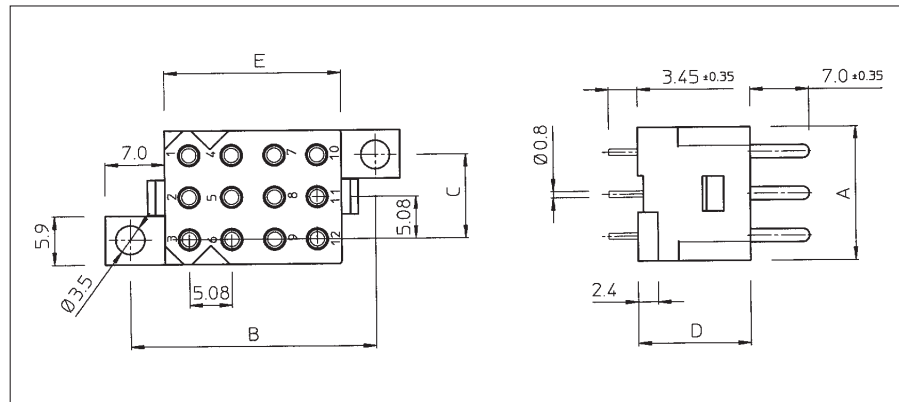
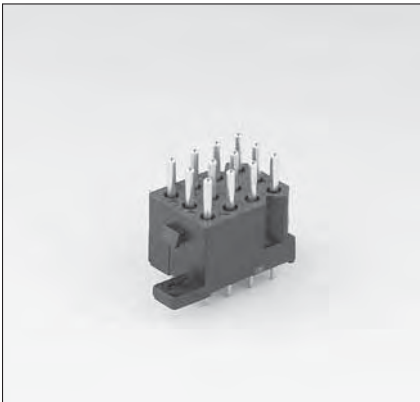
## Straight boardmount with female contacts (SMS--GE3 / SMS--SE3K9)



| Part number<br>Solid machined<br>contacts | Part number<br>Stamped and<br>formed contacts | Number of<br>contact pos. | Number of<br>discrimination<br>pos. | A    | B    | C    | D    | E    |
|-------------------------------------------|-----------------------------------------------|---------------------------|-------------------------------------|------|------|------|------|------|
| SMS2GE3                                   | SMS2SE3K9                                     | 2                         | 0                                   | 11.0 | -    | 19.1 | 13.4 | 5.9  |
| SMS3GE3                                   | SMS3SE3K9                                     | 3                         | 0                                   | 16.2 | 14.0 | 10.2 |      |      |
| SMS4GE3                                   | SMS4SE3K9                                     | 4                         | 0                                   | 21.3 |      | 15.2 |      |      |
| SMS6GE3                                   | SMS6SE3K9                                     | 6                         | 0                                   | 16.2 | 19.2 | 10.2 |      | 10.9 |
| SMS9GE3                                   | SMS9SE3K9                                     | 9                         | 4                                   |      | 24.2 |      |      | 16.0 |
| SMS12GE3                                  | SMS12SE3K9                                    | 12                        | 0                                   |      | 29.2 |      |      | 21.1 |
| SMS15GE3                                  | SMS15SE3K9                                    | 15                        | 8                                   |      | 34.3 |      |      | 26.1 |
| SMS18GE3                                  | SMS18SE3K9                                    | 18                        | 10                                  |      | 39.4 |      |      | 31.2 |
| SMS24GE3                                  | SMS24SE3K9                                    | 24                        | 0                                   | 21.2 | 15.2 |      |      |      |
| SMS36GE3                                  | SMS36SE3K9                                    | 36                        | 0                                   | 46.5 | 15.2 | 54.6 |      | 20.9 |

For other platings: see plating table

## Straight boardmount with male contacts (SMS--GE4 / SMS--SE4K9)



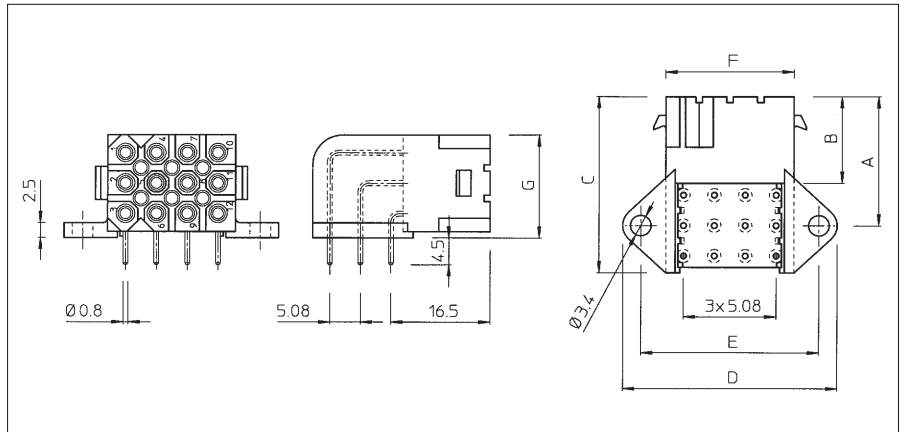
| Part number<br>Solid machined<br>contacts | Part number<br>Stamped and<br>formed contacts | Number of<br>contact pos. | Number of<br>discrimination<br>pos. | A    | B    | C    | D    | E    |
|-------------------------------------------|-----------------------------------------------|---------------------------|-------------------------------------|------|------|------|------|------|
| SMS2GE4                                   | SMS2SE4K9                                     | 2                         | 0                                   | 11.1 | -    | 19.1 | 13.4 | 5.9  |
| SMS3GE4                                   | SMS3SE4K9                                     | 3                         | 0                                   | 16.2 | 14.0 | 10.2 |      |      |
| SMS4GE4                                   | SMS4SE4K9                                     | 4                         | 0                                   | 21.3 |      | 15.2 |      |      |
| SMS6GE4                                   | SMS6SE4K9                                     | 6                         | 0                                   | 16.2 | 19.2 | 10.2 |      | 10.9 |
| SMS9GE4                                   | SMS9SE4K9                                     | 9                         | 4                                   |      | 24.2 |      |      | 16.0 |
| SMS12GE4                                  | SMS12SE4K9                                    | 12                        | 0                                   |      | 29.2 |      |      | 21.1 |
| SMS15GE4                                  | SMS15SE4K9                                    | 15                        | 8                                   |      | 34.3 |      |      | 26.1 |
| SMS18GE4                                  | SMS18SE4K9                                    | 18                        | 10                                  |      | 39.4 |      |      | 31.2 |
| SMS24GE4                                  | SMS24SE4K9                                    | 24                        | 0                                   | 21.2 |      | 15.2 |      |      |
| SMS36GE4                                  | SMS36SE4K9                                    | 36                        | 0                                   | 46.5 | 15.2 | 54.6 |      | 20.9 |

For other platings: see plating table

# Plastic PC Boardmount Connectors



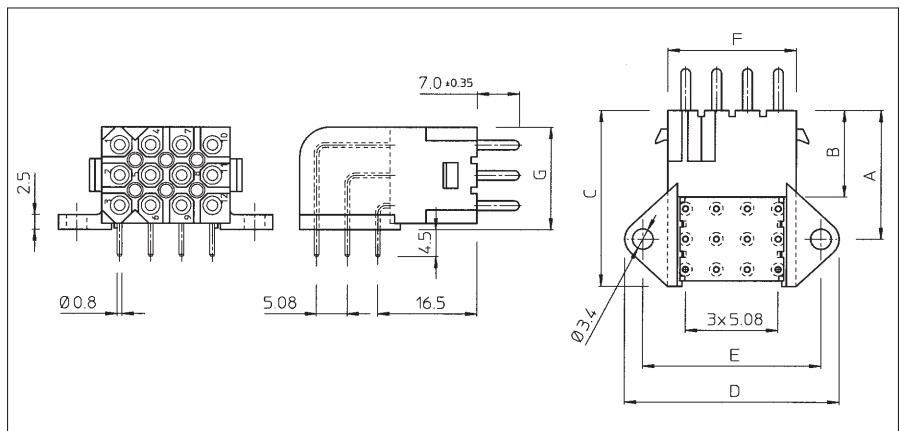
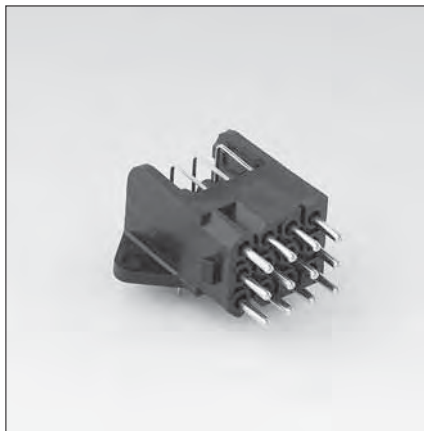
## Right angle boardmount with female contacts (SMS--GE5 / SMS--SE5K9)



| Part number<br>Solid machined<br>contacts | Part number<br>Stamped and<br>formed contacts | Number of<br>contact pos. | Number of<br>discrimination<br>pos. | A    | B    | C    | D    | E    | F    | G    |
|-------------------------------------------|-----------------------------------------------|---------------------------|-------------------------------------|------|------|------|------|------|------|------|
| <b>SMS3GE5</b>                            | <b>SMS3SE5K9</b>                              | <b>3</b>                  | <b>0</b>                            | 16.5 | 14.4 | 20.5 | 30.2 | 24.2 | 16.2 | 6.8  |
| <b>SMS6GE5</b>                            | <b>SMS6SE5K9</b>                              | <b>6</b>                  | <b>0</b>                            | 19.0 |      | 24.5 |      |      |      | 11.9 |
| <b>SMS12GE5</b>                           | <b>SMS12SE5K9</b>                             | <b>12</b>                 | <b>6</b>                            | 21.6 |      | 29.5 | 35.2 | 29.2 | 21.2 | 17.2 |
| <b>SMS18GE5</b>                           | <b>SMS18SE5K9</b>                             | <b>18</b>                 | <b>10</b>                           |      |      |      | 45.4 | 39.4 | 31.2 |      |

For other platings: see plating table

## Right angle boardmount with male contacts (SMS--GE6 / SMS--SE6K9)



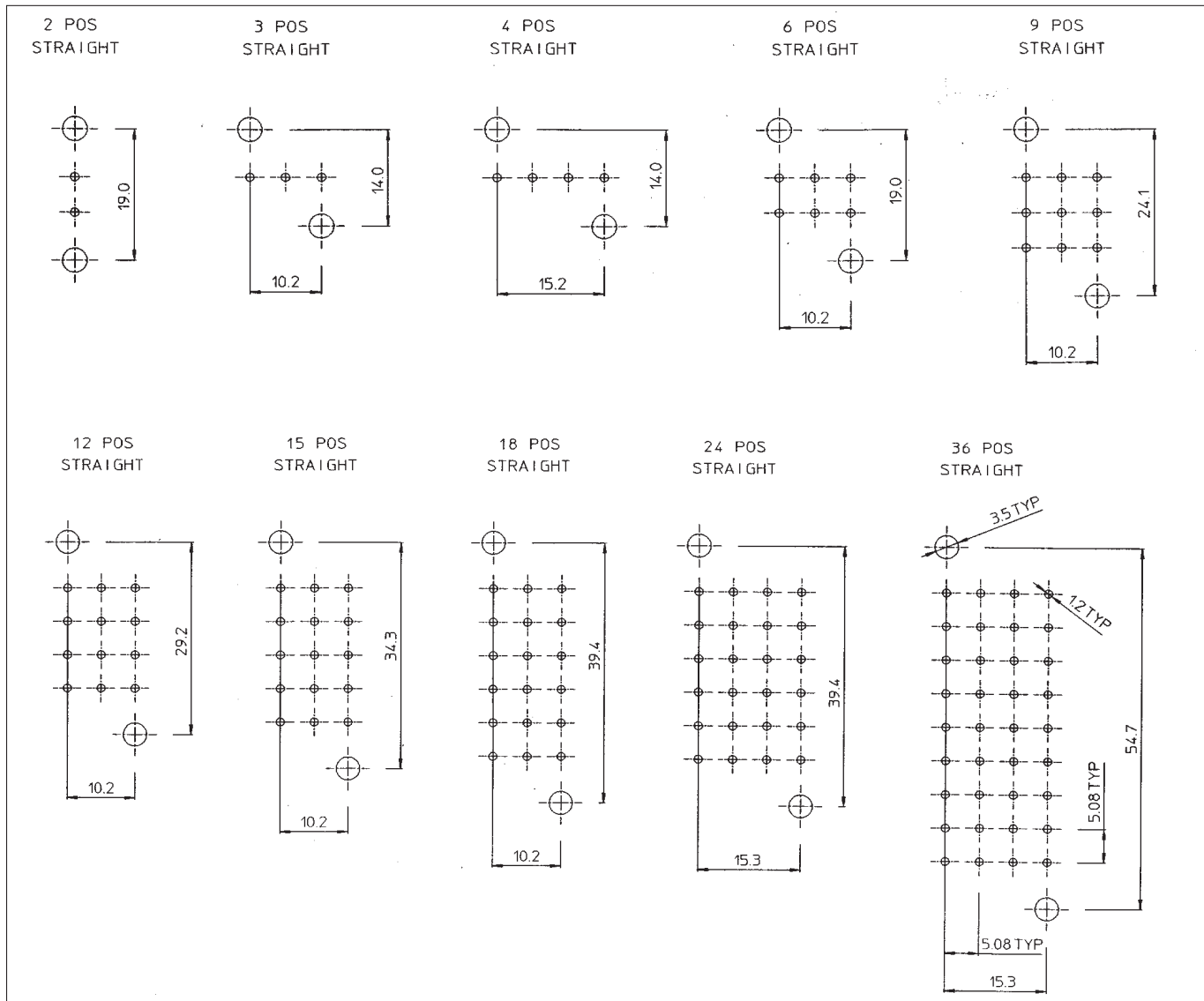
| Part number<br>Solid machined<br>contacts | Part number<br>Stamped and<br>formed contacts | Number of<br>contact pos. | Number of<br>discrimination<br>pos. | A    | B    | C    | D    | E    | F    | G    |
|-------------------------------------------|-----------------------------------------------|---------------------------|-------------------------------------|------|------|------|------|------|------|------|
| <b>SMS3GE6</b>                            | <b>SMS3SE6K9</b>                              | <b>3</b>                  | <b>0</b>                            | 16.5 | 14.4 | 20.5 | 30.2 | 24.2 | 16.2 | 6.8  |
| <b>SMS6GE6</b>                            | <b>SMS6SE6K9</b>                              | <b>6</b>                  | <b>0</b>                            | 19.0 |      | 24.5 |      |      |      | 11.9 |
| <b>SMS12GE6</b>                           | <b>SMS12SE6K9</b>                             | <b>12</b>                 | <b>6</b>                            | 21.6 |      | 29.5 | 35.2 | 29.2 | 21.2 | 17.2 |
| <b>SMS18GE6</b>                           | <b>SMS18SE6K9</b>                             | <b>18</b>                 | <b>10</b>                           |      |      |      | 45.4 | 39.4 | 31.2 |      |

For other platings: see plating table

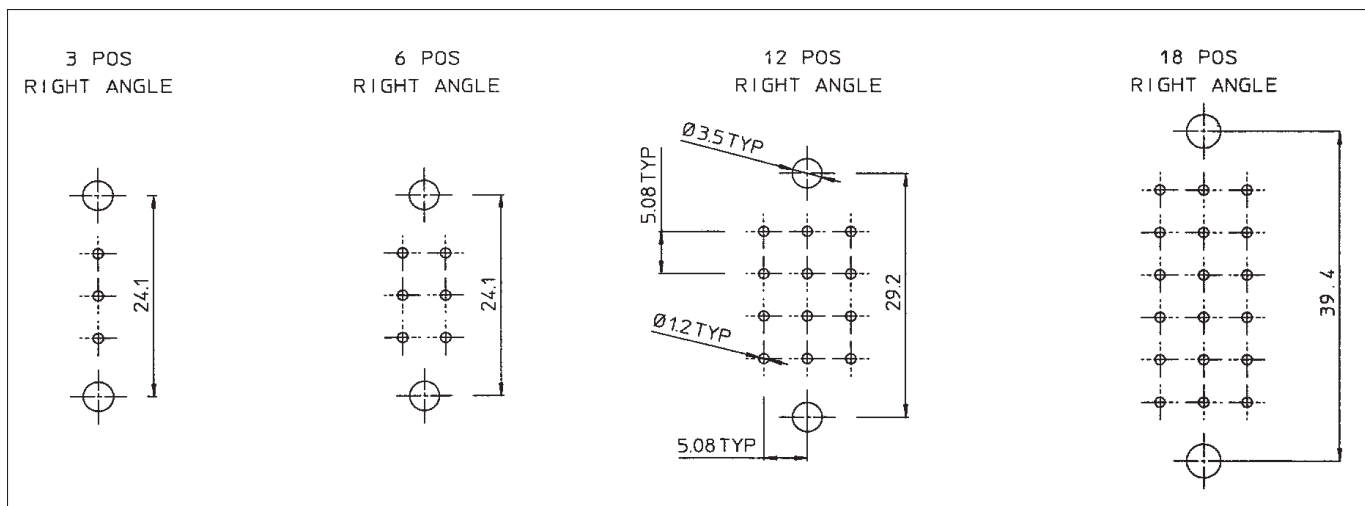
# Plastic PC Boardmount Connectors



## Recommended PC-Board hole lay out for straight male and female boardmount connectors



## Recommended PC-Board hole lay out for right-angled male and female boardmount connectors



# Full Plastic Boardmount Pin Headers and Plugs



## SMS - Qikmate Pin Header Series

### Description

Qikmate Pin Header, available in 3, 4, 6, 9 and 10 positions, provides the additional versatility of straight and right angle board mounting.

Offered as an alternative to stacked connectors, the in-line contact design of the pin header provides the user with significant PC board space savings.

The boardmount receptacle features positive polarization and a moulded on pin protection skirt and is supplied preassembled with straight or right angled:

- Solid machined or stamped and formed PC board pin contacts.
- Coax PC board pin contacts.

The socket cable plug features positive quick connect / disconnect latches and is designed to accept N° 16 TRIM TRIO .0625" (1.6mm) diameter socket contacts for maximum contact protection.

### Features and benefits

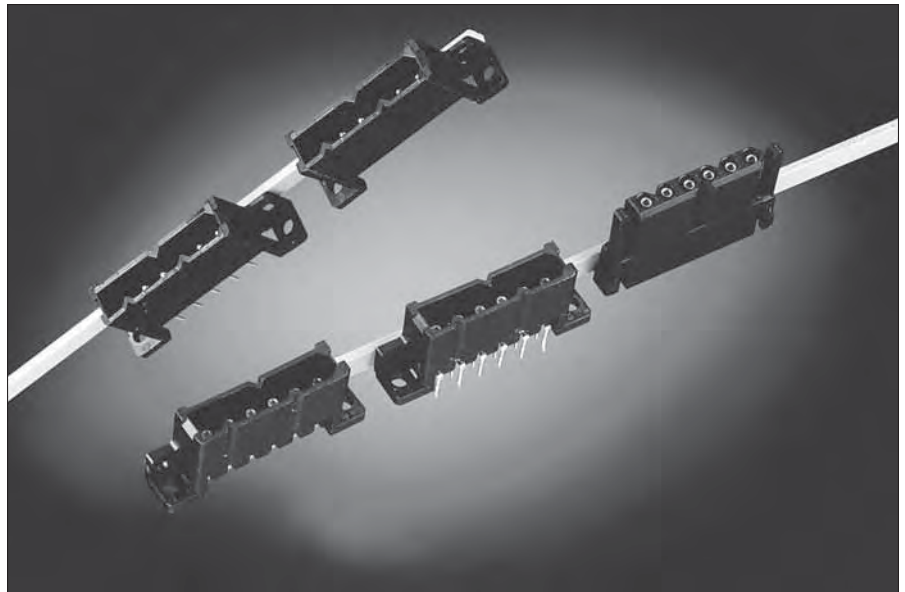
- Available in 3, 4, 6, 9 and 10 positions.
- In-line contact design, offering significant PC board space savings.
- Boardmount connectors available in straight and right-angled version preassembled with:
  - Solid machined or stamped and formed pin contacts.
  - Coax pin contacts.
- UL recognized File Nr.: E238675

### Construction

Connector body:  
Glass filled thermoplast UL94-V0  
Colour: Black

Contacts: High conductive copper alloy

### Performance characteristics



|                        |                                                             |
|------------------------|-------------------------------------------------------------|
| Operating temperature: | -55°C to +125°C                                             |
| Insulation resistance: | 5000 MΩ min.                                                |
| Test potential:        | 2000 VAC                                                    |
| Current rating:        | 5 Amp for stamped contacts<br>7.5 Amp for machined contacts |
| Durability:            | 500 matings and unmatings.                                  |

### Intermateability

- "SMS" Socket plugs accept TRIM TRIO size 16 removable snap-lock contacts (see contact section)
- Contacts to be ordered separately.

### Plating table

Plating for solid machined contacts:

**No digit (std)** = Min. 0.4μ Gold all over, over Nickel.

T = 3 - 5μ Tin all over

Plating for Stamped and formed contacts :

D28 = Min. 0.75μ Au over nickel.

D70 = Gold flash all over

TR29 = 1.2μ Pre-plated Tin all over.

Plating for coax contacts:

Z17 = Min. 0.75μ Au in contact area,  
Flash on solder tail (inner)  
Min 0.75μ Au in contact area,  
Tin on solder tail (outer)

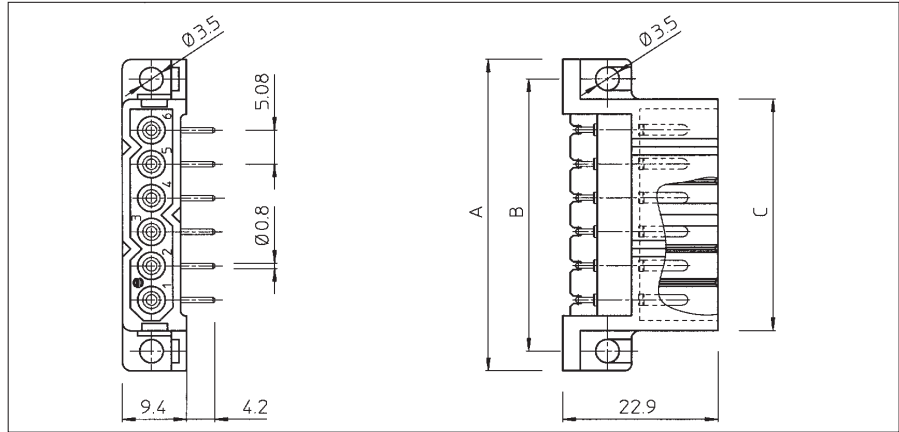
## How to order

| Connector family    |      | SMS                                                           | 9 | PH | 3 | TR29 |
|---------------------|------|---------------------------------------------------------------|---|----|---|------|
|                     |      | SMS                                                           | 9 | CH | 1 | Z17  |
|                     |      | SMS                                                           | 9 | P3 | — | —    |
| Contact arrangement |      |                                                               |   |    |   |      |
| Contact type:       | PH:  | Pin header boardmount.                                        |   |    |   |      |
|                     | CH:  | Coax header boardmount.                                       |   |    |   |      |
|                     | P3:  | Socket cable plug for pin and coax boardmount header.         |   |    |   |      |
| Design variation:   | 1:   | Right angle coax header boardmount with male contacts.        |   |    |   |      |
|                     | 2:   | Straight coax header boardmount with male contacts            |   |    |   |      |
|                     | 3:   | Right angle pin header boardmount with stamped male contacts  |   |    |   |      |
|                     | 4:   | Straight pin header boardmount with stamped male contacts     |   |    |   |      |
|                     | GE6: | Right angle pin header boardmount with machined male contacts |   |    |   |      |
|                     | GE4: | Straight pin header boardmount with machined male contacts    |   |    |   |      |
| Plating indication  |      |                                                               |   |    |   |      |

# Full Plastic Boardmount Pin Headers and Plugs



## Right angle pin header boardmount with male contacts (SMS--PH3 / SMS--PHGE6)

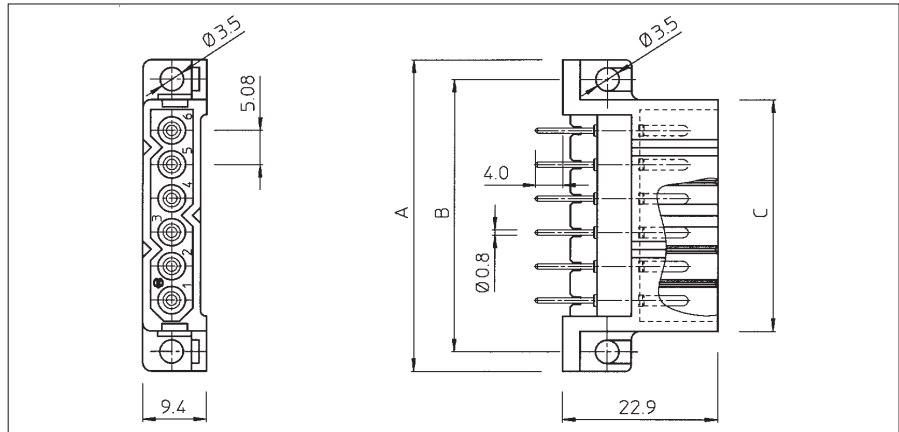


| Part number<br>Stamped and<br>formed contacts | Part number<br>Solid machined<br>contacts | Number of<br>contact<br>positions | A    | B    | C    |
|-----------------------------------------------|-------------------------------------------|-----------------------------------|------|------|------|
| SMS3PH3TR29                                   | SMS3PHGE6                                 | 3                                 | 31.2 | 25.4 | 19.3 |
| SMS4PH3TR29                                   | SMS4PHGE6                                 | 4                                 | 36.3 | 30.4 | 24.4 |
| SMS6PH3TR29                                   | SMS6PHGE6                                 | 6                                 | 46.5 | 40.6 | 34.5 |
| SMS9PH3TR29                                   | SMS9PHGE6                                 | 9                                 | 61.7 | 55.9 | 49.8 |
| SMS10PH3TR29                                  | SMS10PHGE6                                | 10                                | 66.8 | 61.0 | 54.9 |

For other platings: see plating table.

Other solder tail lengths on request

## Straight pin header boardmount with male contacts (SMS--PH4 / SMS--PHGE4)



| Part number<br>Stamped and<br>formed contacts | Part number<br>Solid machined<br>contacts | Number of<br>contact<br>positions | A    | B    | C    |
|-----------------------------------------------|-------------------------------------------|-----------------------------------|------|------|------|
| SMS3PH4TR29                                   | SMS3PHGE4                                 | 3                                 | 31.2 | 25.4 | 19.3 |
| SMS4PH4TR29                                   | SMS4PHGE4                                 | 4                                 | 36.3 | 30.4 | 24.4 |
| SMS6PH4TR29                                   | SMS6PHGE4                                 | 6                                 | 46.5 | 40.6 | 34.5 |
| SMS9PH4TR29                                   | SMS9PHGE4                                 | 9                                 | 61.7 | 55.9 | 49.8 |
| SMS10PH4TR29                                  | SMS10PHGE4                                | 10                                | 66.8 | 61.0 | 54.9 |

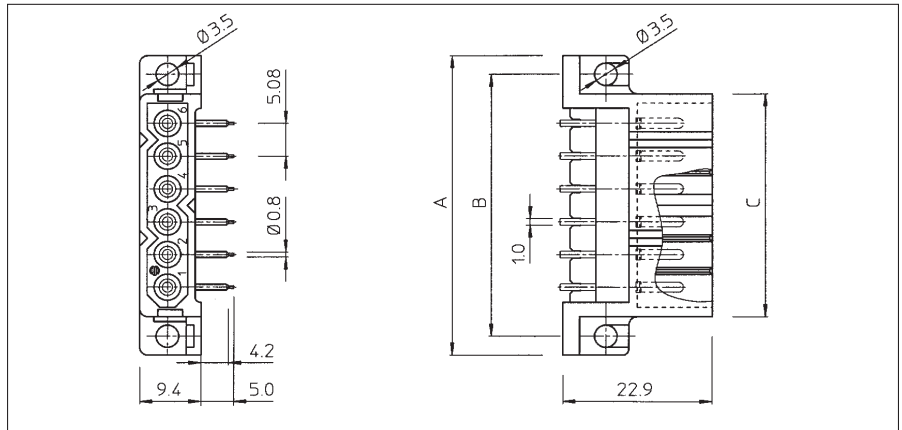
For other platings: see plating table.

Other solder tail lengths on request

# Full Plastic Boardmount Pin Headers and Plugs



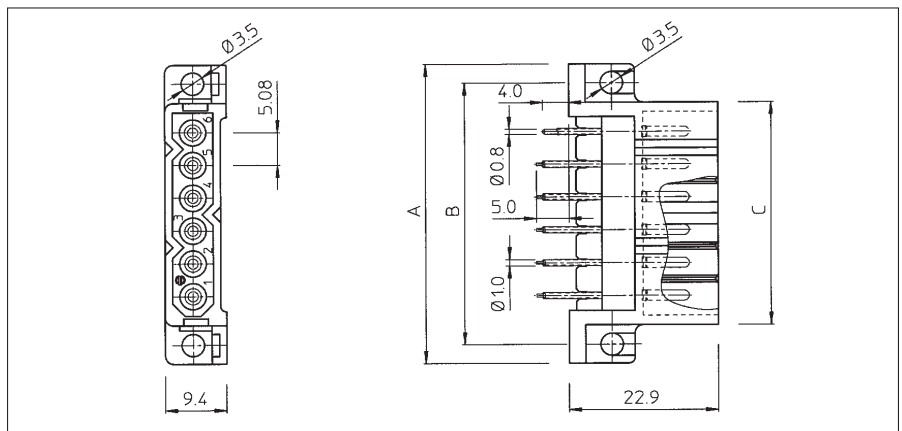
## Right angle coax header boardmount with male contacts (SMS--CH1Z17)



| Part number positions | Number of contact | A    | B    | C    |
|-----------------------|-------------------|------|------|------|
| <b>SMS3CH1Z17</b>     | <b>3</b>          | 31.2 | 25.4 | 19.3 |
| <b>SMS4CH1Z17</b>     | <b>4</b>          | 36.3 | 30.4 | 24.4 |
| <b>SMS6CH1Z17</b>     | <b>6</b>          | 46.5 | 40.6 | 34.5 |
| <b>SMS9CH1Z17</b>     | <b>9</b>          | 61.7 | 55.9 | 49.8 |
| <b>SMS10CH1Z17</b>    | <b>10</b>         | 66.8 | 61.0 | 54.9 |

For plating spec.: see plating table.

## Straight coax header boardmount with male contacts (SMS--CH2Z17)



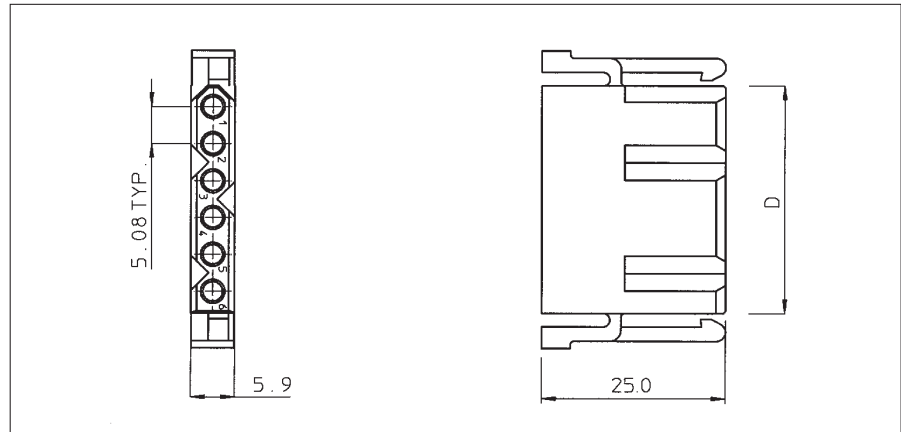
| Part number positions | Number of contact | A    | B    | C    |
|-----------------------|-------------------|------|------|------|
| <b>SMS3CH2Z17</b>     | <b>3</b>          | 31.2 | 25.4 | 19.3 |
| <b>SMS4CH2Z17</b>     | <b>4</b>          | 36.3 | 30.4 | 24.4 |
| <b>SMS6CH2Z17</b>     | <b>6</b>          | 46.5 | 40.6 | 34.5 |
| <b>SMS9CH2Z17</b>     | <b>9</b>          | 61.7 | 55.9 | 49.8 |
| <b>SMS10CH2Z17</b>    | <b>10</b>         | 66.8 | 61.0 | 54.9 |

For plating spec.: see plating table.

# Full Plastic Boardmount Pin Headers and Plugs

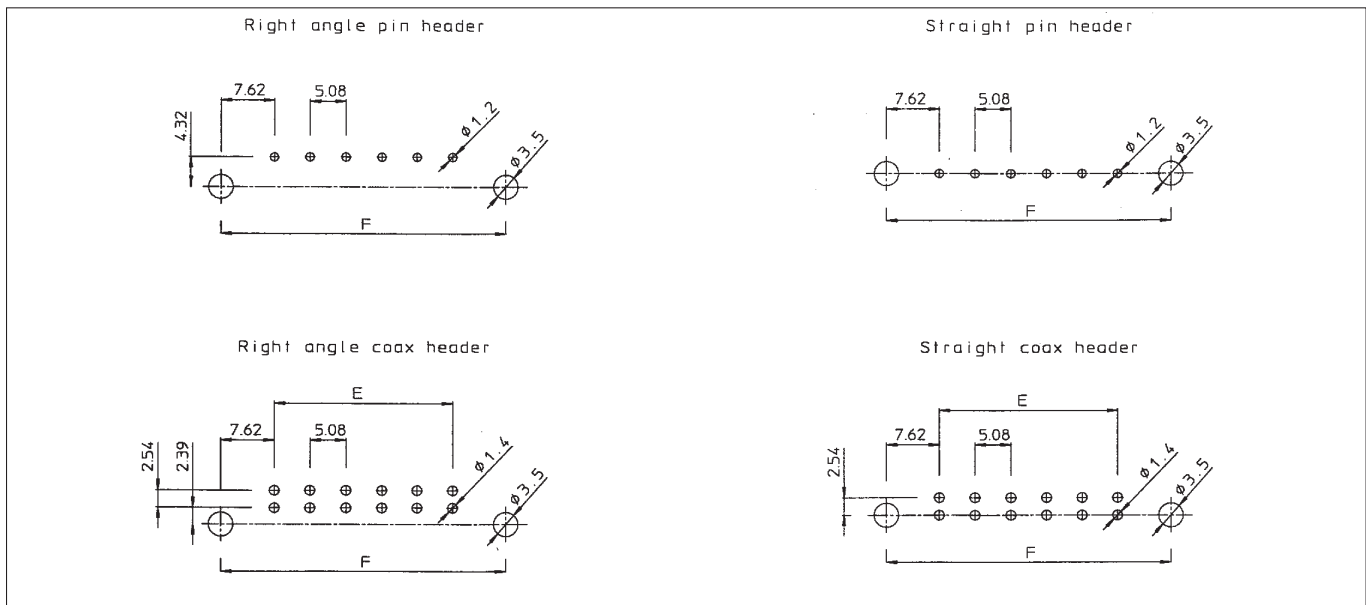


## Socket cable plug for pin and coax boardmount header (SMS--P3)



| Part number | Number of contact positions | D    |
|-------------|-----------------------------|------|
| SMS3P3      | 3                           | 16.0 |
| SMS4P3      | 4                           | 21.1 |
| SMS6P3      | 6                           | 31.2 |
| SMS9P3      | 9                           | 46.5 |
| SMS10P3     | 10                          | 51.6 |

## Recommended PC-board hole layouts



| Part number of contact positions | E     | F     |
|----------------------------------|-------|-------|
| 3                                | 10.18 | 25.40 |
| 4                                | 15.24 | 30.48 |
| 6                                | 25.40 | 40.64 |
| 9                                | 40.64 | 55.88 |
| 10                               | 45.72 | 60.96 |

# Rectangular Mixed Power/ Signal



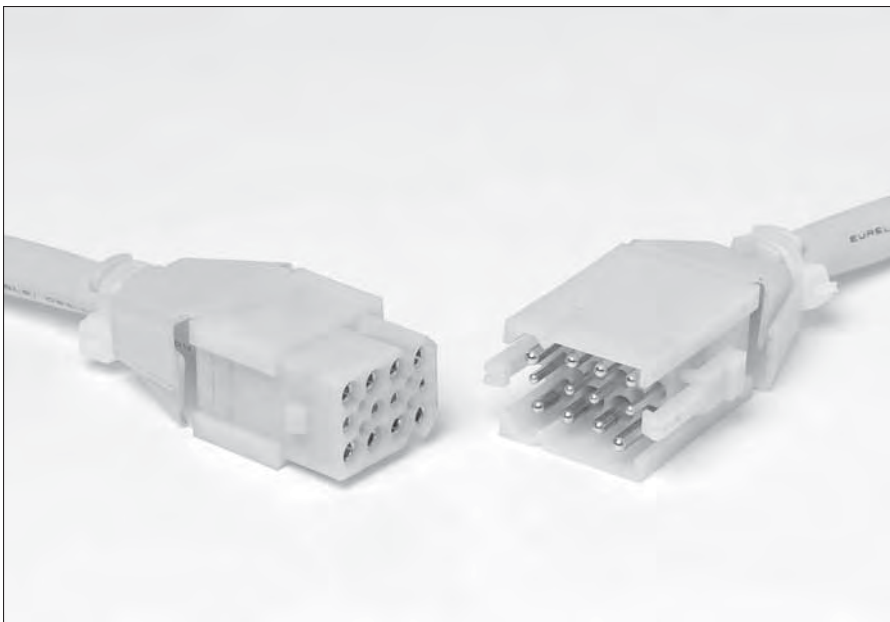
## Description

Power connectors are connectors to meet mixed power and signal requirements.

This range of power connectors is an extension of the long established and popular TRIM TRIO connector series shown in this catalogue, but with the advantage of offering a number of additional features

## Features and benefits

- Connectors suitable for mixed power / signal application.
- Design in flexibility of TRIM TRIO.



## Our Design flexibilities are virtually unlimited on:

- **Contact arrangements**
- **Mixed contact lay-outs**
- **Power versions**
- **Hybrid contacts arrangements**
- **Filtered connectors**
- **High speed solutions**
- **Robust designs**
- **Higher corrosion withstandings**
- ...

The next page lists some of the mixed power / signal TRIM TRIO connector configurations.

It is intended to give you a general idea of our design capabilities.

As the creation of mixed power / signal TRIM TRIO connectors is an ongoing process, we advise you to contact our nearest SOURIAU sales office if you have specific connector needs.

Our design flexibility is virtually unlimited, so we are always willing to consider any customised design. Separate data sheets with more detailed technical info of the listed mixed power / signal TRIM TRIO connectors are available.

# Rectangular Mixed Power/Signal



## SMS 12 with 8 power & 4 standard TRIM TRIO contacts

### Description

It is an SMS12 connector with a modified insert arrangement to accept

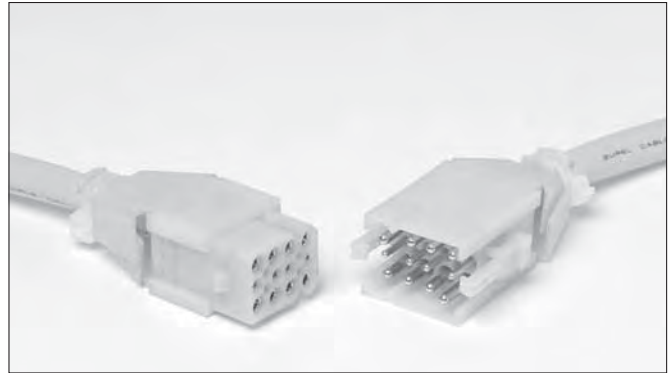
8 power contacts #12 (2.4mm) and

4 TRIM TRIO #16 (1.6mm) signal contacts.

It also offers 4 extra discrimination cavities that accept the SMSPK3 discrimination pins.

### Typical performance characteristics.

- Power contacts #12 (2.4mm) for up to 26 Amp
- Operating temp: -55°C to +150°C
- For further characteristics, (refer to technical drawings)



### Contact accommodation

- Signal cavities accept the TRIM TRIO size 16 crimp-type removable snap-lock contacts (see contacts section)
- Power cavities accept the 8291 power contacts (see power contacts 8291 section)
- Contacts to be ordered separately.

### Available part numbers:

| Part number | Shell size | Description          |
|-------------|------------|----------------------|
| SMS12PDH2NA | 12         | Plug connector       |
| SMS12RDH2NA |            | Receptacle connector |

For dimensions or other characteristics, refer to section SMS with corresponding shell size or refer to the technical drawings

## SMS 12P24 with 8 power & 4 standard TRIM TRIO contacts

### Description

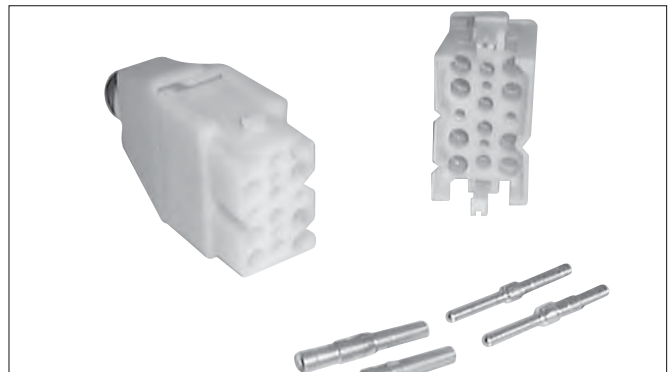
It is an SMS15 connector with a modified insert arrangement to accept

8 power contacts #12 (2.4mm) and

4 TRIM TRIO #16 (1.6mm) signal contacts.

Designed per VDE 0110

It also offers 4 extra discrimination cavities that accept the SMSPK3 discrimination pins.



### Contact accommodation

- Signal cavities accept the TRIM TRIO size 16 crimp-type removable snap-lock contacts (see contacts section)
- Power cavities accept the 8291 power contacts (see power contacts 8291 section)
- Contacts to be ordered separately.

### Available part numbers:

| Part number    | Shell size | Description          |
|----------------|------------|----------------------|
| SMS12P24PDH1NA | 15         | Plug connector       |
| SMS12P24RDH1NA |            | Receptacle connector |

For dimensions or other characteristics, refer to section SMS with corresponding shell size or refer to the technical drawings

# Rectangular Heavy Duty Connectors



## MS75 with die cast hood & integrated shroud

### Description

This MS75 connector features a robust cable hood with integrated shroud and turnable jackscrews. It is available for different cable diameters.

### Performance characteristics.

Refer to technical drawings

### Available part numbers (consult factory):

Several part numbers are available with cable glands to accept different cable diameters.



### Contact accommodation

- "MS-M" Hyfen connectors accept TRIM TRIO size 16 crimp-type removable snap-lock contacts (see contact section)
- Contacts to be ordered separately

## MS50 & MS75 with robust cable hood & shroud

### Description

This MS50 & MS75 connector features a robust cable hood with shroud. It also features enlarged turnable jackscrews to ease the connector mating and unmating in extreme conditions.

### Performance characteristics.

Refer to technical drawings



### Contact accommodation

- "MS-M" Hyfen connectors accept TRIM TRIO size 16 crimp-type removable snap-lock contacts (see contact section)
- Contacts to be ordered separately

### Available part numbers:

| Part number        | Shell size | Description                             |
|--------------------|------------|-----------------------------------------|
| MS50RM157SGMSP2256 | 50         | 50 position cable connector with shroud |
| MS75RM157SGMSP2256 | 75         | 75 position cable connector with shroud |

# Rectangular Drawer Connector



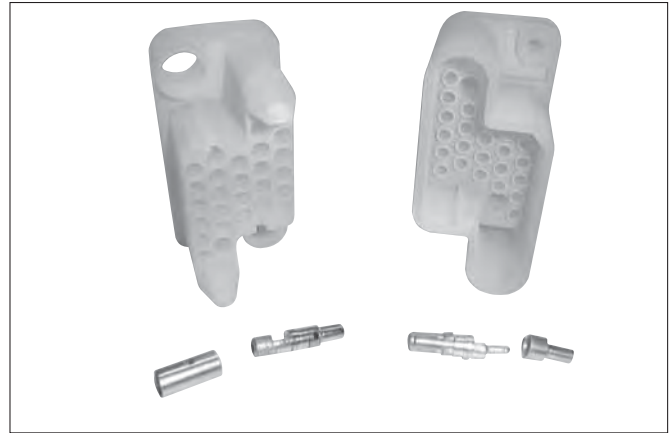
## DRW25 drawer connector with 2 DIN 41626 coax cavities

### Description

DRW25 drawer connector is made for blind mating applications and accept:  
25 TRIM TRIO contacts and  
2 DIN 41626 coax contacts

### Performance characteristics.

Refer to technical drawings



### Contact accommodation

- Signal cavities accept the TRIM TRIO size 16 crimp-type removable snap-lock contacts (see contacts section)
- Coax cavities accept DIN 41626 coax contacts (not available from Souriau)
- TRIM TRIO Contacts to be ordered separately.

### Available part numbers:

| Part number      | Description                               |
|------------------|-------------------------------------------|
| <b>DRW25C2P1</b> | 25 + 2 Positions, female drawer plug.     |
| <b>DRW25C2R1</b> | 25 + 2 Positions, male drawer receptacle. |

# Monolink

## Single Position Connector



**The one-position connector offers an unlimited wiring versatility. It uses all Trim Trio contacts.**

### Performance characteristics.

Operating Temperature: -55°C to +125°C

Durability: 500 Cycles

Vibration Resistance: Per MIL-STD-202, method 204

Shock: Per MIL-STD-202, method 207

### Construction

Connector Body: Polyamide 6.6

### Contact Accommodation

Quick disconnect cable splice accept:

- RM/RC Machined Contacts
- SM/SC Formed one-piece Contacts
- SM/SC Formed two-piece Contacts
- RMDX/RCDX Coaxial Contacts



### Features and Benefits

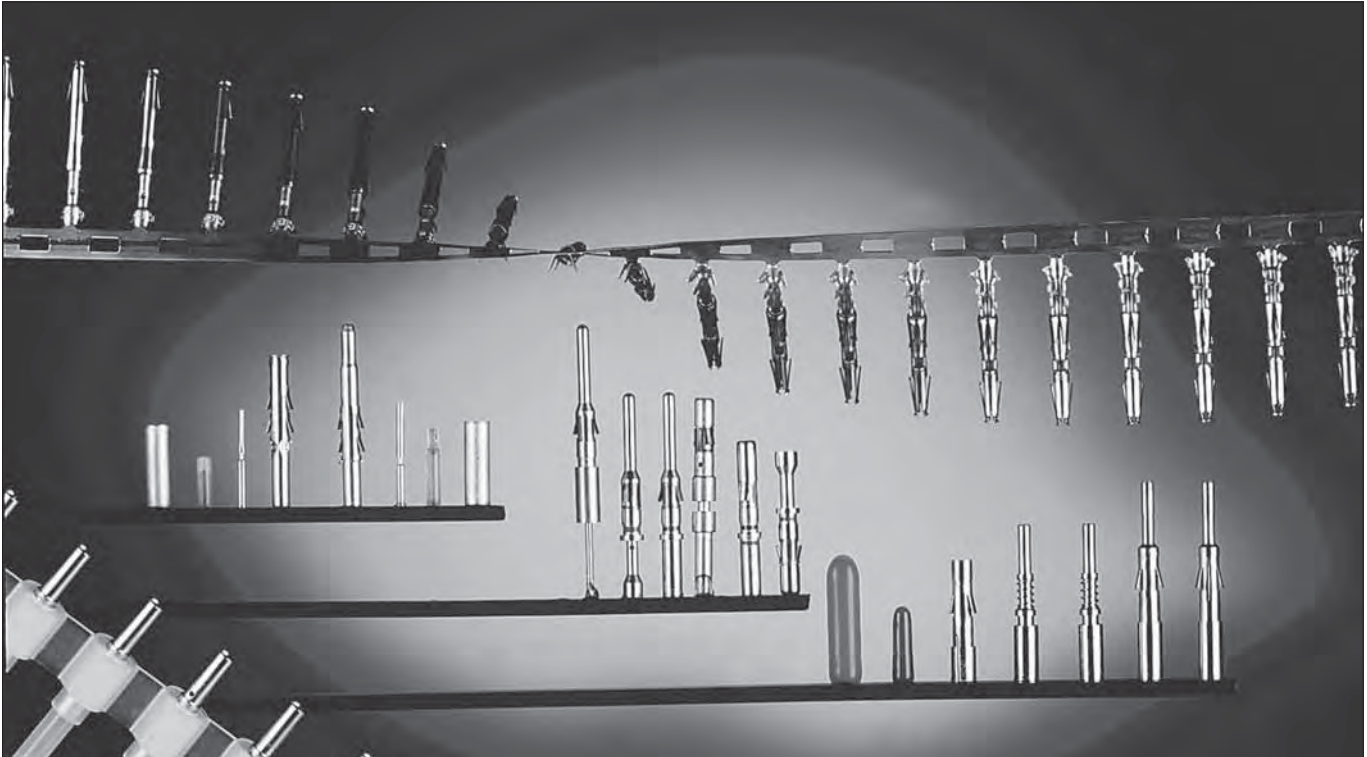
- Locking with a positive snap
- Unmating force between 3 and 15 lbs., therefore locked until intentionally separated
- Molded-in serrations which improve grip on both plug and receptacle while mating and unmating
- Both parts cover the contacts entirely, to prevent accidental damage to contacts
- White color makes coding for discrimination purposes possible
- Removable crimp snap-in pin and socket Trim Trio contacts
- Ideal for repairing co-axial cables (RG 178, RG 179, RG 187, RG 188, etc.)

| Part number    | Description     |
|----------------|-----------------|
| <b>RSCDEX2</b> | Plug Body       |
| <b>RSMDEX1</b> | Receptacle Body |

# Contacts



## Overview TRIM TRIO contacts



### **TRIM TRIO contacts are a wide and versatile range that are offered in many options for crimp, coax and Fiber optic applications**

This section gives an overview on available rectangular connectors for:

#### **1. Size 16 contacts (1.6mm).**

- RM/RC – High performance machined contacts.
- SM-M/SC-M – Stamped and formed contacts.
- RMDX/RCDX – Coax Contacts.
- Fiber optic contacts

#### **2. Size 20 contacts (1.0mm).**

- RM-W/RC-W – High performance machined contacts.
- SM-W/SC-W – Stamped and formed contacts.

#### **3. 8291 power contacts.**

- Size 12 contacts (2.4mm)
- Size 8 contacts (3.6mm)

# Machined Crimp Contacts size 16



## RM/RC-M

### Description

Size 16 RM/RC .063" (1.6mm) diameter contacts are precision solid machined crimp snap-in pin and sockets for heavy duty top performance requirements.

Springs on both contacts are made of spring-tempered, heat-treated, beryllium copper.

The socket inner spring supplies high contact pressure to ensure low-resistance contact between pin and socket. The socket contact features closed entry to prevent probe damage. Crimp barrels have insulation grips for vibration support and are provided with a cable stop and inspection hole.

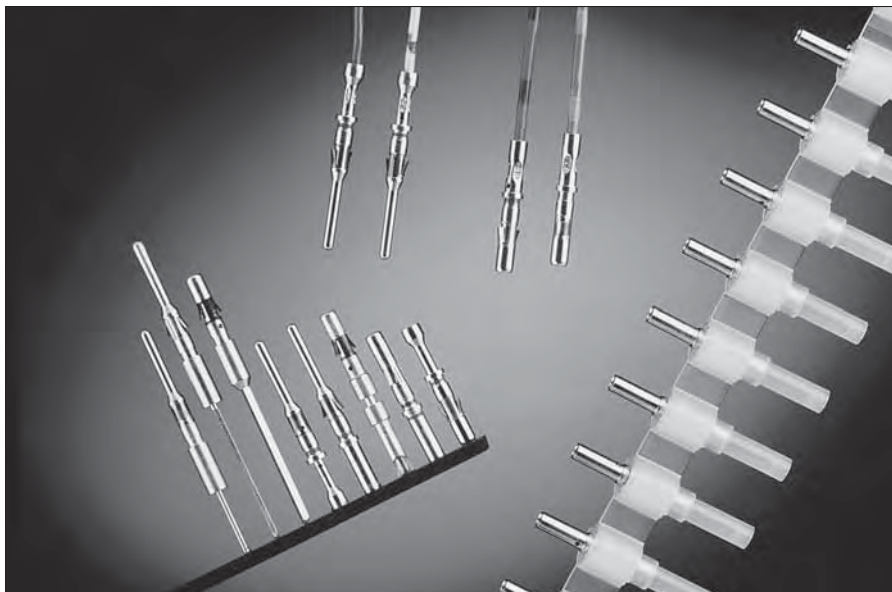
### Features and benefits

- Made from high conductive copper alloy with gold or tin over nickel plate finish.
- Heat-treated beryllium copper locking springs assure proper locking and alignment of contacts in the housing.
- Closed entry design on RC socket contact to prevent probe damage.
- Contacts available in bulk packing

### Performance characteristics

|                     |        |
|---------------------|--------|
| Current rating:     | 13 Amp |
| Contact resistance: | ≤ 3 mΩ |

|                              |             |
|------------------------------|-------------|
| Contact retention in body:   | 110 N min.  |
| Individual insertion force:  | 3.5 N max.  |
| Individual withdrawal force: | 0.55 N min. |



### Construction

Contact body: High conductive copper alloy.

Outer spring: Tempered, heat-treated, beryllium copper.

Inner spring socket: Tempered, heat-treated, plated beryllium copper.

### Plating table

|                           |                                          |
|---------------------------|------------------------------------------|
| K (std)                   | = Min. 0.4 μ Gold all over, over Nickel  |
| J                         | = Gold flash all over, over Nickel       |
| N                         | = Min. 0.75 μ Gold all over, over Nickel |
| T                         | = 3 - 5 μ Tin all over, over Nickel      |
| Other platings on request |                                          |

### Connector accommodation

Any TRIM TRIO size 16 contact can be used in any contact position in any connector in the TRIM TRIO size 16 interconnection system.

- MS-M / MSG / MB
- SMS Qikmate
- UTG
- UTP
- UTO
- UTS
- UTV
- MBG

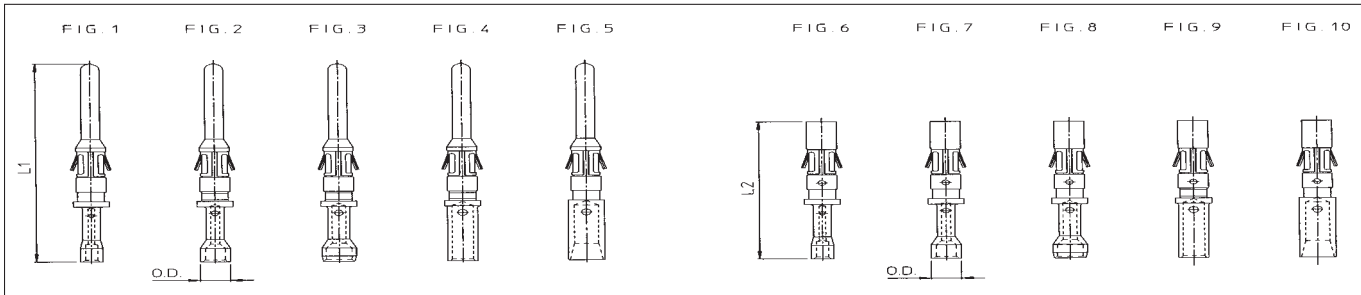
## How to order

|                            | (K) RM<br>(K) RC                                                                                                                                                                           | 16<br>16 | M<br>M | 23<br>23 | (GE1)<br>(GE1) | K<br>K | -<br>- |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------|----------|----------------|--------|--------|
| <b>Contact type:</b>       | <b>RM:</b> Male contact bulk packing<br><b>RC:</b> Female contact bulk packing<br><b>KRM:</b> Male contact on plastic carrier strip<br><b>KRC:</b> Female contact on plastic carrier strip |          |        |          |                |        |        |
| <b>AWG Size:</b>           | 16, 20, 24, 28                                                                                                                                                                             |          |        |          |                |        |        |
| <b>Size 16:</b>            | .0625" (1.6mm) Diameter contacts                                                                                                                                                           |          |        |          |                |        |        |
| <b>Design variation:</b>   | Crimp barrel                                                                                                                                                                               |          |        |          |                |        |        |
| <b>Grounding contact:</b>  |                                                                                                                                                                                            |          |        |          |                |        |        |
| <b>Plating indication:</b> | See plating table                                                                                                                                                                          |          |        |          |                |        |        |
| <b>Packing quantity:</b>   | <b>No digit (std)</b> : 50 pcs. bulk packing (RM/RC)<br>: 2000 pcs on reel (KRM/KRC)<br><b>1000</b> : 1000 pcs bulk packing (RM/RC)                                                        |          |        |          |                |        |        |

# Machined Crimp Contacts size 16



## Standard RM/RC crimp contacts: Contact size 16 - Pin diameter 1.6mm (.063")



### Dimensional table

| Part number   |      |                          | Fig. | Wire size |           | Max. wire dia. | Max. insul. dia. | Wire strip length | O.D. | L1   | L2   |
|---------------|------|--------------------------|------|-----------|-----------|----------------|------------------|-------------------|------|------|------|
| Pin contacts  | Fig. | Socket contacts Standard |      | AWG       | mm²       |                |                  |                   |      |      |      |
| RM28M1(*)     | 1    | RC28M1(*)                | 6    | 30-28     | 0.05-0.08 | 0.55           | 1.1              | 4.8               | 1,90 | 26,2 | 18.2 |
| RM24M9(*)     | 2    | RC24M9(*)                | 7    | 26-24     | 0.13-0.20 | 0.8            | 1.6              |                   | 2,55 |      |      |
| RM20M13(*)    | 3    | RC20M13(*)               | 8    | 22-20     | 0.32-0.52 | 1.18           | 1.8              |                   | 2,92 |      |      |
| RM20M12(*)    |      | RC20M12(*)               |      |           |           |                | 2.2              |                   | 2,92 |      |      |
| RM16M23(*)    | 4    | RC16M23(*)               | 9    | 20-16     | 0.52-1.50 | 1.80           | 3.2              | 7.1               |      | 27,2 | 19.7 |
| RM16M23GE1(*) |      | RC16M23GE1(*)            | 9    |           |           |                |                  |                   | 2,55 |      |      |
| RM14M50(*)    | 5    | RC14M50(*)               | 10   | 16-14     | 1,5-2,5   | 2,05           |                  |                   | 3,10 | 26,2 | 18.2 |
| RM14M30(*)    | 5    | RC14M30(*)               | 10   | 16-14     | 1,5-2,5   | 2,28           |                  |                   | 3,10 |      |      |

(\*) Plating indication : See plating table

For machined contact reeled on plastic carrier: put "K" in front of part number e.g. KRM16M23K

For grounding contacts (1 mm longer) add "GE1" to the part number (e.g. RM16M23GE1K)

For last make contacts (0,3 mm shorter) add "GE3" to the part number (e.g. RM16M23GE3K)

## Special RM / RC contacts: Contact size 16 - Pin diameter 1.6mm (.063")

| Part number  |                 | Type        | Wire size |             | Post cross section A | Length out of TRIM TRIO cavity | Anti-rotating bushing part number |
|--------------|-----------------|-------------|-----------|-------------|----------------------|--------------------------------|-----------------------------------|
| Pin contacts | Socket contacts |             | AWG       | mm²         |                      |                                |                                   |
| RM16SEO(*)   | RC16SE4(*)      | Soldercup   | 16 - 20   | 1.50 - 0.52 | ø1.7                 | 3.5                            | -                                 |
| RM20M12G4(*) | RC20M12G4(*)    | Mini - wrap | 28 - 30   | 0.08 - 0.05 | ø 0.636              | 16.0                           | J1661                             |

(\*) Plating indication : See plating table.

### Crimptooling table

| Size     | Hand crimp tooling for loose contacts |                               |                 |                            |                                 |                            | Automatic crimp tooling for contacts on strip  |                                  | Extraction tools                                |
|----------|---------------------------------------|-------------------------------|-----------------|----------------------------|---------------------------------|----------------------------|------------------------------------------------|----------------------------------|-------------------------------------------------|
|          | Hand tools<br><br>die set included    | MH860                         |                 | M10S1                      |                                 | M8ND                       | P100MAN (Press)                                |                                  |                                                 |
|          |                                       | Positioner<br><br>(not incl.) | Locator setting | Die set<br><br>(not incl.) | Stop bushing<br><br>(not incl.) | Die set<br><br>(not incl.) | Left side applicator<br>KRM/KRC<br>(not incl.) | Stripper unit<br><br>(not incl.) |                                                 |
| 28-1     | Y16RCM<br><br>or<br><br>AF8 + TP120   | MH86164G                      | 4/6             | S9                         | SL40                            | N24RT10                    | --                                             | Consult<br>Factory               | RX2025GE1<br>or<br>RX2025GE2<br>or<br>RX16D11D1 |
| 24-9     |                                       |                               | 5/6             | S10                        |                                 | N20RT30                    | MLSP2763                                       |                                  |                                                 |
| 20-12/13 |                                       |                               | 5/7             |                            | SL39                            |                            | N16RT21                                        |                                  |                                                 |
| 16-23    |                                       |                               | 6/8             | S3D1                       |                                 | SL115                      | N16RT25                                        |                                  |                                                 |
| 16-GE1   |                                       | MH86186                       | --              | S3-14                      | SL39                            | --                         | --                                             | --                               |                                                 |
| 14-50    |                                       | --                            | --              | --                         | --                              | --                         | --                                             |                                  |                                                 |
| 14-30    |                                       | --                            | --              | --                         | --                              | --                         | --                                             |                                  |                                                 |

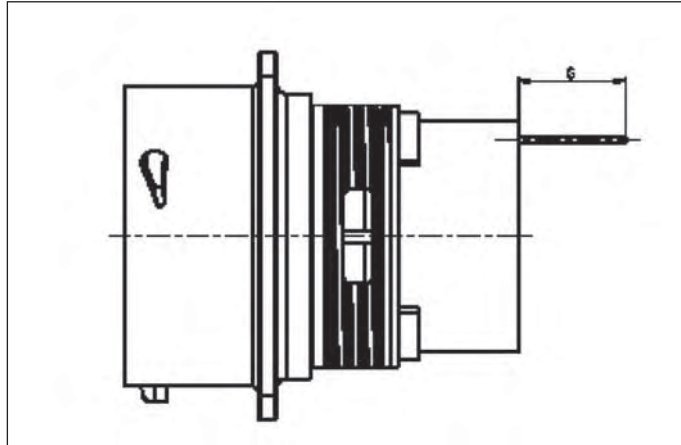
For detailed information on crimp tooling : See crimp tooling section

# Machined Contacts

## PC Boardmount size 16



**Nominal length (dim G) of dipsolder contacts out of connector (contacts to be ordered separately)**



### UTP0 / UTG0 wall mounting receptacle connectors

| Connector size   | Pin contact |             | Socket contact |             |             |
|------------------|-------------|-------------|----------------|-------------|-------------|
|                  | RM20M12E8*  | RM20M12E83* | RC20M12E8*     | RC20M12E83* | RC20M12E84* |
| <b>All sizes</b> | 5.2         | 10.3        | 5.2            | 10.4        | 13.9        |

\* Plating indication: See (plating table)

### UT00 wall mounting receptacle connectors

| Connector size | Pin contact |             | Socket contact |             |             |
|----------------|-------------|-------------|----------------|-------------|-------------|
|                | RM20M12E8*  | RM20M12E83* | RC20M12E8*     | RC20M12E83* | RC20M12E84* |
| <b>10</b>      | 4           | 9.1         | 3.3            | 8.5         | 12.1        |
| <b>12</b>      | 4           | 9.1         | 3.3            | 8.5         | 12.1        |
| <b>14</b>      | 4           | 9.1         | 3.3            | 8.5         | 12.1        |
| <b>16</b>      | 4           | 9.1         | 3.3            | 8.5         | 12.1        |
| <b>18</b>      | 4           | 9.1         | 3.3            | 8.5         | 12.1        |
| <b>20</b>      | 4.1         | 9.2         | 1.8            | 7           | 10.6        |
| <b>22</b>      | 4.1         | 9.2         | 1.1            | 6.3         | 9.9         |
| <b>24</b>      | 4.1         | 9.2         | 1.1            | 6.3         | 9.9         |

\* Plating indication: See (plating table)

### UT07 jam nut receptacle connectors

| Connector size | Pin contact |             | Socket contact |             |             |
|----------------|-------------|-------------|----------------|-------------|-------------|
|                | RM20M12E8*  | RM20M12E83* | RC20M12E84*    | RC20M12E85* | RC20M12E86* |
| <b>10</b>      | 4.1         | 9.2         | 4.65           | 7.15        | 7.95        |
| <b>12</b>      | 4.1         | 9.2         | 4.65           | 7.15        | 7.95        |
| <b>14</b>      | 4.1         | 9.2         | 5.35           | 7.85        | 8.65        |
| <b>16</b>      | 4.1         | 9.2         | 4.65           | 7.15        | 7.95        |
| <b>18</b>      | 4.1         | 9.2         | 4.65           | 7.15        | 7.95        |
| <b>20</b>      |             | 4.85        |                | 3.4         | 4.2         |
| <b>22</b>      |             | 4.85        |                | 2.7         | 3.5         |
| <b>24</b>      |             | 3.35        |                | 1.3         | 2.1         |

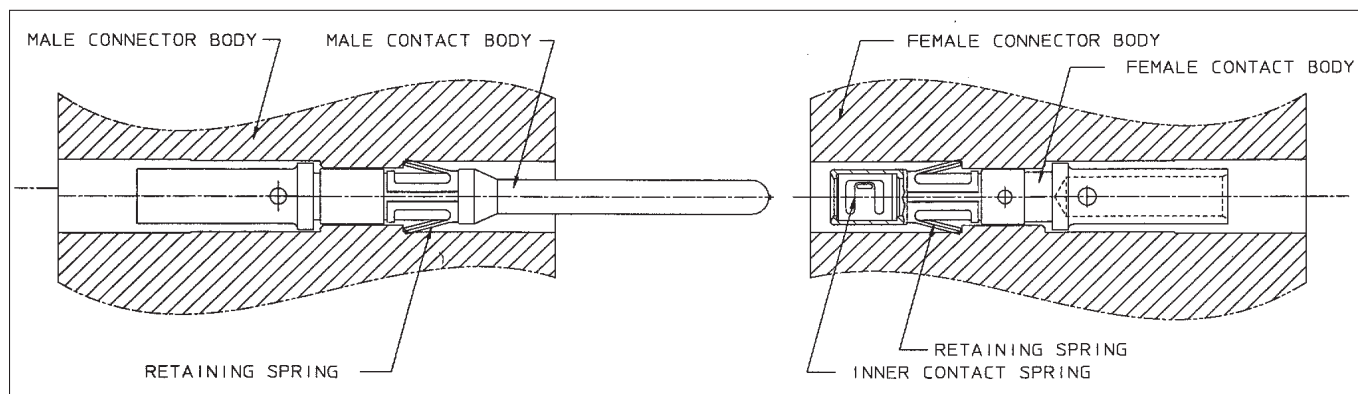
For recommended PC-Board hole lay out: Consult factory

\* Plating indication: See (plating table)

# Machined Contacts size 16



## The RM/RC contact principle



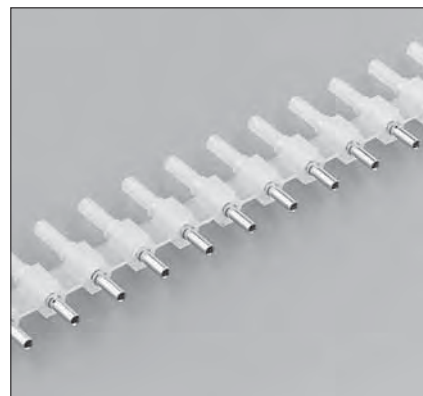
## The RM/RC contact packing



50 pcs bulk packing (standard)



1000 pcs bulk packing



Reeled contacts on plastic carrier (qty 2000 pcs)

# Stamped and Formed Contacts size 16 One Piece



## SM/SC-M

### Description

Size 16 SM/SC .063" (1.6mm) diameter contacts are two piece strip formed crimp snap-in pin and sockets. These contacts consist of a crimp body made of high conductive copper alloy, and a stainless steel retaining spring featuring retention in the housing cavity and a closed entry socket to prevent probe damage. The contact with its open barrel is standard available on strip and packaged with 3000 pcs on reel. This reel packaging combined with semi or even full automatic crimp tooling provides the added advantage of a lower installed cost.

### Features and benefits

- Made from high conductive copper alloy with gold or tin over nickel plate finish.
- Two piece construction with dual purpose spring which serves for contact retention and protects the body against damage.
- Contacts available on reel (standard) and in bulk packing (25 pcs).
- Suitable for high volumes and lower installation cost.

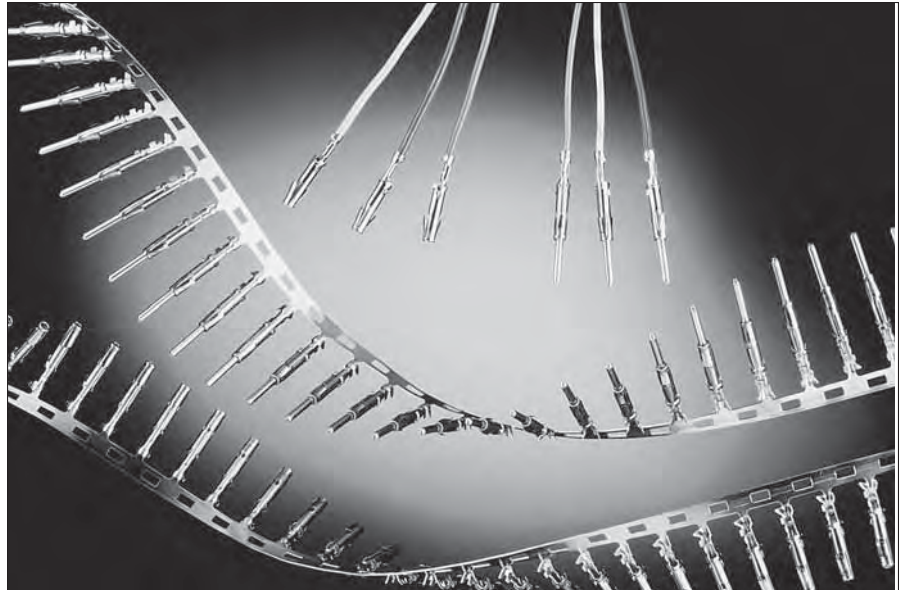
### Performance characteristics

|                     |        |
|---------------------|--------|
| Current rating:     | 13 Amp |
| Contact resistance: | ≤ 6 mΩ |

|                              |             |
|------------------------------|-------------|
| Contact retention in body:   | 65 N min.   |
| Individual insertion force:  | 3.5 N max.  |
| Individual withdrawal force: | 0.55 N min. |

### Construction

|               |                               |
|---------------|-------------------------------|
| Contact body: | High conductive copper alloy. |
| Outer spring: | Stainless steel               |



### Plating table

S6 = 0.75m Gold min. in contact area, flash on crimp barrel over Nickel.  
D70 = Gold flash all over, over Nickel.  
TK6 = Preplated Tin all over.

- MS-M / MSG / MB
- SMS Qikmate
- UTG
- UTP
- UT0
- MBG
- UTS
- UTV

Note:  
Reeled contacts are for applicator with left side feeding.

### Connector accommodation

Any TRIM TRIO size 16 contact can be used in any contact position in any connector in the TRIM TRIO size 16 interconnection system.

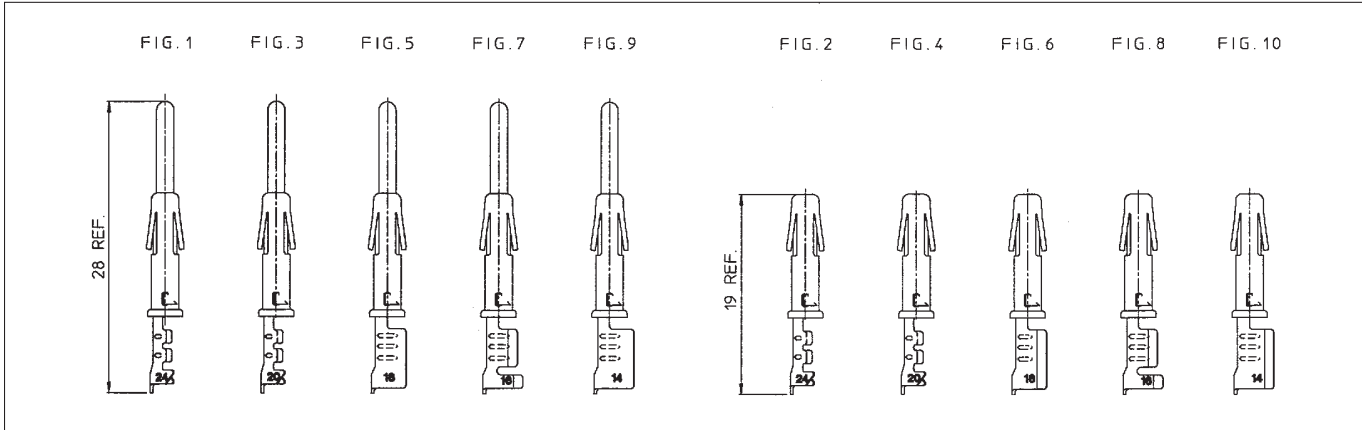
## How to order

|                              | SM<br>SC                                                                                                                                          | 16<br>16 | M<br>M | (L)<br>(L) | 1<br>1 | S6<br>S6 |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------|------------|--------|----------|
| <b>Contact type:</b>         | <b>SM:</b> Male contact<br><b>SC:</b> Female contact                                                                                              |          |        |            |        |          |
| <b>AWG Size:</b>             | 14, 16, 20, 24                                                                                                                                    |          |        |            |        |          |
| <b>Type of crimp barrel:</b> | American open crimp barrel                                                                                                                        |          |        |            |        |          |
| <b>Packing:</b>              | <b>No digit:</b> Contacts on strip (qty 3000 per reel)<br><b>L:</b> Preformed loose piece contacts                                                |          |        |            |        |          |
| <b>Design variation</b>      | <b>1</b> : Only wire crimp for size 14 and 16<br>: Wire + insulation crimp for sizes 20 and 24<br><b>11</b> : Wire + insulation crimp for size 16 |          |        |            |        |          |
| <b>Plating indication:</b>   | See plating table                                                                                                                                 |          |        |            |        |          |

# Stamped and Formed Contacts size 16 One Piece



## Standard SM/SC crimp contacts: Contact size 16 - Pin diameter 1.6mm (.063")



### Dimensional table

| Part number: contacts on strip<br>Loose pieces |      |                         |      | Wire size |                 | Insulation<br>diameter | Wire<br>strip length |
|------------------------------------------------|------|-------------------------|------|-----------|-----------------|------------------------|----------------------|
| Pin contacts                                   | Fig. | Socket contacts         | Fig. | AWG       | mm <sup>2</sup> |                        |                      |
| SM24M1S6<br>SM24ML1S6                          | 1    | SC24M1S6<br>SC24ML1S6   | 2    | 26 - 24   | 0.13 - 0.25     | 0.89 - 1.58            | 4.0                  |
| SM20M1S6<br>SM20ML1S6                          | 3    | SC20M1S6<br>SC20ML1S6   | 4    | 22 - 20   | 0.35 - 0.50     | 1.17 - 2.08            | 4.0                  |
| SM16M1S6<br>SM16ML1S6                          | 5    | SC16M1S6<br>SC16ML1S6   | 6    | 18 - 16   | 0.80 - 1.50     | 3.0                    | 6.35                 |
| SM16M11S6<br>SM16ML11S6                        | 7    | SC16M11S6<br>SC16ML11S6 | 8    | 18 - 16   | 0.80 - 1.50     | 2.0 - 3.0              | 4.65                 |
| SM14M1S6<br>SM14ML1S6                          | 9    | SC14M1S6<br>SC14ML1S6   | 10   | 14        | 2.0 - 2,5       | 3.2                    | 6.35                 |

For other platings: See plating table.

### Crimptooling table

| Size     | Hand crimp tooling for loose contacts      |                                   | Automatic crimp tooling for<br>contacts on strip |                      | Extraction<br>tooling                           |
|----------|--------------------------------------------|-----------------------------------|--------------------------------------------------|----------------------|-------------------------------------------------|
|          | Hand tools<br>die set included             | M8ND<br>Die set<br>(not included) | P100 MAN<br>Mini Applicator<br>(not included)    | (Stripper - crimper) |                                                 |
| 24       | Y16SCM2 (ratchet)                          | N24RT11                           | MLS0318B                                         | SC10S1               | RX2025GE1<br>or<br>RX2025GE2<br>or<br>RX16D11D1 |
| 20       | Y14SCM2 (not ratchet)<br>Y14MTV (ratchet)  | N20RT29                           | MLS0555A                                         |                      |                                                 |
| 16M(L)11 | Y16SCM2 (ratchet)<br>Y14SCM2 (not ratchet) | N16RT26                           | MLS0356A                                         |                      |                                                 |
| 16M(L)1  | Y14SCM (ratchet)<br>Y14MTV (ratchet)       | N16RT24                           | MLS1579                                          |                      |                                                 |
| 14       | Y14SCM (ratchet)<br>Y14MTV (ratchet)       | N14RT13                           | MLS1047                                          |                      |                                                 |

For detailed information on crimp tooling : See crimp tooling section

# Stamped and Formed Contacts size 16 One Piece



## SM/SC-M - One Piece Description

Economic one piece contacts are formed of brass and available with tin or gold plate finishes. Contacts accommodate No. 16 stranded through No. 26 solid or stranded. They are supplied 3,000 to a reel and installed with the Burndy UTM-2 installation machine. These one-piece formed contacts are rated to 5 amps.

## Features and benefits

- Made from high conductive copper alloy with gold or tin over nickel plate finish.
- Contacts available on reel (standard) and in bulk packing (25 pcs).
- Suitable for high volumes and lower installation cost.

## Performance characteristics

Current rating: 5 Amp

Contact resistance:  $\leq 7 \text{ m}\Omega$

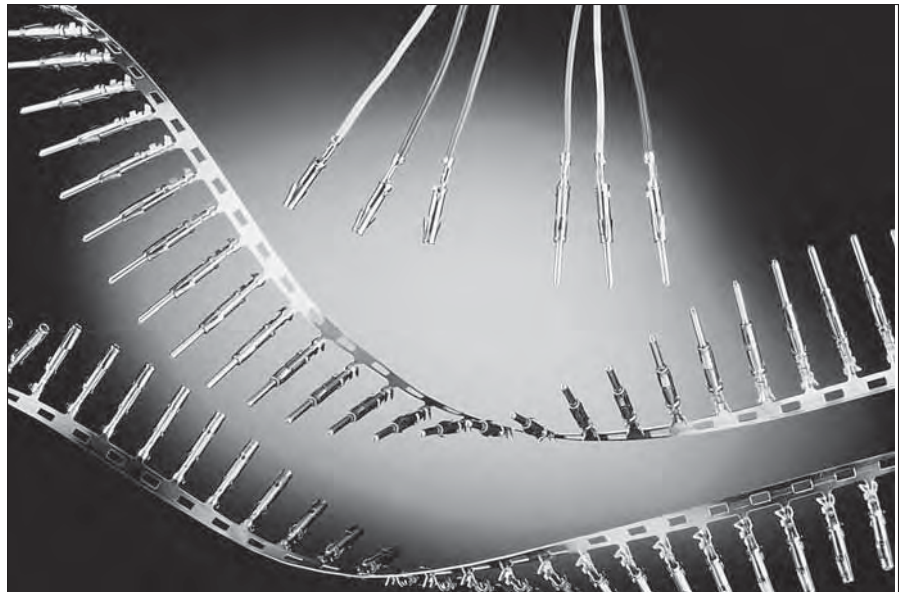
## Construction

Contact body: High conductive copper alloy.

## Plating table

S6 = 0.75m Gold min. in contact area, flash on crimp barrel over Nickel.

TK6 = Preplated Tin all over.



## Connector accommodation

Any TRIM TRIO size 16 contact can be used in any contact position in any connector in the TRIM TRIO size 16 interconnection system.

- MS-M / MSG / MB
- SMS Qikmate
- UTG
- UTP
- UTO
- MBG
- UTS
- UTV

## Dimensional table

| Pin contacts                          | Socket contacts                       | Wire Range<br>AWG    | Insulation<br>Range | Installation Tools   |                          | Extraction<br>Tool |
|---------------------------------------|---------------------------------------|----------------------|---------------------|----------------------|--------------------------|--------------------|
|                                       |                                       |                      |                     | M8ND/Y8ND<br>Die Set | UTM-2 Crimp<br>Mechanism |                    |
| <b>SM24M6S6</b><br><b>SM24M6TK6</b>   | <b>SC24M62S6</b><br><b>SC24M62TK6</b> | 26 - 24<br>SOL / STR | .038" - .062"       | N24RT-11             | CM11G1                   | RX16D11-D1         |
| <b>SM20M6S6</b><br><b>SM20M6TK6</b>   | <b>SC20M62S6</b><br><b>SC20M62TK6</b> | 20 - 22<br>SOL / STR | .046" - .082"       | N20RT-29             | CM11G1                   |                    |
| <b>SM16M6S6</b><br><b>SM16M6TK6</b>   | <b>SC16M62S6</b><br><b>SC16M62TK6</b> | 16 - 18<br>STR       | —                   | N16RT-24             | CM11                     |                    |
| <b>SM16M16S6</b><br><b>SM16M16TK6</b> | <b>SC16M62S6</b><br><b>SC16M62TK6</b> | 16 - 18<br>STR       | .082" - .118"       | N16RT-26             | CM27                     |                    |

# Coaxial Contact Kits size 16



## RMDX/RCDX-K

### Description

Size 16 RMDX/RCDX Monocrimp .0625" (1.6mm) diameter contacts are one-piece monocrimp subminiature coaxial contacts to cover a wide range of subminiature coaxial and twisted pair cables. They provide cost effective solutions in applications where a mix of signal, power and coaxial cable terminations for low frequency, shielded signal and high frequency applications are needed. Monocrimp one piece coaxial contacts offer high reliability plus the economic advantage of a 95% reduction in installation time over conventional assembly methods currently in use.

### Features and benefits

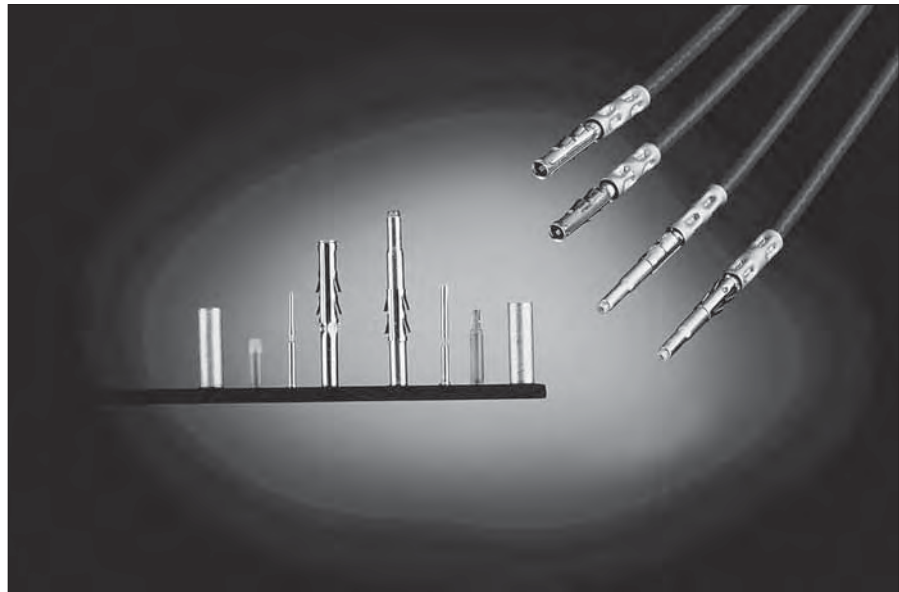
- The monocrimp one-piece coaxial contacts offer high reliability plus the economic advantage of a 95% reduction in installation time over conventional assembly methods.
- This economy is achieved by simultaneously crimping of both the inner and outer conductor

### Performance characteristics

|                                                  |                     |
|--------------------------------------------------|---------------------|
| Operating voltage between inner / outer contact: | 230 VDC             |
| Test potential between inner / outer contact     | 450 VAC 1 min.      |
| Operating temperature:                           | -55°C t0<br>+ 125°C |
| Contact retention in body:                       | 65 N min.           |
| Contact voltage drop a 1A:                       | 30m V max.          |
| Isolation at 30 MHZ:                             | 140 db.             |

### Construction

Inner and outer contacts: High conductive copper alloy



Retaining spring: beryllium copper  
Insulating bushing: Polyamide 6.6

### Plating table

Retaining spring: Nickel plated  
Inner and outer contacts:  
D28: 0.75 µ Gold min. over Nickel

### Connector accommodation

Any TRIM TRIO size 16 contact can be used in any contact position in any

connector in the TRIM TRIO size 16 interconnection system.

- MS-M / MSG / MB
- SMS Qikmate
- UTG
- UTP
- UTO
- MBG

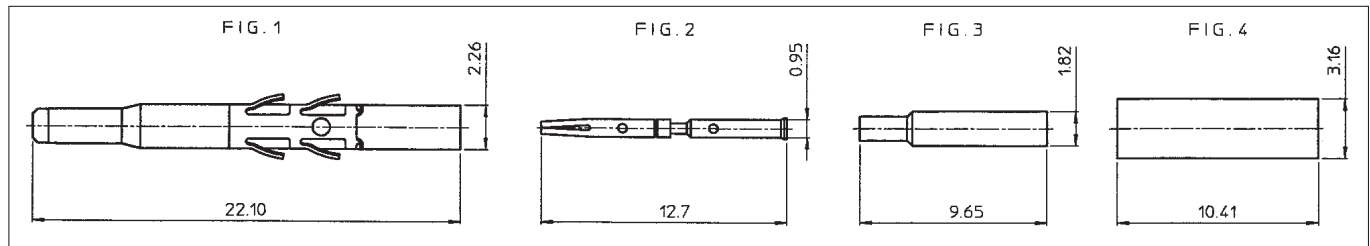
## How to order

|                            |                                                                    | RMDX<br>RCDX | K10<br>K1 | D28<br>D28 |
|----------------------------|--------------------------------------------------------------------|--------------|-----------|------------|
| Contact type:              | RMDX = Male subminiature coax.<br>RCDX = Female subminiature coax. |              |           |            |
| Monocrimp design variation |                                                                    |              |           |            |
| Plating indication         |                                                                    |              |           |            |

# Coaxial Contact Kits size 16



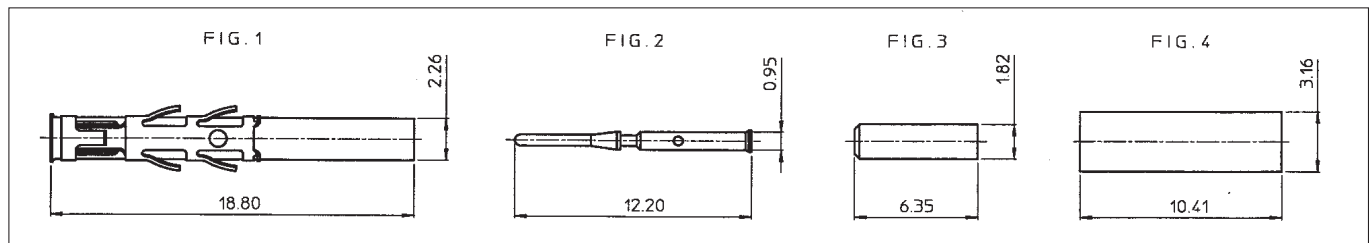
## MULTIPIECE Subminiature coax - Male contact for coaxial cable



| Type of coaxial cable                    | Contact for inner conductor |      |                  |              | Contact for outer braid |     |                          |        |                  |              | Extrac tool   |
|------------------------------------------|-----------------------------|------|------------------|--------------|-------------------------|-----|--------------------------|--------|------------------|--------------|---------------|
|                                          | Inner female contact        |      | Crimp tool M10S1 |              | Outer male contact      |     | Hyring                   |        | Crimp tool M10S1 |              |               |
|                                          | Part number                 | Fig. | Die Set          | Stop Bushing | Part number             | Fig | Part number              | Fig    | Die Set          | Stop Bushing |               |
| RG161U<br>RG179A/U<br>RG179B/U<br>RG187U | RFD26L1D28                  | 2    | S23D2            | SL46D2       | RMDX602D28              | 1   | yOC074                   | 4      | S22-1            | SL47-1       | RX2025<br>GE1 |
| RG174/U<br>RG188/U<br>Amphenol 21-598    |                             |      | S26D2            |              |                         |     | yOC074                   | 4      |                  |              | RX16D11<br>D1 |
| RG178A/U<br>RG196U                       |                             |      | S23D2            |              |                         |     | yOC074<br>+<br>RMDXB0553 | 4<br>3 |                  |              |               |

Kit reference RMDXK10D28 includes RMDX602D28 + RFD26L1D28 + yOC074 + RMDXB0553 and are packed in plastic bag.

## MULTIPIECE Subminiature coax - Female contact for coaxial cable



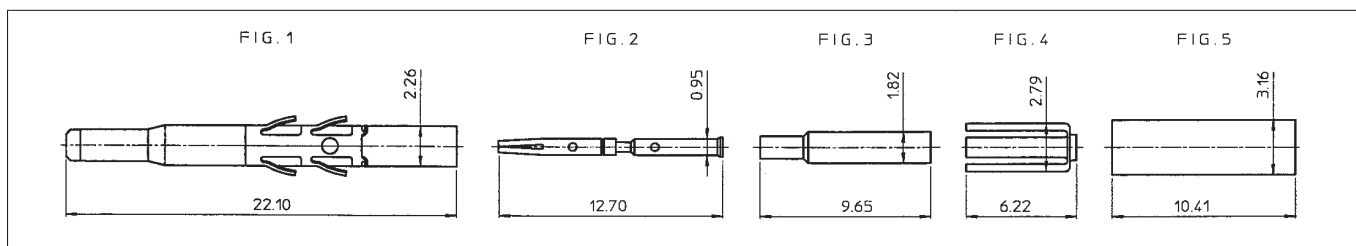
| Type of coaxial cable                    | Contact for inner conductor |      |                  |              | Contact for outer braid |     |                          |        |                  |              | Extrac tool   |
|------------------------------------------|-----------------------------|------|------------------|--------------|-------------------------|-----|--------------------------|--------|------------------|--------------|---------------|
|                                          | Inner male contact          |      | Crimp tool M10S1 |              | Outer female contact    |     | Hyring                   |        | Crimp tool M10S1 |              |               |
|                                          | Part number                 | Fig. | Die Set          | Stop Bushing | Part number             | Fig | Part number              | Fig    | Die Set          | Stop Bushing |               |
| RG161U<br>RG179A/U<br>RG179B/U<br>RG187U | RMD26L1D28                  | 2    | S23D2            | SL46D2       | RCDX602D28              | 1   | yOC074                   | 4      | S22-1            | SL47-1       | RX2025<br>GE1 |
| RG174/U<br>RG188/U<br>Amphenol 21-598    |                             |      | S26D2            |              |                         |     | yOC074                   | 4      |                  |              | or            |
| RG178A/U<br>RG196U                       |                             |      | S23D2            |              |                         |     | yOC074<br>+<br>RCDXB0551 | 4<br>3 |                  |              | RX16D11<br>D1 |

Kit reference RCDXK1D28 includes RCDX602D28 + RMD26L1D28 + yOC074 + RCDXB0551 and are packed in plastic bag.

# Coaxial Contact Kits size 16

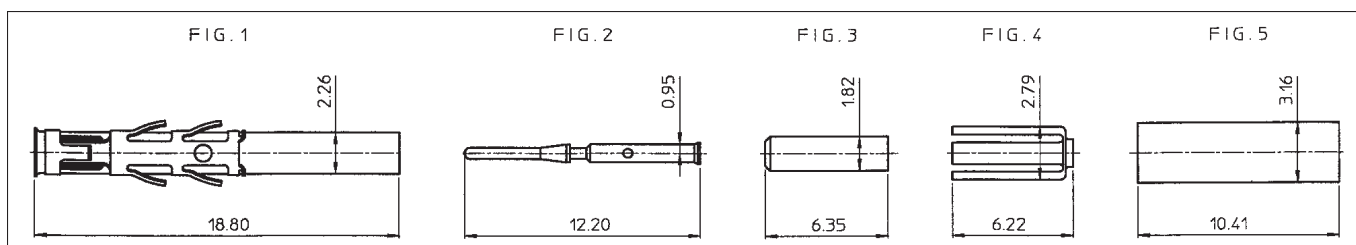


## MULTIPIECE Subminiature coax - Male contact for twisted pair cable



| Type of coaxial cable          | Contact for inner conductor |      |                  |              | Contact for outer braid |     |             |     |                  |              | Extrac tool                          |
|--------------------------------|-----------------------------|------|------------------|--------------|-------------------------|-----|-------------|-----|------------------|--------------|--------------------------------------|
|                                | Inner female contact        |      | Crimp tool M10S1 |              | Outer male contact      |     | Hyring      |     | Crimp tool M10S1 |              |                                      |
|                                | Part number                 | Fig. | Die set          | Stop bushing | Part number             | Fig | Part number | Fig | Die set          | Stop bushing |                                      |
| 2 #24 solid or stranded        | RFD26L1D28                  | 2    | S26D2            | SL46D2       | RMDX602D28              | 1   | YORX090     | 4   | S221             | SL471        | RX2025<br>GE1<br><br>or<br>RX16D11D1 |
| 2 #26 str                      |                             |      |                  |              |                         |     | YOC074      | 5   |                  |              |                                      |
| 2 #24 7/0,20 str.              |                             |      |                  |              |                         |     | RMDXB0553   | 3   |                  |              |                                      |
| MIL-W-76 or MIL-W-16878 type B |                             |      |                  |              |                         |     | YORX090     | 4   |                  |              |                                      |
| #28 per MIL-W-81822/3          |                             |      |                  |              |                         |     | YOC074      | 5   |                  |              |                                      |
|                                |                             |      |                  |              |                         |     | RMDXB0554   | 3   |                  |              |                                      |
|                                |                             |      |                  |              |                         |     | YORX090     | 4   |                  |              |                                      |
|                                |                             |      |                  |              |                         |     | YOC074      | 5   |                  |              |                                      |
|                                |                             |      |                  |              |                         |     | RMDXB0553   | 3   |                  |              |                                      |

## MULTIPIECE Subminiature coax - Female contact for twisted pair cable



| Type of coaxial cable          | Contact for inner conductor |      |                  |              | Contact for outer braid |     |             |     |                  |              | Extrac tool                          |
|--------------------------------|-----------------------------|------|------------------|--------------|-------------------------|-----|-------------|-----|------------------|--------------|--------------------------------------|
|                                | Inner male contact          |      | Crimp tool M10S1 |              | Outer female contact    |     | Hyring      |     | Crimp tool M10S1 |              |                                      |
|                                | Part number                 | Fig. | Die set          | Stop bushing | Part number             | Fig | Part number | Fig | Die set          | Stop bushing |                                      |
| 2 #24 solid or stranded        | RMD26L1D28                  | 2    | S26D2            | SL46D2       | RCDX602D28              | 1   | YORX090     | 4   | S221             | SL471        | RX2025<br>GE1<br><br>or<br>RX16D11D1 |
| 2 #26 str                      |                             |      |                  |              |                         |     | YOC074      | 5   |                  |              |                                      |
|                                |                             |      |                  |              |                         |     | RCDXB0551   | 3   |                  |              |                                      |
| 2 #24 7/0,20 str.              |                             |      |                  |              |                         |     | YORX090     | 4   |                  |              |                                      |
| MIL-W-76 or MIL-W-16878 type B |                             |      |                  |              |                         |     | YOC074      | 5   |                  |              |                                      |
|                                |                             |      |                  |              |                         |     | RCDXB0552   | 3   |                  |              |                                      |
| #28 per MIL-W-81822/3          |                             |      |                  |              |                         |     | YORX090     | 4   |                  |              |                                      |
|                                |                             |      |                  |              |                         |     | YOC074      | 5   |                  |              |                                      |
|                                |                             |      |                  |              |                         |     | RCDXB0551   | 3   |                  |              |                                      |

# Monocrimp Coaxial

## Contacts size 16



### RMDX/RCDX

#### Description

Size 16 RMDX/RCDX Multipiece .0625" (1.6mm) diameter contacts are subminiature coaxial contacts to cover a wide range of subminiature coaxial and twisted pair cables. They are suitable in applications where a mix of signal, power and coaxial cable terminations for low frequency, shielded signal and high frequency applications are needed. The contact consist of an inner pin/socket and an outer male/female body. The thermoplastic insulating bushing in the outer body is designed to accept and permanently retain the inner contact. The outer ferrule hold the outer braid to the outer contact and act as an insulating support to ensure against bending and vibrating stresses. The inner and the outer conductor are crimped individually, thereby enabling inspection of both critical crimp points.

#### Features and benefits

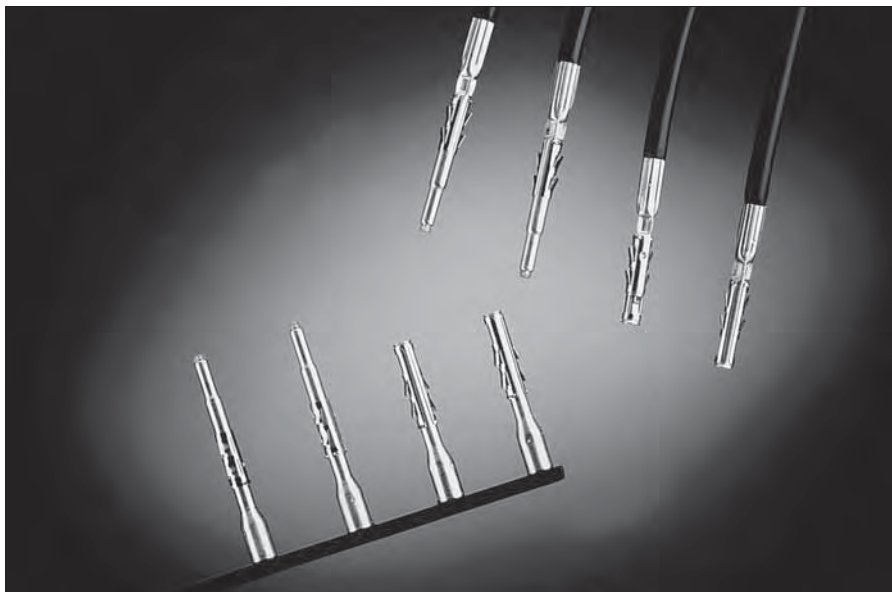
- The inner and outer conductors are crimped individually
- The thermoplastic insulating bushing in the outer body is designed to accept and permanently retain the inner contact.
- Outer ferrule hold the outer braid to the outer contact and act as an insulating support to ensure against bending and vibration.

#### Performance characteristics

|                                                  |                  |
|--------------------------------------------------|------------------|
| Operating voltage between inner / outer contact: | 230 VDC          |
| Test potential between inner / outer contact     | 750 VAC 1 min.   |
| Operating temperature:                           | -55°C to + 125°C |
| Contact retention in body:                       | 65 N min.        |
| Contact voltage drop a 1A:                       | 25m V max.       |
| Isolation at 30 MHZ:                             | 140 db.          |

#### Construction

Inner and outer contacts: High conductive copper alloy



Retaining spring: beryllium copper  
Insulating bushing: Polyamide 6.6

#### Plating table

Retaining spring: Nickel plated  
Inner and outer contacts:  
D28: 0.75µ Gold min. over Nickel

#### Connector accommodation

Any TRIM TRIO size 16 contact can be used in any contact position in any connector in the TRIM TRIO size 16

interconnection system.

- MS-M / MSG / MB
- SMS Qikmate
- UTG
- UTP
- UTO
- MBG

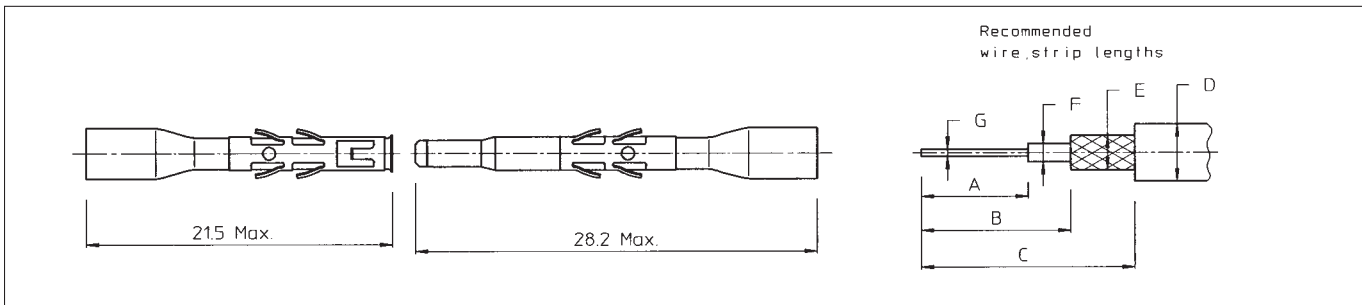
#### How to order

|                            | RMDX60<br>RCDX60                                                   | 36<br>36 | D28<br>D28 |
|----------------------------|--------------------------------------------------------------------|----------|------------|
| <b>Contact type:</b>       | RMDX = Male subminiature coax.<br>RCDX = Female subminiature coax. |          |            |
| <b>Multipiece coax kit</b> | K10 = Lit male coax.<br>K1 = Kit female coax.                      |          |            |
| <b>Plating indication</b>  |                                                                    |          |            |

# Monocrimp Coaxial Contacts size 16

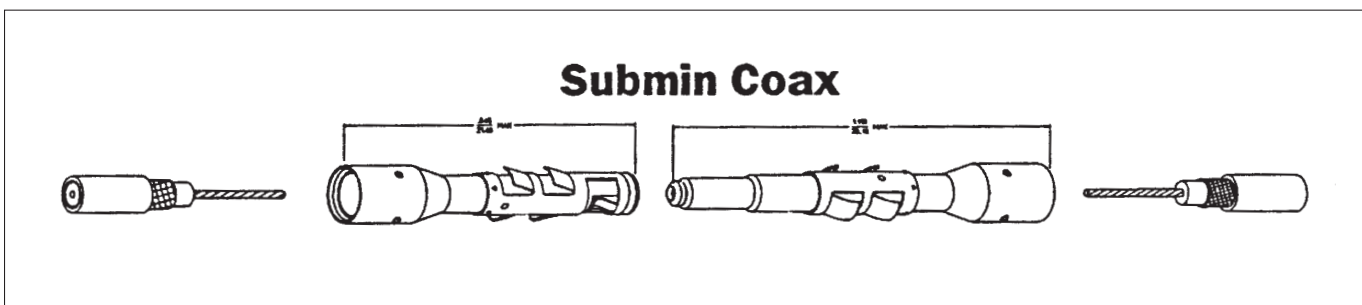


## MONOCRIMP Subminiature coax



| Part number<br><br>Male<br>Female | AWG<br>inner<br>conduct. | Cable<br>type | Coax dimensions |      |      |      | Coax strip lengths |      |      | Crimp tool M10S1     |                              | Extraction<br>tool               |
|-----------------------------------|--------------------------|---------------|-----------------|------|------|------|--------------------|------|------|----------------------|------------------------------|----------------------------------|
|                                   |                          |               | D<br>max        | E    | F    | G    | A                  | B    | C    | Die set<br>not incl. | stop<br>bushing<br>not incl. |                                  |
| RMDX6050D28<br>RCDX6050D28        | 30                       | -             | 2.64            | 2.11 | 1.70 | 0.30 | 5.1                | 6.35 | 8.9  | S80                  | SL105                        | RX2025GE1<br><br>OR<br>RX16D11D1 |
| RMDX6050D28<br>RCDX6050D28        |                          | -             | 2.29            | 1.63 | 1.22 |      | 4.2                |      | 8.5  | S87                  |                              |                                  |
| RMDX6032D28<br>RCDX6032D28        | 28                       | -             | 2.90            | 2.29 | 1.91 | 0.38 | 5.1                |      | 11.7 | S80                  |                              |                                  |
| RMDX6024D28<br>RCDX6024D28        | 26                       | -             | 1.78            | 1.37 | 0.97 | 0.48 |                    |      | S82  |                      |                              |                                  |
| RMDX6032D28<br>RCDX6032D28        |                          | RG174/U       | 2.92            | 2.24 | 1.52 | 0.48 |                    |      | S80  |                      |                              |                                  |
| RMDX6026D28<br>RCDX6026D28        |                          | -             | 3.05            | 2.44 | 1.96 | 0.41 |                    |      | S82  |                      |                              |                                  |
| RMDX6036D28<br>RCDX6036D28        |                          | RG188A/U      | 2.79            | 1.98 | 1.52 | 0.51 |                    |      | 11.7 | S80                  |                              |                                  |
| RMDX6036D28<br>RCDX6036D28        |                          | RG316/U       | 2.72            |      |      |      |                    |      |      |                      |                              |                                  |

\* M10SG8 consists of die set, stop bushing and M10S1 tool

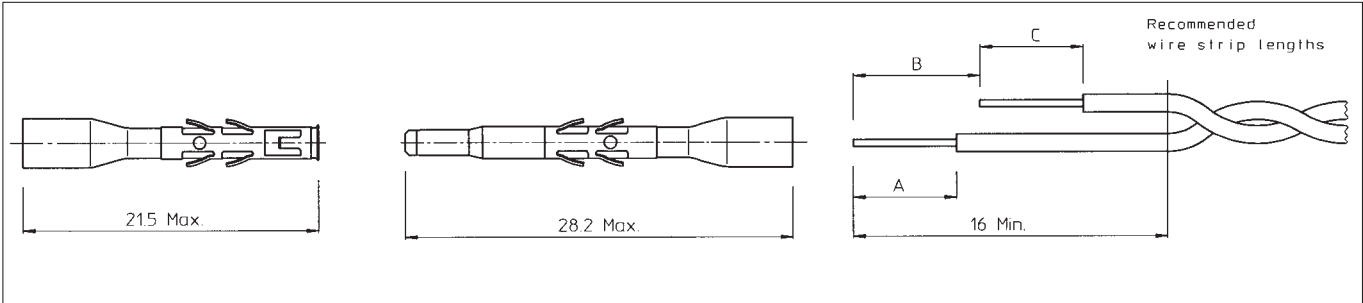


# Monocrimp Coaxial

## Contacts size 16

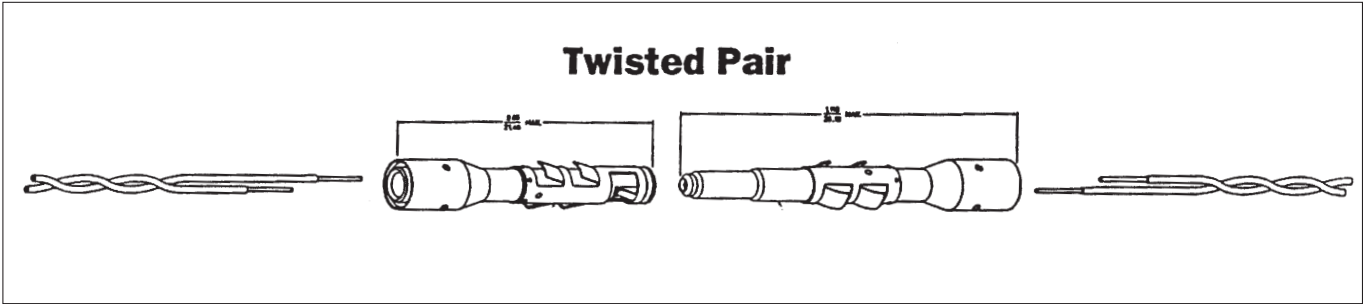


### MONOCRIMP Twisted pair



| Part number        |        | AWG inner conduct. | Dia. outer jacket (single wire) | Cable strip lenghts |     |     | Crimp tool M10S1     |                         | Extraction tool        |
|--------------------|--------|--------------------|---------------------------------|---------------------|-----|-----|----------------------|-------------------------|------------------------|
| Male               | Female |                    |                                 | A                   | B   | C   | Die set not incl.    | Stop bushing not. incl. |                        |
| <b>RMDX6019D28</b> |        | 26 (19 x 0.10)     | 1.25                            | 4.7                 | 6.0 | 4.0 | M10SG8* Crimping kit |                         | RX2025GE1 or RX16D11D1 |
| <b>RCDX6019D28</b> |        | 24 (7 x 0.20)      | 1.25                            |                     |     |     |                      |                         |                        |
|                    |        | 24 (19 x 0.13)     | 1.45                            |                     |     |     |                      |                         |                        |
| <b>RMDX6031D28</b> |        | 26 (7 x 0.16)      | 0.70                            |                     |     |     | S80                  | SL105                   |                        |
| <b>RCDX6031D28</b> |        |                    |                                 |                     |     |     |                      |                         |                        |

\* M10SG8 consist of die set, stop bushing and M10S1 tool.



# Fiber Optic Contacts size 16



## RM/RC POF

### Description

Size 16 Fiber optic contacts are optical contacts designed for the integration of optical links in all TRIM TRIO cable connectors.

The F.O. contacts are designed to accommodate:

- Plastic Optical Fiber (POF)  
1mm core and 2.2mm jacket
- Plastic Clad Fiber (PCF)  
230 µm core and 2.2mm jacket
- Multimode Silica Fiber  
50/125 µm type 1.5mm (or 900µm) jacket

### Features and benefits

- Socket contact is spring loaded to avoid any air gap between the two optical faces.
- Low insertion loss is provided by high precision pieces.
- Single jumpers, multiway harness and active device housings can be supplied regarding customer requirement.



### Performance characteristics

|                                |                |                               |
|--------------------------------|----------------|-------------------------------|
| Fiber type                     | POF / PCF      | Silica 50 / 125µm             |
| Wave length                    | 650 nm         | 850 or 1300 nm                |
| Optical insertion loss (typ.)  | 2 dB max.      | < 0.5 dB                      |
| Jacketed external diameter     | 2.2mm          | 1.5mm (or 0.9mm with adaptor) |
| Temperature range              | -25°C to +70°C | -40°C to +70°C                |
| Cable retention                | 49N            | 60N                           |
| Mating cycles without cleaning | 50             | 50                            |
| Max. mating cycles             | 500            | 250                           |

### Connector accommodation

Any TRIM TRIO size 16 contact can be used in any contact position in any connector in the TRIM TRIO size 16 interconnection system.

- MS-M / MSG / MB
- SMS Qikmate
- UTG
- UTP
- UTO

### Construction

Contact body: Copper alloy

Outer spring: BeCu

### How to order

#### POF Contacts (Plastic Optical Fiber)

Male contact: RMPOF1000

Female contact: RCPOF1000

#### PCF Contacts (Plastic Clad Fiber)

Male contact: RMPCF230

Female contact: RCPCF230

#### Silica Contacts

Male contact: 8012P14G353

Female contact: 8012S14G353

### Tool kit

#### Crimping / polishing technic

The tool kit contains all necessary tools to terminate contacts for POF Fiber or Silica Fiber, such as

- Stripping plier
- Crimping plier
- Polishing plate and tool
- Miscellaneous

Part number: consult factory

# Machined Contacts

## Solder Cup Style



### Solder Cups

- No crimp tool required
- Ideal for prototype & repair
- Gold plating for high performance



| Size | Pin Contacts                   | Sockets                        | Current Rating | Wire Size   |
|------|--------------------------------|--------------------------------|----------------|-------------|
| 16   | RM16SE0K                       | RC16SE4K                       | 13 Amps        | 16 - 20 AWG |
| 12   | RM12Z43028                     | RC12Z42028                     | 26 Amps        | 12 - 14 AWG |
| 8    | 82911685NZX                    | 82911684ZX                     | 44 Amps        | 8 - 12 AWG  |
| 20   | RM20W3KZS<br>(consult factory) | RC20W3KZS<br>(consult factory) | 7.5 Amps       | 22 - 26 AWG |

# Contacts for UTOW/UTS Connectors size 20



## RM/RC-W Machined Contacts SM/SC-W Stamped Contacts

### Description

Size 20 contacts with a .040" (1.0mm) pin diameter are two piece crimp snap-in contacts in pin and socket version available in:

- Solid machined version
- Stamped and formed version
- Solid machined dip solder contacts
  - 50A7
  - 5016

And designed for heavy duty top performance requirements.

These contacts consist of a crimp/solder body made of high conductive copper alloy, and a stainless steel retaining spring featuring retention in the housing cavity and a closed entry socket to prevent probe damage.

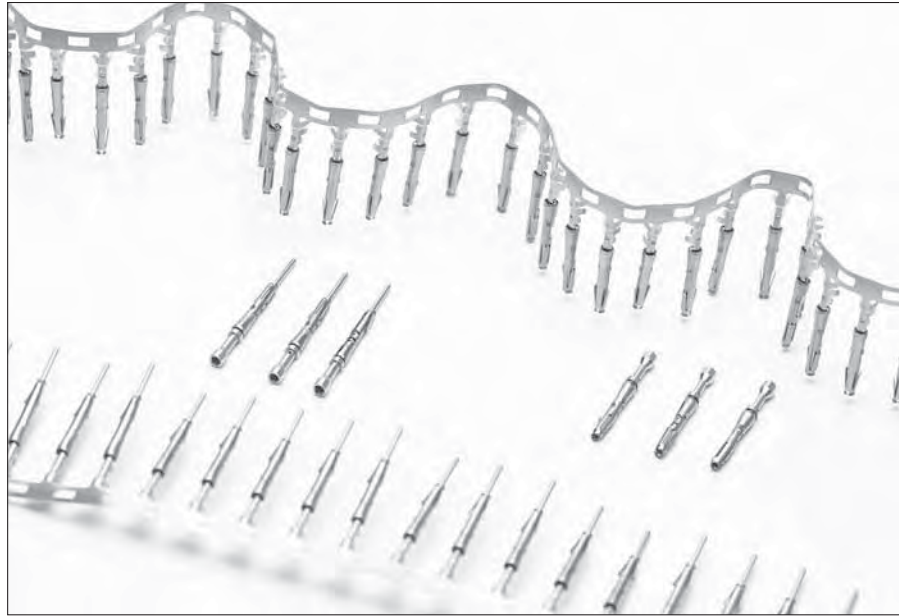
Crimp contacts accommodate AWG20 through AWG26 wire and the crimp barrels.

All contacts have to be ordered separately

### Features and benefits

- Made from high conductive copper alloy with gold plate finish.
- Two piece construction with dual purpose spring which serves for contact retention and protects the body against damage.
- Stamped and formed contacts packaging
  - On reel: 3000 pcs
  - In bulk packing: 100 pcs in plastic bag
- Solid machined crimp and dip solder contacts packaging
  - 50 pcs in plastic box

### How to order



### Performance characteristics

|                                  | Machined                | Stamped and Formed      |
|----------------------------------|-------------------------|-------------------------|
| Current rating:                  | 7,5 Amps                | 5 Amps                  |
| Contact resistance:              | ≤ 6 mΩ                  | ≤ 15 mΩ                 |
| Dielectric withstanding voltage: | 1500 V Rms min          |                         |
| Contact retention in body:       | 90 N max.               |                         |
| Contact engagement force:        | 5 N max.                |                         |
| Contact separation force:        | 0,3 N min.              |                         |
| Plating:                         | 0.40 μ gold over nickel | 0.75 μ gold over nickel |

### Construction

Contact body: High conductive copper alloy.  
Outer spring: Stainless steel

### Connector accommodation

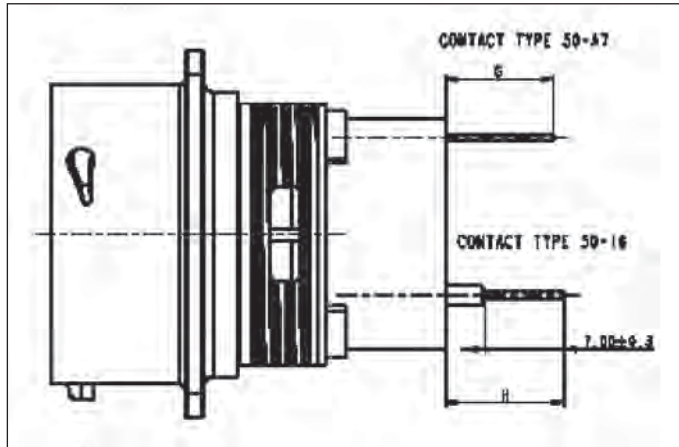
Any size 20 contacts for UTOW connectors can be used in any contact position.

| Contact type           |        | Part number | AWG      | Section mm2 | Insulation diameter | Tooling                                |
|------------------------|--------|-------------|----------|-------------|---------------------|----------------------------------------|
| Machined crimp         | Pin    | RM24W3K     | 26 – 24  | 0.13 – 0.25 | 1.58 max.           | MH860 + positionner MH86301            |
|                        |        | RM20W3K     | 22 – 20  | 0.35 – 0.50 | 1.58 max.           |                                        |
|                        |        | RM18W3K     | 20 - 18  | 0.50 - 1.00 | 2.10 max.           |                                        |
|                        | Socket | RC24W3K     | 26 – 24  | 0.13 – 0.25 | 1.58 max.           |                                        |
|                        |        | RC20W3K     | 22 – 20  | 0.35 – 0.50 | 1.58 max.           |                                        |
|                        |        | RC18W3K     | 20 - 18  | 0.50 - 1.00 | 2.10 max.           |                                        |
| Stamped & formed crimp | Pin    | SM24W3S26   | 26 – 24  | 0.13 – 0.25 | 0.89 – 1.58         | Y16SCM3 or Y14MTV                      |
|                        |        | SM24WL3S26  |          |             |                     |                                        |
|                        |        | SM20W3S26   | 22 – 20  | 0.35 – 0.50 | 1.17 – 2.08         |                                        |
|                        | Socket | SC24W3S25   | 26 – 24  | 0.13 – 0.25 | 0.89 – 1.58         |                                        |
|                        |        | SC24WL3S25  |          |             |                     |                                        |
|                        |        | SC20W3S25   | 22 - 20  | 0.35 – 0.50 | 1.17 – 2.08         |                                        |
| Machined Dip solder    | Pin    | 50A7        | RMW50A7K |             |                     | For solder tail details see next page. |
|                        |        | 5016        | RMW5016K |             |                     |                                        |
|                        | Socket | 50A7        | RCW50A7K |             |                     |                                        |
|                        |        | 5016        | RCW5016K |             |                     |                                        |

# PC Boardmount Contacts for UTOW size 20



**Nominal length (dim G) of dipsolder contacts out of connector (contacts to be ordered separately)**



## UTOW0 wall mounting receptacle connectors

| Connector size | Pin contact |          | Socket contact |          |
|----------------|-------------|----------|----------------|----------|
|                | RMW50A7K    | RMW5016K | RCW50A7K       | RCW5016K |
| 10             | 9.43        | 10.33    | 9.85           | 10.50    |
| 12             |             |          |                |          |
| 14             |             |          |                |          |
| 16             |             |          |                |          |
| 18             |             |          |                |          |
| 20             | 9.24        | 10.32    | 7.65           | 8.31     |
| 22             |             |          |                |          |
| 24             |             |          |                |          |

## UTOW7 jam nut receptacle connectors

| Connector size | Pin contact |          | Socket contact |          |
|----------------|-------------|----------|----------------|----------|
|                | RMW50A7K    | RMW5016K | RCW50A7K       | RCW5016K |
| 10             | 9.51        | 10.41    | 2.4            | 3.04     |
| 12             |             |          |                |          |
| 14             |             |          |                |          |
| 16             |             |          |                |          |
| 18             |             |          |                |          |
| 20             | 5           | 6        | —              | —        |
| 22             |             |          |                |          |
| 24             |             |          |                |          |
|                | 3.6         | 4.6      |                |          |

For recommended PC-Board hole lay out: Consult factory

# Power contacts 8291



## Contacts

TRIM TRIO Connectors also offer possibilities to use or combine power contacts with the standard size 16 signal contacts into the same housing. It offers customers to reduce the number of connectors when combining signal and high current applications into 1 connector.

The signal cavities accept the full range of TRIM TRIO size 16 contacts for applications up till 13 A.

Power cavities will either accept:

- Size 12 contacts for applications up till 26 A
- Size 8 contacts for applications up till 44 A

Pin and Socket contacts are solid machined crimp snap-in and sockets for heavy duty top performance requirements

Springs on both contacts are made of spring tempered, heat-treated, beryllium copper.



### Construction

Contact body : High conductive copper alloy

Outer spring : Tempered, heat-treated, non plated beryllium copper.

### Plating

K = 0.4µm Gold mini all over, over Nickel

A = 3µ Silver all over

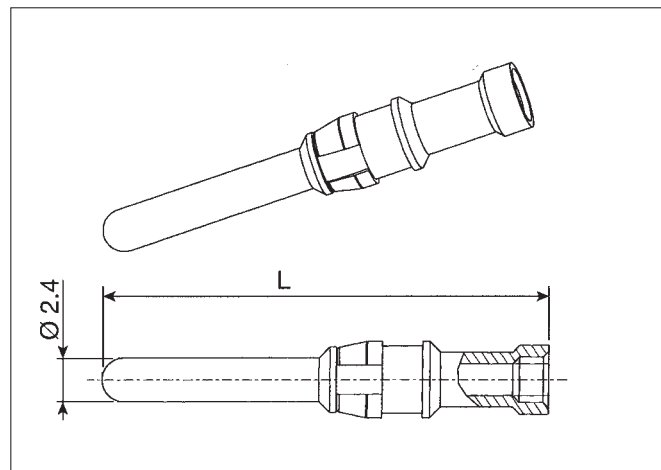
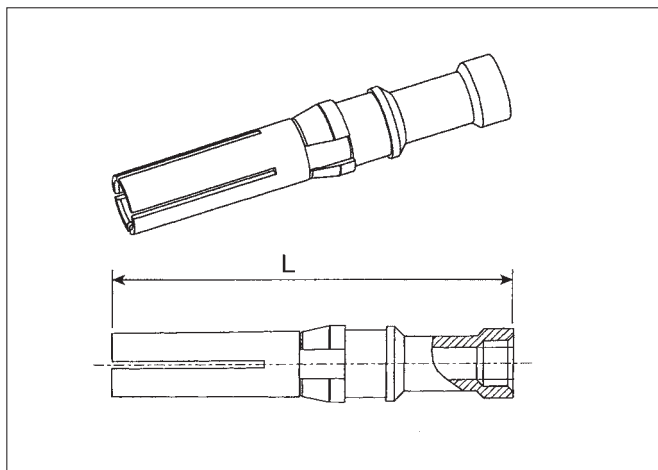
## Performance characteristics

|                      | Contacts # 12 (Ø 2,4) | Contacts # 8 (Ø 3,6) |
|----------------------|-----------------------|----------------------|
| Current rating :     | 26 A                  | 44 A                 |
| Contact resistance : | ≤ 5 mΩ                | ≤ 5 mΩ               |

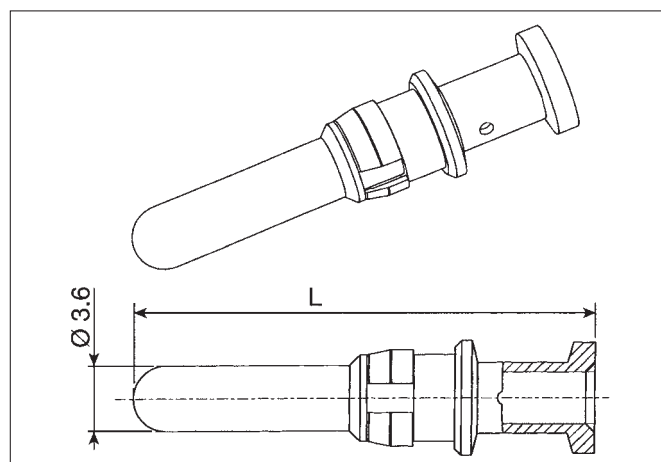
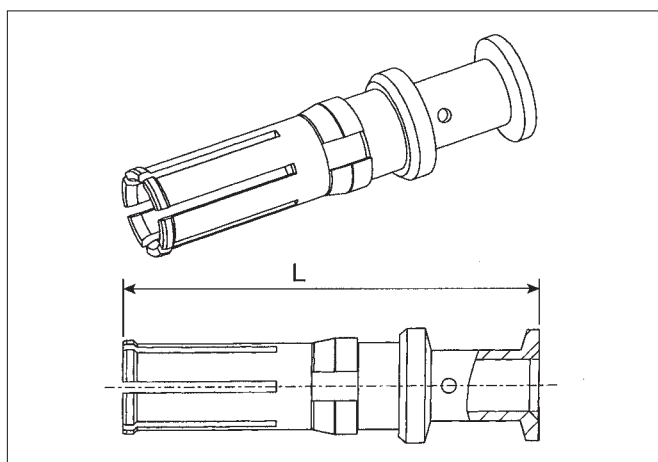
# Power contacts 8291



## Contacts # 12 (2.4 mm)



## Contacts # 8 (3.6 mm)



## How to order

| Part number |            | Contact size | Contact diameter | Cable    |                 |                    |      | Locator                        | Extraction tooling |
|-------------|------------|--------------|------------------|----------|-----------------|--------------------|------|--------------------------------|--------------------|
| Pin         | Socket     |              |                  | Section  |                 | Insulator diameter |      |                                |                    |
|             |            |              |                  | mm       | mm <sup>2</sup> | AWG                |      |                                |                    |
| 82911437NA  | 82911436A  | # 12         | 2.4              | 0.5      | 20              | 4.9                | M317 | VGE10077A                      | 51060210924        |
| 82911435NA  | 82911434A  |              |                  | 0.75-1.0 | 18              |                    |      |                                |                    |
| 82911463NA  | 82911462A  |              |                  | 1.5      | 16              |                    |      |                                |                    |
| 82911465NA  | 82911464A  |              |                  | 2.5      | 14              |                    |      |                                |                    |
| 82911437NK  | 82911436K  | # 12         | 2.4              | 0.5      | 20              | 4.9                | M317 | VGE10077A                      | 51060210924        |
| 82911435NK  | 82911434K  |              |                  | 0.75-1.0 | 18              |                    |      |                                |                    |
| 82911463NK  | 82911462K  |              |                  | 1.50     | 16              |                    |      |                                |                    |
| 82911465NK  | 82911464K  |              |                  | 2.5      | 14              |                    |      |                                |                    |
| 82913601A   | 82913600A  | # 8          | 3.6              | 1.5      | 16              | 6.5                | M317 | VGE10078A                      | 51060210936        |
| 82913603A   | 82913602A  |              |                  | 2.5      | 14              |                    |      |                                |                    |
| 82913605A   | 82913604A  |              |                  | 4        | 12              |                    |      |                                |                    |
| 82913607A   | 82913606A  |              |                  | 6        | 10              |                    |      |                                |                    |
| 82913609A   | 82913608A  |              |                  | 10       | 8               |                    |      |                                |                    |
| RM12Z43D28  | RC12Z43D28 | 12           | 2.4              | 10-4     | 8-12            | N/A                |      | NO TOOL REQUIRED               |                    |
| 82911685NZX | 82911684ZX | 8            | 3.6              | 4-25     | 12-14           | N/A                |      | SOLDER CLIP - NO TOOL REQUIRED |                    |

# Accessories



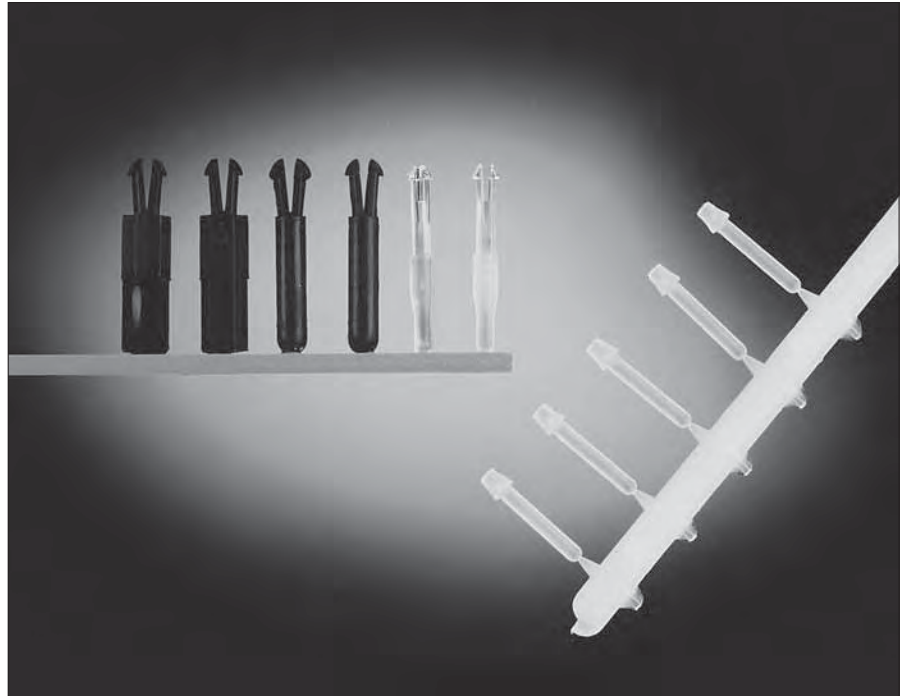
## Discrimination keys for TRIM TRIO size 16 connectors

### Description

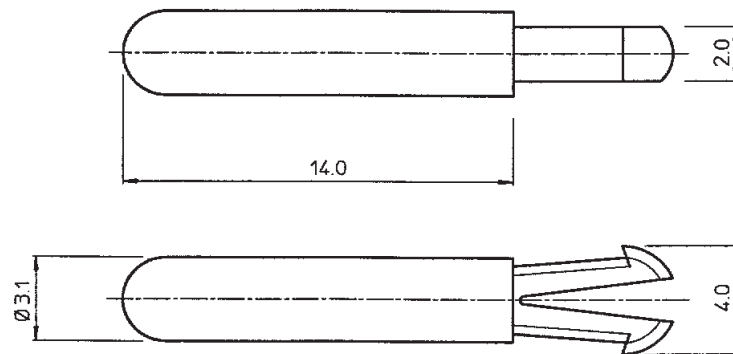
In applications where similar connectors are used next to each other, mismatching can be a reason for disturbances, system failure or even danger to operating personnel. To eliminate mismatching, all TRIM TRIO connectors can be equipped with discrimination keys, which offer unlimited possibilities for a "fool - proof" interconnection system.

When one of these discrimination keys is used, the TRIM TRIO connector will only mate with a connector which has a vacant contact or discrimination cavity at the corresponding position.

This system offers boundless opportunities for all applications which involve several identical TRIM TRIO connectors.

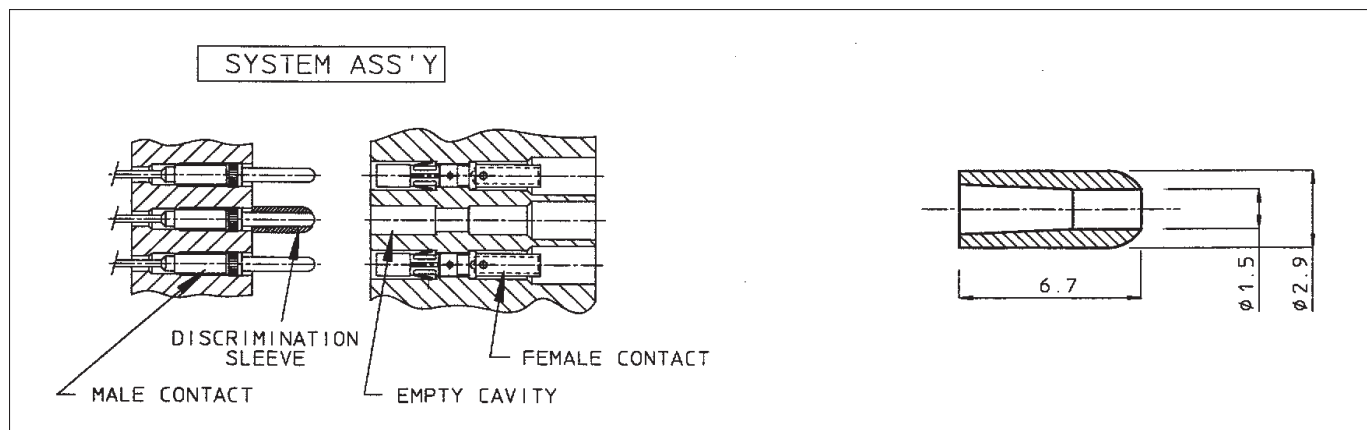


**The material used is polyamide 6.6**



### SMSPKE0

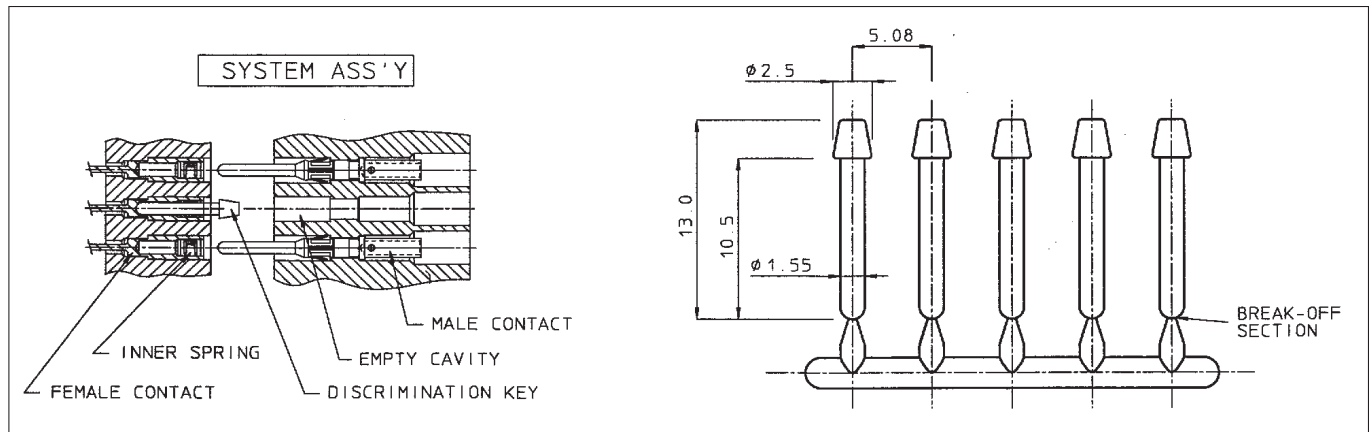
A dummy contact, which can be inserted into an empty contact cavity in any of the TRIM TRIO connectors.



### SMSPKB2

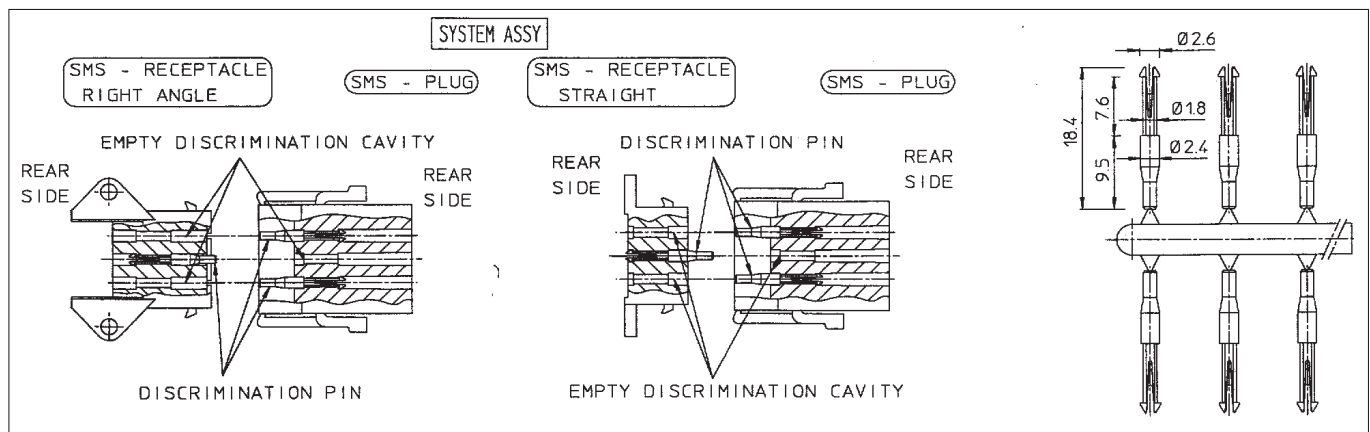
A tube, which can be fitted over a preassembled male contact in all TRIM TRIO male boardmount connectors MSO, SMS, MSG.

# Accessories



## **SMSPE2V1**

A pin, which can be inserted into a preassembled female contact in all TRIM TRIO female boardmount connectors MSO, SMS.



## **SMSPE3**

A pin, Which can be inserted in the discrimination cavities of the SMS Qikmate cable and boardmount connectors. The discrimination cavities are in between of the contact cavities and offer the advantage that no contact cavities are lost due to discrimination.

As extraction tool, the RX2025GE1 without the "extraction tool tip" can be used.

To unlock the discrimination pin, insert the extraction tool in the discrimination cavity at the rear side of the connector. Meanwhile, the pin can be extracted manually at the mating side.

# Tooling – intro



## Overview TRIM TRIO tooling



## Crimptooling for TRIM TRIO contacts

The TRIM TRIO connection system not only offers versatility in connectors but production versatility in tooling as well.

All information needed on tooling ranges from simple handtools for small production, over semi-automatic to full automatic strip-and-crimp machines can be found on the hereafter paragraphs.

All the TRIM TRIO tooling and this for machined, stamped and formed and coax contacts, is specially designed for this system to make reliable, trouble-free connections.

# Tooling



## Crimptooling for Size 16 contacts (Ø 1,6 mm)

For an overview on crimping refer to “crimping tables” at the different contact sections.

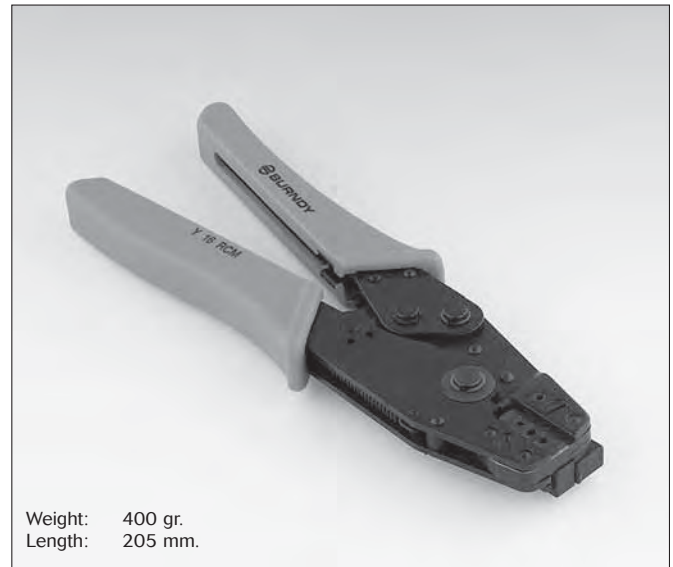


Weight: 425 gr.  
Length: 250 mm.

### M10S1 - for machined contacts

A robust, versatile, full cycling handtool which is fully qualified to the requirements of MIL-C-22520. Interchangeable 4-indent die sets are available for a wide range of machined contacts and gives a simultaneous crimp on both wire and insulation.

**This tool is suitable for application of RM/RC machined contacts and coaxial from the TRIM TRIO range.**



Weight: 400 gr.  
Length: 205 mm.

### Y16RCM - for machined contacts

A light weight, low cost crimping tool with fixed, 3-groove die set to crimp **Size 16 TRIM TRIO RM/RC loose piece machined contacts**.

The tool is ratchet controlled to guarantee a complete crimp cycle. Each crimping tool is supplied with a locator to guarantee a perfect crimp indent positioning.



Weight: 300 gr.  
Length: 170 mm.

### MH860 - for machined contacts

A light weight crimping tool Qualified to MIL-C-22520/7 that gives an 8 impression crimp with a precision cycle-controlled ratcheting mechanism. It features an 8 step crimp-depth selector knob and is designed to crimp **Size 16 TRIM TRIO RM/RC loose piece machined contacts**. The tool can be provided with different locators heads to crimp different contact types.



Weight: 425 gr.  
Length: 250 mm.

### AF8 - for machined contacts

Qualified to MIL-C-22520/1, has virtually limitless application within the specified wire range of 12 through 26 AWG. It gives an 8 impression crimp with a precision cycle-controlled ratcheting mechanism and **is used for certain machined power contacts and certain coax contacts**. The tool can be provided with different locators turret heads to crimp different contact types.

# Tooling



## Crimptooling for Size 16 contacts (Ø 1,6 mm)

For an overview on crimping refer to “crimping tables” at the different contact sections.

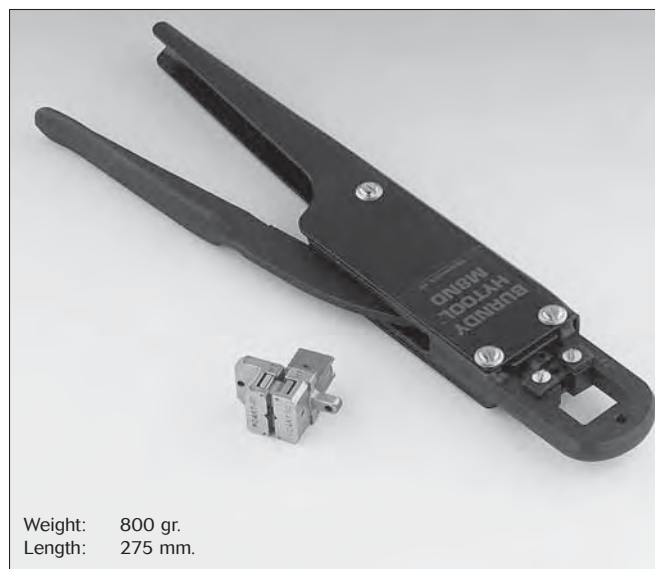


### Y14SCM2 - for formed contacts

A low cost non ratchet plier type handtool for AWG26 to 16 + insulation crimp for:

**Size 16 TRIM TRIO SM-M/SC-M loose piece formed contacts.**

**Size 20 SEALOK SM-W/SC-W loose piece formed contacts.**

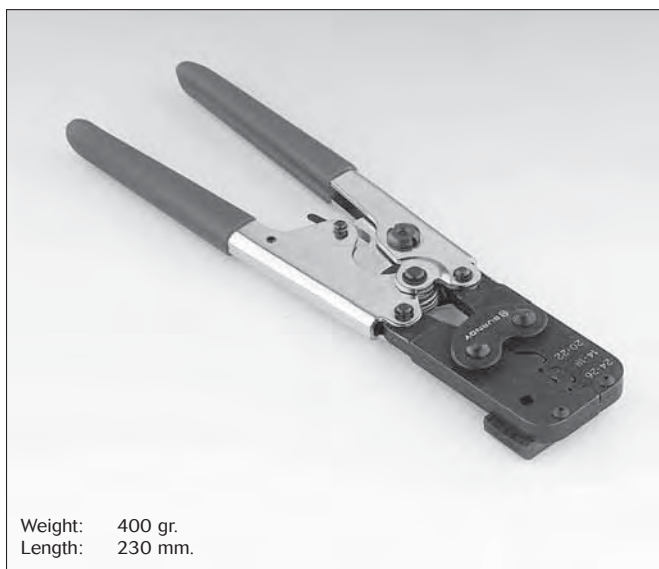


### M8ND - for machined and formed contacts

A robust full cycling hand ratchet tool which utilises interchangeable “N” die sets to crimp

**Size 16 TRIM TRIO RM/RC loose piece machined contacts.**

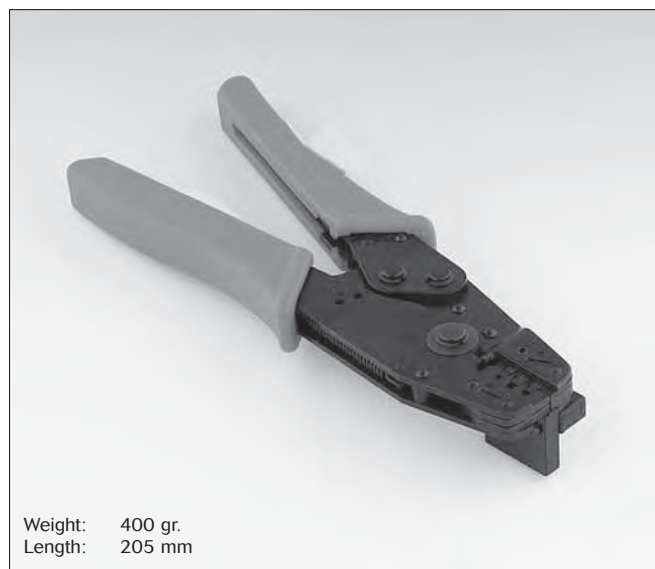
**Size 16 TRIM TRIO SM-M/SC-M loose piece formed contacts.**



### Y14MTV - for formed contact

A light weight crimping tool with fixed 3-groove die set for AWG26 to 14 for: **Size 16 TRIM TRIO SM-M/SC-M loose piece formed contacts.**

Ratchet controlled to guarantee a complete crimp cycle.



### Y16SCM2 - for formed contacts

A light weight crimping tool with fixed 3-groove die set for AWG26 to 16 for:

**Size 16 TRIM TRIO SM-M/SC-M loose piece formed contacts.**

Ratchet controlled to guarantee a complete crimp cycle.

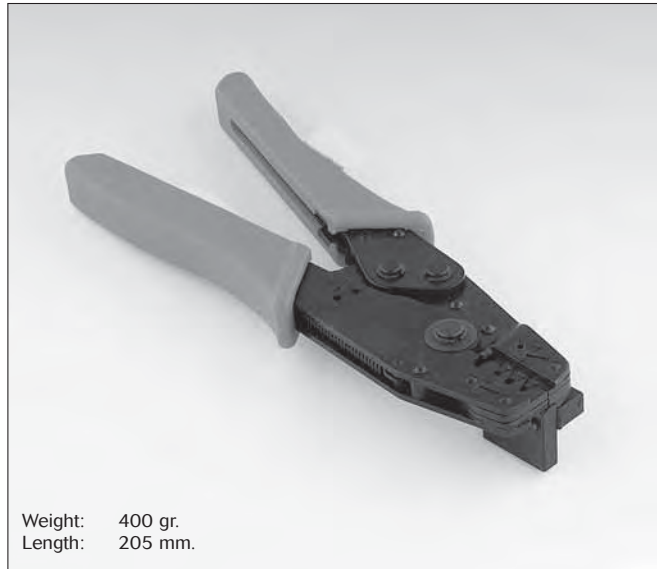
Each crimping tool is supplied with a locator to guarantee a perfect crimp indent positioning.

# Tooling



## Crimptooling for Size 16 contacts (Ø 1,6 mm)

For an overview on crimping refer to “crimping tables” at the different contact sections.



### **Y14SCM - for formed contacts**

A light weight crimping tool with fixed 3-groove die set for AWG18 to 14 for:

**Size 16 TRIM TRIO SM-M/SC-M loose piece formed contacts.**

Ratchet controlled to guarantee a complete crimp cycle.  
Each crimping tool is supplied with a locator to guarantee a perfect crimp indent positioning.

# Tooling



## Extraction and insertion tooling for size 16 contacts (Ø 1,6 mm)



### RX2025GE1

A spring loaded extraction tool **for the full range of TRIM TRIO contacts**. This tool ensures that the contact locking louvres are fully retracted before any pressure is applied to extract a contact. Part number for extraction tip: RX2025GE1P4.



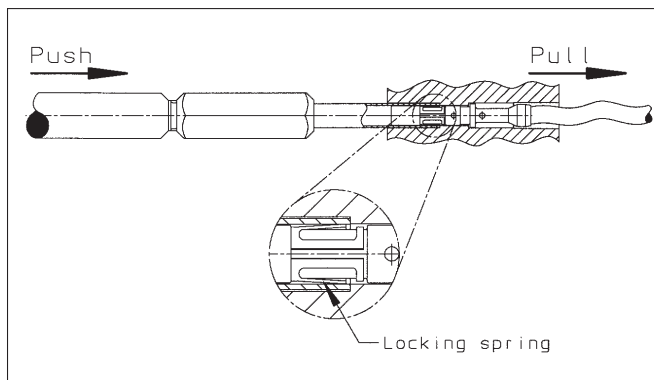
### RX2025GE2

A low cost spring loaded extraction tool for the full range of **TRIM TRIO contacts**.



### RX16D11D1

A spring loaded extraction tool **for the full range of TRIM TRIO contacts**. This tool ensures that the contact locking louvres are fully retracted before any pressure is applied to extract a contact. It is especially suitable for applications where the integrity of the assemblies are of the utmost importance.



### How to extract a contact out of its cavity?

Slide the extraction tip over contact from mating side till the locking spring from the contact is depressed. Push on handle to push out the contact with the spring loaded inner plunger.

## Insertion tooling



### RTM205

This tool is especially designed to ease insertion **of any TRIM TRIO contact** crimped on very flexible or small wire sizes. Simply position the insertion tool so that the tip of the tool bears against the back of the wire barrel, retaining the wire with thumb in the groove of the tool. Push the contact slowly into the connector until it snaps into position.

# Tooling



## Crimptooling for Size 20 contacts (Ø 1,0 mm)

For an overview on crimping refer to "crimping tables" at the different contact sections.



Weight: 300 gr.  
Length: 170 mm.

### MH860 - for machined contacts

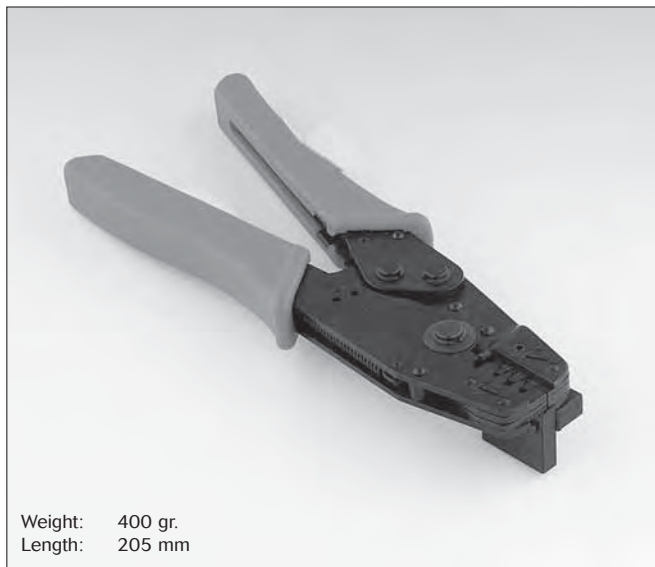
A light weight crimping tool Qualified to MIL-C-22520/7 that gives an 8 impression crimp with a precision cycle-controlled ratcheting mechanism. It features an 8 step crimp-depth selector knob. The tool can be provided with different locators heads to crimp different contact types.



Weight: 340 gr.  
Length: 220 mm

### Y14SCM2 - for formed contacts

A low cost non ratchet plier type handtool for AWG26 to 16 + insulation crimp.



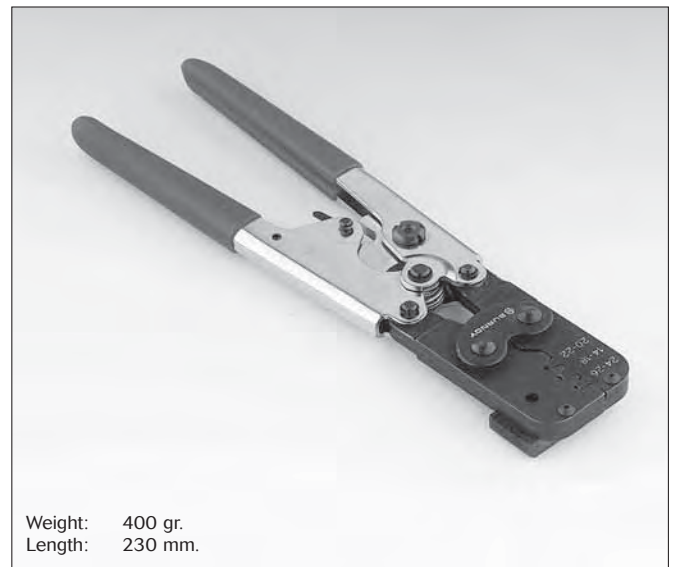
Weight: 400 gr.  
Length: 205 mm

### Y16SCM3 - for formed contacts

A light weight crimping tool with fixed 3-groove die set for AWG26 to 16 for:

#### Size 20 loose piece formed contacts.

Ratchet controlled to guarantee a complete crimp cycle.  
Each crimping tool is supplied with a locator to guarantee a perfect crimp indent positioning.



Weight: 400 gr.  
Length: 230 mm.

### Y14MTV - for formed contact

A light weight crimping tool with fixed 3-groove die set for AWG26 to 14. Ratchet controlled to guarantee a complete crimp cycle.

# Tooling

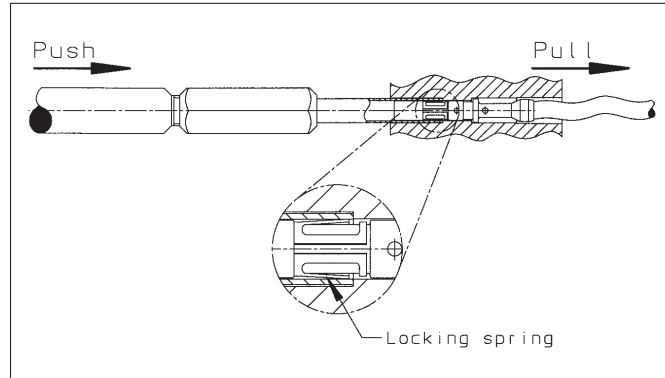


## Extraction and insertion tooling for size 20 contacts (Ø 1,0 mm)



### **RX20D44**

A spring loaded extraction tool. This tool ensures that the contact locking louvres are fully retracted before any pressure is applied to extract a contact. It is especially suitable for applications where the integrity of the assemblies are of the utmost importance.



### **How to extract a contact out of its cavity?**

Slide the extraction tip over contact from mating side till the locking spring from the contact is depressed.

Push on handle to push out the contact with the spring loaded inner plunger.

## Insertion tooling



### **RTM205**

This tool is especially designed to ease insertion **of any contact** crimped on very flexible or small wire sizes. Simply position the insertion tool so that the tip of the tool bears against the back of the wire barrel, retaining the wire with thumb in the groove of the tool. Push the contact slowly into the connector until it snaps into position.

# Tooling



## Automatic crimptooling for size 16 (Ø 1,6 mm) and size 20 (Ø 1,0 mm) contacts

### P100 MAN Press

This electromechanical high speed full automatic crimping press is specially designed for mass production and is realised totally in assembled steel parts.

The available force consents the crimping of a wire section up to 2.5mm<sup>2</sup>.

The press has a 40mm stroke and can be used together with automatic cut and stripping machines.

It uses a new electronic module to control the bracking of the press at the desired point. The noise level of the press is less than 70dB.

There is a safety mechanism that stops the press if the working speed is too high or the press does not complete its cycle. This protects the press or equipment mounted on board from damage.

Ref.: P100MAN  
Power.: 0.37 kWatt  
Weight: 35 kg  
Dimensions: 200x300x580

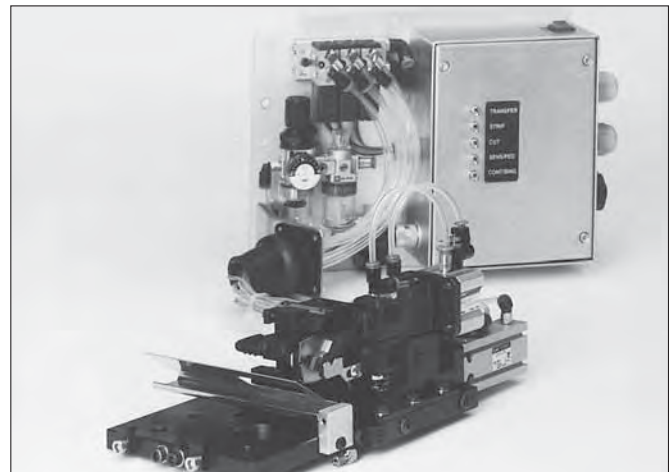


### MLS--- Left side miniapplicator

Miniapplicatorsn to crimp machined or stamped and formed TRIM TRIO and SEALOK contacts.

All the adjustments requested to make tool correctly functioning (crimp feeding pitch, crimp height...) can be simply made. Resolution of 0.03mm. Regulation range from 0 to 2.7 mm.

Ref.: See contact sections  
Stroke: 40 mm  
Weight: 4.5 kg  
Dimensions: 145x107x150



### SC10S1 Stripper-crimper

This stripper unit is used to strip insulation, immediately before the crimping of the contact terminal. The stripper unit is totally separate from the miniapplicator that allows the execution in a way that the setup and trial of the stripper unit can be done independently.

Ref.: SC10S1  
Pressure: 5 - 7 bars  
Cable section: 0.2 - 3 mm<sup>2</sup>  
Stripping length: 2.5 - 12 mm  
Weight: 7.5 kg

### Options

#### 1 - Quality assurance for crimping technology...

A crimping force sensor continuously checks the quality of each individual crimp and records it without impairing the processing speed. The sensor detects bad crimp connections, eliminating the high subsequent costs otherwise caused by them.

For ordering consult factory

### Options

#### 2 - Crimp pull press gauge

The crimp pull press gauge allows to measure the resistance to the pulling of crimped terminals.

#### 3 - Crimp height measuring device

#### 4 - Kit press lighting lamp

For ordering consult factory

# Tooling



## **Crimptooling & extraction tooling for power contacts:**

**Size 12 (dia. 2.4mm)**

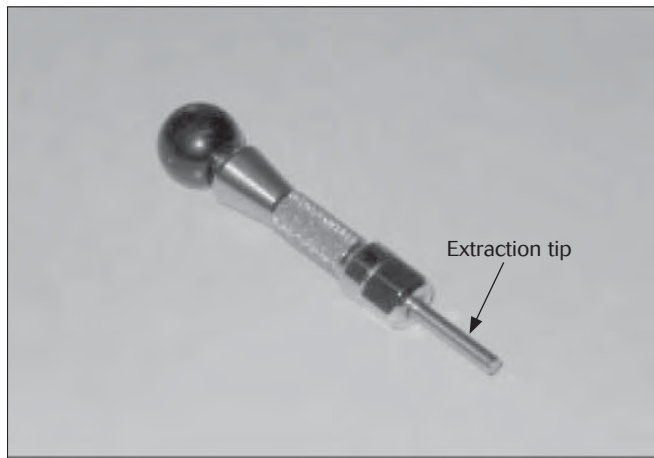
**Size 8 (dia. 3.6mm)**

Hand tooling for machined power contact # 12 (2,4 mm)



**Crimp tooling M317 and locator VGE1 0077A**

Extraction tooling for power contact # 12 (2,4 mm)



**Extraction tooling 5106.021.09.24**

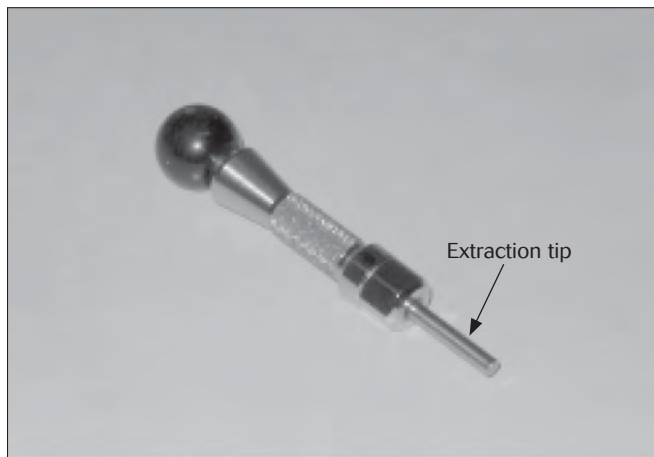
Extraction tip: 5106.021.34.24

Handtooling for machined power contacts # 8 (3,6 mm)



**Crimp tooling M317 and locator VGE1 0078A**

Extraction tooling for contact # 8 (3,6 mm)



**Extraction tooling 5106.021.09.36**

Extraction tip: 5106.021.34.36

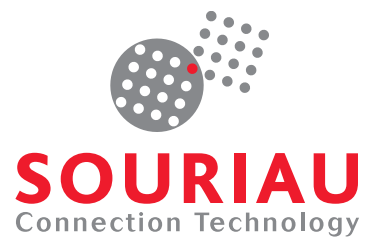


## 26482 Series I Connectors

- Rapid

- Secure

- High Performance



# 26482 Series I

## Solder Connectors



|                                             |     |
|---------------------------------------------|-----|
| Main Features - Part Numbering System ..... | 169 |
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# 26482 Series I Solder Connectors

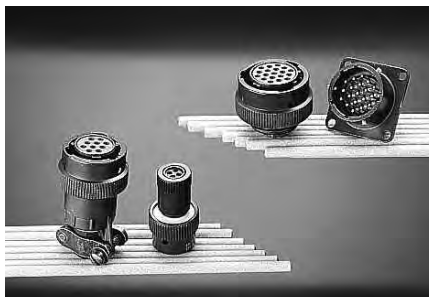


## Applications

Formerly used exclusively in military applications, these connectors are now used in a wide variety of commercial applications.

## Standards

MIL-C 26482 G Series 1  
NFC 93422-He 301 B  
VG 95328  
BS 9522 F 0017  
GAM T1 list  
QPL approved (solder version)



## Description

- Bayonet coupling
- Environmental and hermetic versions
- Solder, crimp, straight spills and wire wrap versions
- Thermocouple contacts available
- Cadmium free plating (Zinc Cobalt) version

## Characteristics

### Mechanical

- Shell :
  - environmental version :
    - aluminum alloy plating
    - olive green cadmium
    - black anodized
    - white cadmium
    - satin finish bright nickel
    - zinc cobalt (olive green)
  - hermetic version : steel
- plating : - iridescent yellow cadmium, nickel
- Insulator :
  - front section : neoprene elastomer (85 shore)
  - rear section : neoprene elastomer (40 shore)
- Contact :
  - crimp : inserted and removed from rear of insulator retained by metallic clip ; solder and straight spills : non removable ; wire wrap : removable or not removable
  - material : copper alloy
  - plating : gold overall or gold plated active zone and tin/lead plated termination
  - min retention force of contacts in insulator

| contact size  | crimp   | solder straight spill ww |
|---------------|---------|--------------------------|
| 20 (Ø 1 mm)   | ≥ 68 N  | ≥ 68 N                   |
| 16 (Ø 1.6 mm) | ≥ 113 N | ≥ 113 N                  |

- Mechanical durability :  
500 cycles (full mating-unmating)

### Electrical

- Dielectric withstanding voltage :
  - at standard pressure :  
mated and unmated connectors
    - 1 500 Vrms between size 20 contacts (service 1)
    - 2 300 Vrms between size 16 contacts (service 2)
    - 1 500 Vrms between mixed size 20 and 16 contacts (service 1)
  - at reduced pressure (10 mbar) :  
connectors mated and unmated
    - 200 Vrms between size 20 contacts (service 1)
    - 300 Vrms between size 16 contacts (service 2)
- Insulation resistance : ≥ 5 000 MΩ under 500 Vdc
- Current rating per contact :
  - size 20 : 7.5 A
  - size 16 : 13 A

- Contact resistance :
  - environmental version :
    - size 20 : 4 mΩ
    - size 16 : 3 mΩ
  - hermetic version :
    - size 20 : 30 mΩ
    - size 16 : 14 mΩ
- Shielding : 70 dB to 5 MHz  
40 dB to 100 MHz

### Environmental

- Working temperature : -55°C to +125°C
- Sealing :
  - crimp contact version, 1 bar differential pressure, leakage ≤ 8 cm³/hr
  - solder contact version, 2 bar differential pressure, leakage ≤ 16 cm³/hr
- Hermiticity : 1 bar differential pressure leakage ≤ 2,8 mm³/hr
- Chemical resistance :
  - to MIL-C 26482 G Series 1 and
  - NFC 93422-HE 301 B code A
- Resistance to salt spray : 48 hours at environmental temperature
- Damp heat : 21 days
- Vibration : to NFC 20-616

## Ordering information - Environmental connectors

|                   |        |                                                                                                                                                             |                                                     |      |   |     |    |   |   |    |     |
|-------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|------|---|-----|----|---|---|----|-----|
| basic series      |        | solder version                                                                                                                                              | 851                                                 | - 00 | E | 8 - | 3A | P | • | 50 | ••• |
|                   |        | crimp version                                                                                                                                               | 851                                                 | - 00 | R | 8 - | 3A | P | • | 50 | ••• |
| shell type        |        |                                                                                                                                                             |                                                     |      |   |     |    |   |   |    |     |
|                   | solder | crimp                                                                                                                                                       |                                                     |      |   |     |    |   |   |    |     |
|                   | 00     | 00                                                                                                                                                          | - square flange receptacle accepting backshells     |      |   |     |    |   |   |    |     |
|                   | 01     | 01                                                                                                                                                          | - cable connecting receptacle                       |      |   |     |    |   |   |    |     |
|                   | 02E    | 02R                                                                                                                                                         | - square flange receptacle not accepting backshells |      |   |     |    |   |   |    |     |
|                   | 07     | 07                                                                                                                                                          | - jam nut receptacle accepting backshells           |      |   |     |    |   |   |    |     |
|                   | 07A    |                                                                                                                                                             | - jam nut receptacle not accepting backshells       |      |   |     |    |   |   |    |     |
|                   | 06     | 06                                                                                                                                                          | - plug for use with straight backshells             |      |   |     |    |   |   |    |     |
|                   | 08     | 08                                                                                                                                                          | - plug for use with 90° backshells                  |      |   |     |    |   |   |    |     |
|                   | 36     | 36                                                                                                                                                          | - screened plug for use with straight backshells    |      |   |     |    |   |   |    |     |
|                   | 76     | 76                                                                                                                                                          | - screened plug with lock finger                    |      |   |     |    |   |   |    |     |
| backshell type    |        | see table next page                                                                                                                                         |                                                     |      |   |     |    |   |   |    |     |
| shell size        |        | 8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24                                                                                                                   |                                                     |      |   |     |    |   |   |    |     |
| contact layout    |        | see table p 20                                                                                                                                              |                                                     |      |   |     |    |   |   |    |     |
| contact type      |        | P = male - S = female                                                                                                                                       |                                                     |      |   |     |    |   |   |    |     |
| orientation       |        | normal (not included in part number) w, x, y, z, see table p 21                                                                                             |                                                     |      |   |     |    |   |   |    |     |
| obligatory suffix |        |                                                                                                                                                             |                                                     |      |   |     |    |   |   |    |     |
|                   | B      | crimped version which used layouts 8-2 / 8-3 / 8-4 / 12-14                                                                                                  |                                                     |      |   |     |    |   |   |    |     |
|                   | 50     | gold plated crimp contacts - solder contacts size 20 - contacts with a gold plated active zone and tin plated terminations - other gold plated terminations |                                                     |      |   |     |    |   |   |    |     |
|                   | 51     | solder contacts gold plated size 20                                                                                                                         |                                                     |      |   |     |    |   |   |    |     |
|                   | 52     | zinc cobalt olive green plated (contacts : idem specif. 50)                                                                                                 |                                                     |      |   |     |    |   |   |    |     |
|                   | 54     | black zinc nickel plating                                                                                                                                   |                                                     |      |   |     |    |   |   |    |     |
| specification     |        | -                                                                                                                                                           | olive green cadmium plate (without specification)   |      |   |     |    |   |   |    |     |
|                   | 29     | black anodized (solder contacts)                                                                                                                            |                                                     |      |   |     |    |   |   |    |     |
|                   | 031    | black anodized (crimp contacts)                                                                                                                             |                                                     |      |   |     |    |   |   |    |     |
|                   | 44     | nickel plate                                                                                                                                                |                                                     |      |   |     |    |   |   |    |     |
|                   | 38     | nickel plate                                                                                                                                                |                                                     |      |   |     |    |   |   |    |     |
|                   | 42     | olive green cadmium plate                                                                                                                                   |                                                     |      |   |     |    |   |   |    |     |
|                   |        | } backshell type T* and RT*                                                                                                                                 |                                                     |      |   |     |    |   |   |    |     |

# 26482 Series I Solder Connectors



## Backshell type

| solder | crimp | shells<br>backshell                                                         | solder version |    |    |    |    |    |    |    | crimp version |    |    |    |    |    |  |  |
|--------|-------|-----------------------------------------------------------------------------|----------------|----|----|----|----|----|----|----|---------------|----|----|----|----|----|--|--|
|        |       |                                                                             | 00             | 01 | 07 | 06 | 08 | 36 | 76 | 00 | 01            | 07 | 06 | 08 | 36 | 76 |  |  |
| E      | R     | backnut                                                                     | •              | •  | •  | •  | -  | -  | -  | •  | •             | •  | •  | -  | -  | -  |  |  |
| EC     | RC    | straight cable clamp                                                        | •              | •  | •  | •  | -  | -  | -  | •  | •             | •  | •  | -  | -  | -  |  |  |
| EC     | RC    | 90° cable clamp                                                             | -              | -  | -  | -  | •  | -  | -  | -  | -             | -  | -  | •  | -  | -  |  |  |
| AC     |       | straight cable clamp without grommet                                        | •              | •  | •  | •  | -  | -  | -  | -  | -             | -  | -  | -  | -  | -  |  |  |
| P      | RP    | straight backshell for potting                                              | •              | •  | •  | •  | -  | -  | -  | •  | •             | •  | •  | -  | -  | -  |  |  |
| P      | RP    | 90° backshell for potting                                                   | -              | -  | -  | -  | •  | -  | -  | -  | -             | -  | -  | •  | -  | -  |  |  |
| A      | RA    | straight adapter                                                            | •              | •  | -  | •  | -  | •  | -  | •  | •             | -  | •  | -  | •  | -  |  |  |
| T      | RT    | straight backshell for heatshrink sleeving                                  | •              | •  | •  | •  | -  | -  | -  | •  | •             | •  | •  | -  | -  | -  |  |  |
| M      | RM    | straight removable backshell for heatshrink sleeving                        | •              | •  | -  | •  | -  | -  | -  | •  | •             | -  | •  | -  | -  | -  |  |  |
| *T     | *RT   | straight removable backshell for screen termination and heatshrink sleeving | •              | •  | •  | -  | -  | •  | -  | •  | •             | •  | -  | -  | •  | -  |  |  |
| G      | RG    | straight removable backshell for screen termination and heatshrink sleeving | •              | •  | •  | -  | -  | •  | -  | •  | •             | •  | -  | -  | •  | -  |  |  |
| J      |       | straight backshell with sealing gland                                       | •              | •  | -  | •  | -  | -  | -  | -  | -             | -  | -  | -  | -  | -  |  |  |
| JC     |       | straight backshell with sealing gland and cable clamp                       | •              | •  | -  | •  | -  | -  | -  | -  | -             | -  | -  | -  | -  | -  |  |  |
| U      | RU    | short backshell for screen termination and heatshrink sleeving              | -              | -  | -  | -  | -  | -  | •  | -  | -             | -  | -  | -  | -  | •  |  |  |
| Z      | RZ    | straight adapter for electrical pitch access                                | -              | -  | -  | •  | -  | -  | -  | -  | -             | -  | •  | -  | -  | -  |  |  |

## Hermetic connectors

|                   |                                                                                                       |
|-------------------|-------------------------------------------------------------------------------------------------------|
| basic series      | 851 -02H 8 -3A P • 50 ••                                                                              |
| shell type        | 02H - square flange receptable<br>07H - jam nut receptable<br>IH - solder fixing receptable           |
| shell size        | 8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24                                                             |
| contact layout    | see table p 20                                                                                        |
| contact type      | P = male only                                                                                         |
| orientation       | N normal (not included in part number) w, x, y, z, see table p 21                                     |
| obligatory suffix | 50 - gold plating for size 20 contacts                                                                |
| specification     | - 02H and 07H, yellow cadmium plating. IH, nickel (without specification)<br>44 - 02H and 07H, nickel |

# 26482 Series I Solder Connectors



## Straight spills and wire wrap connectors

|                          |            |                                                                                                                                                                                                                                                                                                     |             |          |                                     |          |          |           |           |
|--------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|-------------------------------------|----------|----------|-----------|-----------|
| <b>basic series</b>      |            | <b>851</b>                                                                                                                                                                                                                                                                                          | <b>-02E</b> | <b>8</b> | <b>-3A</b>                          | <b>P</b> | <b>•</b> | <b>50</b> | <b>16</b> |
| <b>shell type</b>        |            | <b>02E</b> - square flange receptable not accepting backshell<br><b>07A</b> - jam nut receptable not accepting backshell                                                                                                                                                                            |             |          |                                     |          |          |           |           |
| <b>shell size</b>        |            | <b>8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24</b>                                                                                                                                                                                                                                                    |             |          |                                     |          |          |           |           |
| <b>contact layout</b>    |            | see table p 20                                                                                                                                                                                                                                                                                      |             |          |                                     |          |          |           |           |
| <b>contact type</b>      |            | <b>P</b> = male - <b>S</b> = female                                                                                                                                                                                                                                                                 |             |          |                                     |          |          |           |           |
| <b>orientation</b>       |            | <b>N</b> normal (not included in part number) <b>w, x, y, z</b> , see table p 21                                                                                                                                                                                                                    |             |          |                                     |          |          |           |           |
| <b>obligatory suffix</b> |            | <b>50</b> - pre-tinning for straight spill size 20 contacts (termination area), gold plating for other contacts<br><b>51</b> - gold plating for straight spill contacts size 20<br><b>52</b> - zinc cobalt olive green plated (contacts : idem specif. 50)<br><b>54</b> - black zinc nickel plating |             |          |                                     |          |          |           |           |
| <b>specification</b>     |            |                                                                                                                                                                                                                                                                                                     |             |          |                                     |          |          |           |           |
| <b>straight spill</b>    | <b>16</b>  | olive green cadmium plated body                                                                                                                                                                                                                                                                     |             |          | - Ø 1 mm contact, Ø 0,6 mm terminal |          |          |           |           |
|                          | <b>45</b>  | nickel plating                                                                                                                                                                                                                                                                                      |             |          | - Ø 1,6 mm contact, Ø 1 mm terminal |          |          |           |           |
| <b>wire wrap</b>         | <b>34</b>  | non-bonded contacts, olive green cadmium plated shell                                                                                                                                                                                                                                               |             |          | - Ø 1 mm contact, Ø 0,6 mm terminal |          |          |           |           |
|                          | <b>34A</b> | bonded contacts, olive green cadmium plated shell                                                                                                                                                                                                                                                   |             |          | - Ø 1,6 mm contact, Ø 1 mm terminal |          |          |           |           |

## Cross reference list

### 26482 Series I version with crimp contacts (olive green cadmium plating) connectors with backshells

| Souriau               | NFC 93422<br>(HE 301 B) | MIL-C 26482 G<br>Series I | VG 95328         |
|-----------------------|-------------------------|---------------------------|------------------|
| 851 00 R .. .. 50 ..  | HE 301 B 00 R .. .. 1A  | * MS 3120 E .. ..         | VG 95328 A .. .. |
| 851 00 RC .. .. 50 .. | HE 301 B 00 RC .. .. 1A | * MS 3120 F .. ..         | VG 95328 B .. .. |
| 851 00 RP .. .. 50 .. | HE 301 B 00 RP .. .. 1A | * MS 3120 P .. ..         |                  |
| 851 00 RG .. .. 50 .. |                         |                           | VG 95328 R .. .. |
| 851 00 RA .. .. 50 .. | HE 301 B 00 RA .. .. 1A |                           |                  |
| 851 01 R .. .. 50 ..  | HE 301 B 01 R .. .. 1A  | * MS 3121 E .. ..         |                  |
| 851 01 RC .. .. 50 .. | HE 301 B 01 RC .. .. 1A | * MS 3121 F .. ..         |                  |
| 851 01 RP .. .. 50 .. | HE 301 B 01 RP .. .. 1A | * MS 3121 P .. ..         |                  |
| 851 01 RA .. .. 50 .. | HE 301 B 01 RA .. .. 1A |                           |                  |
| 851 02 R .. .. 50 ..  | HE 301 B 02 R .. .. 1A  | * MS 3122 E .. ..         | VG 95328 C .. .. |
| 851 06 R .. .. 50 ..  | HE 301 B 06 R .. .. 1A  | * MS 3126 E .. ..         |                  |
| 851 06 RC .. .. 50 .. | HE 301 B 06 RC .. .. 1A | * MS 3126 F .. ..         | VG 95328 K .. .. |
| 851 06 RP .. .. 50 .. | HE 301 B 06 RP .. .. 1A | * MS 3126 P .. ..         |                  |
| 851 06 RT .. .. 50 .. |                         |                           | VG 95328 J .. .. |
| 851 06 RA .. .. 50 .. | HE 301 B 06 RA .. .. 1A |                           |                  |
| 851 36 RG .. .. 50 .. |                         |                           | VG 95328 M .. .. |
| 851 36 RA .. .. 50 .. |                         |                           | VG 95328 N .. .. |
| 851 07 R .. .. 50 ..  | HE 301 B 07 R .. .. 1A  | * MS 3124 E .. ..         | VG 95328 D .. .. |
| 851 07 RC .. .. 50 .. | HE 301 B 07 RC .. .. 1A | * MS 3124 F .. ..         | VG 95328 E .. .. |
| 851 07 RP .. .. 50 .. | HE 301 B 07 RP .. .. 1A | * MS 3124 P .. ..         |                  |
| 851 07 RT .. .. 50 .. |                         |                           | VG 95328 S .. .. |
| 851 07 RG .. .. 50 .. |                         |                           | VG 95328 T .. .. |
| 851 76 RU .. .. 50 .. |                         |                           | VG 95328 U .. .. |
| 851 08 RC .. .. 50 .. | HE 301 B 08 RC .. .. 1A |                           |                  |
| 851 08 RP .. .. 50 .. | HE 301 B 08 RP .. .. 1A |                           |                  |

\* Not QPL.

## Other plating

| plating        | Souriau        |                 | NFC 93422 (HE 301 B) |
|----------------|----------------|-----------------|----------------------|
|                | solder version | crimp version   |                      |
| black anodized | 851 .. .. 5029 | 851 .. .. 50031 | HE 301 B .. .. 4A    |
| nickel         | 851 .. .. 5044 | 851 .. .. 5044  | HE 301 B .. .. 5A    |

# 26482 Series I Solder Connectors



## 26482 Series I version with solder contacts (olive green cadmium plating) connectors with backshells

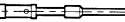
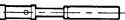
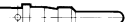
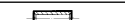
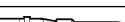
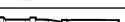
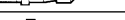
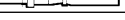
| Souriau               | NFC 93422 (HE 301 B)    | MIL-C 26482 G Series I | VG 95328         |
|-----------------------|-------------------------|------------------------|------------------|
| 851 00 E .. .. 50 ..  | HE 301 B 00 E .. .. 1A  | MS 3110 E .. ..        | VG 95328 H .. .. |
| 851 00 EC .. .. 50 .. | HE 301 B 00 EC .. .. 1A | MS 3110 F .. ..        |                  |
| 851 00 AC .. .. 50 .. | HE 301 B 00 AC .. .. 1A |                        |                  |
| 851 00 P .. .. 50 ..  | HE 301 B 00 P .. .. 1A  | MS 3110 P .. ..        |                  |
| 851 00 A .. .. 50 ..  | HE 301 B 00 A .. .. 1A  |                        |                  |
| 851 00 J .. .. 50 ..  | HE 301 B 00 J .. .. 1A  |                        |                  |
| 851 00 JC .. .. 50 .. |                         | MS 3110 J .. ..        |                  |
| 851 01 E .. .. 50 ..  | HE 301 B 01 E .. .. 1A  | MS 3111 E .. ..        |                  |
| 851 01 EC .. .. 50 .. | HE 301 B 01 EC .. .. 1A | MS 3111 F .. ..        |                  |
| 851 01 AC .. .. 50 .. | HE 301 B 01 AC .. .. 1A |                        |                  |
| 851 01 P .. .. 50 ..  | HE 301 B 01 P .. .. 1A  | MS 3111 P .. ..        |                  |
| 851 01 A .. .. 50 ..  | HE 301 B 01 A .. .. 1A  |                        |                  |
| 851 01 J .. .. 50 ..  | HE 301 B 01 J .. .. 1A  |                        |                  |
| 851 01 JC .. .. 50 .. |                         | MS 3111 J .. ..        |                  |
| 851 02 E .. .. 50 ..  | HE 301 B 02 E .. .. 1A  | MS 3112 E .. ..        |                  |
| 851 06 E .. .. 50 ..  | HE 301 B 06 E .. .. 1A  | MS 3116 E .. ..        |                  |
| 851 06 EC .. .. 50 .. | HE 301 B 06 EC .. .. 1A | MS 3116 F .. ..        |                  |
| 851 06 AC .. .. 50 .. | HE 301 B 06 AC .. .. 1A |                        |                  |
| 851 06 P .. .. 50 ..  | HE 301 B 06 P .. .. 1A  | MS 3116 P .. ..        |                  |
| 851 06 A .. .. 50 ..  | HE 301 B 06 A .. .. 1A  |                        |                  |
| 851 06 J .. .. 50 ..  | HE 301 B 06 J .. .. 1A  |                        |                  |
| 851 06 JC .. .. 50 .. |                         | MS 3116 J .. ..        |                  |
| 851 08 EC .. .. 50 .. | HE 301 B 08 EC .. .. 1A |                        |                  |
| 851 08 P .. .. 50 ..  | HE 301 B 08 P .. .. 1A  |                        |                  |
| 851 07 E .. .. 50 ..  | HE 301 B 07 E .. .. 1A  | MS 3114 E .. ..        |                  |
| 851 07 EC .. .. 50 .. | HE 301 B 07 EC .. .. 1A | MS 3114 F .. ..        |                  |
| 851 07 AC .. .. 50 .. | HE 301 B 07 AC .. .. 1A |                        |                  |
| 851 07 P .. .. 50 ..  | HE 301 B 07 P .. .. 1A  | MS 3114 P .. ..        |                  |
| 851 07 A .. .. 50 ..  | HE 301 B 07 A .. .. 1A  |                        |                  |

## 851 hermetic version

| Souriau             | NFC 93422 (model HE 301 B) | MIL-C 26482 G Series I | VG 95328                             |
|---------------------|----------------------------|------------------------|--------------------------------------|
| 851 02 H .. .. P.50 | HE 301 B 02 H .. .. P.3A   |                        | VG 95328 F .. ..<br>VG 95328 G .. .. |
| 851 07 H .. .. P.50 | HE 301 B 07 H .. .. P.3A   | * MS 3114 H .. .. P.   |                                      |
| 851 1H .. .. P.50   | HE 301 B 1 H .. .. P.3A    | * MS 3113 H .. .. P.   |                                      |

\* Not QPL.

## Contacts - Crimp contacts

| contact type    |         |                                         | contact size | part numbers | section in mm² | gauge AWG | Ø over insulation min/Max (mm) |                                                                                       |
|-----------------|---------|-----------------------------------------|--------------|--------------|----------------|-----------|--------------------------------|---------------------------------------------------------------------------------------|
| standard        | male    | for contact layouts 82, 83 84 and 12.14 | 20           | 8500-9573    | 0.21 to 0.93   | 24 to 18  | 1.20 / 2.11                    |  |
|                 | female  |                                         |              | 8500-9213    |                |           |                                |  |
|                 | male    |                                         |              | 8500-697     |                |           |                                |  |
|                 | female  |                                         |              | 8500-1758A   |                |           |                                |  |
|                 | male    |                                         | 16           | 8500-1300    | 0.93 to 1.91   | 18 to 14  | 1.60 / 2.80                    |  |
|                 | female  |                                         |              | 8500-9331    |                |           |                                |  |
| reducing sleeve |         |                                         | 20           | 8500-781     | 0.06 to 0.21   | 30 to 24  |                                |  |
|                 |         |                                         | 16           | 8500-1985    | 0.60           | 20        |                                |  |
| thermocouple    | chromel | male                                    | 20           | 8500-809     | 0.21 to 0.93   | 24 to 18  | 1.20 / 2.11                    |  |
|                 | alumel  |                                         |              | 8500-812     |                |           |                                |  |
|                 | chromel | female                                  |              | 8500-2054    |                |           |                                |  |
|                 | alumel  |                                         |              | 8500-2055    |                |           |                                |  |
|                 | chromel | male                                    | 16           | 8500-1053    | 0.93 to 1.91   | 18 to 14  | 1.60 / 2.80                    |  |
|                 | alumel  |                                         |              | 8500-1058    |                |           |                                |  |
|                 | chromel | female                                  |              | 8500-1054    |                |           |                                |  |
|                 | alumel  |                                         |              | 8500-1059    |                |           |                                |  |

## Wire wrap contacts

| contact type | contact size | part numbers | diagonals    | gauge AWG   | number of wraps |  |
|--------------|--------------|--------------|--------------|-------------|-----------------|--|
| male         | 20           | 8500-4220    | 0.78 to 0.85 | 26-28-30    | 3               |  |
| female       |              | 8500-9351    | 0.78 to 0.85 | 26-28-30    | 3               |  |
| male         | 16           | 8500-4304    | 1.55 to 1.70 | 20-22-24-26 | 3               |  |
| female       |              | 8500-4305    | 1.55 to 1.70 | 20-22-24-26 | 3               |  |

# 26482 Series I Solder Connectors



## Contact layouts

Viewed from front face of male insulator

|                    |                                  |                                                  |                                                  |                                |                                |
|--------------------|----------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------|--------------------------------|
| shells<br><b>8</b> | <b>2</b><br><br>2 Ø 1 (# 20)     | <b>3</b><br><br>3 Ø 1 (# 20)                     | <b>3A ou 98</b><br><br>3 Ø 1 (# 20)              | <b>4</b><br><br>4 Ø 1 (# 20)   | <b>33</b><br><br>3 Ø 1 (# 20)  |
| <b>10</b>          | <b>6</b><br><br>6 Ø 1 (# 20)     | <b>7</b><br><br>7 Ø 1 (# 20)                     | <b>98</b><br><br>6 Ø 1 (# 20)                    |                                |                                |
| <b>12</b>          | <b>3</b><br><br>3 Ø 1,6 (# 16)   | <b>8</b><br><br>8 Ø 1 (# 20)                     | <b>10</b><br><br>10 Ø 1 (# 20)                   | <b>2</b><br><br>2 Ø 1,6 (# 16) | <b>14</b><br><br>14 Ø 1 (# 20) |
| <b>14</b>          | <b>5</b><br><br>5 Ø 1,6 (# 16)   | <b>12</b><br><br>8 Ø 1 (# 20)<br>4 Ø 1,6 (# 16)  | <b>15</b><br><br>14 Ø 1 (# 20)<br>1 Ø 1,6 (# 16) | <b>18</b><br><br>18 Ø 1 (# 20) | <b>19</b><br><br>19 Ø 1 (# 20) |
| <b>16</b>          | <b>8</b><br><br>8 Ø 1,6 (# 16)   | <b>23</b><br><br>22 Ø 1 (# 20)<br>1 Ø 1,6 (# 16) | <b>26</b><br><br>26 Ø 1 (# 20)                   |                                |                                |
| <b>18</b>          | <b>11</b><br><br>11 Ø 1,6 (# 16) | <b>32</b><br><br>32 Ø 1 (# 20)                   | <b>30</b><br><br>29 Ø 1 (# 20)<br>1 Ø 1,6 (# 16) |                                |                                |
| <b>20</b>          | <b>16</b><br><br>16 Ø 1,6 (# 16) | <b>39</b><br><br>37 Ø 1 (# 20)<br>2 Ø 1,6 (# 16) | <b>41</b><br><br>41 Ø 1 (# 20)                   | <b>24</b><br><br>24 Ø 1 (# 20) | <b>25</b><br><br>25 Ø 1 (# 20) |
|                    |                                  |                                                  |                                                  | <b>27</b><br><br>27 Ø 1 (# 20) |                                |
| <b>22</b>          | <b>21</b><br><br>21 Ø 1,6 (# 16) | <b>36</b><br><br>36 Ø 1 (# 20)                   | <b>55</b><br><br>55 Ø 1 (# 20)                   | <b>32</b><br><br>32 Ø 1 (# 20) | <b>34</b><br><br>34 Ø 1 (# 20) |
| <b>24</b>          | <b>61</b><br><br>61 Ø 1 (# 20)   |                                                  |                                                  |                                |                                |

■ solder contact layouts (QPL)

□ solder contact layouts

+ solder contact layouts without grommet

▲ crimp contact layouts

■ SHTP

● hermetic version contact layouts

◆ straight spills contact layouts

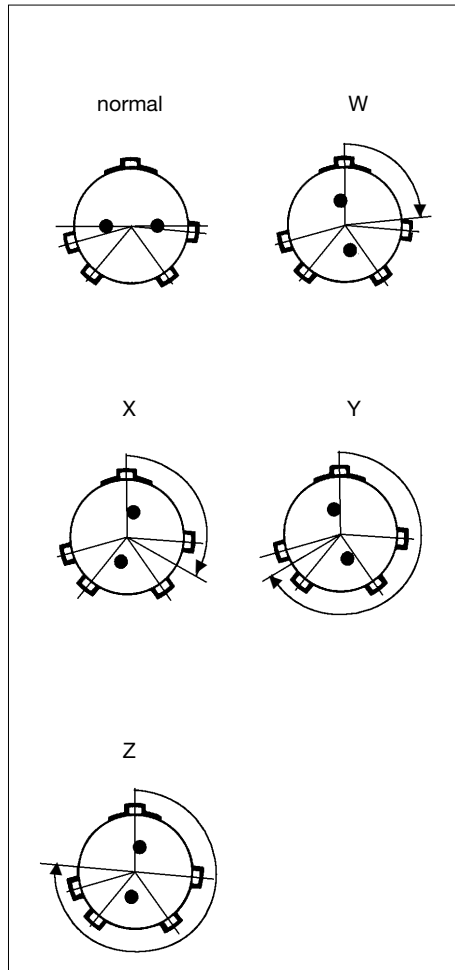
○ wire wrap contact layouts

# 26482 Series I Solder Connectors



## Polarization - insulator rotated inside metal body

Front face of pin insulator shown  
(receptacle or plug)

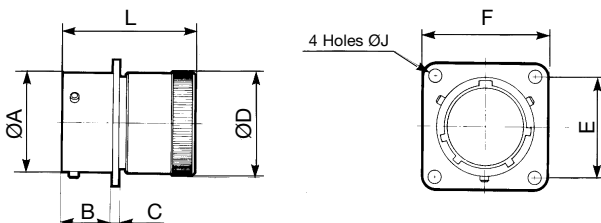


| shell | layout   | angle in degrees |     |     |     | NFC 93422 HE 30 1B |       | MIL-C 26482G Serie 1 |       | service 1 | service 2 |
|-------|----------|------------------|-----|-----|-----|--------------------|-------|----------------------|-------|-----------|-----------|
|       |          | W                | X   | Y   | Z   | solder             | crimp | solder               | crimp | 1500 Vrms | 2300 Vrms |
| 8     | 2        | 58               | 122 | —   | —   |                    |       | •                    |       | X         |           |
|       | 3        | 60               | 210 | —   | —   |                    |       | •                    |       | X         |           |
|       | 3A (98)* | 60               | 210 | —   | —   |                    |       | •                    | •     | X         |           |
|       | 4        | 45               | —   | —   | —   |                    |       | •                    |       | X         |           |
|       | 33       | 90               | —   | —   | —   |                    | •     | •                    | •     | X         |           |
| 10    | 6        | 90               | —   | —   | —   | •                  | •     | •                    | •     | X         |           |
|       | 7        | —                | —   | —   | —   |                    |       | •                    | •     | X         |           |
|       | 98       | 90               | 180 | 240 | 270 |                    |       | •                    | •     | X         |           |
| 12    | 3        | —                | —   | 180 | —   | •                  | •     | •                    | •     | X         | X         |
|       | 8        | 90               | 112 | 203 | 292 | •                  | •     | •                    | •     | X         |           |
|       | 10       | 60               | 155 | 270 | 295 |                    |       | •                    | •     | X         |           |
|       | 2        | —                | —   | —   | —   |                    |       |                      |       |           | X         |
|       | 14       | —                | —   | —   | —   |                    |       | •                    |       | X         |           |
| 14    | 5        | 40               | 92  | 184 | 273 | •                  | •     | •                    | •     | X         | X         |
|       | 12       | 43               | 90  | —   | —   | •                  | •     | •                    | •     | X         |           |
|       | 15       | 17               | 110 | 155 | 234 | •                  | •     | •                    | •     | X         |           |
|       | 18       | 15               | 90  | 180 | 270 |                    |       | •                    | •     | X         |           |
|       | 19       | 30               | 165 | 315 | —   | •                  | •     | •                    | •     | X         |           |
| 16    | 8        | 54               | 152 | 180 | 331 | •                  | •     | •                    | •     | X         | X         |
|       | 23       | 158              | 270 | —   | —   | •                  | •     | •                    | •     | X         |           |
|       | 26       | 60               | —   | 275 | 338 | •                  | •     | •                    | •     | X         |           |
| 18    | 11       | 62               | 119 | 241 | 340 | •                  | •     | •                    | •     | X         | X         |
|       | 32       | 85               | 138 | 222 | 265 | •                  | •     | •                    | •     | X         |           |
|       | 30       | 180              | 193 | 285 | 350 |                    | •     |                      | •     | X         |           |
| 20    | 16       | 238              | 318 | 333 | 347 | •                  | •     | •                    | •     | X         | X         |
|       | 39       | 63               | 144 | 252 | 333 | •                  | •     | •                    | •     | X         |           |
|       | 41       | 45               | 126 | 225 | —   | •                  | •     | •                    | •     | X         |           |
|       | 24       | 70               | 145 | 215 | 290 |                    |       | •                    | •     | X         |           |
|       | 25       | 72               | 144 | 216 | 288 |                    |       |                      | •     | X         |           |
|       | 27       | 72               | 144 | 216 | 288 |                    | •     |                      | •     | X         |           |
| 22    | 21       | 16               | 135 | 175 | 349 | •                  | •     | •                    | •     | X         | X         |
|       | 36       | 72               | 144 | 216 | 288 |                    | •     |                      | •     | X         |           |
|       | 55       | 30               | 142 | 226 | 314 | •                  | •     | •                    | •     | X         |           |
|       | 32       | 72               | 145 | 215 | 288 |                    |       |                      | •     | X         |           |
|       | 34       | 62               | 142 | 218 | 298 |                    |       |                      | •     | X         |           |
| 24    | 61       | 90               | 180 | 270 | 324 | •                  | •     | •                    | •     | X         |           |

\* 8-98 layout W and non standard orientations

## Dimensions - square flange receptacle with backnut

| solder<br>00 E | HE 301 B 00 E<br>MS 3110 E               | shell<br>size | L Max          |                | A              | B<br>Max      | C<br>Max     | D<br>Max       | E              | F<br>Max       | J            |
|----------------|------------------------------------------|---------------|----------------|----------------|----------------|---------------|--------------|----------------|----------------|----------------|--------------|
|                |                                          |               | solder         | crimp          |                |               |              |                |                |                |              |
| crimp<br>00 R  | HE 301 B 00 R<br>MS 3120 E<br>VG 95328 A | 08            | 32.70<br>1.287 | 32.00<br>1.260 | 12.03<br>.474  | 11.70<br>.461 | 1.32<br>.052 | 13.50<br>.531  | 15.09<br>.594  | 20.99<br>.826  | 3.13<br>.123 |
|                |                                          | 10            | 32.70<br>1.287 | 32.00<br>1.260 | 15.01<br>.591  | 11.70<br>.461 | 1.32<br>.052 | 16.70<br>.657  | 18.26<br>.719  | 24.19<br>.952  | 3.13<br>.123 |
|                |                                          | 12            | 32.70<br>1.287 | 32.00<br>1.260 | 19.07<br>.751  | 11.70<br>.461 | 1.32<br>.052 | 19.90<br>.783  | 20.62<br>.812  | 26.54<br>1.045 | 3.13<br>.123 |
|                |                                          | 14            | 32.70<br>1.287 | 32.00<br>1.260 | 22.25<br>.876  | 11.70<br>.461 | 1.32<br>.052 | 23.40<br>.921  | 23.00<br>.906  | 28.89<br>1.137 | 3.13<br>.123 |
|                |                                          | 16            | 32.70<br>1.287 | 32.00<br>1.260 | 25.42<br>1.001 | 11.70<br>.461 | 1.32<br>.052 | 26.60<br>1.047 | 24.61<br>.969  | 31.29<br>1.232 | 3.13<br>.123 |
|                |                                          | 18            | 32.70<br>1.287 | 32.00<br>1.260 | 28.60<br>1.126 | 11.70<br>.461 | 1.32<br>.052 | 29.50<br>1.161 | 26.97<br>1.062 | 33.69<br>1.326 | 3.13<br>.123 |
|                |                                          | 20            | 34.50<br>1.358 | 33.40<br>1.315 | 31.77<br>1.251 | 14.35<br>.565 | 2.15<br>.085 | 32.70<br>1.287 | 29.36<br>1.156 | 36.89<br>1.452 | 3.13<br>.123 |
|                |                                          | 22            | 34.50<br>1.358 | 33.40<br>1.315 | 34.95<br>1.376 | 14.35<br>.565 | 2.15<br>.085 | 36.00<br>1.417 | 31.75<br>1.250 | 39.99<br>1.574 | 3.13<br>.123 |
|                |                                          | 24            | 34.50<br>1.358 | 33.40<br>1.315 | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 39.10<br>1.539 | 34.92<br>1.375 | 43.15<br>1.699 | 3.81<br>.150 |

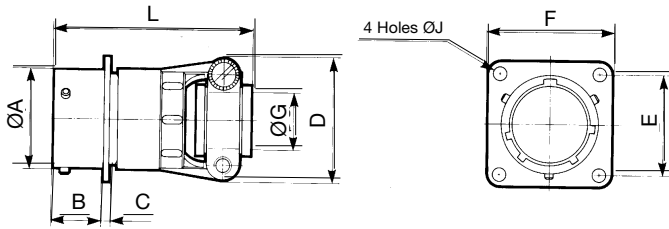


# 26482 Series I Solder Connectors



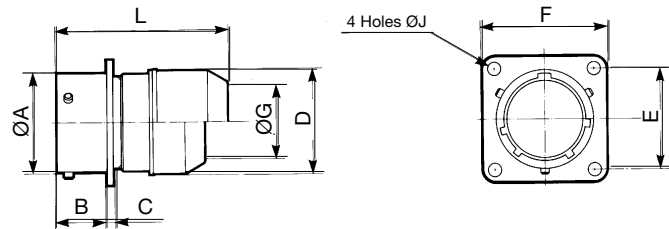
## Square flange receptacle with straight cable clamp

| solder<br>00 EC | HE 301 B 00 EC<br>MS 3110 F               | shell<br>size | L Max          |                | A              | B<br>Max      | C<br>Max     | D<br>Max       | E              | F<br>Max       | G             | J            |
|-----------------|-------------------------------------------|---------------|----------------|----------------|----------------|---------------|--------------|----------------|----------------|----------------|---------------|--------------|
|                 |                                           |               | solder         | crimp          |                |               |              |                |                |                |               |              |
| 00 AC           | HE 301 B 00 AC                            | 08            | 48.00<br>1.890 | 47.30<br>1.862 | 12.03<br>.474  | 11.70<br>.461 | 1.32<br>.052 | 19.90<br>.783  | 15.09<br>.594  | 20.99<br>.826  | 3.50<br>.138  | 3.13<br>.123 |
|                 |                                           |               | 48.00<br>1.890 | 47.30<br>1.862 | 15.01<br>.591  | 11.70<br>.461 | 1.32<br>.052 | 21.50<br>.846  | 18.26<br>.719  | 24.19<br>.952  | 5.00<br>.197  | 3.13<br>.123 |
| crimp<br>00 RC  | HE 301 B 00 RC<br>MS 3120 F<br>VG 95328 B | 10            | 48.00<br>1.890 | 47.30<br>1.862 | 19.07<br>.751  | 11.70<br>.461 | 1.32<br>.052 | 25.00<br>.984  | 20.62<br>.812  | 26.54<br>1.045 | 8.20<br>.323  | 3.13<br>.123 |
|                 |                                           |               | 48.00<br>1.890 | 47.30<br>1.862 | 22.25<br>.876  | 11.70<br>.461 | 1.32<br>.052 | 27.80<br>1.094 | 23.00<br>.906  | 28.89<br>1.137 | 10.00<br>.394 | 3.13<br>.123 |
|                 |                                           | 12            | 51.00<br>2.008 | 50.50<br>1.988 | 25.42<br>1.001 | 11.70<br>.461 | 1.32<br>.052 | 29.40<br>1.157 | 24.61<br>.969  | 31.29<br>1.232 | 13.00<br>.512 | 3.13<br>.123 |
|                 |                                           |               | 51.00<br>2.008 | 50.50<br>1.988 | 28.60<br>1.126 | 11.70<br>.461 | 1.32<br>.052 | 35.30<br>1.390 | 26.97<br>1.062 | 33.69<br>1.326 | 16.00<br>.630 | 3.13<br>.123 |
|                 |                                           | 14            | 53.00<br>2.087 | 51.50<br>2.028 | 31.77<br>1.251 | 14.35<br>.565 | 2.15<br>.085 | 35.30<br>1.390 | 29.36<br>1.156 | 36.89<br>1.452 | 16.00<br>.630 | 3.13<br>.123 |
|                 |                                           |               | 53.00<br>2.087 | 51.50<br>2.028 | 34.95<br>1.376 | 14.35<br>.565 | 2.15<br>.085 | 41.10<br>1.618 | 31.75<br>1.250 | 39.99<br>1.574 | 19.30<br>.760 | 3.13<br>.123 |
|                 |                                           | 16            | 53.00<br>2.087 | 51.50<br>2.028 | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 42.40<br>1.669 | 34.92<br>1.375 | 43.15<br>1.699 | 20.60<br>.811 | 3.81<br>.150 |
|                 |                                           |               | 53.00<br>2.087 | 51.50<br>2.028 | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 42.40<br>1.669 | 34.92<br>1.375 | 43.15<br>1.699 | 20.60<br>.811 | 3.81<br>.150 |



## Square flange receptacle with straight backshell for potting

| solder<br>00 P | HE 301 B 00 P<br>MS 3110 P  | shell<br>size | L Max          |                | A              | B<br>Max      | C<br>Max     | D<br>Max       | E              | F<br>Max       | G<br>Max       | J            |
|----------------|-----------------------------|---------------|----------------|----------------|----------------|---------------|--------------|----------------|----------------|----------------|----------------|--------------|
|                |                             |               | solder         | crimp          |                |               |              |                |                |                |                |              |
| crimp<br>00 RP | HE 301 B 00 RP<br>MS 3120 P | 08            | 36.20<br>1.425 | 41.70<br>1.642 | 12.03<br>.474  | 11.70<br>.461 | 1.32<br>.052 | 15.34<br>.604  | 15.09<br>.594  | 20.99<br>.826  | 10.46<br>.412  | 3.13<br>.123 |
|                |                             |               | 36.20<br>1.425 | 41.70<br>1.642 | 15.01<br>.591  | 11.70<br>.461 | 1.32<br>.052 | 17.70<br>.697  | 18.26<br>.719  | 24.19<br>.952  | 13.55<br>.533  | 3.13<br>.123 |
|                |                             | 10            | 36.20<br>1.425 | 41.70<br>1.642 | 19.07<br>.751  | 11.70<br>.461 | 1.32<br>.052 | 21.69<br>.854  | 20.62<br>.812  | 26.54<br>1.045 | 13.96<br>.550  | 3.13<br>.123 |
|                |                             |               | 36.20<br>1.425 | 41.70<br>1.642 | 22.25<br>.876  | 11.70<br>.461 | 1.32<br>.052 | 23.90<br>.941  | 23.00<br>.906  | 28.89<br>1.137 | 17.42<br>.686  | 3.13<br>.123 |
|                |                             | 12            | 36.20<br>1.425 | 41.70<br>1.642 | 25.42<br>1.001 | 11.70<br>.461 | 1.32<br>.052 | 27.00<br>1.063 | 24.61<br>.969  | 31.29<br>1.232 | 20.56<br>.809  | 3.13<br>.123 |
|                |                             |               | 36.20<br>1.425 | 41.70<br>1.642 | 28.60<br>1.126 | 11.70<br>.461 | 1.32<br>.052 | 30.50<br>1.201 | 26.97<br>1.062 | 33.69<br>1.326 | 23.66<br>.931  | 3.13<br>.123 |
|                |                             | 14            | 36.91<br>1.453 | 44.46<br>1.750 | 28.60<br>1.126 | 11.70<br>.461 | 1.32<br>.052 | 30.50<br>1.201 | 26.97<br>1.062 | 33.69<br>1.326 | 23.66<br>.931  | 3.13<br>.123 |
|                |                             |               | 43.80<br>1.724 | 50.93<br>2.005 | 31.77<br>1.251 | 14.35<br>.565 | 2.15<br>.085 | 33.65<br>1.325 | 29.36<br>1.156 | 36.89<br>1.452 | 23.92<br>.942  | 3.13<br>.123 |
|                |                             | 16            | 43.80<br>1.724 | 50.93<br>2.005 | 34.95<br>1.376 | 14.35<br>.565 | 2.15<br>.085 | 37.10<br>1.461 | 31.75<br>1.250 | 39.99<br>1.574 | 25.52<br>1.005 | 3.13<br>.123 |
|                |                             |               | 43.80<br>1.724 | 50.93<br>2.005 | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 40.00<br>1.575 | 34.92<br>1.375 | 43.15<br>1.699 | 32.00<br>1.260 | 3.81<br>.150 |

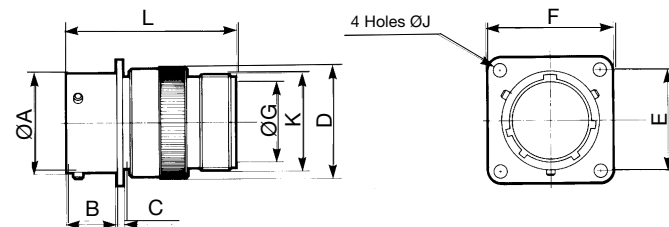


## Square flange receptacle with straight adapter

|                |                |
|----------------|----------------|
| solder<br>00 A | HE 301 B 00A   |
| crimp<br>00 RA | HE 301 B 00 RA |

Technical drawings of a cylindrical component. The left drawing is a side view showing dimensions: L (total length), ØA (outer diameter), e (flange thickness), ØG (threaded section diameter), K (threaded section length), D (base diameter), B (base flange thickness), and C (threaded section thickness). The right drawing is a top view showing dimensions: F (outer diameter of the base flange), E (thickness of the base flange), and 4 Holes ØJ (four mounting holes of diameter ØJ).

| shell<br>size | L Max          |                | A             | B<br>Max     | C<br>Max       | D<br>Max       | E              | F<br>Max       | G<br>Max     | J         | K<br>threading<br>UNEF 2A |
|---------------|----------------|----------------|---------------|--------------|----------------|----------------|----------------|----------------|--------------|-----------|---------------------------|
|               | solder         | crimp          |               |              |                |                |                |                |              |           |                           |
| 08            | 41.00<br>1.614 | 12.03<br>.474  | 11.70<br>.461 | 1.32<br>.052 | 14.50<br>.571  | 15.09<br>.594  | 20.99<br>.826  | 9.10<br>.358   | 3.13<br>.123 | 1/2 18    |                           |
|               | 41.00<br>1.614 | 15.01<br>.591  | 11.70<br>.461 | 1.32<br>.052 | 18.70<br>.736  | 18.26<br>.719  | 24.19<br>.952  | 12.08<br>.476  | 3.13<br>.123 | 5/8 24    |                           |
| 10            | 41.00<br>1.614 | 19.07<br>.751  | 11.70<br>.461 | 1.32<br>.052 | 21.70<br>.854  | 20.62<br>.812  | 26.54<br>1.045 | 15.25<br>.600  | 3.13<br>.123 | 3/4 20    |                           |
|               | 41.00<br>1.614 | 22.25<br>.876  | 11.70<br>.461 | 1.32<br>.052 | 25.10<br>.988  | 23.00<br>.906  | 28.89<br>1.137 | 18.15<br>.715  | 3.13<br>.123 | 7/8 20    |                           |
| 12            | 41.00<br>1.614 | 25.42<br>1.001 | 11.70<br>.461 | 1.32<br>.052 | 28.13<br>1.107 | 24.61<br>.969  | 31.29<br>1.232 | 21.32<br>.839  | 3.13<br>.123 | 1-20      |                           |
|               | 41.00<br>1.614 | 28.60<br>1.126 | 11.70<br>.461 | 1.32<br>.052 | 31.38<br>1.235 | 26.97<br>1.062 | 33.69<br>1.326 | 24.32<br>.957  | 3.13<br>.123 | 1-3/16 18 |                           |
| 14            | 44.00<br>1.732 | 31.77<br>1.251 | 14.35<br>.565 | 2.15<br>.085 | 34.30<br>1.350 | 29.36<br>1.156 | 36.89<br>1.452 | 26.73<br>1.052 | 3.13<br>.123 | 1-3/16 18 |                           |
|               | 44.00<br>1.732 | 34.95<br>1.376 | 14.35<br>.565 | 2.15<br>.085 | 37.60<br>1.480 | 31.75<br>1.250 | 39.99<br>1.574 | 30.67<br>1.207 | 3.13<br>.123 | 1-7/16 18 |                           |
| 16            | 44.00<br>1.732 | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 40.70<br>1.602 | 34.92<br>1.375 | 43.15<br>1.699 | 33.08<br>1.302 | 3.81<br>.150 | 1-7/16 18 |                           |
|               | 44.00<br>1.732 | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 40.70<br>1.602 | 34.92<br>1.375 | 43.15<br>1.699 | 33.08<br>1.302 | 3.81<br>.150 | 1-7/16 18 |                           |



# 26482 Series I Solder Connectors



## Square flange receptacle with straight backshell for heatshrink sleeving

|                |  |               |                |                |                |               |              |                |                |                |                |                |              |              |
|----------------|--|---------------|----------------|----------------|----------------|---------------|--------------|----------------|----------------|----------------|----------------|----------------|--------------|--------------|
| solder<br>00 T |  | shell<br>size | L Max          |                | A              | B<br>Max      | C<br>Max     | D<br>Max       | E              | F<br>Max       | L Max          |                | J            | M<br>Max     |
| crimp<br>00 RT |  |               | solder         | crimp          |                |               |              |                |                |                | solder         | crimp          |              |              |
|                |  | 08            | 36.70<br>1.445 | 36.00<br>1.417 | 12.03<br>.474  | 11.70<br>.461 | 1.32<br>.052 | 15.35<br>.604  | 15.09<br>.594  | 20.99<br>.826  | 7.20<br>.283   | 6.70<br>.264   | 3.13<br>.123 | 3.70<br>.146 |
|                |  | 10            | 36.70<br>1.445 | 36.00<br>1.417 | 15.01<br>.591  | 11.70<br>.461 | 1.32<br>.052 | 18.15<br>.715  | 18.26<br>.719  | 24.19<br>.952  | 10.20<br>.402  | 9.40<br>.370   | 3.13<br>.123 | 3.70<br>.146 |
|                |  | 12            | 36.70<br>1.445 | 36.00<br>1.417 | 19.07<br>.751  | 11.70<br>.461 | 1.32<br>.052 | 23.45<br>.923  | 20.62<br>.812  | 26.54<br>1.045 | 13.20<br>.520  | 11.95<br>.470  | 3.13<br>.123 | 3.70<br>.146 |
|                |  | 14            | 36.70<br>1.445 | 36.00<br>1.417 | 22.25<br>.876  | 11.70<br>.461 | 1.32<br>.052 | 24.25<br>.955  | 23.00<br>.906  | 28.89<br>1.137 | 16.10<br>.634  | 15.15<br>.596  | 3.13<br>.123 | 3.70<br>.146 |
|                |  | 16            | 39.00<br>1.535 | 38.30<br>1.508 | 28.60<br>1.001 | 11.70<br>.461 | 1.32<br>.052 | 31.75<br>1.163 | 26.97<br>.969  | 33.69<br>1.232 | 21.30<br>.758  | 19.95<br>.711  | 3.13<br>.123 | 3.70<br>.146 |
|                |  | 18            | 39.00<br>1.535 | 38.30<br>1.508 | 28.60<br>1.126 | 11.70<br>.461 | 1.32<br>.052 | 31.75<br>1.250 | 26.97<br>1.062 | 33.69<br>1.326 | 21.30<br>.839  | 19.95<br>.785  | 3.13<br>.123 | 3.70<br>.146 |
|                |  | 20            | 45.30<br>1.783 | 44.20<br>1.740 | 31.77<br>1.251 | 14.35<br>.565 | 2.15<br>.085 | 35.85<br>1.411 | 29.36<br>1.156 | 36.89<br>1.452 | 24.40<br>.961  | 23.05<br>.907  | 3.13<br>.123 | 3.70<br>.146 |
|                |  | 22            | 45.30<br>1.783 | 44.20<br>1.740 | 34.95<br>1.376 | 14.35<br>.565 | 2.15<br>.085 | 38.20<br>1.504 | 31.75<br>1.250 | 39.99<br>1.574 | 27.50<br>1.083 | 25.55<br>1.006 | 3.13<br>.123 | 3.70<br>.146 |
|                |  | 24            | 44.00<br>1.732 | 42.60<br>1.677 | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 41.30<br>1.626 | 34.92<br>1.375 | 43.15<br>1.699 | 30.60<br>1.205 | 28.65<br>1.128 | 3.81<br>.150 | 3.70<br>.146 |

## Square flange receptacle with removable straight backshell for heatshrink sleeving

|                |  |
|----------------|--|
| solder<br>00 M |  |
| crimp<br>00 RM |  |

Technical drawing of a square flange receptacle with removable straight backshell for heatshrink sleeving. The drawing includes a side view and a front view. The side view shows the following dimensions: L (total length), ØA (outer diameter of the main body), B (length of the main body), C (length of the backshell), M (length of the crimp), ØG (inner diameter of the backshell), and ØD (outer diameter of the backshell). The front view shows the square flange with four mounting holes, labeled '4 Holes ØJ', and dimensions F (flange width) and E (flange height).

| shell<br>size | L Max          |                | A             | B<br>Max     | C<br>Max       | D<br>Max       | E              | F<br>Max       | G<br>Max     | J            | M<br>Max |
|---------------|----------------|----------------|---------------|--------------|----------------|----------------|----------------|----------------|--------------|--------------|----------|
|               | solder         | crimp          |               |              |                |                |                |                |              |              |          |
| 08            | 50.00<br>1.969 | 12.03<br>.474  | 11.70<br>.461 | 1.32<br>.052 | 13.55<br>.604  | 15.09<br>.719  | 20.99<br>.952  | 7.05<br>.390   | 3.13<br>.123 | 3.50<br>.138 |          |
| 10            | 50.00<br>1.969 | 15.01<br>.591  | 11.70<br>.461 | 1.32<br>.052 | 15.35<br>.767  | 18.26<br>.812  | 24.19<br>1.045 | 9.90<br>.496   | 3.13<br>.123 | 3.50<br>.138 |          |
| 12            | 50.00<br>1.969 | 19.07<br>.751  | 11.70<br>.461 | 1.32<br>.052 | 19.48<br>.767  | 20.62<br>.812  | 26.54<br>1.045 | 12.60<br>.496  | 3.13<br>.123 | 3.50<br>.138 |          |
| 14            | 50.00<br>1.969 | 22.25<br>.876  | 11.70<br>.461 | 1.32<br>.052 | 21.30<br>.839  | 23.00<br>.906  | 28.89<br>1.137 | 15.90<br>.626  | 3.13<br>.123 | 3.50<br>.138 |          |
| 16            | 50.00<br>1.969 | 25.42<br>1.001 | 11.70<br>.461 | 1.32<br>.052 | 24.50<br>.965  | 24.61<br>.969  | 31.29<br>1.232 | 18.95<br>.746  | 3.13<br>.123 | 3.50<br>.138 |          |
| 18            | 50.00<br>1.969 | 28.60<br>1.126 | 11.70<br>.461 | 1.32<br>.052 | 26.45<br>1.041 | 26.97<br>1.062 | 33.69<br>1.326 | 20.90<br>.823  | 3.13<br>.123 | 3.50<br>.138 |          |
| 20            | 53.30<br>2.098 | 31.70<br>1.376 | 14.35<br>.565 | 2.15<br>.085 | 34.24<br>1.348 | 31.75<br>1.250 | 39.99<br>1.574 | 26.60<br>1.047 | 3.13<br>.123 | 3.50<br>.138 |          |
| 22            | 53.30<br>2.098 | 34.95<br>1.376 | 14.35<br>.565 | 2.15<br>.085 | 34.24<br>1.348 | 31.75<br>1.250 | 39.99<br>1.574 | 26.60<br>1.047 | 3.13<br>.123 | 3.50<br>.138 |          |
| 24            | 53.30<br>2.098 | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 36.47<br>1.436 | 34.92<br>1.375 | 43.15<br>1.699 | 29.30<br>1.154 | 3.81<br>.150 | 3.50<br>.138 |          |

## Square flange receptacle with removable straight backshell for screen termination and heatshrink sleeving (38 and 42 suffix)

|                |  |
|----------------|--|
| solder<br>00 T |  |
| crimp<br>00 RT |  |

Technical drawing of a square flange receptacle with removable straight backshell for screen termination and heatshrink sleeving. The drawing includes a side view and a front view. The side view shows dimensions: L (overall length), ØA (outer diameter of the front flange), B (flange thickness), C (backshell length), M (backshell thickness), ØG (inner diameter of the front flange), and ØD (outer diameter of the backshell). The front view shows dimensions: F (flange width), E (flange height), and 4 Holes ØJ (four mounting holes).

| shell<br>size | L Max<br>solder<br>crimp | A              | B<br>Max      | C<br>Max     | D<br>Max       | E              | F<br>Max       | G<br>Max       | J            | M<br>Max     |
|---------------|--------------------------|----------------|---------------|--------------|----------------|----------------|----------------|----------------|--------------|--------------|
| 08            | 51.60<br>2.031           | 12.03<br>.474  | 11.70<br>.461 | 1.32<br>.052 | 18.25<br>.719  | 15.09<br>.594  | 20.99<br>.826  | 7.45<br>.293   | 3.13<br>.123 | 3.70<br>.146 |
| 10            | 51.60<br>2.031           | 15.01<br>.591  | 11.70<br>.461 | 1.32<br>.052 | 20.25<br>.797  | 18.26<br>.719  | 24.19<br>.952  | 9.00<br>.354   | 3.13<br>.123 | 3.70<br>.146 |
| 12            | 51.60<br>2.031           | 22.25<br>.751  | 11.70<br>.461 | 1.32<br>.052 | 24.75<br>.974  | 20.62<br>.812  | 26.54<br>1.045 | 13.30<br>.524  | 3.13<br>.123 | 3.70<br>.146 |
| 14            | 51.60<br>2.031           | 22.25<br>.876  | 11.70<br>.461 | 1.32<br>.052 | 27.75<br>1.093 | 23.00<br>.906  | 28.89<br>1.137 | 16.50<br>.650  | 3.13<br>.123 | 3.70<br>.146 |
| 16            | 51.60<br>2.031           | 25.42<br>1.001 | 11.70<br>.461 | 1.32<br>.052 | 30.05<br>1.183 | 24.61<br>.969  | 31.29<br>1.232 | 18.50<br>.728  | 3.13<br>.123 | 3.70<br>.146 |
| 18            | 52.00<br>2.047           | 28.60<br>1.126 | 11.70<br>.461 | 1.32<br>.052 | 34.15<br>1.344 | 26.97<br>1.062 | 33.69<br>1.326 | 21.90<br>.862  | 3.13<br>.123 | 3.70<br>.146 |
| 20            | 55.10<br>2.169           | 31.77<br>1.251 | 14.35<br>.565 | 2.15<br>.085 | 37.25<br>1.467 | 29.36<br>1.156 | 36.89<br>1.452 | 25.10<br>.988  | 3.13<br>.123 | 3.70<br>.146 |
| 22            | 55.10<br>2.169           | 34.95<br>1.376 | 14.35<br>.565 | 2.15<br>.085 | 40.45<br>1.593 | 31.75<br>1.250 | 39.99<br>1.574 | 28.20<br>1.110 | 3.13<br>.123 | 3.70<br>.146 |
| 24            | 55.10<br>2.169           | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 36.47<br>1.719 | 34.92<br>1.375 | 43.15<br>1.699 | 29.30<br>1.236 | 3.81<br>.150 | 3.50<br>.146 |

# 26482 Series I Solder Connectors



## Square flange receptacle with removable straight backshell for screen termination and heatshrink sleeving

|                |            |  |               |                          |                |               |              |                |                |                |                |              |              |
|----------------|------------|--|---------------|--------------------------|----------------|---------------|--------------|----------------|----------------|----------------|----------------|--------------|--------------|
| solder<br>00 G |            |  | shell<br>size | L Max<br>solder<br>crimp | A              | B<br>Max      | C<br>Max     | D<br>Max       | E              | F<br>Max       | G<br>Max       | J            | M<br>Max     |
| crimp<br>00 RG | VG 95328 R |  | 08            | 51.60<br>2.031           | 12.03<br>.474  | 11.70<br>.461 | 1.32<br>.052 | 18.25<br>.719  | 15.09<br>.594  | 20.99<br>.826  | 7.45<br>.293   | 3.13<br>.123 | 3.70<br>.146 |
|                |            |  | 10            | 51.60<br>2.031           | 15.01<br>.591  | 11.70<br>.461 | 1.32<br>.052 | 20.25<br>.797  | 18.26<br>.719  | 24.19<br>.952  | 9.00<br>.354   | 3.13<br>.123 | 3.70<br>.146 |
|                |            |  | 12            | 51.60<br>2.031           | 19.07<br>.751  | 11.70<br>.461 | 1.32<br>.052 | 24.75<br>.974  | 20.62<br>.812  | 26.54<br>1.045 | 13.30<br>.524  | 3.13<br>.123 | 3.70<br>.146 |
|                |            |  | 14            | 51.60<br>2.031           | 22.25<br>.876  | 11.70<br>.461 | 1.32<br>.052 | 27.75<br>1.093 | 23.00<br>.906  | 28.89<br>1.137 | 16.50<br>.650  | 3.13<br>.123 | 3.70<br>.146 |
|                |            |  | 16            | 51.60<br>2.031           | 25.42<br>1.001 | 11.70<br>.461 | 1.32<br>.052 | 30.05<br>1.183 | 24.61<br>.969  | 31.29<br>1.232 | 18.50<br>.728  | 3.13<br>.123 | 3.70<br>.146 |
|                |            |  | 18            | 52.00<br>2.047           | 28.60<br>1.126 | 11.70<br>.461 | 1.32<br>.052 | 34.15<br>1.344 | 26.97<br>1.062 | 33.69<br>1.326 | 21.90<br>.862  | 3.13<br>.123 | 3.70<br>.146 |
|                |            |  | 20            | 55.10<br>2.169           | 31.77<br>1.251 | 14.35<br>.565 | 2.15<br>.085 | 37.25<br>1.467 | 29.36<br>1.156 | 36.89<br>1.452 | 25.10<br>.988  | 3.13<br>.123 | 3.70<br>.146 |
|                |            |  | 22            | 55.10<br>2.169           | 34.95<br>1.376 | 14.35<br>.565 | 2.15<br>.085 | 40.45<br>1.593 | 31.75<br>1.250 | 39.99<br>1.574 | 28.20<br>1.110 | 3.13<br>.123 | 3.70<br>.146 |
|                |            |  | 24            | 55.10<br>2.169           | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 43.65<br>1.719 | 34.92<br>1.375 | 43.15<br>1.699 | 31.40<br>1.236 | 3.81<br>.150 | 3.70<br>.146 |

## Square flange receptacle with straight sealing gland backshell

|                |               |  |               |                 |                |               |              |                |                |                |               |               |              |
|----------------|---------------|--|---------------|-----------------|----------------|---------------|--------------|----------------|----------------|----------------|---------------|---------------|--------------|
| solder<br>00 J | HE 301 B 00 J |  | shell<br>size | L Max<br>solder | A              | B<br>Max      | C<br>Max     | D<br>Max       | E              | F<br>Max       | G             |               | J            |
|                |               |  | 08            | 47.60<br>1.874  | 12.03<br>.474  | 11.70<br>.461 | 1.32<br>.052 | 14.40<br>.567  | 15.09<br>.594  | 20.99<br>.826  | 5.02<br>.198  | 5.84<br>.230  | 3.13<br>.123 |
|                |               |  | 10            | 47.60<br>1.874  | 15.01<br>.591  | 11.70<br>.461 | 1.32<br>.052 | 17.60<br>.693  | 18.26<br>.719  | 24.19<br>.952  | 5.94<br>.234  | 6.76<br>.266  | 3.13<br>.123 |
|                |               |  | 12            | 48.70<br>1.917  | 19.07<br>.751  | 11.70<br>.461 | 1.32<br>.052 | 21.10<br>.831  | 20.62<br>.812  | 26.54<br>1.045 | 9.34<br>.368  | 10.16<br>.400 | 3.13<br>.123 |
|                |               |  | 14            | 53.50<br>2.106  | 22.25<br>.876  | 11.70<br>.461 | 1.32<br>.052 | 24.40<br>.961  | 23.00<br>.906  | 28.89<br>1.137 | 11.32<br>.446 | 12.14<br>.478 | 3.13<br>.123 |
|                |               |  | 16            | 59.00<br>2.323  | 25.42<br>1.001 | 11.70<br>.461 | 1.32<br>.052 | 27.60<br>1.087 | 24.61<br>.969  | 31.29<br>1.232 | 14.73<br>.580 | 15.55<br>.612 | 3.13<br>.123 |
|                |               |  | 18            | 65.00<br>2.559  | 28.60<br>1.126 | 11.70<br>.461 | 1.32<br>.052 | 30.80<br>1.213 | 26.97<br>1.062 | 33.69<br>1.326 | 16.00<br>.630 | 16.82<br>.662 | 3.13<br>.123 |
|                |               |  | 20            | 79.10<br>3.114  | 31.77<br>1.251 | 14.35<br>.565 | 2.15<br>.085 | 34.10<br>1.343 | 29.36<br>1.156 | 36.89<br>1.452 | 16.89<br>.665 | 17.70<br>.697 | 3.13<br>.123 |
|                |               |  | 22            | 80.00<br>3.150  | 34.95<br>1.376 | 14.35<br>.565 | 2.15<br>.085 | 37.30<br>1.469 | 31.75<br>1.250 | 39.99<br>1.574 | 17.78<br>.700 | 18.60<br>.732 | 3.13<br>.123 |
|                |               |  | 24            | 90.00<br>3.543  | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 40.50<br>1.594 | 34.92<br>1.375 | 43.15<br>1.699 | 20.34<br>.801 | 21.16<br>.833 | 3.81<br>.150 |

## Square flange receptacle with straight sealing gland and cable clamp

|                 |          |  |               |                 |                |               |              |                |                |                |               |               |              |
|-----------------|----------|--|---------------|-----------------|----------------|---------------|--------------|----------------|----------------|----------------|---------------|---------------|--------------|
| solder<br>00 JC | MS 3110J |  | shell<br>size | L Max<br>solder | A              | B<br>Max      | C<br>Max     | D<br>Max       | E              | F<br>Max       | G             |               | J            |
|                 |          |  | 08            | 57.68<br>2.271  | 12.03<br>.474  | 11.70<br>.461 | 1.32<br>.052 | 19.90<br>.783  | 15.09<br>.594  | 20.99<br>.826  | 5.02<br>.198  | 5.84<br>.230  | 3.13<br>.123 |
|                 |          |  | 10            | 57.68<br>2.271  | 15.01<br>.591  | 11.70<br>.461 | 1.32<br>.052 | 21.50<br>.846  | 18.26<br>.719  | 24.19<br>.952  | 5.94<br>.234  | 6.76<br>.266  | 3.13<br>.123 |
|                 |          |  | 12            | 61.24<br>2.411  | 19.07<br>.751  | 11.70<br>.461 | 1.32<br>.052 | 25.00<br>.984  | 20.62<br>.812  | 26.54<br>1.045 | 9.34<br>.368  | 10.16<br>.400 | 3.13<br>.123 |
|                 |          |  | 14            | 66.01<br>2.599  | 22.25<br>.876  | 11.70<br>.461 | 1.32<br>.052 | 27.80<br>1.094 | 23.00<br>.906  | 28.89<br>1.137 | 11.32<br>.446 | 12.14<br>.478 | 3.13<br>.123 |
|                 |          |  | 16            | 74.75<br>2.943  | 25.42<br>1.001 | 11.70<br>.461 | 1.32<br>.052 | 29.40<br>1.157 | 24.61<br>.969  | 31.29<br>1.232 | 14.73<br>.580 | 15.55<br>.612 | 3.13<br>.123 |
|                 |          |  | 18            | 80.57<br>3.172  | 28.60<br>1.126 | 11.70<br>.461 | 1.32<br>.052 | 35.30<br>1.390 | 26.97<br>1.062 | 33.69<br>1.326 | 16.00<br>.630 | 16.82<br>.662 | 3.13<br>.123 |
|                 |          |  | 20            | 91.69<br>3.610  | 31.77<br>1.251 | 14.35<br>.565 | 2.15<br>.085 | 35.30<br>1.390 | 29.36<br>1.156 | 36.89<br>1.452 | 16.89<br>.665 | 17.70<br>.697 | 3.13<br>.123 |
|                 |          |  | 22            | 95.66<br>3.766  | 34.95<br>1.376 | 14.35<br>.565 | 2.15<br>.085 | 41.10<br>1.618 | 31.75<br>1.250 | 39.99<br>1.574 | 17.78<br>.700 | 18.60<br>.732 | 3.13<br>.123 |
|                 |          |  | 24            | 101.22<br>3.985 | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 42.40<br>1.669 | 34.92<br>1.375 | 43.15<br>1.699 | 20.34<br>.801 | 21.16<br>.833 | 3.81<br>.150 |

# 26482 Series I Solder Connectors



## Jam nut receptacle with backnut

|        |                         |
|--------|-------------------------|
| solder | HE 301 B 07 E           |
| 07 E   | MS 3114 E               |
| crimp  | HE 301 B 07 R           |
| 07 R   | MS 3124 E<br>VG 95328 D |

Technical drawing of a jam nut receptacle with backnut. The side view shows dimensions: L (length), ØA (outer diameter), ØF (flange diameter), ØD (backnut diameter), B (flange thickness), and C (backnut thickness). The top view shows dimensions: P (width) and S (height).

| shell size | L Max          |                | A              | B Max         | C Max        | D Max          | F Max          | P Max          | S Max          |
|------------|----------------|----------------|----------------|---------------|--------------|----------------|----------------|----------------|----------------|
|            | solder         | crimp          |                |               |              |                |                |                |                |
| 08         | 34.10<br>1.343 | 33.50<br>1.319 | 12.03<br>.474  | 17.90<br>.705 | 2.64<br>.104 | 18.50<br>.728  | 26.94<br>1.061 | 19.29<br>.759  | 23.94<br>.943  |
| 10         | 34.10<br>1.343 | 33.50<br>1.319 | 15.01<br>.591  | 17.90<br>.705 | 2.64<br>.104 | 21.70<br>.854  | 30.14<br>1.187 | 22.38<br>.881  | 26.94<br>1.061 |
| 12         | 34.10<br>1.343 | 33.50<br>1.319 | 19.07<br>.751  | 17.90<br>.705 | 2.64<br>.104 | 24.90<br>.980  | 34.94<br>1.376 | 27.13<br>1.068 | 31.74<br>1.250 |
| 14         | 34.10<br>1.343 | 33.50<br>1.319 | 22.25<br>.876  | 17.90<br>.705 | 2.64<br>.104 | 28.10<br>1.106 | 38.04<br>1.498 | 30.33<br>1.194 | 34.94<br>1.376 |
| 16         | 34.10<br>1.343 | 33.50<br>1.319 | 25.42<br>1.001 | 17.90<br>.705 | 2.64<br>.104 | 31.20<br>1.228 | 41.24<br>1.624 | 33.48<br>1.318 | 38.24<br>1.506 |
| 18         | 34.10<br>1.343 | 33.50<br>1.319 | 28.60<br>1.126 | 17.90<br>.705 | 2.64<br>.104 | 34.40<br>1.354 | 44.44<br>1.750 | 36.68<br>1.444 | 41.34<br>1.628 |
| 20         | 39.30<br>1.547 | 37.90<br>1.492 | 31.77<br>1.251 | 22.45<br>.884 | 3.44<br>.135 | 38.30<br>1.508 | 49.14<br>1.935 | 39.83<br>1.568 | 46.04<br>1.813 |
| 22         | 39.30<br>1.547 | 37.90<br>1.492 | 34.95<br>1.376 | 22.45<br>.884 | 3.44<br>.135 | 41.50<br>1.634 | 52.24<br>2.057 | 43.03<br>1.694 | 49.24<br>1.939 |
| 24         | 39.30<br>1.547 | 37.90<br>1.492 | 38.12<br>1.501 | 23.30<br>.917 | 3.44<br>.135 | 44.70<br>1.760 | 55.54<br>2.187 | 46.18<br>1.818 | 52.74<br>2.076 |

## Jam nut receptacle with straight cable clamp

|        |                |
|--------|----------------|
| solder | HE 301 B 07 EC |
| 07 EC  | MS 3114 F      |
| 07 AC  | HE 301 B 07 AC |
| crimp  | HE 301 B 07 RC |
| 07 RC  | MS 3124 F      |
|        | VG 95328 E     |

Technical drawing of a jam nut receptacle with straight cable clamp. The drawing includes a side view and a top view. The side view shows the following dimensions: L (total length), ØA (outer diameter of the main body), B (width of the main body), C (width of the base), ØF (outer diameter of the cable clamp), ØG (inner diameter of the cable clamp), and D (height of the main body). The top view shows the following dimensions: P (width of the top flange) and S (height of the top flange).

| shell size | L Max          |                | A              | B Max         | C Max        | D Max          | F Max          | G             | P Max          | S Max          |
|------------|----------------|----------------|----------------|---------------|--------------|----------------|----------------|---------------|----------------|----------------|
|            | solder         | crimp          |                |               |              |                |                |               |                |                |
| 08         | 49.31<br>1.941 | 49.10<br>1.933 | 12.03<br>.474  | 17.90<br>.705 | 2.64<br>.104 | 19.90<br>.783  | 26.94<br>1.061 | 3.50<br>.138  | 19.29<br>.759  | 23.94<br>.943  |
| 10         | 49.31<br>1.941 | 49.10<br>1.933 | 15.01<br>.591  | 17.90<br>.705 | 2.64<br>.104 | 21.50<br>.846  | 30.14<br>1.187 | 5.00<br>.197  | 22.38<br>.881  | 26.94<br>1.061 |
| 12         | 49.17<br>1.936 | 49.10<br>1.933 | 19.07<br>.751  | 17.90<br>.705 | 2.64<br>.104 | 25.00<br>.984  | 34.94<br>1.376 | 8.20<br>.323  | 27.13<br>1.068 | 31.74<br>1.250 |
| 14         | 49.17<br>1.936 | 49.10<br>1.933 | 22.25<br>.876  | 17.90<br>.705 | 2.64<br>.104 | 27.80<br>1.094 | 38.04<br>1.498 | 10.00<br>.394 | 30.33<br>1.194 | 34.94<br>1.376 |
| 16         | 52.34<br>2.061 | 52.20<br>2.055 | 25.42<br>1.001 | 17.90<br>.705 | 2.64<br>.104 | 29.40<br>1.157 | 41.24<br>1.624 | 13.00<br>.512 | 33.48<br>1.318 | 38.24<br>1.506 |
| 18         | 53.22<br>2.095 | 53.10<br>2.091 | 28.60<br>1.126 | 17.90<br>.705 | 2.64<br>.104 | 35.30<br>1.390 | 44.44<br>1.750 | 16.00<br>.630 | 36.68<br>1.444 | 41.34<br>1.628 |
| 20         | 58.10<br>2.287 | 58.00<br>2.283 | 31.77<br>1.251 | 22.45<br>.884 | 3.44<br>.135 | 35.30<br>1.390 | 49.14<br>1.935 | 16.00<br>.630 | 39.83<br>1.568 | 46.04<br>1.813 |
| 22         | 58.10<br>2.287 | 58.00<br>2.283 | 34.95<br>1.376 | 22.45<br>.884 | 3.44<br>.135 | 41.10<br>1.618 | 52.24<br>2.057 | 19.30<br>.760 | 43.03<br>1.694 | 49.24<br>1.939 |
| 24         | 58.10<br>2.287 | 58.00<br>2.283 | 38.12<br>1.501 | 23.30<br>.917 | 3.44<br>.135 | 42.40<br>1.669 | 55.54<br>2.187 | 20.60<br>.811 | 46.18<br>1.818 | 52.74<br>2.076 |

## Jam nut receptacle with straight backshell for potting

|        |                |
|--------|----------------|
| solder | HE 301 B 07 P  |
| 07 P   | MS 3114 P      |
| crimp  | HE 301 B 07 RP |
| 07 RP  | MS 3124 P      |

Technical drawing of a jam nut receptacle with straight backshell for potting. The drawing includes a side view and a top view. The side view shows the receptacle with dimensions L (length), ØA (outer diameter), B (base diameter), C (backshell length), ØF (thread outer diameter), ØG (thread inner diameter), and D (total height). The top view shows the octagonal shape of the receptacle with dimensions P (width) and S (height).

| shell size | L Max          |                | A              | B Max         | C Max        | D Max          | F Max          | G Max          | P Max          | S Max          |
|------------|----------------|----------------|----------------|---------------|--------------|----------------|----------------|----------------|----------------|----------------|
|            | solder         | crimp          |                |               |              |                |                |                |                |                |
| 08         | 34.30<br>1.350 | 39.80<br>1.567 | 12.03<br>.474  | 17.90<br>.705 | 2.64<br>.104 | 15.34<br>.604  | 26.94<br>1.061 | 10.46<br>.412  | 19.29<br>.759  | 23.94<br>.943  |
| 10         | 34.30<br>1.350 | 39.80<br>1.567 | 15.01<br>.591  | 17.90<br>.705 | 2.64<br>.104 | 17.70<br>.697  | 30.14<br>1.187 | 13.55<br>.533  | 22.38<br>.881  | 26.94<br>1.061 |
| 12         | 34.30<br>1.350 | 39.80<br>1.567 | 19.07<br>.751  | 17.90<br>.705 | 2.64<br>.104 | 21.69<br>.854  | 34.94<br>1.376 | 13.96<br>.550  | 27.13<br>1.068 | 31.74<br>1.250 |
| 14         | 34.30<br>1.350 | 39.80<br>1.567 | 22.25<br>.876  | 17.90<br>.705 | 2.64<br>.104 | 23.90<br>.941  | 38.04<br>1.498 | 17.42<br>.686  | 30.33<br>1.194 | 34.94<br>1.376 |
| 16         | 34.30<br>1.350 | 39.80<br>1.567 | 25.42<br>1.001 | 17.90<br>.705 | 2.64<br>.104 | 27.00<br>1.063 | 41.24<br>1.624 | 20.56<br>.809  | 33.48<br>1.318 | 38.24<br>1.506 |
| 18         | 34.10<br>1.343 | 41.80<br>1.646 | 28.60<br>1.126 | 17.90<br>.705 | 2.64<br>.104 | 30.50<br>1.201 | 44.44<br>1.750 | 23.66<br>.931  | 36.68<br>1.444 | 41.34<br>1.628 |
| 20         | 42.25<br>1.663 | 49.92<br>1.965 | 31.77<br>1.251 | 22.45<br>.884 | 3.44<br>.135 | 33.65<br>1.325 | 49.14<br>1.935 | 23.92<br>.942  | 39.83<br>1.568 | 46.04<br>1.813 |
| 22         | 42.25<br>1.663 | 49.92<br>1.965 | 34.95<br>1.376 | 22.45<br>.884 | 3.44<br>.135 | 37.10<br>1.461 | 52.24<br>2.057 | 25.52<br>1.005 | 43.03<br>1.694 | 49.24<br>1.939 |
| 24         | 43.26<br>1.703 | 51.30<br>2.020 | 38.12<br>1.501 | 23.30<br>.917 | 3.44<br>.135 | 40.00<br>1.575 | 55.54<br>2.187 | 32.00<br>1.260 | 46.18<br>1.818 | 52.74<br>2.076 |

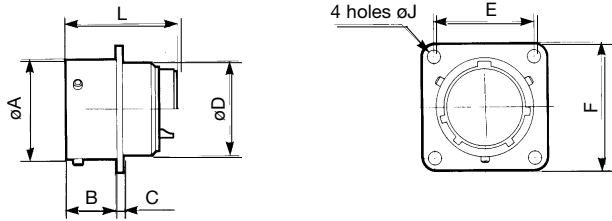


# 26482 Series I Solder Connectors



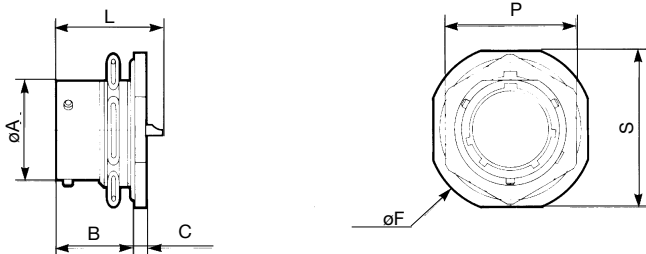
## Square flange receptacle not accepting backshell

| solder | HE 301 B 02 E<br>MS 3112 E<br>VG 95328 H | shell<br>size | L Max          |                | A              | B<br>Max      | C<br>Max     | D<br>Max       | E              | F<br>Max       | J            |
|--------|------------------------------------------|---------------|----------------|----------------|----------------|---------------|--------------|----------------|----------------|----------------|--------------|
|        |                                          |               | solder         | crimp          |                |               |              |                |                |                |              |
| 02 E   |                                          | 08            | 25.18<br>.991  | 32.35<br>1.274 | 12.03<br>.474  | 11.70<br>.461 | 1.32<br>.052 | 10.84<br>.427  | 15.09<br>.594  | 20.99<br>.826  | 3.13<br>.123 |
|        |                                          |               |                |                |                |               |              |                |                |                |              |
| 02 R   | HE 301 B 02 R<br>MS 3122 E<br>VG 95328 C | 10            | 25.10<br>.988  | 32.35<br>1.274 | 15.01<br>.591  | 11.70<br>.461 | 1.32<br>.052 | 13.99<br>.551  | 18.26<br>.719  | 24.19<br>.952  | 3.13<br>.123 |
|        |                                          |               |                |                |                |               |              |                |                |                |              |
|        |                                          | 12            | 25.10<br>.988  | 32.35<br>1.274 | 19.07<br>.751  | 11.70<br>.461 | 1.32<br>.052 | 17.37<br>.684  | 20.62<br>.812  | 26.54<br>1.045 | 3.13<br>.123 |
|        |                                          |               |                |                |                |               |              |                |                |                |              |
|        |                                          | 14            | 25.10<br>.988  | 32.35<br>1.274 | 22.25<br>.876  | 11.70<br>.461 | 1.32<br>.052 | 20.57<br>.810  | 23.00<br>.906  | 28.89<br>1.137 | 3.13<br>.123 |
|        |                                          |               |                |                |                |               |              |                |                |                |              |
|        |                                          | 16            | 25.10<br>.988  | 32.35<br>1.274 | 25.42<br>1.001 | 11.70<br>.461 | 1.32<br>.052 | 23.72<br>.934  | 24.61<br>.969  | 31.29<br>1.232 | 3.13<br>.123 |
|        |                                          |               |                |                |                |               |              |                |                |                |              |
|        |                                          | 18            | 25.10<br>.988  | 32.35<br>1.274 | 28.60<br>1.126 | 11.70<br>.461 | 1.32<br>.052 | 26.69<br>1.051 | 26.97<br>1.062 | 33.69<br>1.326 | 3.13<br>.123 |
|        |                                          |               |                |                |                |               |              |                |                |                |              |
|        |                                          | 20            | 26.67<br>1.050 | 33.95<br>1.337 | 31.77<br>1.251 | 14.35<br>.565 | 2.15<br>.085 | 29.89<br>1.177 | 29.36<br>1.156 | 36.89<br>1.452 | 3.13<br>.123 |
|        |                                          |               |                |                |                |               |              |                |                |                |              |
|        |                                          | 22            | 26.67<br>1.050 | 33.95<br>1.337 | 34.95<br>1.376 | 14.35<br>.565 | 2.15<br>.085 | 33.04<br>1.301 | 31.75<br>1.250 | 39.99<br>1.574 | 3.13<br>.123 |
|        |                                          |               |                |                |                |               |              |                |                |                |              |
|        |                                          | 24            | 26.67<br>1.050 | 33.95<br>1.337 | 38.12<br>1.501 | 15.20<br>.598 | 2.15<br>.085 | 36.24<br>1.427 | 34.92<br>1.375 | 43.15<br>1.699 | 3.81<br>.150 |
|        |                                          |               |                |                |                |               |              |                |                |                |              |



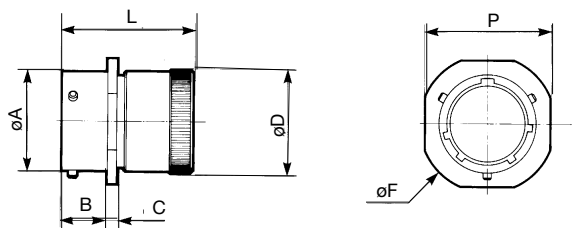
## Jam nut receptacle not accepting backshell

| solder | 07 A | HE 301 B 07 A | shell<br>size | L Max          |                | A              | B<br>Max      | C<br>Max     | F<br>Max       | P<br>Max       | S<br>Max       |
|--------|------|---------------|---------------|----------------|----------------|----------------|---------------|--------------|----------------|----------------|----------------|
|        |      |               |               | solder         | crimp          |                |               |              |                |                |                |
|        |      |               | 08            | 25.18<br>.991  | 32.35<br>1.274 | 12.03<br>.474  | 17.90<br>.705 | 2.64<br>.104 | 26.94<br>1.061 | 19.29<br>.759  | 23.94<br>.943  |
|        |      |               |               |                |                |                |               |              |                |                |                |
|        |      |               | 10            | 25.10<br>.988  | 32.35<br>1.274 | 15.01<br>.591  | 17.90<br>.705 | 2.64<br>.104 | 30.14<br>1.187 | 22.38<br>.881  | 26.94<br>1.061 |
|        |      |               |               |                |                |                |               |              |                |                |                |
|        |      |               | 12            | 25.10<br>.988  | 32.35<br>1.274 | 19.07<br>.751  | 17.90<br>.705 | 2.64<br>.104 | 34.94<br>1.376 | 27.13<br>1.068 | 31.74<br>1.250 |
|        |      |               |               |                |                |                |               |              |                |                |                |
|        |      |               | 14            | 25.10<br>.988  | 32.35<br>1.274 | 22.25<br>.876  | 17.90<br>.705 | 2.64<br>.104 | 38.04<br>1.498 | 30.33<br>1.194 | 34.94<br>1.376 |
|        |      |               |               |                |                |                |               |              |                |                |                |
|        |      |               | 16            | 25.10<br>.988  | 32.35<br>1.274 | 25.42<br>1.001 | 17.90<br>.705 | 2.64<br>.104 | 41.24<br>1.624 | 33.48<br>1.318 | 38.24<br>1.506 |
|        |      |               |               |                |                |                |               |              |                |                |                |
|        |      |               | 18            | 25.10<br>.988  | 32.35<br>1.274 | 28.60<br>1.126 | 17.90<br>.705 | 2.64<br>.104 | 44.44<br>1.750 | 36.68<br>1.444 | 41.34<br>1.628 |
|        |      |               |               |                |                |                |               |              |                |                |                |
|        |      |               | 20            | 26.67<br>1.050 | 33.95<br>1.337 | 31.77<br>1.251 | 22.45<br>.884 | 3.44<br>.135 | 49.14<br>1.935 | 39.83<br>1.568 | 46.04<br>1.813 |
|        |      |               |               |                |                |                |               |              |                |                |                |
|        |      |               | 22            | 26.67<br>1.050 | 33.95<br>1.337 | 34.95<br>1.376 | 22.45<br>.884 | 3.44<br>.135 | 52.24<br>2.057 | 43.03<br>1.694 | 49.24<br>1.939 |
|        |      |               |               |                |                |                |               |              |                |                |                |
|        |      |               | 24            | 26.67<br>1.050 | 33.95<br>1.337 | 38.12<br>1.501 | 23.30<br>.917 | 3.44<br>.135 | 55.54<br>2.187 | 46.18<br>1.818 | 52.74<br>2.076 |
|        |      |               |               |                |                |                |               |              |                |                |                |



## Cable connecting receptacle with backnut

| solder | 01 E                       | HE 301 B 01 E<br>MS 3111 E | shell<br>size | L Max          |                | A              | B<br>Max      | C<br>Max     | D<br>Max       | F<br>Max       | P<br>Max       |
|--------|----------------------------|----------------------------|---------------|----------------|----------------|----------------|---------------|--------------|----------------|----------------|----------------|
|        |                            |                            |               | solder         | crimp          |                |               |              |                |                |                |
| 01 E   |                            |                            | 08            | 32.70<br>1.287 | 32.00<br>1.260 | 12.03<br>.474  | 10.60<br>.417 | 2.10<br>.083 | 13.50<br>.531  | 24.24<br>.954  | 20.99<br>.826  |
|        |                            |                            |               |                |                |                |               |              |                |                |                |
| 01 R   | HE 301 B 01 R<br>MS 3121 E |                            | 10            | 32.70<br>1.287 | 32.00<br>1.260 | 15.01<br>.591  | 10.60<br>.417 | 2.10<br>.083 | 16.70<br>.657  | 27.44<br>1.080 | 24.19<br>.952  |
|        |                            |                            |               |                |                |                |               |              |                |                |                |
|        |                            |                            | 12            | 32.70<br>1.287 | 32.00<br>1.260 | 19.07<br>.751  | 10.60<br>.417 | 2.10<br>.083 | 19.90<br>.783  | 29.79<br>1.173 | 26.54<br>1.045 |
|        |                            |                            |               |                |                |                |               |              |                |                |                |
|        |                            |                            | 14            | 32.70<br>1.287 | 32.00<br>1.260 | 22.25<br>.876  | 10.60<br>.417 | 2.10<br>.083 | 23.40<br>.921  | 32.10<br>1.264 | 28.89<br>1.137 |
|        |                            |                            |               |                |                |                |               |              |                |                |                |
|        |                            |                            | 16            | 32.70<br>1.287 | 32.00<br>1.260 | 25.42<br>1.001 | 10.60<br>.417 | 2.10<br>.083 | 26.60<br>1.047 | 34.59<br>1.362 | 31.29<br>1.232 |
|        |                            |                            |               |                |                |                |               |              |                |                |                |
|        |                            |                            | 18            | 32.70<br>1.287 | 32.00<br>1.260 | 28.60<br>1.126 | 10.60<br>.417 | 2.10<br>.083 | 29.50<br>1.161 | 36.94<br>1.454 | 33.69<br>1.326 |
|        |                            |                            |               |                |                |                |               |              |                |                |                |
|        |                            |                            | 20            | 34.50<br>1.358 | 33.40<br>1.315 | 31.77<br>1.251 | 13.85<br>.545 | 2.65<br>.104 | 32.70<br>1.287 | 40.14<br>1.580 | 36.89<br>1.452 |
|        |                            |                            |               |                |                |                |               |              |                |                |                |
|        |                            |                            | 22            | 34.50<br>1.358 | 33.40<br>1.315 | 34.95<br>1.376 | 13.85<br>.545 | 2.65<br>.104 | 36.00<br>1.417 | 43.24<br>1.702 | 40.00<br>1.575 |
|        |                            |                            |               |                |                |                |               |              |                |                |                |
|        |                            |                            | 24            | 34.50<br>1.358 | 33.40<br>1.315 | 38.12<br>1.501 | 14.70<br>.579 | 2.65<br>.104 | 39.10<br>1.539 | 46.44<br>1.828 | 43.29<br>1.704 |
|        |                            |                            |               |                |                |                |               |              |                |                |                |

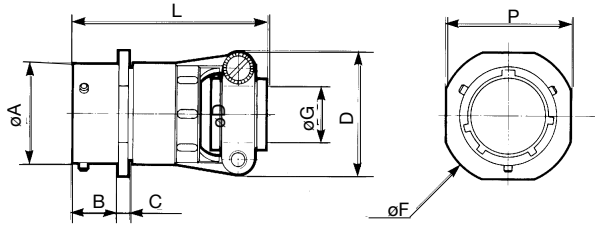


# 26482 Series I Solder Connectors



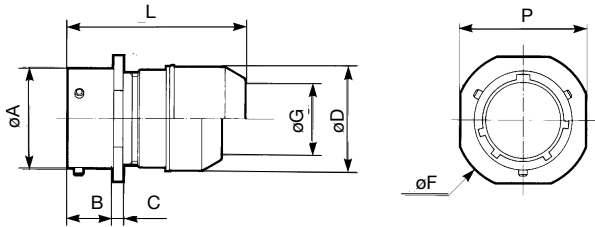
## Cable connecting receptacle with straight cable clamp

| solder |                             | shell size | L Max          |                | A              | B Max         | C Max        | D Max          | F Max          | G Max         | P Max          |
|--------|-----------------------------|------------|----------------|----------------|----------------|---------------|--------------|----------------|----------------|---------------|----------------|
|        |                             |            | solder         | crimp          |                |               |              |                |                |               |                |
| 01 EC  | HE 301 B 01 EC<br>MS 3111 F | 08         | 48.00<br>1.890 | 47.30<br>1.862 | 12.03<br>.474  | 10.60<br>.417 | 2.10<br>.083 | 19.90<br>.783  | 24.24<br>.954  | 3.50<br>.138  | 20.99<br>.826  |
| 01 AC  | HE 301 B 01 AC              |            |                |                |                |               |              |                |                |               |                |
| crimp  |                             | 10         | 48.00<br>1.890 | 47.30<br>1.862 | 15.01<br>.591  | 10.60<br>.417 | 2.10<br>.083 | 21.50<br>.846  | 27.44<br>1.080 | 5.00<br>.197  | 24.19<br>.952  |
| 01 RC  | HE 301 B 01 RC<br>MS 3121 F |            |                |                |                |               |              |                |                |               |                |
|        |                             | 12         | 48.00<br>1.890 | 47.30<br>1.862 | 19.07<br>.751  | 10.60<br>.417 | 2.10<br>.083 | 25.00<br>.984  | 29.79<br>1.173 | 8.20<br>.323  | 26.54<br>1.045 |
|        |                             |            |                |                |                |               |              |                |                |               |                |
|        |                             | 14         | 48.00<br>1.890 | 47.30<br>1.862 | 22.25<br>.876  | 10.60<br>.417 | 2.10<br>.083 | 27.80<br>1.094 | 32.10<br>1.264 | 10.00<br>.394 | 28.89<br>1.137 |
|        |                             |            |                |                |                |               |              |                |                |               |                |
|        |                             | 16         | 51.00<br>2.008 | 50.50<br>1.988 | 25.42<br>1.001 | 10.60<br>.417 | 2.10<br>.083 | 29.40<br>1.157 | 34.59<br>1.362 | 13.00<br>.512 | 31.29<br>1.232 |
|        |                             |            |                |                |                |               |              |                |                |               |                |
|        |                             | 18         | 51.00<br>2.008 | 50.50<br>1.988 | 28.60<br>1.126 | 10.60<br>.417 | 2.10<br>.083 | 35.30<br>1.390 | 36.94<br>1.454 | 16.00<br>.630 | 33.69<br>1.326 |
|        |                             |            |                |                |                |               |              |                |                |               |                |
|        |                             | 20         | 53.00<br>2.087 | 51.50<br>2.028 | 31.77<br>1.251 | 13.85<br>.545 | 2.65<br>.104 | 35.30<br>1.390 | 40.14<br>1.580 | 16.00<br>.630 | 36.89<br>1.452 |
|        |                             |            |                |                |                |               |              |                |                |               |                |
|        |                             | 22         | 53.00<br>2.087 | 51.50<br>2.028 | 34.95<br>1.376 | 13.85<br>.545 | 2.65<br>.104 | 41.10<br>1.618 | 43.24<br>1.702 | 19.30<br>.760 | 40.00<br>1.575 |
|        |                             |            |                |                |                |               |              |                |                |               |                |
|        |                             | 24         | 53.00<br>2.087 | 51.50<br>2.028 | 38.12<br>1.501 | 14.70<br>.579 | 2.65<br>.104 | 42.40<br>1.669 | 46.44<br>1.828 | 20.60<br>.811 | 43.29<br>1.704 |
|        |                             |            |                |                |                |               |              |                |                |               |                |



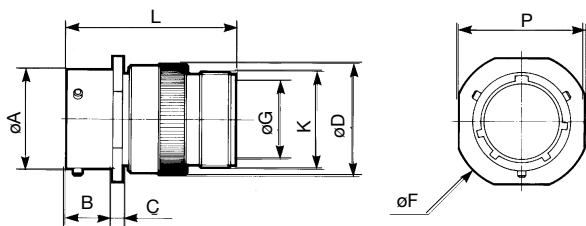
## Cable connecting receptacle with straight backshell for potting

| solder |                             | shell size | L Max          |                | A              | B Max         | C Max        | D Max          | F Max          | G Max          | P Max          |
|--------|-----------------------------|------------|----------------|----------------|----------------|---------------|--------------|----------------|----------------|----------------|----------------|
|        |                             |            | solder         | crimp          |                |               |              |                |                |                |                |
| 01 P   | HE 301 B 01 P<br>MS 3111 P  | 08         | 36.20<br>1.425 | 41.70<br>1.642 | 12.03<br>.474  | 10.60<br>.417 | 2.10<br>.083 | 15.34<br>.604  | 24.24<br>.954  | 10.46<br>.412  | 20.99<br>.826  |
| crimp  |                             |            |                |                |                |               |              |                |                |                |                |
| 01 RP  | HE 301 B 01 RP<br>MS 3121 P | 10         | 36.20<br>1.425 | 41.70<br>1.642 | 15.01<br>.591  | 10.60<br>.417 | 2.10<br>.083 | 17.70<br>.697  | 27.44<br>1.080 | 13.55<br>.533  | 24.19<br>.952  |
|        |                             |            |                |                |                |               |              |                |                |                |                |
|        |                             | 12         | 36.20<br>1.425 | 41.70<br>1.642 | 19.07<br>.751  | 10.60<br>.417 | 2.10<br>.083 | 21.69<br>.854  | 29.79<br>1.173 | 13.96<br>.550  | 26.54<br>1.045 |
|        |                             |            |                |                |                |               |              |                |                |                |                |
|        |                             | 14         | 36.20<br>1.425 | 41.70<br>1.642 | 22.25<br>.876  | 10.60<br>.417 | 2.10<br>.083 | 23.90<br>.941  | 32.10<br>1.264 | 17.42<br>.686  | 28.89<br>1.137 |
|        |                             |            |                |                |                |               |              |                |                |                |                |
|        |                             | 16         | 36.20<br>1.425 | 41.70<br>1.642 | 25.42<br>1.001 | 10.60<br>.417 | 2.10<br>.083 | 27.00<br>1.063 | 34.59<br>1.362 | 20.56<br>.809  | 31.29<br>1.232 |
|        |                             |            |                |                |                |               |              |                |                |                |                |
|        |                             | 18         | 36.91<br>1.453 | 44.46<br>1.750 | 28.60<br>1.126 | 10.60<br>.417 | 2.10<br>.083 | 30.50<br>1.201 | 36.94<br>1.454 | 23.66<br>.931  | 33.69<br>1.326 |
|        |                             |            |                |                |                |               |              |                |                |                |                |
|        |                             | 20         | 43.80<br>1.724 | 50.93<br>2.005 | 31.77<br>1.251 | 13.85<br>.545 | 2.65<br>.104 | 33.65<br>1.325 | 40.15<br>1.581 | 23.92<br>.942  | 36.89<br>1.452 |
|        |                             |            |                |                |                |               |              |                |                |                |                |
|        |                             | 22         | 43.80<br>1.724 | 50.93<br>2.005 | 34.95<br>1.376 | 13.85<br>.545 | 2.65<br>.104 | 37.10<br>1.461 | 42.24<br>1.663 | 25.52<br>1.005 | 40.00<br>1.575 |
|        |                             |            |                |                |                |               |              |                |                |                |                |
|        |                             | 24         | 43.80<br>1.724 | 50.93<br>2.005 | 38.12<br>1.501 | 14.70<br>.579 | 2.65<br>.104 | 40.00<br>1.575 | 46.44<br>1.828 | 32.00<br>1.260 | 43.29<br>1.704 |
|        |                             |            |                |                |                |               |              |                |                |                |                |



## Cable connecting receptacle with straight adapter

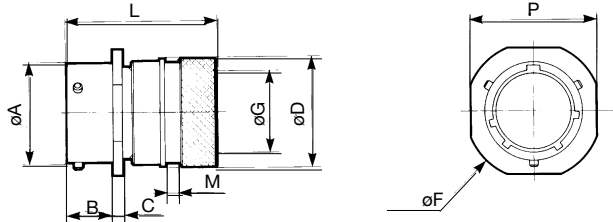
| solder |                | shell size | L Max<br>solder<br>crimp | A              | B Max         | C Max        | D Max          | F Max          | G Max          | K<br>Threading<br>UNE F 2 A | P Max          |
|--------|----------------|------------|--------------------------|----------------|---------------|--------------|----------------|----------------|----------------|-----------------------------|----------------|
|        |                |            |                          |                |               |              |                |                |                |                             |                |
| 01 A   | HE 301 B 01 A  | 08         | 41.00<br>1.614           | 12.03<br>.474  | 10.60<br>.417 | 2.10<br>.083 | 14.50<br>.571  | 24.24<br>.954  | 9.10<br>.358   | 1/2 28                      | 20.99<br>.826  |
| crimp  |                |            |                          |                |               |              |                |                |                |                             |                |
| 01 RA  | HE 301 B 01 RA | 10         | 41.00<br>1.614           | 15.01<br>.591  | 10.60<br>.417 | 2.10<br>.083 | 18.70<br>.736  | 27.44<br>1.080 | 12.08<br>.476  | 5/8 24                      | 24.19<br>.952  |
|        |                |            |                          |                |               |              |                |                |                |                             |                |
|        |                | 12         | 41.00<br>1.614           | 19.07<br>.751  | 10.60<br>.417 | 2.10<br>.083 | 21.70<br>.854  | 29.79<br>1.173 | 15.25<br>.600  | 3/4 20                      | 26.54<br>1.045 |
|        |                |            |                          |                |               |              |                |                |                |                             |                |
|        |                | 14         | 41.00<br>1.614           | 22.25<br>.876  | 10.60<br>.417 | 2.10<br>.083 | 25.10<br>.988  | 32.10<br>1.264 | 18.15<br>.715  | 7/8 20                      | 28.89<br>1.137 |
|        |                |            |                          |                |               |              |                |                |                |                             |                |
|        |                | 16         | 41.00<br>1.614           | 25.42<br>1.001 | 10.60<br>.417 | 2.10<br>.083 | 28.13<br>1.107 | 34.59<br>1.362 | 21.32<br>.839  | 1-20                        | 31.29<br>1.232 |
|        |                |            |                          |                |               |              |                |                |                |                             |                |
|        |                | 18         | 41.00<br>1.614           | 28.60<br>1.126 | 10.60<br>.417 | 2.10<br>.083 | 31.38<br>1.235 | 36.94<br>1.454 | 24.32<br>.957  | 1-3/16 18                   | 33.69<br>1.326 |
|        |                |            |                          |                |               |              |                |                |                |                             |                |
|        |                | 20         | 44.00<br>1.732           | 31.77<br>1.251 | 13.85<br>.545 | 2.65<br>.104 | 34.30<br>1.350 | 40.15<br>1.581 | 26.73<br>1.052 | 1-3/16 18                   | 36.89<br>1.452 |
|        |                |            |                          |                |               |              |                |                |                |                             |                |
|        |                | 22         | 44.00<br>1.732           | 34.95<br>1.376 | 13.85<br>.545 | 2.65<br>.104 | 37.60<br>1.480 | 42.24<br>1.663 | 30.67<br>1.207 | 1-7/16 18                   | 40.00<br>1.575 |
|        |                |            |                          |                |               |              |                |                |                |                             |                |
|        |                | 24         | 44.00<br>1.732           | 38.12<br>1.501 | 14.70<br>.579 | 2.65<br>.104 | 40.70<br>1.602 | 46.44<br>1.828 | 33.08<br>1.302 | 1-7/16 18                   | 43.29<br>1.704 |
|        |                |            |                          |                |               |              |                |                |                |                             |                |



# 26482 Series I Solder Connectors



## Cable connecting receptacle with straight backshell for heatshrink sleeving

| solder<br>01 T                                                                    | crimp<br>01 RT | shell<br>size | L Max  |       | A     | B<br>Max | C<br>Max | D<br>Max | F<br>Max | G Max  |       | P<br>Max | M<br>Max |
|-----------------------------------------------------------------------------------|----------------|---------------|--------|-------|-------|----------|----------|----------|----------|--------|-------|----------|----------|
|                                                                                   |                |               | solder | crimp |       |          |          |          |          | solder | crimp |          |          |
|  |                | 08            | 36.70  | 36.00 | 12.03 | 10.60    | 2.10     | 15.35    | 24.24    | 7.20   | 6.70  | 20.99    | 3.70     |
|                                                                                   |                |               | 1.445  | 1.417 | .474  | .417     | .083     | .604     | .954     | .283   | .264  | .826     | .146     |
|                                                                                   |                | 10            | 36.70  | 36.00 | 15.01 | 10.60    | 2.10     | 18.15    | 27.44    | 10.20  | 9.40  | 24.19    | 3.70     |
|                                                                                   |                |               | 1.445  | 1.417 | .591  | .417     | .083     | .715     | 1.080    | .402   | .370  | .952     | .146     |
|                                                                                   |                | 12            | 36.70  | 36.00 | 19.07 | 10.60    | 2.10     | 23.45    | 29.70    | 13.20  | 11.95 | 26.54    | 3.70     |
|                                                                                   |                |               | 1.445  | 1.417 | .751  | .417     | .083     | .923     | 1.169    | .520   | .470  | 1.045    | .146     |
|                                                                                   |                | 14            | 36.70  | 36.00 | 22.25 | 10.60    | 2.10     | 24.25    | 32.10    | 16.10  | 15.15 | 28.89    | 3.70     |
|                                                                                   |                |               | 1.445  | 1.417 | .876  | .417     | .083     | .955     | 1.264    | .634   | .596  | 1.137    | .146     |
|                                                                                   |                | 16            | 39.00  | 38.30 | 25.42 | 10.60    | 2.10     | 29.55    | 34.59    | 19.25  | 18.05 | 31.29    | 3.70     |
|                                                                                   |                |               | 1.535  | 1.508 | 1.001 | .417     | .083     | 1.163    | 1.362    | .758   | .711  | 1.232    | .146     |
|                                                                                   |                | 18            | 39.00  | 38.30 | 28.60 | 10.60    | 2.10     | 31.75    | 36.94    | 21.30  | 19.95 | 33.69    | 3.70     |
|                                                                                   |                |               | 1.535  | 1.508 | 1.126 | .417     | .083     | 1.250    | 1.454    | .839   | .785  | 1.326    | .146     |
|                                                                                   |                | 20            | 45.30  | 44.20 | 31.77 | 13.85    | 2.65     | 35.85    | 40.15    | 24.40  | 23.05 | 36.89    | 3.70     |
|                                                                                   |                |               | 1.783  | 1.740 | 1.251 | .545     | .104     | 1.411    | 1.581    | .961   | .907  | 1.452    | .146     |
|                                                                                   |                | 22            | 45.30  | 44.20 | 34.95 | 13.85    | 2.65     | 38.20    | 42.24    | 27.50  | 25.55 | 40.00    | 3.70     |
|                                                                                   |                |               | 1.783  | 1.740 | 1.376 | .545     | .104     | 1.504    | 1.663    | 1.083  | 1.006 | 1.575    | .146     |
|                                                                                   |                | 24            | 44.00  | 42.60 | 38.12 | 14.70    | 2.65     | 41.30    | 46.44    | 30.60  | 28.65 | 43.29    | 3.70     |
|                                                                                   |                |               | 1.732  | 1.677 | 1.501 | .579     | .104     | 1.626    | 1.828    | 1.205  | 1.128 | 1.704    | .146     |

## Cable connecting receptacle with removable straight backshell for heatshrink sleeving

|                |  |
|----------------|--|
| solder<br>01 M |  |
| crimp<br>01 RM |  |

Technical drawing of a cable connector. The side view (left) shows a cylindrical body with a crimped end. Dimensions labeled include:  $\phi A$  (outer diameter of the main body),  $e$  (length of the main body),  $\phi G$  (inner diameter of the crimp),  $\phi D$  (outer diameter of the crimp),  $B$  (length of the crimp),  $C$  (length of the main body), and  $M$  (length of the crimp). The front view (right) shows the circular face of the connector with a central hole of diameter  $\phi F$  and an outer diameter  $P$ .

| shell<br>size | L Max           | A     | B<br>Max | C<br>Max | D<br>Max | F<br>Max | G<br>Max | P<br>Max | M<br>Max |
|---------------|-----------------|-------|----------|----------|----------|----------|----------|----------|----------|
|               | solder<br>crimp |       |          |          |          |          |          |          |          |
| 08            | 50.00           | 12.03 | 10.60    | 2.10     | 13.55    | 24.24    | 7.05     | 20.99    | 3.50     |
|               | 1.969           | .474  | .417     | .083     | .533     | .954     | .278     | .826     | .138     |
| 10            | 50.00           | 15.01 | 10.60    | 2.10     | 15.35    | 27.44    | 9.90     | 24.19    | 3.50     |
|               | 1.969           | .591  | .417     | .083     | .604     | 1.080    | .390     | .952     | .138     |
| 12            | 50.00           | 19.07 | 10.60    | 2.10     | 19.48    | 29.79    | 12.60    | 26.54    | 3.50     |
|               | 1.969           | .751  | .417     | .083     | .767     | 1.173    | .496     | 1.045    | .138     |
| 14            | 50.00           | 22.25 | 10.60    | 2.10     | 21.30    | 32.10    | 15.90    | 28.89    | 3.50     |
|               | 1.969           | .876  | .417     | .083     | .839     | 1.264    | .626     | 1.137    | .138     |
| 16            | 50.00           | 25.42 | 10.60    | 2.10     | 24.50    | 34.59    | 18.95    | 31.29    | 3.50     |
|               | 1.969           | 1.001 | .417     | .083     | .965     | 1.362    | .746     | 1.232    | .138     |
| 18            | 50.00           | 28.60 | 10.60    | 2.10     | 26.45    | 36.94    | 20.90    | 33.69    | 3.50     |
|               | 1.969           | 1.126 | .417     | .083     | 1.041    | 1.454    | .823     | 1.326    | .138     |
| 20            | 53.30           | 31.77 | 13.85    | 2.65     | 30.75    | 40.15    | 23.70    | 36.89    | 3.50     |
|               | 2.098           | 1.251 | .545     | .104     | 1.211    | 1.581    | .933     | 1.452    | .138     |
| 22            | 53.30           | 34.95 | 13.85    | 2.65     | 34.24    | 42.24    | 26.60    | 40.00    | 3.50     |
|               | 2.098           | 1.376 | .545     | .104     | 1.348    | 1.663    | 1.047    | 1.575    | .138     |
| 24            | 53.30           | 38.12 | 14.70    | 2.65     | 36.47    | 46.44    | 29.30    | 43.29    | 3.50     |
|               | 2.098           | 1.501 | .579     | .104     | 1.436    | 1.828    | 1.154    | 1.704    | .138     |

## Cable connecting receptacle with removable straight backshell for screen termination and heatshrink sleeving (38 and 42 suffix)

|        |  |
|--------|--|
| solder |  |
| 01 T   |  |
| crimp  |  |
| 01 RT  |  |

The diagram shows a cable connector with two views. The side view (left) shows a cylindrical body with a flange on the left and a mounting bracket on the right. Dimensions labeled include L (total length), øA (flange outer diameter), øG (body inner diameter), øD (body outer diameter), B (flange thickness), C (body length), and M (bracket length). The front view (right) shows the octagonal mounting bracket with a central hole of diameter øF. Dimension P is the width of the bracket.

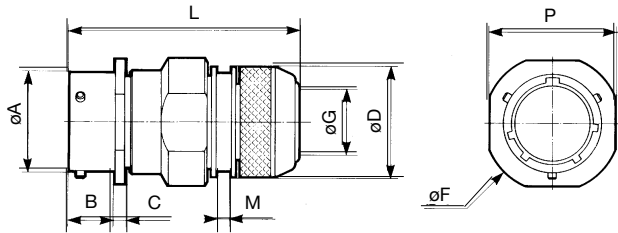
| shell<br>size | L Max           | A              | B<br>Max      | C<br>Max     | D<br>Max       | F<br>Max       | G<br>Max       | M<br>Max     | P<br>Max       |
|---------------|-----------------|----------------|---------------|--------------|----------------|----------------|----------------|--------------|----------------|
|               | solder<br>crimp |                |               |              |                |                |                |              |                |
| 08            | 51.60<br>2.031  | 12.03<br>.474  | 10.60<br>.417 | 2.10<br>.083 | 18.25<br>.719  | 24.24<br>.954  | 7.45<br>.293   | 3.70<br>.146 | 20.99<br>.826  |
| 10            | 51.60<br>2.031  | 15.01<br>.591  | 10.60<br>.417 | 2.10<br>.083 | 20.25<br>.797  | 27.44<br>1.080 | 9.00<br>.354   | 3.70<br>.146 | 24.19<br>.952  |
| 12            | 51.60<br>2.031  | 19.07<br>.751  | 10.60<br>.417 | 2.10<br>.083 | 24.75<br>.974  | 29.79<br>1.173 | 13.30<br>.524  | 3.70<br>.146 | 26.54<br>1.045 |
| 14            | 51.60<br>2.031  | 22.25<br>.876  | 10.60<br>.417 | 2.10<br>.083 | 27.75<br>1.093 | 32.10<br>1.264 | 16.50<br>.650  | 3.70<br>.146 | 28.89<br>1.137 |
| 16            | 51.60<br>2.031  | 25.42<br>1.001 | 10.60<br>.417 | 2.10<br>.083 | 30.05<br>1.183 | 34.59<br>1.362 | 18.50<br>.728  | 3.70<br>.146 | 31.29<br>1.232 |
| 18            | 52.00<br>2.047  | 28.60<br>1.126 | 10.60<br>.417 | 2.10<br>.083 | 34.15<br>1.344 | 36.94<br>1.454 | 21.90<br>.862  | 3.70<br>.146 | 33.69<br>1.326 |
| 20            | 55.10<br>2.169  | 31.77<br>1.251 | 13.85<br>.545 | 2.65<br>.104 | 37.25<br>1.467 | 40.15<br>1.581 | 25.10<br>.988  | 3.70<br>.146 | 36.89<br>1.452 |
| 22            | 55.10<br>2.169  | 34.95<br>1.376 | 13.85<br>.545 | 2.65<br>.104 | 40.45<br>1.593 | 42.24<br>1.663 | 28.20<br>1.110 | 3.70<br>.146 | 40.00<br>1.575 |
| 24            | 55.10<br>2.169  | 38.12<br>1.501 | 14.70<br>.579 | 2.65<br>.104 | 43.65<br>1.719 | 46.44<br>1.828 | 31.40<br>1.236 | 3.70<br>.146 | 43.29<br>1.704 |

# 26482 Series I Solder Connectors



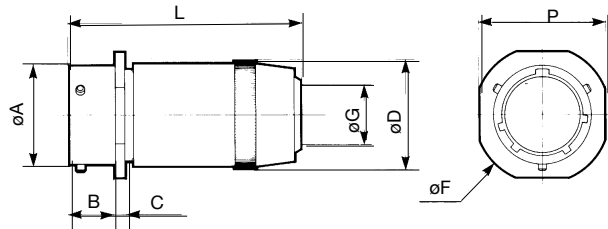
## Cable connecting receptacle with removable straight backshell for screen termination and heatshrink sleeving

| solder<br>01 G | crimp<br>01 RG | shell<br>size | L Max<br>solder<br>crimp | A              | B<br>Max      | C<br>Max     | D<br>Max       | F<br>Max       | G<br>Max       | M<br>Max     | P<br>Max       |
|----------------|----------------|---------------|--------------------------|----------------|---------------|--------------|----------------|----------------|----------------|--------------|----------------|
|                |                |               |                          |                |               |              |                |                |                |              |                |
|                |                | 08            | 54.00<br>2.126           | 12.03<br>.474  | 10.60<br>.417 | 2.10<br>.083 | 16.30<br>.642  | 24.24<br>.954  | 7.45<br>.293   | 3.60<br>.142 | 20.99<br>.826  |
|                |                | 10            | 54.00<br>2.126           | 15.01<br>.591  | 10.60<br>.417 | 2.10<br>.083 | 18.30<br>.720  | 27.44<br>1.080 | 10.30<br>.406  | 3.60<br>.142 | 24.19<br>.952  |
|                |                | 12            | 54.00<br>2.126           | 19.07<br>.751  | 10.60<br>.417 | 2.10<br>.083 | 22.30<br>.878  | 29.79<br>1.173 | 13.20<br>.520  | 3.60<br>.142 | 26.54<br>1.045 |
|                |                | 14            | 54.00<br>2.126           | 22.25<br>.876  | 10.60<br>.417 | 2.10<br>.083 | 25.30<br>.996  | 32.10<br>1.264 | 16.50<br>.650  | 3.60<br>.142 | 28.89<br>1.137 |
|                |                | 16            | 54.00<br>2.126           | 25.42<br>1.001 | 10.60<br>.417 | 2.10<br>.083 | 28.30<br>1.114 | 34.59<br>1.362 | 19.35<br>.762  | 3.60<br>.142 | 31.29<br>1.232 |
|                |                | 18            | 54.00<br>2.126           | 28.60<br>1.126 | 10.60<br>.417 | 2.10<br>.083 | 32.30<br>1.272 | 36.94<br>1.454 | 21.60<br>.850  | 3.60<br>.142 | 33.69<br>1.326 |
|                |                | 20            | 59.30<br>2.335           | 31.77<br>1.251 | 13.85<br>.545 | 2.65<br>.104 | 34.30<br>1.350 | 40.15<br>1.581 | 24.80<br>.976  | 3.60<br>.142 | 36.89<br>1.452 |
|                |                | 22            | 59.30<br>2.335           | 34.95<br>1.376 | 13.85<br>.545 | 2.65<br>.104 | 38.30<br>1.508 | 42.24<br>1.663 | 27.90<br>1.098 | 3.60<br>.142 | 40.00<br>1.575 |
|                |                | 24            | 59.30<br>2.335           | 38.12<br>1.501 | 14.70<br>.579 | 2.65<br>.104 | 41.30<br>1.626 | 46.44<br>1.828 | 31.00<br>1.220 | 3.60<br>.142 | 43.29<br>1.704 |



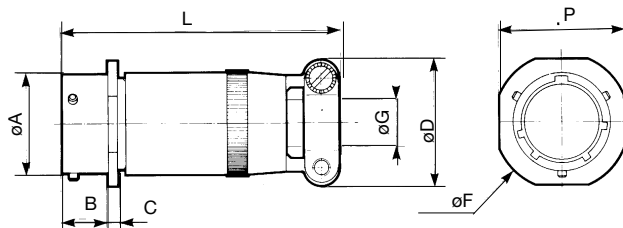
## Cable connecting receptacle with straight sealing gland backshell

| solder<br>01 J | HE 301 B 01 J | shell<br>size | L Max<br>solder | A              | B<br>Max      | C<br>Max     | D<br>Max       | F<br>Max       | G             |               | P<br>Max       |
|----------------|---------------|---------------|-----------------|----------------|---------------|--------------|----------------|----------------|---------------|---------------|----------------|
|                |               |               |                 |                |               |              |                |                | min           | Max           |                |
|                |               | 08            | 47.60<br>1.874  | 12.03<br>.474  | 10.60<br>.417 | 2.10<br>.083 | 14.40<br>.567  | 24.24<br>.954  | 5.02<br>.198  | 5.84<br>.230  | 20.99<br>.826  |
|                |               | 10            | 47.60<br>1.874  | 15.01<br>.591  | 10.60<br>.417 | 2.10<br>.083 | 17.60<br>.693  | 27.44<br>1.080 | 5.94<br>.234  | 6.76<br>.266  | 24.19<br>.952  |
|                |               | 12            | 48.70<br>1.917  | 19.07<br>.751  | 10.60<br>.417 | 2.10<br>.083 | 21.10<br>.831  | 29.79<br>1.173 | 9.34<br>.368  | 10.16<br>.400 | 26.54<br>1.045 |
|                |               | 14            | 53.50<br>2.106  | 22.25<br>.876  | 10.60<br>.417 | 2.10<br>.083 | 24.40<br>.961  | 32.10<br>1.264 | 11.32<br>.446 | 12.14<br>.478 | 28.89<br>1.137 |
|                |               | 16            | 59.00<br>2.323  | 25.42<br>1.001 | 10.60<br>.417 | 2.10<br>.083 | 27.60<br>1.087 | 34.59<br>1.362 | 14.73<br>.580 | 15.55<br>.612 | 31.29<br>1.232 |
|                |               | 18            | 65.00<br>2.559  | 28.60<br>1.126 | 10.60<br>.417 | 2.10<br>.083 | 30.80<br>1.213 | 36.94<br>1.454 | 16.00<br>.630 | 16.82<br>.662 | 33.69<br>1.326 |
|                |               | 20            | 79.10<br>3.114  | 31.77<br>1.251 | 13.85<br>.545 | 2.65<br>.104 | 34.10<br>1.343 | 40.15<br>1.581 | 16.89<br>.665 | 17.71<br>.697 | 36.89<br>1.452 |
|                |               | 22            | 80.00<br>3.150  | 34.95<br>1.376 | 13.85<br>.545 | 2.65<br>.104 | 37.30<br>1.469 | 42.24<br>1.663 | 17.78<br>.700 | 18.60<br>.732 | 40.00<br>1.575 |
|                |               | 24            | 90.00<br>3.543  | 38.12<br>1.501 | 14.70<br>.579 | 2.65<br>.104 | 40.50<br>1.594 | 46.44<br>1.828 | 20.34<br>.801 | 21.16<br>.833 | 43.29<br>1.704 |



## Cable connecting receptacle with straight sealing gland and cable clamp backshell

| solder<br>01 JC | MS 3111 J | shell<br>size | L Max<br>solder | A              | B<br>Max      | C<br>Max     | D<br>Max       | F<br>Max       | G             |               | P<br>Max       |
|-----------------|-----------|---------------|-----------------|----------------|---------------|--------------|----------------|----------------|---------------|---------------|----------------|
|                 |           |               |                 |                |               |              |                |                | min           | Max           |                |
|                 |           | 08            | 57.68<br>2.271  | 12.03<br>.474  | 10.60<br>.417 | 2.10<br>.083 | 19.90<br>.783  | 24.24<br>.954  | 5.02<br>.198  | 5.84<br>.230  | 20.99<br>.826  |
|                 |           | 10            | 57.68<br>2.271  | 15.01<br>.591  | 10.60<br>.417 | 2.10<br>.083 | 21.50<br>.846  | 27.44<br>1.080 | 5.94<br>.234  | 6.76<br>.266  | 24.19<br>.952  |
|                 |           | 12            | 61.24<br>2.411  | 19.07<br>.751  | 10.60<br>.417 | 2.10<br>.083 | 25.00<br>.984  | 29.79<br>1.173 | 9.34<br>.368  | 10.16<br>.400 | 26.54<br>1.045 |
|                 |           | 14            | 66.01<br>2.599  | 22.25<br>.876  | 10.60<br>.417 | 2.10<br>.083 | 27.80<br>1.094 | 32.10<br>1.264 | 11.32<br>.446 | 12.14<br>.478 | 28.89<br>1.137 |
|                 |           | 16            | 74.75<br>2.943  | 25.42<br>1.001 | 10.60<br>.417 | 2.10<br>.083 | 29.40<br>1.157 | 34.59<br>1.362 | 14.73<br>.580 | 15.50<br>.610 | 31.29<br>1.232 |
|                 |           | 18            | 80.57<br>3.172  | 28.60<br>1.126 | 10.60<br>.417 | 2.10<br>.083 | 35.30<br>1.390 | 36.94<br>1.454 | 16.00<br>.630 | 16.82<br>.662 | 33.69<br>1.326 |
|                 |           | 20            | 91.69<br>3.610  | 31.77<br>1.251 | 13.85<br>.545 | 2.65<br>.104 | 35.30<br>1.390 | 40.15<br>1.581 | 16.89<br>.665 | 17.71<br>.697 | 36.89<br>1.452 |
|                 |           | 22            | 95.66<br>3.766  | 34.95<br>1.376 | 13.85<br>.545 | 2.65<br>.104 | 41.10<br>1.618 | 42.24<br>1.663 | 17.78<br>.700 | 18.60<br>.732 | 40.00<br>1.575 |
|                 |           | 24            | 101.22<br>3.985 | 38.12<br>1.501 | 14.70<br>.579 | 2.65<br>.104 | 42.40<br>1.669 | 46.44<br>1.828 | 20.34<br>.801 | 21.16<br>.833 | 43.29<br>1.704 |

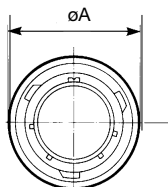
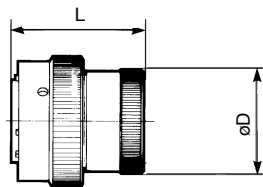


# 26482 Series I Solder Connectors



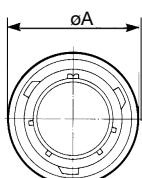
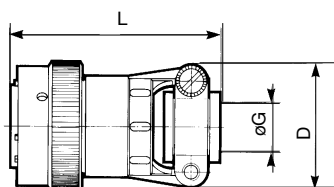
## Plug with backnut

| solder<br>06 E | HE 301 B 06 E<br>MS 3116 E | shell size | L Max          |                | A<br>Max       | D<br>Max       |
|----------------|----------------------------|------------|----------------|----------------|----------------|----------------|
|                |                            |            | solder         | crimp          |                |                |
| crimp<br>06 R  | HE 301 B 06 R<br>MS 3126 E | 08         | 32.54<br>1.281 | 32.00<br>1.260 | 19.05<br>.750  | 13.50<br>.531  |
|                |                            | 10         | 32.54<br>1.281 | 32.00<br>1.260 | 21.80<br>.858  | 16.70<br>.657  |
|                |                            | 12         | 32.54<br>1.281 | 32.00<br>1.260 | 26.15<br>1.030 | 19.90<br>.783  |
|                |                            | 14         | 32.54<br>1.281 | 32.00<br>1.260 | 29.35<br>1.156 | 23.40<br>.921  |
|                |                            | 16         | 32.54<br>1.281 | 32.00<br>1.260 | 32.50<br>1.280 | 26.60<br>1.047 |
|                |                            | 18         | 32.54<br>1.281 | 32.00<br>1.260 | 35.30<br>1.390 | 29.60<br>1.165 |
|                |                            | 20         | 33.30<br>1.311 | 32.10<br>1.264 | 38.85<br>1.530 | 32.70<br>1.287 |
|                |                            | 22         | 33.30<br>1.311 | 32.10<br>1.264 | 42.05<br>1.656 | 36.00<br>1.417 |
|                |                            | 24         | 33.30<br>1.311 | 32.10<br>1.264 | 45.10<br>1.776 | 39.10<br>1.539 |



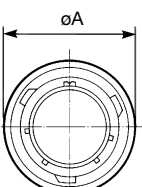
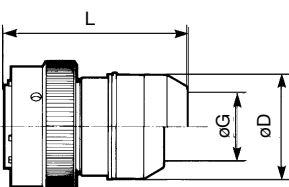
## Plug with straight cable clamp

| solder<br>06 EC | HE 301 B 06 EC<br>MS 3116 F               | shell size | L Max          |                | A<br>Max       | D<br>Max       | G             |
|-----------------|-------------------------------------------|------------|----------------|----------------|----------------|----------------|---------------|
|                 |                                           |            | solder         | crimp          |                |                |               |
| crimp<br>06 RC  | HE 301 B 06 RC<br>MS 3126 F<br>VG 95328 K | 08         | 48.00<br>1.890 | 47.30<br>1.862 | 19.05<br>.750  | 19.90<br>.783  | 3.50<br>.138  |
|                 |                                           | 10         | 48.00<br>1.890 | 47.30<br>1.862 | 21.80<br>.858  | 21.50<br>.846  | 5.00<br>.197  |
|                 |                                           | 12         | 48.00<br>1.890 | 47.30<br>1.862 | 26.15<br>1.030 | 25.00<br>.984  | 8.20<br>.323  |
|                 |                                           | 14         | 48.00<br>1.890 | 47.30<br>1.862 | 29.35<br>1.156 | 27.80<br>1.094 | 10.00<br>.394 |
|                 |                                           | 16         | 51.00<br>2.008 | 50.50<br>1.988 | 32.50<br>1.280 | 29.40<br>1.157 | 13.00<br>.512 |
|                 |                                           | 18         | 51.00<br>2.008 | 50.50<br>1.988 | 35.30<br>1.390 | 35.30<br>1.390 | 16.00<br>.630 |
|                 |                                           | 20         | 52.00<br>2.047 | 50.20<br>1.976 | 38.85<br>1.530 | 35.30<br>1.390 | 16.00<br>.630 |
|                 |                                           | 22         | 52.00<br>2.047 | 50.20<br>1.976 | 42.05<br>1.656 | 41.10<br>1.618 | 19.30<br>.760 |
|                 |                                           | 24         | 52.00<br>2.047 | 50.20<br>1.976 | 45.10<br>1.776 | 42.40<br>1.669 | 20.60<br>.811 |



## Plug with straight backshell for potting

| solder<br>06 P | HE 301 B 06 P<br>MS 3116 P  | shell size | L Max          |                | A<br>Max       | D<br>Max       | G<br>Max       |
|----------------|-----------------------------|------------|----------------|----------------|----------------|----------------|----------------|
|                |                             |            | solder         | crimp          |                |                |                |
| crimp<br>06 RP | HE 301 B 06 RP<br>MS 3126 P | 08         | 36.20<br>1.425 | 42.10<br>1.657 | 19.05<br>.750  | 15.34<br>.604  | 10.46<br>.412  |
|                |                             | 10         | 36.20<br>1.425 | 42.10<br>1.657 | 21.80<br>.858  | 17.70<br>.697  | 13.55<br>.533  |
|                |                             | 12         | 36.20<br>1.425 | 42.10<br>1.657 | 26.15<br>1.030 | 21.69<br>.854  | 13.96<br>.550  |
|                |                             | 14         | 36.20<br>1.425 | 42.10<br>1.657 | 29.35<br>1.156 | 23.90<br>.941  | 17.42<br>.686  |
|                |                             | 16         | 36.20<br>1.425 | 42.10<br>1.657 | 32.50<br>1.280 | 27.00<br>1.063 | 20.56<br>.809  |
|                |                             | 18         | 37.70<br>1.484 | 45.40<br>1.787 | 35.30<br>1.390 | 30.50<br>1.201 | 23.66<br>.931  |
|                |                             | 20         | 42.40<br>1.669 | 50.00<br>1.969 | 38.85<br>1.530 | 33.65<br>1.325 | 23.92<br>.942  |
|                |                             | 22         | 42.40<br>1.669 | 50.00<br>1.969 | 42.05<br>1.656 | 37.10<br>1.461 | 25.52<br>1.005 |
|                |                             | 24         | 42.85<br>1.687 | 50.00<br>1.969 | 45.10<br>1.776 | 40.00<br>1.575 | 32.00<br>1.260 |



# 26482 Series I Solder Connectors



## Plug with straight adapter

|                |                |            |                |                |                |                |                |           |
|----------------|----------------|------------|----------------|----------------|----------------|----------------|----------------|-----------|
| solder<br>06 A | HE 301 B 06 A  | shell size | L Max          |                | A Max          | D Max          | G Max          | K         |
| crimp<br>06 RA | HE 301 B 06 RA |            | solder         | crimp          |                |                |                |           |
|                |                | 08         | 41.00<br>1.614 | 41.00<br>1.614 | 19.05<br>.750  | 14.50<br>.571  | 9.10<br>.358   | 1/2 28    |
|                |                | 10         | 41.00<br>1.614 | 41.00<br>1.614 | 21.80<br>.858  | 18.70<br>.736  | 12.08<br>.476  | 5/8 24    |
|                |                | 12         | 41.00<br>1.614 | 41.00<br>1.614 | 26.15<br>1.030 | 21.70<br>.854  | 15.25<br>.600  | 3/4 20    |
|                |                | 14         | 41.00<br>1.614 | 41.00<br>1.614 | 29.35<br>1.156 | 25.10<br>.988  | 18.15<br>.715  | 7/8 20    |
|                |                | 16         | 41.00<br>1.614 | 41.00<br>1.614 | 32.50<br>1.280 | 28.13<br>1.107 | 21.32<br>.839  | 1-20      |
|                |                | 18         | 41.00<br>1.614 | 41.00<br>1.614 | 35.30<br>1.390 | 31.38<br>1.235 | 24.32<br>.957  | 1-3/16 18 |
|                |                | 20         | 44.00<br>1.732 | 43.30<br>1.705 | 38.85<br>1.530 | 34.30<br>1.350 | 26.73<br>1.052 | 1-3/16 18 |
|                |                | 22         | 44.00<br>1.732 | 43.30<br>1.705 | 42.05<br>1.656 | 37.60<br>1.480 | 30.67<br>1.207 | 1-7/16 18 |
|                |                | 24         | 44.00<br>1.732 | 43.50<br>1.713 | 45.10<br>1.776 | 40.70<br>1.602 | 33.08<br>1.302 | 1-7/16 18 |

## Plug with straight backshell for heatshrink sleeving

|                |            |            |                |                |                |                |                |                |              |
|----------------|------------|------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------|
| solder<br>06 T |            | shell size | L Max          |                | A              | D Max          | G Max          |                | M Max        |
| crimp<br>06 RT | VG 95328 J |            | solder         | crimp          |                |                | solder         | crimp          |              |
|                |            | 08         | 36.70<br>1.445 | 36.00<br>1.417 | 19.05<br>.750  | 15.35<br>.604  | 7.20<br>.283   | 6.70<br>.264   | 3.70<br>.146 |
|                |            | 10         | 36.70<br>1.445 | 36.00<br>1.417 | 21.80<br>.858  | 18.15<br>.715  | 10.20<br>.402  | 9.40<br>.370   | 3.70<br>.146 |
|                |            | 12         | 36.70<br>1.445 | 36.00<br>1.417 | 26.15<br>1.030 | 23.45<br>.923  | 13.20<br>.520  | 11.95<br>.470  | 3.70<br>.146 |
|                |            | 14         | 36.70<br>1.445 | 36.00<br>1.417 | 29.35<br>1.156 | 24.25<br>.955  | 16.10<br>.634  | 15.15<br>.596  | 3.70<br>.146 |
|                |            | 16         | 39.00<br>1.535 | 38.30<br>1.508 | 32.50<br>1.280 | 29.55<br>1.163 | 19.25<br>.758  | 18.05<br>.711  | 3.70<br>.146 |
|                |            | 18         | 39.00<br>1.535 | 38.30<br>1.508 | 35.30<br>1.390 | 31.75<br>1.250 | 21.30<br>.839  | 19.95<br>.785  | 3.70<br>.146 |
|                |            | 20         | 44.00<br>1.732 | 42.90<br>1.689 | 38.85<br>1.530 | 35.85<br>1.411 | 24.40<br>.961  | 23.05<br>.907  | 3.70<br>.146 |
|                |            | 22         | 44.00<br>1.732 | 42.90<br>1.689 | 42.05<br>1.656 | 38.20<br>1.504 | 27.50<br>1.083 | 25.55<br>1.006 | 3.70<br>.146 |
|                |            | 24         | 42.70<br>1.681 | 41.60<br>1.638 | 45.10<br>1.776 | 41.30<br>1.626 | 30.60<br>1.205 | 28.65<br>1.128 | 3.70<br>.146 |

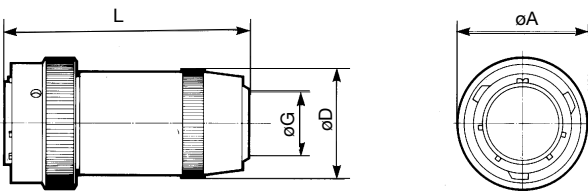
## Plug with removable straight backshell for heatshrink sleeving

|                |  |            |                |                |                |                |              |
|----------------|--|------------|----------------|----------------|----------------|----------------|--------------|
| solder<br>06 M |  | shell size | L Max          | A Max          | D Max          | G Max          | M Max        |
| crimp<br>06 RM |  |            | solder/crimp   |                |                |                |              |
|                |  | 08         | 50.00<br>1.969 | 19.05<br>.750  | 13.55<br>.533  | 7.05<br>.278   | 3.50<br>.138 |
|                |  | 10         | 50.00<br>1.969 | 21.80<br>.858  | 15.35<br>.604  | 9.90<br>.390   | 3.50<br>.138 |
|                |  | 12         | 50.00<br>1.969 | 26.15<br>1.030 | 19.48<br>.767  | 12.60<br>.496  | 3.50<br>.138 |
|                |  | 14         | 50.00<br>1.969 | 29.35<br>1.156 | 21.30<br>.839  | 15.90<br>.626  | 3.50<br>.138 |
|                |  | 16         | 50.00<br>1.969 | 32.50<br>1.280 | 24.50<br>.965  | 18.95<br>.746  | 3.50<br>.138 |
|                |  | 18         | 50.00<br>1.969 | 35.30<br>1.390 | 26.45<br>1.041 | 20.90<br>.823  | 3.50<br>.138 |
|                |  | 20         | 52.00<br>2.047 | 38.85<br>1.530 | 30.73<br>1.210 | 23.70<br>.933  | 3.50<br>.138 |
|                |  | 22         | 52.00<br>2.047 | 42.05<br>1.656 | 34.24<br>1.348 | 26.60<br>1.047 | 3.50<br>.138 |
|                |  | 24         | 52.00<br>2.047 | 45.10<br>1.776 | 36.47<br>1.436 | 29.30<br>1.154 | 3.50<br>.138 |

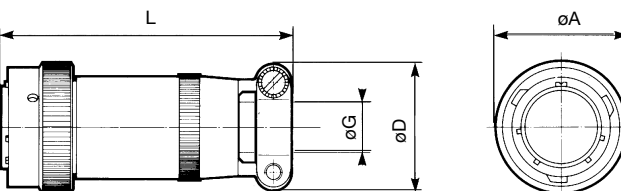
# 26482 Series I Solder Connectors



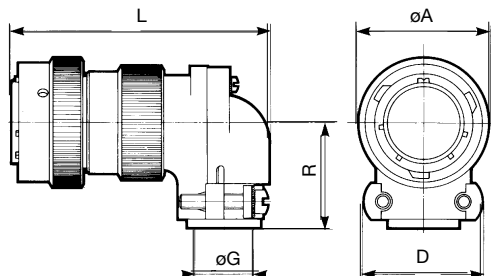
## Plug with straight sealing gland backshell

|                |               |  |                                                                                   |            |                |                |                |               |               |
|----------------|---------------|--|-----------------------------------------------------------------------------------|------------|----------------|----------------|----------------|---------------|---------------|
| solder<br>06 J | HE 301 B 06 J |  |  | shell size | L Max          | A Max          | D Max          | G             |               |
|                |               |  |                                                                                   |            | solder         |                |                | min           | Max           |
|                |               |  |                                                                                   | 08         | 47.60<br>1.874 | 19.05<br>.750  | 14.40<br>.567  | 5.02<br>.198  | 5.84<br>.230  |
|                |               |  |                                                                                   | 10         | 47.60<br>1.874 | 21.80<br>.858  | 17.60<br>.693  | 5.94<br>.234  | 6.76<br>.266  |
|                |               |  |                                                                                   | 12         | 49.20<br>1.937 | 26.15<br>1.030 | 21.10<br>.831  | 9.34<br>.368  | 10.16<br>.400 |
|                |               |  |                                                                                   | 14         | 54.00<br>2.126 | 29.35<br>1.156 | 24.40<br>.961  | 11.32<br>.446 | 12.14<br>.478 |
|                |               |  |                                                                                   | 16         | 59.60<br>2.346 | 32.50<br>1.280 | 27.60<br>1.087 | 14.73<br>.580 | 15.55<br>.612 |
|                |               |  |                                                                                   | 18         | 65.60<br>2.583 | 35.30<br>1.390 | 30.80<br>1.213 | 16.00<br>.630 | 16.80<br>.661 |
|                |               |  |                                                                                   | 20         | 78.00<br>3.071 | 38.85<br>1.530 | 34.10<br>1.343 | 16.89<br>.665 | 17.71<br>.697 |
|                |               |  |                                                                                   | 22         | 79.50<br>3.130 | 42.05<br>1.656 | 37.30<br>1.469 | 17.78<br>.700 | 18.60<br>.732 |
|                |               |  |                                                                                   | 24         | 90.00<br>3.543 | 45.10<br>1.776 | 40.50<br>1.594 | 20.34<br>.801 | 21.16<br>.833 |

## Plug with straight sealing gland and cable clamp backshell

|                 |           |  |                                                                                     |            |                 |                |                |               |               |
|-----------------|-----------|--|-------------------------------------------------------------------------------------|------------|-----------------|----------------|----------------|---------------|---------------|
| solder<br>06 JC | MS 3116 J |  |  | shell size | L Max           | A Max          | D Max          | G             |               |
|                 |           |  |                                                                                     |            | solder          |                |                | min           | Max           |
|                 |           |  |                                                                                     | 08         | 57.68<br>2.271  | 19.05<br>.750  | 19.90<br>.783  | 5.02<br>.198  | 5.84<br>.230  |
|                 |           |  |                                                                                     | 10         | 57.68<br>2.271  | 21.80<br>.858  | 21.50<br>.846  | 5.94<br>.234  | 6.76<br>.266  |
|                 |           |  |                                                                                     | 12         | 61.24<br>2.411  | 26.15<br>1.030 | 25.00<br>.984  | 9.34<br>.368  | 10.16<br>.400 |
|                 |           |  |                                                                                     | 14         | 66.01<br>2.599  | 29.35<br>1.156 | 27.80<br>1.094 | 11.32<br>.446 | 12.14<br>.478 |
|                 |           |  |                                                                                     | 16         | 74.75<br>2.943  | 32.50<br>1.280 | 29.40<br>1.157 | 14.73<br>.580 | 15.50<br>.610 |
|                 |           |  |                                                                                     | 18         | 80.57<br>3.172  | 35.30<br>1.390 | 35.30<br>1.390 | 16.00<br>.630 | 16.82<br>.662 |
|                 |           |  |                                                                                     | 20         | 91.69<br>3.610  | 38.85<br>1.530 | 35.30<br>1.390 | 16.89<br>.665 | 17.71<br>.697 |
|                 |           |  |                                                                                     | 22         | 95.66<br>3.766  | 42.05<br>1.656 | 41.10<br>1.618 | 17.78<br>.700 | 18.60<br>.732 |
|                 |           |  |                                                                                     | 24         | 101.22<br>3.985 | 45.10<br>1.776 | 42.40<br>1.669 | 20.34<br>.801 | 21.16<br>.833 |

## Plug with elbow cable clamp backshell

|                 |                |  |                                                                                     |            |                |                |                |               |                |
|-----------------|----------------|--|-------------------------------------------------------------------------------------|------------|----------------|----------------|----------------|---------------|----------------|
| solder<br>08 EC | HE 301 B 08 EC |  |  | shell size | L Max          | A Max          | D Max          | G             | R Max          |
| crimp<br>08 RC  | HE 301 B 08 RC |  |                                                                                     |            | solder/crimp   |                |                |               |                |
|                 |                |  |                                                                                     | 08         | 50.10<br>1.972 | 19.05<br>.750  | 19.70<br>.776  | 3.50<br>.138  | 16.00<br>.630  |
|                 |                |  |                                                                                     | 10         | 52.60<br>2.071 | 21.80<br>.858  | 21.20<br>.835  | 5.00<br>.197  | 18.00<br>.709  |
|                 |                |  |                                                                                     | 12         | 54.90<br>2.161 | 26.15<br>1.030 | 24.20<br>.953  | 8.20<br>.323  | 19.50<br>.768  |
|                 |                |  |                                                                                     | 14         | 58.50<br>2.303 | 29.35<br>1.156 | 27.50<br>1.083 | 10.00<br>.394 | 22.00<br>.866  |
|                 |                |  |                                                                                     | 16         | 60.80<br>2.394 | 32.50<br>1.280 | 29.10<br>1.146 | 13.00<br>.512 | 23.50<br>.925  |
|                 |                |  |                                                                                     | 18         | 65.00<br>2.559 | 35.30<br>1.390 | 35.70<br>1.406 | 16.00<br>.630 | 25.00<br>.984  |
|                 |                |  |                                                                                     | 20         | 69.10<br>2.720 | 38.85<br>1.530 | 35.70<br>1.406 | 16.00<br>.630 | 26.50<br>1.043 |
|                 |                |  |                                                                                     | 22         | 71.00<br>2.795 | 42.05<br>1.656 | 39.70<br>1.563 | 19.30<br>.760 | 28.00<br>1.102 |
|                 |                |  |                                                                                     | 24         | 75.50<br>2.972 | 45.10<br>1.776 | 43.50<br>1.713 | 20.60<br>.811 | 31.00<br>1.220 |

|                |                |
|----------------|----------------|
| solder<br>08 P | HE 301 B 08 P  |
| crimp<br>08 RP | HE 301 B 08 RP |



Technical drawing of the HE 301 B 08 P connector. The side view shows dimensions L (total length), ØA (outer diameter), R (radius of the flange), and G (length of the mounting tab). The front view shows dimensions ØA (outer diameter) and S (width of the mounting tab).

| shell size | L Max          | A Max          | G Max         | R Max          | S Max          |
|------------|----------------|----------------|---------------|----------------|----------------|
|            | solder/crimp   |                |               |                |                |
| 08         | 40.70<br>1.602 | 19.05<br>.750  | 8.10<br>.319  | 11.70<br>.461  | 11.30<br>.445  |
| 10         | 44.90<br>1.768 | 21.80<br>.858  | 11.30<br>.445 | 14.35<br>.565  | 14.50<br>.571  |
| 12         | 46.90<br>1.846 | 26.15<br>1.030 | 13.30<br>.524 | 15.90<br>.626  | 17.70<br>.697  |
| 14         | 49.20<br>1.937 | 29.35<br>1.156 | 16.10<br>.634 | 16.30<br>.642  | 20.10<br>.791  |
| 16         | 50.60<br>1.992 | 32.50<br>1.280 | 16.90<br>.665 | 19.30<br>.760  | 22.80<br>.898  |
| 18         | 51.80<br>2.039 | 35.30<br>1.390 | 18.10<br>.713 | 20.60<br>.811  | 25.60<br>1.008 |
| 20         | 53.70<br>2.114 | 38.85<br>1.530 | 19.70<br>.776 | 21.90<br>.862  | 28.80<br>1.134 |
| 22         | 54.80<br>2.157 | 42.05<br>1.656 | 20.80<br>.819 | 23.50<br>.925  | 31.60<br>1.244 |
| 24         | 58.20<br>2.291 | 45.10<br>1.776 | 24.20<br>.953 | 30.15<br>1.187 | 35.20<br>1.386 |

| solder<br>36 A | VG 95328 N     |  | <table border="1"> <thead> <tr> <th rowspan="2">shell size</th><th>L Max</th><th rowspan="2">A Max</th><th rowspan="2">D Max</th><th rowspan="2">G Max</th><th rowspan="2">K</th></tr> <tr> <th>solder/crimp</th></tr> </thead> <tbody> <tr><td>08</td><td>41.00<br/>1.614</td><td>19.05<br/>.750</td><td>14.50<br/>.571</td><td>9.10<br/>.358</td><td>1/2 28</td></tr> <tr><td>10</td><td>41.00<br/>1.614</td><td>21.80<br/>.858</td><td>18.70<br/>.736</td><td>12.08<br/>.476</td><td>5/8 24</td></tr> <tr><td>12</td><td>41.00<br/>1.614</td><td>26.15<br/>1.030</td><td>21.70<br/>.854</td><td>15.25<br/>.600</td><td>3/4 20</td></tr> <tr><td>14</td><td>41.00<br/>1.614</td><td>29.35<br/>1.156</td><td>25.10<br/>.988</td><td>18.15<br/>.715</td><td>7/8 20</td></tr> <tr><td>16</td><td>41.00<br/>1.614</td><td>32.50<br/>1.280</td><td>28.13<br/>1.107</td><td>21.32<br/>.839</td><td>1-20</td></tr> <tr><td>18</td><td>41.00<br/>1.614</td><td>35.30<br/>1.390</td><td>31.38<br/>1.235</td><td>24.32<br/>.957</td><td>1-3/16 18</td></tr> <tr><td>20</td><td>43.30<br/>1.705</td><td>38.85<br/>1.530</td><td>34.30<br/>1.350</td><td>26.73<br/>1.052</td><td>1-3/16 18</td></tr> <tr><td>22</td><td>43.30<br/>1.705</td><td>42.05<br/>1.656</td><td>37.60<br/>1.480</td><td>30.67<br/>1.207</td><td>1-7/16 18</td></tr> <tr><td>24</td><td>43.50<br/>1.713</td><td>45.10<br/>1.776</td><td>40.70<br/>1.602</td><td>33.08<br/>1.302</td><td>1-7/16 18</td></tr> </tbody> </table> | shell size     | L Max     | A Max | D Max | G Max | K | solder/crimp | 08 | 41.00<br>1.614 | 19.05<br>.750 | 14.50<br>.571 | 9.10<br>.358 | 1/2 28 | 10 | 41.00<br>1.614 | 21.80<br>.858 | 18.70<br>.736 | 12.08<br>.476 | 5/8 24 | 12 | 41.00<br>1.614 | 26.15<br>1.030 | 21.70<br>.854 | 15.25<br>.600 | 3/4 20 | 14 | 41.00<br>1.614 | 29.35<br>1.156 | 25.10<br>.988 | 18.15<br>.715 | 7/8 20 | 16 | 41.00<br>1.614 | 32.50<br>1.280 | 28.13<br>1.107 | 21.32<br>.839 | 1-20 | 18 | 41.00<br>1.614 | 35.30<br>1.390 | 31.38<br>1.235 | 24.32<br>.957 | 1-3/16 18 | 20 | 43.30<br>1.705 | 38.85<br>1.530 | 34.30<br>1.350 | 26.73<br>1.052 | 1-3/16 18 | 22 | 43.30<br>1.705 | 42.05<br>1.656 | 37.60<br>1.480 | 30.67<br>1.207 | 1-7/16 18 | 24 | 43.50<br>1.713 | 45.10<br>1.776 | 40.70<br>1.602 | 33.08<br>1.302 | 1-7/16 18 |
|----------------|----------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------|-------|-------|-------|---|--------------|----|----------------|---------------|---------------|--------------|--------|----|----------------|---------------|---------------|---------------|--------|----|----------------|----------------|---------------|---------------|--------|----|----------------|----------------|---------------|---------------|--------|----|----------------|----------------|----------------|---------------|------|----|----------------|----------------|----------------|---------------|-----------|----|----------------|----------------|----------------|----------------|-----------|----|----------------|----------------|----------------|----------------|-----------|----|----------------|----------------|----------------|----------------|-----------|
| shell size     | L Max          | A Max                                                                              | D Max                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                | G Max     |       |       |       |   | K            |    |                |               |               |              |        |    |                |               |               |               |        |    |                |                |               |               |        |    |                |                |               |               |        |    |                |                |                |               |      |    |                |                |                |               |           |    |                |                |                |                |           |    |                |                |                |                |           |    |                |                |                |                |           |
|                | solder/crimp   |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |           |       |       |       |   |              |    |                |               |               |              |        |    |                |               |               |               |        |    |                |                |               |               |        |    |                |                |               |               |        |    |                |                |                |               |      |    |                |                |                |               |           |    |                |                |                |                |           |    |                |                |                |                |           |    |                |                |                |                |           |
| 08             | 41.00<br>1.614 | 19.05<br>.750                                                                      | 14.50<br>.571                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 9.10<br>.358   | 1/2 28    |       |       |       |   |              |    |                |               |               |              |        |    |                |               |               |               |        |    |                |                |               |               |        |    |                |                |               |               |        |    |                |                |                |               |      |    |                |                |                |               |           |    |                |                |                |                |           |    |                |                |                |                |           |    |                |                |                |                |           |
| 10             | 41.00<br>1.614 | 21.80<br>.858                                                                      | 18.70<br>.736                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 12.08<br>.476  | 5/8 24    |       |       |       |   |              |    |                |               |               |              |        |    |                |               |               |               |        |    |                |                |               |               |        |    |                |                |               |               |        |    |                |                |                |               |      |    |                |                |                |               |           |    |                |                |                |                |           |    |                |                |                |                |           |    |                |                |                |                |           |
| 12             | 41.00<br>1.614 | 26.15<br>1.030                                                                     | 21.70<br>.854                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 15.25<br>.600  | 3/4 20    |       |       |       |   |              |    |                |               |               |              |        |    |                |               |               |               |        |    |                |                |               |               |        |    |                |                |               |               |        |    |                |                |                |               |      |    |                |                |                |               |           |    |                |                |                |                |           |    |                |                |                |                |           |    |                |                |                |                |           |
| 14             | 41.00<br>1.614 | 29.35<br>1.156                                                                     | 25.10<br>.988                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 18.15<br>.715  | 7/8 20    |       |       |       |   |              |    |                |               |               |              |        |    |                |               |               |               |        |    |                |                |               |               |        |    |                |                |               |               |        |    |                |                |                |               |      |    |                |                |                |               |           |    |                |                |                |                |           |    |                |                |                |                |           |    |                |                |                |                |           |
| 16             | 41.00<br>1.614 | 32.50<br>1.280                                                                     | 28.13<br>1.107                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 21.32<br>.839  | 1-20      |       |       |       |   |              |    |                |               |               |              |        |    |                |               |               |               |        |    |                |                |               |               |        |    |                |                |               |               |        |    |                |                |                |               |      |    |                |                |                |               |           |    |                |                |                |                |           |    |                |                |                |                |           |    |                |                |                |                |           |
| 18             | 41.00<br>1.614 | 35.30<br>1.390                                                                     | 31.38<br>1.235                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 24.32<br>.957  | 1-3/16 18 |       |       |       |   |              |    |                |               |               |              |        |    |                |               |               |               |        |    |                |                |               |               |        |    |                |                |               |               |        |    |                |                |                |               |      |    |                |                |                |               |           |    |                |                |                |                |           |    |                |                |                |                |           |    |                |                |                |                |           |
| 20             | 43.30<br>1.705 | 38.85<br>1.530                                                                     | 34.30<br>1.350                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 26.73<br>1.052 | 1-3/16 18 |       |       |       |   |              |    |                |               |               |              |        |    |                |               |               |               |        |    |                |                |               |               |        |    |                |                |               |               |        |    |                |                |                |               |      |    |                |                |                |               |           |    |                |                |                |                |           |    |                |                |                |                |           |    |                |                |                |                |           |
| 22             | 43.30<br>1.705 | 42.05<br>1.656                                                                     | 37.60<br>1.480                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 30.67<br>1.207 | 1-7/16 18 |       |       |       |   |              |    |                |               |               |              |        |    |                |               |               |               |        |    |                |                |               |               |        |    |                |                |               |               |        |    |                |                |                |               |      |    |                |                |                |               |           |    |                |                |                |                |           |    |                |                |                |                |           |    |                |                |                |                |           |
| 24             | 43.50<br>1.713 | 45.10<br>1.776                                                                     | 40.70<br>1.602                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 33.08<br>1.302 | 1-7/16 18 |       |       |       |   |              |    |                |               |               |              |        |    |                |               |               |               |        |    |                |                |               |               |        |    |                |                |               |               |        |    |                |                |                |               |      |    |                |                |                |               |           |    |                |                |                |                |           |    |                |                |                |                |           |    |                |                |                |                |           |
| crimp<br>36 RA |                |                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |           |       |       |       |   |              |    |                |               |               |              |        |    |                |               |               |               |        |    |                |                |               |               |        |    |                |                |               |               |        |    |                |                |                |               |      |    |                |                |                |               |           |    |                |                |                |                |           |    |                |                |                |                |           |    |                |                |                |                |           |

|                |  |
|----------------|--|
| solder<br>36 T |  |
| crimp<br>36 RT |  |



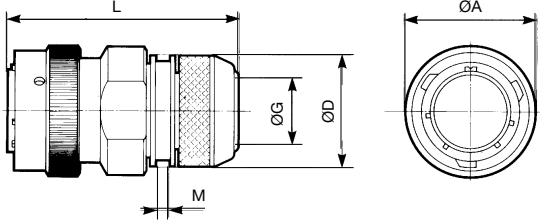
  

| shell size | L Max          | A Max          | D Max          | G Max          | M Max        |
|------------|----------------|----------------|----------------|----------------|--------------|
|            | solder/crimp   |                |                |                |              |
| 08         | 51.60<br>2.031 | 19.05<br>.750  | 18.25<br>.719  | 7.45<br>.293   | 3.70<br>.146 |
| 10         | 51.60<br>2.031 | 21.80<br>.858  | 20.25<br>.797  | 9.00<br>.354   | 3.70<br>.146 |
| 12         | 51.60<br>2.031 | 26.15<br>1.030 | 24.75<br>.974  | 13.30<br>.524  | 3.70<br>.146 |
| 14         | 51.60<br>2.031 | 29.35<br>1.156 | 27.75<br>1.093 | 16.50<br>.650  | 3.70<br>.146 |
| 16         | 51.60<br>2.031 | 32.50<br>1.280 | 30.05<br>1.183 | 18.50<br>.728  | 3.70<br>.146 |
| 18         | 52.00<br>2.047 | 35.30<br>1.390 | 34.15<br>1.344 | 21.90<br>.862  | 3.70<br>.146 |
| 20         | 53.90<br>2.122 | 38.85<br>1.530 | 37.25<br>1.467 | 25.10<br>.988  | 3.70<br>.146 |
| 22         | 53.90<br>2.122 | 42.05<br>1.656 | 40.45<br>1.593 | 28.20<br>1.110 | 3.70<br>.146 |
| 24         | 53.90<br>2.122 | 45.10<br>1.776 | 43.65<br>1.719 | 31.40<br>1.236 | 3.70<br>.146 |

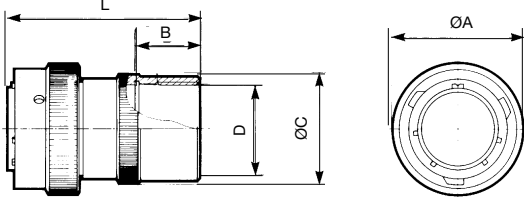
# 26482 Series I Solder Connectors



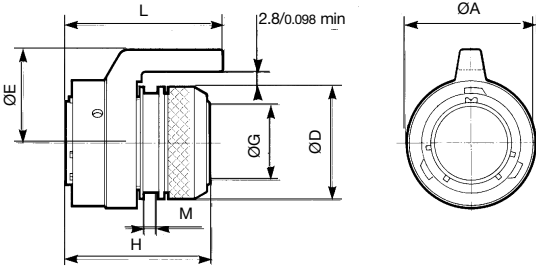
**Screened plug with removable straight backshell  
for screen termination and heatshrink sleeving**

|                |            |                                                                                   |              |                |                |                |                |              |
|----------------|------------|-----------------------------------------------------------------------------------|--------------|----------------|----------------|----------------|----------------|--------------|
| solder<br>36 G |            |  | shell size   | L Max          | A Max          | D Max          | G Max          | M Max        |
| crimp<br>36 RG | VG 95328 M |                                                                                   | solder/crimp |                |                |                |                |              |
|                |            |                                                                                   | 08           | 54.00<br>2.126 | 19.05<br>.750  | 16.30<br>.642  | 7.45<br>.293   | 3.60<br>.142 |
|                |            |                                                                                   | 10           | 54.00<br>2.126 | 21.80<br>.858  | 18.30<br>.720  | 10.30<br>.406  | 3.60<br>.142 |
|                |            |                                                                                   | 12           | 54.00<br>2.126 | 26.15<br>1.030 | 22.30<br>.878  | 13.20<br>.520  | 3.60<br>.142 |
|                |            |                                                                                   | 14           | 54.00<br>2.126 | 29.35<br>1.156 | 25.30<br>.996  | 16.50<br>.650  | 3.60<br>.142 |
|                |            |                                                                                   | 16           | 54.00<br>2.126 | 32.50<br>1.280 | 28.30<br>1.114 | 19.35<br>.762  | 3.60<br>.142 |
|                |            |                                                                                   | 18           | 54.00<br>2.126 | 35.30<br>1.390 | 32.30<br>1.272 | 21.60<br>.850  | 3.60<br>.142 |
|                |            |                                                                                   | 20           | 58.00<br>2.283 | 38.85<br>1.530 | 34.30<br>1.350 | 24.80<br>.976  | 3.60<br>.142 |
|                |            |                                                                                   | 22           | 58.00<br>2.283 | 42.05<br>1.656 | 38.30<br>1.508 | 27.90<br>1.098 | 3.60<br>.142 |
|                |            |                                                                                   | 24           | 58.00<br>2.283 | 45.10<br>1.776 | 41.30<br>1.626 | 31.00<br>1.220 | 3.60<br>.142 |

**Plug with straight adapter for electrical pitch access**

|                |  |                                                                                     |              |                |                |                |                |              |
|----------------|--|-------------------------------------------------------------------------------------|--------------|----------------|----------------|----------------|----------------|--------------|
| solder<br>06 Z |  |  | shell size   | L Max          | A Max          | B Max          | C Max          | D            |
| crimp<br>06 RZ |  |                                                                                     | solder/crimp |                |                |                |                | threading PE |
|                |  |                                                                                     | 08           | -              | -              | -              | -              | -            |
|                |  |                                                                                     | 10           | -              | -              | -              | -              | -            |
|                |  |                                                                                     | 12           | 43.00<br>1.693 | 26.15<br>1.030 | 9.00<br>.354   | 24.80<br>.976  | 11           |
|                |  |                                                                                     | 14           | 45.00<br>1.772 | 29.35<br>1.156 | 11.00<br>.433  | 28.80<br>1.134 | 16           |
|                |  |                                                                                     | 16           | 45.00<br>1.772 | 32.50<br>1.280 | 11.00<br>.433  | 30.80<br>1.213 | 16           |
|                |  |                                                                                     | 18           | 46.00<br>1.811 | 35.30<br>1.390 | 12.00<br>.472  | 40.80<br>1.606 | 21           |
|                |  |                                                                                     | 20           | 46.50<br>1.831 | 38.85<br>1.530 | 12.00<br>.472  | 40.80<br>1.606 | 21           |
|                |  |                                                                                     | 22           | 46.50<br>1.831 | 42.05<br>1.656 | 12.00<br>.472  | 40.80<br>1.606 | 21           |
|                |  |                                                                                     | 24           | 65.50<br>2.579 | 45.10<br>1.776 | 31.40<br>1.236 | 45.00<br>1.772 | 29           |

**Screened plug with lock finger and short backshell  
for screen termination and heatshrink sleeving**

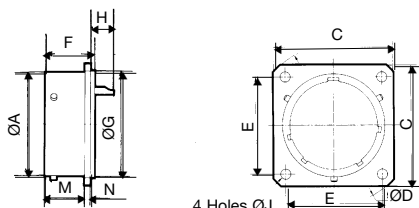
|                |            |                                                                                     |              |                |                |                |                |               |               |              |
|----------------|------------|-------------------------------------------------------------------------------------|--------------|----------------|----------------|----------------|----------------|---------------|---------------|--------------|
| solder<br>76 U |            |  | shell size   | L Max          | A Max          | D Max          | H Max          | G Max         | E Max         | M Max        |
| crimp<br>76 RU | VG 95328 U |                                                                                     | solder/crimp |                |                |                |                |               |               |              |
|                |            |                                                                                     | 08           | -              | -              | -              | -              | -             | -             | -            |
|                |            |                                                                                     | 10           | -              | -              | -              | -              | -             | -             | -            |
|                |            |                                                                                     | 12           | 35.60<br>1.402 | 25.00<br>.984  | 22.50<br>.886  | 32.00<br>1.260 | 13.20<br>.520 | 19.50<br>.768 | 3.70<br>.146 |
|                |            |                                                                                     | 14           | 35.60<br>1.402 | 29.00<br>1.142 | 25.50<br>1.004 | 32.00<br>1.260 | 16.10<br>.634 | 21.00<br>.827 | 3.70<br>.146 |
|                |            |                                                                                     | 16           | 35.60<br>1.402 | 32.00<br>1.260 | 28.50<br>1.122 | 32.00<br>1.260 | 19.25<br>.758 | 22.50<br>.886 | 3.70<br>.146 |
|                |            |                                                                                     | 18           | -              | -              | -              | -              | -             | -             | -            |
|                |            |                                                                                     | 20           | -              | -              | -              | -              | -             | -             | -            |
|                |            |                                                                                     | 22           | -              | -              | -              | -              | -             | -             | -            |
|                |            |                                                                                     | 24           | -              | -              | -              | -              | -             | -             | -            |

# 26482 Series I Solder Connectors

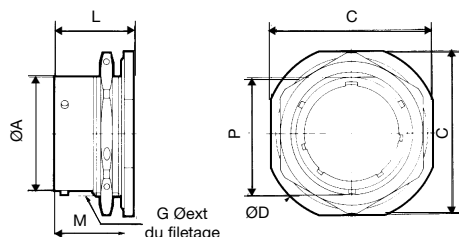


## Hermetic connectors

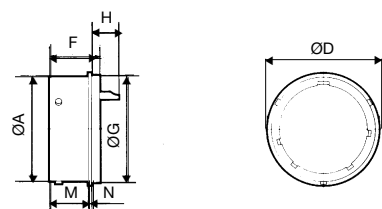
|                          |  |            |                |                |                |                |               |                |              |              |               |              |
|--------------------------|--|------------|----------------|----------------|----------------|----------------|---------------|----------------|--------------|--------------|---------------|--------------|
| square flange receptacle |  | shell size | A              | C Max          | D Max          | E              | F             | G              | H Max        | J            | M Max         | N Max        |
| 02 H   HE 301 B 02 H     |  | 08         | 12.03<br>.474  | 21.42<br>.843  | 27.09<br>1.067 | 15.09<br>.594  | 13.84<br>.545 | 14.27<br>.562  | 6.97<br>.274 | 3.13<br>.123 | 11.24<br>.443 | 1.67<br>.066 |
|                          |  | 10         | 15.01<br>.591  | 24.62<br>.969  | 31.87<br>1.255 | 18.26<br>.719  | 13.84<br>.545 | 17.06<br>.672  | 6.97<br>.274 | 3.13<br>.123 | 11.24<br>.443 | 1.67<br>.066 |
|                          |  | 12         | 19.07<br>.751  | 26.98<br>1.062 | 35.04<br>1.380 | 20.62<br>.812  | 13.84<br>.545 | 19.85<br>.781  | 6.97<br>.274 | 3.13<br>.123 | 11.24<br>.443 | 1.67<br>.066 |
|                          |  | 14         | 22.25<br>.876  | 29.36<br>1.156 | 38.22<br>1.505 | 23.00<br>.906  | 13.84<br>.545 | 23.00<br>.906  | 6.97<br>.274 | 3.13<br>.123 | 11.24<br>.443 | 1.67<br>.066 |
|                          |  | 16         | 25.42<br>1.001 | 31.73<br>1.249 | 41.39<br>1.630 | 24.61<br>.969  | 13.84<br>.545 | 26.18<br>1.031 | 6.97<br>.274 | 3.13<br>.123 | 11.24<br>.443 | 1.67<br>.066 |
|                          |  | 18         | 28.60<br>1.126 | 34.12<br>1.343 | 44.57<br>1.755 | 26.97<br>1.062 | 13.84<br>.545 | 29.36<br>1.156 | 6.97<br>.274 | 3.13<br>.123 | 11.24<br>.443 | 1.67<br>.066 |
|                          |  | 20         | 31.77<br>1.251 | 37.20<br>1.465 | 47.74<br>1.880 | 29.36<br>1.156 | 15.42<br>.607 | 31.74<br>1.250 | 6.99<br>.275 | 3.13<br>.123 | 12.00<br>.472 | 2.48<br>.098 |
|                          |  | 22         | 34.95<br>1.376 | 40.47<br>1.593 | 50.92<br>2.005 | 31.75<br>1.250 | 16.23<br>.639 | 34.92<br>1.375 | 6.99<br>.275 | 3.13<br>.123 | 12.00<br>.472 | 2.48<br>.098 |
|                          |  | 24         | 38.12<br>1.501 | 43.66<br>1.719 | 55.69<br>2.193 | 34.92<br>1.375 | 17.04<br>.671 | 38.10<br>1.500 | 6.19<br>.244 | 3.81<br>.150 | 12.81<br>.504 | 2.48<br>.098 |



|                                                 |  |            |                |                |                |                |                |               |                |
|-------------------------------------------------|--|------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------|
| jam nut receptacle                              |  | shell size | A              | C Max          | D Max          | G              | L Max          | M Max         | P              |
| 07 H   HE 301 B 07 H<br>MS 3114 H<br>VG 95328 F |  | 08         | 12.03<br>.474  | 24.07<br>.948  | 27.37<br>1.078 | 14.26<br>.561  | 20.53<br>.808  | 17.93<br>.706 | 13.33<br>.525  |
|                                                 |  | 10         | 15.01<br>.591  | 27.22<br>1.072 | 30.57<br>1.204 | 17.43<br>.686  | 20.53<br>.808  | 17.93<br>.706 | 16.51<br>.650  |
|                                                 |  | 12         | 19.07<br>.751  | 32.00<br>1.260 | 35.32<br>1.391 | 22.19<br>.874  | 20.53<br>.808  | 17.93<br>.706 | 20.63<br>.812  |
|                                                 |  | 14         | 22.25<br>.876  | 35.17<br>1.385 | 38.50<br>1.516 | 25.36<br>.998  | 20.53<br>.808  | 17.93<br>.706 | 23.78<br>.936  |
|                                                 |  | 16         | 25.42<br>1.001 | 38.35<br>1.510 | 41.67<br>1.641 | 28.54<br>1.124 | 20.53<br>.808  | 17.93<br>.706 | 26.93<br>1.060 |
|                                                 |  | 18         | 28.60<br>1.126 | 41.52<br>1.635 | 44.85<br>1.766 | 31.71<br>1.248 | 20.53<br>.808  | 17.93<br>.706 | 30.10<br>1.185 |
|                                                 |  | 20         | 31.77<br>1.251 | 46.27<br>1.822 | 49.62<br>1.954 | 34.89<br>1.374 | 26.10<br>1.028 | 22.70<br>.894 | 33.28<br>1.310 |
|                                                 |  | 22         | 34.95<br>1.376 | 49.47<br>1.948 | 52.77<br>2.078 | 38.06<br>1.498 | 26.10<br>1.028 | 22.70<br>.894 | 36.45<br>1.435 |
|                                                 |  | 24         | 38.12<br>1.501 | 52.62<br>2.072 | 55.97<br>2.204 | 41.24<br>1.624 | 26.93<br>1.060 | 23.54<br>.927 | 39.63<br>1.560 |



|                                              |  |            |                |                |              |               |                |               |              |
|----------------------------------------------|--|------------|----------------|----------------|--------------|---------------|----------------|---------------|--------------|
| solder fixing receptacle                     |  | shell size | A              | D Max          | H Max        | F             | G Max          | M Max         | N Max        |
| IH   HE 301 B 1 H<br>MS 3113 H<br>VG 95328 G |  | 08         | 12.03<br>.474  | 16.40<br>.646  | 8.19<br>.322 | 13.84<br>.545 | 14.27<br>.562  | 10.69<br>.421 | 0.76<br>.030 |
|                                              |  | 10         | 15.01<br>.591  | 19.40<br>.764  | 8.19<br>.322 | 13.84<br>.545 | 17.06<br>.672  | 10.69<br>.421 | 0.76<br>.030 |
|                                              |  | 12         | 19.07<br>.751  | 21.80<br>.858  | 8.19<br>.322 | 13.84<br>.545 | 19.83<br>.781  | 10.69<br>.421 | 0.76<br>.030 |
|                                              |  | 14         | 22.25<br>.876  | 25.00<br>.984  | 8.19<br>.322 | 13.84<br>.545 | 23.00<br>.906  | 10.69<br>.421 | 0.76<br>.030 |
|                                              |  | 16         | 25.42<br>1.001 | 28.10<br>1.106 | 8.19<br>.322 | 13.84<br>.545 | 26.18<br>1.031 | 10.69<br>.421 | 0.76<br>.030 |
|                                              |  | 18         | 28.60<br>1.126 | 31.30<br>1.232 | 8.19<br>.322 | 13.84<br>.545 | 29.36<br>1.156 | 10.69<br>.421 | 0.76<br>.030 |
|                                              |  | 20         | 31.77<br>1.251 | 33.70<br>1.327 | 8.16<br>.321 | 15.42<br>.607 | 31.74<br>1.250 | 12.32<br>.485 | 0.76<br>.030 |
|                                              |  | 22         | 34.95<br>1.376 | 36.90<br>1.453 | 8.16<br>.321 | 16.23<br>.639 | 34.92<br>1.375 | 12.32<br>.485 | 0.76<br>.030 |
|                                              |  | 24         | 38.12<br>1.501 | 40.10<br>1.579 | 7.36<br>.290 | 17.04<br>.671 | 38.10<br>1.500 | 13.12<br>.517 | 0.76<br>.030 |



# 26482 Series I Solder Connectors



## Wire wrap and straight spills connectors

### Square flange receptacle type 02 E

|            |                | wire wrap version       |              |                |                |                |               |              |               |              |  |
|------------|----------------|-------------------------|--------------|----------------|----------------|----------------|---------------|--------------|---------------|--------------|--|
|            |                | straight spills version |              |                |                |                |               |              |               |              |  |
| shell size | A              | B Max                   | C Max        | Ø D Max        | E              | F Max          | H             | J            | L Max         | T            |  |
| 08         | 12.03<br>.474  | 11.70<br>.461           | 1.32<br>.052 | 10.84<br>.427  | 15.09<br>.594  | 20.99<br>.826  | 12.42<br>.489 | 3.13<br>.123 | 20.50<br>.807 | 9.46<br>.372 |  |
| 10         | 15.01<br>.591  | 11.70<br>.461           | 1.32<br>.052 | 13.99<br>.551  | 18.26<br>.719  | 24.19<br>.952  | 12.42<br>.489 | 3.13<br>.123 | 20.50<br>.807 | 9.46<br>.372 |  |
| 12         | 19.07<br>.751  | 11.70<br>.461           | 1.32<br>.052 | 17.37<br>.684  | 20.62<br>.812  | 26.54<br>1.045 | 12.42<br>.489 | 3.13<br>.123 | 20.50<br>.807 | 9.46<br>.372 |  |
| 14         | 22.25<br>.876  | 11.70<br>.461           | 1.32<br>.052 | 20.57<br>.810  | 23.00<br>.906  | 28.89<br>1.137 | 12.42<br>.489 | 3.13<br>.123 | 20.50<br>.807 | 9.46<br>.372 |  |
| 16         | 25.42<br>1.001 | 11.70<br>.461           | 1.32<br>.052 | 23.62<br>.930  | 24.61<br>.969  | 31.29<br>1.232 | 12.42<br>.489 | 3.13<br>.123 | 20.50<br>.807 | 9.46<br>.372 |  |
| 18         | 28.60<br>1.126 | 11.70<br>.461           | 1.32<br>.052 | 26.69<br>1.051 | 26.97<br>1.062 | 33.69<br>1.326 | 12.42<br>.489 | 3.13<br>.123 | 20.50<br>.807 | 9.46<br>.372 |  |
| 20         | 31.77<br>1.251 | 14.35<br>.565           | 2.15<br>.085 | 29.89<br>1.177 | 29.36<br>1.156 | 36.89<br>1.452 | 10.69<br>.421 | 3.13<br>.123 | 23.80<br>.937 | 7.76<br>.306 |  |
| 22         | 34.95<br>1.376 | 14.35<br>.565           | 2.15<br>.085 | 33.04<br>1.301 | 31.75<br>1.250 | 39.99<br>1.574 | 10.69<br>.421 | 3.13<br>.123 | 23.80<br>.937 | 7.76<br>.306 |  |
| 24         | 38.12<br>1.501 | 15.20<br>.598           | 2.15<br>.085 | 36.24<br>1.427 | 34.92<br>1.375 | 43.15<br>1.699 | 10.69<br>.421 | 3.81<br>.150 | 23.80<br>.937 | 7.76<br>.306 |  |

### Jam nut receptacle type 07 A

|            |                | wire wrap version       |              |                |               |                |                |                |              |  |
|------------|----------------|-------------------------|--------------|----------------|---------------|----------------|----------------|----------------|--------------|--|
|            |                | straight spills version |              |                |               |                |                |                |              |  |
| shell size | A              | B Max                   | C Max        | F Max          | H             | L Max          | P Max          | S Max          | T            |  |
| 08         | 12.03<br>.474  | 17.90<br>.705           | 2.64<br>.104 | 26.94<br>1.061 | 12.42<br>.489 | 20.64<br>.813  | 19.29<br>.759  | 23.94<br>.943  | 9.46<br>.372 |  |
| 10         | 15.01<br>.591  | 17.90<br>.705           | 2.64<br>.104 | 30.14<br>1.187 | 12.42<br>.489 | 20.64<br>.813  | 22.38<br>.881  | 26.95<br>1.061 | 9.46<br>.372 |  |
| 12         | 19.07<br>.751  | 17.90<br>.705           | 2.64<br>.104 | 34.94<br>1.376 | 12.42<br>.489 | 20.64<br>.813  | 27.13<br>1.068 | 31.74<br>1.250 | 9.46<br>.372 |  |
| 14         | 22.25<br>.876  | 17.90<br>.705           | 2.64<br>.104 | 38.04<br>1.498 | 12.42<br>.489 | 20.64<br>.813  | 30.33<br>1.194 | 34.94<br>1.376 | 9.46<br>.372 |  |
| 16         | 25.42<br>1.001 | 17.90<br>.705           | 2.64<br>.104 | 41.26<br>1.624 | 12.42<br>.489 | 20.64<br>.813  | 33.48<br>1.318 | 38.24<br>1.506 | 9.46<br>.372 |  |
| 18         | 28.60<br>1.126 | 17.90<br>.705           | 2.64<br>.104 | 44.44<br>1.750 | 12.42<br>.489 | 20.64<br>.813  | 36.68<br>1.444 | 41.34<br>1.628 | 9.46<br>.372 |  |
| 20         | 31.77<br>1.251 | 22.45<br>.884           | 3.44<br>.135 | 49.14<br>1.935 | 8.64<br>.340  | 25.99<br>1.023 | 39.83<br>1.568 | 46.04<br>1.813 | 8.49<br>.334 |  |
| 22         | 34.95<br>1.376 | 22.45<br>.884           | 3.44<br>.135 | 52.24<br>2.057 | 8.64<br>.340  | 25.99<br>1.023 | 43.03<br>1.694 | 49.24<br>1.939 | 8.49<br>.334 |  |
| 24         | 38.12<br>1.501 | 23.30<br>.917           | 3.44<br>.135 | 55.54<br>2.187 | 7.79<br>.307  | 26.84<br>1.057 | 46.18<br>1.818 | 52.74<br>2.076 | 7.79<br>.307 |  |

# 26482 Series I Solder Connectors



## Protective Caps

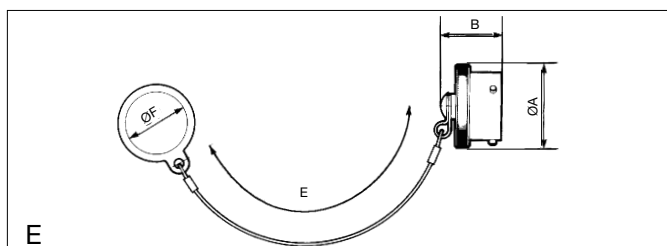
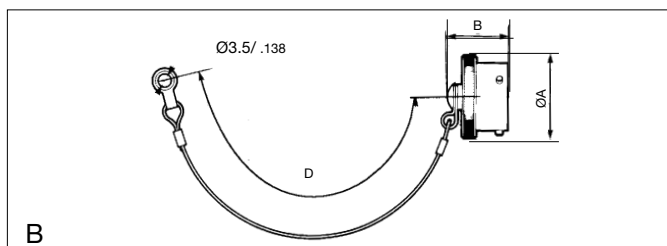
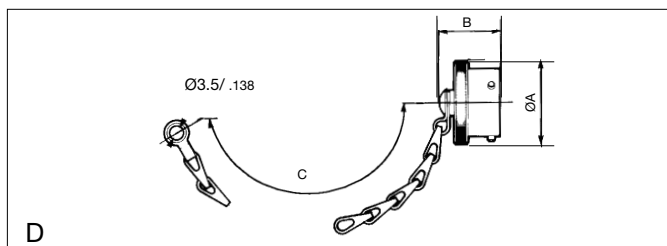
### Part numbers

| basic series                |                          |    |    |    |    |    |    |    | 8500 | 05 | ... |
|-----------------------------|--------------------------|----|----|----|----|----|----|----|------|----|-----|
| shell size                  | 8                        | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24   |    |     |
| part numbers for receptacle | 02                       | 03 | 04 | 05 | 27 | 06 | 07 | 08 | 09   |    |     |
| part numbers for plug       | 10                       | 11 | 12 | 13 | 28 | 14 | 15 | 16 | 17   |    |     |
| specification               | for cap type and plating |    |    |    |    |    |    |    |      |    |     |

### Type and plating

| Cap type                                             | receptacle cap      |                |        | plug cap            |               |                |        |
|------------------------------------------------------|---------------------|----------------|--------|---------------------|---------------|----------------|--------|
|                                                      | olive green cadmium | black anodized | nickel | olive green cadmium | white cadmium | black anodized | nickel |
| cap with chain and ring                              | D                   | 29 D           | 44 D   | D                   | 02 D          | 29 D           | 44 D   |
| cap with nylon cord and ring                         | B                   | 29 B           | 44 B   | B                   | 02 B          | 29 B           | 44 B   |
| cap with nylon cord and washer (shell 10, 12 and 14) | -                   | -              | -      | E                   | -             | -              | -      |
| cap with nylon cord and washer                       | H                   | -              | -      | -                   | -             | -              | -      |
| cap with chain and washer                            | J                   | -              | -      | -                   | -             | -              | -      |

### Caps for plug

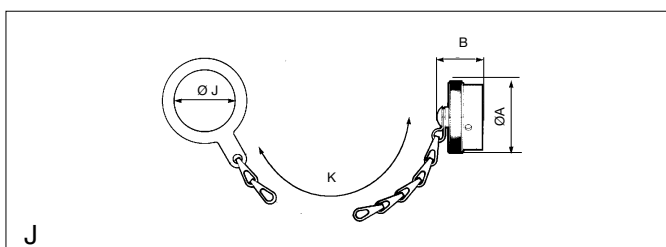
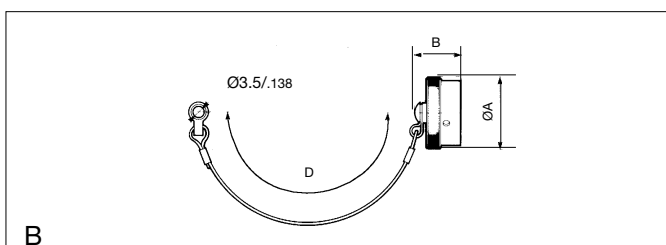
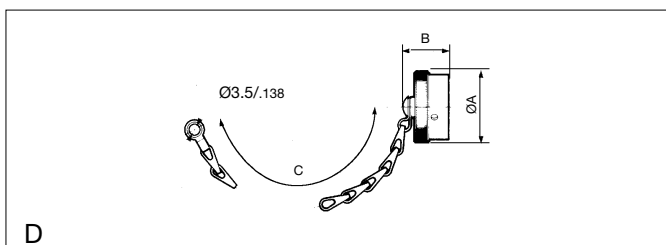


| shell size | Ø A<br>Maxi    | B<br>Maxi     | C               | D               | E               | Ø F           |
|------------|----------------|---------------|-----------------|-----------------|-----------------|---------------|
| 08         | 16.80<br>.661  | 19.84<br>.781 | 132.00<br>5.197 | 128.00<br>5.039 | -               | -             |
| 10         | 19.80<br>.780  | 19.84<br>.781 | 132.00<br>5.197 | 128.00<br>5.039 | 132.00<br>5.197 | 14.00<br>.551 |
| 12         | 23.90<br>.941  | 19.84<br>.781 | 148.00<br>5.827 | 148.00<br>5.827 | 148.00<br>5.827 | 17.60<br>.693 |
| 14         | 27.00<br>1.063 | 19.84<br>.781 | 148.00<br>5.827 | 148.00<br>5.827 | 148.00<br>5.827 | 20.80<br>.819 |
| 16         | 30.20<br>1.189 | 19.84<br>.781 | 148.00<br>5.827 | 148.00<br>5.827 | -               | -             |
| 18         | 33.40<br>1.315 | 19.84<br>.781 | 148.00<br>5.827 | 148.00<br>5.827 | -               | -             |
| 20         | 36.50<br>1.437 | 21.44<br>.844 | 168.00<br>6.614 | 153.00<br>6.024 | -               | -             |
| 22         | 39.80<br>1.567 | 21.44<br>.844 | 168.00<br>6.614 | 153.00<br>6.024 | -               | -             |
| 24         | 42.90<br>1.689 | 22.22<br>.875 | 168.00<br>6.614 | 153.00<br>6.024 | -               | -             |

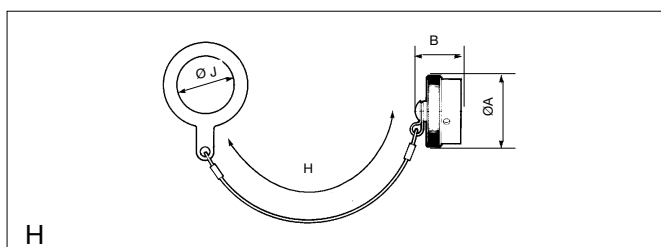
# 26482 Series I Solder Connectors



## Caps for receptacle



| shell size | Ø A Max        | B Max         | C               | D               | J Max          | H               | K               |
|------------|----------------|---------------|-----------------|-----------------|----------------|-----------------|-----------------|
| 08         | 19.00<br>.748  | 21.44<br>.844 | 84.00<br>3.307  | 77.00<br>3.031  | 14.80<br>.583  | 80.00<br>3.150  | 84.00<br>3.307  |
| 10         | 21.80<br>.858  | 21.44<br>.844 | 84.00<br>3.307  | 77.00<br>3.031  | 17.90<br>.705  | 80.00<br>3.150  | 84.00<br>3.307  |
| 12         | 26.10<br>1.028 | 21.44<br>.844 | 100.00<br>3.937 | 89.00<br>3.504  | 22.70<br>.894  | 90.00<br>3.543  | 100.00<br>3.937 |
| 14         | 29.30<br>1.154 | 21.44<br>.844 | 100.00<br>3.937 | 89.00<br>3.504  | 25.90<br>1.020 | 90.00<br>3.543  | 100.00<br>3.937 |
| 16         | 32.50<br>1.280 | 21.44<br>.844 | 100.00<br>3.937 | 89.00<br>3.504  | 29.00<br>1.142 | 90.00<br>3.543  | 100.00<br>3.937 |
| 18         | 35.30<br>1.390 | 21.44<br>.844 | 100.00<br>3.937 | 89.00<br>3.504  | 32.20<br>1.268 | 90.00<br>3.543  | 100.00<br>3.937 |
| 20         | 38.80<br>1.528 | 21.44<br>.844 | 116.00<br>4.567 | 102.00<br>4.016 | 35.40<br>1.394 | 110.00<br>4.331 | 116.00<br>4.567 |
| 22         | 42.00<br>1.654 | 21.44<br>.844 | 116.00<br>4.567 | 102.00<br>4.016 | 38.60<br>1.520 | 110.00<br>4.331 | 116.00<br>4.567 |
| 24         | 45.10<br>1.776 | 22.22<br>.875 | 116.00<br>4.567 | 102.00<br>4.016 | 41.70<br>1.642 | 110.00<br>4.331 | 116.00<br>4.567 |



## Tools

### Crimping pliers

| contact sizes | wire size |     | crimping tool                                                           | part numbers                                                         | locator |
|---------------|-----------|-----|-------------------------------------------------------------------------|----------------------------------------------------------------------|---------|
|               | mm²       | AWG |                                                                         |                                                                      |         |
| 20            | 0,93      | 18  | } 8465 (MS 3191-1)<br>8476-01 (M 22520 / 2-01)<br>8365 (M 22520 / 1-01) | MS 3191-20 A<br>8476-02 (M 22520 / 2-02)<br>8365-02 (M 22520 / 1-02) |         |
|               | 0,60      | 20  |                                                                         |                                                                      |         |
|               | 0,38      | 22  |                                                                         |                                                                      |         |
|               | 0,21      | 24  |                                                                         |                                                                      |         |
| 16            | 1,91      | 14  | } 8465 (MS 3191-1)<br>8365 (M 22520 / 1-01)                             | MS 3191-16 A<br>8365-02 (M 22520 / 1-02)                             |         |
|               | 1,34      | 16  |                                                                         |                                                                      |         |
|               | 0,93      | 18  |                                                                         |                                                                      |         |

## Insertion and extraction tools

| contact type | contact size | part numbers          |                  |
|--------------|--------------|-----------------------|------------------|
|              |              | insertion tools       | extraction tools |
| crimp        | 20           | 8500-29 B *           | 8500-36 A        |
|              | 16           | 8500-39               | 8500-38 A        |
| for wire cap | 20           | 8500-31               | 8500-31          |
|              | 16           | or 8500-39<br>8500-37 | 8500-37          |

Spare tube for tool : - 8500-36 A PN : 8500-1163  
- 8500-38 A PN : 8500-1184

\* Except 8-2, 8-3, 8-4, 12-14 contact layouts :  
insertion tool 8500-93B

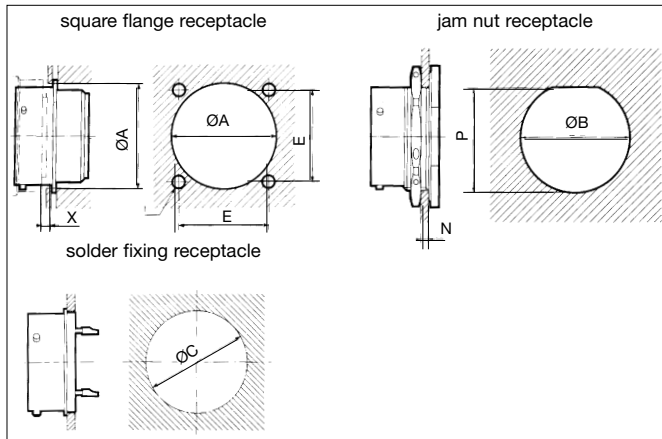
## Filler plug

| contact size | part numbers               | colour | profile |
|--------------|----------------------------|--------|---------|
| 20           | 8500-4144                  | grey   |         |
| 16           | 8500-479                   | blue   |         |
| 20           | 8500-4144 A (MS 3187 A 20) | red    |         |
| 16           | 8500-4267 (MS 3187-16)     | blue   |         |

# 26482 Series I Solder Connectors



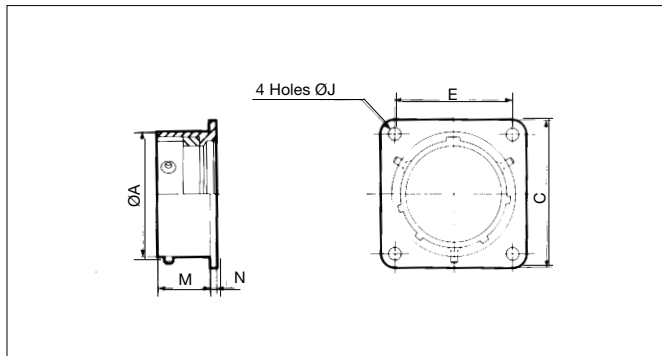
## Panel cut-out



| shell size | A              | B              | C              | E              | J            | N            |              | P              | X min        |
|------------|----------------|----------------|----------------|----------------|--------------|--------------|--------------|----------------|--------------|
|            |                |                |                |                |              | min          | Max          |                |              |
| 08         | 15.55<br>.612  | 14.60<br>.575  | 14.70<br>.579  | 15.10<br>.594  | 3.15<br>.124 | 1.57<br>.062 | 3.17<br>.125 | 13.75<br>.541  | 2.90<br>.114 |
| 10         | 18.80<br>.740  | 17.75<br>.699  | 17.50<br>.689  | 18.26<br>.719  | 3.15<br>.124 | 1.57<br>.062 | 3.17<br>.125 | 16.95<br>.667  | 2.90<br>.114 |
| 12         | 22.15<br>.872  | 22.50<br>.886  | 20.20<br>.795  | 20.62<br>.812  | 3.15<br>.124 | 1.57<br>.062 | 3.17<br>.125 | 21.50<br>.846  | 2.90<br>.114 |
| 14         | 25.30<br>.996  | 25.70<br>1.012 | 23.40<br>.921  | 23.00<br>.906  | 3.15<br>.124 | 1.57<br>.062 | 3.17<br>.125 | 24.20<br>.953  | 2.90<br>.114 |
| 16         | 28.45<br>1.120 | 28.85<br>1.136 | 26.60<br>1.047 | 24.60<br>.969  | 3.15<br>.124 | 1.57<br>.062 | 3.17<br>.125 | 27.35<br>1.077 | 2.90<br>.114 |
| 18         | 31.65<br>1.246 | 32.05<br>1.262 | 29.80<br>1.173 | 26.97<br>1.062 | 3.15<br>.124 | 1.57<br>.062 | 3.17<br>.125 | 30.55<br>1.203 | 2.90<br>.114 |
| 20         | 34.80<br>1.370 | 35.20<br>1.386 | 32.10<br>1.264 | 29.36<br>1.156 | 3.15<br>.124 | 1.57<br>.062 | 6.35<br>.250 | 33.70<br>1.327 | 5.50<br>.217 |
| 22         | 38.00<br>1.496 | 38.40<br>1.512 | 35.30<br>1.390 | 31.75<br>1.250 | 3.15<br>.124 | 1.57<br>.062 | 6.35<br>.250 | 36.90<br>1.453 | 5.50<br>.217 |
| 24         | 41.20<br>1.622 | 41.55<br>1.636 | 38.40<br>1.512 | 34.92<br>1.375 | 3.73<br>.147 | 1.57<br>.062 | 6.35<br>.250 | 40.05<br>1.577 | 5.50<br>.217 |

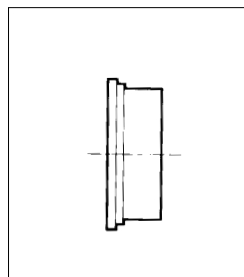
## Accessories

### Dummy receptacle



| Shell size | A              | C Max          | E              | J            | M Max         | N Max        |
|------------|----------------|----------------|----------------|--------------|---------------|--------------|
| 08         | 12.03<br>.474  | 20.99<br>.826  | 15.09<br>.594  | 3.13<br>.123 | 11.70<br>.461 | 1.32<br>.052 |
| 10         | 15.01<br>.591  | 24.19<br>.952  | 18.26<br>.719  | 3.13<br>.123 | 11.70<br>.461 | 1.32<br>.052 |
| 12         | 19.07<br>.751  | 26.54<br>1.045 | 20.62<br>.812  | 3.13<br>.123 | 11.70<br>.461 | 1.32<br>.052 |
| 14         | 22.25<br>.876  | 28.89<br>1.137 | 23.00<br>.906  | 3.13<br>.123 | 11.70<br>.461 | 1.32<br>.052 |
| 16         | 25.42<br>1.001 | 31.29<br>1.232 | 24.61<br>.969  | 3.13<br>.123 | 11.70<br>.461 | 1.32<br>.052 |
| 18         | 28.60<br>1.126 | 33.69<br>1.326 | 26.97<br>1.062 | 3.13<br>.123 | 11.70<br>.461 | 1.32<br>.052 |
| 20         | 31.77<br>1.251 | 36.89<br>1.452 | 29.36<br>1.156 | 3.13<br>.123 | 14.35<br>.565 | 2.15<br>.085 |
| 22         | 34.95<br>1.376 | 39.99<br>1.574 | 31.75<br>1.250 | 3.13<br>.123 | 14.35<br>.565 | 2.15<br>.085 |
| 24         | 38.12<br>1.501 | 43.15<br>1.699 | 34.92<br>1.375 | 3.81<br>.150 | 15.20<br>.598 | 2.15<br>.085 |

### Plastic protective caps for receptacle and plug



| Shell size | caps for receptacle | caps for plug |
|------------|---------------------|---------------|
| 08         | 8500-5585A          | 8500-5594     |
| 10         | 8500-5586A          | 8500-5595     |
| 12         | 8500-5587A          | 8500-5596     |
| 14         | 8500-5588A          | 8500-5597     |
| 16         | 8500-5589A          | 8500-5598     |
| 18         | 8500-5590A          | 8500-5599     |
| 20         | 8500-5591A          | 8500-5600     |
| 22         | 8500-5592A          | 8500-5601     |
| 24         | 8500-5593A          | 8500-5602     |

## Gaskets

| Shell size | gaskets for square flange receptacle |           | gaskets for jam nut receptacle |                                 |
|------------|--------------------------------------|-----------|--------------------------------|---------------------------------|
|            | neoprene                             | fairprene | neoprene                       | viton (for hermetic receptacle) |
| 8          | 8500-275                             | 8500-4164 | 3330102                        | 3330675                         |
| 10         | 8500-276                             | 8500-4165 | 3330103                        | 3330670                         |
| 12         | 8500-277                             | 8500-4166 | 3330104                        | 3330671                         |
| 14         | 8500-278                             | 8500-4167 | 3330105                        | 3330672                         |
| 16         | 8500-283                             | 8500-4168 | 3330106                        | 3331048                         |
| 18         | 8500-279                             | 8500-4169 | 3330107                        | 3331049                         |
| 20         | 8500-280                             | 8500-4170 | 3330108                        | 3331050                         |
| 22         | 8500-281                             | 8500-4171 | 3330109                        | 3331051                         |
| 24         | 8500-282                             | 8500-4172 | 3330110                        | 3331052                         |

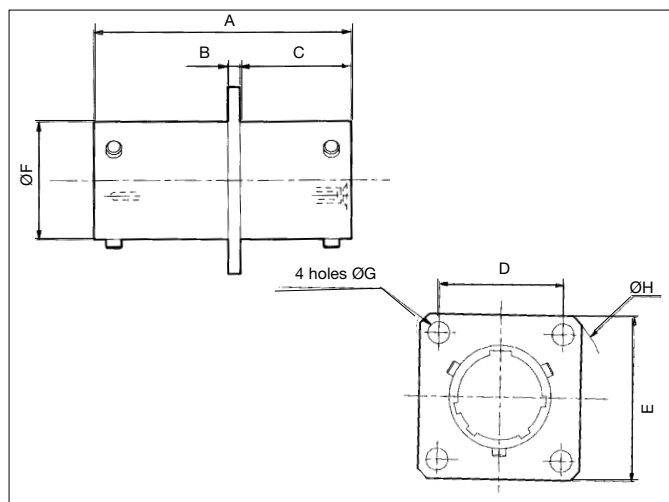
## Re-usable fixing plate

Two, three or four-holes self-locking fixing-plates are available at SHTP. See page 126.

# 26482 Series I Solder Connectors



## Male - female square flange through bulkhead receptacle

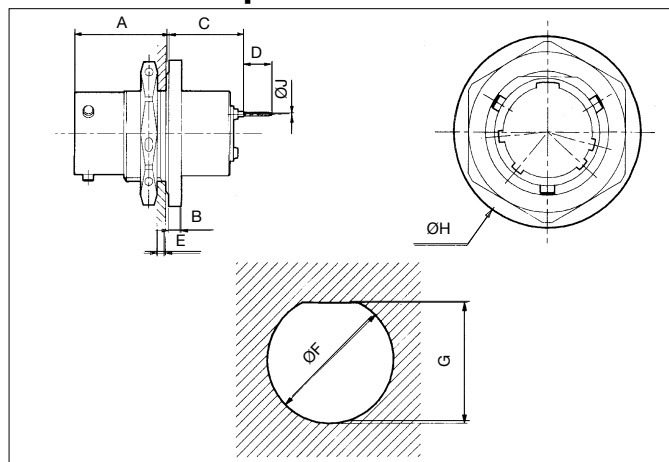


| shell size | A              | B            | C             | D              | E              | F              | G            | H              |
|------------|----------------|--------------|---------------|----------------|----------------|----------------|--------------|----------------|
| 08         | 33.20<br>1.307 | 1.60<br>.063 | 14.30<br>.563 | 15.10<br>.594  | 20.60<br>.811  | 12.00<br>.472  | 3.20<br>.126 | 27.30<br>1.075 |
| 10         | 33.20<br>1.307 | 1.60<br>.063 | 14.30<br>.563 | 18.30<br>.720  | 23.80<br>.937  | 15.00<br>.591  | 3.20<br>.126 | 31.80<br>1.252 |
| 12         | 33.20<br>1.307 | 1.60<br>.063 | 14.30<br>.563 | 20.60<br>.811  | 26.20<br>1.031 | 19.05<br>.750  | 3.20<br>.126 | 35.10<br>1.382 |
| 14         | 33.20<br>1.307 | 1.60<br>.063 | 14.30<br>.563 | 23.00<br>.906  | 28.60<br>1.126 | 22.23<br>.875  | 3.20<br>.126 | 38.50<br>1.516 |
| 16         | 33.20<br>1.307 | 1.60<br>.063 | 14.30<br>.563 | 24.60<br>.969  | 30.90<br>1.217 | 25.40<br>1.000 | 3.20<br>.126 | 41.30<br>1.626 |
| 18         | 33.20<br>1.307 | 1.60<br>.063 | 14.30<br>.563 | 27.00<br>1.063 | 33.30<br>1.311 | 28.60<br>1.126 | 3.20<br>.126 | 44.70<br>1.760 |
| 20         | 36.40<br>1.433 | 2.40<br>.094 | 17.50<br>.689 | 29.40<br>1.157 | 36.50<br>1.437 | 31.75<br>1.250 | 3.20<br>.126 | 49.10<br>1.933 |
| 21         | 36.40<br>1.433 | 2.40<br>.094 | 17.50<br>.689 | 30.60<br>1.205 | 38.50<br>1.516 | 33.85<br>1.333 | 3.20<br>.126 | 51.20<br>2.016 |
| 22         | 36.40<br>1.433 | 2.40<br>.094 | 17.50<br>.689 | 31.80<br>1.252 | 39.70<br>1.563 | 34.90<br>1.374 | 3.20<br>.126 | 53.10<br>2.091 |
| 24         | 36.40<br>1.433 | 2.40<br>.094 | 17.50<br>.689 | 34.90<br>1.374 | 42.90<br>1.689 | 38.10<br>1.500 | 4.20<br>.165 | 57.30<br>2.256 |

### Part numbers

|                |                        |    |    |    |   |
|----------------|------------------------|----|----|----|---|
| basic series   | EC 52 B                | ** | ** | PS | * |
| shell size     | 851 range              |    |    |    |   |
| contact layout | please consult us      |    |    |    |   |
| contact type   | P - male<br>S - female |    |    |    |   |
| polarization   | N, W, X, Y, Z          |    |    |    |   |

## Jam nut receptacle with front release straight spills



| shell size | A             | B            | C             | D            | E Max        | E min        | F              | G              | H              | J           |
|------------|---------------|--------------|---------------|--------------|--------------|--------------|----------------|----------------|----------------|-------------|
| 08         | 17.25<br>.679 | 2.30<br>.091 | 13.68<br>.539 | 5.00<br>.197 | 5.00<br>.197 | 1.57<br>.062 | 14.60<br>.575  | 23.15<br>.911  | 23.15<br>.911  | .60<br>.024 |
| 10         | 17.25<br>.679 | 2.30<br>.091 | 13.68<br>.539 | 5.00<br>.197 | 5.00<br>.197 | 1.57<br>.062 | 17.70<br>.697  | 16.80<br>.661  | 26.45<br>1.041 | .60<br>.024 |
| 12         | 17.25<br>.679 | 2.30<br>.091 | 13.68<br>.539 | 5.00<br>.197 | 5.00<br>.197 | 1.57<br>.062 | 22.70<br>.894  | 20.90<br>.823  | 31.20<br>1.228 | .60<br>.024 |
| 14         | 17.25<br>.679 | 2.30<br>.091 | 13.68<br>.539 | 5.00<br>.197 | 5.00<br>.197 | 1.57<br>.062 | 25.70<br>1.012 | 24.10<br>.949  | 34.40<br>1.354 | .60<br>.024 |
| 16         | 17.25<br>.679 | 2.30<br>.091 | 13.68<br>.539 | 5.00<br>.197 | 5.00<br>.197 | 1.57<br>.062 | 28.80<br>1.134 | 27.20<br>1.071 | 37.55<br>1.478 | .60<br>.024 |
| 18         | 17.25<br>.679 | 2.30<br>.091 | 13.68<br>.539 | 5.00<br>.197 | 5.00<br>.197 | 1.57<br>.062 | 32.00<br>1.260 | 30.40<br>1.197 | 40.75<br>1.604 | .60<br>0.24 |
| 20         | 18.85<br>.742 | 2.50<br>.098 | 13.79<br>.543 | 5.00<br>.197 | 6.60<br>.260 | 1.57<br>.062 | 35.20<br>1.386 | 33.60<br>1.323 | 45.50<br>1.791 | .60<br>.024 |
| 22         | 18.85<br>.742 | 2.50<br>.098 | 13.79<br>.543 | 5.00<br>.197 | 6.60<br>.260 | 1.57<br>.062 | 38.40<br>1.512 | 36.80<br>1.449 | 48.70<br>1.917 | .60<br>.024 |
| 24         | 18.85<br>.742 | 2.50<br>.098 | 13.79<br>.543 | 5.00<br>.197 | 5.90<br>.232 | 1.57<br>.062 | 41.50<br>1.634 | 39.90<br>1.571 | 51.85<br>2.041 | .60<br>.024 |

### Part numbers

|                             |                                            |     |    |    |   |   |        |
|-----------------------------|--------------------------------------------|-----|----|----|---|---|--------|
| basic series                | 851                                        | 07A | ** | ** | P | * | SN0378 |
| shell type                  | 07A - jam nut receptacle without backshell |     |    |    |   |   |        |
| shell size                  | 851 range                                  |     |    |    |   |   |        |
| contact layout              | consult SHTP                               |     |    |    |   |   |        |
| contact type                | P - male                                   |     |    |    |   |   |        |
| polarization                |                                            |     |    |    |   |   |        |
| manufactures specifications |                                            |     |    |    |   |   |        |

# 26482 Series I Solder Connectors



## Push-pull locking plug

### General characteristics

- Locking : by pushing on the coupling nut
- Unlocking : by pulling a lanyard
- Mounted : on all 851 receptacles
- Layouts and crimp solder contacts : (see pages 7 and 11)
- Other characteristics : (see page 6)

### Ordering information - Environmental connectors

|                                                                |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
|----------------------------------------------------------------|------------|------------------------------------------------|-----------------------------------------------------------------------------|------|---|----|------|---|---|----|-----|
| basic series                                                   |            | crimp version                                  | 856                                                                         | - 06 | R | •• | - •• | P | • | 50 | - • |
|                                                                |            | solder version                                 | 856                                                                         | - 06 | E | •• | - •• | P | • | 50 | - • |
| shell type                                                     |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
|                                                                | 06         | -                                              | plug for use with straight backshell                                        |      |   |    |      |   |   |    |     |
|                                                                | 08         | -                                              | plug for use with 90° backshell                                             |      |   |    |      |   |   |    |     |
| backshell type                                                 |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
|                                                                | R/Ebacknut |                                                |                                                                             |      |   |    |      |   |   |    |     |
|                                                                | RC/EC      | -                                              | straitght cable clamp                                                       |      |   |    |      |   |   |    |     |
|                                                                | RA/A       | -                                              | straight adaptor                                                            |      |   |    |      |   |   |    |     |
|                                                                | RP/P       | -                                              | straight backshell for potting                                              |      |   |    |      |   |   |    |     |
|                                                                | RM/M       | -                                              | straitght removable backshell for heatshrink sleeving                       |      |   |    |      |   |   |    |     |
|                                                                | RT/T       | -                                              | spécification 38 or 42                                                      |      |   |    |      |   |   |    |     |
|                                                                |            |                                                | straight removable backshell for screen termination and heatshrink sleeving |      |   |    |      |   |   |    |     |
|                                                                | RC/EC      | -                                              | 90° cable clamp                                                             |      |   |    |      |   |   |    |     |
|                                                                | RP/P       | -                                              | 90° backshell for potting                                                   |      |   |    |      |   |   |    |     |
| shell size                                                     |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
| 8 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24                      |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
| contact layout                                                 |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
| see table p ?                                                  |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
| contact type                                                   |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
| P = male - S = female                                          |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
| orientation                                                    |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
| normal (not included in part number) w, x, y, z, see table p ? |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
| obligatory suffix                                              |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
| specification                                                  |            |                                                |                                                                             |      |   |    |      |   |   |    |     |
|                                                                | 07         | olive-green cadmium plate (solder version)     |                                                                             |      |   |    |      |   |   |    |     |
|                                                                | 08         | olive-green cadmium plate (crimp version)      |                                                                             |      |   |    |      |   |   |    |     |
|                                                                | 09         | white cadmium plate (crimp and solder version) |                                                                             |      |   |    |      |   |   |    |     |

# 26482 Series I

## Solder Connectors



| Dimensions                       | Shell size       | 8     | 10    | 12    | 14    | 16    | 18    | 20    | 22    | 24    |
|----------------------------------|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                  | A                | 19,50 | 22,80 | 27,30 | 30,80 | 34,00 | 37,00 | 41,00 | 44,50 | 49,20 |
|                                  | B                | 24,95 | 28,75 | 32,55 | 36,05 | 39,05 | 42,05 | 45,80 | 49,20 | 53,45 |
| 06 R                             | E                | 32,00 | 32,00 | 32,00 | 32,00 | 32,00 | 32,00 | 31,80 | 31,80 | 31,80 |
| 06 RC                            | E                | 47,30 | 47,30 | 47,30 | 47,30 | 50,50 | 50,50 | 49,90 | 49,90 | 49,90 |
| 06 RP                            | E                | 42,10 | 42,10 | 42,10 | 42,10 | 42,10 | 45,40 | 49,80 | 49,80 | 49,80 |
| 06 RA                            | E                | 41,00 | 41,00 | 41,00 | 41,00 | 41,00 | 41,00 | 43,00 | 43,00 | 43,20 |
| 06 RM                            | E                | 50,00 | 50,00 | 50,00 | 50,00 | 50,00 | 50,00 | 51,70 | 51,70 | 51,70 |
| 06 RT<br>spécifications 38 or 42 | E                | 50,00 | 50,00 | 50,00 | 50,00 | 50,00 | 50,00 | 51,70 | 51,70 | 51,70 |
| 08 RC                            | E                | 50,10 | 52,60 | 54,90 | 58,50 | 60,80 | 65,00 | 68,80 | 71,20 | 76,20 |
|                                  | D <sub>max</sub> | 16,00 | 18,00 | 19,50 | 22,00 | 23,50 | 25,00 | 26,50 | 28,00 | 31,00 |
| 08 RP                            | E                | 40,70 | 44,90 | 47,00 | 49,20 | 50,60 | 51,80 | 53,10 | 54,50 | 57,90 |
|                                  | D <sub>max</sub> | 11,00 | 14,35 | 15,90 | 16,30 | 19,30 | 20,60 | 21,90 | 23,50 | 30,15 |

Note : for backshells dimensions refer to values given in preceding pages

# 26482 Series I

## Solder Connectors



### 8F51 filter connector

#### Overview

These connectors are derived from standard specifications MIL-C-26482 G series 1 - NFC 93422 (HE 301 B) - VG 95328.

They are intermountable and intermateable with standard connectors.

Different types of filters may be fitted in these connectors to eliminate RFI/EMI in different frequency ranges.

Built-in tubular filter offers following advantages :

- rational filtering on interferences at electronic equipment input or output,
- case screen-shielding efficiency is maintained,
- cost and volume saving as compared with the use of discrete filters wired down the line,
- 4 types of filter contacts are available,
- a wide choice of combinations of filter, unfiltered and grounded contacts.

An adaptor version is also a simple technique to equip existing systems which do not incorporate filters.

#### Electrical characteristics

- Max. current rating per contact : 3 A or 7 A depending on contact type
- Max. operating voltage : 100 or 200 V depending on filter
- Attenuation for HF filter contact : 35 dB min between 40 and 1000 MHz
- Attenuation for LF filter contact : 35 dB min between 10 and 1000 MHz

For this product, consult our **FILTER CONNECTOR** department.

### Cadmium free plating

SOURIAU propose a 851 connector with cadmium free black zinc-nickel plating. This plating has been introduced in accordance with European directive 76/769 EEC.

#### Reason :

- Reduction in level of heavy metal pollutants produced by cadmium.
- Reduction in health associated with the corrosive by products of cadmium.

#### Characteristics :

- Mechanical
  - shell : aluminium alloy
  - plating : zinc-nickel
- Electrical
  - shell continuity :  $\leq 2.5 \text{ m}\Omega$
- Environmental
  - salt spray : 200 hours

#### Part numbers :

- Solder version 851 00 E 8-3A P.54 zinc-nickel plating
- Crimp version 851 00 R 8-3A P.54 zinc-nickel plating

\* See part numbers system

- page 8 (solder and crimp version)
- page 10 (straight spills and wire-wrap versions)

#### This plating is available for shell type

- 00 : square flange receptacle accepting backshells
- 02 : square flange receptacle not accepting backshells
- 07 : jam nut receptacle accepting backshell
- 07A : jam nut receptacle not accepting backshells
- 06 : plug for use without straight backshell
- 36 : screened plug for use with straight backshells

Backshells, please consult us.

# 26482 Series I Solder Connectors



- **Notes:**



## Push Pull Connectors

- Rapid

- Secure

- High Performance

# Push-Pull connectors



## Introduction

This catalogue presents the push-pull connectors ranges for industrial applications.

These products are particularly suitable for high reliability and high quality applications where a simple yet fast method to connect/disconnect is required. Also suitable for high endurance and ease of operation in very limited spaces. The aesthetics of the product allows for perfect integration on front panel equipments.

SOURIAU offers 3 main series of metallic circular connectors :

- **JBX series** : basic push-pull series for signal transmission
- **JKX series** : environmental version of the JBX series sealed to IP68
- **JDX series** : environmentally sealed. Breakaway version.

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All dimensions are in mm



# Where and Why **push-pull ?**

**Medical**



**Professional audio-video**



- Extremely fast and easy to use
- A thousand matings/unmatings.
- Enhanced appearance to add value to equipment
- Space saving

**GPS**



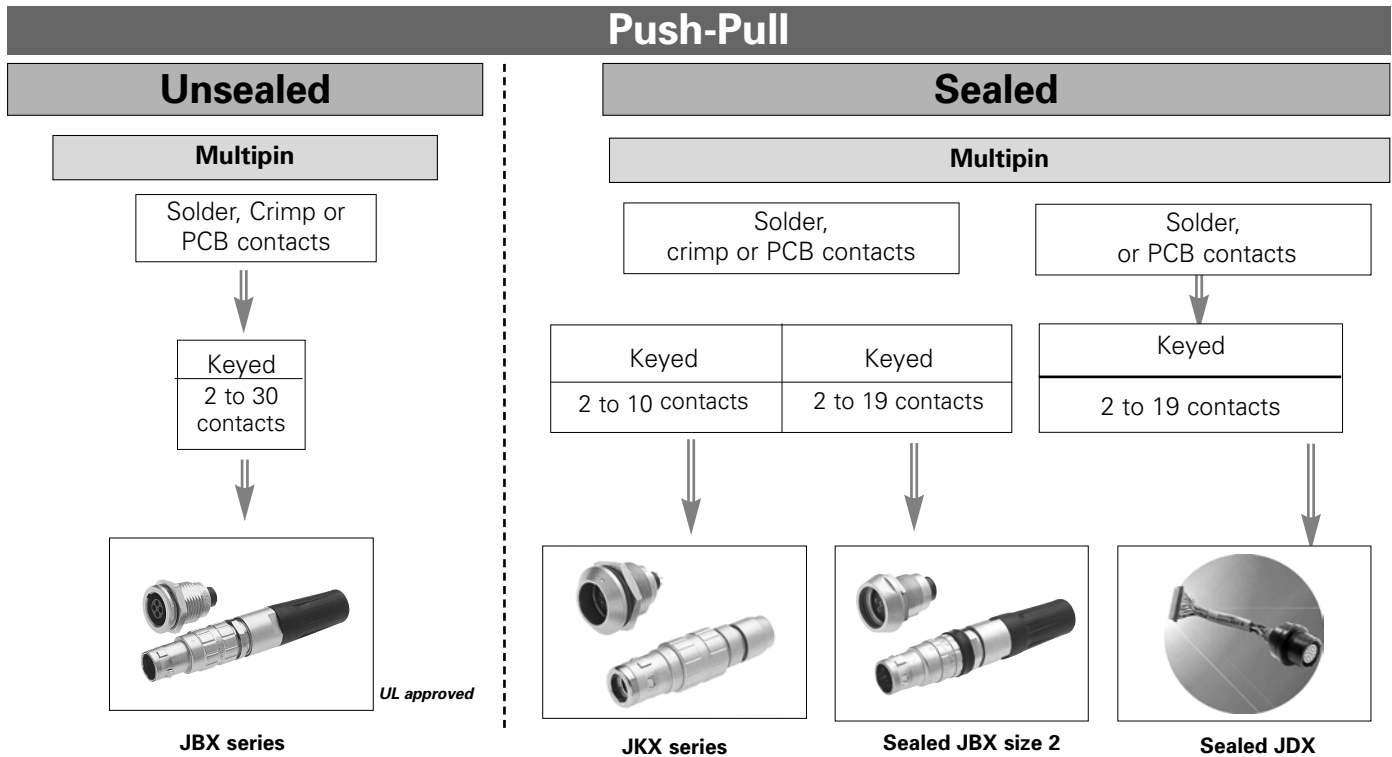
**Instrumentation**



**Telecommunications**



# Selection Guide



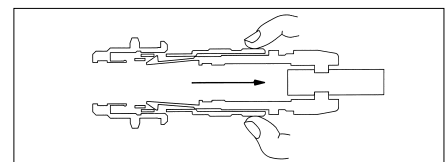
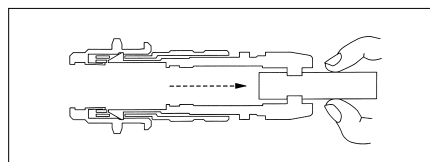
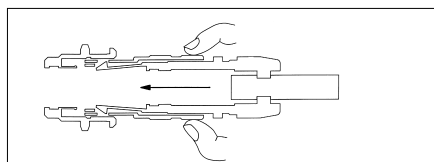
|                    |                                     |                                     |                                    |                                    |
|--------------------|-------------------------------------|-------------------------------------|------------------------------------|------------------------------------|
| Shell material     | Brass                               | Brass                               | Brass                              | Brass and Aluminum                 |
| Insulator material | PEEK                                | PEEK                                | PEEK                               | PEEK                               |
| Shielding          | Shielded (55 dB up to 100 MHz)      | Shielded (55 dB up to 100 MHz)      | Shielded (55 dB up to 100 MHz)     | Shielded (35 dB up to 1GHz)        |
| Endurance          | > 1000 cycles                       | > 1000 cycles                       | > 1000 cycles                      | > 2500 cycles                      |
| Current rating     | up to 30 A                          | up to 15 A                          | up to 30 A                         | up to 30 A                         |
| Temperature range  | - 40°C ; + 125°C (- 58°F ; + 257°F) | - 40°C ; + 125°C (- 58°F ; + 257°F) | - 40°C ; +125°C (- 40°F ; + 257°F) | - 40°C ; +125°C (- 40°F ; + 257°F) |
| Protection index   | IP 40                               | IP 68 when mated                    | IP 67                              | IP 68 mated and unmated            |

## Push-pull locking system

The locking of the plug into the receptacle is achieved by a simple axial push on the outer shell.

Connection cannot be broken by pulling the cable or any other parts of the plug than the outer shell.

To unmate the plug from the receptacle, just pull axially the outer shell.



# Push Pull Connectors



## Key features

- Mechanically keyed : ensures correct polarisation and alignment.
- Contact layouts from 2 to 30 contacts.
- Wire gauges range from 30 AWG to 12 AWG.
- High contact density in a small space.
- Contact termination in either crimp, solder, PCB or right angle PCB contacts.



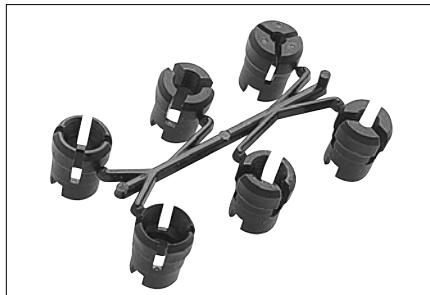
## User advantages

### Blister packaging



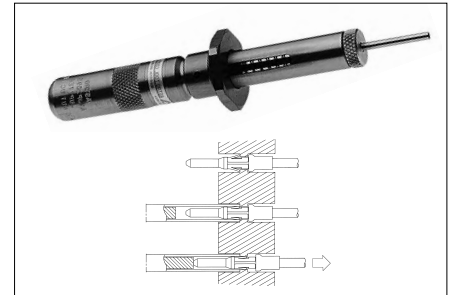
### 6-collet cluster

Allows a wide range of cable diameter applications for a single connector.



### Removable contacts

Available crimp versions allow easier wiring and maintenance.



## Part number system

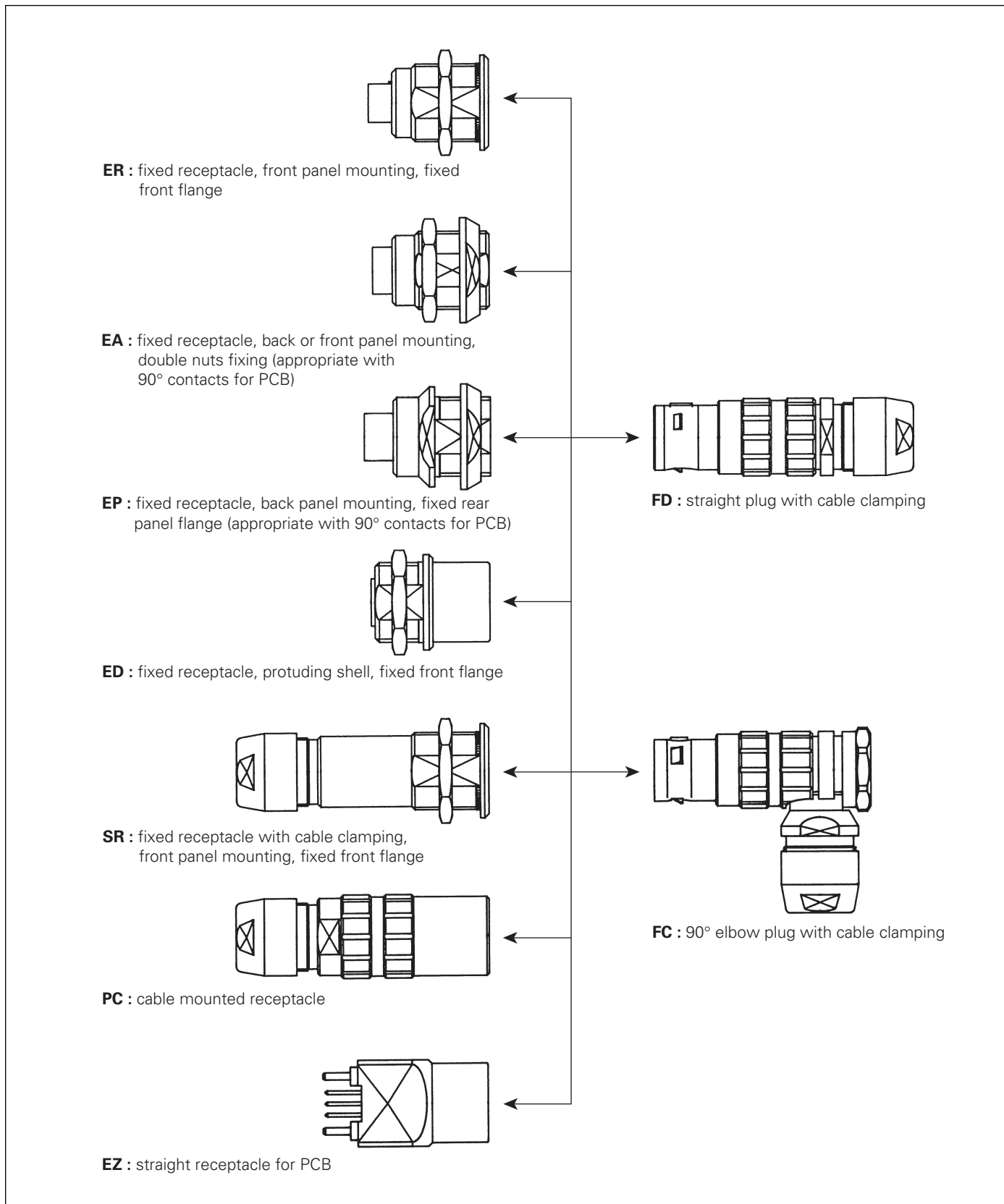
|                            |                                                                                                                                                            |    |   |   |    |   |   |   |   |   |   |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|---|----|---|---|---|---|---|---|
| Basic series               | JBX                                                                                                                                                        | FD | 1 | G | 05 | M | C | S | D | S | M |
| Shell type                 | FD-FC-ER-EA-SR-PC-ED-EP-EZ                                                                                                                                 |    |   |   |    |   |   |   |   |   |   |
| Shell size                 | 00 - 0 - 1 - 2 - 3                                                                                                                                         |    |   |   |    |   |   |   |   |   |   |
| Keying                     | G - J - A - B                                                                                                                                              |    |   |   |    |   |   |   |   |   |   |
| Contact layout             | 02 ----- 30                                                                                                                                                |    |   |   |    |   |   |   |   |   |   |
| Contact type               | M : pin    F : socket (in relation with keying)                                                                                                            |    |   |   |    |   |   |   |   |   |   |
| Contact termination        | C : crimp ; S : solder ; P* : straight PCB tails ; Q* : 90° PCB tails                                                                                      |    |   |   |    |   |   |   |   |   |   |
| Material & surface plating | S : Outer shell in brass alloy with chrome over nickel                                                                                                     |    |   |   |    |   |   |   |   |   |   |
|                            | N : Outer shell in brass alloy with black plating (consult Souriau USA)                                                                                    |    |   |   |    |   |   |   |   |   |   |
|                            | D : Obligatory suffix                                                                                                                                      |    |   |   |    |   |   |   |   |   |   |
|                            | S : All content dismeters except .05 mm<br>P : 0.5 mm contact only                                                                                         |    |   |   |    |   |   |   |   |   |   |
| Options                    | M : Connector with backnut for protective boot - Protective boot to order separately page 13<br>R : Red dot (possible for FD, FC, PC, SR, ER, ED, EZ only) |    |   |   |    |   |   |   |   |   |   |

\* For receptacles with female contacts only.

# Push Pull Connectors



## Shell types

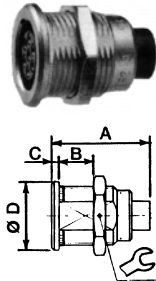


# Push Pull Connectors



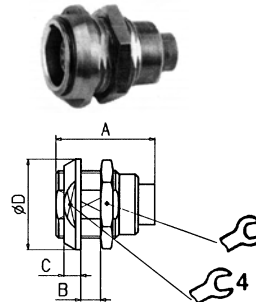
## Dimensions

**ER** : Fixed receptacle,  
front panel mounting



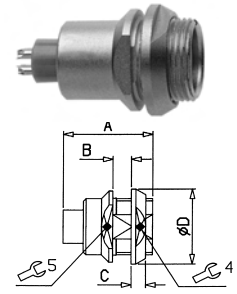
| Size       | 00  | 0   | 1   | 2   | 3   |
|------------|-----|-----|-----|-----|-----|
| <b>A</b>   | 14  | 19  | 21  | 24  | 28  |
| <b>B</b>   | 6   | 8   | 10  | 10  | 12  |
| <b>C</b>   | 0.8 | 1.2 | 1.5 | 1.8 | 2.0 |
| <b>Ø D</b> | 8   | 10  | 14  | 18  | 22  |

**EA** : Double nut receptacle



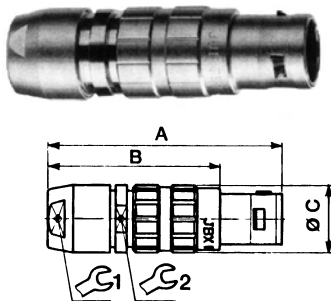
| Size       | 0   | 1   | 2   | 3   |
|------------|-----|-----|-----|-----|
| <b>A</b>   | 19  | 21  | 24  | 28  |
| <b>B</b>   | 6.7 | 8.3 | 8   | 9.5 |
| <b>C</b>   | 2.5 | 3.2 | 3.8 | 4.5 |
| <b>Ø D</b> | 12  | 16  | 20  | 24  |

**EP** : Fixed receptacle,  
back panel mounting



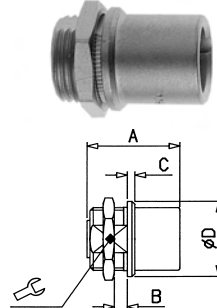
| Size       | 0   | 1   | 2   |
|------------|-----|-----|-----|
| <b>A</b>   | 19  | 21  | 24  |
| <b>B</b>   | 4.5 | 6   | 6.5 |
| <b>C</b>   | 2.5 | 3.2 | 3.8 |
| <b>Ø D</b> | 12  | 16  | 20  |

**FD** : Straight plug



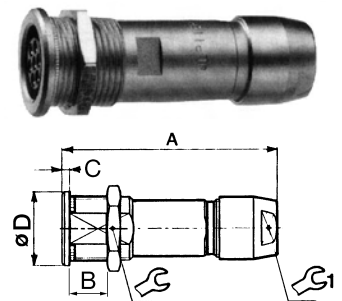
| Size       | 00 | 0  | 1  | 2  | 3  |
|------------|----|----|----|----|----|
| <b>A</b>   | 31 | 39 | 45 | 52 | 62 |
| <b>B</b>   | 23 | 29 | 34 | 40 | 47 |
| <b>Ø C</b> | 7  | 10 | 12 | 15 | 18 |

**ED** : Protruding receptacle



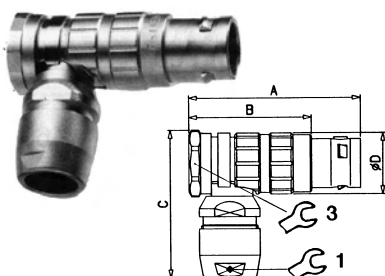
| Size       | 0   | 1   | 2   |
|------------|-----|-----|-----|
| <b>A</b>   | 19  | 21  | 24  |
| <b>B</b>   | 3   | 4.5 | 6.3 |
| <b>C</b>   | 1.2 | 1.5 | 1.8 |
| <b>Ø D</b> | 10  | 14  | 18  |

**SR** : Cable clamp receptacle



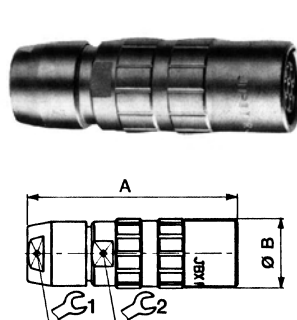
| Size       | 0   | 1   | 2   | 3  |
|------------|-----|-----|-----|----|
| <b>A</b>   | 38  | 43  | 50  | 59 |
| <b>B</b>   | 8   | 10  | 10  | 12 |
| <b>C</b>   | 1.2 | 1.5 | 1.8 | 2  |
| <b>Ø D</b> | 10  | 14  | 18  | 22 |

**FC** : 90° elbow plug



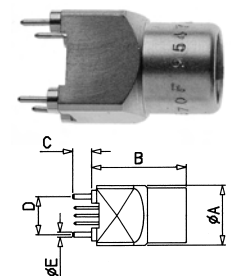
| Size       | 0    | 1    | 2    | 3    |
|------------|------|------|------|------|
| <b>A</b>   | 30.5 | 36.5 | 42.5 | 50.5 |
| <b>B</b>   | 20.5 | 25.5 | 30.5 | 35.5 |
| <b>C</b>   | 29.5 | 33.5 | 36.5 | 45   |
| <b>Ø D</b> | 10   | 12   | 15   | 18   |

**PC** : Cable mounted receptacle



| Size       | 0  | 1  | 2  | 3    |
|------------|----|----|----|------|
| <b>A</b>   | 38 | 43 | 50 | 59   |
| <b>Ø B</b> | 10 | 13 | 16 | 19.5 |

**EZ** : Receptacle for PCB



| Size       | 0    | 1    |
|------------|------|------|
| <b>Ø A</b> | 10   | 12   |
| <b>B</b>   | 19   | 21   |
| <b>C</b>   | 4    | 4    |
| <b>D</b>   | 7.62 | 7.62 |
| <b>Ø E</b> | 1.1  | 1.1  |

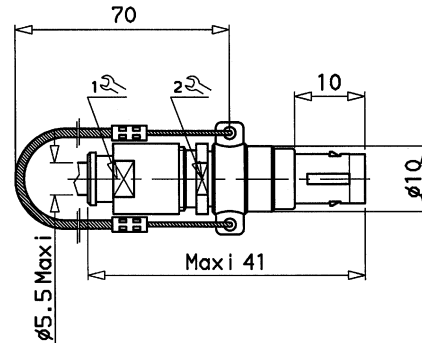
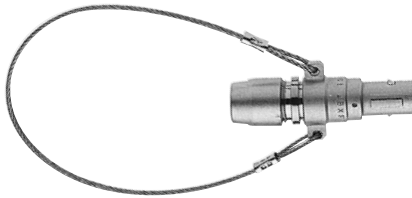
# Push Pull Connectors



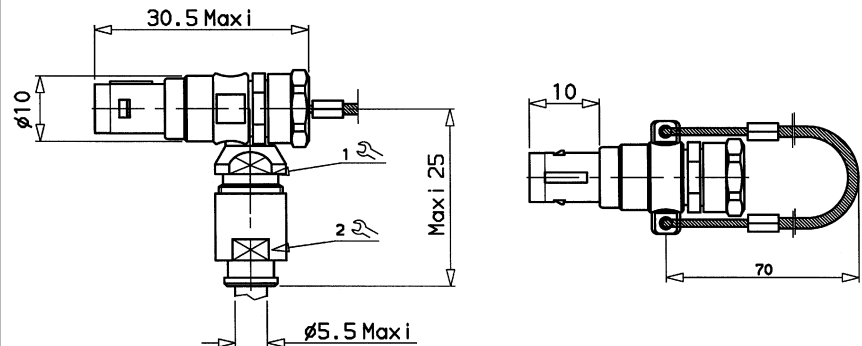
## Dimensions

### • Special custom shells

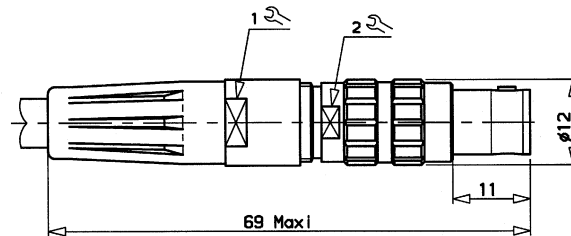
**FN** : Straight plug,  
shell size 0 with a lanyard



**FM** : 90° elbow plug,  
shell size 0 with a lanyard

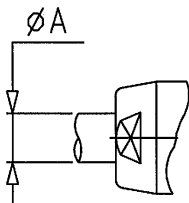


**FF** : Straight plug,  
with no latching shell size 1



## Range of cable diameters

With the plastic collet set supplied with the standard product, a wide range of cable diameters is allowed. Find below the maximum and the minimum for each size of shell (for information only because it can change with the cable characteristics).



| Size                 | 00  | 0   | 1   | 2   | 3    |
|----------------------|-----|-----|-----|-----|------|
| $\phi A \text{ min}$ | 1.1 | 1.5 | 2.0 | 3.5 | 4.9  |
| $\phi A \text{ Max}$ | 3.5 | 5.5 | 7.5 | 9.7 | 12.0 |

# Push Pull Connectors



## Keying

### • Keying angles

JBX Series are mechanically keyed to ensure correct alignment of the inserts before the contacts mate.

«G» : **normal inserts** ; 0° keying angle, plugs with pin contacts, receptacles with socket contacts

«J» : **reversed gender inserts** ; twin narrow keys, plugs with socket contacts, receptacles with pin contacts.

| Key          | G                                                                                 | J                                                                                 |                                                                                    | A                                                                                   | B                                                                                   |
|--------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|              |                                                                                   | sizes 0 - 1                                                                       | sizes 2 - 3                                                                        |                                                                                     | sizes 0 - 1                                                                         |
| Keying angle | 0°                                                                                | 45°                                                                               | 37.5°                                                                              | 30°                                                                                 | 60°                                                                                 |
| Plug         |  |  |  |  |  |
| Receptacle   |  |  |  |  |  |

### • Keyed shells availability

| Shell size | Key              | ER               | EA     | ED | EP | EZ | SR | PC | FD               | FC     |
|------------|------------------|------------------|--------|----|----|----|----|----|------------------|--------|
| 00         | G                | ●                |        |    |    |    |    |    | ●                |        |
| 0          | G<br>J<br>A<br>B | ●<br>●<br>●<br>● | ●<br>● | ●  | ●  | ●  | ●  | ●  | ●<br>●<br>●<br>● | ●<br>● |
| 1          | G<br>J<br>A      | ●<br>●<br>●      | ●<br>● | ●  | ●  | ●  | ●  | ●  | ●<br>●<br>●      | ●<br>● |
| 2          | G<br>J<br>A      | ●<br>●<br>●      | ●<br>● | ●  | ●  |    | ●  | ●  | ●<br>●<br>●      | ●<br>● |
| 3          | G                | ●                | ●      |    |    |    | ●  | ●  | ●                | ●      |

● Available for JBX Series, Customs can be ordered, contact Product Management.

# Push Pull Connectors



## Contact layouts

### • Multi contact inserts

| Shell size | Male insulator viewed from wiring side | Contact layout | Contact types available |         |                       |                  | Ø Contact | AWG              |                 | Max. current rating (A) | Testing voltage (Vrms) | Working voltage (Vdc / Vrms) |
|------------|----------------------------------------|----------------|-------------------------|---------|-----------------------|------------------|-----------|------------------|-----------------|-------------------------|------------------------|------------------------------|
|            |                                        |                | S solder                | C crimp | P* straight PCB tails | Q* 90° PCB tails |           | Solder wire Max. | Crimp wire Max. |                         |                        |                              |
| 00         |                                        | 04             | S                       |         |                       |                  | 0.5       | 30               | -               | 2                       | 1000                   | 500/350                      |
| 0          |                                        | 02             | S                       | C       | P                     | Q                | 0.9       | 24               | 20              | 10                      | 1400                   | 660/460                      |
|            |                                        | 03             | S                       | C       | P                     | Q                | 0.9       | 24               | 20              | 8                       | 1300                   | 600/420                      |
|            |                                        | 04             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 7                       | 1400                   | 660/460                      |
|            |                                        | 05             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 6.5                     | 800                    | 400/260                      |
|            |                                        | 06             | S                       |         | P                     |                  | 0.5       | 28               | -               | 2.5                     | 680                    | 320/220                      |
|            |                                        | 07             | S                       |         | P                     |                  | 0.5       | 28               | -               | 2.5                     | 680                    | 320/220                      |
| 1          |                                        | 02             | S                       | C       |                       |                  | 1.3       | 20               | 18              | 15                      | 1600                   | 760/530                      |
|            |                                        | 03             | S                       | C       |                       |                  | 1.3       | 20               | 18              | 12                      | 1300                   | 600/420                      |
|            |                                        | 04             | S                       | C       | P                     | Q                | 0.9       | 24               | 20              | 10                      | 1900                   | 900/630                      |
|            |                                        | 05             | S                       | C       | P                     | Q                | 0.9       | 24               | 20              | 9                       | 1400                   | 660/460                      |
|            |                                        | 06             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 7                       | 1400                   | 660/460                      |
|            |                                        | 07             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 7                       | 1400                   | 660/460                      |
|            |                                        | 08             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 5                       | 1200                   | 600/420                      |
|            |                                        | 10             | S                       |         |                       |                  | 0.5       | 28               | -               | 2.5                     | 600                    | 300/200                      |

Inserts with fixed non removable contacts

\* For receptacles with female contacts only.

**Note :** Contacts are numbered counter clock wise in the plug and clock wise in the receptacle.

# Push Pull Connectors



## Contact layouts

### • Multi contact inserts

| Shell size | Male insulator viewed from wiring side | Contact layout | Contact types available |         |                       |                  | Ø Contact | AWG              |                 | Max. current rating (A) | Testing voltage (Vrms) | Working voltage (Vdc / Vrms) |
|------------|----------------------------------------|----------------|-------------------------|---------|-----------------------|------------------|-----------|------------------|-----------------|-------------------------|------------------------|------------------------------|
|            |                                        |                | S solder                | C crimp | P* straight PCB tails | Q* 90° PCB tails |           | Solder wire Max. | Crimp wire Max. |                         |                        |                              |
| 2          |                                        | 02             | S                       | C       |                       |                  | 2         | 16               | 12              | 30                      | 2100                   | 1000/700                     |
|            |                                        | 03             | S                       | C       |                       |                  | 1.6       | 18               | 14              | 17                      | 1700                   | 830/560                      |
|            |                                        | 04             | S                       | C       |                       |                  | 1.3       | 20               | 18              | 15                      | 2400                   | 1000/800                     |
|            |                                        | 05             | S                       | C       |                       |                  | 1.3       | 20               | 18              | 14                      | 1900                   | 900/630                      |
|            |                                        | 06             | S                       | C       |                       |                  | 1.3       | 20               | 18              | 12                      | 1900                   | 900/630                      |
|            |                                        | 07             | S                       | C       |                       |                  | 1.3       | 20               | 18              | 11                      | 1500                   | 730/500                      |
|            |                                        | 08             | S                       | C       | P                     | Q                | 0.9       | 24               | 20              | 10                      | 1700                   | 830/560                      |
|            |                                        | 10             | S                       | C       | P                     | Q                | 0.9       | 24               | 20              | 8                       | 1700                   | 830/560                      |
|            |                                        | 12             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 7                       | 1700                   | 830/560                      |
|            |                                        | 16             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 6                       | 1500                   | 730/500                      |
|            |                                        | 18             | S                       | C       | P                     |                  | 0.7       | 26               | 22              | 5.5                     | 1400                   | 660/460                      |
|            |                                        | 19             | S                       | C       | P                     |                  | 0.7       | 26               | 22              | 5                       | 1400                   | 660/460                      |
| 3          |                                        | 03             | S                       | C       |                       |                  | 2         | 16               | 12              | 25                      | 3600                   | 1600/1200                    |
|            |                                        | 04             | S                       | C       |                       |                  | 2         | 16               | 12              | 25                      | 2500                   | 1100/830                     |

Inserts with fixed non removable contacts

\* For receptacles with female contacts.

**Note :** Contacts are numbered counter clock wise in the plug and clock wise in the receptacle.

# Push Pull Connectors



## Contact layouts

### • Multi contact inserts

| Shell size | Male insulator viewed from wiring side | Contact layout side | Contact types available |         |                       |                  | Ø Contact | AWG              |                 | Max. current rating (A) | Testing voltage (Vrms) | Working voltage (Vdc / Vrms) |
|------------|----------------------------------------|---------------------|-------------------------|---------|-----------------------|------------------|-----------|------------------|-----------------|-------------------------|------------------------|------------------------------|
|            |                                        |                     | S solder                | C crimp | P* straight PCB tails | Q* 90° PCB tails |           | Solder wire Max. | Crimp wire Max. |                         |                        |                              |
| 3          |                                        | 07                  | S                       | C       |                       |                  | 1.6       | 16               | 12              | 15                      | 2200                   | 1000/730                     |
|            |                                        | 10                  | S                       | C       |                       |                  | 1.3       | 20               | 18              | 12                      | 1400                   | 660/460                      |
|            |                                        | 14                  | S                       | C       | P                     |                  | 0.9       | 24               | 20              | 9                       | 1700                   | 830/560                      |
|            |                                        | 18                  | S                       | C       | P                     |                  | 0.9       | 24               | 20              | 7                       | 1400                   | 660/460                      |
|            |                                        | 22                  | S                       | C       | P                     |                  | 0.7       | 26               | 22              | 5.5                     | 1200                   | 560/400                      |
|            |                                        | 30                  | S                       | C       | P                     |                  | 0.7       | 26               | 26              | 3.5                     | 800                    | 400/260                      |

Inserts with fixed non removable contacts

\* For receptacles with female contacts.

**Note :** Contacts are numbered counter clock wise in the plug and clock wise in the receptacle.

### • Voltage Test Procedure

- **The testing voltage** corresponds to the maximum voltage the connector is able to withstand in normal climatic conditions. The value is about 75% of the electrical breakdown voltage. The testing voltage level can be reached several times in connectors life, but never applied for a continuous duration.
- **The working voltage** corresponds to the maximum voltage the connector is able to withstand continuously during its life time, in real environmental conditions, even with high temperature. The value is around 1/3 of the testing voltage.

### • Maximum current rating

- **This indicated maximum current rating** corresponds to the maximum current that can be applied **simultaneously on each line of the connector mated pair**, continuously during its life time, in normal climatic conditions.

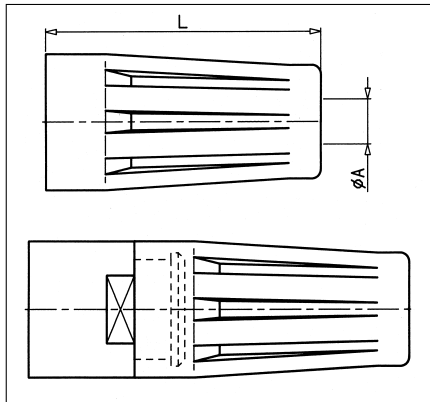
Remark : If the current is applied on only one contact of the layout, then an increased current value can be achieved over a long duration.

# Push Pull Connectors



## Options

### • Protective boot



| Part number | Shell size | Dimensions |    |         |      |
|-------------|------------|------------|----|---------|------|
|             |            | Ø A        | L  | Ø Cable |      |
|             |            |            |    | min     | Max. |
| JBX 00 MPN  | 00         | 1.5        | 15 | 1       | 3.5  |
| JBX 0 MP*   | 0          | 2.2        | 20 | 1.5     | 5.5  |
| JBX 1 MP*   | 1          | 2.6        | 25 | 2       | 7.5  |
| JBX 2 MP*   | 2          | 4          | 30 | 3.5     | 9.7  |
| JBX 3 MP*   | 3          | 5          | 35 | 4.9     | 12   |

\* Color code / In size 00, available only in black

| Color code | Colors |
|------------|--------|
| A          | blue   |
| B          | white  |
| G          | grey   |
| J          | yellow |
| M          | brown  |
| N          | black  |
| R          | red    |
| V          | green  |
| O          | orange |

#### Material :

ELASTOLLAN (PUR)

#### Working temperature :

- 40°C ; + 80°C

- 40°F ; + 176°F

Parts that require a protective boot need to be ordered with an M suffix, see page 5. Protective boots are ordered separately.

With each JBX connector, one protective boot can accept diverse cable diameters thus the end-user can manage various cable diameters without bothering with multiple part numbers.

### • Caps : an efficient protection against dust



| Part number | Ø  |
|-------------|----|
| JBX BR0     | 12 |
| JBX BR1     | 14 |
| JBX BR2     | 18 |
| JBX BR3     | 20 |

# Push Pull Connectors



## Technical characteristics

### • Material and treatment

**UL approved - homologation file E118235 - **

| Component                                                | Material         | Standard  |             | Surface treatment (µm) |       |     |
|----------------------------------------------------------|------------------|-----------|-------------|------------------------|-------|-----|
|                                                          |                  | ISO       | ASTM        | Cr                     | Ni    | Au  |
| Outer shell and collet nut                               | Brass            | CuZn40Pb3 | C38500/C360 | 0.1 - 0.6              | 5 - 8 | -   |
| Latching sleeve                                          | Brass            | CuZn40Pb3 | C38500/C360 | -                      | 5 - 8 | -   |
| Shielding ring                                           | Brass            | CuZn40Pb3 | C38500/C360 | -                      | 3 - 7 | -   |
| Nut                                                      | Brass            | CuZn40Pb3 | C38500/C360 | -                      | 5 - 8 | -   |
| Half bushes                                              | Brass            | CuZn40Pb3 | C38500/C360 | -                      | 5 - 8 | -   |
| Socket contact (1)                                       | Cupro-nickel     | CuNi1Pb1P | CDAC19150   | -                      | 3 - 5 | 0.5 |
| Pin contact (1)                                          | Brass            | CuZn35Pb2 | C35300/C360 | -                      | 3 - 5 | 0.5 |
| Clip                                                     | Beryllium copper | CuBe1,9   | C17200/C360 | -                      | -     | -   |
| (1) Gold thickness as per MIL-G-45204C type 1, class 00. |                  |           |             |                        |       |     |

| Component | Material      | Color | Working Temperature |                |
|-----------|---------------|-------|---------------------|----------------|
| Insert    | PEEK + 15%GF  | brown | - 50°C + 250°C      | - 58°F + 482°F |
| Collet    | PA 6/6 + MoS2 | black | - 55°C + 125°C      | - 67°F + 257°F |

### • Mechanical and climatics

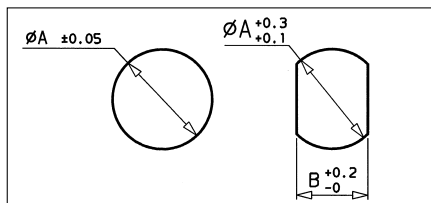
| Characteristics       | Values                                                                                                            | Standard      | Method |
|-----------------------|-------------------------------------------------------------------------------------------------------------------|---------------|--------|
| Endurance             | > 1000 cycles (except for 0.7 mm crimp contacts for which endurance is limited to 500 cycles)                     | MIL-STD 1344A | 2016.1 |
| Shock                 | 50 g, duration 6 ms ; contact Ø 0.7 mm and 0.9 mm<br>100 g, duration 6 ms ; contact Ø 1.3 mm - 1.6 mm and 2 mm    | MIL-STD 1344A | 2004.1 |
| Vibrations            | 10 to 2000 Hz $\gamma$ = 15 g, contact Ø 0.7 mm and 0.9 mm<br>$\gamma$ = 20 g, contact Ø 1.3 mm - 1.6 mm and 2 mm | MIL-STD 1344A | 2005.1 |
| Protection index      | IP 40                                                                                                             | CEI 529       |        |
| Operating temperature | with plastic collets } - 55°C + 125°C<br>- 67°F + 257°F                                                           | -             | -      |
|                       | with optional metal collets } - 55°C + 200°C<br>- 67°F + 392°F<br>(only on request, consult SOURIAU)              | -             | -      |

# Push Pull Connectors



## Wiring and assembly instructions

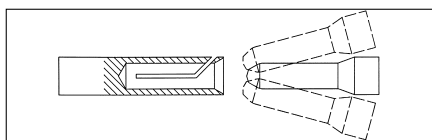
### • Panel cutout



| Size            | 00  | 0   | 1    | 2    | 3    |
|-----------------|-----|-----|------|------|------|
| $\varnothing A$ | 7.1 | 9.1 | 12.1 | 15.1 | 18.1 |
| <b>B</b>        | 6.4 | 8.3 | 10.6 | 13.6 | 16.6 |

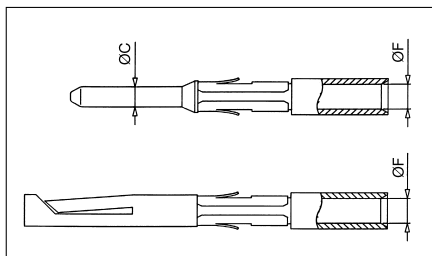
### • Removable contacts

#### Reliable design



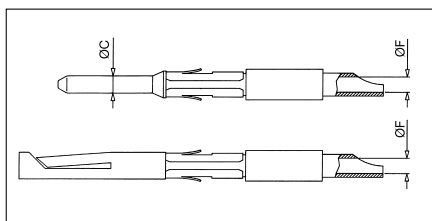
- Conical entry with chamfered edge on the socket contact and smooth slope on the pin contact ensure perfect concentric mating even when handled carelessly.
- The pressure spring of the socket contact maintains a constant force on the pin contact when mated.

### Crimp contacts



| Contact         |                 | Usable cables                   |       |          | Max. current rating (A) | Contact resistance (m $\Omega$ ) | Endurance (number of cycles) |
|-----------------|-----------------|---------------------------------|-------|----------|-------------------------|----------------------------------|------------------------------|
| $\varnothing C$ | $\varnothing F$ | Core section (mm <sup>2</sup> ) |       | AWG      |                         |                                  |                              |
|                 |                 | min                             | Max.  |          |                         |                                  |                              |
| 0.7             | 0.85            | 0.129                           | 0.326 | 22-24-26 | 7                       | 5                                | 500 Max.                     |
| 0.9             | 1.1             | 0.205                           | 0.518 | 20-22-24 | 10                      | 3.5                              | > 1000                       |
| 1.3             | 1.4             | 0.326                           | 0.823 | 18-20-22 | 15                      | 3                                | > 1000                       |
| 1.6             | 1.9             | 0.823                           | 2.081 | 14-16-18 | 17                      | 2.5                              | > 1000                       |
| 2.0             | 2.4             | 1.309                           | 3.309 | 12-14-16 | 30                      | 2.5                              | > 1000                       |

### Solder contacts

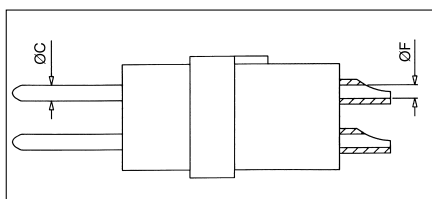


| Contact         |                 | Usable cables                   |      |     | Max. current rating (A) | Contact resistance (m $\Omega$ ) | Endurance (number of cycles) |
|-----------------|-----------------|---------------------------------|------|-----|-------------------------|----------------------------------|------------------------------|
| $\varnothing C$ | $\varnothing F$ | Core section (mm <sup>2</sup> ) |      | AWG |                         |                                  |                              |
|                 |                 | min                             | Max. |     |                         |                                  |                              |
| 0.7             | 0.7             | –                               | 0.30 | 26  | 7                       | 5                                | 500 max                      |
| 0.9             | 0.8             | –                               | 0.21 | 24  | 10                      | 3.5                              | > 1000                       |
| 1.3             | 1.1             | –                               | 0.60 | 20  | 15                      | 3                                | > 1000                       |
| 1.6             | 1.5             | –                               | 0.93 | 18  | 17                      | 2.5                              | > 1000                       |
| 2               | 1.9             | –                               | 1.34 | 16  | 30                      | 2.5                              | > 1000                       |

The conductor bucket on the solder contacts is designed with an angle to form a cup into which the solder can flow easily.

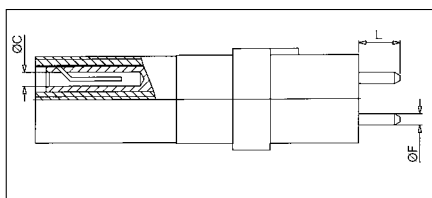
### • Fixed contacts

#### Solder contacts



| Contact         |                 | Shell size    | Usable cables                        |     | Max. current rating (A) | Contact resistance (m $\Omega$ ) | Endurance (number of cycles) |
|-----------------|-----------------|---------------|--------------------------------------|-----|-------------------------|----------------------------------|------------------------------|
| $\varnothing C$ | $\varnothing F$ |               | Core section (mm <sup>2</sup> ) Max. | AWG |                         |                                  |                              |
| 0.5             | 0.4             | 00            | 0.06                                 | 30  | 5                       | 10                               | > 1000                       |
|                 | 0.5             | 0 - 1         | 0.096                                | 28  |                         |                                  |                              |
| 0.7             | 0.63            | 0 - 1 - 2 - 3 | 0.15                                 | 26  | 7                       | 5                                | > 1000                       |

#### Contacts for PCB



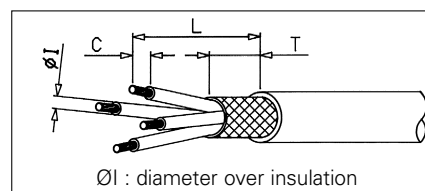
| Contacts for PCB                     |  | Contact length dimensions "L"              |  |
|--------------------------------------|--|--------------------------------------------|--|
| PCB tail length size 0               |  | dimension "L" 5.5 mm                       |  |
| 0.7 mm female PCB tail length size 0 |  | dimension "L" 3.5 mm                       |  |
| 0.7 mm female PCB tail length size 1 |  | dimension "L" 4.0 mm                       |  |
| 0.7 mm female PCB tail length size 2 |  | dimension "L" 6.0 mm                       |  |
| 0.7 mm female PCB tail length size 3 |  | dimension "L" 6.0 mm                       |  |
| 0.9 mm female PCB tail length size 0 |  | dimension "L" 3.5 mm                       |  |
| 0.9 mm female PCB tail length size 1 |  | dimension "L" 4.0 mm                       |  |
| 0.9 mm female PCB tail length size 2 |  | dimension "L" 6.0 mm                       |  |
| 4.3 mm female PCB tail length size 1 |  | dimension "L" 4.0 mm, dimension "F" 0.7 mm |  |
| 4.3 mm female PCB tail length size 2 |  | dimension "L" 6.0 mm, dimension "F" 0.7 mm |  |
| 4.3 mm female PCB tail length size 3 |  | dimension "L" 6.0 mm, dimension "F" 0.7 mm |  |

# Push Pull Connectors



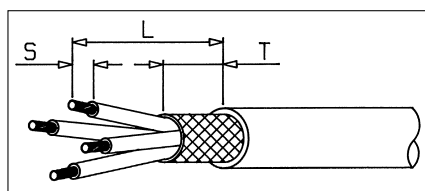
## Wiring and assembly instructions

### • Cable stripping for connectors with crimp contacts



| Shell size | Ø contacts | Ø I    | Stripping for FD, SR, PC |     |    | Stripping for FC |     |    |
|------------|------------|--------|--------------------------|-----|----|------------------|-----|----|
|            |            |        | L                        | C   | T  | L                | C   | T  |
| 0          | 0.7        | ? 1.35 | 15                       | 4   | 7  | 19               | 4   | 7  |
|            |            | > 1.35 |                          | 5.5 |    |                  | 5.5 |    |
|            | 0.9        | ? 1.6  | 15                       | 4   | 7  | 19               | 4   | 7  |
| 1          | 0.7        | ? 1.35 | 16                       | 4   | 8  | 22               | 4   | 8  |
|            |            | > 1.35 |                          | 5.5 |    |                  | 5.5 |    |
|            | 0.9        | ? 1.6  | 16                       | 4   | 8  | 22               | 4   | 8  |
| 2          | 0.7        | ? 2.1  | 19                       | 4   | 9  | 28               | 4   | 9  |
|            |            | > 2.1  |                          | 5.5 |    |                  | 5.5 |    |
|            | 0.9        | ? 1.6  | 19                       | 4   | 9  | 28               | 4   | 9  |
| 3          | 0.7        | ? 2.1  | 25                       | 4   | 10 | 35               | 4   | 10 |
|            |            | > 2.1  |                          | 7   |    |                  | 7   |    |
|            | 0.9        | ? 1.6  | 25                       | 4   | 10 | 35               | 4   | 10 |
| 4          | 0.7        | ? 2.1  | 25                       | 4   | 10 | 35               | 4   | 10 |
|            |            | > 2.1  |                          | 7   |    |                  | 7   |    |
|            | 0.9        | ? 1.6  | 25                       | 4   | 10 | 35               | 4   | 10 |
| 5          | 0.7        | ? 2.6  | 27                       | 5.5 | 10 | 35               | 5.5 | 10 |
|            |            | > 2.6  |                          | 8.5 |    |                  | 8.5 |    |
|            | 0.9        | ? 3.2  | 27                       | 5.5 | 10 | 35               | 5.5 | 10 |
| 6          | 0.7        | ? 3.2  | 27                       | 5.5 | 10 | 35               | 5.5 | 10 |
|            |            | > 3.2  |                          | 8.5 |    |                  | 8.5 |    |
|            | 0.9        | ? 3.2  | 27                       | 5.5 | 10 | 35               | 5.5 | 10 |

### • Cable stripping for connectors with solder contacts

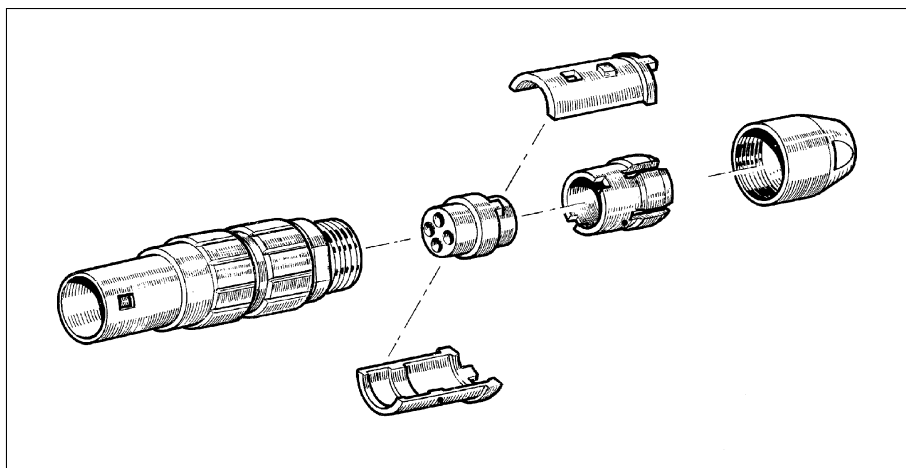


| Shell size | Ø Contacts | Stripping for FD, SR, PC |     |    | Stripping for FC |     |    |
|------------|------------|--------------------------|-----|----|------------------|-----|----|
|            |            | L                        | S   | T  | L                | S   | T  |
| 00         | 0.5        | 9                        | 2   | 4  | /                | /   | /  |
| 0          | 0.5        | 11                       | 2   | 7  | 16               | 2   | 7  |
|            | 0.7        | 12                       | 3   | 7  | 16               | 3   | 7  |
|            | 0.9        | 12                       | 3   | 7  | 16               | 3   | 7  |
| 1          | 0.5        | 12                       | 2   | 8  | 19               | 2   | 8  |
|            | 0.7        | 13                       | 3   | 8  | 19               | 3   | 8  |
|            | 0.9        | 13                       | 3   | 8  | 19               | 3   | 8  |
| 2          | 0.7        | 16                       | 3   | 9  | 25               | 3   | 9  |
|            | 0.9        | 16                       | 3   | 9  | 25               | 3   | 9  |
|            | 1.3        | 16                       | 3.5 | 9  | 25               | 3.5 | 9  |
| 3          | 0.7        | 20                       | 3   | 10 | 30               | 3   | 10 |
|            | 0.9        | 20                       | 3   | 10 | 30               | 3   | 10 |
|            | 1.3        | 20                       | 3.5 | 10 | 30               | 3.5 | 10 |
| 4          | 0.7        | 22                       | 4   | 10 | 30               | 4   | 10 |
|            | 0.9        | 22                       | 4   | 10 | 30               | 4   | 10 |
|            | 1.3        | 22                       | 4   | 10 | 30               | 4   | 10 |

# Push Pull Connectors

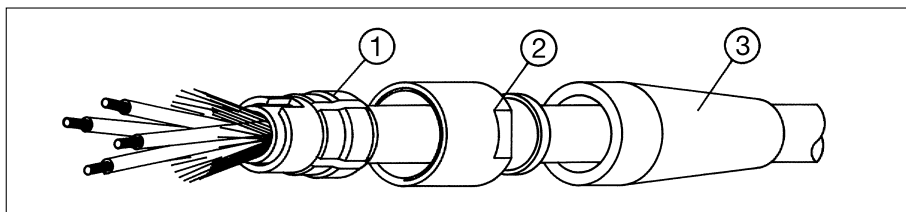


## Wiring and assembly instructions : STRAIGHT PLUG



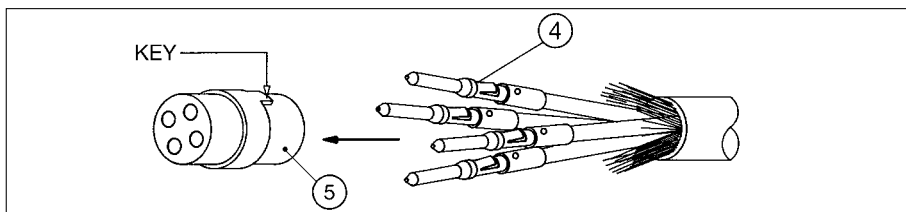
• **Cable stripping** : see page 16

### • Connector preparation



- 1 - Select the proper collet ①. (see page 19)
- 2 - Slide the protective boot ③ the backnut ② and the collet ① onto the cable.
- 3 - In case of a screened cable, combs out the screen and fold back over the collet ①.

### • Contacts wiring : crimp contacts

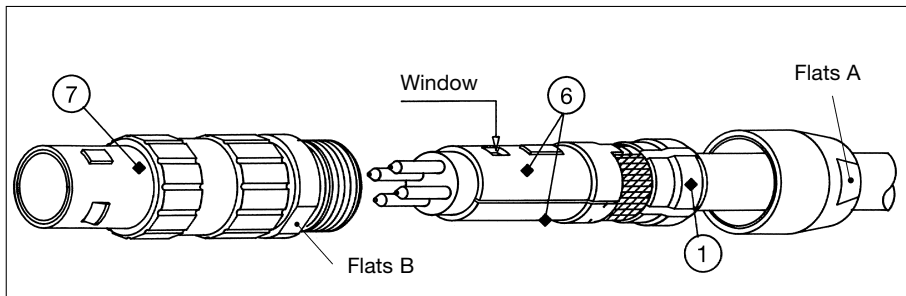


- 1 - Select the proper crimping tool (see page 48) and locator according to the connectors involved.
- 2 - Adjust the tool selector for the corresponding conductor AWG.
- 3 - Crimp the contacts † and then engage them into the insert cavities ⑤ till clip tightening.

### • Contacts wiring : solder contacts

| Fixed solder contacts 0.5 mm and 0.7 mm               | Removable solder contacts from 0.9 mm to 2 mm                                                                  |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 1 - Terminate the bucket contacts using solder method | 1 - Solder the conductors to the contact buckets then engage them into the insert cavities ⑤ till clip holding |

### • Connector assembly



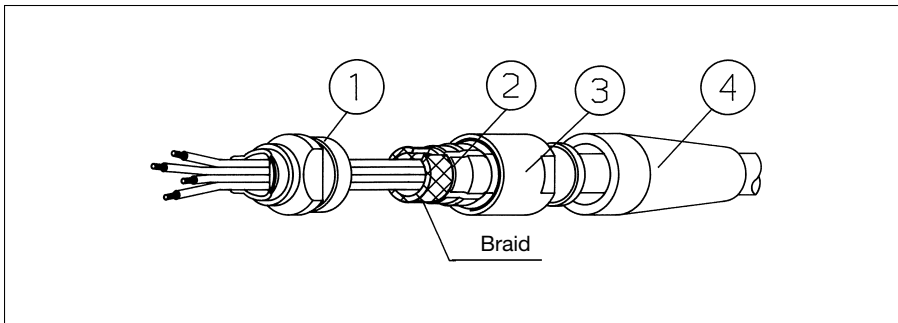
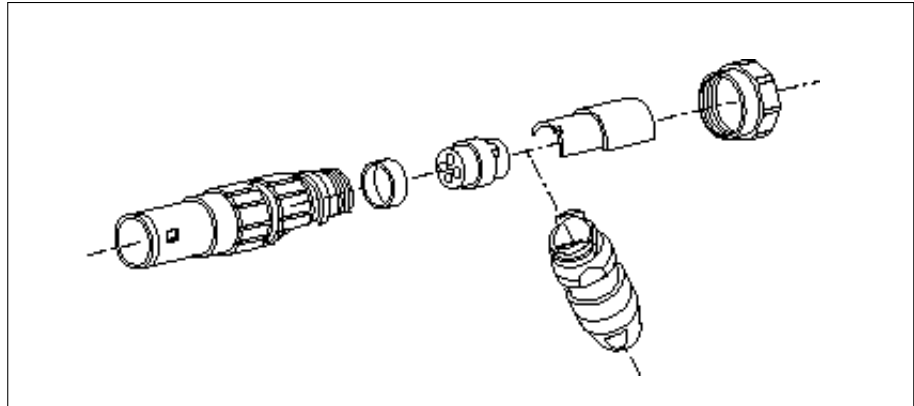
- 1 - Position 2 half bushes † on the insert ⑤ making sure that the insert key appears through window of one bush.
- 2 - Position the collet and the half bushes while maintaining the screen. Bush keys are seated in the collet keying slots.
- 3 - Position all the sub-assembly in the connector housing † making sure to keep sub-assembly aligned.
- 4 - Install the backnut ② and screw it. Use the two wrenches well positionned on the flats A and B. Place a wrench to grip flats B, use the other wrench to tighten the backnut at the flats A following the torque values on page 19.
- 5 - Install the protective boot ③ if exists.

# Push Pull Connectors



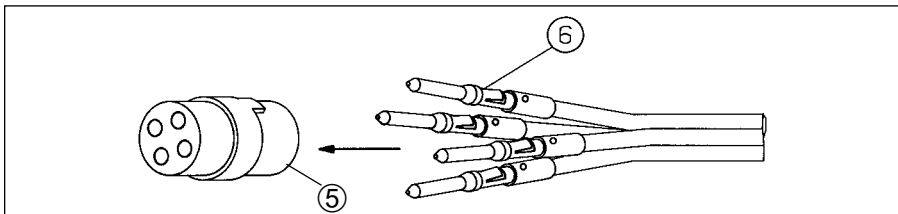
## Wiring and assembly instructions : 90° ELBOW PLUG

- **Cable stripping** : see page 16
- **Connector preparation**



- 1 - Select the proper collet ② (see page 19).
- 2 - Slide the protective boot †, the backnut ③, the collet ② and the elbow outlet ① onto the cable.
- 3 - In case of a screened cable, comb out the screen and fold back over the collet ②.
- 4 - Position in the elbow outlet making sure the anti-rotating keys are well aligned.
- 5 - Tighten the backnut ③ till bottomed.
- 6 - Install the protective boot † if exists.

- **Contacts wiring : crimp contacts**

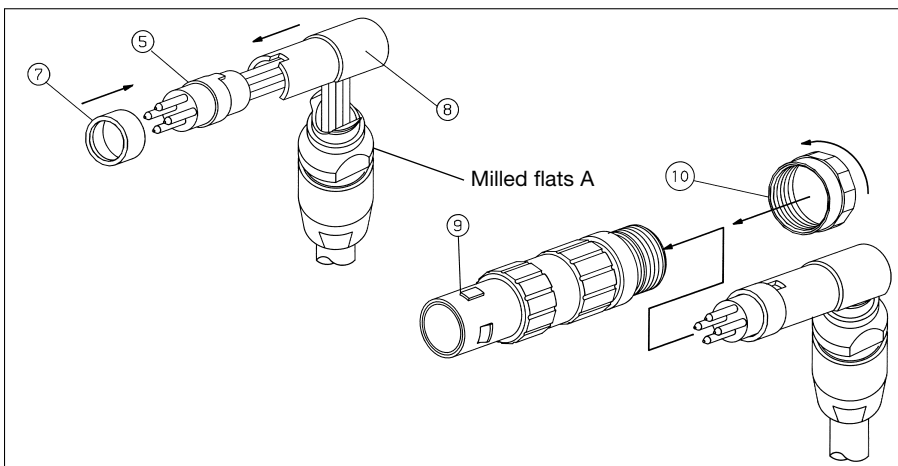


- 1 - Select the proper crimping tool (see page 49) and positionner according to connectors involved.
- 2 - Adjust the tool selector for the corresponding conductor AWG.
- 3 - Crimp the contacts † then engage them into the insert cavities ⑤ till clip tightening.

- **Contacts wiring : solder contacts**

| Fixed solder contacts 0.5 mm and 0.7 mm               | Removable solder contacts from 0.9 mm to 2 mm                                                                  |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 1 - Terminate the bucket contacts using solder method | 1 - Solder the conductors to the contact buckets then engage them into the insert cavities ⑤ till clip holding |

- **Connector assembly**



- 1 - Position the ring † on the insert ⑤ then engage all in the spacer ⑧.
- 2 - Position all the sub-assembly in the connector housing ⑨ with milled flats A of the elbow outlet facing to the rear of the plug housing.
- 3 - Tighten the screw ⑩ at the torque values defined on page 19.

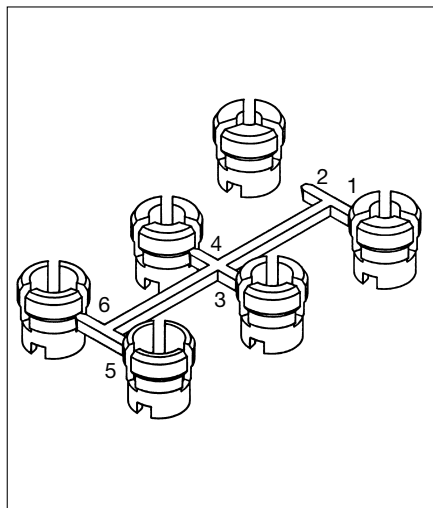
# Push Pull Connectors



## Wiring and assembly instructions

### • Collets selection according to cable diameters

4 or 6 collets per shell size allow a wide range of cable diameters for a single connector ; outer cable diameters are for reference only, since values will change with specific manufacturers cable properties.

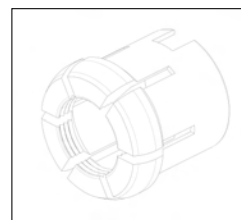


| Collet number | Cable diameter   |                  |                  |                  |                    |
|---------------|------------------|------------------|------------------|------------------|--------------------|
|               | Shell size 00    | Shell size 0     | Shell size 1     | Shell size 2     | Shell size 3       |
| 1             | <b>1.1</b> - 1.9 | <b>1.5</b> - 2.5 | <b>2.0</b> - 2.5 | <b>3.5</b> - 4.7 | <b>4.9</b> - 6     |
| 2             | 2 - 2.8          | 2.6 - 3.5        | 2.6 - 3.5        | 4.8 - 5.7        | 6.1 - 7.2          |
| 3             | 2.9 - <b>3.5</b> | 3.6 - 4.5        | 3.6 - 4.5        | 5.8 - 6.7        | 7.3 - 8.4          |
| 4             | -                | 4.6 - <b>5.5</b> | 4.6 - 5.5        | 6.8 - 7.7        | 8.5 - 9.6          |
| 5             | -                | -                | 5.6 - 6.6        | 7.8 - 8.7        | 9.7 - 10.8         |
| 6             | -                | -                | 6.7 - <b>7.5</b> | 8.8 - <b>9.7</b> | 10.9 - <b>12.0</b> |

### • Coupling torques

| Tools<br>(jaw dimensions) | 7 x 0.5 | 9 x 0.6 | 12 x 1 | 15 x 1 | 18 x 1 | Advised torques* in Nm |            |     |            |   |
|---------------------------|---------|---------|--------|--------|--------|------------------------|------------|-----|------------|---|
| Size                      | 00      | 0       | 1      | 2      | 3      | 00                     | 0          | 1   | 2          | 3 |
|                           | 7       | 11      | 14     | 17     | 21     | 0.5                    | 0.7        | 1.3 | 1.7        | 2 |
| 1                         | 6       | 8       | 10     | 13     | 15     | 0.7                    | 0.8        | 1   | 1.5        | 2 |
| 2                         | 6       | 9       | 11     | 14     | 16     | 0.7                    | 0.8        | 1   | 1.5        | 2 |
| 3                         | -       | 10      | 12     | 15     | 17     | -                      | 0.4 to 0.5 |     | 0.5 to 0.7 |   |
| 4                         | -       | 10      | 13     | 17     | 20     | 0.5                    | 0.7        | 1.3 | 1.7        | 2 |
| 5                         | -       | 9       | 13     | 15     | -      | -                      | -          | -   | -          | - |

Metal collet available for all sizes



Discreet application based on cable diameter

Torque values are the maximum allowable for each connector size.

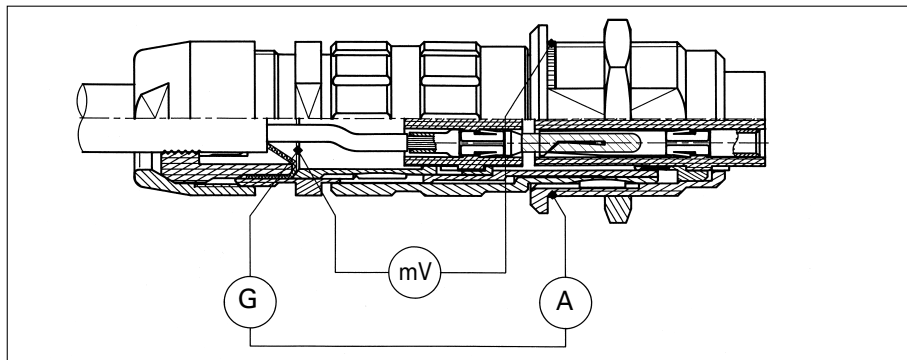
Torque values will vary due to the type and size of the cable used.

\*Apply thread lock to back nut prior to assembly.

Note : All the tooling numbers refer to the drawings page 205

### • Shielding

Tested according to MIL-STD 1344 A, method 3007

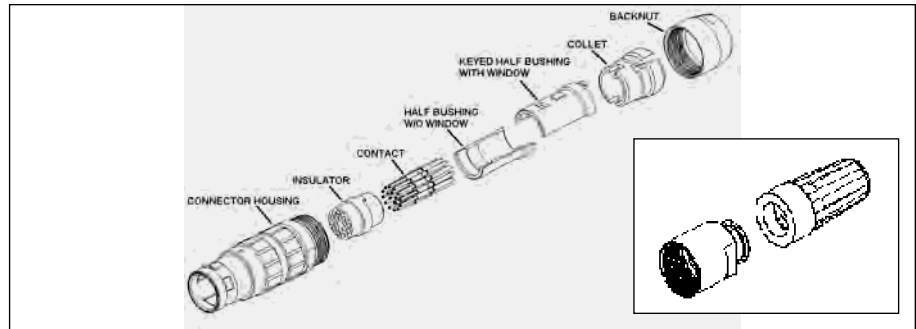


| Shell size | Electrical continuity (mΩ) |
|------------|----------------------------|
| <b>00</b>  | 4.5                        |
| <b>0</b>   | 4                          |
| <b>1</b>   | 3                          |
| <b>2</b>   | 2.5                        |
| <b>3</b>   | 2.5                        |

# JBX Plug Assembly Instructions

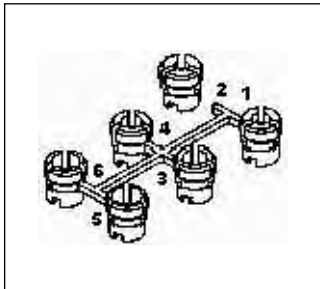


1. Determine what size cable you will be using. Then select the proper collet number for that cable.



## • Collets selection according to cable diameter

3 or 5 collets per shell size allow a wide range of cable diameters for a single connector. Cable out diameters are for information only, since values will change with each cable construction.

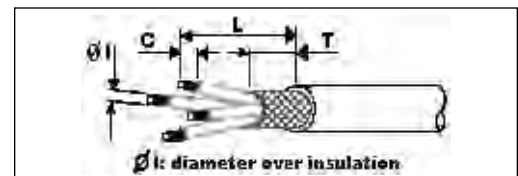


| Collet Number | Cable Diameter |                  |              |                  |
|---------------|----------------|------------------|--------------|------------------|
|               | Shell Size 0   | Size 0, Option G | Shell Size 1 | Size 1, Option G |
| 1             | 1.5 - 2.5      | —                | 2 - 2.5      | —                |
| 2             | 2.6 - 3.5      | —                | 2.6 - 3.5    | —                |
| 3             | 3.6 - 4.5      | —                | 3.6 - 4.5    | 6.1 - 6.7        |
| 4             | —              | 4.6 - 5.5        | 4.6 - 5.5    | 6.8 - 7.7        |
| 5             | —              | 5.6 - 6          | 5.6 - 6      | 7.8 - 8          |

Collet number 4 in shell size 0 and collet number 6 in shell size 1 are not used

2. Strip the cable and each wire to the required strip length.

## • Cable stripping for connectors with crimp contacts

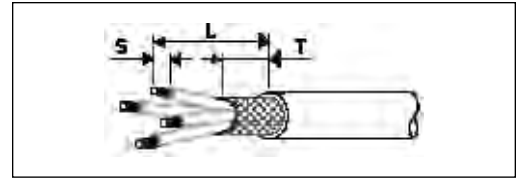


| Shell Size | Ø Contacts | Ø I   | Stripping for FD, SR, PC |     |    | Stripping for FC |     |    |
|------------|------------|-------|--------------------------|-----|----|------------------|-----|----|
|            |            |       | L                        | C   | T  | L                | C   | T  |
| 0          | 0.7        | ≤1.35 | 15                       | 4   | 7  | 19               | 4   | 7  |
|            |            | >1.35 |                          | 5.5 |    |                  | 5.5 |    |
|            | 0.9        | ≤1.6  | 15                       | 4   | 7  | 19               | 4   | 7  |
|            |            | >1.6  |                          | 5.5 |    |                  | 5.5 |    |
| 1          | 0.7        | ≤1.35 | 16                       | 4   | 8  | 22               | 4   | 8  |
|            |            | >1.35 |                          | 5.5 |    |                  | 5.5 |    |
|            | 0.9        | ≤1.6  | 16                       | 4   | 8  | 22               | 4   | 8  |
|            |            | >1.6  |                          | 5.5 |    |                  | 5.5 |    |
|            | 1.3        | ≤2.1  | 16                       | 4   | 8  | 22               | 4   | 8  |
|            |            | >2.1  |                          | 5.5 |    |                  | 5.5 |    |
| 2          | 0.7        | ≤1.35 | 19                       | 4   | 9  | 28               | 4   | 9  |
|            |            | >1.35 |                          | 5.5 |    |                  | 5.5 |    |
|            | 0.9        | ≤1.6  | 19                       | 4   | 9  | 28               | 4   | 9  |
|            |            | >1.6  |                          | 5.5 |    |                  | 5.5 |    |
|            | 1.3        | ≤2.1  | 19                       | 4   | 9  | 28               | 4   | 9  |
|            |            | >2.1  |                          | 5.5 |    |                  | 5.5 |    |
|            | 1.6        | ≤2.6  | 21                       | 5.5 | 9  | 28               | 5.5 | 9  |
|            |            | >2.6  |                          | 7   |    |                  | 7   |    |
|            | 2.0        | ≤3.2  | 21                       | 5.5 | 9  | 28               | 5.5 | 9  |
|            |            | >3.2  |                          | 7   |    |                  | 7   |    |
| 3          | 0.7        | ≤1.35 | 25                       | 4   | 10 | 35               | 4   | 10 |
|            |            | >1.35 |                          | 7   |    |                  | 7   |    |
|            | 0.9        | ≤1.6  | 25                       | 4   | 10 | 35               | 4   | 10 |
|            |            | >1.6  |                          | 7   |    |                  | 7   |    |
|            | 1.3        | ≤2.1  | 25                       | 4   | 10 | 35               | 4   | 10 |
|            |            | >2.1  |                          | 7   |    |                  | 7   |    |
|            | 1.6        | ≤2.6  | 27                       | 5.5 | 10 | 35               | 5.5 | 10 |
|            |            | >2.6  |                          | 8.5 |    |                  | 8.5 |    |
|            | 2.0        | ≤3.2  | 27                       | 5.5 | 10 | 35               | 5.5 | 10 |
|            |            | >3.2  |                          | 8.5 |    |                  | 8.5 |    |

# JBX Plug Assembly Instructions

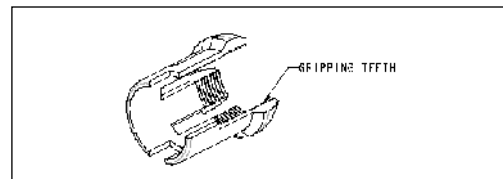
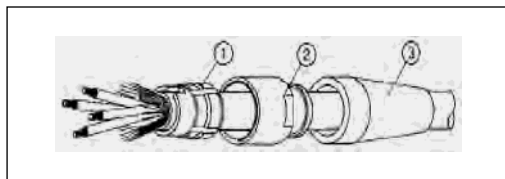


## • Cable stripping for connectors with solder contacts



| Shell Size | ø Contacts | Stripping for FD, SR, PC |     |    | Stripping for FC |     |    |
|------------|------------|--------------------------|-----|----|------------------|-----|----|
|            |            | L                        | S   | T  | L                | S   | T  |
| 00         | 0.5        | 9                        | 2   | 4  | /                | /   | /  |
| 0          | 0.5        | 11                       | 2   | 7  | 16               | 2   | 7  |
|            | 0.7        | 12                       | 3   | 7  | 16               | 3   | 7  |
|            | 0.9        | 12                       | 3   | 7  | 16               | 3   | 7  |
| 1          | 0.5        | 12                       | 2   | 8  | 19               | 2   | 8  |
|            | 0.7        | 13                       | 3   | 8  | 19               | 3   | 8  |
|            | 0.9        | 13                       | 3   | 8  | 19               | 3   | 8  |
|            | 1.3        | 13                       | 3.5 | 8  | 19               | 3.5 | 8  |
| 2          | 0.7        | 16                       | 3   | 9  | 25               | 3   | 9  |
|            | 0.9        | 16                       | 3   | 9  | 25               | 3   | 9  |
|            | 1.3        | 16                       | 3.5 | 9  | 25               | 3.5 | 9  |
|            | 1.6        | 18                       | 4   | 9  | 25               | 4   | 9  |
|            | 2.0        | 18                       | 4   | 9  | 25               | 4   | 9  |
| 3          | 0.7        | 20                       | 3   | 10 | 30               | 3   | 10 |
|            | 0.9        | 20                       | 3   | 10 | 30               | 3   | 10 |
|            | 1.3        | 20                       | 3.5 | 10 | 30               | 3.5 | 10 |
|            | 1.6        | 22                       | 4   | 10 | 30               | 4   | 10 |
|            | 2.0        | 22                       | 4   | 10 | 30               | 4   | 10 |

3. When assembling a plug with a protective boot (#3), prep the cable by taking the protective boot and sliding it with the small inside diameter first onto the cable. Then slide the end of the back nut (#2) that has the smaller diameter onto the cable. Next, take the collet (#1) and slide the end with the gripping teeth first onto the cable until the opposite end of the collet is flush with the cut end of the jacket. If the cable has shielding, fold back the braid so that it is covering the outside diameter of the collet. Do not place braid into any area of the alignment slots. Then insure that the braid does not interfere with the alignment slots of the collet.



4. Attach removable contacts to wires:
- If using crimped contacts, crimp the contacts onto the ends of the exposed wires using the proper crimping tool set on the correct AWG wire. (see FIGURE 4.A). After the contact has been crimped to the wire, check each contact to insure that the contact is securely crimped to the wire.

# JBX Plug Assembly Instructions

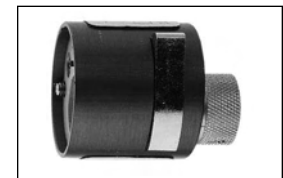


Locator for pin and socket 0.7 - 0.9 mm and 1.3 mm contacts

**FIGURE 4.A**

| Shell Size | ø Contacts | AWG          | Male Contact   |             |           | Female Contact |             |           |
|------------|------------|--------------|----------------|-------------|-----------|----------------|-------------|-----------|
|            |            |              | Souriau P/N    | Daniels P/N | Astro P/N | Souriau P/N    | Daniels P/N | Astro P/N |
| 0          | 0.7        | 22 - 24 - 26 | JBX 0 OUT LP07 | 86 - 223    | /         | JBX 0 OUT LP07 | 86 - 224    | /         |
|            | 0.9        | 20 - 22 - 24 | JBX 0 OUT LP09 | 86 - 225    | /         | JBX 0 OUT LP09 | 86 - 226    | /         |
| 1          | 0.7        | 22 - 24 - 26 | JBX 1 OUT LP07 | 86 - 196    | 642 - 001 | JBX 1 OUT LP07 | 86 - 197    | 642 - 004 |
|            | 0.9        | 20 - 22 - 24 | JBX 1 OUT LP09 | 86 - 198    | 642 - 002 | JBX 1 OUT LP09 | 86 - 199    | 642 - 005 |
|            | 1.3        | 18 - 20 - 22 | JBX 1 OUT LP13 | 86 - 200    | 642 - 003 | JBX 1 OUT LP13 | 86 - 201    | 642 - 006 |
| 2          | 0.7        | 22 - 24 - 26 | JBX 2 OUT LP07 | 86 - 202    | 642 - 007 | JBX 2 OUT LP07 | 86 - 203    | 642 - 010 |
|            | 0.9        | 20 - 22 - 24 | JBX 2 OUT LP09 | 86 - 204    | 642 - 008 | JBX 2 OUT LP09 | 86 - 205    | 642 - 011 |
|            | 1.3        | 18 - 20 - 22 | JBX 2 OUT LP13 | 86 - 206    | 642 - 009 | JBX 2 OUT LP13 | 86 - 207    | 642 - 012 |
| 3          | 0.7        | 22 - 24 - 26 | JBX 3 OUT LP07 | 86 - 217    | 642 - 014 | JBX 3 OUT LP07 | 86 - 214    | 642 - 017 |
|            | 0.9        | 20 - 22 - 24 | JBX 3 OUT LP09 | 86 - 218    | 642 - 015 | JBX 3 OUT LP09 | 86 - 215    | 642 - 018 |
|            | 1.3        | 18 - 20 - 22 | JBX 3 OUT LP13 | 86 - 219    | 642 - 016 | JBX 3 OUT LP13 | 86 - 216    | 642 - 019 |

Turret with locator for pin and socket 1.6 mm and 2 mm contacts



| Shell Size | ø Contacts | AWG          | Male and Female Contacts |             |           |
|------------|------------|--------------|--------------------------|-------------|-----------|
|            |            |              | Souriau P/N              | Daniels P/N | Astro P/N |
| 2          | 1.6        | 14 - 16 - 18 | JBX 2 OUT LT16           | TH 564      | 650 - 030 |
|            | 2          | 12 - 14 - 16 | JBX 2 OUT LT20           | TH 565      | 650 - 031 |
| 3          | 1.6        | 14 - 16 - 18 | JBX 3 OUT LT16           | TH 566      | 650 - 038 |
|            | 2          | 12 - 14 - 16 | JBX 3 OUT LT20           | TH 567      | 650 - 035 |

## Crimping Tool

| Specifications MIL-C-22520 / 7.01                                                   |                                     |                       |                                  |
|-------------------------------------------------------------------------------------|-------------------------------------|-----------------------|----------------------------------|
|  | Contacts 0.7 mm - 0.9 mm and 1.3 mm | MIL P/N - Souriau P/N | Supplier P/N                     |
|                                                                                     |                                     | MIL-22520/7-01        | Daniels: MH860                   |
| Specifications MIL-C-22520 / 1.01                                                   |                                     |                       |                                  |
|  | Contacts 1.6 mm and 2 mm            | MIL P/N - Souriau P/N | Supplier P/N                     |
|                                                                                     |                                     | MIL-22520/1-01        | Daniels: AF8<br>Buchanan: 615708 |

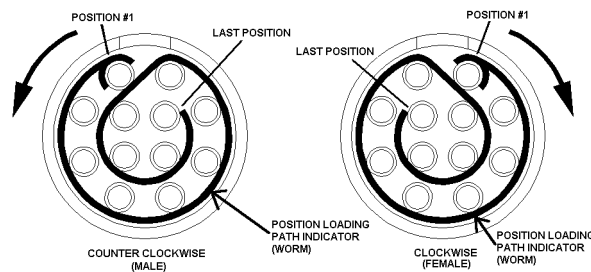
- b. If using soldered contacts, prep each wire with flux and then tin dip each exposed wire end. Next pre-load a piece of heat shrink onto the wire (Individual heat shrink tubes are optional). Solder each wire to the solder cup end of the contact. To avoid shorts, make sure that no solder comes in contact with any other contact or wire on the connector. After the contact has been soldered to the wire, check each contact to insure that the contact is securely soldered to the wire. Slide the pre-loaded heat shrink over the solder joint and shrink into place. Do not over-heat the solder joint area as it can cause the solder to re-flow or it could burn the wire insulation.

# JBX Plug Assembly Instructions



## 5. If inserting removable contacts:

- Starting with the interface end of the contact, carefully insert each contact into the backside of the insulator that has the position loading path indicator (worm) on it. Start with the end of the position loading path indicator (worm) that has the half circle on it (Position #1). Then follow the position loading path indicator (worm) around the insulator. You will go counter clockwise if using a male contact and clockwise if using a female contact (see diagram below for the position loading path indicator (worm) layout). If the connector has center contacts, it is sometimes easier to start at the end of the position loading path indicator (worm) (last position) and work backwards. This is up to the assembler and the process they are using to insert the contacts. Make sure not to bend the contact when inserting it into the insulator. It is extremely important that the contact is completely seated in to the insulator. For the connector to function properly, the contact should click/snap into place when seated. To confirm the seating of the contact, check each contact for proper seating.



## 6. Removal of contacts:

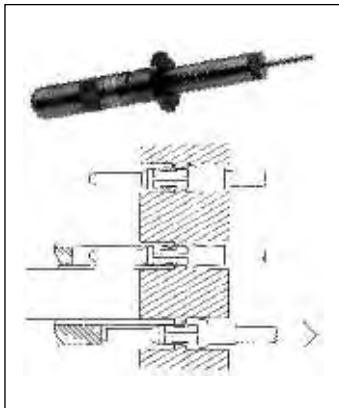
- Using the proper extraction tool insert the tool over the front of the contact and push contact out. Failure to use the proper extraction tool can result in damage to the contact.

### TOOLINGS – JBX – JKX

#### Manual Extraction Tools

Contacts automatically extracted without pulling on the cable.

The extraction tool is the same for both male and female contacts.



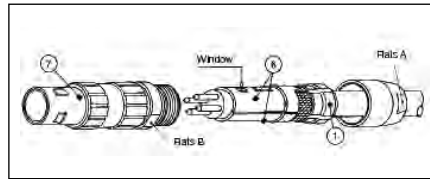
| Shell Size | ø Contacts | Souriau Part Number | Astro Part Number |
|------------|------------|---------------------|-------------------|
| 0          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
| 1          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
| 2          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
|            | 1.6        | JBX OUT DC 16       | ATJP 2095         |
|            | 2.0        | JBX OUT DC 20       | ATJP 2115         |
| 3          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
|            | 1.6        | JBX OUT DC 16       | ATJP 2095         |
|            | 2.0        | JBX OUT DC 20       | ATJP 2115         |

- Take the keyed half bushing (#6) and place it over the insulator so that the window is lined up with the key on the insulator and the key on the half bushing is pointing to the back of the insulator (position loading path indicator (worm end)). Then take the half bushing without the window (#6) and place on the opposite side of the insulator so that both half bushings are aligned with each other.

# JBX Plug Assembly Instructions



8. Take the collet that is pre-loaded on the cable and align the slots in the collet with the keys on the end of the half bushings (you may need to move the braid away from the slots and spin the collet slightly). Once they are aligned, compress the assembly so that it is in line and there are no gaps between the collet & the half bushings. The braid should still be in place once the assembly is inserted.
9. Take a connector housing (#7) and slide it over the insulator so that the red dot on the connector housing lines up with the key on the half bushing with window. Push the whole assembly into the connector housing until it bottoms out. Insure that the keys are seated properly by turning the collet that is already aligned with the half bushings. If the collet does not turn, then the keys are correctly aligned. If the collet does turn, then you must withdraw the assembly & realign the keys.

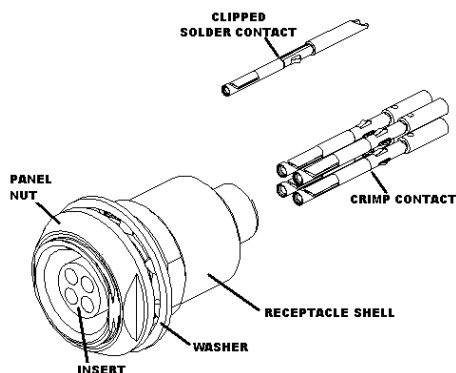


10. Once the assembly is installed into the connector housing and is aligned properly, apply thread lock to thread area. Then slide the back nut up until you can manually start the back nut threads onto the threaded end of the connector housing. Tighten the back nut up as far as you can by hand, then take the appropriate wrenches and place the wrenches onto the flats located on the connector housing. Do not over torque back nut as it can cause connector failure.
11. If the connector requires a protective boot, slide the boot over the lip on the back nut.
12. Potting of backend of plug with clipped contacts:  
Clipped contacts are designed to float in the connector so that they self align when mated. It is sometimes necessary to pot the back end of the connector so that the contacts are sealed off from the environment. When this application is needed, it is recommended that the assembler engage a mating connector/alignment tool to the assembly being potted. Once the mating connector/alignment tool is engaged, it must be left engaged until the potting compound has hardened. This will insure that the true position requirements are met. If the application is for low volume, a mating connector can be used. If the application is for high volume, it is recommended that an alignment tool be purchased from the supplier.

## Trouble Shooting

| Problem:                                                         | Cause:                                                                                                                                                     | Correction:                                                                                                                             |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Contact will not seat in connector, contact backing out.         | Wrong wire or insulation size, wrong strip length, poor crimping, broken clips, damaged insulator, removed contact without proper removal tool, bad crimp. | Use correct wire, adjust strip length, strip and re-crimp with new contact, replace insulator, using wrong crimp tool, replace contact. |
| Bent solder contact                                              | Bent in handling, bent in soldering operation, connector assembled incorrectly.                                                                            | Replace insert with contacts.                                                                                                           |
|                                                                  | Pins and insulator were inserted into electrical test while unprotected by shell                                                                           |                                                                                                                                         |
| Connector will not release from mating part or operate correctly | Not using flats on latching sleeve and back nut to torque connector, improper assembly of the connector, over mold material inside connector.              | Release back nut and re-torque, disassemble and reassemble, replace connector.                                                          |
| Over tightened the back nut.                                     | Connector will not release from mating part or operate correctly, damage connector.                                                                        | Loosen back nut and retighten.                                                                                                          |
| Collet will not grip cable.                                      | Loose cable in connector.                                                                                                                                  | Check correct collet size is being used.                                                                                                |
| Connector will not assemble.                                     | Incorrect alignment of key in connector, half bushings, connector housing, insulator, collet, braid in key slots in collet.                                | Disassemble connector and reassemble connector-aligning keys, relocate braid in collet.                                                 |
| Contact stubbing after mating.                                   | Bent contact and damaged contact, connector-assembled incorrectly.                                                                                         | Re-align contact, replace insert with contacts.                                                                                         |
| Electrical failure.                                              | Improper crimping, wrong wire strip length, wire loading incorrect location, poor solder joint.                                                            | Remove contact with correct removal tool, re-install new contact, and verify strip length.                                              |

# JBX Receptacle Assembly Instructions

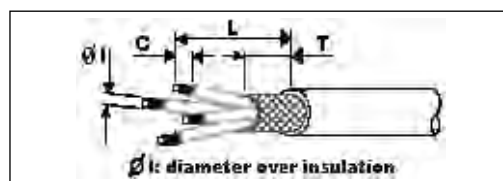


1. Select the proper JBX receptacle and contact size for the specific cable application by using the contact layout chart as depicted in the Push Pull catalog.

2. Strip the cable/wire to the required strip length.

Wiring and assembly instructions

Cable stripping for connectors with crimp contacts

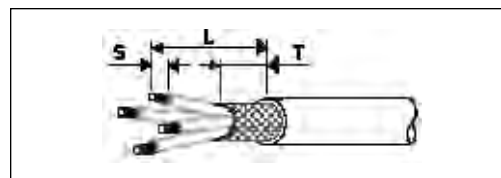


| Shell Size | ø Contacts | ø I   | Stripping for FD, SR, PC |     |    | Stripping for FC |     |    |
|------------|------------|-------|--------------------------|-----|----|------------------|-----|----|
|            |            |       | L                        | C   | T  | L                | C   | T  |
| 0          | 0.7        | ≤1.35 | 15                       | 4   | 7  | 19               | 4   | 7  |
|            |            | >1.35 |                          | 5.5 |    |                  | 5.5 |    |
|            | 0.9        | ≤1.6  | 15                       | 4   | 7  | 19               | 4   | 7  |
|            |            | >1.6  |                          | 5.5 |    |                  | 5.5 |    |
| 1          | 0.7        | ≤1.35 | 16                       | 4   | 8  | 22               | 4   | 8  |
|            |            | >1.35 |                          | 5.5 |    |                  | 5.5 |    |
|            | 0.9        | ≤1.6  | 16                       | 4   | 8  | 22               | 4   | 8  |
|            |            | >1.6  |                          | 5.5 |    |                  | 5.5 |    |
|            | 1.3        | ≤2.1  | 16                       | 4   | 8  | 22               | 4   | 8  |
|            |            | >2.1  |                          | 5.5 |    |                  | 5.5 |    |
| 2          | 0.7        | ≤1.35 | 19                       | 4   | 9  | 28               | 4   | 9  |
|            |            | >1.35 |                          | 5.5 |    |                  | 5.5 |    |
|            | 0.9        | ≤1.6  | 19                       | 4   | 9  | 28               | 4   | 9  |
|            |            | >1.6  |                          | 5.5 |    |                  | 5.5 |    |
|            | 1.3        | ≤2.1  | 19                       | 4   | 9  | 28               | 4   | 9  |
|            |            | >2.1  |                          | 5.5 |    |                  | 5.5 |    |
|            | 1.6        | ≤2.6  | 21                       | 5.5 | 9  | 28               | 5.5 | 9  |
|            |            | >2.6  |                          | 7   |    |                  | 7   |    |
|            | 2.0        | ≤3.2  | 21                       | 5.5 | 9  | 28               | 5.5 | 9  |
|            |            | >3.2  |                          | 7   |    |                  | 7   |    |
| 3          | 0.7        | ≤1.35 | 25                       | 4   | 10 | 35               | 4   | 10 |
|            |            | >1.35 |                          | 7   |    |                  | 7   |    |
|            | 0.9        | ≤1.6  | 25                       | 4   | 10 | 35               | 4   | 10 |
|            |            | >1.6  |                          | 7   |    |                  | 7   |    |
|            | 1.3        | ≤2.1  | 25                       | 4   | 10 | 35               | 4   | 10 |
|            |            | >2.1  |                          | 7   |    |                  | 7   |    |
|            | 1.6        | ≤2.6  | 27                       | 5.5 | 10 | 35               | 5.5 | 10 |
|            |            | >2.6  |                          | 8.5 |    |                  | 8.5 |    |
|            | 2.0        | ≤3.2  | 27                       | 5.5 | 10 | 35               | 5.5 | 10 |
|            |            | >3.2  |                          | 8.5 |    |                  | 8.5 |    |

# JBX Receptacle Assembly Instructions



Wiring and assembly instructions  
Cable stripping for connectors with solder contacts



| Shell Size | ø Contacts | Stripping for FD, SR, PC |     |    | Stripping for FC |     |    |
|------------|------------|--------------------------|-----|----|------------------|-----|----|
|            |            | L                        | S   | T  | L                | S   | T  |
| 00         | 0.5        | 9                        | 2   | 4  | /                | /   | /  |
| 0          | 0.5        | 11                       | 2   | 7  | 16               | 2   | 7  |
|            | 0.7        | 12                       | 3   | 7  | 16               | 3   | 7  |
|            | 0.9        | 12                       | 3   | 7  | 16               | 3   | 7  |
| 1          | 0.5        | 12                       | 2   | 8  | 19               | 2   | 8  |
|            | 0.7        | 13                       | 3   | 8  | 19               | 3   | 8  |
|            | 0.9        | 13                       | 3   | 8  | 19               | 3   | 8  |
|            | 1.3        | 13                       | 3.5 | 8  | 19               | 3.5 | 8  |
| 2          | 0.7        | 16                       | 3   | 9  | 25               | 3   | 9  |
|            | 0.9        | 16                       | 3   | 9  | 25               | 3   | 9  |
|            | 1.3        | 16                       | 3.5 | 9  | 25               | 3.5 | 9  |
|            | 1.6        | 18                       | 4   | 9  | 25               | 4   | 9  |
|            | 2.0        | 18                       | 4   | 9  | 25               | 4   | 9  |
| 3          | 0.7        | 20                       | 3   | 10 | 30               | 3   | 10 |
|            | 0.9        | 20                       | 3   | 10 | 30               | 3   | 10 |
|            | 1.3        | 20                       | 3.5 | 10 | 30               | 3.5 | 10 |
|            | 1.6        | 22                       | 4   | 10 | 30               | 4   | 10 |
|            | 2.0        | 22                       | 4   | 10 | 30               | 4   | 10 |

3. Depending on application and shell type, the nut and washer may be removed before attaching the wires to the contacts.

4. Attach crimped contacts to wires:

- If using crimped contacts, crimp the contacts onto the ends of the exposed wires using the proper crimping tool and locator set on the correct AWG wire size (see FIGURE 4.A). After the contact has been crimped to the wire, check each contact to insure that the contact is securely crimped.

Locator for pin and socket 0.7 - 0.9 mm and 1.3 mm contacts



FIGURE 4.A

| Shell Size | ø Contacts | AWG          | Male Contact   |             |           | Female Contact |             |           |
|------------|------------|--------------|----------------|-------------|-----------|----------------|-------------|-----------|
|            |            |              | Souriau P/N    | Daniels P/N | Astro P/N | Souriau P/N    | Daniels P/N | Astro P/N |
| 0          | 0.7        | 22 - 24 - 26 | JBX 0 OUT LP07 | 86 - 223    | /         | JBX 0 OUT LP07 | 86 - 224    | /         |
|            | 0.9        | 20 - 22 - 24 | JBX 0 OUT LP09 | 86 - 225    | /         | JBX 0 OUT LP09 | 86 - 226    | /         |
| 1          | 0.7        | 22 - 24 - 26 | JBX 1 OUT LP07 | 86 - 196    | 642 - 001 | JBX 1 OUT LP07 | 86 - 197    | 642 - 004 |
|            | 0.9        | 20 - 22 - 24 | JBX 1 OUT LP09 | 86 - 198    | 642 - 002 | JBX 1 OUT LP09 | 86 - 199    | 642 - 005 |
|            | 1.3        | 18 - 20 - 22 | JBX 1 OUT LP13 | 86 - 200    | 642 - 003 | JBX 1 OUT LP13 | 86 - 201    | 642 - 006 |
| 2          | 0.7        | 22 - 24 - 26 | JBX 2 OUT LP07 | 86 - 202    | 642 - 007 | JBX 2 OUT LP07 | 86 - 203    | 642 - 010 |
|            | 0.9        | 20 - 22 - 24 | JBX 2 OUT LP09 | 86 - 204    | 642 - 008 | JBX 2 OUT LP09 | 86 - 205    | 642 - 011 |
|            | 1.3        | 18 - 20 - 22 | JBX 2 OUT LP13 | 86 - 206    | 642 - 009 | JBX 2 OUT LP13 | 86 - 207    | 642 - 012 |
| 3          | 0.7        | 22 - 24 - 26 | JBX 3 OUT LP07 | 86 - 217    | 642 - 014 | JBX 3 OUT LP07 | 86 - 214    | 642 - 017 |
|            | 0.9        | 20 - 22 - 24 | JBX 3 OUT LP09 | 86 - 218    | 642 - 015 | JBX 3 OUT LP09 | 86 - 215    | 642 - 018 |
|            | 1.3        | 18 - 20 - 22 | JBX 3 OUT LP13 | 86 - 219    | 642 - 016 | JBX 3 OUT LP13 | 86 - 216    | 642 - 019 |

# JBX Receptacle Assembly Instructions



Turret with locator for pin and socket 1.6 mm and 2 mm contacts



| Shell Size | ø Contacts | AWG          | Male and Female Contacts |             |           |
|------------|------------|--------------|--------------------------|-------------|-----------|
|            |            |              | Souriau P/N              | Daniels P/N | Astro P/N |
| 2          | 1.6        | 14 - 16 - 18 | JBX 2 OUT LT16           | TH 564      | 650 - 030 |
|            | 2          | 12 - 14 - 16 | JBX 2 OUT LT20           | TH 565      | 650 - 031 |
| 3          | 1.6        | 14 - 16 - 18 | JBX 3 OUT LT16           | TH 566      | 650 - 038 |
|            | 2          | 12 - 14 - 16 | JBX 3 OUT LT20           | TH 567      | 650 - 035 |

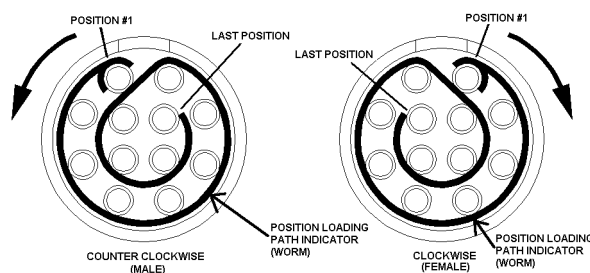
## Crimping Tool

| Specifications MIL-C-22520 / 7.01                                                   |                                     |                       |                                  |
|-------------------------------------------------------------------------------------|-------------------------------------|-----------------------|----------------------------------|
|    | Contacts 0.7 mm - 0.9 mm and 1.3 mm | MIL P/N - Souriau P/N | Supplier P/N                     |
|                                                                                     |                                     | MIL-22520/7-01        | Daniels: MH860                   |
| Specifications MIL-C-22520 / 1.01                                                   |                                     |                       |                                  |
|  | Contacts 1.6 mm and 2 mm            | MIL P/N - Souriau P/N | Supplier P/N                     |
|                                                                                     |                                     | MIL-22520/1-01        | Daniels: AF8<br>Buchanan: 615708 |

- b. If using clipped solder contacts, prep each wire with flux and then tin dip each exposed wire end. Next pre-load a piece of heat shrink onto the wire (Individual heat shrink tubes are optional). Solder each wire to the solder cup end of the contact. To avoid shorts, make sure that no solder comes in contact with any other contact or wire on the connector. After the contact has been soldered to the wire, check each contact to insure that the contact is securely soldered to the wire. Slide the pre-loaded heat shrink over the solder joint and shrink into place. Do not over-heat the solder joint area as it can cause the solder to re-flow or it could burn the wire insulation.

## 5. If inserting terminated contacts:

- a. Starting with the interface end of the contact, insert each contact into the backside of the insulator that has the position loading path indicator (worm) on it. Start with the end of the position loading path indicator (worm) that has the half circle on it (Position #1). Then follow the position loading path indicator (worm) around the insulator. You will go counter clockwise if using a male contact and clockwise if using a female contact (see diagram below for the position loading path indicator (worm) layout). If the connector has center contacts, it is sometimes easier to start at the end of the position loading path indicator (worm) (last position) and work backwards. This is up to the assembler and the process used to insert the contacts. Make sure not to bend the contact when inserting it into the insulator. It is extremely important that the contact is seated in the insulator for the connector to function properly. The contact should click/snap into place when seated. Check each contact for proper seating.



## Removal of contacts:

Using the proper extraction tool (See FIGURE 6.A), insert the tool over the front of the contact and push contact out. Failure to use the proper extraction tool can result in damage to the contact.

# JBX Receptacle Assembly Instructions



Manual extraction tools



The extraction tool is the same for both male and female contacts.

FIGURE 6.A

| Shell Size | ø Contacts | Souriau Part Number | Astro Part Number |
|------------|------------|---------------------|-------------------|
| 0          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
| 1          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
| 2          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
|            | 1.6        | JBX OUT DC 16       | ATJP 2095         |
|            | 2.0        | JBX OUT DC 20       | ATJP 2115         |
| 3          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
|            | 1.6        | JBX OUT DC 16       | ATJP 2095         |
|            | 2.0        | JBX OUT DC 20       | ATJP 2115         |

## 7. Potting of backend of receptacle with clipped contacts

Clipped contacts are designed to float in the connector so that they self align when mated. It is sometimes necessary to pot the backend of the connector so that the contacts are sealed off from the environment. When this application is needed, it is recommended that the assembler engage a mating connector/alignment tool to the assembly being potted. Once the mating connector/alignment tool is engaged, it must be left engaged until the potting compound has hardened. This will insure that the true position requirements are met. If the application is low volume, a mating connector can be used. If the application is for high volume, it is recommended that an alignment tool be purchased from the supplier.

## Trouble shooting

| Problem:                                                 | Cause:                                                                                                                                                     | Correction:                                                                                                                                                                                                                            |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact will not seat in connector, contact backing out. | Wrong wire or insulation size, wrong strip length, poor crimping, broken clips, damaged insulator, removed contact without proper removal tool, bad crimp. | Use correct wire, adjust strip length, strip and re-crimp with new contact, replace insulator, using correct crimp tool, replace contact.                                                                                              |
| Bent solder contact                                      | Bent in handling, bent in soldering operation, connector assembled incorrectly.                                                                            | Re-align contact, replace insert with contacts.                                                                                                                                                                                        |
| Contact stubbing after mating.                           | Bent contact and damaged contact, connector-assembled incorrectly.                                                                                         | Re-align contact, replace insert with contacts. If using clipped contacts and receptacle is potted, a mating connector must be applied to the connector that is being potted. This insures that the contacts will be properly aligned. |
| Electrical failure.                                      | Improper crimping, wrong wire strip length, wire loading incorrect location, poor solder joint.                                                            | Remove contact with correct removal tool, re-install new contact, and verify strip length.                                                                                                                                             |

# Environmentally Sealed Push Pull Connectors



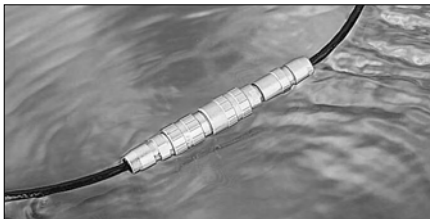
## Key features

- Sealed IP 68 (mated connectors)
- Mechanically keyed : ensures correct polarization and alignment.
- Contact arrangements : from 2 to 10 contacts.
- Wire gauge range from 28 AWG to 14 AWG.
- High contact density in a small space.
- Contact termination in either crimp, solder, PC or right angle PCB contacts.



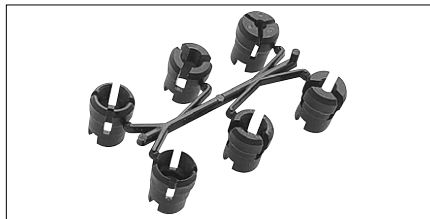
## User advantages

### Temporary immersion IP 68



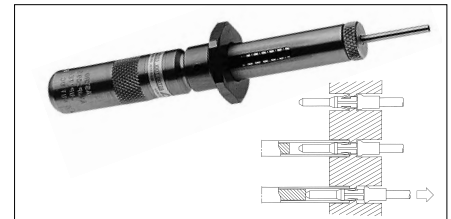
### 6-collet cluster

Allows a wide range of cable diameter applications for a single connector.  
Reduces inventory



### Removable contacts

Crimp versions allow easier wiring and maintenance.



## Part number system

|                            |                                                                                                                                                                                                                                                    |    |   |   |    |   |   |   |   |   |   |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|---|----|---|---|---|---|---|---|
| Basic series               | JKX                                                                                                                                                                                                                                                | FD | 1 | G | 05 | M | C | S | D | S | M |
| Shell configuration        | FD - ER - EP - PC                                                                                                                                                                                                                                  |    |   |   |    |   |   |   |   |   |   |
| Size                       | 0 - 1                                                                                                                                                                                                                                              |    |   |   |    |   |   |   |   |   |   |
| Keying                     | G                                                                                                                                                                                                                                                  |    |   |   |    |   |   |   |   |   |   |
| Contact layouts            | 02 ----- 10 (see page 33)                                                                                                                                                                                                                          |    |   |   |    |   |   |   |   |   |   |
| Contact type               | M : pin    F : socket (in relation with keying)                                                                                                                                                                                                    |    |   |   |    |   |   |   |   |   |   |
| Contact termination        | C : crimp ; S : solder ; P* : straight PCB tails ; Q* : 90° PCB tails                                                                                                                                                                              |    |   |   |    |   |   |   |   |   |   |
| Material & surface plating | S : Outer shell in brass alloy with glossy chrome over nickel<br>N : Outer shell in brass alloy with black plating (consult SOURIAU US)<br>D : Obligatory suffix<br>S : All contact diamete except 0.5 mm<br>P : 0.5 mm contacts only              |    |   |   |    |   |   |   |   |   |   |
| Options                    | M : Connector with backnut for protective boot (protective boot to order separately page 34)<br>G : Connector with adaptation to accomodate big cables (Ø 4.5 to 6 in size 0 and Ø 6 to 8 in size 1)<br>R : Red dot (possible for FD, PC, ER only) |    |   |   |    |   |   |   |   |   |   |

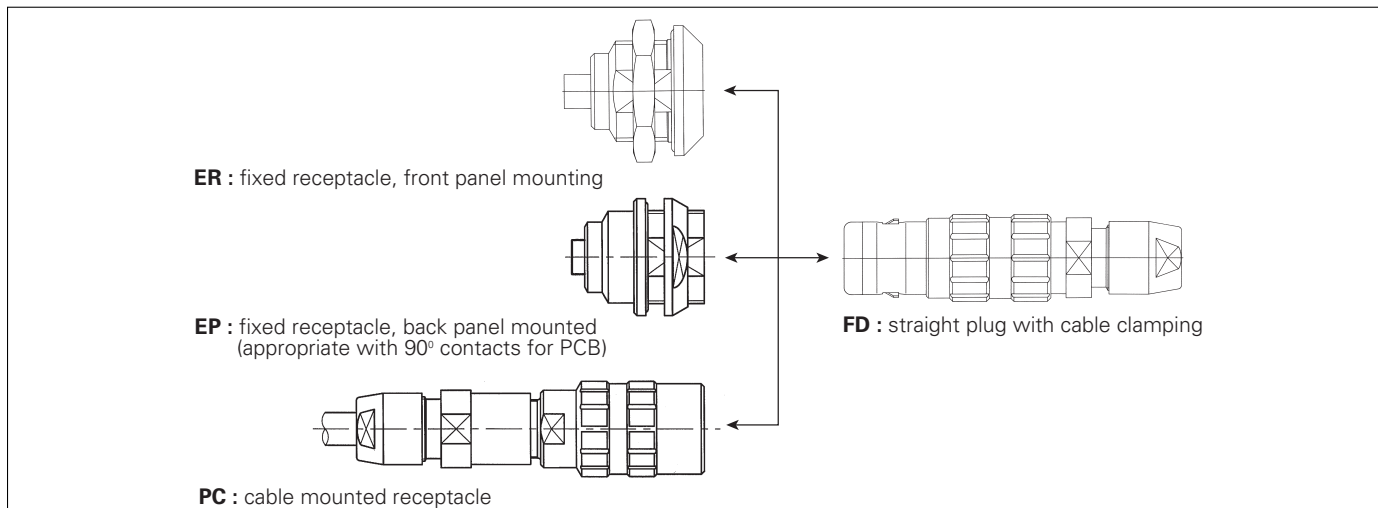
\* For receptacles with female contacts only.

# Environmentally Sealed Push Pull Connectors



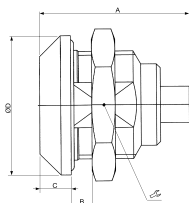
## Shell type

### • Available JKX shells



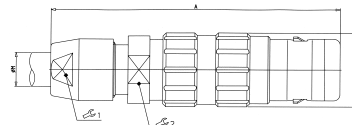
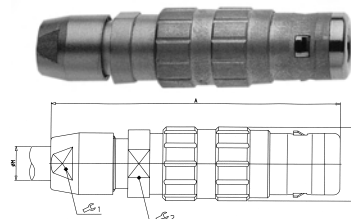
### • Dimensions

**ER** : Fixed receptacle, front panel mounting



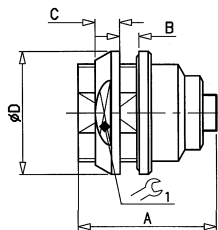
| Size | A    | B   | C   | Ø D |
|------|------|-----|-----|-----|
| 0    | 19.5 | 4.5 | 4   | 18  |
| 1    | 24.5 | 8.5 | 4.5 | 20  |

**FD** : Straight plug with cable clamping



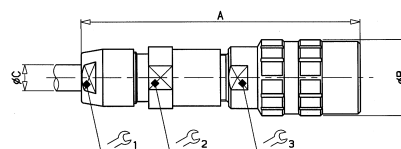
| Size | A  | Ø B | Ø M        |
|------|----|-----|------------|
| 0    | 47 | 12  | 1.5 to 4.5 |
| 1    | 57 | 15  | 2 to 6     |

**EP** : Fixed receptacle, back panel mounting



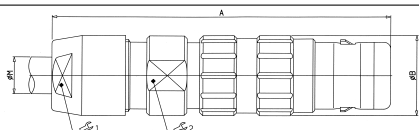
| Size | A    | B   | C   | Ø D |
|------|------|-----|-----|-----|
| 0    | 19.5 | 4.5 | 3.2 | 18  |
| 1    | 24.5 | 6   | 4   | 20  |

**PC** : Cable mounted receptacle



| Size | A  | Ø B | Ø C    |
|------|----|-----|--------|
| 0    | —  | —   | —      |
| 1    | 60 | 16  | 2 to 6 |

### • Option G : to accomodate bigger cables



| Size | A  | Ø B | Ø M      |
|------|----|-----|----------|
| 0    | 51 | 12  | 4.6 to 6 |
| 1    | 60 | 15  | 6 to 8   |

# Environmentally Sealed Push Pull Connectors



## Keying

Only G keying is available in standard version (0° keying angle, plugs with pin contacts, receptacles with female contacts) for the shell styles.

| Shell size | Key | ER | EP | PC | FD |
|------------|-----|----|----|----|----|
| 0          | G   | ●  | ●  | –  | ●  |
| 1          | G   | ●  | ●  | ●  | ●  |

## Contacts

● Concerning the availability of other alternatives, please consult our commercial office.

### • Multi contacts inserts

| Shell size | Male insulator viewed from wiring side | Contact layout | Available Contact types |         |                       |                  | Ø Contact | AWG              |                 | Max. current rating (A) | Testing voltage (Vrms) | Working voltage (Vdc / Vrms) |
|------------|----------------------------------------|----------------|-------------------------|---------|-----------------------|------------------|-----------|------------------|-----------------|-------------------------|------------------------|------------------------------|
|            |                                        |                | S solder                | C crimp | P* straight PCB tails | Q* 90° PCB tails |           | Solder wire Max. | Crimp wire Max. |                         |                        |                              |
| 0          |                                        | 02             | S                       | C       | P                     | Q                | 0.9       | 24               | 20              | 10                      | 1400                   | 660/460                      |
|            |                                        | 03             | S                       | C       | P                     | Q                | 0.9       | 24               | 20              | 8                       | 1300                   | 600/420                      |
|            |                                        | 04             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 7                       | 1400                   | 660/460                      |
|            |                                        | 05             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 6.5                     | 800                    | 400/260                      |
|            |                                        | 06             | S                       |         | P                     |                  | 0.5       | 28               | -               | 2.5                     | 680                    | 320/220                      |
|            |                                        | 07             | S                       |         | P                     |                  | 0.5       | 28               | -               | 2.5                     | 680                    | 320/220                      |
| 1          |                                        | 02             | S                       | C       |                       |                  | 1.3       | 20               | 18              | 15                      | 1600                   | 760/530                      |
|            |                                        | 03             | S                       | C       |                       |                  | 1.3       | 20               | 18              | 12                      | 1300                   | 600/420                      |
|            |                                        | 04             | S                       | C       | P                     | Q                | 0.9       | 24               | 20              | 10                      | 1900                   | 900/630                      |
|            |                                        | 05             | S                       | C       | P                     | Q                | 0.9       | 24               | 20              | 9                       | 1400                   | 660/460                      |
|            |                                        | 06             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 7                       | 1400                   | 660/460                      |
|            |                                        | 07             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 7                       | 1400                   | 660/460                      |
|            |                                        | 08             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 5                       | 1200                   | 600/420                      |
|            |                                        | 10             | S                       |         |                       |                  | 0.5       | 28               | -               | 2.5                     | 600                    | 300/200                      |

Inserts with fixed contacts (non removable contacts)

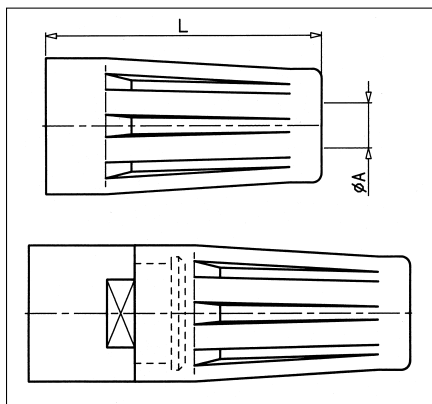
\* For receptacles with female contacts only

# Environmentally Sealed Push Pull Connectors



## Options

### • Protective boot



| Part number | Shell size | Shell size option G | Dimensions |    |         |      |
|-------------|------------|---------------------|------------|----|---------|------|
|             |            |                     | Ø A        | L  | Ø Câble |      |
|             |            |                     |            |    | min     | Max. |
| JBX 0 MP*   | 0          | -                   | 2.2        | 20 | 1.5     | 5.5  |
| JBX 1 MP*   | 1          | 0                   | 2.6        | 25 | 2       | 7.5  |
| JBX 2 MP*   | -          | 1                   | 4          | 30 | 3.5     | 9.7  |

\* Color code



| Color code | Colors |
|------------|--------|
| A          | blue   |
| B          | white  |
| G          | grey   |
| J          | yellow |
| M          | brown  |
| N          | black  |
| R          | red    |
| V          | green  |
| O          | orange |

#### Material :

ELASTOLLAN (PUR)

#### Working temperature :

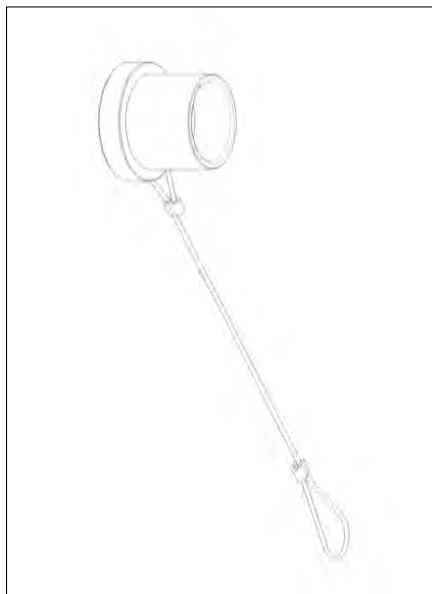
- 40°C ; + 80°C

- 40°F ; + 176°F

Parts that require a protective boot need to be ordered with an M suffix. Protective boots are ordered separately.

With each JKX connector, one protective boot can accept diverse cable diameters thus the end-user can manage various cable diameters without bothering with multiple part numbers.

### • Caps : Protect the receptacle to IP68



| Part number | Ø  |
|-------------|----|
| JKX BR0     | 14 |
| JKX BR1     | 16 |

# Environmentally Sealed Push Pull Connectors



## Technical characteristics

### • Material and treatment

| Component                                                | Material         | Standard  |             | Surface treatment (µm) |       |     |
|----------------------------------------------------------|------------------|-----------|-------------|------------------------|-------|-----|
|                                                          |                  | ISO       | ASTM        | Cr                     | Ni    | Au  |
| Outer shell and collet nut                               | Brass            | CuZn40Pb3 | C38500/C360 | 0.1 - 0.6              | 5 - 8 | -   |
| Latching sleeve                                          | Brass            | CuZn40Pb3 | C38500/C360 | -                      | 5 - 8 | -   |
| Shielding ring                                           | Brass            | CuZn40Pb3 | C38500/C360 | -                      | 3 - 7 | -   |
| Nut                                                      | Brass            | CuZn40Pb3 | C38500/C360 | -                      | 5 - 8 | -   |
| Tapered washer and half bushes                           | Brass            | CuZn40Pb3 | C38500/C360 | -                      | 5 - 8 | -   |
| Socket contact (1)                                       | Cupro-nickel     | CuNi1Pb1P | CDAC19150   | -                      | 3 - 5 | 0.5 |
| Pin contact (1)                                          | Brass            | CuZn35Pb2 | C38500/C360 | -                      | 3 - 5 | 0.5 |
| Clip                                                     | Beryllium copper | CuBe1,9   | C17200/C360 | -                      | -     | -   |
| (1) Gold thickness as per MIL-G-45204C type 1, class 00. |                  |           |             |                        |       |     |

| Component  | Material       | Color | Temperature withstanding |                |
|------------|----------------|-------|--------------------------|----------------|
| Insert     | PEEK + 30%GF   | brown | - 50°C + 250°C           | - 58°F + 482°F |
| Collet     | PA 6/6 + MoS2  | black | - 55°C + 125°C           | - 67°F + 257°F |
| Cable seal | Silicon rubber | red   | - 50°C + 250°C           | - 58°F + 482°F |

### • Mechanical and climatics

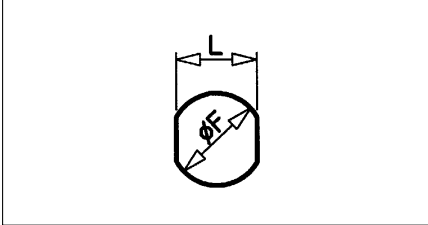
| Characteristics       | Values                                                                                                         | Standard      | Method |
|-----------------------|----------------------------------------------------------------------------------------------------------------|---------------|--------|
| Endurance             | > 1000 cycles (except for 0.7 mm crimp contacts for which endurance is limited to 500 cycles)                  | MIL-STD 1344A | 2016.1 |
| Shock                 | 50 g, duration 6 ms ; contact Ø 0.7 mm and 0.9 mm<br>100 g, duration 6 ms ; contact Ø 1.3 mm - 1.6 mm and 2 mm | MIL-STD 1344A | 2004.1 |
| Vibrations            | 10 to 2000 Hz γ = 15 g, contact Ø 0.7 mm and 0.9 mm<br>γ = 20 g, contact Ø 1.3 mm - 1.6 mm and 2 mm            | MIL-STD 1344A | 2005.1 |
| Protection index      | IP 68 (watertight - 48 hours under 1 m of water)                                                               | CEI 529       |        |
| Operating temperature | with plastic collets } - 55°C + 125°C<br>- 67°F + 257°F                                                        | -             | -      |
|                       | with optional metal collets } - 55°C + 200°C<br>- 67°F + 392°F<br>(only on request, consult SOURIAU)           | -             | -      |

# Environmentally Sealed Push Pull Connectors



## Wiring and assembly instructions

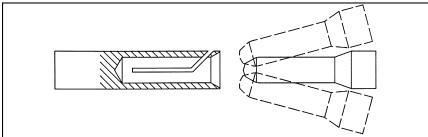
### • Panel cutout



| Size | 0    | 1    |
|------|------|------|
| Ø F  | 14.1 | 16.1 |
| L    | 12.6 | 14.6 |

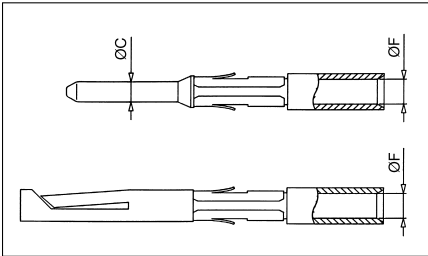
### • Removable contacts

#### Reliable design



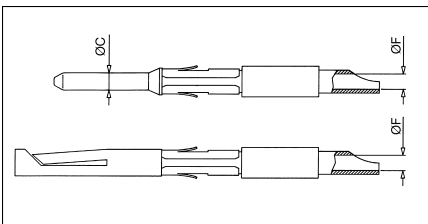
- Conical entry with chamfered edge on the socket contact and smooth slope on the pin contact ensure perfect concentric mating even when handled carelessly.
- The pressure spring of the socket contact maintains a constant force on the pin contact when mated.

### Crimp contacts



| Contact |      | Usable cables      |       |              | Max.<br>current<br>rating (A) | Contact<br>resistance<br>(m?) | Endurance<br>(number<br>of cycles) |
|---------|------|--------------------|-------|--------------|-------------------------------|-------------------------------|------------------------------------|
| Ø C     | Ø F  | Core section (mm²) |       | AWG          |                               |                               |                                    |
|         |      | min                | Max.  |              |                               |                               |                                    |
| 0.7     | 0.85 | 0.129              | 0.326 | 22 - 24 - 26 | 7                             | 5                             | 500 Max.                           |
| 0.9     | 1.1  | 0.205              | 0.518 | 20 - 22 - 24 | 10                            | 3.5                           | > 1000                             |
| 1.3     | 1.4  | 0.326              | 0.823 | 18 - 20 - 22 | 15                            | 3                             | > 1000                             |

### Solder contacts

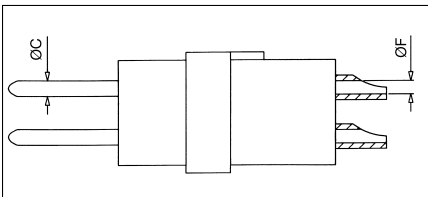


| Contact |     | Usable cables      |      |     | Max. current rating (A) | Contact resistance (m?) | Endurance (number of cycles) |
|---------|-----|--------------------|------|-----|-------------------------|-------------------------|------------------------------|
| Ø C     | Ø F | Core section (mm²) |      | AWG |                         |                         |                              |
|         |     | min                | Max. |     |                         |                         |                              |
| 0.9     | 0.8 | –                  | 0.21 | 24  | 10                      | 3.5                     | > 1000                       |
| 1.3     | 1.1 | –                  | 0.60 | 20  | 15                      | 3                       | > 1000                       |

The conductor bucket on the solder contacts is designed with an angle to form a cup into which the solder can flow easily.

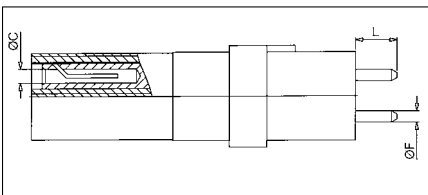
### • Fixed contacts

#### Solder contacts



| Contact |      | Shell size | Usable cables           |     | Max. current rating (A) | Contact resistance (m?) | Endurance (number of cycles) |
|---------|------|------------|-------------------------|-----|-------------------------|-------------------------|------------------------------|
| Ø C     | Ø F  |            | Core section (mm²) Max. | AWG |                         |                         |                              |
| 0.5     | 0.5  | 0 - 1      | 0.096                   | 28  | 5                       | 10                      | > 1000                       |
| 0.7     | 0.63 | 0 - 1      | 0.15                    | 26  | 7                       | 5                       | > 1000                       |

#### Contacts for PCB



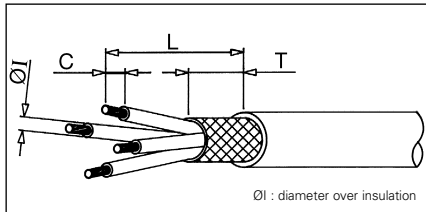
| Contact |     | Shell size | L   | Max. current rating (A) | Contact resistance (m?) | Endurance (number of cycles) |
|---------|-----|------------|-----|-------------------------|-------------------------|------------------------------|
| Ø C     | Ø F |            |     |                         |                         |                              |
| 0.5     | 0.5 | 0          | 5.5 | 5                       | 10                      | > 1000                       |
| 0.7     | 0.5 | 0          | 5   | 7                       | 5                       | > 1000                       |
|         |     | 1          | 6   |                         |                         |                              |
| 0.9     | 0.7 | 0          | 5   | 10                      | 3.5                     | > 1000                       |
|         |     | 1          | 6   |                         |                         |                              |

# Environmentally Sealed Push Pull Connectors



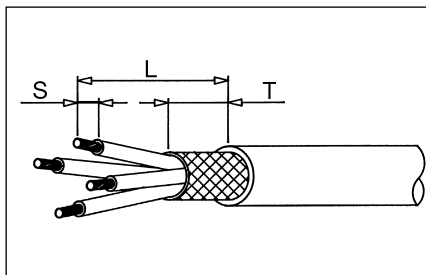
## Wiring and assembly instructions

### • Cable stripping for connectors with crimp contacts



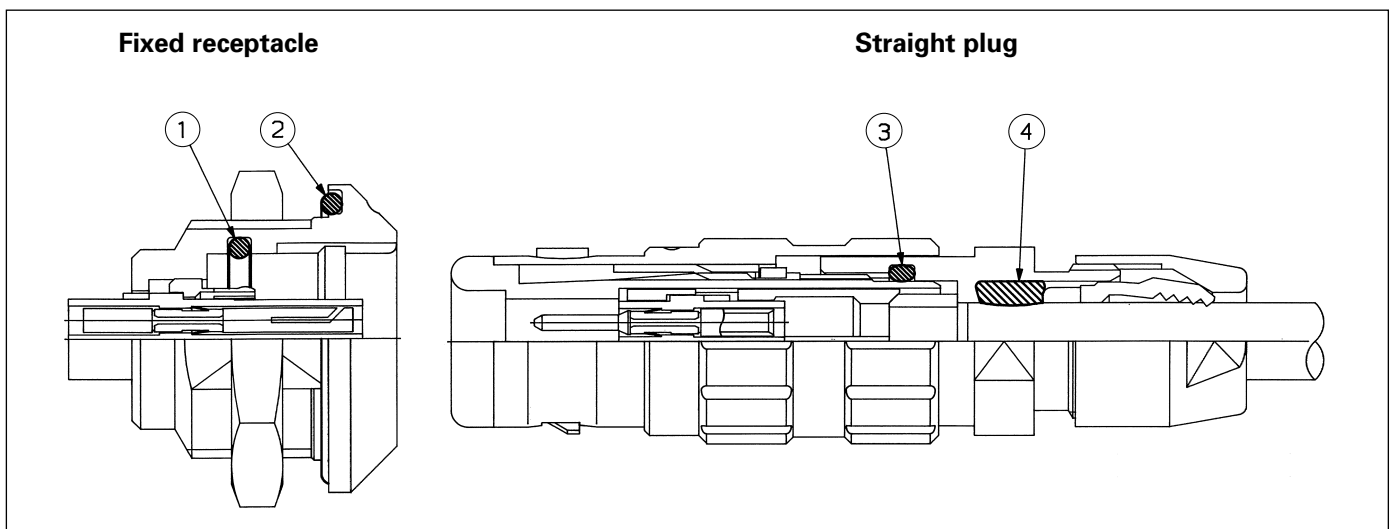
| Shell size | Ø Contacts | Ø I              | Stripping for FD / PC |          |   |
|------------|------------|------------------|-----------------------|----------|---|
|            |            |                  | L                     | C        | T |
| 0          | 0.7        | ? 1.35<br>> 1.35 | 15                    | 4<br>5.5 | 7 |
|            | 0.9        | ? 1.6<br>> 1.6   | 15                    | 4<br>5.5 | 7 |
| 1          | 0.7        | ? 1.35<br>> 1.35 | 17                    | 4<br>5.5 | 8 |
|            | 0.9        | ? 1.6<br>> 1.6   | 17                    | 4<br>5.5 | 8 |
|            | 1.3        | ? 2.1<br>> 2.1   | 17                    | 4<br>5.5 | 8 |
|            |            |                  |                       |          |   |

### • Cable stripping for connectors with solder contacts



| Shell size | Ø Contacts | Stripping for FD / PC |     |   |
|------------|------------|-----------------------|-----|---|
|            |            | L                     | S   | T |
| 0          | 0.5        | 11                    | 2   | 7 |
|            | 0.7        | 12                    | 3   | 7 |
|            | 0.9        | 12                    | 3   | 7 |
| 1          | 0.5        | 13                    | 2   | 8 |
|            | 0.7        | 14                    | 3   | 8 |
|            | 0.9        | 14                    | 3   | 8 |
|            | 1.3        | 14                    | 3.5 | 8 |

### • Watertightness design (mated connectors)



① : O'ring for sealing between receptacle and plug shell

② : O'ring for sealing between receptacle and panel

③ : O'ring for sealing between plug body and backshell

† : seals to accomodate variety of cable diameters

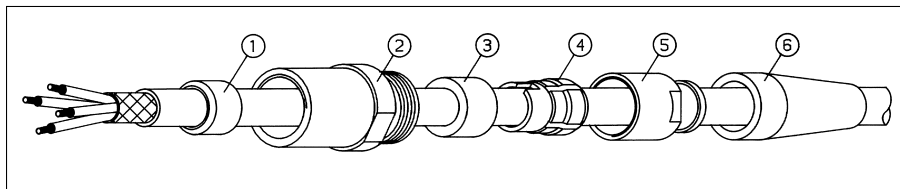
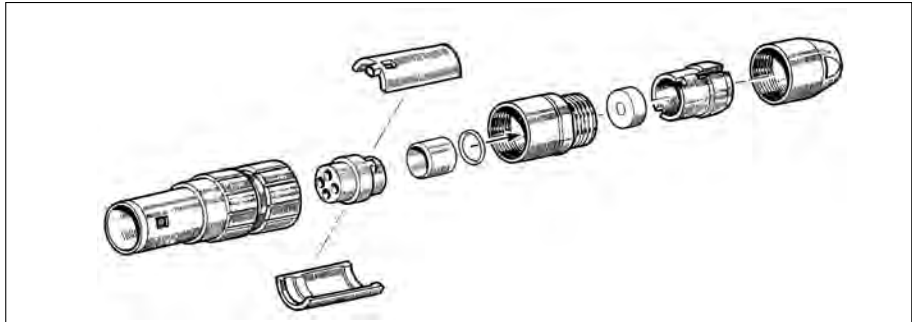
# Environmentally Sealed Push Pull Connectors



## Wiring and assembly instructions : STRAIGHT PLUG

• **Cable stripping** : see page 37

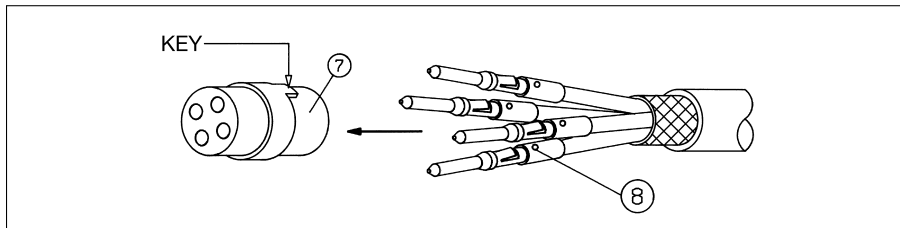
• **Connector preparation**



1 - Select the proper collet † and the cable gland ③ (see page 39).

2 - Slide protective boot †, the backnut ⑤, the collet †, the cable gland ③, the outer shell ② and the taper seat ① onto the cable.

• **Contacts wiring : crimp contacts**



1 - Select the proper crimping tool (see page 49) and positioner according to connectors involved.

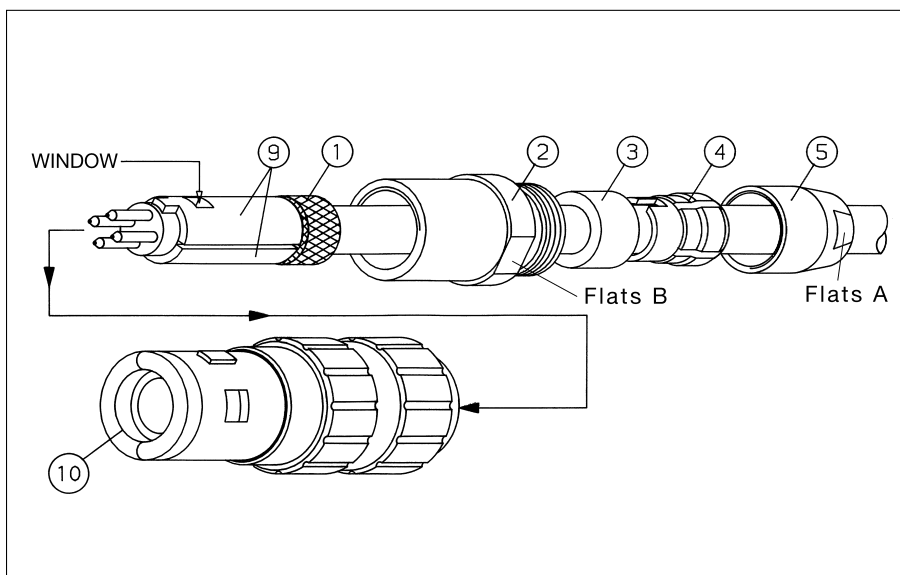
2 - Adjust the tool selector for the corresponding conductor AWG.

3 - Crimp the contacts ⑧ then engage them into the insert cavities † till clip tightening.

• **Contacts wiring : solder contacts**

| Fixed solder contacts 0.5 mm and 0.7 mm               | Removable solder contacts from 0.9 mm to 1.3 mm                                                                   |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| 1 - Terminate the bucket contacts using solder method | 1 - Solder the conductors to the contact buckets then engage them into the insert cavities † till clip tightening |

• **Connector assembly**



1 - In case of screened cable, comb out the screen and fold back over the taper seat ①.

2 - Position 2 half bushes ⑨, making sure that the insert key appears through the windows of one bush.

3 - Position the taper seat ① on the half bushes ⑨.

4 - Position all the sub-assembly in connector housing ⑩, making sure to keep the sub-assembly well aligned.

5 - Screw the outer shell ② following the torque values on page 39. Install the cable gland ③ and the collet † into the outer shell ② then screw the backnut ⑤ till bottoming. Use 2 wrenches well positioned on the flats A and B. Place a wrench to grip flats B, use the other wrench to tighten the backnut at the flats A following the torque values on page 39.

6 - Install the protective boot † if exists.

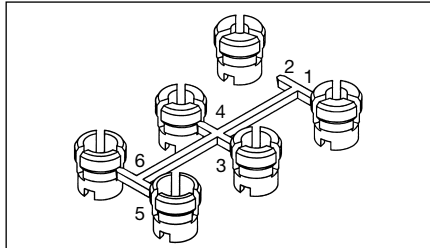
# Environmentally Sealed Push Pull Connectors



## Wiring and assembly instructions

### • Collets selection according to cable diameters

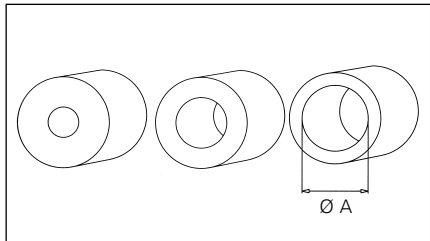
3 or 5 collets per shell size allow a wide range of cable diameters for a single connector. Cable out diameters are for information only, since values will change with each cable construction.



| Collet number | Cable diameter |                  |              |                  |
|---------------|----------------|------------------|--------------|------------------|
|               | Shell size 0   | Size 0, option G | Shell size 1 | Size 1, option G |
| 1             | 1.5 - 2.5      | -                | 2 - 2.5      | -                |
| 2             | 2.6 - 3.5      | -                | 2.6 - 3.5    | -                |
| 3             | 3.6 - 4.5      | -                | 3.6 - 4.5    | 6.1 - 6.7        |
| 4             | -              | 4.6 - 5.5        | 4.6 - 5.5    | 6.8 - 7.7        |
| 5             | -              | 5.6 - 6          | 5.6 - 6      | 7.8 - 8          |

Collet number 4 in shell size 0 and collet number 6 in shell size 1 are not used.

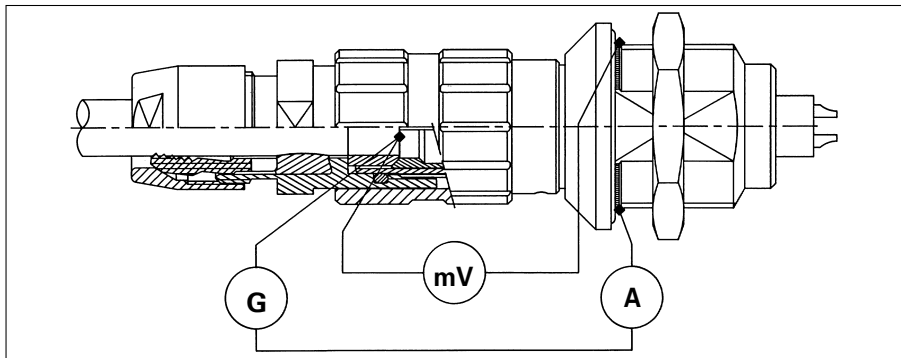
### • Glands selection to accommodate cable diameters



| Cable gland<br>Ø A | Cable diameter |                  |              |                  |
|--------------------|----------------|------------------|--------------|------------------|
|                    | Shell size 0   | Size 0, option G | Shell size 1 | Size 1, option G |
| 2                  | 1.5 - 2.9      |                  |              |                  |
| 3.5                | 3 - 4.5        |                  |              |                  |
| 2.5                |                |                  | 2 - 3.4      | -                |
| 4                  |                | 4.6 - 4.9        | 3.5 - 4.9    | -                |
| 5.5                |                | 5 - 6            | 5 - 6        | 6.1 - 6.4        |
| 7                  |                |                  |              | 6.5 - 8          |

### • Shielding

Tested according to MIL-STD 1344 A, method 3007



| Shell size | Electrical continuity (m?) |
|------------|----------------------------|
| 0          | 4                          |
| 1          | 3                          |

### • Coupling torques

| Advised torque* in Nm |     |              |     |              |
|-----------------------|-----|--------------|-----|--------------|
| Size                  | 0   | 0 (option G) | 1   | 1 (option G) |
|                       | 1.6 | /            | 1.8 | /            |
| 1                     | 1.5 | 2            | 2   | 2.5          |
| 2                     | 0.8 | 0.8          | 1   | 1            |

| Tools (jaw dimensions) | 14 x 1 |              | 16 x 1 |              |
|------------------------|--------|--------------|--------|--------------|
| Size                   | 0      | 0 (option G) | 1      | 1 (option G) |
|                        | 17     |              | 19     |              |
| 1                      | 8      | 10           | 13     |              |
| 2                      | 10     | 11           | 12     | 14           |

Torque values are the maximum allowable for each connector size. Torque values will vary due to the type and size of the cable used.

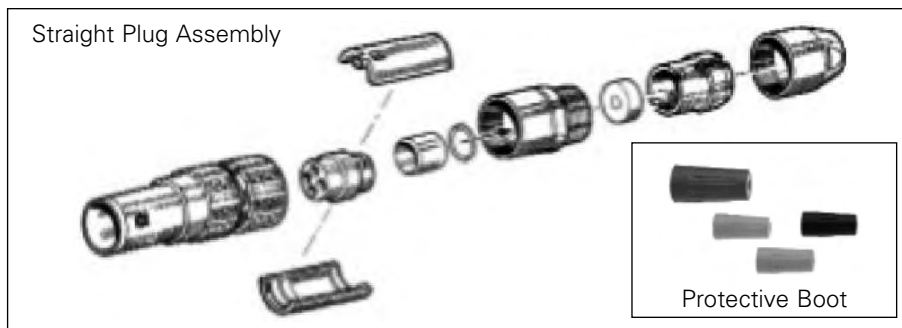
\*Apply thread lock to back nut prior to assembly.

Tool numbers can be found on page 228.

# JKX Plug Assembly Instructions

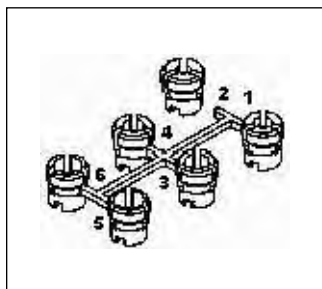


1. Determine what size cable you will be using. Then select the proper collet number for that cable.



## • Collets selection according to cable diameter

3 or 5 collets per shell size allow a wide range of cable diameters for a single connector. Cable out diameters are for information only, since values will change with each cable construction.

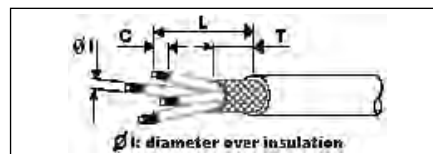


| Collet Number | Cable Diameter |                  |              |                  |
|---------------|----------------|------------------|--------------|------------------|
|               | Shell Size 0   | Size 0, Option G | Shell Size 1 | Size 1, Option G |
| 1             | 1.5 - 2.5      | —                | 2 - 2.5      | —                |
| 2             | 2.6 - 3.5      | —                | 2.6 - 3.5    | —                |
| 3             | 3.6 - 4.5      | —                | 3.6 - 4.5    | 6.1 - 6.7        |
| 4             | —              | 4.6 - 5.5        | 4.6 - 5.5    | 6.8 - 7.7        |
| 5             | —              | 5.6 - 6          | 5.6 - 6      | 7.8 - 8          |

Collet number 4 in shell size 0 and collet number 6 in shell size 1 are not used

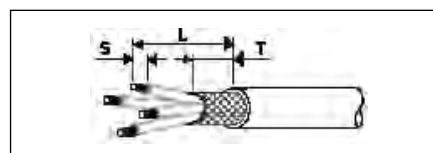
2. Strip the cable and each wire to the required strip length.

## • Cable stripping for connectors with crimp contacts



| Shell Size | Ø Contacts | Ø I   | Stripping for FD/PC |     |   |
|------------|------------|-------|---------------------|-----|---|
|            |            |       | L                   | C   | T |
| 0          | 0.7        | ≤1.35 | 15                  | 4   | 7 |
|            |            | >1.35 |                     | 5.5 |   |
|            | 0.9        | ≤1.6  | 15                  | 4   | 7 |
|            |            | >1.6  |                     | 5.5 |   |
| 1          | 0.7        | ≤1.35 | 17                  | 4   | 8 |
|            |            | >1.35 |                     | 5.5 |   |
|            | 0.9        | ≤1.6  | 17                  | 4   | 8 |
|            |            | >1.6  |                     | 5.5 |   |
|            | 1.3        | ≤2.1  | 17                  | 4   | 8 |
|            |            | >2.1  |                     | 5.5 |   |

## • Cable stripping for connectors with solder contacts

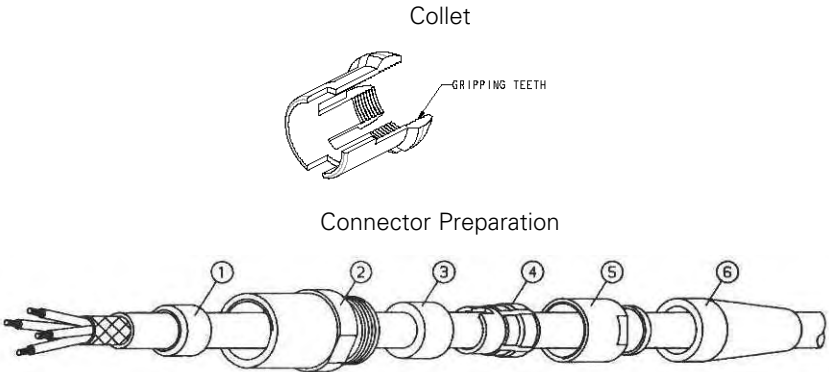


| Shell Size | Ø Contacts | Stripping for FD/PC |     |   |
|------------|------------|---------------------|-----|---|
|            |            | L                   | S   | T |
| 0          | 0.5        | 11                  | 2   | 7 |
|            | 0.7        | 12                  | 3   | 7 |
|            | 0.9        | 12                  | 3   | 7 |
| 1          | 0.5        | 13                  | 2   | 8 |
|            | 0.7        | 14                  | 3   | 8 |
|            | 0.9        | 14                  | 3   | 8 |
|            | 1.3        | 14                  | 3.5 | 8 |

# JKX Plug Assembly Instructions



3. When assembling a plug with a protective boot, prep the cable by taking the protective boot (#6) and sliding it with the small inside diameter first onto the cable. Then slide the small diameter end of the back nut (#5) onto the cable. Next, take the collet (#4) and slide the end with the gripping teeth (See below) first onto the cable. Then take a cable gland (#3) and slide it onto the cable. Once the cable gland is in place take an outer shell (#2) and slide it onto the cable with the outside threads going onto the cable first. Then take the flat end of a taper seat (#1) and slide that onto the cable so that the chamfer side is pointing outward.



4. Attach removable contacts to wires:

- a. If using crimped contacts, crimp the contacts onto the ends of the exposed wires using the proper crimping tool set on the correct AWG wire size After the contact has been crimped to the wire, check each contact to insure that the contact is securely crimped to the wire.

### Crimping Tool

| Specifications MIL-C-22520 / 7.01                                                   |                                     |                       |                                     |
|-------------------------------------------------------------------------------------|-------------------------------------|-----------------------|-------------------------------------|
|  | Contacts 0.7 mm - 0.9 mm and 1.3 mm | MIL P/N - Souriau P/N | Supplier P/N                        |
|                                                                                     |                                     | MIL-22520/7-01        | Daniels: MH860<br>Buchanan: 616 336 |
| Specifications MIL-C-22520 / 1.01                                                   |                                     |                       |                                     |
|  | Contacts 1.6 mm and 2 mm            | MIL P/N - Souriau P/N | Supplier P/N                        |
|                                                                                     |                                     | MIL-22520/1-01        | Daniels: AF8<br>Buchanan: 615 708   |

# JKX Plug Assembly Instructions



Locator Pin and Socket .07-.09 mm and 1.3 mm contacts



| Shell Size | ø Contacts | AWG          | Male Contact   |             |           | Female Contact |             |           |
|------------|------------|--------------|----------------|-------------|-----------|----------------|-------------|-----------|
|            |            |              | Souriau P/N    | Daniels P/N | Astro P/N | Souriau P/N    | Daniels P/N | Astro P/N |
| 0          | 0.7        | 22 - 24 - 26 | JBX 0 OUT LP07 | 86 - 223    | /         | JBX 0 OUT LP07 | 86 - 224    | /         |
|            | 0.9        | 20 - 22 - 24 | JBX 0 OUT LP09 | 86 - 225    | /         | JBX 0 OUT LP09 | 86 - 226    | /         |
| 1          | 0.7        | 22 - 24 - 26 | JBX 1 OUT LP07 | 86 - 196    | 642 - 001 | JBX 1 OUT LP07 | 86 - 197    | 642 - 004 |
|            | 0.9        | 20 - 22 - 24 | JBX 1 OUT LP09 | 86 - 198    | 642 - 002 | JBX 1 OUT LP09 | 86 - 199    | 642 - 005 |
|            | 1.3        | 18 - 20 - 22 | JBX 1 OUT LP13 | 86 - 200    | 642 - 003 | JBX 1 OUT LP13 | 86 - 201    | 642 - 006 |
| 2          | 0.7        | 22 - 24 - 26 | JBX 2 OUT LP07 | 86 - 202    | 642 - 007 | JBX 2 OUT LP07 | 86 - 203    | 642 - 010 |
|            | 0.9        | 20 - 22 - 24 | JBX 2 OUT LP09 | 86 - 204    | 642 - 008 | JBX 2 OUT LP09 | 86 - 205    | 642 - 011 |
|            | 1.3        | 18 - 20 - 22 | JBX 2 OUT LP13 | 86 - 206    | 642 - 009 | JBX 2 OUT LP13 | 86 - 207    | 642 - 012 |
| 3          | 0.7        | 22 - 24 - 26 | JBX 3 OUT LP07 | 86 - 217    | 642 - 014 | JBX 3 OUT LP07 | 86 - 214    | 642 - 017 |
|            | 0.9        | 20 - 22 - 24 | JBX 3 OUT LP09 | 86 - 218    | 642 - 015 | JBX 3 OUT LP09 | 86 - 215    | 642 - 018 |
|            | 1.3        | 18 - 20 - 22 | JBX 3 OUT LP13 | 86 - 219    | 642 - 016 | JBX 3 OUT LP13 | 86 - 216    | 642 - 019 |

Turret with locator for pin and socket 1.6 mm and 2 mm contacts



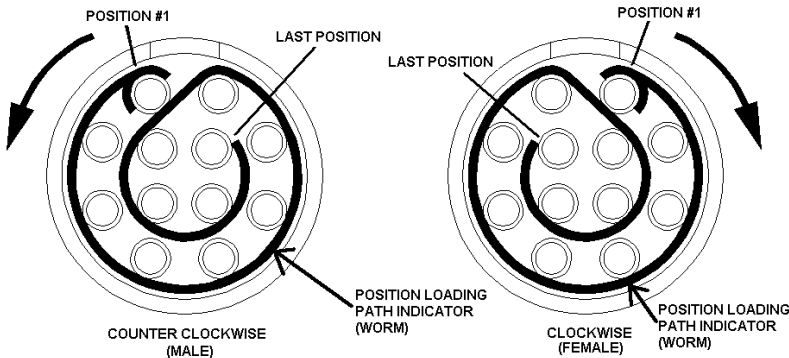
| Shell Size | ø Contacts | AWG          | Male and Female Contacts |             |           |
|------------|------------|--------------|--------------------------|-------------|-----------|
|            |            |              | Souriau P/N              | Daniels P/N | Astro P/N |
| 2          | 1.6        | 14 - 16 - 18 | JBX 2 OUT LT16           | TH 564      | 650 - 030 |
|            | 2          | 12 - 14 - 16 | JBX 2 OUT LT20           | TH 565      | 650 - 031 |
| 3          | 1.6        | 14 - 16 - 18 | JBX 3 OUT LT16           | TH 566      | 650 - 038 |
|            | 2          | 12 - 14 - 16 | JBX 3 OUT LT20           | TH 567      | 650 - 035 |

b. If using soldered contacts, prep each wire with flux and then tin dip each exposed wire end. Next pre-load a piece of heat shrink onto the wire (Individual heat shrink tubes are optional). Solder each wire to the solder cup end of the contact. To avoid shorts, make sure that no solder comes in contact with any other contact or wire on the connector. After the contact has been soldered to the wire, check each contact to insure that the contact is securely soldered to the wire. Slide the pre-loaded heat shrink over the solder joint and shrink into place. Do not over-heat the solder joint area as it can cause the solder to re-flow or it could burn the wire insulation.

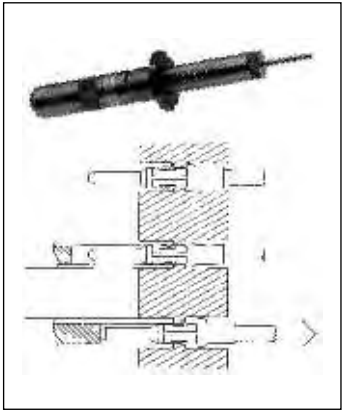
5. If inserting removable contacts:

- Starting with the interface end of the contact, carefully insert each contact into the backside of the insulator that has the position loading path indicator (worm) on it. Start with the end of the position loading path indicator (worm) that has the half circle on it (Position #1). Then follow the position loading path indicator (worm) around the insulator. You will go counter clockwise if using a male contact and clockwise if using a female contact (see diagram below for the position loading path indicator (worm) layout). If the connector has center contacts, it is sometimes easier to start at the end of the position loading path indicator (worm) (last position) and work backwards. This is up to the assembler and the process they are using to insert the contacts. Make sure not to bend the contact when inserting it into the insulator. It is extremely important that the contact is completely seated in to the insulator. For the connector to function properly, the contact should click/snap into place when seated. To confirm the seating of the contact, check each contact for proper seating.

# JKX Plug Assembly Instructions

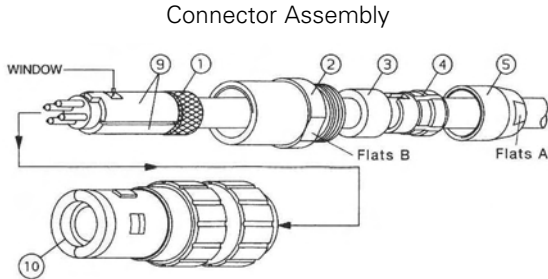


6. Removal of Contacts:
- a. Using the proper extraction tool insert the tool over the front of the contact and push contact out. Failure to use the proper extraction tool can result in damage to the contact.



| Shell Size | ø Contacts | Souriau Part Number | Astro Part Number |
|------------|------------|---------------------|-------------------|
| 0          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
| 1          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
| 2          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
|            | 1.6        | JBX OUT DC 16       | ATJP 2095         |
|            | 2.0        | JBX OUT DC 20       | ATJP 2115         |
| 3          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
|            | 1.6        | JBX OUT DC 16       | ATJP 2095         |
|            | 2.0        | JBX OUT DC 20       | ATJP 2115         |

7. Take the keyed half bushing (#9) and place it over the insulator so that the window is lined up with the key on the insulator (interface end of connector). Then take the half bushing without the window (#9) and place on the opposite side of the insulator so that both half bushings are aligned with each other.



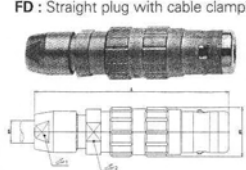
8. Take the contact assembly that is mounted on the cable and using the red dot as a reference, align the slot on the inside of the connector (#10) with the keys on the end of the half bushings (you may need to spin the assembly slightly). Insure that the keys are seated properly by turning the insulator and contact assembly. If the assembly does not turn, then the keys are correctly aligned. If the assembly does turn, then you must withdraw the assembly & realign the keys.

# JKX Plug Assembly Instructions



9. Then push the preloaded taper seat (if a shielded cable is being used, comb out the shielding and fold back over the taperseat) and outer shell into the connector housing and thread the outer shell into the housing until it is hand tight and you can feel the o-ring being compressed.
10. Once the outer shell is installed onto the connector housing, apply thread lock to thread area. Then slide the cable glade (#3) collet (#4) and back nut (#5) up until you can manually start the back nut threads onto the threaded end of the connector housing. Tighten the back nut up as far as you can by hand, then take the appropriate wrenches and place the wrenches onto the "A" & "B" flats located on the connector housing. Do not over torque back nut as it can cause connector failure. (See torque requirements listed below)

FD : Straight plug with cable clamping



| Size | A  | ø B | ø M        |
|------|----|-----|------------|
| 0    | 47 | 12  | 1.5 to 4.5 |
| 1    | 57 | 15  | 2 to 6     |

## Coupling Torques

| Advised torque* in Nm                                                                            |     |                 |     |                 |  | Tools<br>(jaw dimensions)                                                                        | 14 x 1 |                 | 16 x 1 |                 |
|--------------------------------------------------------------------------------------------------|-----|-----------------|-----|-----------------|--|--------------------------------------------------------------------------------------------------|--------|-----------------|--------|-----------------|
| Size                                                                                             | 0   | 0<br>(Option G) | 1   | 1<br>(Option G) |  | Size                                                                                             | 0      | 0<br>(Option G) | 1      | 1<br>(Option G) |
|               | 1.6 | /               | 1.8 | /               |  |               | 17     |                 | 19     |                 |
|  <sup>1</sup> | 1.5 | 2               | 2   | 2.5             |  |  <sup>1</sup> | 8      | 10              |        | 13              |
|  <sup>2</sup> | 0.8 | 0.8             | 1   | 1               |  |  <sup>2</sup> | 10     | 11              | 12     | 14              |

11. If the connector requires a protective boot, slide the boot over the lip on the back nut.

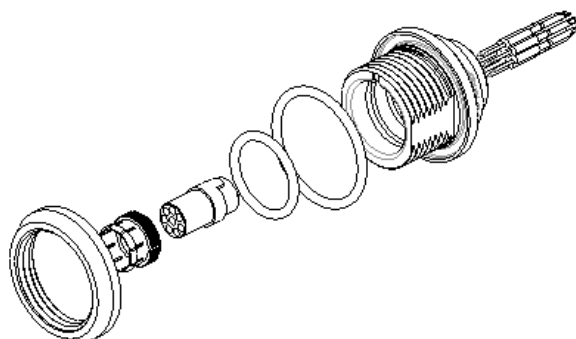
# JKX Plug Assembly Instructions



## Trouble shooting

| Problem:                                                         | Cause:                                                                                                                                                     | Correction:                                                                                                                             |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Contact will not seat in connector, contact backing out.         | Wrong wire or insulation size, wrong strip length, poor crimping, broken clips, damaged insulator, removed contact without proper removal tool, bad crimp. | Use correct wire, adjust strip length, strip and re-crimp with new contact, replace insulator, using wrong crimp tool, replace contact. |
| Bent solder contact                                              | Bent in handling, bent in soldering operation, connector assembled incorrectly.                                                                            | Replace with new insert and/or contacts.                                                                                                |
|                                                                  | Pins and insulator were inserted into electrical test while unprotected by shell                                                                           |                                                                                                                                         |
| Connector will not release from mating part or operate correctly | Not using flats on latching sleeve and back nut to torque connector, improper assembly of the connector, over mold material inside connector.              | Release back nut and re-torque, disassemble and reassemble, replace connector.                                                          |
| Over tightened the back nut.                                     | Connector will not release from mating part or operate correctly, damage connector.                                                                        | Loosen back nut and retighten.                                                                                                          |
| Collet will not grip cable.                                      | Loose cable in connector.                                                                                                                                  | Check correct collet size is being used.                                                                                                |
| Connector will not assemble.                                     | Incorrect alignment of key in connector, half bushings, connector housing, insulator, collet, braid in key slots in collet.                                | Disassemble connector and reassemble connector-aligning keys, relocate braid in collet.                                                 |
| Contact stubbing after mating.                                   | Bent contact and damaged contact, connector-assembled incorrectly.                                                                                         | Re-align contact, replace insert with contacts.                                                                                         |
| Electrical failure.                                              | Improper crimping, wrong wire strip length, wire loading incorrect location, poor solder joint.                                                            | Remove contact with correct removal tool, reinstall new contact, and verify strip length.                                               |
| Leakage of Seals                                                 | Over torque of nut                                                                                                                                         | Disassemble connector and inspect seals                                                                                                 |

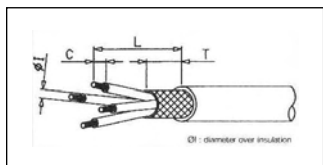
# JKX Receptacle Assembly Instructions



1. Select the proper JKX receptacle and contact size for the specific cable application by using the contact layout chart as depicted in the Push Pull catalog.
2. Strip the cable/wire to the required strip length.

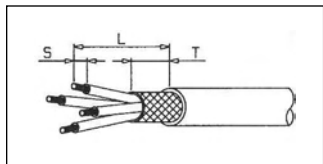
## Wiring and Assembly Instructions

### • Cable stripping for connectors with crimp contacts



| Shell Size | ø Contacts | ø I   | Stripping for FD/PC |     |   |
|------------|------------|-------|---------------------|-----|---|
|            |            |       | L                   | C   | T |
| 0          | 0.7        | ≤1.35 | 15                  | 4   | 7 |
|            |            | >1.35 |                     | 5.5 |   |
|            | 0.9        | ≤1.6  | 15                  | 4   | 7 |
|            |            | >1.6  |                     | 5.5 |   |
| 1          | 0.7        | ≤1.35 | 17                  | 4   | 8 |
|            |            | >1.35 |                     | 5.5 |   |
|            | 0.9        | ≤1.6  | 17                  | 4   | 8 |
|            |            | >1.6  |                     | 5.5 |   |
|            | 1.3        | ≤2.1  | 17                  | 4   | 8 |
|            |            | >2.1  |                     | 5.5 |   |

### • Cable stripping for connectors with solder contacts



| Shell Size | ø Contacts | Stripping for FD/PC |     |   |
|------------|------------|---------------------|-----|---|
|            |            | L                   | S   | T |
| 0          | 0.5        | 11                  | 2   | 7 |
|            | 0.7        | 12                  | 3   | 7 |
|            | 0.9        | 12                  | 3   | 7 |
| 1          | 0.5        | 13                  | 2   | 8 |
|            | 0.7        | 14                  | 3   | 8 |
|            | 0.9        | 14                  | 3   | 8 |
|            | 1.3        | 14                  | 3.5 | 8 |

3. Depending on application and shell type, the nut and washer may be removed before attaching the wires to the contacts.
4. Attach crimped contacts to wires:
  - a. If using crimped contacts, crimp the contacts onto the ends of the exposed wires using the proper crimping tool and locator set on the correct AWG wire size. After the contact has been crimped to the wire, check each contact to insure that the contact is securely crimped.

# JKX Receptacle Assembly Instructions



## Crimping Tool

| Specifications MIL-C-22520 / 7.01                                                 |                                     |                       |                                     |
|-----------------------------------------------------------------------------------|-------------------------------------|-----------------------|-------------------------------------|
|  | Contacts 0.7 mm - 0.9 mm and 1.3 mm | MIL P/N - Souriau P/N | Supplier P/N                        |
|                                                                                   |                                     | MIL-22520/7-01        | Daniels: MH860<br>Buchanan: 616 336 |
| Specifications MIL-C-22520 / 1.01                                                 |                                     |                       |                                     |
|  | Contacts 1.6 mm and 2 mm            | MIL P/N - Souriau P/N | Supplier P/N                        |
|                                                                                   |                                     | MIL-22520/1-01        | Daniels: AF8<br>Buchanan: 615 708   |

Locator Pin and Socket .07-.09 mm and 1.3 mm contacts



| Shell Size | ø Contacts | AWG          | Male Contact   |             |           | Female Contact |             |           |
|------------|------------|--------------|----------------|-------------|-----------|----------------|-------------|-----------|
|            |            |              | Souriau P/N    | Daniels P/N | Astro P/N | Souriau P/N    | Daniels P/N | Astro P/N |
| 0          | 0.7        | 22 - 24 - 26 | JBX 0 OUT LP07 | 86 - 223    | /         | JBX 0 OUT LP07 | 86 - 224    | /         |
|            | 0.9        | 20 - 22 - 24 | JBX 0 OUT LP09 | 86 - 225    | /         | JBX 0 OUT LP09 | 86 - 226    | /         |
| 1          | 0.7        | 22 - 24 - 26 | JBX 1 OUT LP07 | 86 - 196    | 642 - 001 | JBX 1 OUT LP07 | 86 - 197    | 642 - 004 |
|            | 0.9        | 20 - 22 - 24 | JBX 1 OUT LP09 | 86 - 198    | 642 - 002 | JBX 1 OUT LP09 | 86 - 199    | 642 - 005 |
|            | 1.3        | 18 - 20 - 22 | JBX 1 OUT LP13 | 86 - 200    | 642 - 003 | JBX 1 OUT LP13 | 86 - 201    | 642 - 006 |
| 2          | 0.7        | 22 - 24 - 26 | JBX 2 OUT LP07 | 86 - 202    | 642 - 007 | JBX 2 OUT LP07 | 86 - 203    | 642 - 010 |
|            | 0.9        | 20 - 22 - 24 | JBX 2 OUT LP09 | 86 - 204    | 642 - 008 | JBX 2 OUT LP09 | 86 - 205    | 642 - 011 |
|            | 1.3        | 18 - 20 - 22 | JBX 2 OUT LP13 | 86 - 206    | 642 - 009 | JBX 2 OUT LP13 | 86 - 207    | 642 - 012 |
| 3          | 0.7        | 22 - 24 - 26 | JBX 3 OUT LP07 | 86 - 217    | 642 - 014 | JBX 3 OUT LP07 | 86 - 214    | 642 - 017 |
|            | 0.9        | 20 - 22 - 24 | JBX 3 OUT LP09 | 86 - 218    | 642 - 015 | JBX 3 OUT LP09 | 86 - 215    | 642 - 018 |
|            | 1.3        | 18 - 20 - 22 | JBX 3 OUT LP13 | 86 - 219    | 642 - 016 | JBX 3 OUT LP13 | 86 - 216    | 642 - 019 |

Turret with locator for pin and socket 1.6 mm and 2 mm contacts



| Shell Size | ø Contacts | AWG          | Male and Female Contacts |             |           |
|------------|------------|--------------|--------------------------|-------------|-----------|
|            |            |              | Souriau P/N              | Daniels P/N | Astro P/N |
| 2          | 1.6        | 14 - 16 - 18 | JBX 2 OUT LT16           | TH 564      | 650 - 030 |
|            | 2          | 12 - 14 - 16 | JBX 2 OUT LT20           | TH 565      | 650 - 031 |
| 3          | 1.6        | 14 - 16 - 18 | JBX 3 OUT LT16           | TH 566      | 650 - 038 |
|            | 2          | 12 - 14 - 16 | JBX 3 OUT LT20           | TH 567      | 650 - 035 |

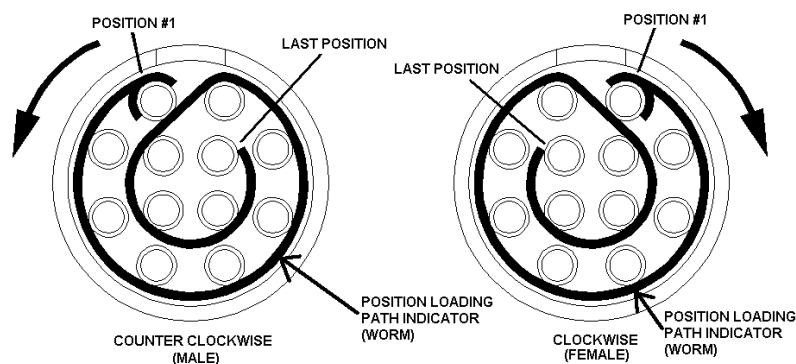
- b. If using clipped solder contacts, prep each wire with flux and then tin dip each exposed wire end. Next pre-load a piece of heat shrink onto the wire (Individual heat shrink tubes are optional). Solder each wire to the solder cup end of the contact. To avoid shorts, make sure that no solder comes in contact with any other contact or wire on the connector. After the contact has been soldered to the wire, check each contact to insure that the contact is securely soldered to the wire. Slide the pre-loaded heat shrink over the solder joint and shrink into place. Do not over-heat the solder joint area as it can cause the solder to re-flow or it could burn the wire insulation.

# JKX Receptacle Assembly Instructions



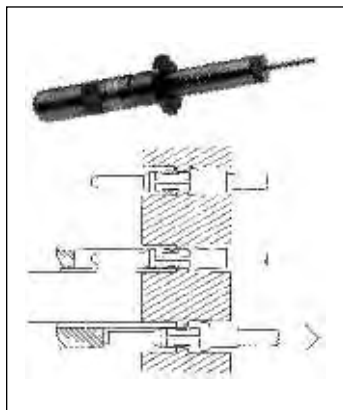
## 5. If inserting terminated contacts:

- a. Starting with the interface end of the contact, insert each contact into the backside of the insulator that has the position loading path indicator (worm) on it. Start with the end of the position loading path indicator (worm) that has the half circle on it (Position #1). Then follow the position loading path indicator (worm) around the insulator. You will go counter clockwise if using a male contact and clockwise if using a female contact (see diagram below for the position loading path indicator (worm) layout). If the connector has center contacts, it is sometimes easier to start at the end of the position loading path indicator (worm) (last position) and work backwards. This is up to the assembler and the process used to insert the contacts. Make sure not to bend the contact when inserting it into the insulator. It is extremely important that the contact is seated in the insulator for the connector to function properly. The contact should click/snap into place when seated. Check each contact for proper seating.



## 6. Removal of contacts:

- a. Using the proper extraction tool (See FIGURE 6.A), insert the tool over the front of the contact and push contact out. Failure to use the proper extraction tool can result in damage to the contact.



| Shell Size | ø Contacts | Souriau Part Number | Astro Part Number |
|------------|------------|---------------------|-------------------|
| 0          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
| 1          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
| 2          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
|            | 1.6        | JBX OUT DC 16       | ATJP 2095         |
|            | 2.0        | JBX OUT DC 20       | ATJP 2115         |
| 3          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
|            | 1.6        | JBX OUT DC 16       | ATJP 2095         |
|            | 2.0        | JBX OUT DC 20       | ATJP 2115         |

# JKX Receptacle Assembly Instructions



## **Trouble shooting**

| <b>Problem:</b>                                          | <b>Cause:</b>                                                                                                                                              | <b>Correction:</b>                                                                                                                        |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Contact will not seat in connector, contact backing out. | Wrong wire or insulation size, wrong strip length, poor crimping, broken clips, damaged insulator, removed contact without proper removal tool, bad crimp. | Use correct wire, adjust strip length, strip and re-crimp with new contact, replace insulator, using correct crimp tool, replace contact. |
| Bent solder contact                                      | Bent in handling, bent in soldering operation, connector assembled incorrectly.                                                                            | Replace insert with contacts.                                                                                                             |
| Contact stubbing after mating.                           | Bent contact and damaged contact, connector-assembled incorrectly.                                                                                         | Re-align contact, replace insert with contacts.                                                                                           |
| Electrical failure.                                      | Improper crimping, wrong wire strip length, wire loading incorrect location, poor solder joint.                                                            | Remove contact with correct removal tool, reinstall new contact, and verify strip length.                                                 |

# Push Pull Connectors sealed version size 2



## Key features

- Sealed IP 67 (mated connectors)
- Mechanically keyed : ensure correct polarisation and alignment.
- Contact arrangements : from 2 to 19 contacts.
- Wire gauge range from 26 AWG to 12 AWG.
- High contact density in a small space.
- Contact termination in either crimp, solder, or PCB contacts.



## User advantages

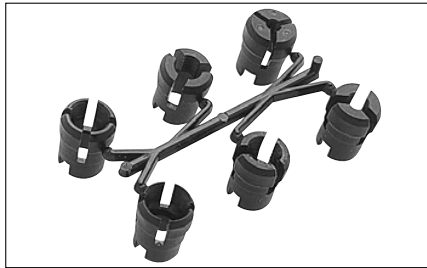
### Wet environment

Splash proof IP 67



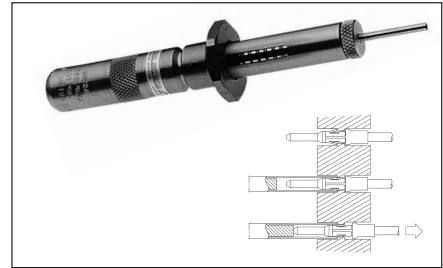
### 6-collet cluster

Allows a wide range of cable diameter applications for a single connector.



### Removable contacts

Crimp versions allow easier wiring and maintenance.



## Part number system

|                            |                                                                                                   |           |          |          |           |          |          |          |          |          |          |
|----------------------------|---------------------------------------------------------------------------------------------------|-----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|
| Basic series               | <b>JBX</b>                                                                                        | <b>FE</b> | <b>2</b> | <b>G</b> | <b>12</b> | <b>M</b> | <b>C</b> | <b>S</b> | <b>D</b> | <b>S</b> | <b>R</b> |
| Shell type                 | <b>FE-EC-PE-SE</b>                                                                                |           |          |          |           |          |          |          |          |          |          |
| Shell size                 | <b>2</b>                                                                                          |           |          |          |           |          |          |          |          |          |          |
| Keying                     | <b>G</b>                                                                                          |           |          |          |           |          |          |          |          |          |          |
| Contact layouts            | <b>02 ----- 19</b>                                                                                |           |          |          |           |          |          |          |          |          |          |
| Contact type               | <b>M</b> : pin <b>F</b> : socket (in relation with keying)                                        |           |          |          |           |          |          |          |          |          |          |
| Contact termination        | <b>C</b> : crimp ; <b>S</b> : solder ; <b>P*</b> : straight PCB tails ; <b>Q*</b> : 90° PCB tails |           |          |          |           |          |          |          |          |          |          |
| Material & surface plating | <b>S</b> : Outer shell in brass alloy with chrome over nickel                                     |           |          |          |           |          |          |          |          |          |          |
|                            | <b>N</b> : Outer shell in brass alloy with black plating (consult Souriau US)                     |           |          |          |           |          |          |          |          |          |          |
|                            | <b>D</b> : Obligatory suffix                                                                      |           |          |          |           |          |          |          |          |          |          |
|                            | <b>S</b> : Obligatory suffix                                                                      |           |          |          |           |          |          |          |          |          |          |
| Option                     | <b>R</b> : Red dot (possible for FE, PE, HH, HHE only)                                            |           |          |          |           |          |          |          |          |          |          |

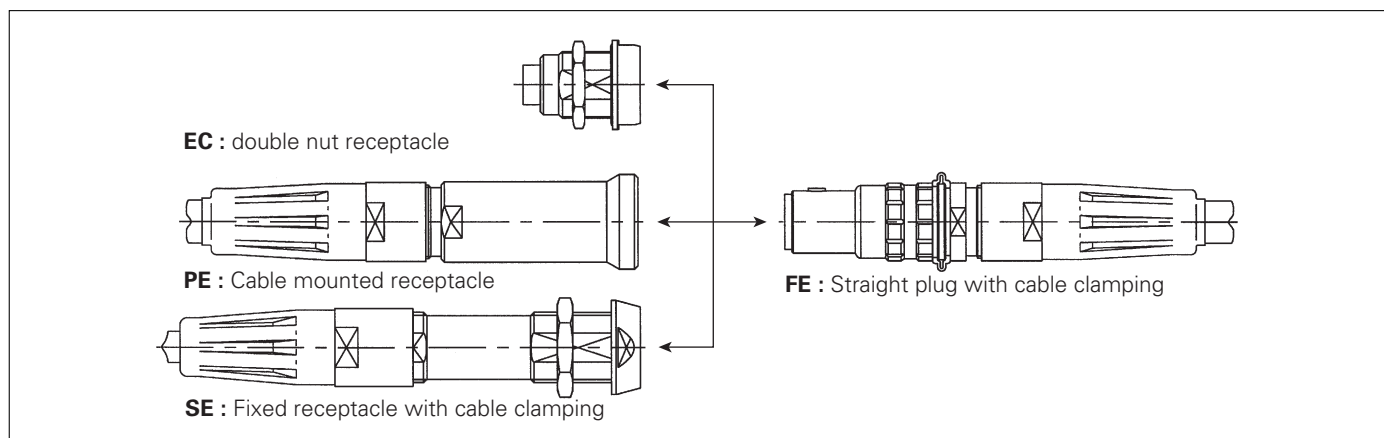
\* For receptacles with female contacts only.

# Push Pull Connectors sealed version size 2

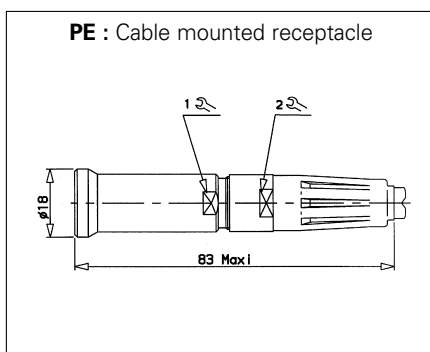
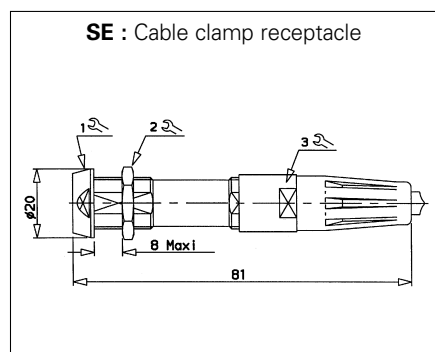
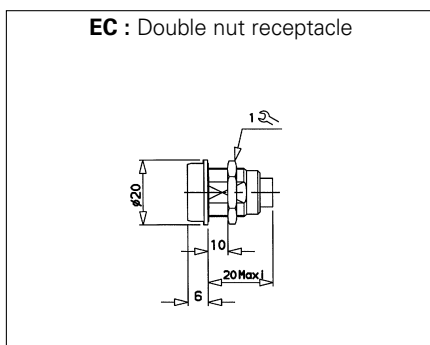
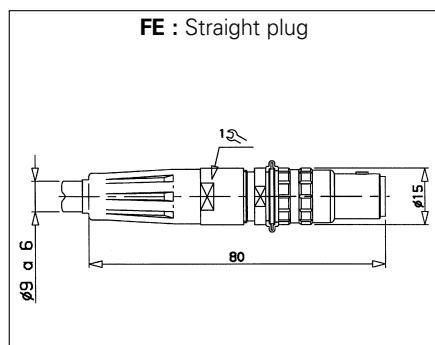


## Shell type

- Available sealed JBX, Size 2



## • Dimensions



**Note 1** : For the plug, the cable clamp receptacle and the free receptacle, a black protective boot is included in the P/N.

# Push Pull Connectors sealed version size 2



## Keying

Only G keying is available in standard version (0° keying angle, plugs with pin contacts, receptacles with female contacts) for the different types of shells.

## Contact layouts

### • Multi contact inserts

| Shell size | Male insulator viewed from wiring side | Contact layout | Available Contact types |         |                       |                  | Ø Contact | AWG              |                 | Max. current rating (A) | Testing voltage (Vrms) | Working voltage (Vdc / Vrms) |
|------------|----------------------------------------|----------------|-------------------------|---------|-----------------------|------------------|-----------|------------------|-----------------|-------------------------|------------------------|------------------------------|
|            |                                        |                | S solder                | C crimp | P* straight PCB tails | Q* 90° PCB tails |           | Solder wire Max. | Crimp wire Max. |                         |                        |                              |
| 2          |                                        | 02             | S                       | C       |                       |                  | 2         | 16               | 12              | 30                      | 2100                   | 1000/700                     |
|            |                                        | 03             | S                       | C       |                       |                  | 1.6       | 18               | 14              | 17                      | 1700                   | 830/560                      |
|            |                                        | 04             | S                       | C       |                       |                  | 1.3       | 20               | 18              | 15                      | 2400                   | 1000/800                     |
|            |                                        | 05             | S                       | C       |                       |                  | 1.3       | 20               | 18              | 14                      | 1900                   | 900/630                      |
|            |                                        | 06             | S                       | C       |                       |                  | 1.3       | 20               | 18              | 12                      | 1900                   | 900/630                      |
|            |                                        | 07             | S                       | C       |                       |                  | 1.3       | 20               | 18              | 11                      | 1500                   | 730/500                      |
|            |                                        | 08             | S                       | C       | P                     | Q                | 0.9       | 24               | 20              | 10                      | 1700                   | 830/560                      |
|            |                                        | 10             | S                       | C       | P                     | Q                | 0.9       | 24               | 20              | 8                       | 1700                   | 830/560                      |
|            |                                        | 12             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 7                       | 1700                   | 830/560                      |
|            |                                        | 16             | S                       | C       | P                     | Q                | 0.7       | 26               | 22              | 6                       | 1500                   | 730/500                      |
|            |                                        | 18             | S                       | C       | P                     |                  | 0.7       | 26               | 22              | 5.5                     | 1400                   | 660/460                      |
|            |                                        | 19             | S                       | C       | P                     |                  | 0.7       | 26               | 22              | 5                       | 1400                   | 660/460                      |

 Inserts with fixed non removable contacts

\* For EC receptacles with female contacts.

# Push Pull Connectors sealed version size 2



## Technical characteristics

The technical characteristics are the same as for the standard JBX series except the following ones:

### • Material - Specific additional elements

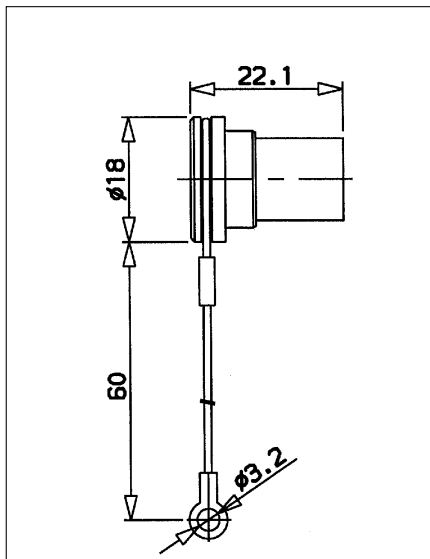
| Component       | Material                 | Color                               | Working temperature |                  |
|-----------------|--------------------------|-------------------------------------|---------------------|------------------|
| Seals           | Nitrile & Silicon rubber | O'ring = black<br>plug seal = black | - 40°C ; + 250°C    | - 58°F ; + 482°F |
| Protective boot | Elastollan (PUR)         | Black                               | - 40°C ; + 80°C     | - 40°F ; + 176°F |

### • Mechanical and climatics - Specific additional elements

| Characteristics       | Values                                            |                  |
|-----------------------|---------------------------------------------------|------------------|
| Protection index      | IP 67 (Splashproof - 1/2 hour under 1 m of water) |                  |
| Operating temperature | - 40°C ; + 80°C                                   | - 40°F ; + 176°F |

## Options

### • Cap: Part-number = JBX BR2 022 : an efficient protection against water



## Wiring and assembly instructions

### • Panel cutout

The panel cutout is the same as for the JBX size 2 shells except for the HC (or HCE) type for which it corresponds to the JBX size 3 shells.

### • Range of cable diameter: from 6 to 9 mm

### • Operation to add during the plug assembly:

Deposit of watertight thread glue between the backnut (② on the drawing p17) and the connection shell († on the drawing p17).  
Advised glue = Loctite 542.

# Sealed Breakaway Connector



## Souriau JDX Breakaway Connectors



### Key Features

**Breakaway design eliminates the need for a manually operated latching system**

**Mates and un-mates quickly and prevents injury to the user or equipment if the cable becomes entangled.**

**Sealed to IP68.  
Two shell sizes, 2 to 19 positions.  
Contact termination solder & PCB.  
Custom cable assemblies.**

## Part Numbering System

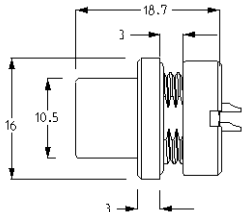
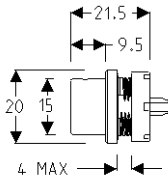
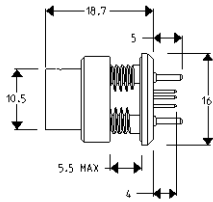
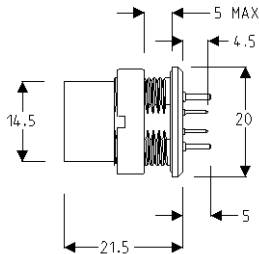
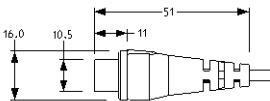
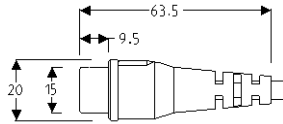
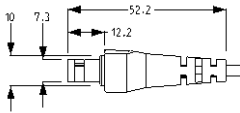
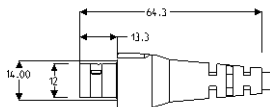
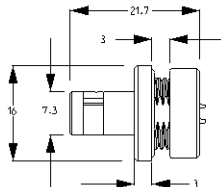
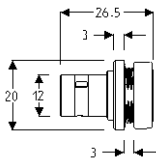
|                     |                                                                                                                    |    |   |   |    |   |   |   |   |
|---------------------|--------------------------------------------------------------------------------------------------------------------|----|---|---|----|---|---|---|---|
| Basic Series        | JDX                                                                                                                | FD | 2 | T | 05 | M | S | N | R |
| Shell Type          | FD-EP-EZ-PC                                                                                                        |    |   |   |    |   |   |   |   |
| Shell Size          | 0 - 2                                                                                                              |    |   |   |    |   |   |   |   |
| Keying              | T & U                                                                                                              |    |   |   |    |   |   |   |   |
| Contact Layout      | Size 0; 2, 3, 4, 5, 6, 7, 8<br>Size 2; 2, 3, 4, 5, 6, 7, 8, 10, 12, 16, 18, 19                                     |    |   |   |    |   |   |   |   |
| Contact Type        | M : pin    F : socket                                                                                              |    |   |   |    |   |   |   |   |
| Contact Termination | S: solder ; P: PCB                                                                                                 |    |   |   |    |   |   |   |   |
| Surface Plating     | N : Outer shell, brass alloy with black chrome over nickel<br>S : Outer shell, brass alloy with chrome over nickel |    |   |   |    |   |   |   |   |
| Orientation         | Red dot                                                                                                            |    |   |   |    |   |   |   |   |

FD & PC are only sold as part of a cable assembly.  
Contact Souriau for information on custom cable assemblies.

# Sealed Breakaway Connector



## JDX Shell Styles

| Size 0                                                                              | Size 2                                                                                |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| EP: Fixed receptacle front panel mounted, fixed flange                              | EP: Fixed receptacle front panel mounted, fixed flange                                |
|    |    |
| EZ: Straight PCB mounted receptacle                                                 | EZ: Straight PCB mounted receptacle                                                   |
|    |   |
| PC: Straight cable mounted receptacle                                               | PC: Straight cable mounted receptacle                                                 |
|  |  |
| FD: Straight cable mounted plug                                                     | FD: Straight cable mounted plug                                                       |
|  |  |
| FA: Front panel mounted plug                                                        | FA: Front panel mounted plug                                                          |
|  |  |

# Sealed Breakaway Connector



## Contact Layouts

| Shell Size | Male Insulator Viewed From Wire Side | Contact Layout | Solder | PCB | Contact Diameter mm | Solder Wire MAX | MAX Current Rating | Test Voltage (Vrms) | Working Voltage (Vrms) |
|------------|--------------------------------------|----------------|--------|-----|---------------------|-----------------|--------------------|---------------------|------------------------|
| 0          |                                      | 02             | S      | P   | 0.9                 | 24              | 10                 | 1400                | 660/460                |
|            |                                      | 03             | S      | P   | 0.9                 | 24              | 8                  | 1300                | 600/420                |
|            |                                      | 04             | S      | P   | 0.7                 | 26              | 7                  | 1400                | 660/460                |
|            |                                      | 05             | S      | P   | 0.7                 | 26              | 6.5                | 800                 | 400/260                |
|            |                                      | 06             | S      | P   | 0.5                 | 30              | 2.5                | 680                 | 320/220                |
|            |                                      | 07             | S      | P   | 0.5                 | 30              | 2.5                | 680                 | 320/220                |
|            |                                      | 08             | S      | P   | 0.5                 | 30              | 2.5                | 680                 | 320/220                |
| 2          |                                      | 02             | S      |     | 2                   | 16              | 30                 | 2100                | 1000/700               |
|            |                                      | 03             | S      |     | 1.6                 | 18              | 17                 | 1700                | 830/560                |
|            |                                      | 04             | S      | P   | 1.3                 | 20              | 15                 | 2400                | 1000/800               |
|            |                                      | 05             | S      | P   | 1.3                 | 20              | 14                 | 1900                | 900/630                |
|            |                                      | 06             | S      | P   | 1.3                 | 20              | 12                 | 1900                | 900/630                |
|            |                                      | 07             | S      | P   | 1.3                 | 20              | 11                 | 1500                | 730/500                |
|            |                                      | 08             | S      | P   | 0.9                 | 24              | 10                 | 1700                | 830/560                |
|            |                                      | 10             | S      | P   | 0.9                 | 24              | 8                  | 1700                | 830/560                |
|            |                                      | 12             | S      | P   | 0.7                 | 26              | 7                  | 1700                | 830/561                |
|            |                                      | 16             | S      | P   | 0.7                 | 26              | 6                  | 1500                | 730/500                |
|            |                                      | 18             | S      | P   | 0.7                 | 26              | 5.5                | 1400                | 660/460                |
|            |                                      | 19             | S      | P   | 0.7                 | 26              | 5                  | 1400                | 660/460                |

Non- removable contacts

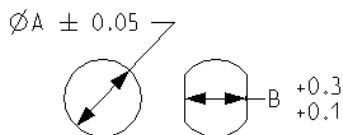
## • Voltage Test Procedure

- **The testing voltage** corresponds to the maximum voltage the connector is able to withstand in normal climatic conditions. The value is about 75% of the electrical breakdown voltage. The testing voltage level can be reached several times in connectors life, but never applied for a continuous duration.
- **The working voltage** corresponds to the maximum voltage the connector is able to withstand continuously during its life time, in real environmental conditions, even with high temperature. The value is around 1/3 of the testing voltage.

| Keying Options |        |
|----------------|--------|
| Size 0         | Size 2 |
| T & U          | T & U  |

| Key                | T | U |
|--------------------|---|---|
| Plug & Receptacles |   |   |

# Sealed Breakaway Connector



| Size | 0    | 2    |
|------|------|------|
| A    | 12.1 | 15   |
| B    | 10.6 | 14.6 |

## Technical Characteristics

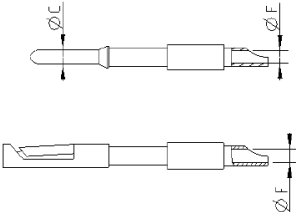
| Component      | Material                                                 | Standard     | Surface Treatment (um) |       |     |
|----------------|----------------------------------------------------------|--------------|------------------------|-------|-----|
|                |                                                          |              | Cr                     | Ni    | Au  |
| Shell          | Brass                                                    | C38500/C3600 | 0.1 - 0.6              | 5 - 8 |     |
| Shell          | Aluminum, Contact Souriau for Availability & Part Number | AISI 7075-T6 | 0.1 - 0.6              | 5 - 8 |     |
| Nut            | Brass                                                    | C38500/C3600 | 0.1 - 0.6              | 5 - 8 |     |
| Nut            | Aluminum, Contact Souriau for Availability & Part Number | AISI 7075-T6 | 0.1 - 0.6              | 5 - 8 |     |
| Pin Contact    | Brass                                                    | C38500/C3600 |                        | 3 - 5 | 0.5 |
| Socket Contact | Copper Nickel                                            | CAD C 19150  |                        | 3 - 5 | 0.5 |
| Clip           | Beryllium Copper                                         | 17200        |                        |       |     |
| Shielding Ring | Copper Alloy (Proprietary)                               | —            |                        | 3 - 7 |     |

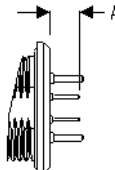
## Mechanical, Climatic & Electrical

| Characteristics       | Values                                                                                    | Standard       | Method               |
|-----------------------|-------------------------------------------------------------------------------------------|----------------|----------------------|
| Endurance             | >2,500 cycles                                                                             | Mil-Std-1344A  | 2016.1               |
| Insulation resistance | >500M ohm                                                                                 | ANSI-EIA-364-D | 21                   |
| EMI Shielding         | (60dB min. up to 100MHz)<br>(35dB min. up to 1GHz)                                        | ANSI-EIA-364-D | 66                   |
| Thermal Shock         | - 40 C to + 125 c<br>5 cycles                                                             | ANSI-EIA-364-D | 32                   |
| Mechanical Shock      | 300 g, 3ms                                                                                | ANSI-EIA-364-D | 27                   |
| Vibrations            | 10 to 2000 HZ y = 15 g                                                                    | Mil-Std-1344A  | 2005.1               |
| Random Vibrations     |                                                                                           | ANSI-EIA-364-D | 28, test concision 4 |
| Altitude Immersion    | 3 cycles (3*30min),                                                                       |                | 3                    |
| Humidity              | 240 hours @ 40 C 90%RH                                                                    | ANSI-EIA-364-D | 31                   |
| Resistance to Fluids  | Kerosene JP8<br>(NATO code F34)<br>Gasoline ASTM D 4814*<br>Mineral oil<br>NATO code H515 | ANSI-EIA-364-D | 10                   |
| Protection index      | IP68 mated & un-mated                                                                     | IEC 529        | 14.2.8               |
| Operating temperature | - 40 C to + 125 c<br>5 cycles                                                             |                |                      |

# Sealed Breakaway Connector



| Solder Contacts <sup>2</sup>                                                      |         |      |                                        |      |    |                           |                               |                          |
|-----------------------------------------------------------------------------------|---------|------|----------------------------------------|------|----|---------------------------|-------------------------------|--------------------------|
|  | Contact |      | Usable Cables<br>Core Section (mm) AWG |      |    | Max Current<br>Rating (A) | Contact<br>Resistance<br>(mΩ) | Endurance<br># of Cycles |
|                                                                                   | C       | F    | min                                    | max  |    |                           |                               |                          |
|                                                                                   | 0.5     | 0.5  | —                                      | —    | 28 | 5                         | 10                            | >1,000                   |
|                                                                                   | 0.7     | 0.63 | —                                      | 0.3  | 26 | 7                         | 5                             | >1,000                   |
|                                                                                   | 0.9     | 0.8  | —                                      | 0.21 | 24 | 10                        | 3.5                           | >1,000                   |
|                                                                                   | 1.3     | 1.1  | —                                      | 0.6  | 20 | 15                        | 3                             | >1,000                   |
|                                                                                   | 1.6     | 1.5  | —                                      | 0.93 | 18 | 17                        | 2.5                           | >1,000                   |
|                                                                                   | 2       | 1.9  | —                                      | 1.34 | 16 | 30                        | 2.5                           | >1,000                   |

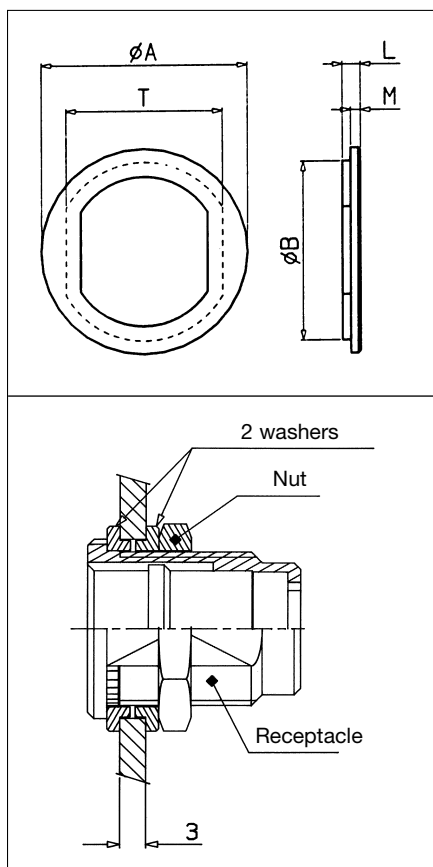
| PCB Contacts                                                                      |                                      |                      |
|-----------------------------------------------------------------------------------|--------------------------------------|----------------------|
|  | 0.5 mm female PCB tail length size 0 | Dimension "L" 4 mm   |
|                                                                                   | 0.7 mm female PCB tail length size 0 | Dimension "L" 4 mm   |
|                                                                                   | 0.9 mm female PCB tail length size 0 | Dimension "L" 4 mm   |
|                                                                                   | 0.7 mm female PCB tail length size 2 | Dimension "L" 6.0 mm |
|                                                                                   | 0.9 mm female PCB tail length size 2 | Dimension "L" 6.0mm  |
|                                                                                   | 1.3 mm female PCB tail length size 2 | Dimension "L" 6.0 mm |

# Push-Pull connectors



## Accessories JBX

### • Insulating washer



| Part number | Shell size | Ø A | B    | L   | M   | N   | T    | E    |
|-------------|------------|-----|------|-----|-----|-----|------|------|
| JBX 00 RIN  | 00         | 10  | 8.8  | 1.8 | 1   | 0.8 | 8    | 4.4  |
| JBX 0 RI*   | 0          | 12  | 10.8 | 1.8 | 1   | 0.8 | 9.9  | 6.4  |
| JBX 1 RI*   | 1          | 16  | 13.8 | 1.8 | 1   | 0.8 | 12.2 | 8.4  |
| JBX 2 RI*   | 2          | 21  | 17.8 | 2.2 | 1.2 | 0.8 | 16.2 | 8.2  |
| JBX 3 RI*   | 3          | 25  | 21.8 | 2.2 | 1.2 | 0.8 | 20.2 | 10.1 |

\* Washer colors as protective boots.  
In size 00, available only in black.

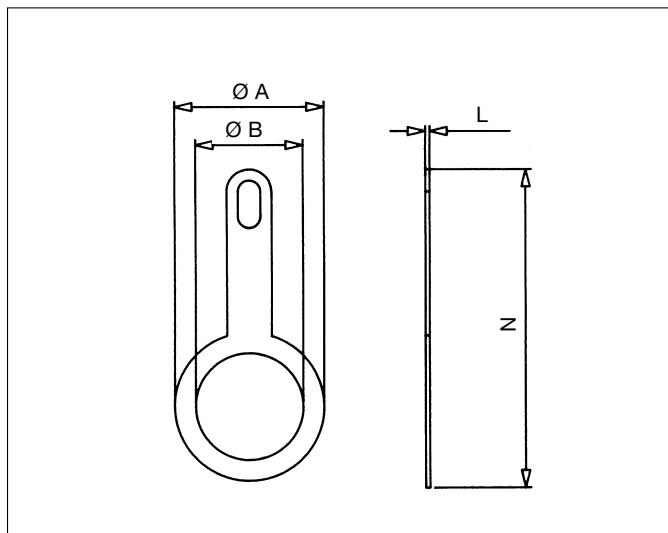
**Material :** PA 6/6

**Working temperature :** - 40°C ; + 125°C  
- 40°F ; + 257°F

Using 2 washers for receptacle / panel insulating

Be careful : usable for the JAX and JBX series but not for sealed connectors (JKX and sealed JBX size 2).

### • Grounding washer



| Part number   | Shell size | Dimensions |      |     |      |
|---------------|------------|------------|------|-----|------|
|               |            | Ø A        | Ø B  | L   | N    |
| JAX RA 00 251 | 00         | 10         | 7.2  | 0.3 | 21.5 |
| JAX RA 0 251  | 0          | 13         | 9.1  | 0.3 | 24   |
| JAX RA 1 251  | 1          | 16         | 12.2 | 0.3 | 24   |
| JAX RA 2 251  | 2          | 21         | 15.1 | 0.8 | 35   |
| JAX RA 3 251  | 3          | 25         | 18.1 | 0.8 | 37   |

**Material :** - Brass  
- Nickel plated (3 µm)

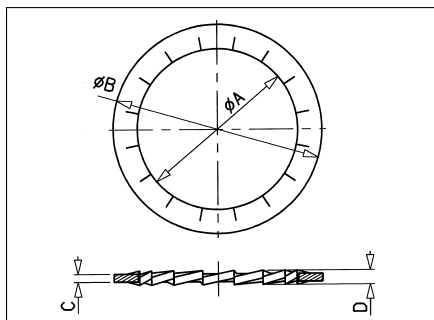
Be careful : usable for the JBX series but not for sealed connectors (JKX and sealed JBX size 2).

# Push-Pull connectors



## Accessories JBX

### • Locking washer



| Part number | Shell size | Dimensions |      |     |   |
|-------------|------------|------------|------|-----|---|
|             |            | Ø A        | Ø B  | C   | D |
| JAX RE 00   | 00         | 7.3        | 10   | 0.5 | 1 |
| JAX RE 0    | 0          | 9.2        | 12.5 | 0.6 | 1 |
| JAX RE 1    | 1          | 12.2       | 16   | 0.6 | 1 |

## Piece parts JBX-JKX

### • Crimp contacts (if ordered separately)

| Shell size | Ø contact | Part Number    |                |
|------------|-----------|----------------|----------------|
|            |           | Crimp pin      | Crimp socket   |
| 0          | 0.9       | JBX 0 CT MC 09 | JBX 0 CT FC 09 |
|            | 0.7       | JBX 0 CT MC 07 | JBX 0 CT FC 07 |
| 1          | 1.3       | JBX 1 CT MC 13 | JBX 1 CT FC 13 |
|            | 0.9       | JBX 1 CT MC 09 | JBX 1 CT FC 09 |
|            | 0.7       | JBX 1 CT MC 07 | JBX 1 CT FC 07 |
| 2          | 2         | JBX 2 CT MC 20 | JBX 2 CT FC 20 |
|            | 1.6       | JBX 2 CT MC 16 | JBX 2 CT FC 16 |
|            | 1.3       | JBX 2 CT MC 13 | JBX 2 CT FC 13 |
|            | 0.9       | JBX 2 CT MC 09 | JBX 2 CT FC 09 |
|            | 0.7       | JBX 2 CT MC 07 | JBX 2 CT FC 07 |
| 3          | 2         | JBX 3 CT MC 20 | JBX 3 CT FC 20 |
|            | 1.6       | JBX 3 CT MC 16 | JBX 3 CT FC 16 |
|            | 1.3       | JBX 3 CT MC 13 | JBX 3 CT FC 13 |
|            | 0.9       | JBX 3 CT MC 09 | JBX 3 CT FC 09 |
|            | 0.7       | JBX 3 CT MC 07 | JBX 3 CT FC 07 |

### • Solder contacts (if ordered separately)

| Shell size | Ø contact | Part Number    |                |
|------------|-----------|----------------|----------------|
|            |           | Solder pin     | Solder socket  |
| 0          | 0.9       | JBX 0 CT MS 09 | JBX 0 CT FS 09 |
| 1          | 1.3       | JBX 1 CT MS 13 | JBX 1 CT FS 13 |
|            | 0.9       | JBX 1 CT MS 09 | JBX 1 CT FS 09 |
| 2          | 2         | JBX 2 CT MS 20 | JBX 2 CT FS 20 |
|            | 1.6       | JBX 2 CT MS 16 | JBX 2 CT FS 16 |
|            | 1.3       | JBX 2 CT MS 13 | JBX 2 CT FS 13 |
|            | 0.9       | JBX 2 CT MS 09 | JBX 2 CT FS 09 |
| 3          | 2         | JBX 3 CT MS 20 | JBX 3 CT FS 20 |
|            | 1.6       | JBX 3 CT MS 16 | JBX 3 CT FS 16 |
|            | 1.3       | JBX 3 CT MS 13 | JBX 3 CT FS 13 |
|            | 0.9       | JBX 3 CT MS 09 | JBX 3 CT FS 09 |

Solder contacts of 0.5 mm and 0.7 mm of diameter not available separately (always fixed into the insulator).

# Push-Pull connectors



## Piece parts JBX-JKX

- Inserts for removable solder and crimp contacts (if ordered separately)

| Shell size | Insert | Insert Part Number |                 |
|------------|--------|--------------------|-----------------|
|            |        | Pin contacts       | Socket contacts |
| 0          | 02     | JBX 0 BI 02 MS     | JBX 0 BI 02 FS  |
|            | 03     | JBX 0 BI 03 MS     | JBX 0 BI 03 FS  |
|            | 04     | JBX 0 BI 04 MS     | JBX 0 BI 04 FS  |
|            | 05     | JBX 0 BI 05 MS     | JBX 0 BI 05 FS  |
| 1          | 02     | JBX 1 BI 02 MS     | JBX 1 BI 02 FS  |
|            | 03     | JBX 1 BI 03 MS     | JBX 1 BI 03 FS  |
|            | 04     | JBX 1 BI 04 MS     | JBX 1 BI 04 FS  |
|            | 05     | JBX 1 BI 05 MS     | JBX 1 BI 05 FS  |
|            | 06     | JBX 1 BI 06 MS     | JBX 1 BI 06 FS  |
|            | 07     | JBX 1 BI 07 MS     | JBX 1 BI 07 FS  |
| 2          | 08     | JBX 1 BI 08 MS     | JBX 1 BI 08 FS  |
|            | 02     | JBX 2 BI 02 MS     | JBX 2 BI 02 FS  |
|            | 03     | JBX 2 BI 03 MS     | JBX 2 BI 03 FS  |
|            | 04     | JBX 2 BI 04 MS     | JBX 2 BI 04 FS  |
|            | 05     | JBX 2 BI 05 MS     | JBX 2 BI 05 FS  |
|            | 06     | JBX 2 BI 06 MS     | JBX 2 BI 06 FS  |
|            | 07     | JBX 2 BI 07 MS     | JBX 2 BI 07 FS  |
|            | 08     | JBX 2 BI 08 MS     | JBX 2 BI 08 FS  |
|            | 10     | JBX 2 BI 10 MS     | JBX 2 BI 10 FS  |
|            | 12     | JBX 2 BI 12 MS     | JBX 2 BI 12 FS  |
| 3          | 16     | JBX 2 BI 16 MS     | JBX 2 BI 16 FS  |
|            | 18     | JBX 2 BI 18 MS     | JBX 2 BI 18 FS  |
|            | 19     | JBX 2 BI 19 MS     | JBX 2 BI 19 FS  |
|            | 03     | JBX 3 BI 03 MS     | JBX 3 BI 03 FS  |
|            | 04     | JBX 3 BI 04 MS     | JBX 3 BI 04 FS  |
|            | 07     | JBX 3 BI 07 MS     | JBX 3 BI 07 FS  |
|            | 10     | JBX 3 BI 10 MS     | JBX 3 BI 10 FS  |
|            | 14     | JBX 3 BI 14 MS     | JBX 3 BI 14 FS  |
|            | 18     | JBX 3 BI 18 MS     | JBX 3 BI 18 FS  |
|            | 22     | JBX 3 BI 22 MS     | JBX 3 BI 22 FS  |
|            | 30     | JBX 3 BI 30 MS     | JBX 3 BI 30 FS  |

Insert for pin contacts



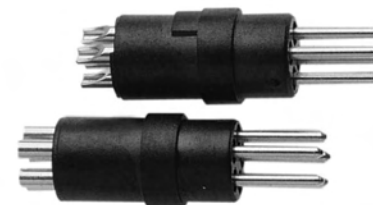
Insert for socket contacts



- Inserts with fixed solder contacts (if ordered separately)

| Shell size | Insert | Insert Part Number |                  |
|------------|--------|--------------------|------------------|
|            |        | Pin contacts       | Socket contacts  |
| 00         | 04     | JBX 00 BI 04 MPS   | JBX 00 BI 04 FPS |
| 0          | 04     | JBX 0 BI 04 MSS    | JBX 0 BI 04 FSS  |
|            | 05     | JBX 0 BI 05 MSS    | JBX 0 BI 05 FSS  |
|            | 06     | JBX 0 BI 06 MPS    | JBX 0 BI 06 FPS  |
|            | 07     | JBX 0 BI 07 MPS    | JBX 0 BI 07 FPS  |
| 1          | 07     | JBX 1 BI 07 MSS    | JBX 1 BI 07 FSS  |
|            | 08     | JBX 1 BI 08 MSS    | JBX 1 BI 08 FSS  |
|            | 10     | JBX 1 BI 10 MPS    | JBX 1 BI 10 FPS  |
| 2          | 12     | JBX 2 BI 12 MSS    | JBX 2 BI 12 FSS  |
|            | 16     | JBX 2 BI 16 MSS    | JBX 2 BI 16 FSS  |
|            | 18     | JBX 2 BI 18 MSS    | JBX 2 BI 18 FSS  |
|            | 19     | JBX 2 BI 19 MSS    | JBX 2 BI 19 FSS  |
| 3          | 22     | JBX 3 BI 22 MSS    | JBX 3 BI 22 FSS  |
|            | 30     | JBX 3 BI 30 MSS    | JBX 3 BI 30 FSS  |

Insert for pin contacts



Insert for socket contacts



# Push-Pull connectors

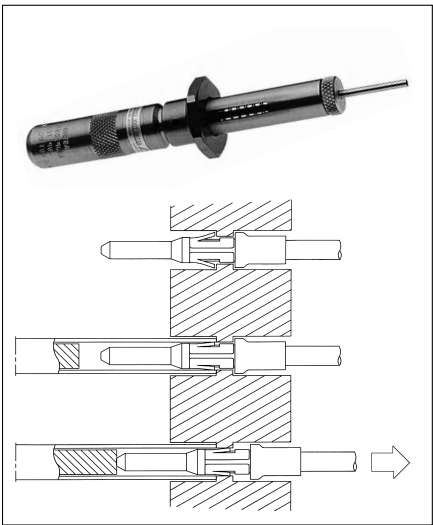


## Toolings JBX - JKX

### • Manual extraction tools

#### Contacts automatically extracted

The extraction tool is similar for both male and female contacts.



| Shell size | Ø Contacts | SOURIAU Part number | ASTRO Part number |
|------------|------------|---------------------|-------------------|
| 0          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
| 1          | 0.7        | JBX OUT DC 07       | ATJP2045          |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
| 2          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
|            | 1.6        | JBX OUT DC 16       | ATJP 2095         |
|            | 2.0        | JBX OUT DC 20       | ATJP 2115         |
| 3          | 0.7        | JBX OUT DC 07       | ATJP 2045         |
|            | 0.9        | JBX OUT DC 09       | ATJP 2057         |
|            | 1.3        | JBX OUT DC 13       | ATJP 2077         |
|            | 1.6        | JBX OUT DC 16       | ATJP 2095         |
|            | 2.0        | JBX OUT DC 20       | ATJP 2115         |

The contact is automatically extracted without the need of pulling onto the cable.

# Push-Pull connectors



## Toolings JBX - JKX

### • Crimping tool



#### Specifications MIL-C-22520 / 7.01

| Contacts 0.7 mm - 0.9 mm<br>and 1.3 mm | MIL P/N - SOURIAU P/N | Supplier P/N                          |
|----------------------------------------|-----------------------|---------------------------------------|
|                                        | MIL-22520/7-01        | Daniels : MH860<br>Buchanan : 616 336 |



#### Specifications MIL-C-22520 / 1.01

| Contacts 1.6 mm<br>and 2 mm | MIL P/N - SOURIAU P/N | Supplier P/N                        |
|-----------------------------|-----------------------|-------------------------------------|
|                             | MIL-22520/1-01        | Daniels : AF8<br>Buchanan : 615 708 |

### • Locator for pin and socket 0.7 - 0.9 mm and 1.3 mm contacts



| Shell size | Ø contacts | AWG          | Male contact   |             |           | Female contact |             |           |
|------------|------------|--------------|----------------|-------------|-----------|----------------|-------------|-----------|
|            |            |              | SOURIAU P/N    | DANIELS P/N | ASTRO P/N | SOURIAU P/N    | DANIELS P/N | ASTRO P/N |
| 0          | 0.7        | 22 - 24 - 26 | JBX 0 OUT LP07 | 86 - 223    | /         | JBX 0 OUT LS07 | 86 - 224    | /         |
|            | 0.9        | 20 - 22 - 24 | JBX 0 OUT LP09 | 86 - 225    | /         | JBX 0 OUT LS09 | 86 - 226    | /         |
| 1          | 0.7        | 22 - 24 - 26 | JBX 1 OUT LP07 | 86 - 196    | 642 - 001 | JBX 1 OUT LS07 | 86 - 197    | 642 - 004 |
|            | 0.9        | 20 - 22 - 24 | JBX 1 OUT LP09 | 86 - 198    | 642 - 002 | JBX 1 OUT LS09 | 86 - 199    | 642 - 005 |
|            | 1.3        | 18 - 20 - 22 | JBX 1 OUT LP13 | 86 - 200    | 642 - 003 | JBX 1 OUT LS13 | 86 - 201    | 642 - 006 |
| 2          | 0.7        | 22 - 24 - 26 | JBX 2 OUT LP07 | 86 - 202    | 642 - 007 | JBX 2 OUT LS07 | 86 - 203    | 642 - 010 |
|            | 0.9        | 20 - 22 - 24 | JBX 2 OUT LP09 | 86 - 204    | 642 - 008 | JBX 2 OUT LS09 | 86 - 205    | 642 - 011 |
|            | 1.3        | 18 - 20 - 22 | JBX 2 OUT LP13 | 86 - 206    | 642 - 009 | JBX 2 OUT LS13 | 86 - 207    | 642 - 012 |
| 3          | 0.7        | 22 - 24 - 26 | JBX 3 OUT LP07 | 86 - 217    | 642 - 014 | JBX 3 OUT LS07 | 86 - 214    | 642 - 017 |
|            | 0.9        | 20 - 22 - 24 | JBX 3 OUT LP09 | 86 - 218    | 642 - 015 | JBX 3 OUT LS09 | 86 - 215    | 642 - 018 |
|            | 1.3        | 18 - 20 - 22 | JBX 3 OUT LP13 | 86 - 219    | 642 - 016 | JBX 3 OUT LS13 | 86 - 216    | 642 - 019 |

### • Turret with locator for pin and socket 1.6 mm and 2 mm contacts



| Shell size | Ø contacts | AWG          | Male and female contacts |             |           |
|------------|------------|--------------|--------------------------|-------------|-----------|
|            |            |              | SOURIAU P/N              | DANIELS P/N | ASTRO P/N |
| 2          | 1.6        | 14 - 16 - 18 | JBX 2 OUT LT16           | TH 564      | 650 - 030 |
|            | 2          | 12 - 14 - 16 | JBX 2 OUT LT20           | TH 565      | 650 - 031 |
| 3          | 1.6        | 14 - 16 - 18 | JBX 3 OUT LT16           | TH 566      | 650 - 038 |
|            | 2          | 12 - 14 - 16 | JBX 3 OUT LT20           | TH 567      | 650 - 035 |

# Custom Connector and Cable Assemblies



## Examples of custom designs derivated from standard connectors lines

- **Watertight receptacles**



- **JBX series**, Custom Receptacle Design

- **Black conductive plating**



- **JKX series**, black chrome plating

# Push-Pull connectors



**Request form please fill in and fax to SOURIAU - Customer service**  
(see the address page for your local contact)

Name : ..... Tel number : ..... Fax number : .....

Title : ..... E-mail : .....

Company : .....

Address : .....

## Applications :

- ☐ Medical      ☐ Audio      ☐ Video      ☐ Instrumentation      ☐ Nuclear physics  
☐ GPS      ☐ Transportation      ☐ Metrology      ☐ Other .....

Detailed description of end product, unit or application .....

## Connector description :

- ☐ Series : ..... ☐ Shell configuration : .....  
☐ Shell size : ..... ☐ Protective boot : ..... ☐ Color : .....  
☐ Number of contacts : .....  
☐ Type of contacts : ☐ Solder      ☐ Crimp      ☐ Printed circuit      ☐ 90° printed circuit  
☐ Conductor AWG : ..... ☐ Coax type : ..... ☐ Other : .....

## Electrical :

- ☐ Working voltage (AC/DC) : ..... ☐ Current rating : .....  
☐ Impedance (Ohms) : ..... ☐ SWR : ..... ☐ Frequency : .....  
☐ Contact resistance : ..... ☐ Shielding : .....  
☐ Fibre optics : ☐ Multimode ..... ☐ Monomode .....

## Environment :

- ☐ Temperature : ..... ☐ Protection index (IP - ) : .....  
☐ Outside environment :  
    ☐ Clear ..... ☐ Splash proof ..... ☐ Sterilization .....  
    ☐ Dirt ..... ☐ Fluids ..... ☐ Radiation .....  
    ☐ Chemicals ..... ☐ Waterproof ..... ☐ Gases .....  
    ☐ Salt waterspray .....

## Projections :

- ☐ Prototype quantity : ..... ☐ Delivery date : .....  
☐ Preseries quantity : ..... ☐ Delivery date : .....  
☐ Production quantity : ..... ☐ Delivery date : .....  
☐ Production per year : ..... ☐ Number of years : .....  
☐ Target pricing per connector : .....



# Push-Pull connectors

## Conversion Table

### • Millimeters / Inches

| (mm) | (inches) | (mm) | (inches) | (mm)   | (inches)  |
|------|----------|------|----------|--------|-----------|
| 0.1  | 0.00394  | 8.2  | 0.32308  | 38.0   | 1.49720   |
| 0.2  | 0.00788  | 8.4  | 0.33096  | 38.5   | 1.51690   |
| 0.3  | 0.01182  | 8.6  | 0.33884  | 39.0   | 1.53660   |
| 0.4  | 0.01576  | 8.8  | 0.34672  | 39.5   | 1.55630   |
| 0.5  | 0.01970  | 9.0  | 0.35460  | 40.0   | 1.57600   |
| 0.6  | 0.02364  | 9.2  | 0.36248  | 40.5   | 1.59570   |
| 0.7  | 0.02758  | 9.4  | 0.37036  | 41.0   | 1.61540   |
| 0.8  | 0.03152  | 9.6  | 0.37824  | 41.5   | 1.63510   |
| 0.9  | 0.03546  | 9.8  | 0.38612  | 42.0   | 1.65480   |
| 1.0  | 0.03940  | 10.0 | 0.39400  | 42.5   | 1.67450   |
| 1.1  | 0.04334  | 10.5 | 0.41370  | 43.0   | 1.69420   |
| 1.2  | 0.04728  | 11.0 | 0.43340  | 43.5   | 1.71390   |
| 1.3  | 0.05122  | 11.5 | 0.45310  | 44.0   | 1.73360   |
| 1.4  | 0.05516  | 12.0 | 0.47280  | 44.5   | 1.75330   |
| 1.5  | 0.05910  | 12.5 | 0.49250  | 45.0   | 1.77300   |
| 1.6  | 0.06304  | 13.0 | 0.51220  | 45.5   | 1.79270   |
| 1.7  | 0.06698  | 13.5 | 0.53190  | 46.0   | 1.81240   |
| 1.8  | 0.07092  | 14.0 | 0.55160  | 46.5   | 1.83210   |
| 1.9  | 0.07486  | 14.5 | 0.57130  | 47.0   | 1.85180   |
| 2.0  | 0.07880  | 15.0 | 0.59100  | 47.5   | 1.87150   |
| 2.1  | 0.08274  | 15.5 | 0.61070  | 48.0   | 1.89120   |
| 2.2  | 0.08668  | 16.0 | 0.63040  | 48.5   | 1.91090   |
| 2.3  | 0.09062  | 16.5 | 0.65010  | 49.0   | 1.93060   |
| 2.4  | 0.09456  | 17.0 | 0.66980  | 49.5   | 1.95030   |
| 2.5  | 0.09850  | 17.5 | 0.68950  | 50.0   | 1.97000   |
| 2.6  | 0.10244  | 18.0 | 0.70920  | 51.0   | 2.00940   |
| 2.7  | 0.10638  | 18.5 | 0.72890  | 52.0   | 2.04880   |
| 2.8  | 0.11032  | 19.0 | 0.74860  | 53.0   | 2.08820   |
| 2.9  | 0.11426  | 19.5 | 0.76830  | 54.0   | 2.12760   |
| 3.0  | 0.11820  | 20.0 | 0.78800  | 55.0   | 2.16700   |
| 3.1  | 0.12214  | 20.5 | 0.80770  | 56.0   | 2.20640   |
| 3.2  | 0.12608  | 21.0 | 0.82740  | 57.0   | 2.24580   |
| 3.3  | 0.13002  | 21.5 | 0.84710  | 58.0   | 2.28520   |
| 3.4  | 0.13396  | 22.0 | 0.86680  | 59.0   | 2.32460   |
| 3.5  | 0.13790  | 22.5 | 0.88650  | 60.0   | 2.36400   |
| 3.6  | 0.14184  | 23.0 | 0.90620  | 61.0   | 2.40340   |
| 3.7  | 0.14578  | 23.5 | 0.92590  | 62.0   | 2.44280   |
| 3.8  | 0.14972  | 24.0 | 0.94560  | 63.0   | 2.48220   |
| 3.9  | 0.15366  | 24.5 | 0.96530  | 64.0   | 2.52160   |
| 4.0  | 0.15760  | 25.0 | 0.98500  | 65.0   | 2.56100   |
| 4.1  | 0.16154  | 25.5 | 1.00470  | 66.0   | 2.60040   |
| 4.2  | 0.16548  | 26.0 | 1.02440  | 67.0   | 2.63980   |
| 4.3  | 0.16942  | 26.5 | 1.04410  | 68.0   | 2.67920   |
| 4.4  | 0.17336  | 27.0 | 1.06380  | 69.0   | 2.71860   |
| 4.5  | 0.17730  | 27.5 | 1.08350  | 70.0   | 2.75800   |
| 4.6  | 0.18124  | 28.0 | 1.10320  | 71.0   | 2.79740   |
| 4.7  | 0.18518  | 28.5 | 1.12290  | 72.0   | 2.83680   |
| 4.8  | 0.18912  | 29.0 | 1.14260  | 73.0   | 2.87620   |
| 4.9  | 0.19306  | 29.5 | 1.16230  | 74.0   | 2.91560   |
| 5.0  | 0.19700  | 30.0 | 1.18200  | 75.0   | 2.95500   |
| 5.2  | 0.20488  | 30.5 | 1.20170  | 80.0   | 3.15200   |
| 5.4  | 0.21276  | 31.0 | 1.22140  | 85.0   | 3.34900   |
| 5.6  | 0.22064  | 31.5 | 1.24110  | 90.0   | 3.54600   |
| 5.8  | 0.22852  | 32.0 | 1.26080  | 100.0  | 3.94000   |
| 6.0  | 0.23640  | 32.5 | 1.28050  | 200.0  | 7.88000   |
| 6.2  | 0.24428  | 33.0 | 1.30020  | 400.0  | 15.76000  |
| 6.4  | 0.25216  | 33.5 | 1.31990  | 600.0  | 23.64000  |
| 6.6  | 0.26004  | 34.0 | 1.33960  | 800.0  | 31.52000  |
| 6.8  | 0.26792  | 34.5 | 1.35930  | 1000.0 | 39.40000  |
| 7.0  | 0.27580  | 35.0 | 1.37900  | 1200.0 | 47.28000  |
| 7.2  | 0.28368  | 35.5 | 1.39870  | 1600.0 | 63.04000  |
| 7.4  | 0.29156  | 36.0 | 1.41840  | 2000.0 | 78.80000  |
| 7.6  | 0.29944  | 36.5 | 1.43810  | 3200.0 | 126.08000 |
| 7.8  | 0.30732  | 37.0 | 1.45780  |        |           |
| 8.0  | 0.31520  | 37.5 | 1.47750  |        |           |

### • °C/°F

| (°C) | (°F) |
|------|------|
| - 70 | - 94 |
| - 65 | - 85 |
| - 55 | - 67 |
| - 50 | - 58 |
| - 40 | - 40 |
| 0    | 32   |
| 37   | 98.6 |
| 80   | 176  |
| 125  | 257  |
| 150  | 302  |
| 170  | 338  |
| 200  | 392  |
| 250  | 482  |

### • Pressure conversion

| bar | psi   | mmHg (torr) |
|-----|-------|-------------|
| 10  | 145.0 | 7600        |
| 5   | 72.5  | 3800        |
| 2   | 29.0  | 1520        |
| 1   | 14.5  | 760         |
| 0.5 | 7.2   | 380         |
| 0.1 | 1.4   | 76          |

| mbar | psi   | torr (mmHg) |
|------|-------|-------------|
| 100  | 1.4   | 76          |
| 50   | 0.72  | 38          |
| 10   | 0.14  | 7.6         |
| 1.32 | 0.019 | 1           |

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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