

New TRIM TRIO®



**RoHS
Compliant**

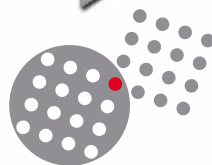
UTS series

IP68 / IP69K Plastic Connector

• Rapid

• Secure

• High Performance



SOURIAU
Connection Technology

UTS



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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

Rapid refers to the locking system and the total installed cost starting with the wiring & cabling and ending with the installation to the customers equipment. Rapid also refers to the total service on price request, samples and production deliveries.

• Secure

The secure locking system together with the secure and versatile TRIM TRIO® contacts are giving confidence to both the connection and the customers equipment.

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

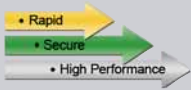
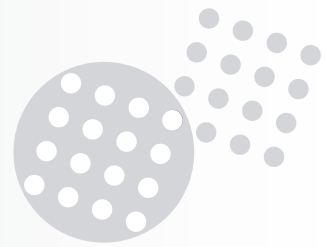
• High Performance

Extreme performance on water protection even in dynamic situations this in combination with a rapid and secure locking system makes UTS suitable for any high performance application.

UTS provides a connection that performs faster, easier, safer and more reliable, it makes :

UTS : Your first choice in waterproof connectors !

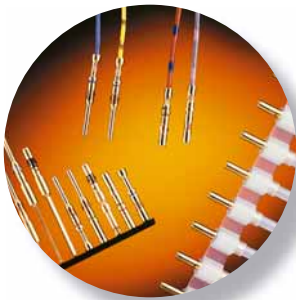
UTS - Major features and benefits



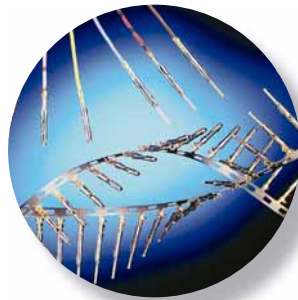
Different contact styles, selective loading, easy reparability, rapid crimping...rapid assembly

➡ **TRIM TRIO® contacts - The most versatile and modular contacts concept**

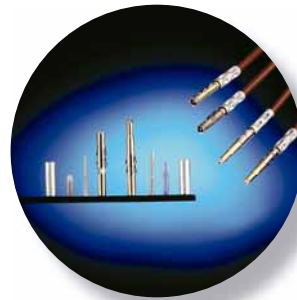
- Available in 4 different contact styles
- Suitable for field service and maintenance
- Combine all contact styles in same connector
- Established for more than 40 years



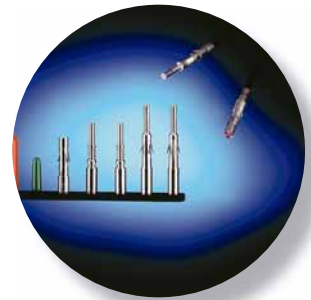
Machined



Stamped



Coax



Fiber optic

➡ **Rapid crimping with TRIM TRIO® contacts**

- Reliable and trouble free crimping
- Hand tools for maintenance and production
- Semi automatic bench press & applicators
- Stripper crimpers
- Contacts to be ordered separately
- Refer to TRIM TRIO® catalogue

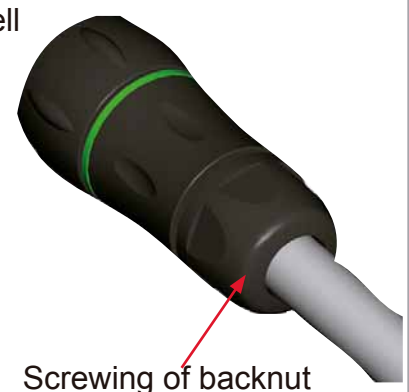
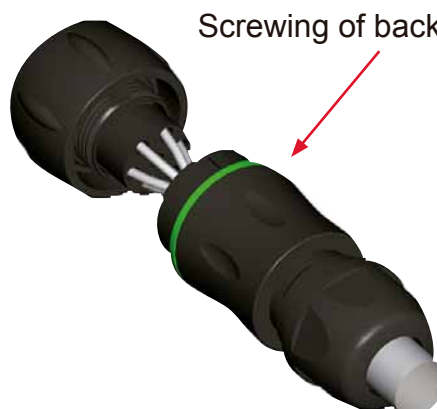
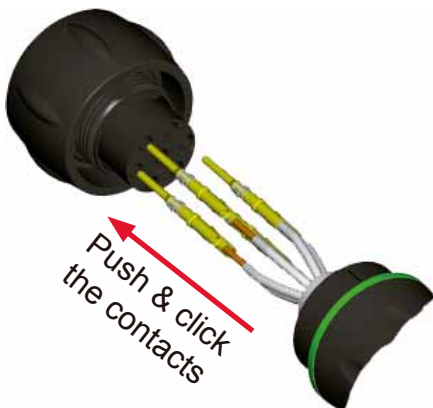


➡ **Rapid assembly of contacts**

- Push the contact in the cavity until it clicks»
- Selective loading
- Easy to repair

➡ **Rapid assembly of backshell**

- Limited number of components
- Integrated cable gland
- Backshell suitable for a wide range of cables



UTS : Your first choice in waterproof connectors !

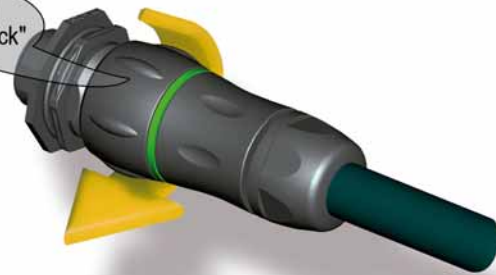
UTS - Major features and benefits



Rapid and secure locking system

- ➡ Confidence that the connector is properly mated
- ➡ Easy to connect in difficult places
- ➡ Minimalised operator fatigue
- ➡ Labor saving

Rapid mating with 1/3 turn
with an audible & sensitive "click"



Rapid and trouble free service

- ➡ Fast delivery of samples, quotes and production volumes

Worldwide network of:

- Sales units
- Distributors
- Agents



UTS : Your first choice in waterproof connectors !



UTS - Major features and benefits



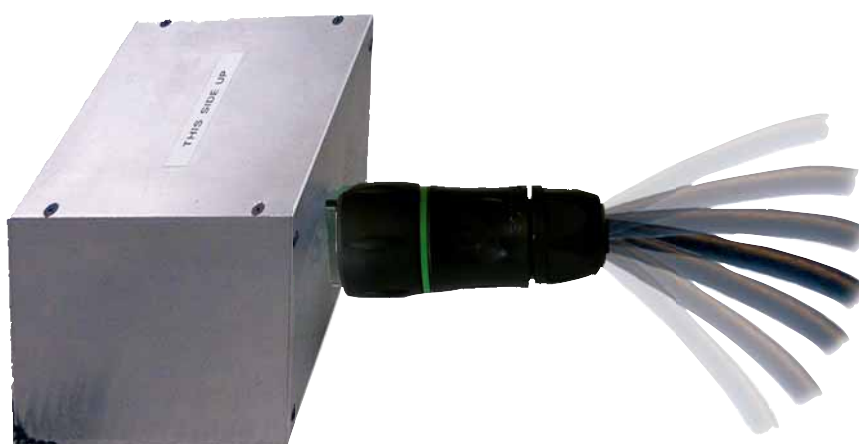
Extreme environmental sealing performance

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

➡ Dynamic IP68*

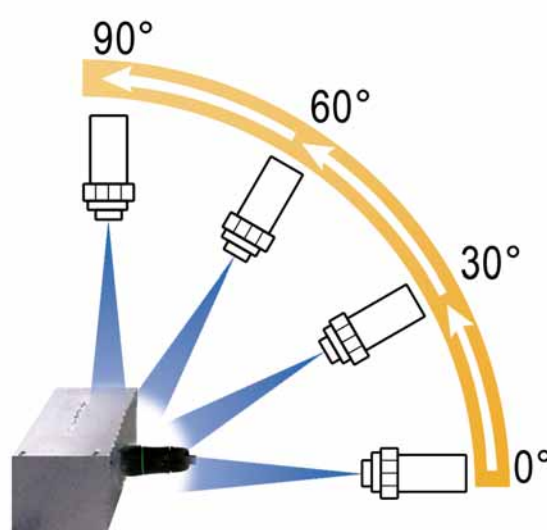
Connector will remain IP68 even when:

- Pulling on the cable
- Bending the cable



➡ Dynamic IP69K*

Connector withstands high pressure water cleaning



* See table page 16 for more details

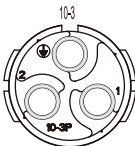
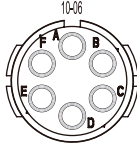
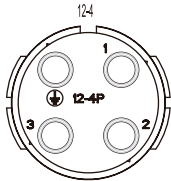
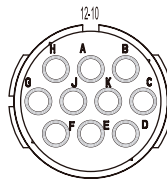
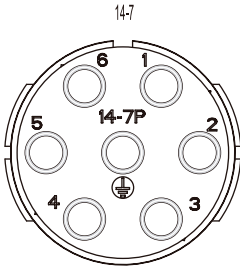
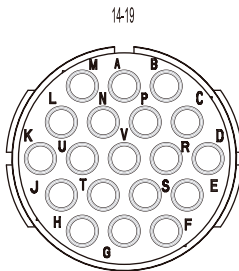
UTS : Your first choice in waterproof connectors !

UTS - Major features and benefits



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 gender
 - Custom version upon request such as:
 - Mixed contact sizes
 - Power versions
 - High speed versions (RJ45, USB, BNC), upon request
- ➡ **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 |
| Overvoltage category | III | III | III |
| Pollution degree | 3 | 3 | 3 |
| Size 10 | * |  |  |
| | | | |
| | | | |
| Number of contacts | 3 (2+ grounding) | 4 | 6 |
| Max current (per contact) | 13A (machined + stamped) | 13A (machined + stamped) | 7.5A (machined) / 5A (stamped) |
| Size 12 | * |  |  |
| | | | |
| | | | |
| Number of contacts | 4 (3 + grounding) | 8 | 10 |
| Max current (per contact) | 13A (machined + stamped) | 13A (machined + stamped) | 7.5A (machined)/ 5A (stamped) |
| Size 14 | * |  |  |
| | | | |
| | | | |
| Number of contacts | 7 (6 + grounding) | 12 | 19 |
| Max current (per contact) | 13A (machined + stamped) | 13A (machined + stamped) | 7.5A (machined)/ 5A (stamped) |

* Arrangements with advanced grounding cavity.

UTS : Your first choice in waterproof connectors !



UTS - Major features and benefits



Rapid and secure panel mounting

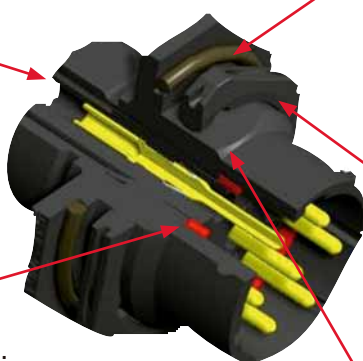
Rear panel mount solution suitable for pre-harnessing and PCB mounting

Captive panel seal to prevent misalignment

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

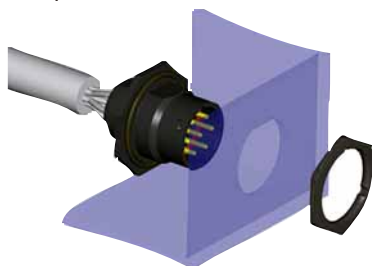
O-ring seal to guarantee sealing between receptacle and plug

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

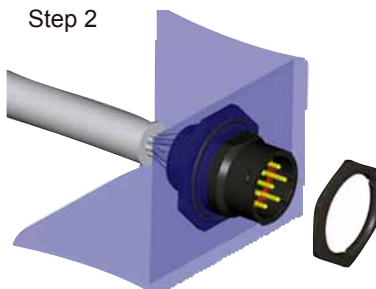


Assembly procedure of jam nut receptacle

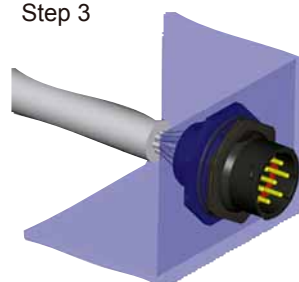
Step 1



Step 2



Step 3



PCB receptacle...low profile with rapid installation features

Low profile housing to limit space between panel and PCB

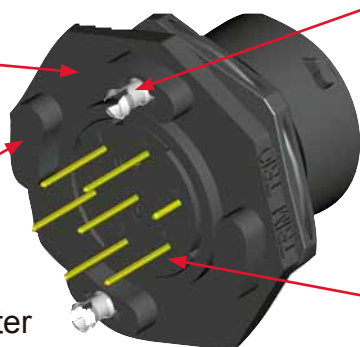
Metal hold down clips

- to lock the connector easily on the PCB and to release stress on solder joints
- Suitable for soldering in a metallised hole

Pre-assembled PCB contacts

- machined or stamped versions available
- different solder tail lengths possible
- different plating options

Stand-offs to allow cleaning after soldering



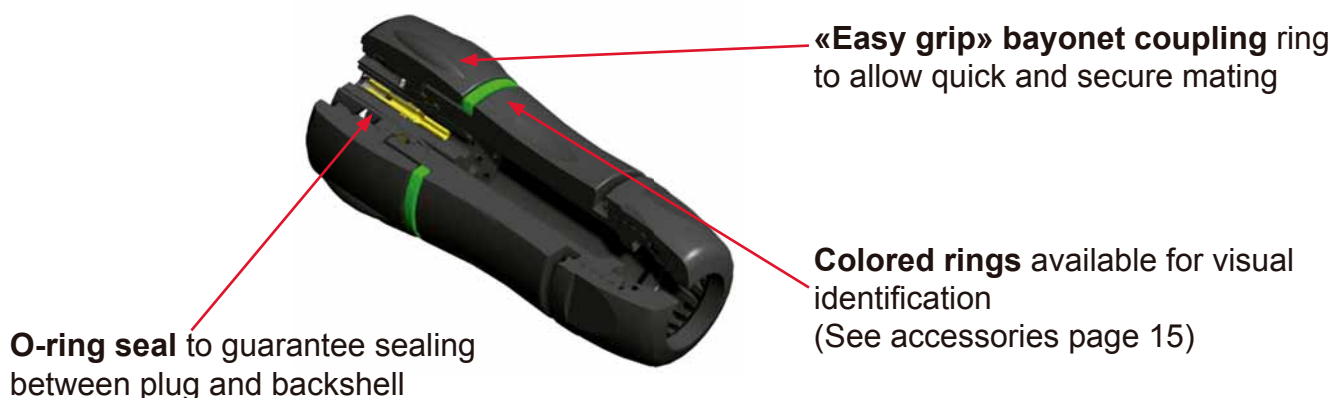
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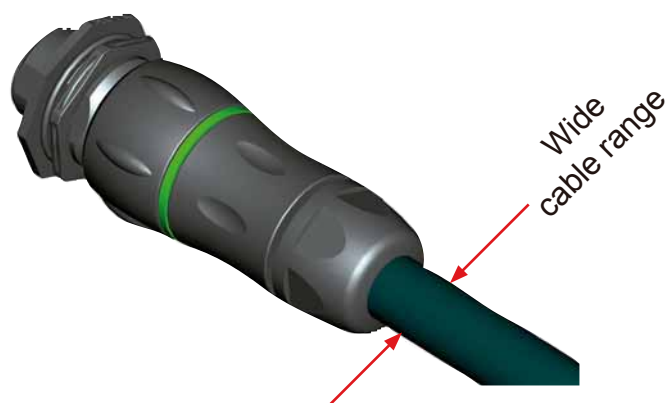
UTS - Major features and benefits



Ergonomic plug design with maximized cabling space and minimized connector length



Backshells...accepting a wide range of cables

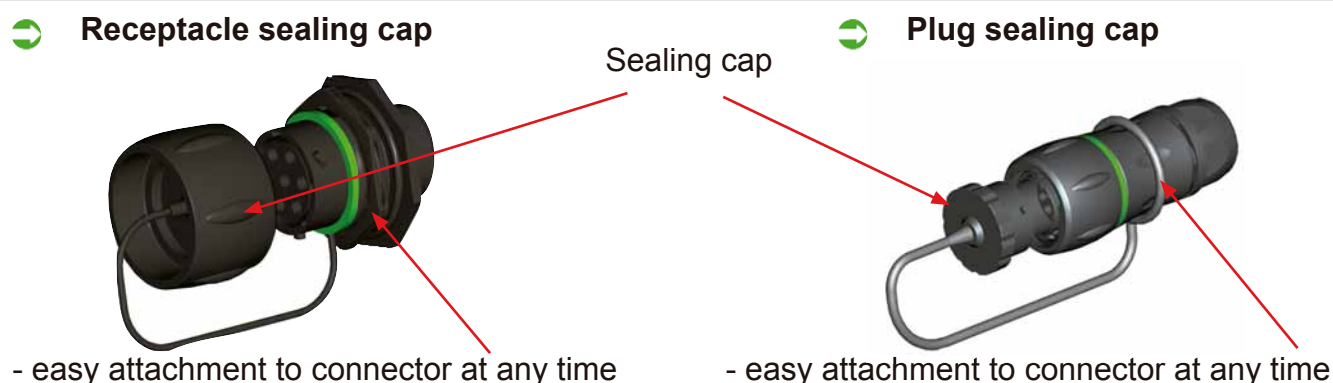


| | |
|---------|----------------|
| Size 10 | 2.5 to 8.0 mm |
| Size 12 | 3.0 to 12.0 mm |
| Size 14 | 5.0 to 14.0 mm |

Low installed cost with reduced number of components



Sealing caps...easy to install...at any time



UTS : Your first choice in waterproof 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: No mechanical degradation or important variation of color after 5 years of exposure in natural environment (equivalence exposure to sun and moisture as per ISO 4892)
- 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

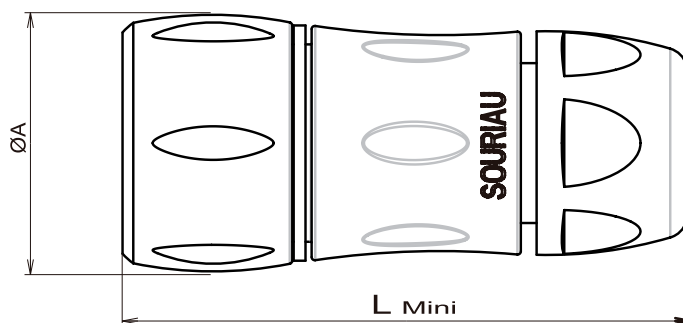
- “UTS” connectors accept TRIM TRIO® size 16 or size 20 (depending on arrangement)
removable snap-lock contacts
- Contacts to be ordered separately (except PCB versions)
- Refer to TRIM TRIO® catalog for details or visit our website:
www.souriau.com → products → by connector type → TRIM TRIO® → contacts

In accordance with UL requirements

UTS : Your first choice in waterproof 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 pin contact | PN socket | Nb of contacts x contact Ø | Shell size | L | Ø A | Ø Cable range |
|----------------|-------------|-------------------------------|---------------|------|------|---------------------------------------|
| UTS6JC103P | UTS6JC103S | 3 x 1.6 mm | 10 | 63.2 | 26.2 | 1.5 to 5.0 2.5 to 8.00 (standard) |
| UTS6JC104P | UTS6JC104S | 4 x 1.6 mm | | | | |
| UTS6JC106P | UTS6JC106S | 6 x 1.0 mm | | | | |
| UTS6JC124P | UTS6JC124S | 4 x 1.6 mm | 12 | 66.7 | 29.7 | 3.0 to 9.0 5.0 to 12.0 (standard) |
| UTS6JC128P | UTS6JC128S | 8 x 1.6 mm | | | | |
| UTS6JC1210P | UTS6JC1210S | 10 x 1.0 mm | | | | |
| UTS6JC147P | UTS6JC147S | 7 x 1.6 mm | 14 | 71.5 | 34.6 | 5.0 to 12.0 7.0 to 14.0 (standard) |
| UTS6JC1412P | UTS6JC1412S | 12 x 1.6 mm | | | | |
| UTS6JC1419P | UTS6JC1419S | 19 x 1.0 mm | | | | |

For more detail on contact arrangements, see page 8.

Coloured ring supplied as optional extra (See page 15).

Contacts to be ordered separately.

For more details about TRIM TRIO® connectors, refer to TRIM TRIO® catalogue or visit our website:
www.souriau.com → products → by connector type → TRIM TRIO® → contacts

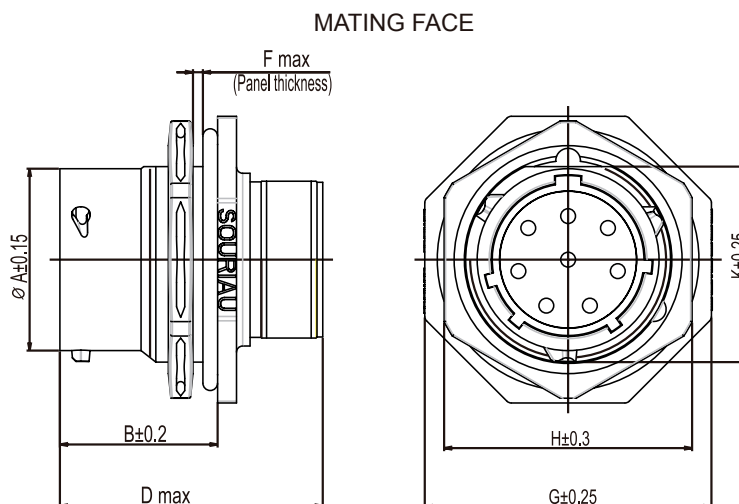
Note: All dimensions are in mm.

Dimensions are not contractual and may be subject to modifications.

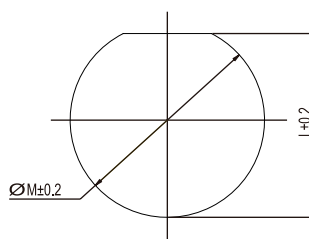
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Jam nut receptacle (wire version) for pin and socket contacts (UTS7...P / UTS7...S)



PANEL CUT OUT



| PN pin contact | PN socket | Nb of contacts x contact Ø | Shell size | Ø A | B | D Max | F Max | G | H | K | L | Ø M |
|----------------|-----------|-------------------------------|---------------|--------|------|----------|----------|------|------|------|------|------|
| UTS7103P | UTS7103S | 3 x 1.6 mm | 10 | 14.9 | 19.3 | 33.9 | 3.2 | 27.0 | 22.2 | 16.6 | 16.5 | 17.7 |
| UTS7104P | UTS7104S | 4 x 1.6 mm | | | | | | | | | | |
| UTS7106P | UTS7106S | 6 x 1.0 mm | | | | | | | | | | |
| UTS7124P | UTS7124S | 4 x 1.6 mm | 12 | 19.0 | 19.3 | 33.9 | 3.2 | 31.8 | 27.0 | 20.8 | 21.2 | 22.5 |
| UTS7128P | UTS7128S | 8 x 1.6 mm | | | | | | | | | | |
| UTS71210P | UTS71210S | 10 x 1.0 mm | | | | | | | | | | |
| UTS7147P | UTS7147S | 7 x 1.6 mm | 14 | 22.2 | 19.3 | 33.9 | 3.2 | 34.9 | 30.2 | 23.9 | 24.3 | 25.7 |
| UTS71412P | UTS71412S | 12 x 1.6 mm | | | | | | | | | | |
| UTS71419P | UTS71419S | 19 x 1.0 mm | | | | | | | | | | |

For more detail on contact arrangements, see page 8.

Coloured ring supplied as optional extra (See page 15).

Contacts to be ordered separately.

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www.souriau.com → products → by connector type → TRIM TRIO® → contacts

Note: All dimensions are in mm.

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For free hanging applications, connector can be equipped with the same backshell as for the plug (please consult us).

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