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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



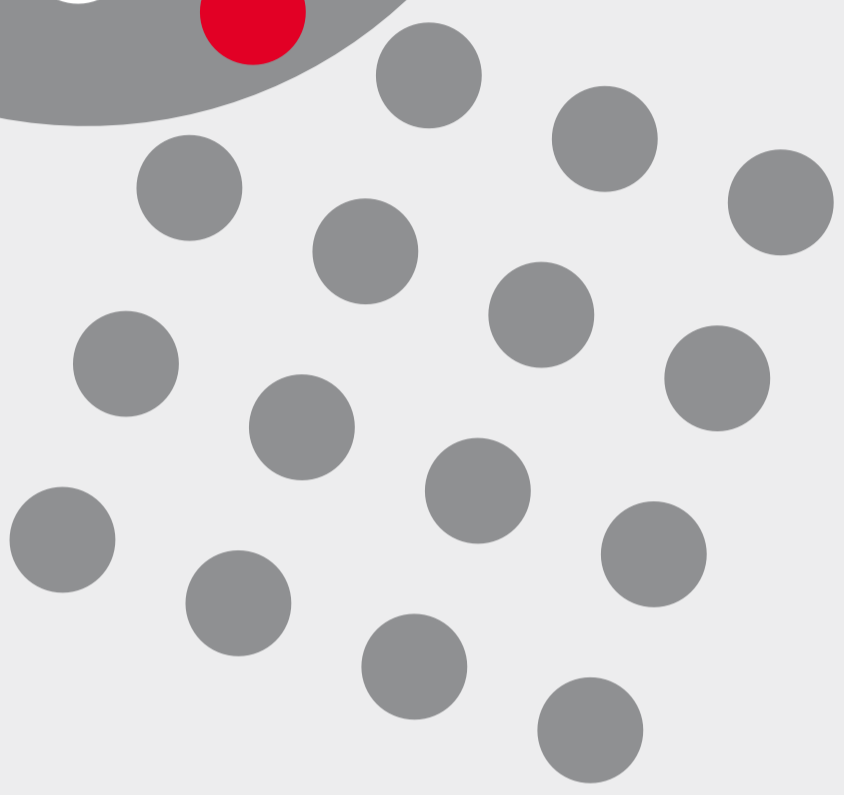
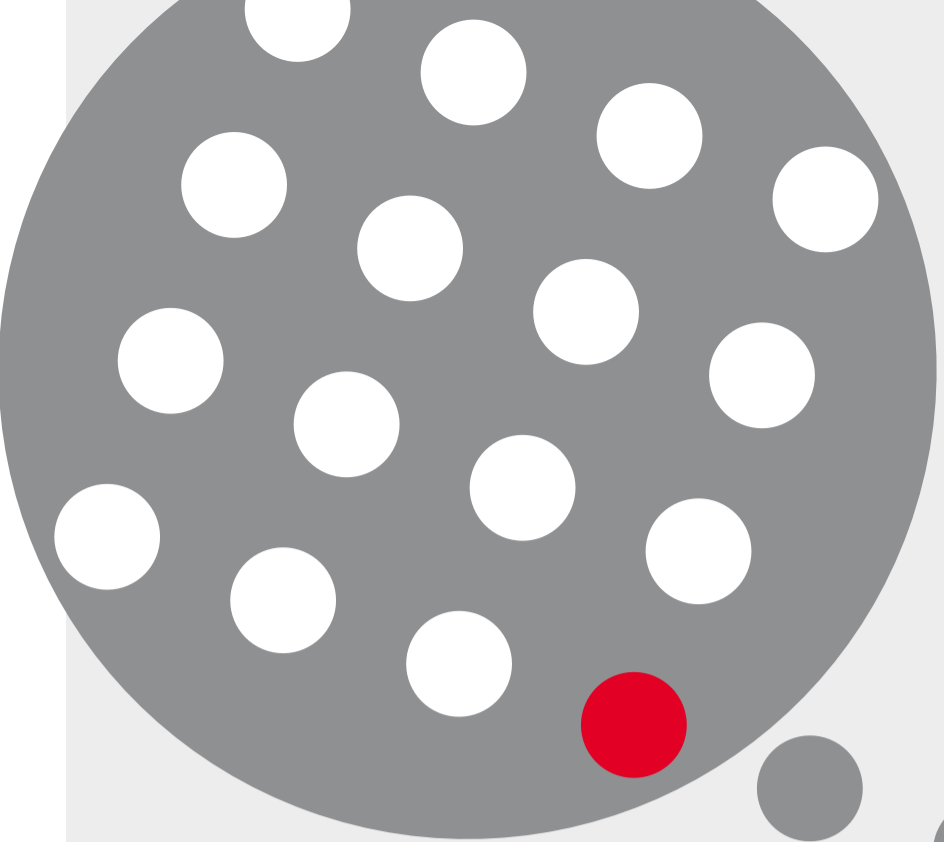
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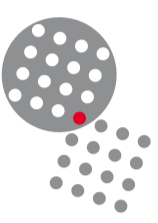




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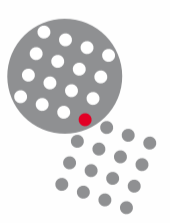
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SOURIAU
Connection Technology

UTS Series

Dynamic IP68/69K • UV Resistant • UL/IEC Compliant



SOURIAU
Connection Technology

UTS Series



Welcome to the new SOURIAU catalog:
UTS Series.

To discover our product range,
click on an item, or turn pages.

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Web contacts

UTS Series

Overview

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How to read our catalog

Example:

A 3 x 1.5mm² multicore cable carrying 10A of continuous current needs to be connected to a weatherproof enclosure.

The enclosure contains some expensive electronics, so it is important to ensure that it remains sealed even when the cable is not connected.

Step 1

Use the layout guide page 12.

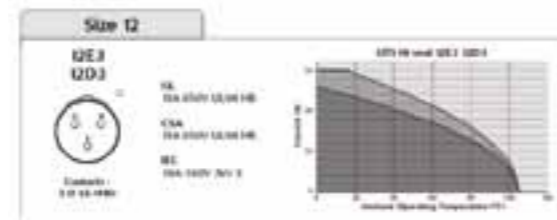
UTS Layout Guide

Contact quantity	Wire size	AMP (UL to UL)	AMP (UL to UL)	AMP (UL to UL)
2	18	0.10 to 4 mm ²	0.10 to 6 mm ²	0.10 to 2.5 mm ²
3	18	Contact #20	Contact #20	Contact #16
3	18	UTS Hi Seal	UTS Hi Seal	UTS Hi Seal
3	18	UTS Hi Seal	UTS Hi Seal	UTS Hi Seal

→ **12E3** (for solder contacts) or **12D3** (for PCB)

Step 2

Check if your layout can run at 10A continuous using the dedicated de-rating curve (see pages 14 to 20).



Step 3

Choose your plug and receptacle.

In our example we chose a plug with solder contacts.

Product	Wire size	AMP	Material	Color
UTS6JC	18	10	Brass	Black
UTS6JC	18	10	Brass	Black

Plug with solder contacts:
→ **UTS6JC - E - S**

Step 4

Your selection should be:

→ **UTS6JC - E - S**

Using the UTS layout guide you can select the insert arrangement code according to your needs. Replace -- by your choice → **12E3** for solder contacts.

Result:

Here your plug with solder contacts is **UTS6JC12E3S**

For any assembly questions please refer to the "assembly instruction" section (pages 54 to 57).

For discrimination see p.79.

UTS range overview

The UTS series is a plastic connector range but rugged enough to withstand industrial applications.

The bayonet coupling system makes it simple to use. With only a 1/3 twist of the coupling ring, connectors are mated with an audible and sensitive "click"



UTS series is a wide range...

Based on multiple power & signal connectors and offers everything from box mounted receptacles and cable mounted plugs to cable mounted in-line and PCB mounted receptacles. Almost all ways to accommodate wires exist: Crimp, Solder, Screw termination.



Screw termination version

The philosophy of the UTS series is built around three key elements:

Dynamic IP68/69K



UTS series is rated at IP68/69K... even in dynamic conditions. This means that it remain sealed even when used continuously underwater or cleaned using a high pressure hose and cable is moving.

This extreme level of performance is achievable with jacketed cable or discrete wires.

If this same level of performance is required even when connectors are not mated, we have UTS Hi Seal; a product designed to remain watertight if an environmental cap is not fitted or if the equipment is likely to get wet when cables have been disconnected.

UV Resistant



In most applications, our connectors are exposed to extreme climatic conditions; it was therefore key for us to select the materials best able to cope with the targeted environment.

Part of our product qualification process involved subjecting connectors to a simulated five years of exposure to various elements including Temperature, UV and Humidity.

The results were positive in that there were no visible signs of weakness, such as cracking or crazing.

UL/IEC Compliant



The utmost priority for any electrical installation is to protect personnel from any shock hazard.

In North America, Underwriters Laboratories insisted that connector manufacturers, depending of the application, respect their standards. The UTS series had thus been qualified and is certified by this organisation.

In Europe and in Asia, IEC standards are better known and trusted by end users. Like its American equivalent, the IEC refers to safety rules. The UTS series was obviously designed to respect these rules.



UTS range overview

UTS discrete wire sealing

See page 9

UTS Series



Sealed: IP68/69K
UV resistant
UL/IEC compliant

Corrosion-proof
Plastic housing

UTS screw termination



Just screw the wires to the connector!

No special tools required, use a standard screwdriver

UTS discrete wire sealing



No filler plug needed

Double Sealing

Crimp contact

- machined
- stamped and formed
- coaxial
- fibre optics

Screw termination contact

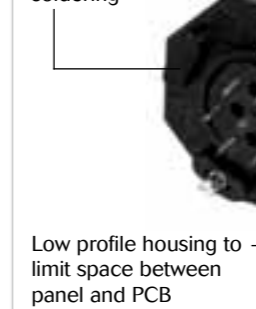


Solder contact

Plug

UTS PCB contacts

Stand-offs to allow cleaning after soldering



Metal hold down clips
- to lock the connector easily on the PCB and to release stress on solder joints
- suitable for soldering in a metalised hole

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

Low profile housing to limit space between panel and PCB

Receptacles



General technical characteristics

Mechanical

- Durability:
250 matings & unmatings per MIL-C-26482
- 1** • Vibration resistance (all UTS versions except UTS Screw termination contacts):
Sinusoidal vibrations per CEI 60512-4 - from 10 to 2000 Hz
- Thermal shock:
5 cycles 30 min. from -40°C to 105°C per MIL-STD1344 method 1003

Environmental

- 2** • Operating temperature:
from -40°C to +105°C
40/100/21 per NFF 61-030
- Flammability rating:
UL94-V0 (all UTS except the Hi seal) - see page 60
UL94-HB (UTS Hi seal only) - see page 60
I2F3 according to NFF 16101 and NFF 16102
- 3** • Salt spray:
≥500 hours
- 4** • UV resistant:
No mechanical degradation or important variation of colour after 5 years of exposure in natural environment (equivalence exposure to sun and moisture as per ISO4892)
- 5** • Sealing:
- UTS Standard: IP68/IP69K (mated)
- UTS Hi seal: IP68/IP69K (mated and unmated)
- UTS Discrete wire sealing: IP67/69K (up to IP68 with easy handling backshell)
- UTS Screw termination contacts: IP68/IP69K
Note: IPx8: 1m underwater during 1 week
- Fluid resistance:
- Gasoil
- Mineral oil
- Acid bath
- Basic bath



Electrical

- See pages 14 to 20

Material

- Body connector + Backshell:
Thermoplastic
- Insert:
- UTS Standard, UTS Discrete wire sealing, UTS Screw termination contacts:
Thermoplastic
- UTS Hi seal handsolder & UTS Hi seal with PC tails contacts:
Elastomer
- Contacts:
See page 39
- Nut:
Metal
- Halogen free
- RoHS compliant & conform to the Chinese standard SJ/T1166-2006 (Chinese RoHS equivalent)
- In accordance with:
- UL 1977:
Certificat ECBT2
File number: E169916
- CSA C22.2 n°182.3:
Certificat ECBT8
File number: E169916





UTS Layout Guide

Contact quantity	Shell size	Wire dimension & Contacts size			
		AWG 22 to 12 0.13 to 4 mm ²	AWG 26 to 18 0.13 to 0.93 mm ²	AWG 30 to 14 0.05 to 2.5 mm ²	AWG 16 to 8 1.5 to 10 mm ²
		Contact #12 / Ø2.4mm	Contact #20 / Ø1mm	Contact #16 / Ø1.6mm	Contact #8 / Ø3.6mm
2	8		8E2 (Solder) 8D2 (PCB)		
	12			12E2 (Solder) 12D2 (PCB)	
2 + PE	10			103 (Crimp)	
	14				142G1 (Crimp)
3	8		8E3, 8E3A, 8E98, 8E33 (Solder) 8D3, 8D3A, 8D98, 8D33 (PCB)		
	12			12E3 (Solder) 12D3 (PCB)	
3 + PE	12			124 (Crimp) 124 (Screw) *	
4	8		8E4 (Solder) 8D4 (PCB)		
	10	102W2 (Crimp, 2#20 + 2#12)			
	10			104 (Crimp)	
5	14			14E5 (Solder) 14D5 (PCB)	
6	10		106 (Crimp) 10E6, 10E98 (Solder) 10D6, 10D98 (PCB)		
		103W3 (Crimp, 3#20 + 3#16)			
6 + PE	14			147 (Crimp) 147 (Screw) *	
7	10		10E7 (Solder) 10D7 (PCB)		
8	12		12E8 (Solder) 12D8 (PCB)	128 (Crimp)	
10	12		1210 (Crimp) 12E10 (Solder) 12D10 (PCB)		
11	18			18E11 (Solder) 18D11 (PCB)	
		1412 (Crimp)			
12	14	14E12 (Solder, 8#20 + 4#16) 14D12 (PCB, 8#20 + 4#16)			
		12E14 (Solder) 12D14 (PCB)			
15	14	14E5 (Solder, 14#20 + 1#16) 14D5 (PCB, 14#20 + 1#16)			
19	14		1419 (Crimp) 14E19 (Solder) 14D19 (PCB)		
23	18			1823 (Crimp)	
30	18	18E30 (Solder, 29#20 + 1#16) 18D30 (PCB, 29#20 + 1#16)			
		1832 (Crimp) 18E32 (Solder) 18D32 (PCB)			

Note: PE=protective earth

* AWG 20 to 14, 0.5 to 2.5 mm². Contact #16.

Contact layouts

Size 8

8E2
8D2

2 Ø1 (#20)

8E3
8D3

3 Ø1 (#20)

8E3A/8E98
8D3A/8D98

3 Ø1 (#20)

8E4
8D4

4 Ø1 (#20)

8E33
8D33

3 Ø1 (#20)

Size 10

102W2

2 Ø2.4 (#12)
2 Ø1.0 (#20)

103
(2+PE)

3 Ø1.6 (#16)

103W3

3 Ø1.6 (#16)
3 Ø1.0 (#20)

104

4 Ø1.6 (#16)

106
10E6
10D6

6 Ø1 (#20)

10E7
10D7

7 Ø1 (#20)

10E98
10D98

6 Ø1 (#20)

Size 12

12E2
12D2

2 Ø1.6 (#16)

12E3
12D3

3 Ø1.6 (#16)

124
(3+PE)

4 Ø1.6 (#16)

128

8 Ø1.6 (#16)

12E8
12D8

8 Ø1 (#20)

1210
12E10
12D10

10 Ø1 (#20)

12E14
12D14

14 Ø1 (#20)

Size 14

142G1
(2+PE)

3 Ø3.6 (#8)

14E5
14D5

5 Ø1.6 (#16)

147
(6+PE)

7 Ø1.6 (#16)

1412

12 Ø1.6 (#16)

14E12
14D12

8 Ø1 (#20)
4 Ø1.6 (#16)

14E15
14D15

14 Ø1 (#20)
1 Ø1.6 (#16)

14E18
14D18

18 Ø1 (#20)

1419
14E19
14D19

19 Ø1 (#20)

Size 18*

18E11
18D11

11 Ø1.6 (#16)

1823

23 Ø1.6 (#16)

18E30
18D30

29 Ø1 (#20)
1 Ø1.6 (#16)

1832
18E32
18D32

32 Ø1 (#20)

UTS layouts:

- = UTS standard version (Ex: 1210)
- E - = UTS Hi seal + Solder (Ex: 12E10)
- D - = UTS Hi seal + PCB (Ex: 12D10)
- = UTS standard version
- = UTS Hi seal version (Size 18: please consult us)
- ▲ = UTS discrete wire sealing version
- = UTS with screw contact termination
- = In-Line version

Overview

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* Please consult us



De-rating curves

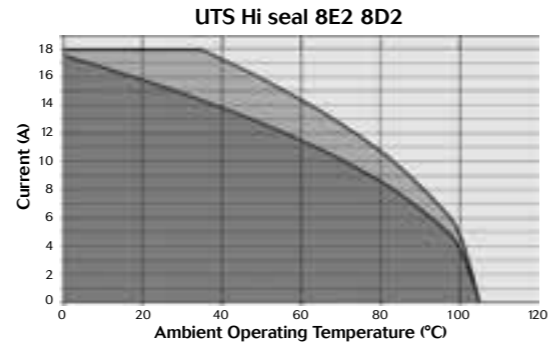
Size 8

8E2
8D2



Contacts :
2 Ø 1 (#20)

UL
7A 250V UL94 HB
CSA
7A 250V UL94 HB
IEC
7A 63V 2.5kV 3

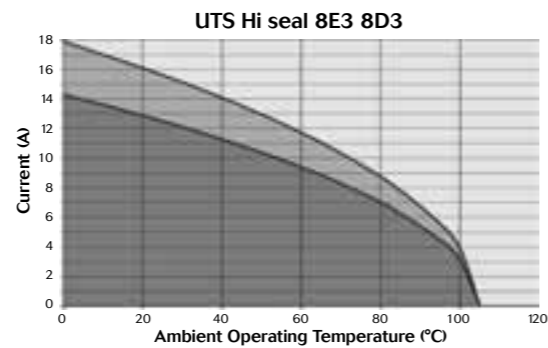


8E3
8D3



Contacts :
3 Ø 1 (#20)

UL
7A 250V UL94 HB
CSA
7A 250V UL94 HB
IEC
7A 40V 2.5kV 3

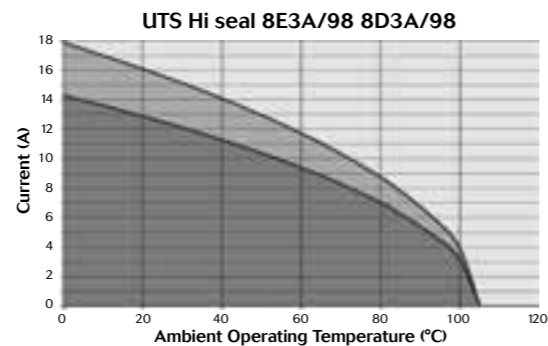


8E3A/8E98
8D3A/8D98



Contacts :
3 Ø 1 (#20)

UL
7A 250V UL94 HB
CSA
7A 250V UL94 HB
IEC
7A 40V 2.5kV 3

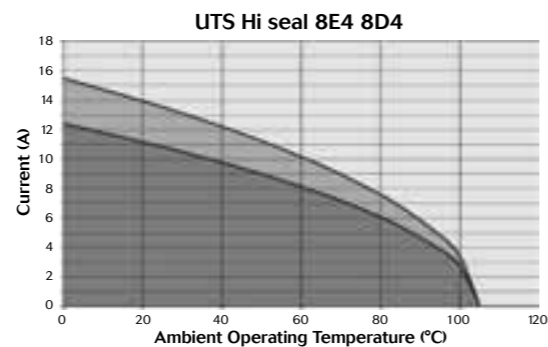


8E4
8D4



Contacts :
4 Ø 1 (#20)

UL
7A 250V UL94 HB
CSA
7A 250V UL94 HB
IEC
7A 40V 2.5kV 3



Test conditions

Contact used:
Machined contacts
Wires used:
0.518mm² for #20 contacts
1.31mm² for #16 contacts
3.31mm² for #12 contacts
8.37mm² for #8 contacts

Layouts

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

Derating curve

- Current use
- ▲ Limited use
- Not recommended use

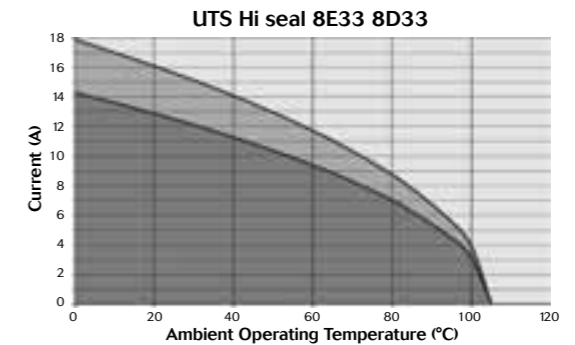
Size 8

8E33
8D33



Contacts :
3 Ø 1 (#20)

UL
7A 250V UL94 HB
CSA
7A 250V UL94 HB
IEC
7A 100V 2.5kV 3



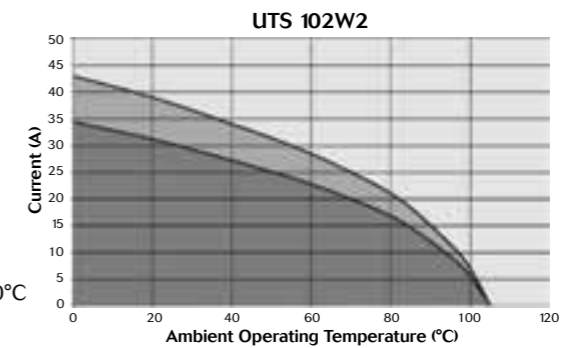
Size 10

102W2



Contacts :
2 Ø2.4 (#12)
2 Ø1.0 (#20)

UL
20A 500V UL94 V-0
CSA
18A 500V UL94 V-0
IEC
25A 200V 3kV 3
Temperature elevation: 50°C

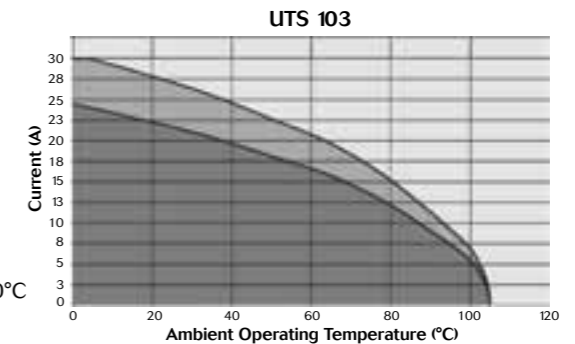


103
(2+PE)



Contacts* :
3 Ø 1.6 (#16)

UL
10A 500V UL94 V-0
CSA
7A 500V UL94 V-0
IEC
16A 320V 4kV 3
Temperature elevation: 50°C

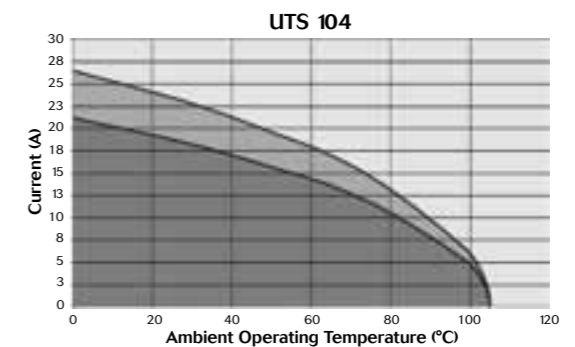


104



Contacts :
4 Ø 1.6 (#16)

UL
10A 500V UL94 V-0
CSA
7A 500V UL94 V-0
IEC
16A 200V 3kV 3



Test conditions

Contact used:
Machined contacts
Wires used:
0.518mm² for #20 contacts
1.31mm² for #16 contacts
3.31mm² for #12 contacts
8.37mm² for #8 contacts

Layouts

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

Derating curve

- Current use
- ▲ Limited use
- Not recommended use



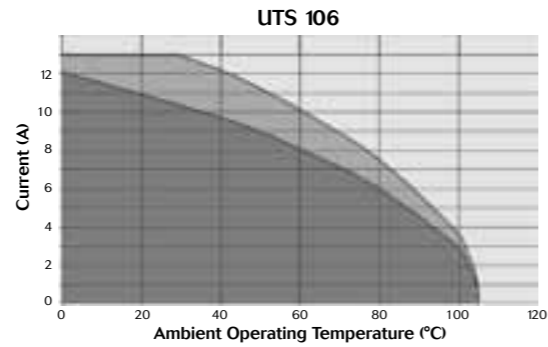
Size 10

106



Contacts :
6 Ø 1 (#20)

UL
5A 250V UL94 V-0
CSA
4A 250V UL94 V-0
IEC
6A 40V 1.5kV 3

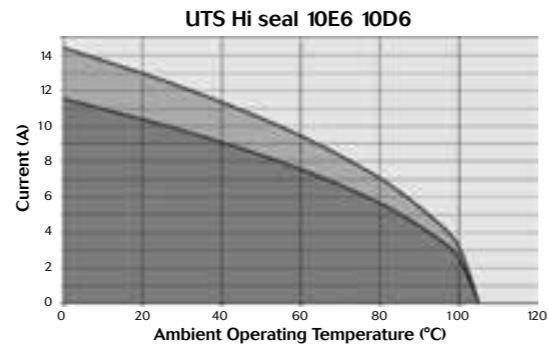


**10E6
10D6**



Contacts :
6 Ø 1 (#20)

UL
6A 250V UL94 HB
CSA
6A 250V UL94 HB
IEC
10A 100V 2.5kV 3

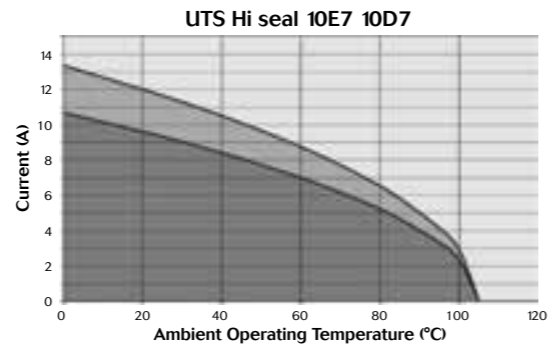


**10E7
10D7**



Contacts :
7 Ø 1 (#20)

UL
6A 250V UL94 HB
CSA
6A 250V UL94 HB
IEC
7A 100V 2.5kV 3



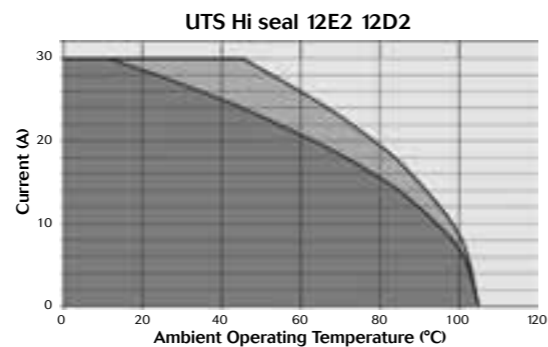
Size 12

**12E2
12D2**



Contacts :
2 Ø 1.6 (#16)

UL
13A 650V UL94 HB
CSA
13A 650V UL94 HB
IEC
16A 160V 3kV 3

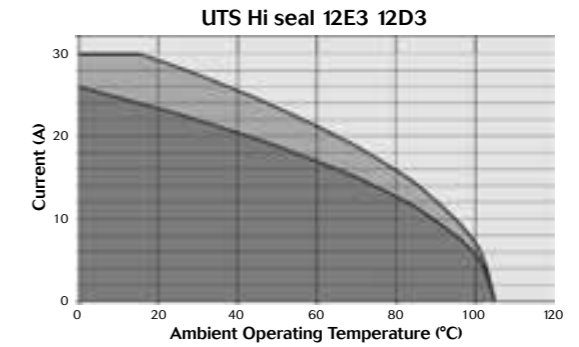


**12E3
12D3**



Contacts :
3 Ø 1.6 (#16)

UL
13A 650V UL94 HB
CSA
13A 650V UL94 HB
IEC
16A 160V 3kV 3

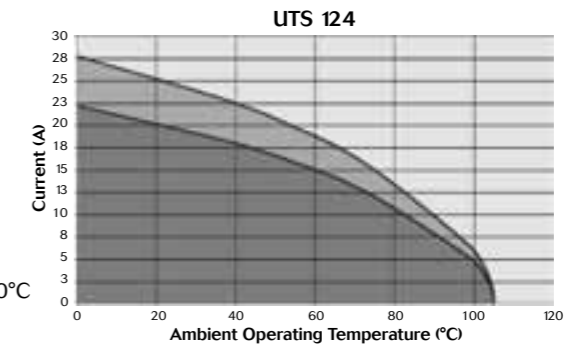


**124
(3+PE)**



Contacts* :
4 Ø 1.6 (#16)

UL
10A 500V UL94 V-0
CSA
7A 500V UL94 V-0
IEC
16A 400V 4kV 3
Temperature elevation: 50°C

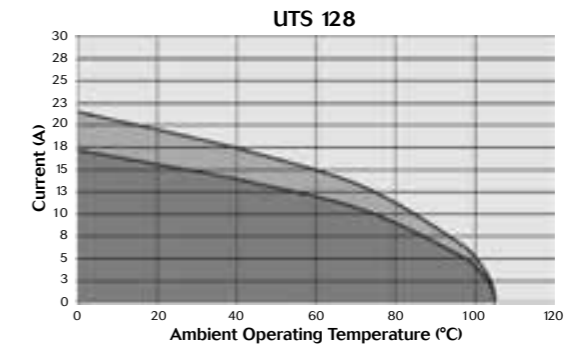


128



Contacts :
8 Ø 1.6 (#16)

UL
10A 500V UL94 V-0
CSA
7A 500V UL94 V-0
IEC
10A 80V 2.5kV 3

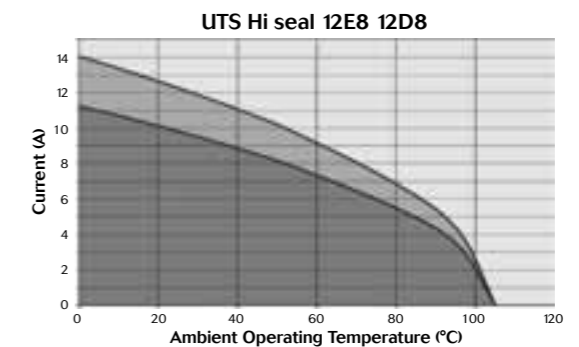


**12E8
12D8**



Contacts :
8 Ø 1 (#20)

UL
4.5A 250V UL94 HB
CSA
4.5A 250V UL94 HB
IEC
7A 100V 2.5kV 3



Test conditions

Contact used:
Machined contacts
Wires used:
0.518mm² for #20 contacts
1.31mm² for #16 contacts
3.31mm² for #12 contacts
8.37mm² for #8 contacts

Layouts

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

Derating curve

- Current use
- ▒ Limited use
- Not recommended use

Test conditions

Contact used:
Machined contacts
Wires used:
0.518mm² for #20 contacts
1.31mm² for #16 contacts
3.31mm² for #12 contacts
8.37mm² for #8 contacts

Layouts

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

Derating curve

- Current use
- ▒ Limited use
- Not recommended use



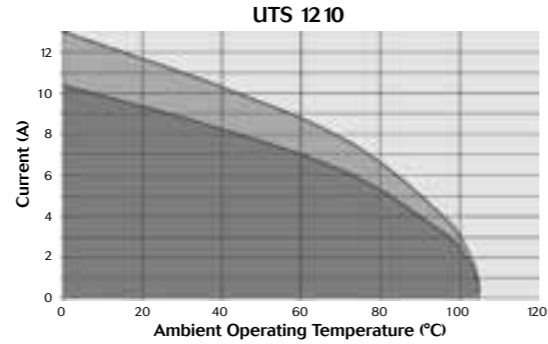
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12 10

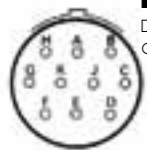


Contacts :
10 Ø 1 (#20)

UL
5A 250V UL94 V-0
CSA
4A 250V UL94 V-0
IEC
6A 40V 1.5kV 3

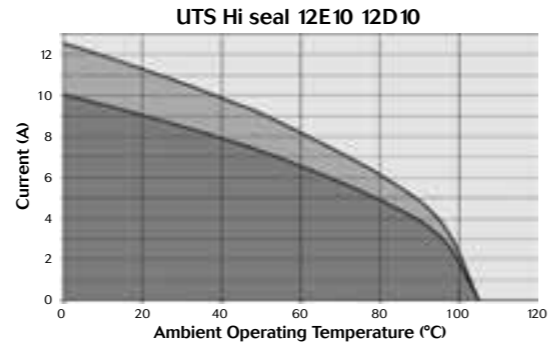


12E 10 12D 10



Contacts :
10 Ø 1 (#20)

UL
4.5A 250V UL94 HB
CSA
4.5A 250V UL94 HB
IEC
7A 100V 2.5kV 3

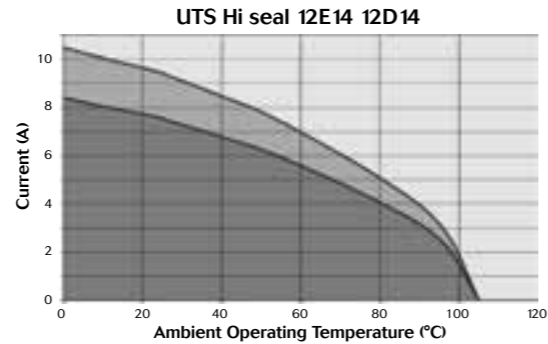


12E 14 12D 14



Contacts :
14 Ø 1 (#20)

UL
4.5A 250V UL94 HB
CSA
4.5A 250V UL94 HB
IEC
7A 32V 2.5kV 3



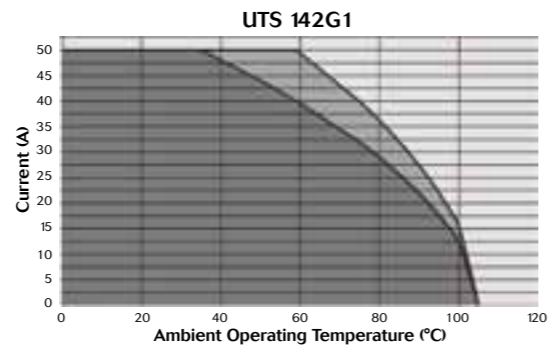
Size 14

142G1



Contacts :
3 Ø 3.6 (#8)

UL
44A 600V UL94 V-0
CSA
30A 600V UL94 V-0
IEC
42A 230V 4kV 3



Test conditions

Contact used:
Machined contacts
Wires used:
0.518mm² for #20 contacts
1.31mm² for #16 contacts
3.31mm² for #12 contacts
8.37mm² for #8 contacts

Layouts

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

Derating curve

- Current use
- ▒ Limited use
- Not recommended use

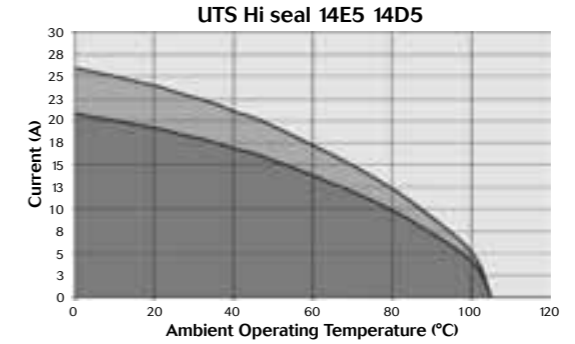
Size 14

14E5 14D5



Contacts :
5 Ø 1.6 (#16)

UL
12A 650V UL94 HB
CSA
12A 650V UL94 HB
IEC
16A 160V 3kV 3

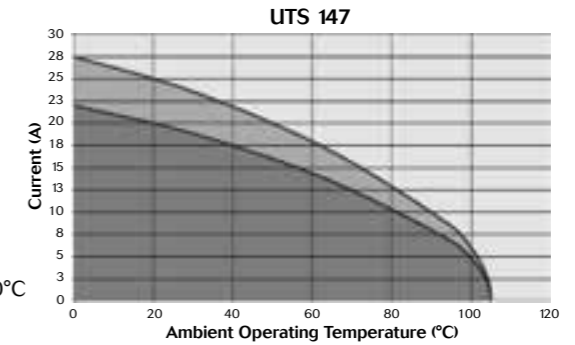


147 (6+PE)



Contacts* :
7 Ø 1.6 (#16)

UL
10A 500V UL94 V-0
CSA
7A 500V UL94 V-0
IEC
16A 400V 4kV 3
Temperature elevation: 50°C

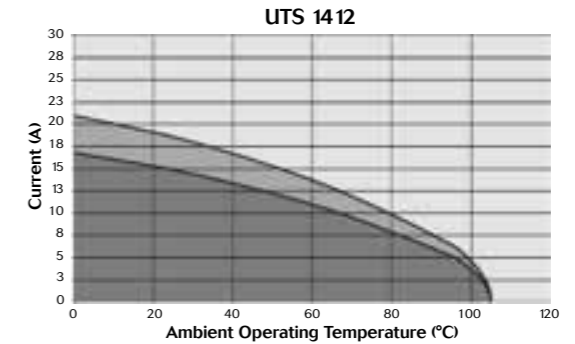


14 12



Contacts :
12 Ø 1.6 (#16)

UL
10A 500V UL94 V-0
CSA
7A 500V UL94 V-0
IEC
10A 80V 2.5kV 3

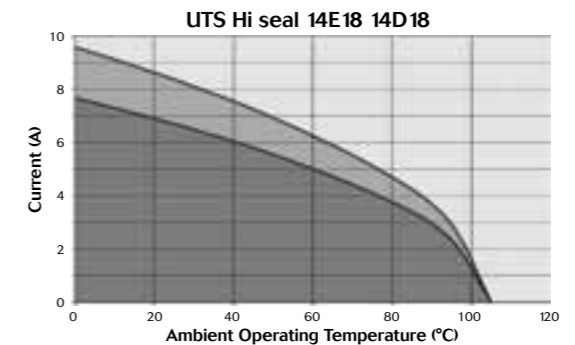


14E 18 14D 18



Contacts :
18 Ø 1 (#20)

UL
4A 250V UL94 HB
CSA
4A 250V UL94 HB
IEC
7A 100V 2.5kV 3



Test conditions

Contact used:
Machined contacts
Wires used:
0.518mm² for #20 contacts
1.31mm² for #16 contacts
3.31mm² for #12 contacts
8.37mm² for #8 contacts

Layouts

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

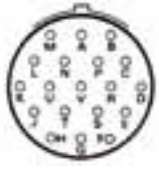
Derating curve

- Current use
- ▒ Limited use
- Not recommended use



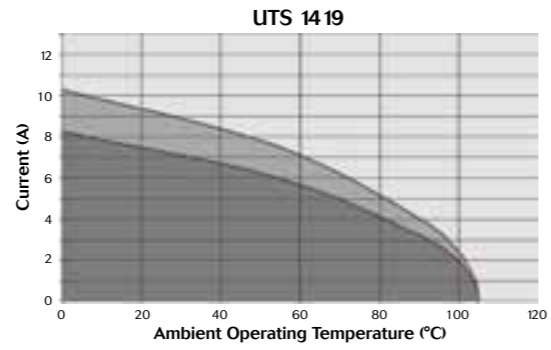
Size 14

1419



Contacts :
19 Ø 1 (#20)

■
□
○
UL
5A 250V UL94 V-0
CSA
4A 250V UL94 V-0
IEC
4A 40V 1.5kV 3

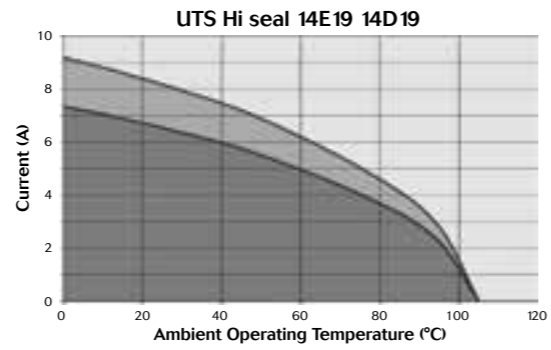


14E19 14D19



Contacts :
19 Ø 1 (#20)

■
□
○
UL
4A 250V UL94 HB
CSA
4A 250V UL94 HB
IEC
7A 100V 2.5kV 3



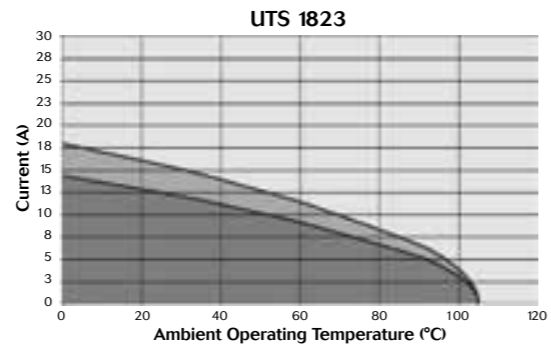
Size 18

1823



Contacts :
23 Ø 1.6 (#16)

■
○
UL
10A 500V UL94 V-0
CSA
7A 500V UL94 V-0
IEC
10A 80V 2.5kV 3

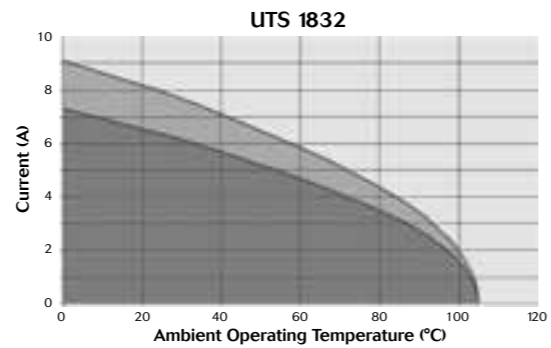


1832



Contacts :
32 Ø 1 (#20)

■
□
○
UL
5A 250V UL94 V-0
CSA
4A 250V UL94 V-0
IEC
3A 32V 1.5kV 3



Test conditions

Contact used:
Machined contacts

Wires used:
0.518mm² for #20 contacts
1.31mm² for #16 contacts
3.31mm² for #12 contacts
8.37mm² for #8 contacts

Layouts

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

Derating curve

- Current use
- Limited use
- Not recommended use

UTS Series

Mechanics

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■ Cable assembly	36



Mechanics
UTS plug cable gland backshell

Part number



Contact type	Connector type	Termination	Contact sex	Shell size	Part number			
Crimp contacts supply separately	UTS standard	Cable gland	Male	10	UTS6JC - - P			
				12				
				14				
			Female	18				
				10		UTS6JC - - S		
				12				
		14						
		Nut and grommet	Female	18	UTS6GN104S			
				10	UTS6GN128S			
				12	UTS6GN147S			
		Cable gland and grommet	Female	14	UTS6GN1412S			
					10	UTS6GJC104S		
12	UTS6GJC128S							
14	UTS6GJC147S							
	10			UTS6GJC1412S				
	12			UTS6GJC1412S				
Solder contacts loaded	Hi seal	No backshell	Male	8	UTS6 - E - P	Sealed Unmated		
				10				
				12				
			Female	14	UTS6 - E - S	Sealed Unmated		
				18				
				On demand				
			Cable gland	Male	8	UTS6JC - E - P	Sealed Unmated	
					10			
					12			
		Female		14	UTS6JC - E - S	Sealed Unmated		
				18				
				On demand				
		Screw contacts loaded		UTS standard	Cable gland	Male	12	UTS6JC124PSCR
							14	UTS6JC147PSCR
							12	UTS6JC124SSCR
			Female			14	UTS6JC147SSCR	

For coding " - - " see p.6 and UTS layout guide p.12.

Dimensions

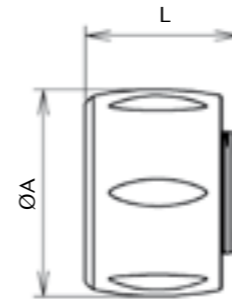


Fig. 1

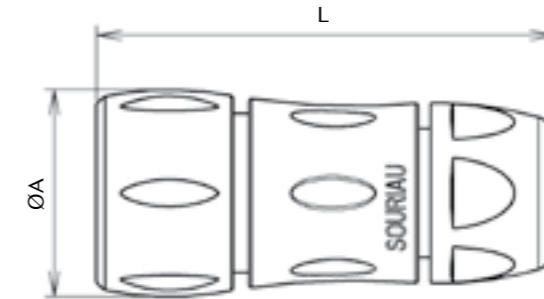


Fig. 2

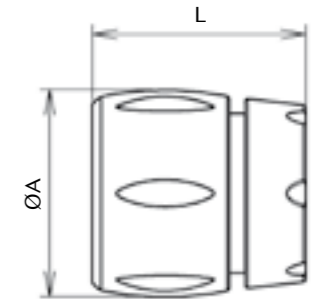


Fig. 3

Part number	Shell size	L (total length)	ØA	Figure
UTS6JC - - P	10	63.2	26.7	Fig. 2
	12	66.7	30.2	
	14	71.5	35.1	
	18	81.3	42	
UTS6JC - - S	10	63.2	26.7	Fig. 2
	12	66.7	30.2	
	14	71.5	35.1	
	18	81.3	42	
UTS6GN104S	10	32	26.2	Fig. 3
UTS6GN128S	12	32.3	29.7	
UTS6GN147S	14	32	34.6	
UTS6GN1412S	14	32	34.6	
UTS6GJC104S	10	61.5	26.2	Fig. 2
UTS6GJC128S	12	64.5	29.7	
UTS6GJC147S	14	70	34.6	
UTS6GJC1412S	14	70	34.6	
UTS6 - E - P	8	21.3	22.5	Fig. 1
	10	23.6	26.7	
	12	23.6	30.2	
	14	23.6	35.1	
	18	23.6	35.1	
UTS6 - E - S	8	21.3	22.5	Sealed Unmated
	10	23.6	26.7	
	12	23.6	30.2	
	14	23.6	35.1	
	18	23.6	35.1	
UTS6JC - E - P	8	54	22.5	Fig. 2
	10	63.2	26.7	
	12	66.7	30.2	
	14	71.5	35.1	
	18	81.3	42	
UTS6JC - E - S	8	54	22.5	Sealed Unmated
	10	63.2	26.7	
	12	66.7	30.2	
	14	71.5	35.1	
	18	81.3	42	
	On demand	On demand	On demand	
UTS6JC124PSCR	12	66.7	29.7	Fig. 2
UTS6JC147PSCR	14	71.5	34.6	
UTS6JC124SSCR	12	66.7	29.7	
UTS6JC147SSCR	14	71.5	34.6	

For coding " - - " see p.6 and UTS layout guide p.12.

Note : all dimensions are in mm



Mechanics UTS square flange receptacle

Part number

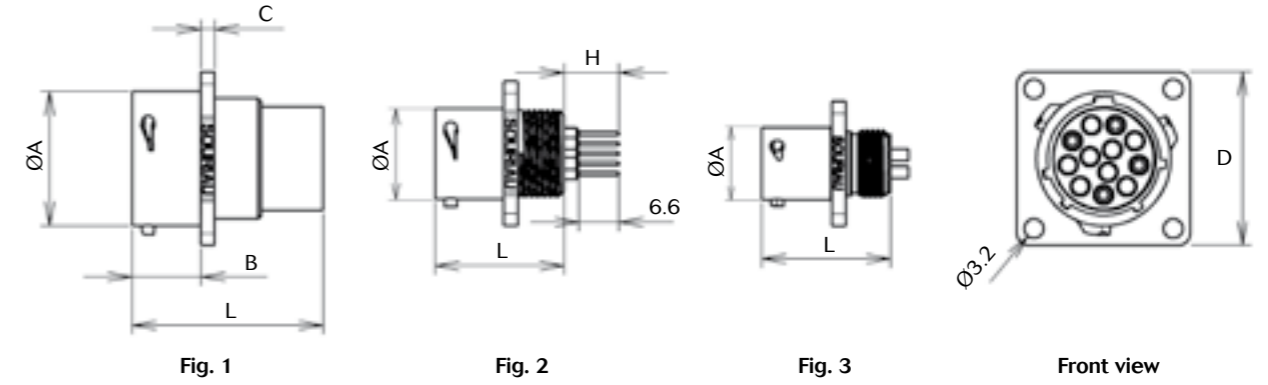


Contact type	Connector type	Contact sex	Shell size	Part number			
Crimp contacts supply separately	UTS standard	Male	10	UTS0104P			
			12	UTS0128P			
			14	UTS01412P			
			18	UTS01823P			
			10	UTS0104S			
		Female	12	UTS0128S			
			14	UTS01412S			
			18	UTS01823S			
			Solder contacts loaded	Hi seal	Male	8	UTSO - E - P
						10	
12							
14							
18							
On demand							
Female	8	UTSO - E - S					
	10						
	12						
	14						
	18						
On demand							
PCB contacts loaded	Hi seal	Male	8	UTSO - D - P			
			10				
			12				
			14				
			18				
		On demand					
		Female	8	UTSO - D - S			
			10				
			12				
			14				
18							
On demand							
PCB contacts supply separately	UTS standard	Male	10	UTS0104P			
			12	UTS0128P			
			14	UTS01412P			
			18	UTS01823P			
			10	UTS0104S			
		Female	12	UTS0128S			
			14	UTS01412S			
			18	UTS01823S			

For coding " - - " see p.6 and UTS layout guide p.12.



Dimensions



Part number	Shell size	L (total length)	ØA	B	C	D	Figure			
UTS0104P	10	31.7	15	11.35	2.3	23.8	Fig. 1			
UTS0128P	12		19			26.2				
UTS01412P	14		22.2			28.6				
UTS01823P	18	28.5	33.3							
UTS0104S	10	24.2	15		11.35	2.5		23.8	Fig. 1	
UTS0128S	12		19					26.2		
UTS01412S	14		22.2	28.6						
UTS01823S	18	28.5	33.3							
UTSO - E - P	8	21.5	12	11.35		2.3	21	Fig. 3		
	10		23.8							
	12		26.2							
	14		28.6							
	18		33.3							
UTSO - E - S	8	21.5	12		11.35		2.3		21	Fig. 3
	10		23.8							
	12		26.2							
	14		28.6							
	18		33.3							
UTSO - D - P	8	21.5	11.9	11.3		2.3		21	Fig. 2	
	10		14.9					23.8		
	12		19					26.2		
	14		22.2					28.6		
	18		28.5					33.3		
UTSO - D - S	8	21.5	12		11.3	2.5	21	Fig. 2		
	10		15				23.8			
	12		19				26.2			
	14		22.2				28.6			
	18		28.5				33.3			
UTS0104P	10	31.7	15	11.35		2.3	23.8		Fig. 1	
UTS0128P	12		19				26.2			
UTS01412P	14		22.2				28.6			
UTS01823P	18	28.5	33.3							
UTS0104S	10	24.2	15			11.35	2.5			23.8
UTS0128S	12		19		26.2					
UTS01412S	14		22.2	28.6						
UTS01823S	18	28.5	33.3							

H (for PCB contact): PCB nominal length (see page 30)
For coding " - - " see p.6 and UTS layout guide p.12.

Note : all dimensions are in mm



Mechanics UTS jam nut receptacle with accessories

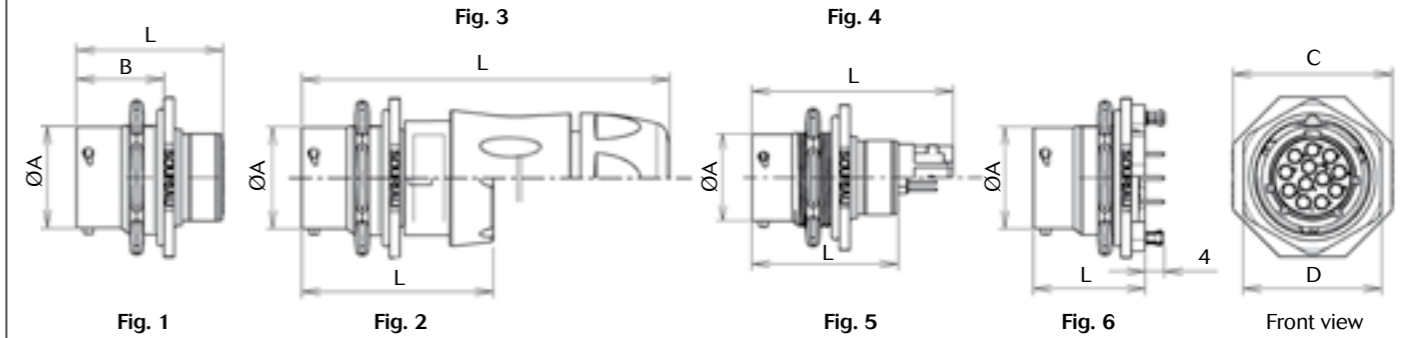
Part number



Contact type	Connector type	Termination	Contact sex	Shell size	Part number		
Crimp contacts supply separately	UTS standard		Male	10	UTS7 -- P		
				12			
				14			
			Female	18			
				10		UTS7 -- S	
				12			
	14						
	Discrete wire sealing	Nut and grommet	Male	10	UTS7GN104P		
				12	UTS7GN128P		
				14	UTS7GN147P		
		Cable gland and grommet	Male	10	UTS7GN1412P		
				12	UTS7GJC104P		
14				UTS7GJC128P			
Solder contacts loaded	Hi seal with stand off	Standard receptacle	Male	8	UTS7 - E - P		
				10			
				12			
			Female	14		UTS7 - E - S	
				8			
				10			
	UTS standard with stand off	Receptacle with hold down clip	Male	12	UTS7128PSEK9		
				14	UTS7147PSEK9		
				18	On demand		
		Hi seal with stand off	Receptacle without hold down clip	Male	8	UTS7 - D - P	
					10		
					12		
Receptacle with hold down clips	Female		14	UTS7 - D - S			
			10				
			12				
PCB contacts loaded	UTS standard		Male		8	UTS7 -- P	
					10		
					12		
			Female	14	UTS7 -- S		
				10			
				12			
	Screw contacts loaded	UTS standard		Male		14	UTS7124PSCR
						12	
						14	
				Female	12	UTS7124SSCR	
					14		
					14		

For coding "--" see p.6 and UTS layout guide p.12.

Dimensions



Part number	Shell size	L (total length)	ØA	B	C	D	Figure
UTS7 -- P	10	33.9	14.9	19.3	27	22.2	Fig. 1
	12		19		31.8	27	
	14		22.2		34.9	30.2	
	18		28.5		41.3	36.6	
	10		14.9		27	22.2	
	12		19		31.8	27	
UTS7 -- S	10	33.9	14.9	19.3	27	22.2	Fig. 2
	12		19		31.8	27	
	14		22.2		34.9	30.2	
	18		28.5		41.3	36.6	
	10		14.9		27	22.2	
	12		19		31.8	27	
UTS7GN104P	10	41	14.9	19.3	27	22.2	Fig. 3
	12	40.7	19		31.8	27	
	14	43	22.2		34.9	30.2	
	10	70.5	14.9		27	22.2	
	12	74	19		31.8	27	
	14	80.5	22.2		34.9	30.2	
UTS7 - E - P	8	25	12	19.3	24	19.3	Fig. 5
	10		14.9		27	22.2	
	12		19		31.8	27	
	14		22.2		34.9	30.2	
	8		12		24	19.3	
	10		14.9		27	22.2	
UTS7 - E - S	8	25	12	19.3	24	19.3	Fig. 6
	10		14.9		27	22.2	
	12		19		31.8	27	
	14		22.2		34.9	30.2	
	12		19		31.8	27	
	14		22.2		34.9	30.2	
UTS7128PSEK9	12	25	19	19.3	31.8	27	Fig. 6
	14		22.1		34.9	30.2	
	8		12		24	19.3	
	10		14.9		28	22.2	
	12		19		31.8	27	
	14		22.2		34.9	30.2	
UTS7 - D - P	8	25	12	19.3	24	19.3	Fig. 6
	10		14.9		28	22.2	
	12		19		31.8	27	
	14		22.2		34.9	30.2	
	8		12		24	19.3	
	10		14.9		28	22.2	
UTS7 - D - S	8	25	12	19.3	24	19.3	Fig. 6
	10		14.9		28	22.2	
	12		19		31.8	27	
	14		22.2		34.9	30.2	
	8		12		24	19.3	
	10		14.9		28	22.2	
UTS7 - D - P32	8	25	12	19.3	24	19.3	Fig. 6
	10		14.9		28	22.2	
	12		19		31.8	27	
	14		22.2		34.9	30.2	
	8		12		24	19.3	
	10		14.9		28	22.2	
UTS7 - D - S32	8	25	12	19.3	24	19.3	Fig. 6
	10		14.9		28	22.2	
	12		19		31.8	27	
	14		22.2		34.9	30.2	
	10		14.9		27	22.2	
	12		19		31.8	27	
UTS7 -- P	10	33.9	14.9	19.3	27	22.2	Fig. 5
	12		19		31.8	27	
	14		22.2		34.9	30.2	
	18		28.5		41.3	36.6	
	10		14.9		27	22.2	
	12		19		31.8	27	
UTS7 -- S	10	33.9	14.9	19.3	27	22.2	Fig. 5
	12		19		31.8	27	
	14		22.2		34.9	30.2	
	18		28.5		41.3	36.6	
	12		19		31.8	27	
	14		22.2		34.9	30.2	
UTS7124PSCR	12	46.5	19	19.3	31.8	27	Fig. 4
UTS7147PSCR	14	52.5	22.2		34.9	30.2	
UTS7124SSCR	12	38.3	19		31.8	27	
UTS7147SSCR	14	44.4	22.2		34.9	30.2	

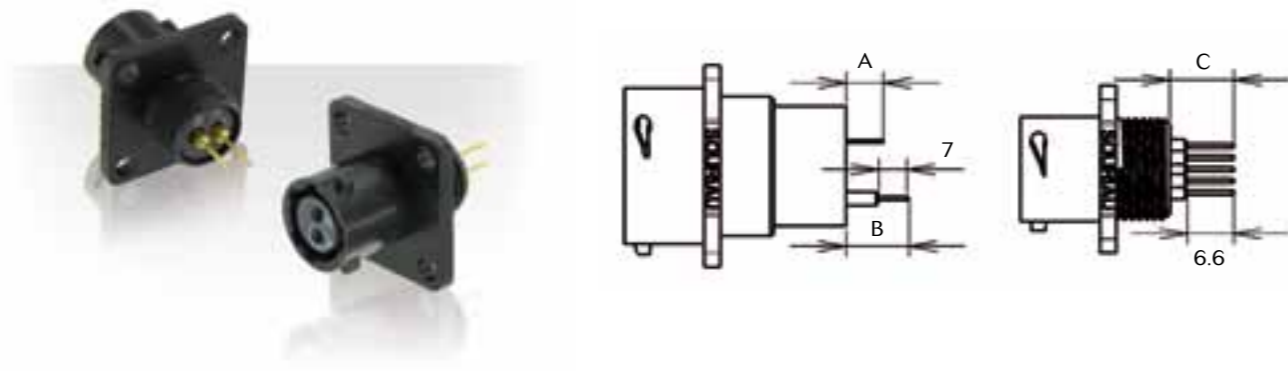
H (for PCB contact): PCB nominal length (see page 30)
For coding "--" see p.6 and UTS layout guide p.12.

Note: all dimensions are in mm



Mechanics
Solder tail protrusion

Dimensions



Contact type	Connector type	Contact size	Contact sex	Part number	Shell size	Layout	A	C
PCB contacts supply separately	UTSO Standard	16	Male	RM20M12E8□	10 to 18	-	5.2	-
				RM20M12E83□		-	10.3	-
			Female	RC20M12E8□		-	5.2	-
				RC20M12E83□		-	10.4	-
				RC20M12E84□		-	13.9	-
PCB contacts loaded	UTSO Hi seal	16 & 20	Male	-	8	8D2 8D3 8D4	-	9.76 to 11.86
				-		8D3A 8D98	-	10.78 to 13.09
				-		-	-	8.1 to 10.5
			Female	-	10	-	-	8.1 to 10.5
				-		12D14	-	7.2 to 9.3
				-		-	-	8.1 to 10.5
		Male	-	8	-	8D2 8D3 8D4	-	9.55 to 11.71
			-		8D3A 8D98	-	10.82 to 12.79	
			-		-	-	8.15 to 10.15	
			-		-	-	8.15 to 10.15	
		Female	-	12	-	-	-	8.15 to 10.15
			-		12D14	-	7.3 to 9.3	
			-		-	-	8.15 to 10.15	

□ = plating - see available plating p.42
Note : all dimensions are in mm

Dimensions



Contact type	Connector type	Contact size	Contact sex	Part number	Shell size	Layout	A	B	C	D
PCB contacts supply separately	UTS7 Standard	16	Male	RM20M12E8□	10 to 18	-	4.1	-	-	-
				RM20M12E83□	10 to 18	-	9.2	-	-	-
			Female	20 & 22	-	4.85	-	-	-	-
				24	-	3.35	-	-	-	-
				RC20M12E84□	10 to 18	-	4.65	-	-	-
				RC20M12E85□	10 & 12	-	7.15	-	-	-
					14	-	7.85	-	-	-
					16 & 18	-	7.15	-	-	-
					20	-	3.4	-	-	-
					22	-	2.7	-	-	-
		24	-		1.3	-	-	-		
		RC20M12E86□	10 & 12	-	7.95	-	-	-		
			14	-	8.65	-	-	-		
			16 & 18	-	7.95	-	-	-		
			20	-	4.2	-	-	-		
			22	-	3.5	-	-	-		
			24	-	2.1	-	-	-		
		20	Male	RMW50A7K	10 to 16	-	9.51	-	-	-
				18 to 22	-	5	-	-	-	
			Female	24	-	3.6	-	-	-	
RCW50A7K	10 to 16			-	-	10.41	-	-		
18 to 22	-			-	6	-	-			
24	-			-	4.6	-	-			
RCW5016K	10 to 16	-	2.4	-	-					
RCW5016K	10 to 16	-	-	3.04	-					
PCB contacts loaded	UTS7 Hi seal without stand off	16	Male & Female	-	12 & 14	-	-	-	3.6	-
				-	8	8D2 8D3 8D4	-	-	-	3.8 to 6
		20	Male	-	8	8D3A 8D98 8D33	-	-	-	4.7 to 7.25
				-	10	10D6 10D7	-	-	-	4.9 to 7
				-	12	12D2 12D3 12D8 12D10	-	-	-	4.8 to 7
			Female	-	12	12D14	-	-	-	3.85 to 5.9
				-	14	14D5 14D12 14D15	-	-	-	4.8 to 7
				-	14	14D18 14D19	-	-	-	4.8 to 7
		Female	-	8	8D2 8D3 8D4	-	-	-	3.75 to 5.8	
			-	8	8D3A 8D98 8D33	-	-	-	4.8 to 6.9	
			-	10	10D6 10D7	-	-	-	4.9 to 7	
			-	12	12D2 12D3 12D8 12D10	-	-	-	5.2 to 7	
			-	12	12D14	-	-	-	3.85 to 5.9	
			-	14	14D5 14D12 14D15	-	-	-	5.3 to 7	
-	14	14D18 14D19	-	-	-	5.3 to 7				

□ = plating - see available plating p.42
Note : all dimensions are in mm



Mechanics
UTS in line receptacle with accessories

Part number



Contact type	Connector type	Termination	Contact sex	Shell size	Part number	
Crimp contacts supply separately	UTS standard	Cable gland	Male	10	UTS1JC - - P	
				12		
				14		
				18		
			Female	10		UTS1JC - - S
				12		
				14		
				18		
	Discrete wire sealing	Nut and grommet	Male	10	UTS1GN104P	
				12	UTS1GN128P	
				14	UTS1GN147P	
					UTS1GN1412P	
Cable gland and grommet		Male	10	UTS1GJC104P		
			12	UTS1GJC128P		
			14	UTS1GJC147P		
				UTS1GJC1412P		
Screw contacts loaded	UTS standard	Cable gland backshell	Male	12	UTS1JC124PSCR	
				14	UTS1JC147PSCR	

For coding " - - " see p.6 and UTS layout guide p.12.

Dimensions

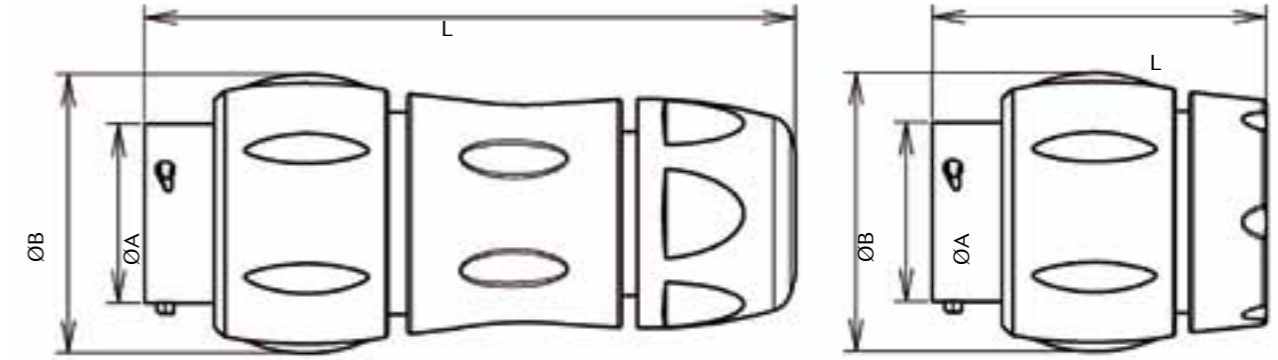


Fig. 1

Fig. 2

Part number	Shell size	L (total length)	ØA	B	Figure
UTS1JC - - P	10	70	14.9	26.7	Fig. 1
	12	74	19	30.1	
	14	78.5	22.2	35.1	
	18	89	28.5	42	
UTS1JC - - S	10	70	14.9	26.7	
	12	74	19	30.1	
	14	78.5	22.2	35.1	
	18	89	28.5	42	
UTS1GN104P	10	40.9	14.9	26.2	Fig. 2
UTS1GN128P	12	40.9	19	29.7	
UTS1GN147P	14	43	22.2	34.6	
UTS1GN1412P					
UTS1GJC104P	10	70.7	14.9	26.2	Fig. 1
UTS1GJC128P	12	74.5	19	29.7	
UTS1GJC147P	14	80.5	22.2	34.6	
UTS1GJC412P					
UTS1JC124PSCR	12	74	19	29.7	Fig. 1
UTS1JC147PSCR	14	78.5	22.2	34.6	

For coding " - - " see p.6 and UTS layout guide p.12.

Note : all dimensions are in mm

UTS Series



Accessories



Description

UTS series offers a wide range of accessories: from the plastic protective cap to the dust caps, coloured rings for visual identification or discrimination pins.

Colour coding rings



Part numbers		Shell size
Receptacles	Plugs	
UTS710CCR*	UTS610CCR*	10
UTS712CCR*	UTS612CCR*	12
UTS714CCR*	UTS614CCR*	14

* Add G for Green, Y for Yellow, R for Red
For shell sizes 8 & 18, please consult factory

Gasket



Part numbers / neoprene	Shell size
UTFD 11B	8
UTFD 12B	10
UTFD 13B	12
UTFD 14B	14
UTFD 16B	18

PMA adapter



IP40 solution when used with a UTS connectors and sealed PMA adapter.

To get a PMA adapter you should change JC to PMA.
Ex: UTS6JC -- S → UTS6PMA -- S

Bending protection spiral



IP68/69K version

To get a spiral protection you should change JC to JS.
Ex: UTS6JC -- S → UTS6JS -- S

UTS Series



Jam nut sealing caps



Part numbers	Shell size
UTS8DCG	8
UTS10DCG	10
UTS12DCG	12
UTS14DCG	14
UTS18DCG	18



Part numbers	Shell size
UTS8DCGR	8
UTS10DCGR	10
UTS12DCGR	12
UTS14DCGR	14
UTS18DCGR	18

Metal terminal

Square flange sealing cap



Part numbers	Shell size
UTS8DCGE	8
UTS10DCGE	10
UTS12DCGE	12
UTS14DCGE	14
UTS18DCGE	18

Metal terminal

Plug sealing cap



Part numbers	Shell size
UTS610DCG	10
UTS612DCG	12
UTS614DCG	14
UTS618DCG	18

Plug protective cap



Size 8
IP40

Part number: UTS68C

Plastic protective cap



Part numbers		Shell size
Receptacle cap	Plug cap	
8500-5585A	8500-5594	8
8500-5586A	8500-5595	10
8500-5587A	8500-5596	12
8500-5588A	8500-5597	14
8500-5590A	8500-5599	18



Cable assembly

Souriau provides connectors in various applications for more than 90 years in the most extreme environment.

Being conscious about the difficulty to find a quick and a reliable harness manufacturer, we decided years ago to start in house cable assembly production. It allows customers to reduce the number of suppliers, and to take advantage of the "best in class" quality of the Souriau group. Overmoulding is a process that further enhances the sealing properties of the UTS range, especially over many years of use. Overmoulding provides the opportunity to change the cable exit from straight through 90 degrees and avoid any stress on the cable terminated to the connector. Also, as the wires are encapsulated inside the moulding, a barrier is created which prevents from any liquid from entering the equipment through the connector if the cable jacket is breached.

In this section you'll find standard cable sets but as all customers are unique we are happy to adapt our proposal to your specific needs on demand.

Harnesses

Standard harnesses

Connector type	Backshell type	Gender	Connector size	Part number		
				1m of cable	3m of cable	5m of cable
UTS standard	Straight	Male	10 to 18	HAUTS - - PST100	HAUTS - - PST300	HAUTS - - PST500
		Female		HAUTS - - SST100	HAUTS - - SST300	HAUTS - - SST500
UTS Hi seal	Straight	Male	8 to 14	HAUTS - E - PST100	HAUTS - E - PST300	HAUTS - E - PST500
		Female		HAUTS - E - SST100	HAUTS - E - SST300	HAUTS - E - SST500

Overmoulded harnesses

Discrete connector

If cable jacket is breached... water ingress unhampered, leading to damage.

Overmoulded connector

If cable jacket is breached... prevents water ingress via capillary action.

Connector type	Backshell type	Gender	Connector size	Part number		
				1m of cable	3m of cable	5m of cable
UTS standard	Straight	Male	10 to 18	HAUTSOV - - PST100	HAUTSOV - - PST300	HAUTSOV - - PST500
		Female		HAUTSOV - - SST100	HAUTSOV - - SST300	HAUTSOV - - SST500
	Male	HAUTSOV - - PRA100		HAUTSOV - - PRA300	HAUTSOV - - PRA500	
	Female	HAUTSOV - - SRA100		HAUTSOV - - SRA300	HAUTSOV - - SRA500	
UTS Hi seal	Straight	Male	8 to 14	HAUTSOV - E - PST100	HAUTSOV - E - PST300	HAUTSOV - E - PST500
		Female		HAUTSOV - E - SST100	HAUTSOV - E - SST300	HAUTSOV - E - SST500
	Male	HAUTSOV - E - PRA100		HAUTSOV - E - PRA300	HAUTSOV - E - PRA500	
	Female	HAUTSOV - E - SRA100		HAUTSOV - E - SRA300	HAUTSOV - E - SRA500	

Other lengths and configurations: on demand, see factory.
 Note: UTS standard necessarily with gold plated stamped & formed contacts.
 For coding "--" see p. 37

Cable information

Range of temperature:	Occasional flexing: -5°C up to +70°C Fixed installation: -40°C up to +80°C
Rated voltage:	U0/U: 300/500 V
Wire section :	Arrangement with #16 contact: wire section 1.5 mm ² Arrangement with #20 contact: wire section 0.5 mm ²

Cable selection

Connector type		Number and size of wires	Cable used	
Shell size	Layout for coding "--" p.36		Type	Harmonised reference
8	8E2	2 #20	2X0.5	H05 VV - F 2X0.5
	8E3; 8E3A; 8E33; 8E98	3 #20	3X0.5	H05 VV - F 3X0.5
	8E4	4 #20	4X0.5	H05 VV - F 4X0.5
10	103PE*	3 #16	3G1.5	H05 VV - F 3G1.5
	103	3 #16	3X1.5	H05 VV - F 3X1.5
	104	4 #16	4X1.5	H05 VV - F 4X1.5
	106; 10E6; 1098	6 #20	7X0.5	H05 VV - F 7X0.5
	10E7	7 #20	7X0.5	H05 VV - F 7X0.5
12	12E2	2 #16	2X1.5	H05 VV - F 2X1.5
	12E3	3 #16	3X1.5	H05 VV - F 3X1.5
	124PE*	4 #16	4G1.5	H05 VV - F 4G1.5
	124	4 #16	4X1.5	H05 VV - F 4X1.5
	128	8 #16	8X1.5	H05 VV - F 8X1.5
	12E8	8 #20	10G0.5	H05 VV - F 10G0.5
	1210; 12E10	10 #20	10G0.5	H05 VV - F 10G0.5
	1214	14 #20	14G0.5	H05 VV - F 14G0.5
	142G1	3 #8	3G10	H05 VV - F 3G10
	14E5	5 #16	3G10	H05 VV - F 3G10
14	147PE*	7 #16	7G1.5	H05 VV - F 7G1.5
	147	7 #16	7X1.5	H05 VV - F 7X1.5
	1412	12 #16	12X1.5	H05 VV - F 12X1.5
	14E12	8 #20; 4 #16	12G0.5	H05 VV - F 12G0.5
	14E15	14 #20; 1 #16	18G0.5	H05 VV - F 18G0.5
	14E18	18 #20	18G0.5	H05 VV - F 18G0.5
	1419; 14E19	19 #20	21G0.5	H05 VV - F 21G0.5
	18E11	11 #16	12X1.5	H05 VV - F 12X1.5
	1823	23 #16	25G1	H05 VV - F 25G1.5
	18E30	29 #20; 1 #16	30G0.5	H05 VV - F 30G0.5
18	1832; 18E32	32 #20	35G0.5	H05 VV - F 35G0.5

*Suffix PE added to mention the use of a ground wire.

UTS Series

Contacts

■ Description	40
■ Contact plating selector guide	41
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■ Crimp contacts	43
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■ PCB contacts	46
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Contacts



Description

The UTS series is delivered with (solder and PCB versions) or without contact (crimp version). When contacts are not loaded, this series offers the unique possibility to use the same contact in any layout as long as it receives the same active part size. Thus it is possible to buy only one contact reference and equip all connectors even if housings are different.

The main benefit is the standardisation which means reduction of inventory cost.

Bearing in mind that any additional tool or complicated assembly process should be avoided, our contacts are based on a snap-in principle which avoid the use of an insertion tool.

Crimp contacts are available in different versions:



• machined



• stamped & formed



• coaxial



• fiber optic

In addition, UTS series can obviously be equipped with solder contacts, PCB contacts, screw termination.



Contact plating selector guide

As soon as you know what contact size you need, you next have to decide on which type to use.

Souriau proposes mainly two different types of electrical contacts:

- Machined
- Stamped & formed

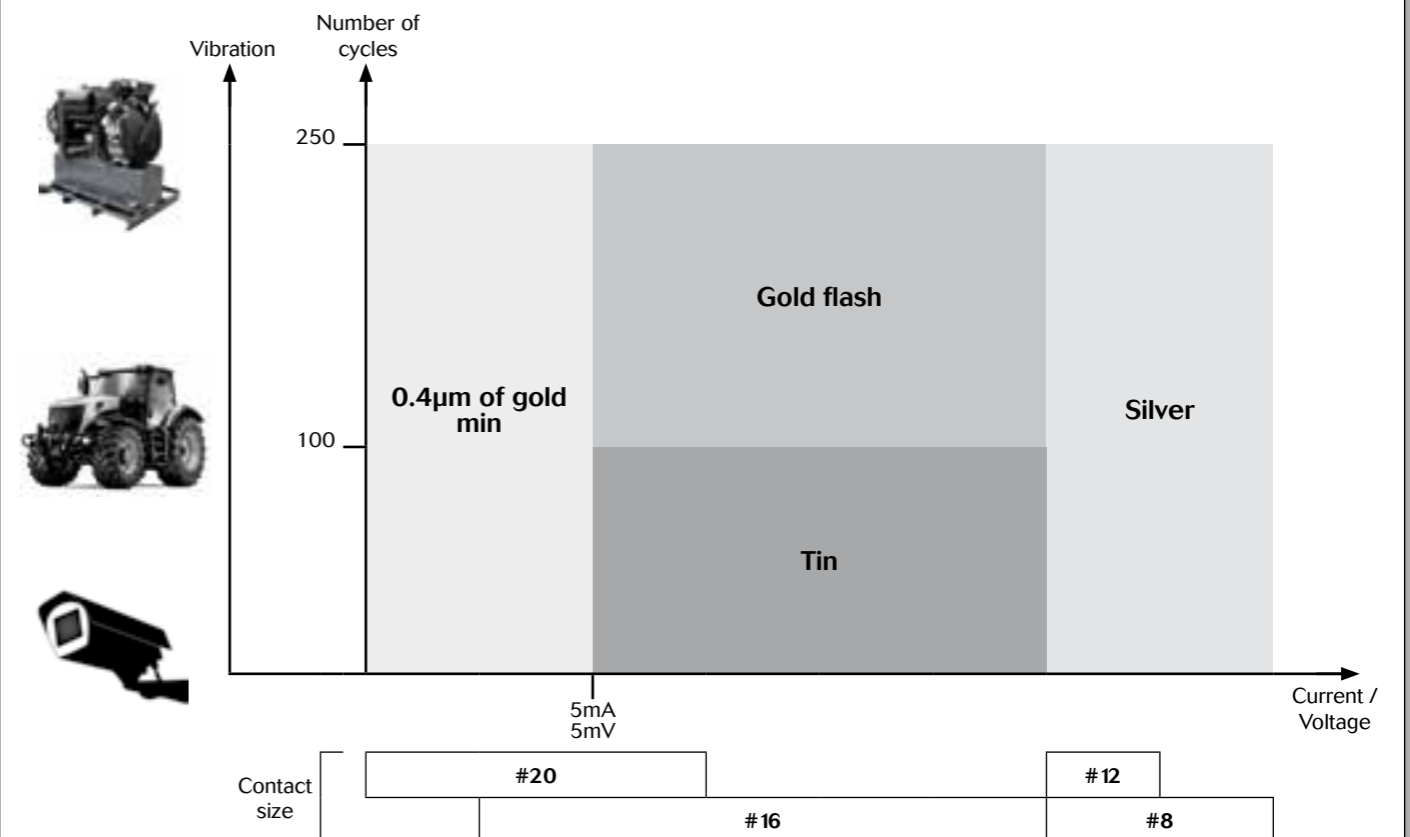
Machined contacts are generally chosen for low quantities purpose as well as a better solution for power applications.

Stamped & formed contacts offer the ability to be crimped automatically which makes them more suitable for high volume production applications.

Then comes the question: What plating should I choose ?

Hereunder is a graph with criteria to guide you:

NB: do not mix different plating (e.g. tin plated pin contact with gold plated socket contact).





Contact selector guide

Contact preloaded

Electrical characteristics: contact resistance		
#20 Ø1mm	Machined	< 4mΩ
#16 Ø1.6mm	Machined	< 3mΩ

Available platings (contact preloaded)	
Min 0.4μ gold over 2μ Ni	

Contact supply separately

Electrical characteristics: contact resistance		
#20 Ø1mm	Machined	< 6mΩ
	Stamped & formed	< 15mΩ
#16 Ø1.6mm	Machined	< 3mΩ
	Stamped & formed	< 6mΩ
#12 Ø2.4mm	Machined	< 5mΩ
#8 Ø3.6mm	Machined	< 5mΩ

Available platings (contact supply separately)	
A	2μ Ni + 2μ Ag
J	Gold flash over 2μ Ni
K	Min 0.4μ gold over 2μ Ni
S31	Active part: Gold flash over Ni Crimp area: Nickel
S18	Active part: 0.75μ gold min over 2μ Ni Crimp area: 1.3μ tin over Ni Other: Nickel
S25 S26	Active part: 0.75μ Au over Ni Crimp area: flash Au over Ni
T	T: 2μm Ni mini all over + 3 to 5 μm Sn all over
TK6	2-5μ Sn pre-plated

Packaging

Conscious of the wide variety of applications, contact packaging has been considered for small series (bulk packaging) and high volume production (reeled contacts):



• 50 pieces bulk packing (standard)



• 1000 pieces bulk packing



• 3000 pieces reeled stamped & formed contacts



• 5000 pieces reeled machined contacts

Crimp contacts

Standard version



Contact size	Type	Wire size		Part number		Max wire Ø	Max insulator Ø	Color band		Plating available
		AWG	mm ²	Male	Female			Front	Rear	
#20 Ø1 mm	Machined	26-24	0.13-0.20	RM24W3-	RC24W3-		1.58 max	-	-	K
	S&F	26-24	0.13-0.25	SM24W3- (1)	SC24W3- (1)		0.89-1.58	-	-	TK6, S25 (female), S26 (male)
				SM24WL3- (2)	SC24WL3- (2)	-		-		
	Machined	22-20	0.32-0.52	RM20W3-	RC20W3-		1.58 max	-	-	K
	S&F	22-20	0.35-0.5	SM20W3- (1)	SC20W3- (1)		1.17-2.08	-	-	TK6, S25 (female), S26 (male)
				SM20WL3- (2)	SC20WL3- (2)	-		-		
Machined	20-18	0.50-0.93	RM18W3-	RC18W3-		2.10 max	-	-	K	
#16 Ø1.6 mm	Machined	30-28	0.05-0.08	RM28M1-	RC28M1-	0.55	1.1	-	-	K, J, T
	Machined	26-24	0.13-0.2	RM24M9-	RC24M9-	0.8	1.6	Red	-	K, J, T
	S&F	26-24	0.13-0.25	SM24M1- (1)	SC24M1- (1)	0.89-1.28	Insulation grip	-	-	S31, S18, TK6
				SM24ML1- (2)	SC24ML1- (2)			-	-	
	Machined	22-20	0.32-0.52	RM20M13-	RC20M13-	1.18	1.8	Black	-	K, J, T
				RM20M12-	RC20M12-			Blue	-	
	S&F	22-20	0.35-0.5	SM20M1- (1)	SC20M1- (1)	1.17-2.08	Insulation grip	-	-	S31, S18, TK6
				SM20ML1- (2)	SC20ML1- (2)			-	-	
	Machined	20-16	0.52-1.5	RM16M23-	RC16M23-	1.8	3.2	-	-	K, J, T
	S&F	18-16	0.8-1.5	SM16M1- (1)	SC16M1- (1)	3.0	No insulation grip	-	-	S31, S18, TK6
SM16ML1- (2)				SC16ML1- (2)	-			-		
S&F	18-16	0.8-1.5	SM16M11- (1)	SC16M11- (1)	2.0-3.0	Insulation grip	-	-	S31, S18, TK6	
			SM16ML11- (2)	SC16ML11- (2)			-	-		
Machined	16-14	1.5-2.5	RM14M50-	RC14M50-	2.05	3.2	-	-	K, J, T	
Machined	16-14	1.5-2.5	RM14M30-	RC14M30-	2.28	3.2	-	-	K, J, T	
#12 Ø2.4 mm	Machined		22	0.13-0.4	8291 1457N-	8291 1456-		4.9		A, K
			20	0.5	8291 1459N-	8291 1458-				
			18	0.75-1.0	8291 1461N-	8291 1460-				
			16	1.5	8291 1463N-	8291 1462-				
			14	2.5	8291 1465N-	8291 1464-				
			12	4	8291 1467N-	8291 1466-				
#8 Ø3.6 mm	Machined		16	1.5	8291 3601-	8291 3600-		6.5		A
			14	2.5	8291 3603-	8291 3602-				
			12	4	8291 3605-	8291 3604-				
			10	6.0	8291 3607-	8291 3606-				
			8	10.0	8291 3609-	8291 3608-				

(1) contact reeled (2) loose contact



Crimp contacts

First Mate Last Break contacts

Contact size	Type	Wire size		Part number		Max wire Ø	Max insulator Ø	Color band		Plating available
		AWG	mm ²	Male	Female			Front	Rear	
#16 Ø1.6 mm Longer male contact (+1mm)	Machined	30-28	0.05-0.08	RM28M1GE1□	-	0.55	1.1	-	Red	□ = K, J or T
		26-24	0.13-0.2	RM24M9GE1□		0.8	1.6	Red	Red	
		22-20	0.32-0.52	RM20M13GE1□		1.18	1.8	Black	Red	
				RM20M12GE1□				Blue	Red	
		20-16	0.52-1.5	RM16M23GE1□		1.8	3.2	-	Red	
		16-14	1.5-2.5	RM14M50GE1□		2.05	-	-	Red	
		16-14	1.5-2.5	RM14M30GE1□		2.28	-	-	Red	
#16 Ø1.6 mm Shorter female contact (-0.7mm)	Machined	30-28	0.05-0.08	-	RC28M1GE7□	0.55	1.1	-	Blue	□ = K, J or T
		26-24	0.13-0.2	-	RC24M9GE7□	0.8	1.6	Red	Blue	
		22-20	0.32-0.52	-	RC20M13GE7□	1.18	1.8	Black	Blue	
				-	RC20M12GE7□			Blue	Blue	
		20-16	0.52-1.5	-	RC16M23GE7□	1.8	3.2	-	Blue	
		16-14	1.5-2.5	-	RC14M50GE7□	2.05	-	-	Blue	
		16-14	1.5-2.5	-	RC14M30GE7□	2.28	-	-	Blue	

How to make FMLB / LMFB connection

Contact 1 \ Contact 2	Standard male contact	Standard female contact	Longer male contact
Standard male contact		✓	
Standard female contact	✓		✓ FMLB
Shorter female contact	✓ LMFB		

First Mate Last Break contacts should be chosen only if the cavity is not marked with the earth symbol. For cavities marked with the earth symbol, standard contacts will fulfill the same role as a first mate, last break contact used in a standard cavity.



Ground symbol



#16 coaxial contacts

Coaxial contact range

We provide 2 types of coaxial contacts suitable for 50 or 75Ω, coaxial cable or twisted pair cable.

Monocrimp coaxial contact

- 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 both the inner conductor and outer braid or drain wire.



Multipiece crimp coaxial contact

- The inner conductor and outer braid is crimped individually.
- The thermoplastic insulating bushing in the outer body is designed to accept and permanently retain the inner contact.
- An outer ferrule is used to connect the braid to the outer contact and provide cable support to ensure against bending and vibration.



Suitable for Coaxial cable or Twisted cable

- For jacket diameter from 1.78 to 3.05mm
Inner conductor up to 2.44mm diameter



- For jacket diameter from 0.64 to 1.45mm
Inner conductor from AWG30 to AWG24



Contacts for coaxial cable summary

Contact type	Contact range		Contact part number with cable combination	Cabling notice
	Male contact	Female contact		
Multipiece	RMDXK10D28	RCDXK1D28	See page 68	See pages 72 & 73
Monocrimp	RMDX60xxD28	RCDX60xxD28		See page 74

Contacts for twisted pairs cable summary

Contact type	Contact range		Contact part number with cable combination	Cabling notice
	Male contact	Female contact		
Multipiece	RMDXK10D28 + YORK090	RCDXK1D28 + YORK090	See page 69	See page 70
Monocrimp	RMDX60xxD28	RCDX60xxD28		See page 71



PCB contacts

PCB contacts

PCB soldering

UTS range can be carried out with a wave soldering process, but not reflow soldering process. All high temperature processes are prohibited.



Contact size	Type	Part number		Plating
		Male	Female	
#20 Ø1mm	Short version	RMW50A7□	RCW50A7□	□ = K
	Long version	RMW5016□	RCW5016□	
#16 Ø1.6mm	Short version	RM20M12E8□	RC20M12E8□	□ = K or T
	Long version	RM20M12E83□	RC20M12E83□	
			RC20M12E84□	



Fibre optic contacts

Description

Size 16 Fibre optic contacts for TRIM TRIO® connectors

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

The Fibre optic contacts are designed to accommodate:

- Plastic Optical Fibre (POF)
1 mm core and 2.2 mm jacket
- Plastic Clad Fibre (PCF)
230µm core and 2.2 mm jacket
- Multimode Silica Fibre
62.5/125µm type 2.0 mm max. jacket
- Singlemode Silica Fibre
9/125µm type 2.0 mm jacket



Typical features and benefits are:

- 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.

Technical characteristics

Performance

	POF/PCF	Multimode	Singlemode
• Fibre type:		62.5/125µm	9/125µm
• Wave length:	650 nm	1300 nm	1310 nm
• Optical insertion loss (typ.):	2 dB max.	< 0.5 dB	< 0.35 dB
• Jacketed external diameter:	2.2mm	2.0mm max.	2.0mm max.
• Temperature range:	-25°C to +70°C	-25°C to +70°C	-25°C to +70°C
• Cable retention:	49N		
• Mating cycles without cleaning:	50		
• Max. mating cycles:	500		

Construction

- Contact body: Copper alloy

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 : UTP, UTS, UTG, UTO.



Fibre optic contacts

Ordering information

POF Contacts (Plastic Optical Fibre)

Male contact RMPOF1000
Female contact RCPOF1000B

Silica Contacts - Multimode

Male contact RMMMOFA
Female contact RCMMOFA

PCF Contacts (Plastic Clad Fibre)

Male contact RMPCF230
Female contact RCPCF230B

Silica Contacts - Monomode

Male contact RMSMOFA
Female contact RCSMOFA

POF Contact (Plastic Optical Fibre)

STANDARD TOOLING KIT - P/N 80MS0004

The *standard tooling kit* is made of the part numbers below that can be ordered separately as well.

Part numbers	Descriptions
80WD0005	Stripping tool
80WD0025	Automatic stripping tool for Ø 0.5 mm, 0.6 mm, 0.7 mm & 3.8 mm
80WM0006	Ruler
80WP0005	Polishing plate
80WP0013	Non slip base (to hold the polishing plate)
80WP0014	Polishing disk (grain size 9µm)
80WP0018	Polishing tool
80WP0019	Polishing disk (grain size 30µm)
80WS0002	Crimping plier

SPECIFIC TOOLING LIST - can be ordered only separately

Part numbers	Descriptions
80WG0010	Needle
80WG0015	Capsule
80WG0016	Syringe
80WN0005	Dry air spray
80WN0006	Optical paper
80WN0012	Dropping bottle
80WN0008	Wiping solvent

PCF Contact (Plastic Clad Fibre)

STANDARD TOOLING KIT - P/N 80MG0039

Descriptions
Stripping tool for Ø 2.2 mm
Kevlar scissors
Stripping tool for Ø 0.25 mm
Alumina blade
Polishing tool
Press fit tool
Microscope

Descriptions
Polishing disk (grain size 9µm)
Polishing disk (grain size 0.3µm)
Curing oven
Polishing plate
Non slip base (to hold the polishing plate)
Glue



Fibre optic contacts

Multimode Contact - Silica

STANDARD TOOLING KIT - P/N 80MG0027

The *standard tooling kit* is made of the part numbers below that can be ordered separately as well.

Part numbers	Descriptions
80WC0001	Aramid yarn scissors
80WC0003	Cutter
80WC0004	Alumina blade
80WD0008	Stripping tool for Ø 0.20 mm
80WD0010	Stripping tool for Ø 0.25 mm
80WD0014	Stripping tool for Ø 0.60 mm
80WD0025	Automatic stripping tool for Ø 0.5 mm, 0.6 mm, 0.7 mm & 3.8 mm
80WM0006	Ruler
80WP0005	Polishing plate
80WP0013	Non slip base (to hold the polishing plate)
80WT0008	Curing oven
80WT0009	Protective tube

SPECIFIC TOOLING LIST - can be ordered only separately

Part numbers	Descriptions
80WD0036	Stripping tool for Ø 0.9 mm & 0.25 mm
80WD0005	Stripping tool for Ø 2.2 mm & 1.5 mm
80WL0001	Microscope x400
80WL0008	Microscope adaptor
80WP0025	Polishing tool
80WS0002	Crimping tool
80WT0005	Contact support for polymerisation
80WG0010	Needle
80WG0014	Glue
80WG0015	Capsule
80WG0016	Syringe
80WN0005	Dry air spray
80WN0006	Optical paper
80WN0012	Dropping bottle
80WP0014	Polishing disk (grain size 9µm)
80WP0015	Polishing disk (grain size 0.3µm)