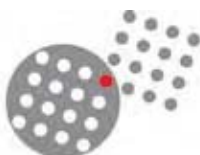


UTS series IP68 / IP69K Plastic Connectors

Part of the TRIM TRIO® interconnect system



SOURIAU
Connection Technology



Overview

UTS contact arrangements

Size 8						
2	3	3A/98	4	33		
Contacts : 2 Ø 1 (#20)	Contacts : 3 Ø 1 (#20)	Contacts : 3 Ø 1 (#20)	Contacts : 4 Ø 1 (#20)	Contacts : 3 Ø 1 (#20)		

Size 10						
2W2	3 (2+PE)	3W3	4	6	7	98
Contacts : 2 Ø2.4 (#12) 2 Ø1.0 (#20)	Contacts* : 3 Ø 1.6 (#16)	Contacts : 3 Ø 1.6 (#16) 3 Ø 1.0 (#20)	Contacts : 4 Ø 1.6 (#16)	Contacts : 6 Ø 1 (#20)	Contacts : 7 Ø 1 (#20)	Contacts : 6 Ø 1 (#20)

Size 12						
2	3	4 (3+PE)	8	8	10	14
Contacts : 2 Ø 1.6 (#16)	Contacts : 3 Ø 1.6 (#16)	Contacts* : 4 Ø 1.6 (#16)	Contacts : 8 Ø 1.6 (#16)	Contacts : 8 Ø 1 (#20)	Contacts : 10 Ø 1 (#20)	Contacts : 14 Ø 1 (#20)

Size 14						
5	7 (6+PE)	12	12	15	18	19
Contacts : 5 Ø 1.6 (#16)	Contacts* : 7 Ø 1.6 (#16)	Contacts : 12 Ø 1.6 (#16)	Contacts : 8 Ø 1 (#20) 4 Ø 1.6 (#16)	Contacts : 14 Ø 1 (#20) 1 Ø 1.6 (#16)	Contacts : 18 Ø 1 (#20)	Contacts : 19 Ø 1 (#20)

* Arrangements with advanced grounding cavity (For other arrangements, First Mate, Last Break contacts are available - see from page 27)

UTS : Your first choice in waterproof connectors !



Overview

Size 18

11	23	32	30	RJ45
Contacts : 11 Ø 1.6 (#16)	Contacts : 23 Ø 1.6 (#16)	Contacts : 32 Ø 1 (#20)	Contacts : 29 Ø 1 (#20) 1 Ø 1.6 (#16)	

- UTS standard version
- UTS Hi seal version
- ▲ UTS discrete wire sealing version
- UTS with screw contact termination
- In-Line version

For specific arrangements, please consult us

Working voltage according to VDE & UL standards

			VDE0110	UL1977
			Overvoltage class III, pollution degree 2 / IEC 60664-1 (equivalent)	Type 2
#16 Ø 1.6 mm	Shell size	Nb of contacts	320 V*	500 V**
	10	3	400 V*	
	12	4	125 V	500 V**
	14	7		
	10	4		
	12	8		
14	12	125 V	250 V**	
18	23 ¹			
#20 Ø 1.0 mm	10	6	125 V	250 V**
	12	10		
	14	19		
	18	32 ¹		
Mixed ¹	10	2W2 2 x #12 2 x #20	200 V	500 V
	10	3W3 3 x #16 3 x #20		

¹ Not certified

Note : all the written working voltage are in Volts AC/DC

* tested by the VDE organism

** certified by the UL organism (only for shell size 10, 12 & 14)

UTS : Your first choice in waterproof connectors !



UTS series

Major features & benefits



Rapid & 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 secure panel mounting

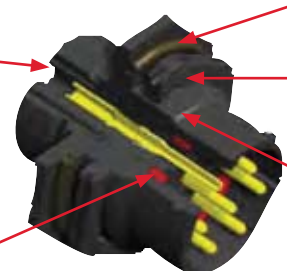
Rear panel mount solution suitable for pre-harnessing and PCB mounting

Captive panel seal

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

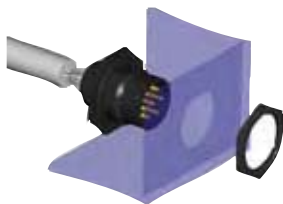
D-shape panel cut to ensure correct mounting and to prevent the connector from rotating

O-ring seal to guarantee sealing between receptacle and plug

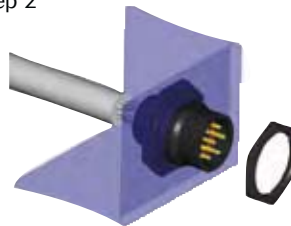


Assembly procedure of jam nut receptacle

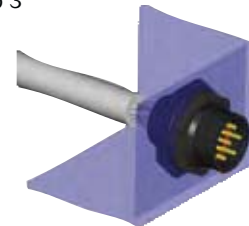
Step 1



Step 2



Step 3



Assembly procedure of square flange receptacle

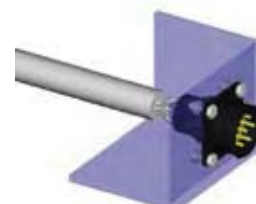
Step 1



Step 2



Step 3




UTS : Your first choice in waterproof connectors !



UTS series

Ergonomic plug design with maximized cabling space and minimized connector length




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

Colored rings available for visual identification (see accessories page 72)

O-ring seal to guarantee sealing between plug and backshell

Backshells ... accepting a wide range of cables



Wide cable range


Size 8	1.5 to 6.5 mm
Size 10	1.5 to 8.0 mm
Size 12	3.0 to 12.0 mm
Size 14	5.0 to 14.0 mm
Size 18	7.0 to 18.0 mm

Low installed cost with reduced number of components

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

Receptacle sealing cap Plug sealing cap

Sealing cap
(other sealing caps see page 71)



- easy attachment to connector at any time - easy attachment to connector at any time

UTS : Your first choice in waterproof connectors !



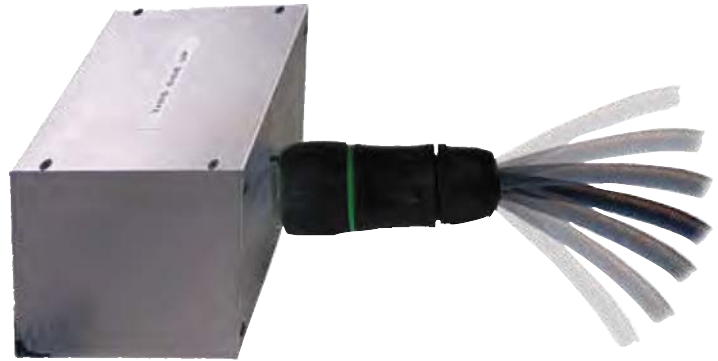
Extreme environmental sealing performance

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

↻ Dynamic IP68

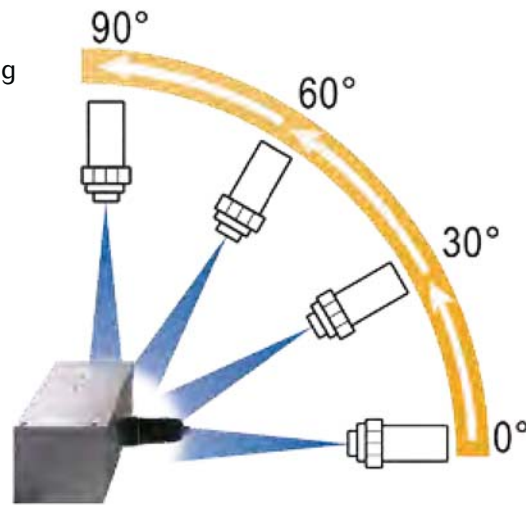
Connector will remain IP68 even when:

- Pulling on the cable
- Bending the cable



↻ Dynamic IP69K

Connector withstands high pressure water cleaning



UTS : Your first choice in waterproof connectors !



Description

IP68/IP69K - Plastic connector

- UTS series is a range of industrial plastic circular connectors offering **IP68/IP69K water protection**.
4 shell sizes - up to 32 contact positions - are available with different contact styles in size 16 & size 20:
 - Machined contacts
 - Stamped & formed contacts
 - Coax contacts
 - Fibre optic contacts
- Other typical UTS features are:
 - Rapid & secure locking system
 - Extreme environmental sealing performances
 - Easy visual identification
 - Rapid wiring, cabling & installation
 - Suitable for a wide range of industrial applications

UTS : Your first choice in waterproof connectors !



Technical characteristics

Mechanical

- Durability: 250 matings & unmatings
- Vibration resistance: Sinusoidal vibrations per CEI 60512-4 - from 10 to 2000 Hz 5 cycles 30 min. from -40°C to 105°C
- Thermal shock: per MIL-STD 1344 method 1003

Electrical

- Current per contact max.:
Size 16: 13A
Size 20: 7.5A - machined contact
5A - stamped & formed contact
- Insulation resistance: ≥ 5000 MΩ
- Test potential: 2000 VAC - #16 contact
1500 VAC - #20 contact
- Working voltage: up to 400 V class III, PD 2 as per VDE
up to 500 V as per UL1977
see page 7 for more details

Environmental

- Operating temperature: -40°C to + 105°C
- Flammability rating: UL94-V0
- Salt spray: 500 hours
- Sealing (mated):
Dynamic IP68 - 10 m 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 ISO4892)

Material

- Connectors + Backshell: Thermoplastic

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) - see from page 25 to 54

In accordance with UL requirements (UL ECBT2.E169916 and CSA ECBT8.E169916)

Ordering information

Type	UTS	6	JC	12	10	S
	UTS	7	-	12	10	P
	UTS	1	JC	12	10	S
Connector type						
0 Square flange receptacle						
6 Cable plug						
7 Jam nut receptacle						
1 In-line receptacle						
Rear of the connector						
JC Backshell (only for plug & In-line version)						
Shell size 10 - 12 - 14 - 18						
Number of contacts - see next page						
Contact Gender						
P: Pin contacts / S: Socket contacts						






UTS : Your first choice in waterproof connectors !






UTS

UTS contact arrangements




Size 10

<p>2W2</p>  <p>Contacts : 2 Ø2.4 (#12) 2 Ø1.0 (#20)</p>	<p>3 (2+PE)</p>  <p>Contacts* : 3 Ø 1.6 (#16)</p>	<p>3W3</p>  <p>Contacts : 3 Ø 1.6 (#16) 3 Ø 1.0 (#20)</p>	<p>4 ♦</p>  <p>Contacts : 4 Ø 1.6 (#16)</p>	<p>6</p>  <p>Contacts : 6 Ø 1 (#20)</p>
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Size 12

<p>4 (3+PE)</p>  <p>Contacts* : 4 Ø 1.6 (#16)</p>	<p>8 ♦</p>  <p>Contacts : 8 Ø 1.6 (#16)</p>	<p>10</p>  <p>Contacts : 10 Ø 1 (#20)</p>
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Size 14

<p>7 (6+PE)</p>  <p>Contacts* : 7 Ø 1.6 (#16)</p>	<p>12 ♦</p>  <p>Contacts : 12 Ø 1.6 (#16)</p>	<p>19</p>  <p>Contacts : 19 Ø 1 (#20)</p>
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Size 18**

<p>23 ♦</p>  <p>Contacts : 23 Ø 1.6 (#16)</p>	<p>32</p>  <p>Contacts : 32 Ø 1 (#20)</p>
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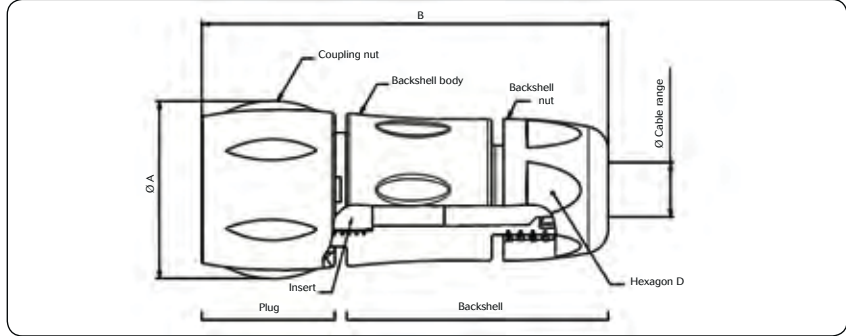
* Arrangements with advanced grounding cavity
 ** For In-line version shell size 18, please consult us

All arrangements are available in plug and jam nut versions.
 Arrangements marked with ♦ are available in square flange version as well.

UTS : Your first choice in waterproof connectors !



Cable plug with backshell for pin & socket contacts



Shell size	Part numbers		Ø A	B	Ø Cable range Standard seal	Ø Cable range Reducing seal	Hexagon D
	Male contact	Female contact					
10	UTS6JC10 - - - P	UTS6JC10 - - - S	26.7	63.2	2.5 / 8.0	1.5 / 5.0	18.5
12	UTS6JC12 - - P	UTS6JC12 - - S	30.15	66.7	5.0 / 12.0	3.0 / 9.0	24.0
14	UTS6JC14 - - P	UTS6JC14 - - S	35.1	71.5	7.0 / 14.0	5.0 / 12.0	26.0
18	UTS6JC18 - - P	UTS6JC18 - - S	42.0	81.3	9.0 / 18.0	7.0 / 16.0	33.0

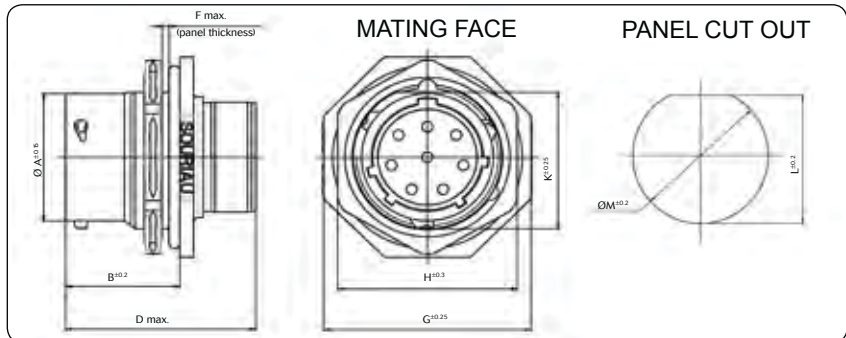
Coloured ring supplied as optional extra (see page 72).

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

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



Jam nut receptacle for pin & socket contacts



Shell size	Part numbers		Ø A	B	D max	F max	G	H	L	Ø M	Tightening torque
	Male contact	Female contact									
10	UTS710 - - - P	UTS710 - - - S	14.9	19.3	33.9	3.2	27.0	22.2	16.5	17.7	3 N.m
12	UTS712 - - P	UTS712 - - S	19.0	19.3	33.9	3.2	31.8	27.0	21.2	22.5	4 N.m
14	UTS714 - - P	UTS714 - - S	22.2	19.3	33.9	3.2	34.9	30.2	24.3	25.7	5 N.m
18	UTS718 - - P	UTS718 - - S	28.5	19.3	33.9	3.2	41.3	36.6	30.6	32.0	5 N.m

Coloured ring supplied as optional extra (see page 72).

UTS : Your first choice in waterproof connectors !