

**Plastic circular connectors**  
Souriau TRIM TRIO® UTSX series



**EATON**

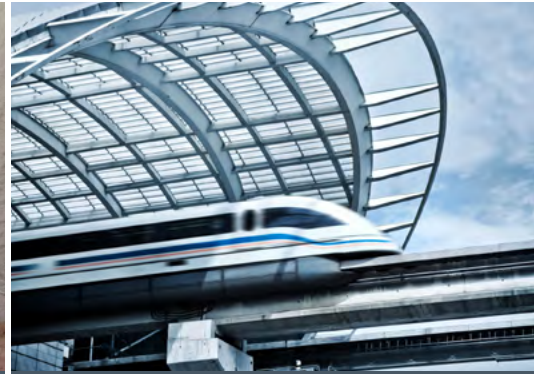
*Powering Business Worldwide*

# Souriau UTSX series

## Typical applications



Off-road vehicles



Railway



Energy



Lighting



eMobility



Instrumentation



Measurement



Robotics



Building automation and control



Infrastructure



Machinery



# Souriau UTSX series

## Upgraded for higher performance

The Souriau UTSX series is a full-plastic, waterproof circular connector designed for harsh environments. The UTSX series features reinforced bayonet pins and a broader range of layouts, sizes and mechanical keyings when compared to its predecessor, the UTS series.

## Interchangeable with other Souriau TRIM TRIO® connectors

Part of the Souriau TRIM TRIO® connector line, the UTSX series shares a unique design of contacts that are interchangeable across several of our connector series, allowing you to simplify your supply chain and maintain the same cabling process across all ranges. The trio of contacts; machined, stamped and formed, and coaxial is used in different connector shapes with plastic or metal shells, bayonet or push-pull coupling mechanisms. For series that are intermateable, such as the UTS, UTGX and UTO series, you can easily switch from one series to the other across the applications in your operation.

## Reliable connections in harsh environments

UTSX series connectors are waterproof, lightweight, withstand 250 mating cycles and are manufactured from materials that have UV and corrosion resistant properties. They are IP68/69K rated even in dynamic conditions and available with multiple contact layouts for design flexibility, including hybrid power/signal and hybrid copper/fiber.

## Easy, quick and safe to use in a wide range of applications

The easy to grip connectors have a one-third bayonet coupling to confirm the connection with an audible and tactile click. The UTSX series is compliant with IEC and UL standards and resistant to shock, ensuring safe connections for installers and operators. The UTSX series is perfect for outdoor solar and wind management applications, as well as conditions where humidity or corrosive agents would compromise metal components – applications that range from off-road machinery to instrumentation and water management.



Waterproof

UV resistant

Lightweight

Shock proof

# Souriau UTSX series

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# Souriau UTSX series



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## UTSX series



Cable sealed



Plug without backshell



Plug with backshell

## UTSX backshells

### Cable sealing



### Double sealing (wires + cable)



Grommet

## Contacts supplied separately



Choice of crimp contacts  
Machined / Stamped and formed / Coaxial  
PCB  
Fiber optic

Contacts loaded  
Handsolder  
Screw

## Plug



## UTSX Hi-seal



Plug without backshell



Plug with backshell

## Overmolded cable assembly



For more information on our overmolding solutions, please contact us.



**UTSX standard receptacle**

Square flange



Jam nut



Free hanging



Jam nut



**Contacts supplied separately**



**Choice of crimp contacts**  
Machined / Stamped and formed / Coaxial  
**PCB**  
**Fiber optic**

**UTSX backshells**

Cable sealing only for square flange



**Contacts supplied separately**



**Choice of crimp contacts**  
Machined / Stamped and formed / Coaxial  
**PCB**  
**Fiber optic**

**UTSX backshells**

Cable sealing



**Contacts loaded**  
Handsolder  
Screw

**Double sealing**  
(wires + cable)



**UTSX Hi-seal receptacle**

Jam nut



Square flange

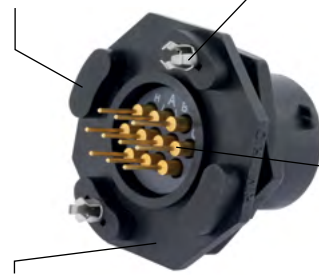


**Contacts loaded**  
**PCB**  
**Handsolder**

**UTSX PCB contacts**

Stand-offs to allow cleaning after soldering

Metal hold down clips lock the connector easily on the PCB and release stress on solder joints. They are also suitable for soldering the connector to the PCB through metal holes.



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

Low profile housing to limit space between panel and PCB



## Technical features

### Environmental

- Temperature class: 40/100/21 per NFF 61-030 from -40°C to +105°C
- Flammability rating:
  - UL94 V-0 (all UTSX except the sealed unmated version)
  - UL94 HB (UTSX sealed unmated version only)
  - I3F2 according to NFF 16102
- Salt spray: per EIA-364-26: 500 hours
- UV resistant connector made with (f1) material according to UL746C
- Outdoor used following level 6/6P according to UL50/UL50E
- Aging validation: ISO 21207 Method B, 5 cycles. Corresponding to 27 years in an industrial environment
- Sealing:
  - UTSX standard: IP68/IP69K dynamic (mated)
  - UTSX sealed unmated version: IP68/IP69K dynamic (unmated)
  - UTSX single wire sealed: IP67/69K (up to IP68 with double sealing backshell)
  - UTSX screw termination contacts: IP68/IP69K dynamic (mated)

**Note:** IP68=10 m. underwater during 1 week

- Fluid resistance:
  - Gas and oil
  - Mineral oil
  - Acid bath
  - Basic bath

### Materials

- Connector body and backshell: thermoplastic
- Insert:
  - UTSX standard, UTSX single wire sealed
  - UTSX screw termination contacts: thermoplastic
  - UTSX Hi-seal: elastomer
- Nut: metal
- Locking ring: brass and stainless steel
- Contacts: see page 125
- Halogen free
- RoHS compliant and conforms to the Chinese standard SJ/T1166-2006 (Chinese RoHS equivalent)

### Electrical

- In accordance with:
  - UL 1977: category ECBT2 file number: E169916
  - C22.2 n°182.3: category ECBT8 file number: E169916
- Voltage and current information available on pages 9 to 11

### Mechanical

- Durability: 250 matings and unmatings according to MIL-C-26482
- Vibration resistance (all UTSX versions except UTSX screw termination contacts):
  - Sinusoidal vibrations per EN 60512-4- from 10 to 2000 Hz
  - Sinusoidal vibrations according to CEI 60512-6-4
- Thermal shock: 5 cycles 30 min. from -40°C to 105°C per MIL-STD-1344 method 1003
- IK resistors: see table below for shock resistance

Connector type	Size 10	Size 12	Size 14
UTSX0 / UTSX6JC	IK03	IK05	IK05
UTSX7 / UTSX6JC	–	IK05	IK05



### Layouts face male contact

Electrical parameter according to IEC61984 for a pollution degree IV and overvoltage category III.

A higher voltage can be applied by selecting the appropriate connectors and contacts. Please consult us for more information.

Contacts	Description (mating face view male connectors)		
<b>Contact #16</b> (Ø 0.062"/1.6 mm)			
	103 16A/300V 2 + ground Page 18	104 13A/150V 4 contacts Page 41	
<b>Contact #20</b> (Ø 0.039"/1.0 mm)			
	106 – 10E6/10D6 7A/32V 6 contacts Page 56	10E98/10D98 7A/50V 6 contacts Page 61	10E7/10D7 7A/50V 7 contacts Page 70
<b>Hybrid and others</b>			
	102W2 25A/150V 4 contact 2xØ 2.4 (#12) + 2xØ 1.0 (#20) Page 36	103W3 5A/32V 6 contacts 3xØ 1.6 (#16) + 3xØ 1.0 (#20) Page 50	

**Note:** Layouts in blue text are UTSX sealed unmated (Hi-seal) condition

Contacts #20:  
from AWG 26 to 18  
0.005" to 0.031"<sup>2</sup>  
0.13 to 0.80 mm<sup>2</sup>

Contacts #16:  
from AWG 30 to 14  
0.002" to 0.098"<sup>2</sup>  
0.05 to 2.5 mm<sup>2</sup>

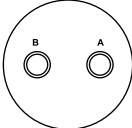
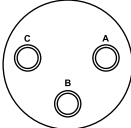
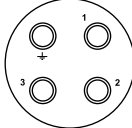
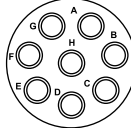
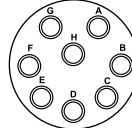
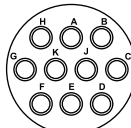
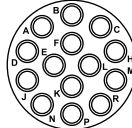
Contacts #12:  
from AWG 20 to 12  
0.005" to 0.157"<sup>2</sup>  
0.52 to 4 mm<sup>2</sup>

Contacts #8:  
from AWG 16 to 8  
0.059" to 0.393"<sup>2</sup>  
1.5 to 10 mm<sup>2</sup>

### Layouts face male contact

Electrical parameter according to IEC61984 for a pollution degree IV and overvoltage category III.

A higher voltage can be applied by selecting the appropriate connectors and contacts. Please consult us for more information.

Contacts	Description (mating face view male connectors)		
<b>Contact #16</b> (Ø 0.062"/1.6 mm)	 <p><b>12E2/12D2</b> 16A/150V 2 contacts Page 14</p>	 <p><b>12E3/12D3</b> 16A/150V 3 contacts Page 27</p>	 <p><b>124 – 12E4/12D4</b> 16A/150V 3 + ground Page 31</p>
	 <p><b>128</b> 10A/80V 8 contacts Page 74</p>		
<b>Contact #20</b> (Ø 0.039"/1.0 mm)	 <p><b>12E8/12D8</b> 6A/32V 8 contacts Page 79</p>	 <p><b>1210 – 12E10/12D10</b> 6A/50V 10 contacts Page 89</p>	 <p><b>12E14/12D14</b> 5A/32V 14 contacts Page 108</p>

**Note:** Layouts in blue text are UTSX sealed unmated (Hi-seal) condition

Contacts #20:  
from AWG 26 to 18  
0.005" to 0.031"<sup>2</sup>  
0.13 to 0.80 mm<sup>2</sup>

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from AWG 30 to 14  
0.002" to 0.098"<sup>2</sup>  
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Contacts #12:  
from AWG 20 to 12  
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Contacts #8:  
from AWG 16 to 8  
0.059" to 0.393"<sup>2</sup>  
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**Layouts face male contact**

Electrical parameter according to IEC61984 for a pollution degree IV and overvoltage category III.

A higher voltage can be applied by selecting the appropriate connectors and contacts. Please consult us for more information.

Contacts	Description (mating face view male connectors)			
<b>Contact #16</b> (Ø 0.062"/1.6 mm)				
	<b>14E5/14D5</b> 16A/150V 5 contacts Page 46	<b>147 – 14E7/14D7</b> 7A/150V 6 + ground Page 65	<b>1412</b> 10A/63V 12 contacts Page 94	<b>1492</b> 10A/63V 12 contacts Page 103
	<hr/>			
	<b>Contact #20</b> (Ø 0.039"/1.0 mm)			
<b>14E18/14D18</b> 5A/50V 18 contacts Page 116		<b>1419 – 14E19/14D19</b> 5A/32V 19 contacts Page 120		
<hr/>				
<b>Contact #8</b> (Ø 0.141"/3.6 mm)				
	<b>142G1</b> 40A/300V 2 + ground Page 23			
<hr/>				
<b>Mixed power</b>				
	<b>148</b> 17A/230V 8 contacts 4xØ 1.6 (#16) + 3xØ 2.4 (#12) + ground Page 83	<b>14E12/14D12</b> 4A/50V 12 contacts 4xØ 1.6 (#16) + 8xØ 1.0 (#20) Page 99	<b>14E15/14D15</b> 4A/50V 15 contacts 1xØ 1.6 (#16) + 14xØ 1.0 (#20) Page 112	
	<hr/>			

**Note:** Layouts in blue text are UTSX sealed unmated (Hi-seal) condition

Contacts #20:  
from AWG 26 to 18  
0.005" to 0.031"<sup>2</sup>  
0.13 to 0.80 mm<sup>2</sup>

Contacts #16:  
from AWG 30 to 14  
0.002" to 0.098"<sup>2</sup>  
0.05 to 2.5 mm<sup>2</sup>

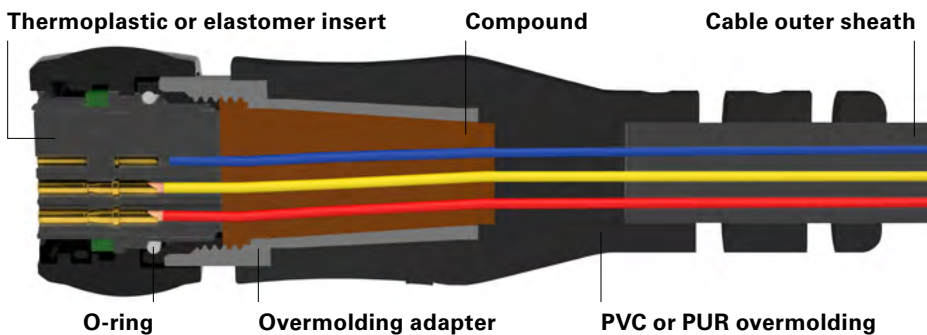
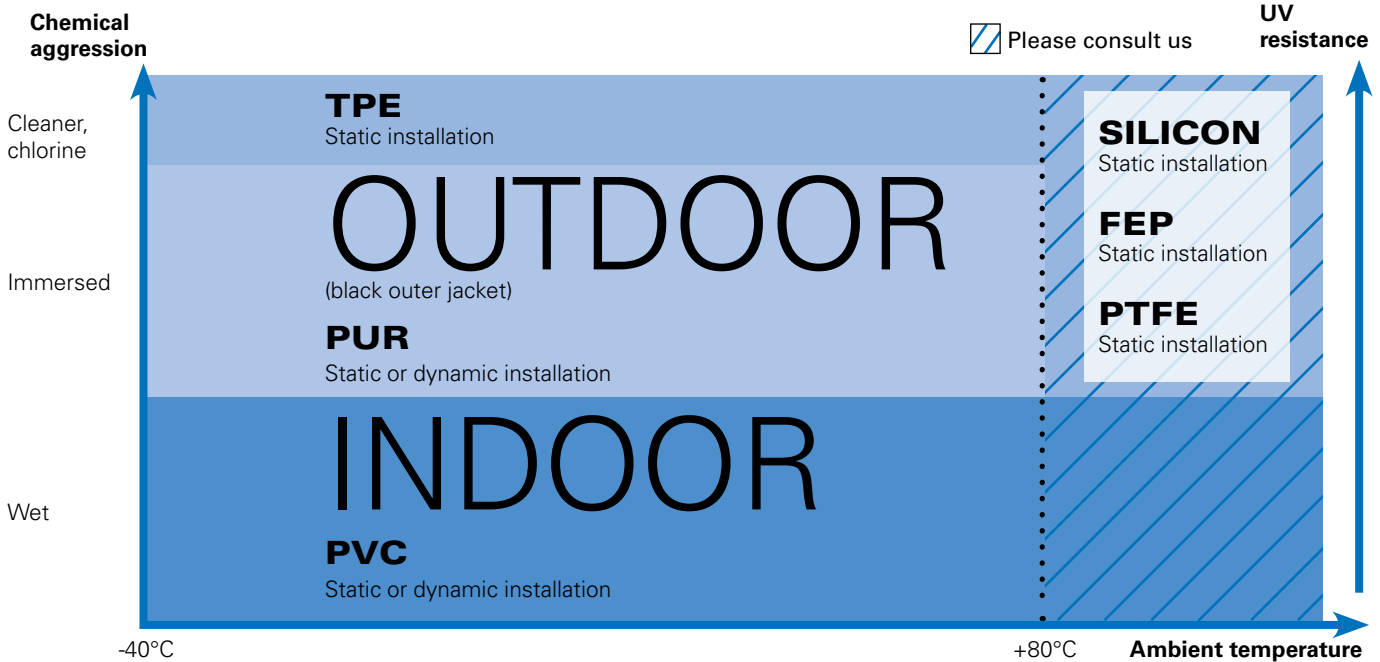
Contacts #12:  
from AWG 20 to 12  
0.020" to 0.157"<sup>2</sup>  
0.52 to 4 mm<sup>2</sup>

Contacts #8:  
from AWG 16 to 8  
0.059" to 0.393"<sup>2</sup>  
1.5 to 10 mm<sup>2</sup>

Overmolding is a process that further enhances the sealing properties of the UTSX series, especially over many years of use. Overmolding provides the opportunity to change the cable exit from straight to 90 degrees and avoid stress on the cable terminated to the connector. Also, as the wires are encapsulated inside the moulding, a barrier is created which prevents any liquid from entering the equipment through the connector if the cable jacket is breached.

2

### How to choose the outer jacket material



#### Connector with cable gland backshell

**GOOD**

If cable jacket is breached...



...water ingress unhampered, leading to damage.

#### Overmolded connector

**BEST**

If cable jacket is breached...



...prevents water ingress via capillary action.



UTSX waterproof plastic overmold

**HAUTSX standard offering**



2

**Cable**

- PVC outer sheath (grey color)
- Wire section 16 AWG for #16 contact
- Wire section 20 AWG for #20 contact
- 300V
- Unshielded
- Operating temperature: -40°C +70°C

**Overmolding specifications**

Plating	Salt spray	Temperature*	Waterproof*	Mechanical
No plating	500 H	-30°C up to + 50°C	IP68/IP69K dynamic (mated)	250 matings/unmatings

\* With appropriate cable and overmolding

**Cable information**

Range of temperature	Rated voltage	Wire section	Harmonized reference
-30°C +50°C	U0/U: 300/500V	Layouts with #16 contact: wire section 0.196"² (5 mm²)	H05 VV - F XX

**Example of customized cable assemblies**



Overmolding on curly cable



Overmolding with double ends



Harness for PCB connection

# 2

## Connectors

12E2/12D2 (Shell size 12, 2x#16)

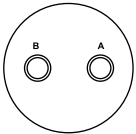
2



### Connector part number

#### UTSX 12E2/12D2

2 contacts + ground  
13A/600V  
per UL 1977  
with AWG16 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Handsolder electrical contacts loaded see page 17	Square flange receptacle	Without (Fig. 1)	<b>UTSX012E2P</b>	<b>UTSX012E2S</b>
	Plug	Without (Fig. 5)	<b>UTSX612E2P</b>	<b>UTSX612E2S</b>
		Cable gland (Fig. 3)	<b>UTSX6JC12E2P</b>	<b>UTSX6JC12E2S</b>
	Jam nut receptacle	Without (Fig. 4)	<b>UTSX712E2P</b>	<b>UTSX712E2S</b>
PCB contacts loaded see page 17	Square flange receptacle	Without (Fig. 2)	<b>UTSX012D2P</b>	<b>UTSX012D2S</b>
	Jam nut receptacle with stand off and without hold down clip	Without (Fig. 5)	<b>UTSX712D2P</b>	<b>UTSX712D2S</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 6)	<b>UTSX712D2P32</b>	<b>UTSX712D2S32</b>

For discrimination/keying methods see page 150

Sealed unmated

### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.

**Dimensions** (For mated connector lengths see page 142)

**Square flange receptacle - UTSX0**

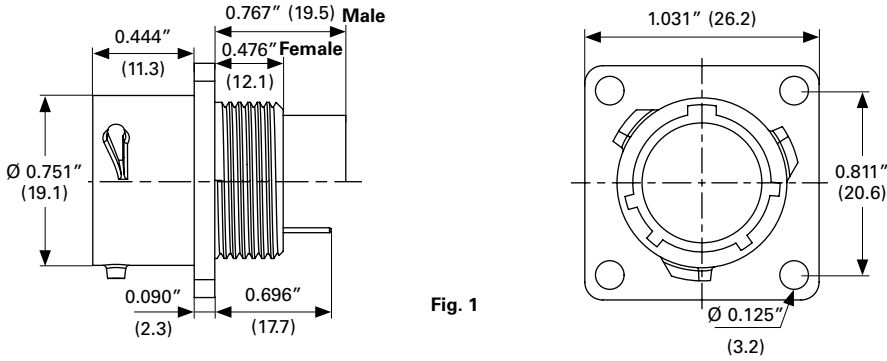


Fig. 1

**Plug - UTSX6 and UTSX6JC**

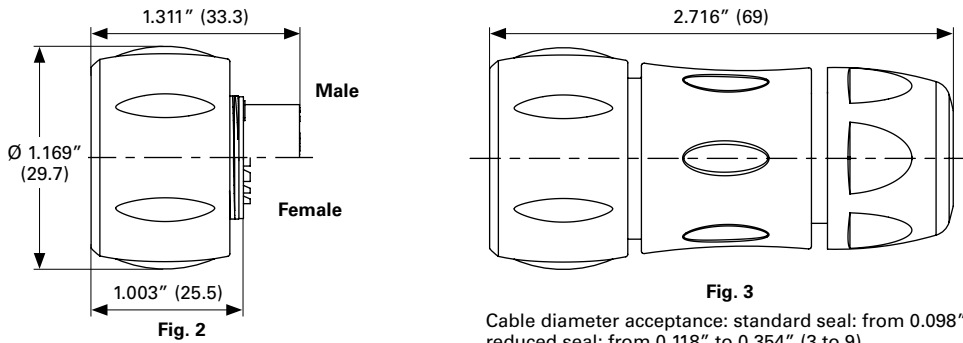


Fig. 2

Fig. 3

Cable diameter acceptance: standard seal: from 0.098" to 0.472" (5 to 12),  
reduced seal: from 0.118" to 0.354" (3 to 9)

**Jam nut receptacle UTSX7**

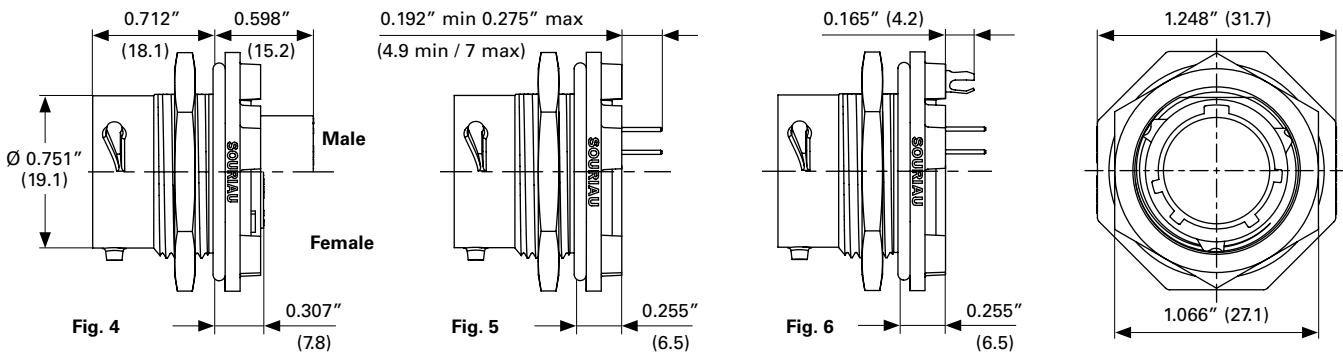


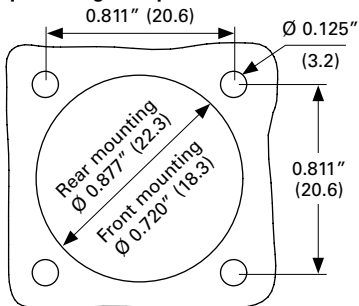
Fig. 4

Fig. 5

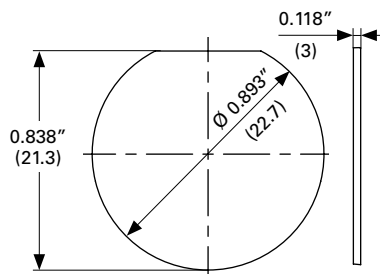
Fig. 6

**Panel cut out**

**Square flange receptacle - UTSX0**



**Jam nut receptacle - UTSX7**



# 2

## Connectors

12E2/12D2 (Shell size 12, 2x#16)

### Accessories

2

#### Jam nut and free hanging receptacle sealing caps



Description	Part number
IP68	UTGX12DCG
IP68 - Metal terminal	UTGX12DCGR

#### Square flange sealing cap



Description	Part number
IP68 - Metal terminal	UTGX12DCGE

#### Plug sealing cap



Description	Part number
IP68	UTGX612DCG

#### Plastic protective cap



Part number receptacle cap	Part number plug cap
85005587A	85005596

#### Gasket



Part number
UTFD13B

#### Color coding rings



Description	Part number receptacles	Part number plugs
G for Green	UTGX712CCRG	UTGX612CCRG
Y for Yellow	UTGX712CCRY	UTGX612CCRY
R for Red	UTGX712CCRR	UTGX612CCRR



## Contacts #16

Contact type	Plating	Cable acceptance (AWG)	Cable acceptance		Wire stripping length	
			inch <sup>2</sup>	mm <sup>2</sup>	inch	mm
Hand solder Loaded in the connector	Min 0.4μ gold over 0.8μ Ni	18-14	0.031"-0.098"	0.80-2.48	0.196"	5
PCB Machined <sup>(1)</sup>	Min 0.4μ gold over 0.8μ Ni	—	—	—	—	—

(1): For dimensions see pages 133 or 134

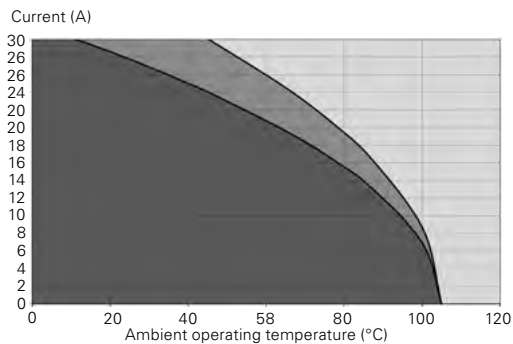
2

## Electrical characteristics

UL	CSA	IEC
13A 600V with AWG16 wire	13A 600V with AWG16 wire	16A 150V 2.5kV 3

Electrical information according to the IEC 61984, with pollution degree IV and overvoltage category III.

## UTSX 12E2/12D2 derating curves



- Current use
- Limited use
- Not recommended use

### Test conditions

Contact used: machined contacts

Wires used: 16 AWG

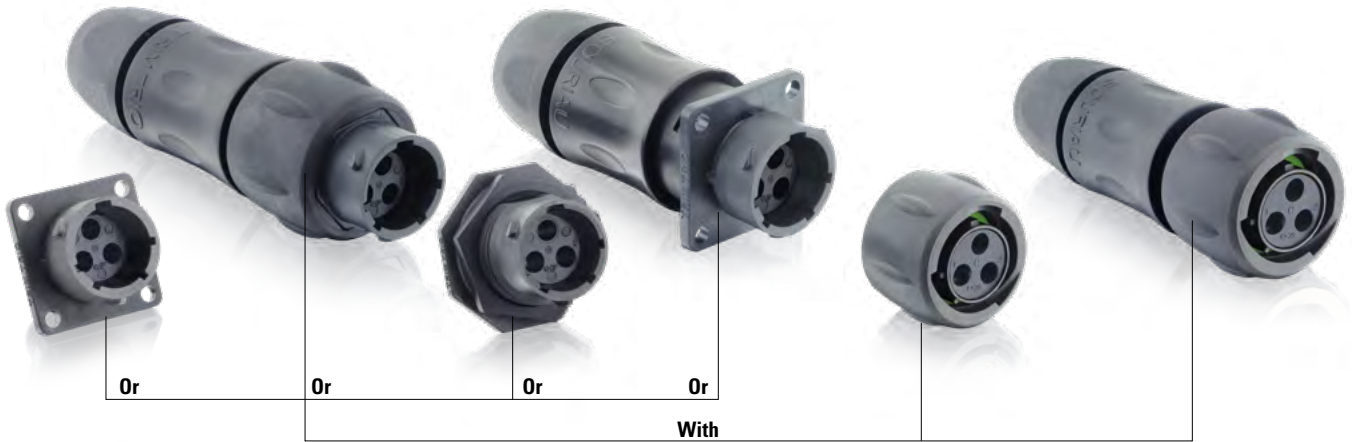
Derating curves based on continuous current application.

# 2

## Connectors

103 (Shell size 10, 2 + ground, 3x#16)

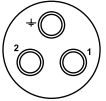
2



### Connector part number

#### UTSX 103

2 contacts + ground  
10A/500V  
per UL 1977 with  
AWG16 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 22	Square flange receptacle	Without (Fig. 1)	<b>UTSX0103P</b>	<b>UTSX0103S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC103P</b>	<b>UTSX0JC103S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC103P</b>	<b>UTSX1JC103S</b>
		Plug	Without (Fig. 4)	<b>UTSX6103P</b>
	Cable gland (Fig. 5)	<b>UTSX6JC103P</b>	<b>UTSX6JC103S</b>	
PCB contacts supplied separately see page 22	Jam nut receptacle	Without (Fig. 6)	<b>UTSX7103P</b>	<b>UTSX7103S</b>
	Jam nut receptacle	Without (Fig. 7)	<b>UTSX7103P</b>	<b>UTSX7103S</b>

#### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.

**Dimensions** (For mated connector lengths see page 142)

**Square flange receptacle - UTSX0 and UTSX0JC**

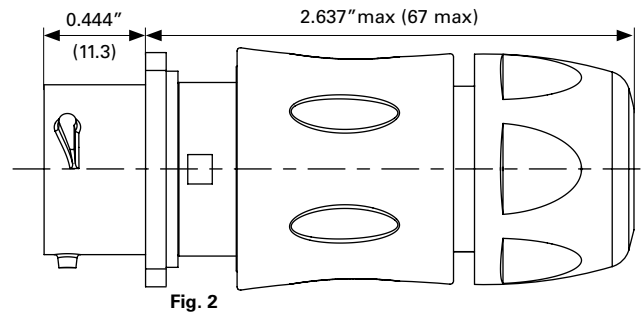
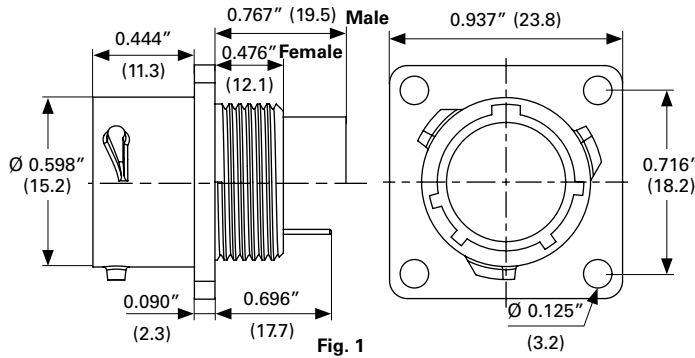


Fig. 2  
Cable diameter acceptance: standard seal: from 0.098" to 0.314" (2.5 to 8),  
reduced seal: from 0.059" to 0.196" (1.5 to 5)

**Free hanging - UTSX1JC**

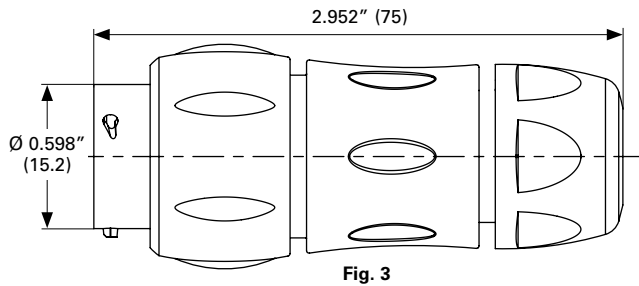


Fig. 3  
Cable diameter acceptance: standard seal: from 0.098" to 0.314" (2.5 to 8),  
reduced seal: from 0.059" to 0.196" (1.5 to 5)

**Plug - UTSX6 and UTSX6JC**

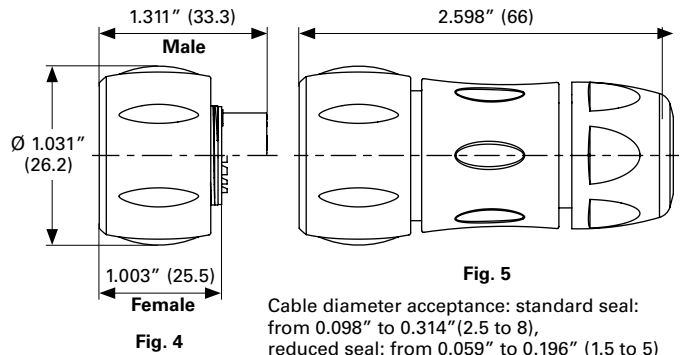
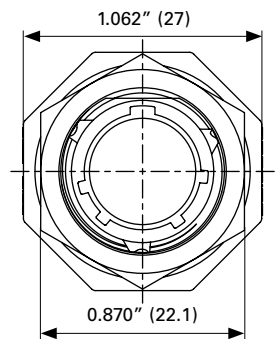
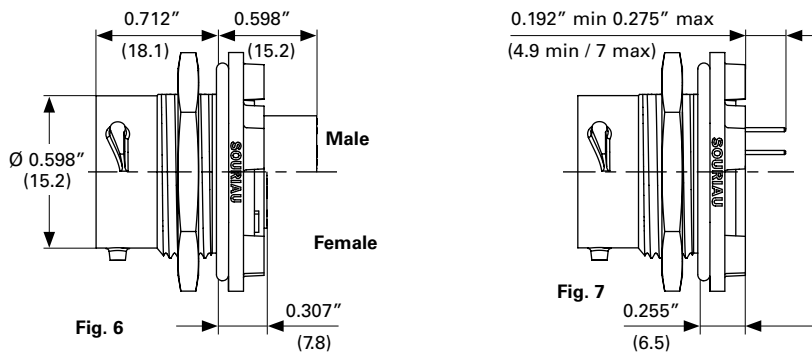


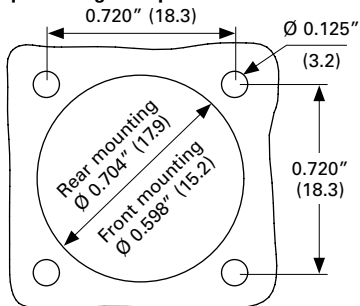
Fig. 5  
Cable diameter acceptance: standard seal:  
from 0.098" to 0.314" (2.5 to 8),  
reduced seal: from 0.059" to 0.196" (1.5 to 5)

**Jam nut receptacle UTSX7**

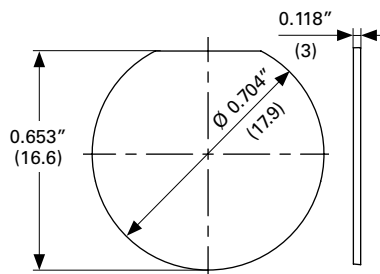


**Panel cut out**

**Square flange receptacle - UTSX0**



**Jam nut receptacle - UTSX7**



Dimensions in inches (millimeters)

# 2

## Connectors

103 (Shell size 10, 2 + ground, 3x#16)

### Accessories

2

#### Jam nut and free hanging receptacle sealing caps



Description	Part number
IP68	UTGX10DCG
IP68 - Metal terminal	UTGX10DCGR

#### Plug sealing cap



Description	Part number
IP68	UTGX610DCG

#### Plastic protective cap



Part number receptacle cap	Part number plug cap
85005586A	85005595

#### Color coding rings



Description	Part number receptacles	Part number plugs
G for Green	UTGX710CCRG	UTGX610CCRG
Y for Yellow	UTGX710CCRY	UTGX610CCRY
R for Red	UTGX710CCRR	UTGX610CCRR



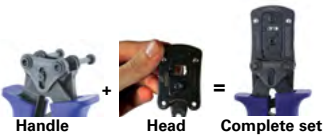
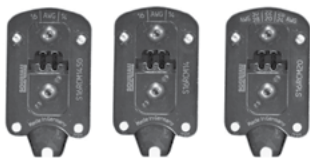
## Tooling

### Tooling



Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

### Crimp tooling (without Shandles)



Contact size	Contacts	Part number of Head
Standard contacts #16 Ø 0.062" (1.6)	<b>RM/RC 28M1K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 24M9K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M13K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M12K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 16M23K<sup>(1)</sup></b>	<b>S16RCM16*</b>
	<b>RM/RC 14M30K<sup>(1)</sup></b>	<b>S16RCM14*</b>
	<b>SM/SC 24ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 20ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 16ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 14ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 16ML11TK6<sup>(1)</sup></b>	<b>S16SCML11*</b>

(1): Example of plating, for other plating options see page 126

\* Heads to be used with handle PN: SHANDLES

### Extraction tool #16

Fig. 1



Fig. 2



Description	Part number
<b>Fig. 1</b>	<b>RX2025GE1</b>
<b>Fig. 2 - Long endurance tool</b>	<b>RX2031J</b>

### Contacts #16

2

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø inch	max mm	Insulator Ø inch	max mm
Crimp contacts	Machined	30-28	0.002"-0.003"	0.05-0.08	<b>RM28M1K</b> <sup>(1)</sup>	<b>RC28M1K</b> <sup>(1)</sup>	0.021"	0.55	0.039"	1.00
		26-24	0.005"-0.009"	0.13-0.25	<b>RM24M9K</b> <sup>(1)</sup>	<b>RC24M9K</b> <sup>(1)</sup>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M13K</b> <sup>(1)</sup>	<b>RC20M13K</b> <sup>(1)</sup>	0.045"	1.15	0.070"	1.80
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M12K</b> <sup>(1)</sup>	<b>RC20M12K</b> <sup>(1)</sup>	0.045"	1.15	0.086"	2.20
		20-16	0.020"-0.059"	0.52-1.48	<b>RM16M23K</b> <sup>(1)</sup>	<b>RC16M23K</b> <sup>(1)</sup>	0.070"	1.80	0.125"	3.20
		16-14	0.059"-0.098"	1.48-2.48	<b>RM14M30K</b> <sup>(1)</sup>	<b>RC14M30K</b> <sup>(1)</sup>	0.090"	2.30	0.125"	3.20
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6</b> <sup>(1)(2)</sup>	<b>SC24M1TK6</b> <sup>(1)(2)</sup>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM20M1TK6</b> <sup>(1)(2)</sup>	<b>SC20M1TK6</b> <sup>(1)(2)</sup>	-	-	0.047"-0.082"	1.20-2.10
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M1TK6</b> <sup>(1)(2)</sup>	<b>SC16M1TK6</b> <sup>(1)(2)</sup>	-	-	0.125"	3.20
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M11TK6</b> <sup>(1)(2)</sup>	<b>SC16M11TK6</b> <sup>(1)(2)</sup>	-	-	0.118"	3.00
		14	0.098"	2.48	<b>SM14M1TK6</b> <sup>(1)(2)</sup>	<b>SC14M1TK6</b> <sup>(1)(2)</sup>	-	-	0.125"	3.20
PCB	Machined <sup>(3)</sup>	-			<b>RM20M12E83K</b> <sup>(1)</sup>	<b>RC20M12E84K</b> <sup>(1)</sup>	-	-	-	-
Coaxial	Cable multipiece	see pages 130 to 132			<b>RMDXK10D28</b>	<b>RCDXK1D28</b>	-	-	-	-
	Cable monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
	Twisted pair multipiece				<b>RMDXK10D28 + yorx090</b>	<b>RCDXK1D28 + yorx090</b>	-	-	-	-
	Twisted pair monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
Fiber optic	POF contacts (Plastic optical fiber)	-			<b>RMPOF1000</b>	<b>RCPOF1000B</b>	-	-	-	-

(1): Example of plating, for other plating see page 126

(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

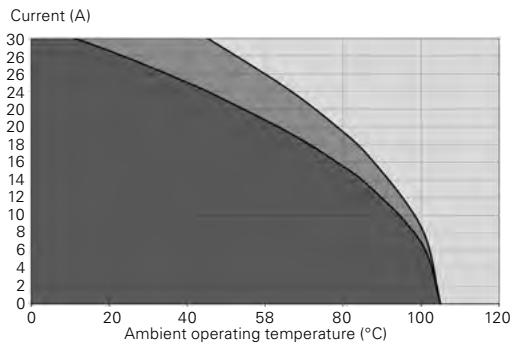
(3): For dimensions see page 133

### Electrical characteristics

UL	CSA	IEC
10A 500V with AWG16 wire	7A 500V with AWG16 wire	16A 300V 4kV 3 temperature elevation: 50°C

Electrical information according to the IEC 61984, with pollution degree IV and overvoltage category III.

### UTSX 103 derating curves



- Current use
- Limited use
- Not recommended use

#### Test conditions

Contact used: machined contacts

Wires used: 16 AWG

Derating curves based on continuous current application.

142G1 (Shell size 14, 2 + ground, 3x#8)

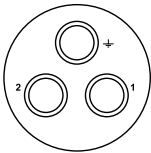
2



**Connector part number**

**UTSX 142G1**

2 contacts + ground  
Up to 44A/600V  
per UL 1977 with  
AWG8 wire



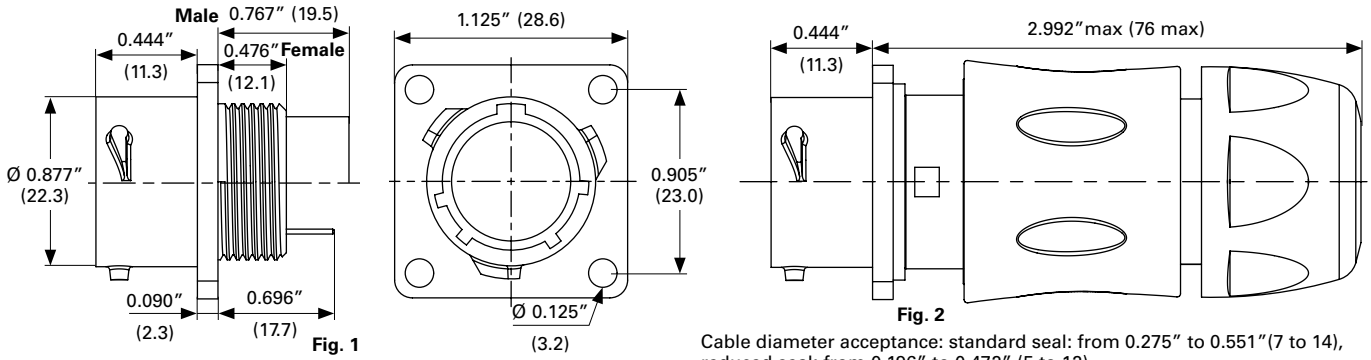
Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 26	Square flange receptacle	Without (Fig. 1)	<b>UTSX0142G1P</b>	<b>UTSX0142G1S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC142G1P</b>	<b>UTSX0JC142G1S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC142G1P</b>	<b>UTSX1JC142G1S</b>
		Plug	Without (Fig. 4)	<b>UTSX6142G1P</b>
	Cable gland (Fig. 5)	<b>UTSX6JC142G1P</b>	<b>UTSX6JC142G1S</b>	
PCB contacts supplied separately see page 26	Jam nut receptacle	Without (Fig. 6)	<b>UTSX7142G1P</b>	<b>UTSX7142G1S</b>
	Jam nut receptacle	Without (Fig. 7)	<b>UTSX7142G1P</b>	<b>UTSX7142G1S</b>

**Overmolded cable assembly part numbers**

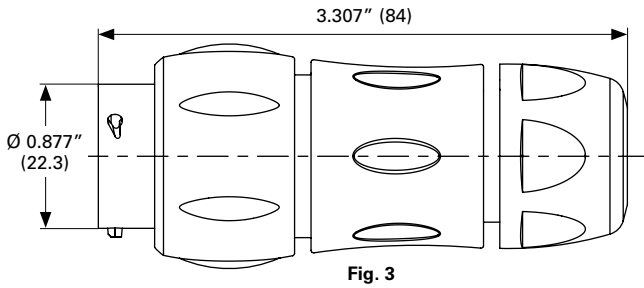
Please contact us directly for overmolded cable assemblies.

### Dimensions (For mated connector lengths see page 142)

#### Square flange receptacle - UTSX0 and UTSX0JC

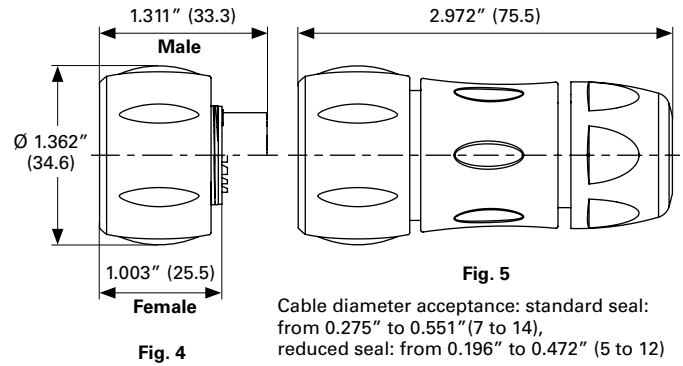


#### Free hanging - UTSX1JC

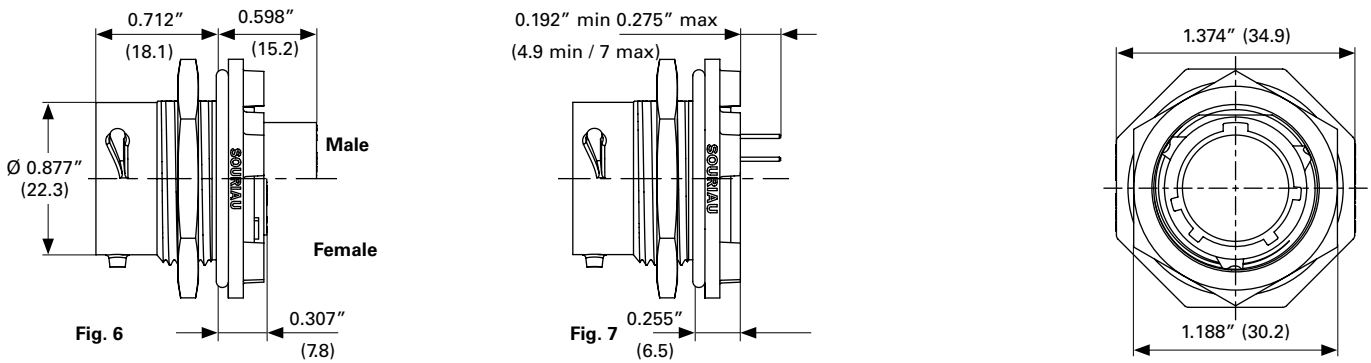


Cable diameter acceptance: standard seal: from 0.275" to 0.551" (7 to 14),  
reduced seal: from 0.196" to 0.472" (5 to 12)

#### Plug - UTSX6 and UTSX6JC

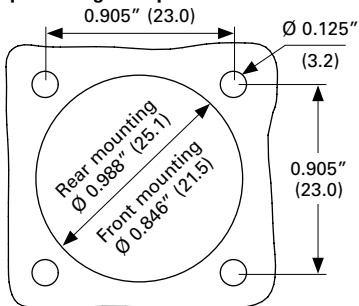


#### Jam nut receptacle UTSX7

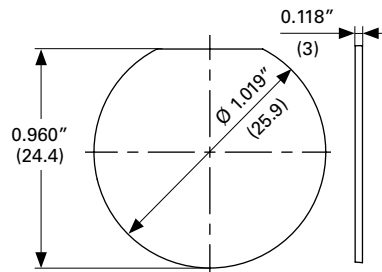


#### Panel cut out

##### Square flange receptacle - UTSX0



##### Jam nut receptacle - UTSX7



Dimensions in inches (millimeters)



142G1 (Shell size 14, 2 + ground, 3x#8)

**Accessories**

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX14DCG
IP68 - Metal terminal	UTGX14DCGR

2

**Plug sealing cap**



Description	Part number
IP68	UTGX614DCG

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005588A	85005597

**Gasket**



Part number
UTFD14B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX714CCRG	UTGX614CCRG
Y for Yellow	UTGX714CCRY	UTGX614CCRY
R for Red	UTGX714CCRR	UTGX614CCRR

# 2

## Connectors

142G1 (Shell size 14, 2 + ground, 3x#8)

### Tooling

2

#### Hand Tool



Description	Part number
Shandle only	M317

#### Positioner + Locator setting #8



Description	Part number
For crimp contacts #8 Ø 0.141" (3.6)	VGE10078A

#### Extraction tool #8



Description	Part number
For crimp contacts #8 Ø 0.141" (3.6)	51060210936

### Contacts #8

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number		Wire Ø max		Insulator Ø max	
					Male	Female	inch	mm	inch	mm
Crimp contacts	Machined	16	0.059"	1.48	82913601A <sup>(1)</sup>	82913600A <sup>(1)</sup>	0.067"	1.72	0.255"	6.5
		14	0.098"	2.48	82913603A <sup>(1)</sup>	82913602A <sup>(1)</sup>	0.087"	2.20		
		12	0.157"	4.00	82913605A <sup>(1)</sup>	82913604A <sup>(1)</sup>	0.111"	2.82		
		10	0.236"	6.00	82913607A <sup>(1)</sup>	82913606A <sup>(1)</sup>	0.137"	3.48		
		8	0.393"	10.00	82913609A <sup>(1)</sup>	82913608A <sup>(1)</sup>	0.171"	4.35		
PCB	Machined <sup>(2)</sup>	–			82911685NPC <sup>(1)</sup>	82911684NPC <sup>(1)</sup>	–	–	–	–

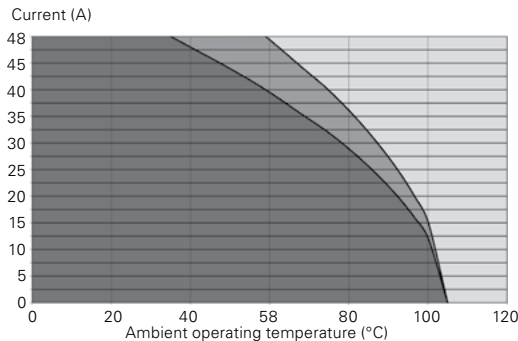
(1): Example of plating, for other plating see page 126

(2): for dimensions see pages 133 or 134

### Electrical characteristics

UL	CSA	IEC
44A 600V with AWG8 wire	34A 600V with AWG8 wire	40A 300V 4kV 3

### UTSX 142G1 derating curves



- Current use
- Limited use
- Not recommended use

#### Test conditions

Contact used: machined contacts

Wires used: 8 AWG

Derating curves based on continuous current application.  
Dimensions in inches (millimeters)

12E3/12D3 (Shell size 12, 3x#16)

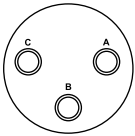


2

### Connector part number

#### UTSX 12E3/12D3

2 contacts  
13A/600V  
per UL 1977  
with AWG16 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Handsolder electrical contacts loaded see page 30	Square flange receptacle	Without (Fig. 1)	<b>UTSX012E3P</b>	<b>UTSX012E3S</b>
	Plug	Without (Fig. 2)	<b>UTSX612E3P</b>	<b>UTSX612E3S</b>
		Cable gland (Fig. 3)	<b>UTSX6JC12E3P</b>	<b>UTSX6JC12E3S</b>
	Jam nut receptacle	Without (Fig. 4)	<b>UTSX712E3P</b>	<b>UTSX712E3S</b>
PCB contacts loaded see page 30	Square flange receptacle	Without (Fig. 2)	<b>UTSX012D3P</b>	<b>UTSX012D3S</b>
	Jam nut receptacle with stand off and without hold down clip	Without (Fig. 5)	<b>UTSX712D3P</b>	<b>UTSX712D3S</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 6)	<b>UTSX712D3P32</b>	<b>UTSX712D3S32</b>

For discrimination/keying methods see page 150

Sealed unmated

#### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.

### Dimensions (For mated connector lengths see page 142)

#### Square flange receptacle - UTSX0

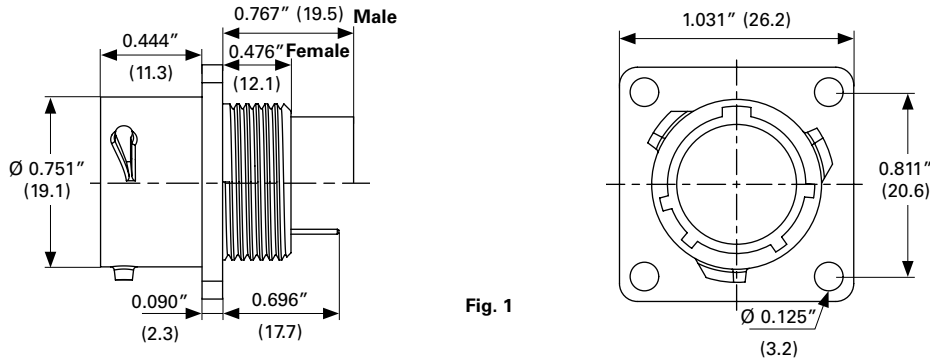


Fig. 1

#### Plug - UTSX6 and UTSX6JC

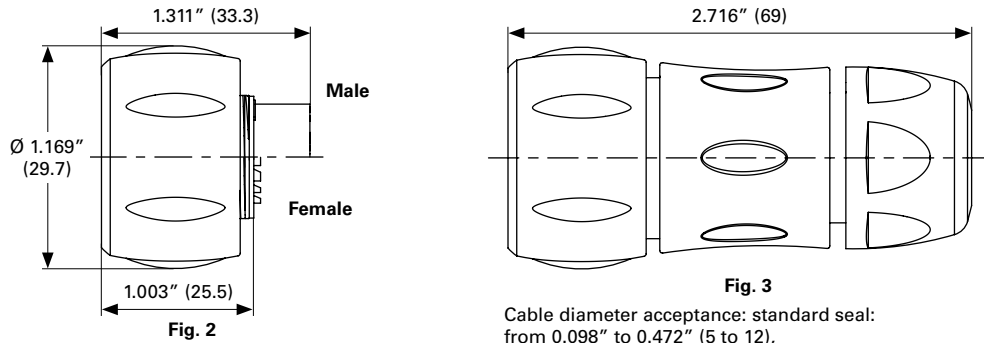


Fig. 3

Cable diameter acceptance: standard seal:  
from 0.098" to 0.472" (5 to 12),  
reduced seal: from 0.118" to 0.354" (3 to 9)

#### Jam nut receptacle UTSX7

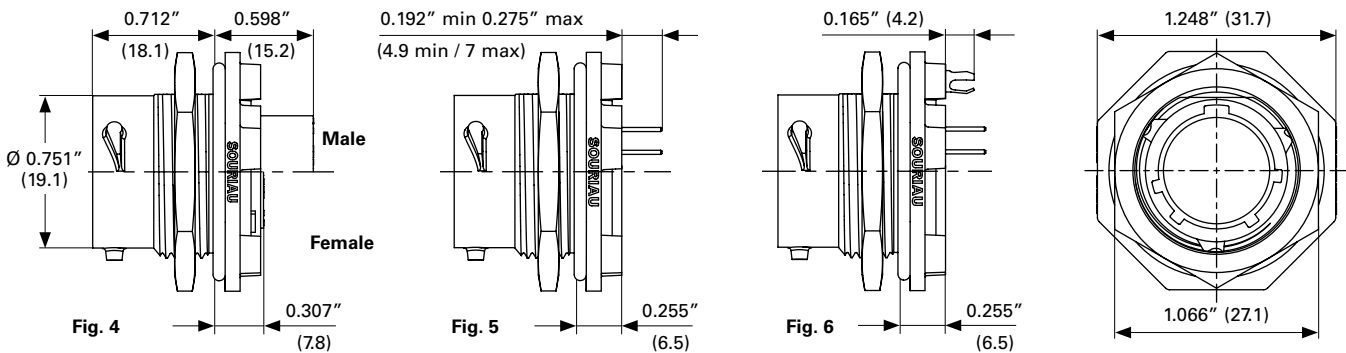


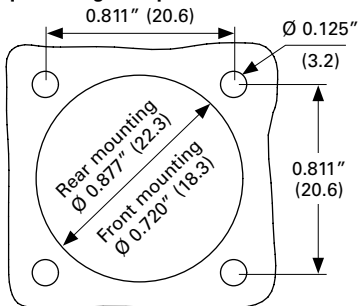
Fig. 4

Fig. 5

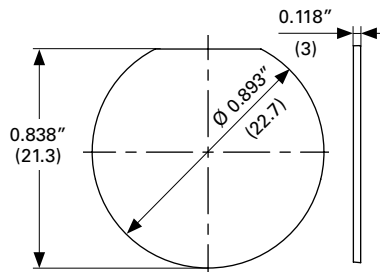
Fig. 6

#### Panel cut out

##### Square flange receptacle - UTSX0



##### Jam nut receptacle - UTSX7



Dimensions in inches (millimeters)

**Accessories**

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX12DCG
IP68 - Metal terminal	UTGX12DCGR

2

**Square flange sealing cap**



Description	Part number
IP68 - Metal terminal	UTGX12DCGE

**Plug sealing cap**



Description	Part number
IP68	UTGX612DCG

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005587A	85005596

**Gasket**



Part number
UTFD13B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX712CCRG	UTGX612CCRG
Y for Yellow	UTGX712CCRY	UTGX612CCRY
R for Red	UTGX712CCRR	UTGX612CCRR

### Contacts #16

2

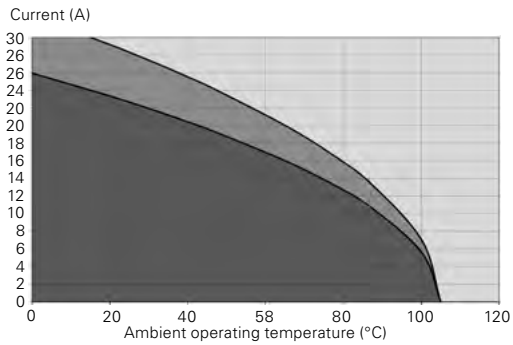
Contact type	Plating	Cable acceptance (AWG)	Cable acceptance		Wire stripping length	
			inch <sup>2</sup>	mm <sup>2</sup>	inch	mm
Hand solder Loaded in the connector	Min 0.4μ gold over 0.8μ Ni	18-14	0.031"-0.098"	0.80-2.48	0.196"	5
PCB Machined <sup>(1)</sup>	Min 0.4μ gold over 0.8μ Ni	—	—	—	—	—

(1): For dimensions see pages 133 or 134

### Electrical characteristics

UL	CSA	IEC
13A 600V with AWG16 wire	13A 600V with AWG16 wire	16A 150V 2.5kV 3

### UTSX 12E3/12D3 derating curves



- Current use
- Limited use
- Not recommended use

#### Test conditions

Contact used: machined contacts

Wires used: 16 AWG

Derating curves based on continuous current application.



124 - 12E4/12D4 (Shell size 12, 3 + ground, 4x#16)



2

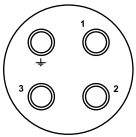
Connector part number

**UTSX 124**

3 contacts + ground  
16A/500V  
per UL 1977  
with AWG14 wire

**12E4/12D4**

3 contacts + ground  
13A/600V  
per UL 1977  
with AWG16 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 35	Square flange receptacle	Without (Fig. 1)	<b>UTSX0124P</b>	<b>UTSX0124S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC124P</b>	<b>UTSX0JC124S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC124P</b>	<b>UTSX1JC124S</b>
	Plug	Without (Fig. 4)	<b>UTSX6124P</b>	<b>UTSX6124S</b>
		Cable gland (Fig. 5)	<b>UTSX6JC124P</b>	<b>UTSX6JC124S</b>
	Jam nut receptacle	Without (Fig. 6)	<b>UTSX7124P</b>	<b>UTSX7124S</b>
Screw contacts loaded	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC124PSCR</b>	<b>UTSX1JC124SSCR</b>
	Plug	Cable gland (Fig. 5)	<b>UTSX6JC124PSCR</b>	<b>UTSX6JC124SSCR</b>
	Jam nut receptacle	Without (Fig. 9)	<b>UTSX7124PSCR</b>	<b>UTSX7124SSCR</b>
PCB contacts supplied separately see page 35	Square flange receptacle	Without (Fig. 1)	<b>UTSX0124P</b>	<b>UTSX0124S</b>
	Jam nut receptacle	Without (Fig. 7)	<b>UTSX7124P</b>	<b>UTSX7124S</b>
Handsolder electrical contacts loaded see page 35	Square flange receptacle	Without (Fig. 1)	<b>UTSX012E4P</b>	<b>UTSX012E4S</b>
	Plug	Without (Fig. 4)	<b>UTSX612E4P</b>	<b>UTSX612E4S</b>
		Cable gland (Fig. 5)	<b>UTSX6JC12E4P</b>	<b>UTSX6JC12E4S</b>
	Jam nut receptacle	Without (Fig. 6)	<b>UTSX712E4P</b>	<b>UTSX712E4S</b>
PCB contacts loaded	Square flange receptacle	Without (Fig. 3)	<b>UTSX012D4P</b>	<b>UTSX012D4S</b>
	Jam nut receptacle with stand off and without hold down clip	Without (Fig.7)	<b>UTSX712D4P</b>	<b>UTSX712D4S</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 8)	<b>UTSX712D4P32</b>	<b>UTSX712D4S32</b>

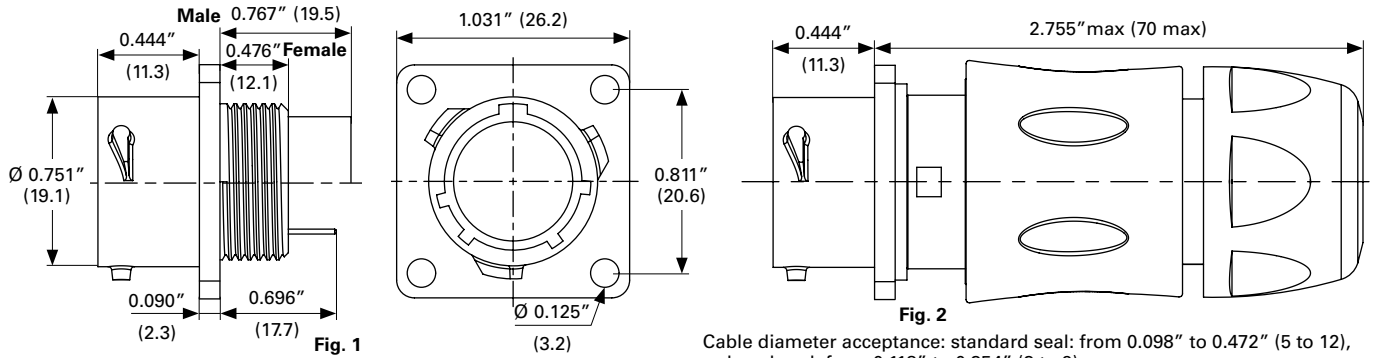
Sealed unmatd

Overmolded cable assembly part numbers

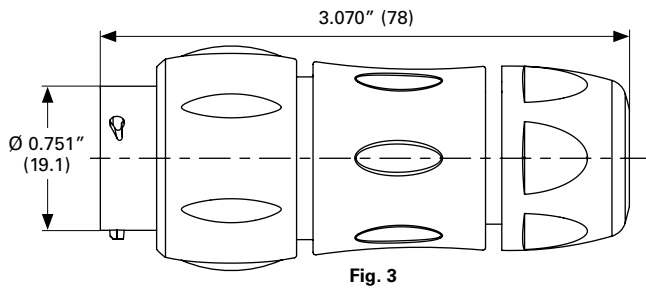
Please contact us directly for overmolded cable assemblies.

### Dimensions (For mated connector lengths see page 142)

#### Square flange receptacle - UTSX0 and UTSX0JC

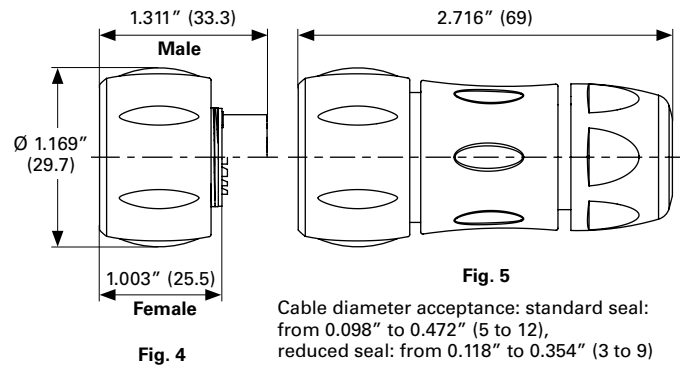


#### Free hanging - UTSX1JC

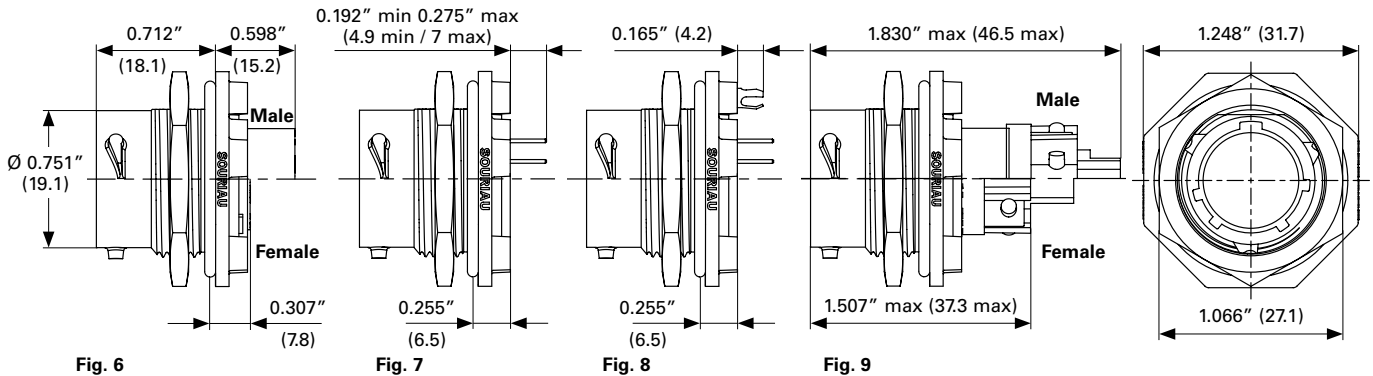


Cable diameter acceptance: standard seal: from 0.098" to 0.472" (5 to 12), reduced seal: from 0.118" to 0.354" (3 to 9)

#### Plug - UTSX6 and UTSX6JC

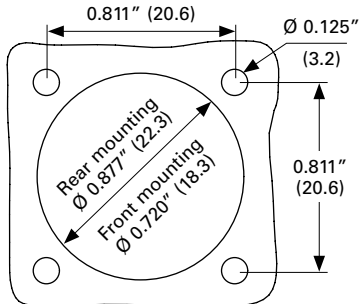


#### Jam nut receptacle UTSX7

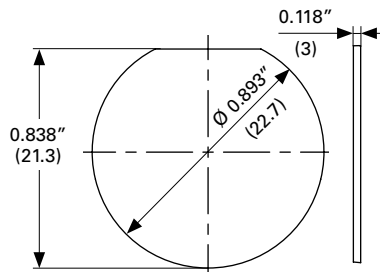


#### Panel cut out

##### Square flange receptacle - UTSX0



##### Jam nut receptacle - UTSX7



Dimensions in inches (millimeters)

124 - 12E4/12D4 (Shell size 12, 3 + ground, 4x#16)

## Accessories

### Jam nut and free hanging receptacle sealing caps



Description	Part number
IP68	UTGX12DCG
IP68 - Metal terminal	UTGX12DCGR

2

### Square flange sealing cap



Description	Part number
IP68 - Metal terminal	UTGX12DCGE

### Plug sealing cap



Description	Part number
IP68	UTGX612DCG

### Plastic protective cap



Part number receptacle cap	Part number plug cap
85005587A	85005596

### Gasket



Part number
UTFD13B

### Color coding rings



Description	Part number receptacles	Part number plugs
G for Green	UTGX712CCRG	UTGX612CCRG
Y for Yellow	UTGX712CCRY	UTGX612CCRY
R for Red	UTGX712CCRR	UTGX612CCRR

# 2

## Connectors

124 - 12E4/12D4 (Shell size 12, 3 + ground, 4x#16)

### Tooling

2

#### Tooling



Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

#### Crimp tooling (without Shandles)



Contact size	Contacts	Part number of Head
Standard contacts #16 Ø 0.062" (1.6)	<b>RM/RC 28M1K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 24M9K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M13K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M12K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 16M23K<sup>(1)</sup></b>	<b>S16RCM16*</b>
	<b>RM/RC 14M30K<sup>(1)</sup></b>	<b>S16RCM14*</b>
	<b>SM/SC 24ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 20ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 16ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 14ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 16ML11TK6<sup>(1)</sup></b>	<b>S16SCML11*</b>

(1): Example of plating, for other plating options see page 126

\* Heads to be used with handle PN: SHANDLES

#### Extraction tool #16

Fig. 1



Fig. 2



Description	Part number
<b>Fig. 1</b>	<b>RX2025GE1</b>
<b>Fig. 2 - Long endurance tool</b>	<b>RX2031J</b>

## 124 - 12E4/12D4 (Shell size 12, 3 + ground, 4x#16)

## Contacts #16

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø max inch	Wire Ø max mm	Insulator Ø max inch	Insulator Ø max mm
Crimp contacts	Machined	30-28	0.002"-0.003"	0.05-0.08	<b>RM28M1K</b> <sup>(1)</sup>	<b>RC28M1K</b> <sup>(1)</sup>	0.021"	0.55	0.039"	1.00
		26-24	0.005"-0.009"	0.13-0.25	<b>RM24M9K</b> <sup>(1)</sup>	<b>RC24M9K</b> <sup>(1)</sup>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M13K</b> <sup>(1)</sup>	<b>RC20M13K</b> <sup>(1)</sup>	0.045"	1.15	0.070"	1.80
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M12K</b> <sup>(1)</sup>	<b>RC20M12K</b> <sup>(1)</sup>	0.045"	1.15	0.086"	2.20
		20-16	0.020"-0.059"	0.52-1.48	<b>RM16M23K</b> <sup>(1)</sup>	<b>RC16M23K</b> <sup>(1)</sup>	0.070"	1.80	0.125"	3.20
		16-14	0.059"-0.098"	1.48-2.48	<b>RM14M30K</b> <sup>(1)</sup>	<b>RC14M30K</b> <sup>(1)</sup>	0.090"	2.30	0.125"	3.20
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6</b> <sup>(1)(2)</sup>	<b>SC24M1TK6</b> <sup>(1)(2)</sup>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM20M1TK6</b> <sup>(1)(2)</sup>	<b>SC20M1TK6</b> <sup>(1)(2)</sup>	-	-	0.047"-0.082"	1.20-2.10
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M1TK6</b> <sup>(1)(2)</sup>	<b>SC16M1TK6</b> <sup>(1)(2)</sup>	-	-	0.125"	3.20
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M11TK6</b> <sup>(1)(2)</sup>	<b>SC16M11TK6</b> <sup>(1)(2)</sup>	-	-	0.118"	3.00
		14	0.098"	2.48	<b>SM14M1TK6</b> <sup>(1)(2)</sup>	<b>SC14M1TK6</b> <sup>(1)(2)</sup>	-	-	0.125"	3.20
PCB	Machined <sup>(3)</sup>	-			<b>RM20M12E83K</b> <sup>(1)</sup>	<b>RC20M12E84K</b> <sup>(1)</sup>	-	-	-	-
Coaxial	Cable multipiece	see pages 130 to 132			<b>RMDXK10D28</b>	<b>RCDXK1D28</b>	-	-	-	-
	Cable monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
	Twisted pair multipiece				<b>RMDXK10D28 + yox090</b>	<b>RCDXK1D28 + yox090</b>	-	-	-	-
	Twisted pair monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
Fiber optic	POF contacts (Plastic optical fiber)	-			<b>RMPOF1000</b>	<b>RCPOF1000B</b>	-	-	-	-
Hand solder	Loaded in the connector	14-18	0.098"-0.031"	2.48-0.80	-	-	-	-	-	-

(1): Example of plating, for other plating see page 126

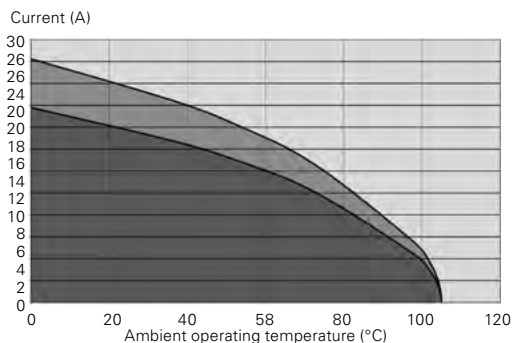
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

(3): For dimensions see page 133

## Electrical characteristics

UL	CSA	IEC
UTSX 124		
16A 500V with AWG14 wire	16A 500V with AWG14 wire	16A 150V 2.5kV 3 temperature elevation: 50°C
UTSX 12E4/12D4		
13A 600V with AWG16 wire	13A 600V with AWG16 wire	16A 150V 2.5kV 3 temperature elevation: 50°C

## UTSX 124 - 12E4/12D4 derating curves



■ Current use  
 ■ Limited use  
 □ Not recommended use

## Test conditions

Contact used: machined contacts

Wires used: 16 AWG

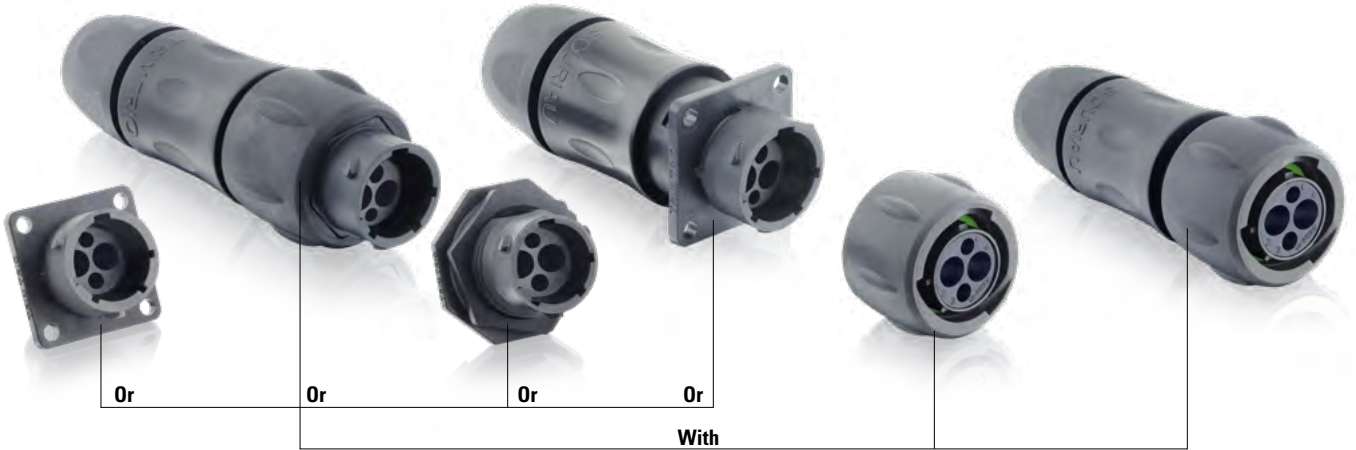
Derating curves based on continuous current application.

# 2

## Connectors

102W2 (Shell size 10, 2x#20, 2x12)

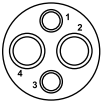
2



### Connector part number

#### UTSX 102W2

4 contacts  
26A/600V per UL1977 with  
AWG12 wire  
7.5A/250V per UL1977 with  
AWG20 wire  
(qualification pending)

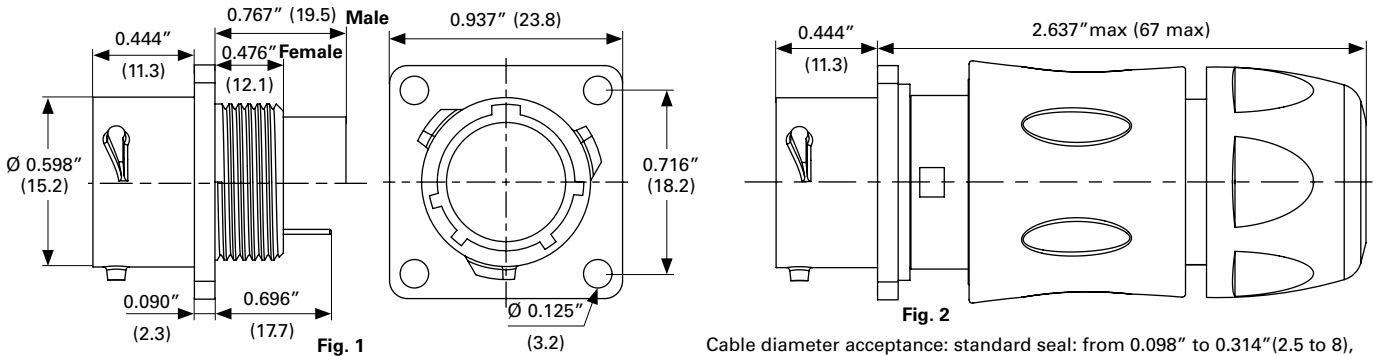


Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 40	Square flange receptacle	Without (Fig. 1)	<b>UTSX0102W2P</b>	<b>UTSX0102W2S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC102W2P</b>	<b>UTSX0JC102W2S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC102W2P</b>	<b>UTSX1JC102W2S</b>
		Plug	Without (Fig. 4)	<b>UTSX6102W2P</b>
	Plug	Cable gland (Fig. 5)	<b>UTSX6JC102W2P</b>	<b>UTSX6JC102W2S</b>
		Jam nut receptacle	Without (Fig. 6)	<b>UTSX7102W2P</b>

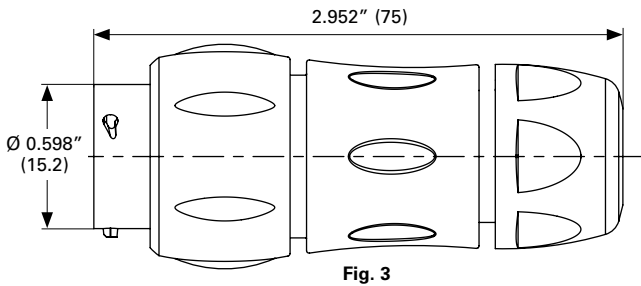


## Dimensions (For mated connector lengths see page 142)

### Square flange receptacle - UTSX0 and UTSX0JC

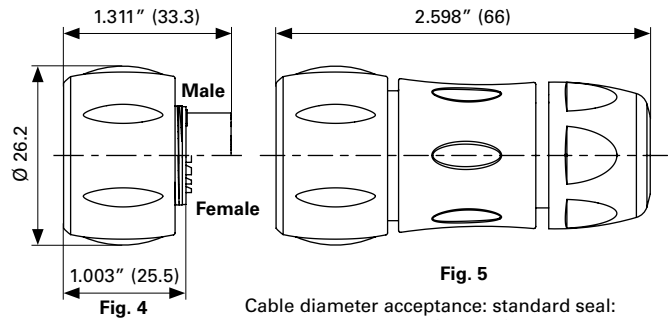


### Free hanging - UTSX1JC



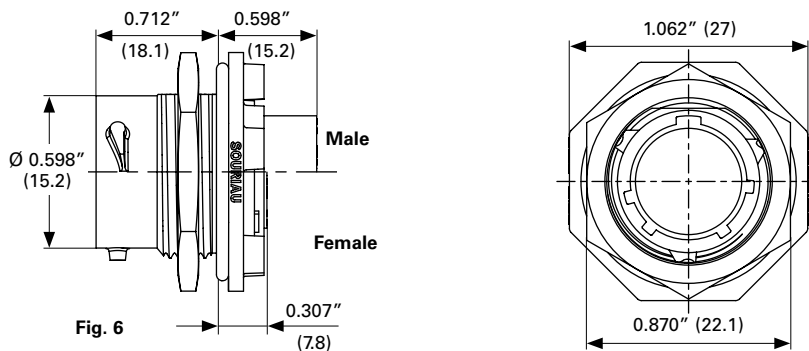
Cable diameter acceptance: standard seal: from 0.098" to 0.314" (2.5 to 8), reduced seal: from 0.059" to 0.196" (1.5 to 5)

### Plug - UTSX6 and UTSX6JC



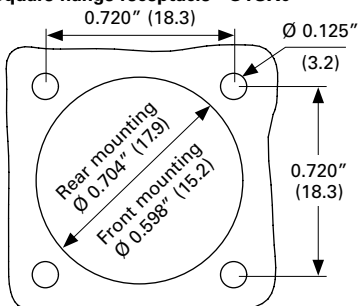
Cable diameter acceptance: standard seal: from 0.098" to 0.314" (2.5 to 8), reduced seal: from 0.059" to 0.196" (1.5 to 5)

### Jam nut receptacle UTSX7

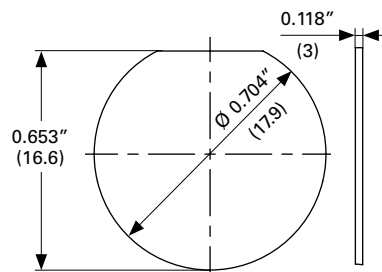


### Panel cut out

#### Square flange receptacle - UTSX0



#### Jam nut receptacle - UTSX7



# 2

## Connectors

102W2 (Shell size 10, 2x#20, 2x12)

### Accessories

2

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX10DCG
IP68 - Metal terminal	UTGX10DCGR

**Plug sealing cap**



Description	Part number
IP68	UTGX610DCG

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005586A	85005595

**Gasket**



Part number
UTFD12B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX710CCRG	UTGX610CCRG
Y for Yellow	UTGX710CCRY	UTGX610CCRY
R for Red	UTGX710CCRR	UTGX610CCRR

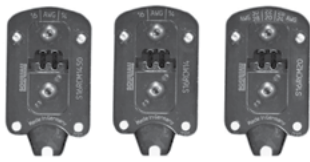
## Tooling

### Tooling



Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

### Crimp tooling (without Shandles)

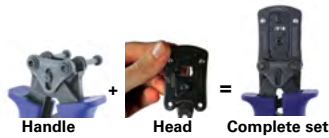


Contact size	Contacts	Part number of Head
Standard contacts #20 Ø 0.039" (1)	<b>RM/RC 24W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>RM/RC 20W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>RM/RC 18W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>SM/SC 24WL3<sup>(1)(2)</sup></b>	<b>S20SCM20*</b>
	<b>SM/SC 20WL3<sup>(1)(2)</sup></b>	<b>S20SCM20*</b>

(1): Example of plating, for other plating options see page 126

(2): Loose contact

\* Heads to be used with handle PN: SHANGLES



### Crimp tooling #12



Contact size	Part number hand tool	Part number positioner + locator setting
Standard contacts #12 Ø 0.094" (2.4)	<b>M317</b>	<b>VGE10077A</b>

### Extraction tool



Description	Part number
<b>Fig. 1</b> - Contacts #20 Ø 0.039" (1)	<b>RX20D44</b>
<b>Fig. 2</b> - Contacts #12 Ø 0.094" (2.4)	<b>51060210924</b>



### Contacts #20

2

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø max inch	Wire Ø max mm	Insulator Ø max inch	Insulator Ø max mm
Crimp contacts	Machined	26-24	0.005"-0.009"	0.13-0.25	<b>RM24W3K</b>	<b>RC24W3K</b>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20W3K</b>	<b>RC20W3K</b>	0.045"	1.15	0.070"	1.80
		20-18	0.020"-0.031"	0.52-0.80	<b>RM18W3K</b>	<b>RC18W3K</b>	0.051"	1.30	0.082"	2.10
Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece		26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6<sup>(1)(2)</sup></b>	<b>SC24M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		26-24	0.005"-0.009"	0.13-0.25	<b>SM20M1TK6<sup>(1)(2)</sup></b>	<b>SC20M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM16M1TK6<sup>(1)(2)</sup></b>	<b>SC16M1TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10
		22-20	0.012"-0.020"	0.32-0.52	<b>SM16M11TK6<sup>(1)(2)</sup></b>	<b>SC16M11TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10

(1): Example of plating, for other plating see page 126

(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20W3TK6 becomes SM20WL3TK6

### Contacts #12

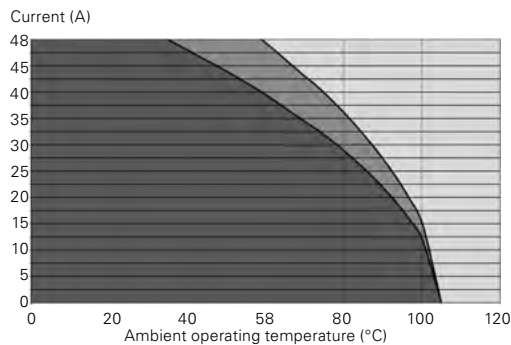
Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø max inch	Wire Ø max mm	Insulator Ø max inch	Insulator Ø max mm
Crimp contacts	Machined	20	0.020"	0.52	<b>82911457NA</b>	<b>82911456A</b>	0.034"	0.87	0.192"	4.90
		20	0.020"	0.52	<b>82911459NA</b>	<b>82911458A</b>	0.044"	1.12		
		18	0.031"	0.80	<b>82911461NA</b>	<b>82911460A</b>	0.055"	1.42		
		16	0.059"	1.48	<b>82911463NA</b>	<b>82911462A</b>	0.067"	1.72		
		14	0.098"	2.48	<b>82911465NA</b>	<b>82911464A</b>	0.087"	2.20		
		12	0.157"	4.00	<b>82911467NA</b>	<b>82911466A</b>	0.111"	2.82		

### Electrical characteristics

UL	CSA	IEC
26A 600V with AWG12* 7.5A 250V with AWG20*	20A 600V with AWG12* 2.5A 250V with AWG20*	25A 150V 2.5kV 3 temperature elevation: 50°C

\* qualification pending

### UTSX 102W2 derating curves



- Current use
- Limited use
- Not recommended use

#### Test conditions

Contact used: machined contacts

Wires used: 20 AWG

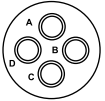
Derating curves based on continuous current application.



## Connector part number

### UTSX 104

4 contacts  
10A/500V  
per UL 1977 with  
AWG16 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 45	Square flange receptacle	Without (Fig. 1)	<b>UTSX0104P</b>	<b>UTSX0104S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC104P</b>	<b>UTSX0JC104S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC104P</b>	<b>UTSX1JC104S</b>
		Cable gland and grommet(Fig. 3)	<b>UTSX1GJC104P</b>	–
	Plug	Without (Fig. 4)	<b>UTSX6104P</b>	<b>UTSX6104S</b>
		Cable gland (Fig. 5)	<b>UTSX6JC104P</b>	<b>UTSX6JC104S</b>
Cable gland and grommet(Fig. 5)		–	<b>UTSX6GJC104S</b>	
Jam nut receptacle	Without (Fig. 6)	<b>UTSX7104P</b>	<b>UTSX7104S</b>	
	Cable gland and grommet (Fig. 8)	<b>UTSX7GJC104P</b>	–	
PCB contacts supplied separately see page 45	Jam nut receptacle	Without (Fig. 7)	<b>UTSX7104P</b>	<b>UTSX7104S</b>

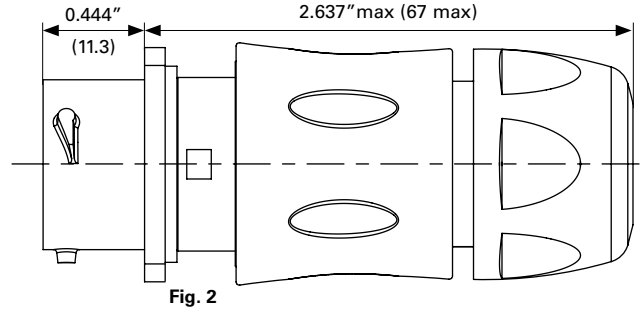
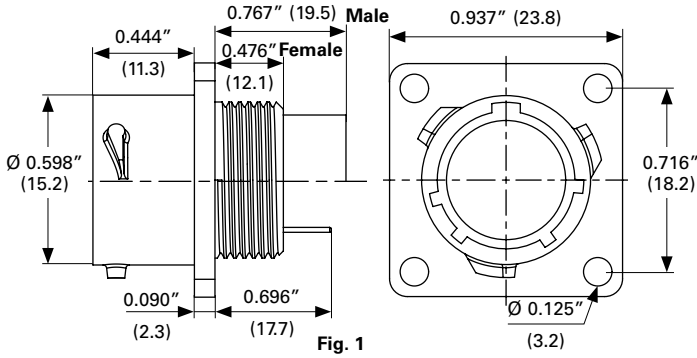
For discrimination/keying methods see page 150

### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.

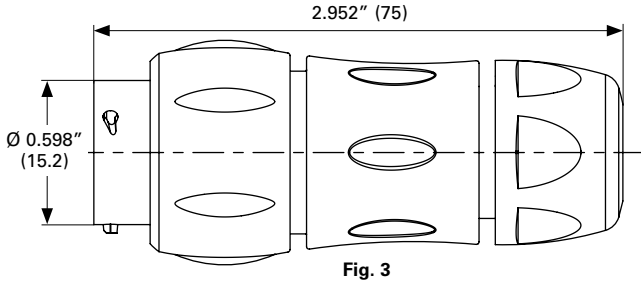
### Dimensions (For mated connector lengths see page 142)

#### Square flange receptacle - UTSX0 and UTSX0JC



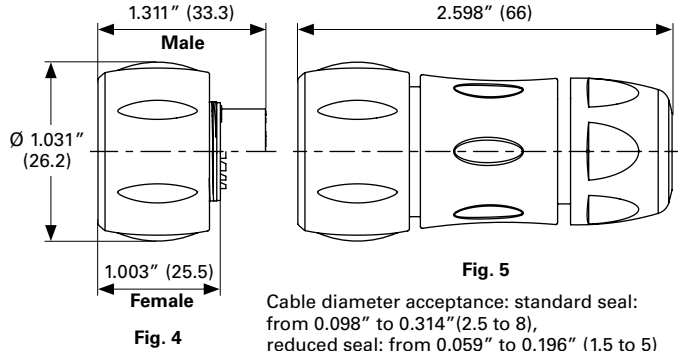
Cable diameter acceptance: standard seal: from 0.098" to 0.314" (2.5 to 8),  
reduced seal: from 0.059" to 0.196" (1.5 to 5)

#### Free hanging - UTSX1JC and UTSX1GJC



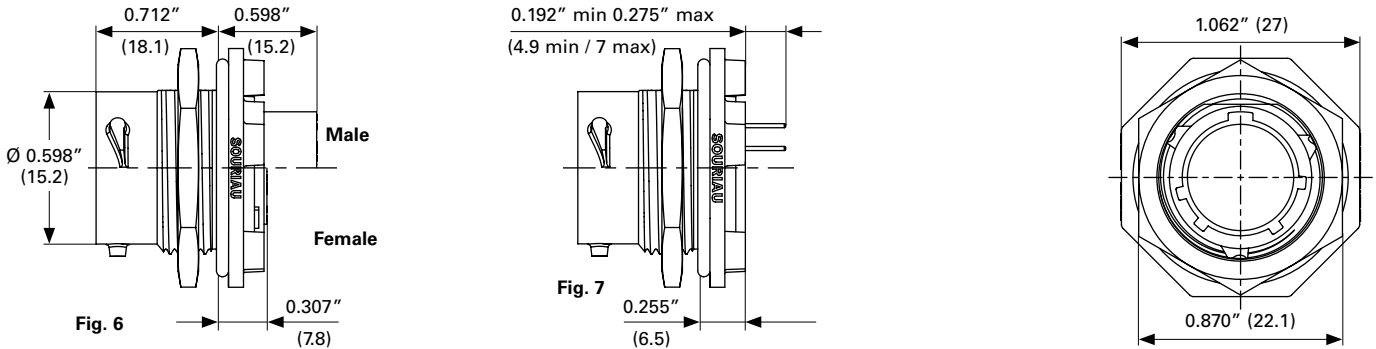
Cable diameter acceptance: standard seal: from 0.098" to 0.314" (2.5 to 8),  
reduced seal: from 0.059" to 0.196" (1.5 to 5)

#### Plug - UTSX6, UTSX6JC and UTSX6GJC



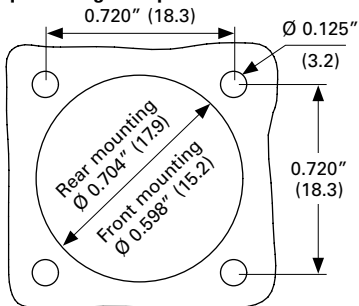
Cable diameter acceptance: standard seal:  
from 0.098" to 0.314" (2.5 to 8),  
reduced seal: from 0.059" to 0.196" (1.5 to 5)

#### Jam nut receptacle UTSX7 and UTSX7GJC

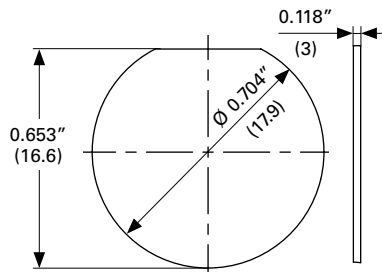


#### Panel cut out

##### Square flange receptacle - UTSX0



##### Jam nut receptacle - UTSX7



Dimensions in inches (millimeters)



**Accessories**

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX10DCG
IP68 - Metal terminal	UTGX10DCGR

**Square flange sealing cap**



Description	Part number
IP68 - Metal terminal	UTGX10DCGE

**Plug sealing cap**



Description	Part number
IP68	UTGX610DCG

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005586A	85005595

**Gasket**



Part number
UTFD12B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX710CCRG	UTGX610CCRG
Y for Yellow	UTGX710CCRY	UTGX610CCRY
R for Red	UTGX710CCRR	UTGX610CCRR

# 2

## Connectors

104 (Shell size 10, 4x#16)

### Tooling

2

#### Tooling



Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

#### Crimp tooling (without Shandles)



Contact size	Contacts	Part number of Head
Standard contacts #16 Ø 0.062" (1.6)	<b>RM/RC 28M1K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 24M9K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M13K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M12K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 16M23K<sup>(1)</sup></b>	<b>S16RCM16*</b>
	<b>RM/RC 14M30K<sup>(1)</sup></b>	<b>S16RCM14*</b>
	<b>SM/SC 24ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 20ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 16ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 14ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 16ML11TK6<sup>(1)</sup></b>	<b>S16SCML11*</b>

(1): Example of plating, for other plating options see page 126

\* Heads to be used with handle PN: SHANDLES

#### Extraction tool #16

Fig. 1



Fig. 2



Description	Part number
<b>Fig. 1</b>	<b>RX2025GE1</b>
<b>Fig. 2 - Long endurance tool</b>	<b>RX2031J</b>

## Contacts #16

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number		Wire Ø		Insulator Ø	
					Male	Female	inch	mm	inch	mm
Crimp contacts	Machined	30-28	0.002"-0.003"	0.05-0.08	<b>RM28M1K<sup>(1)</sup></b>	<b>RC28M1K<sup>(1)</sup></b>	0.021"	0.55	0.039"	1.00
		26-24	0.005"-0.009"	0.13-0.25	<b>RM24M9K<sup>(1)</sup></b>	<b>RC24M9K<sup>(1)</sup></b>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M13K<sup>(1)</sup></b>	<b>RC20M13K<sup>(1)</sup></b>	0.045"	1.15	0.070"	1.80
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M12K<sup>(1)</sup></b>	<b>RC20M12K<sup>(1)</sup></b>	0.045"	1.15	0.086"	2.20
		20-16	0.020"-0.059"	0.52-1.48	<b>RM16M23K<sup>(1)</sup></b>	<b>RC16M23K<sup>(1)</sup></b>	0.070"	1.80	0.125"	3.20
		16-14	0.059"-0.098"	1.48-2.48	<b>RM14M30K<sup>(1)</sup></b>	<b>RC14M30K<sup>(1)</sup></b>	0.090"	2.30	0.125"	3.20
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6<sup>(1)(2)</sup></b>	<b>SC24M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM20M1TK6<sup>(1)(2)</sup></b>	<b>SC20M1TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M1TK6<sup>(1)(2)</sup></b>	<b>SC16M1TK6<sup>(1)(2)</sup></b>	-	-	0.125"	3.20
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M11TK6<sup>(1)(2)</sup></b>	<b>SC16M11TK6<sup>(1)(2)</sup></b>	-	-	0.118"	3.00
	14	0.098"	2.48	<b>SM14M1TK6<sup>(1)(2)</sup></b>	<b>SC14M1TK6<sup>(1)(2)</sup></b>	-	-	0.125"	3.20	
PCB	Machined <sup>(3)</sup>	-			<b>RM20M12E83K<sup>(1)</sup></b>	<b>RC20M12E84K<sup>(1)</sup></b>	-	-	-	-
Coaxial	Cable multipiece	see pages 130 to 132			<b>RMDXK10D28</b>	<b>RCDXK1D28</b>	-	-	-	-
	Cable monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
	Twisted pair multipiece				<b>RMDXK10D28 + yorex090</b>	<b>RCDXK1D28 + yorex090</b>	-	-	-	-
	Twisted pair monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
Fiber optic	POF contacts (Plastic optical fiber)	-			<b>RMPDF1000</b>	<b>RCPOF1000B</b>	-	-	-	-

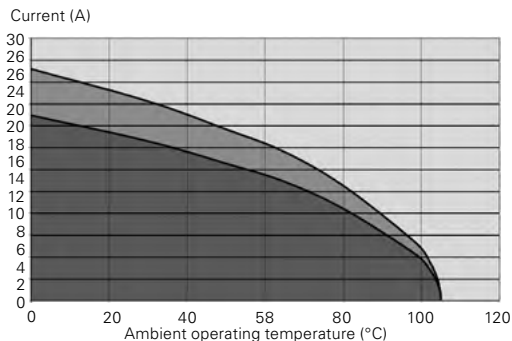
(1): Example of plating, for other plating see page 126  
 (3): for dimensions see pages 133 or 134

(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

## Electrical characteristics

UL	CSA	IEC
10A 500V with AWG16 wire	7A 500V with AWG16 wire	13A 150V 2.5kV 3

## UTSX 104 derating curves



Derating curves based on continuous current application.

■ Current use  
 ■ Limited use  
 ■ Not recommended use

## Test conditions

Contact used: machined contacts

Wires used: 16 AWG

# 2

## Connectors

14E5/14D5 (Shell size 14, 5x#16)

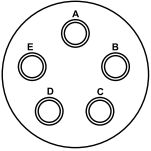
2



### Connector part number

#### UTSX 14E5/14D5

5 contacts  
12A/600V  
per UL 1977  
with AWG16 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Handsolder electrical contacts loaded see page 49	Square flange receptacle	Without (Fig. 1)	<b>UTSX014E5P</b>	<b>UTSX014E5S</b>
	Plug	Without (Fig. 2)	<b>UTSX614E5P</b>	<b>UTSX614E5S</b>
		Cable gland (Fig. 3)	<b>UTSX6JC14E5P</b>	<b>UTSX6JC14E5S</b>
PCB contacts loaded see page 49	Jam nut receptacle	Without (Fig. 4)	<b>UTSX714E5P</b>	<b>UTSX714E5S</b>
	Square flange receptacle	Without (Fig. 2)	<b>UTSX014D5P</b>	<b>UTSX014D5S</b>
	Jam nut receptacle with stand off and without hold down clip	Without (Fig. 5)	<b>UTSX714D5P</b>	<b>UTSX714D5S</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 6)	<b>UTSX714D5P32</b>	<b>UTSX714D5S32</b>

For discrimination/keying methods see page 150

Sealed unmated

### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.

**Dimensions** (For mated connector lengths see page 142)

**Square flange receptacle - UTSX0**

2

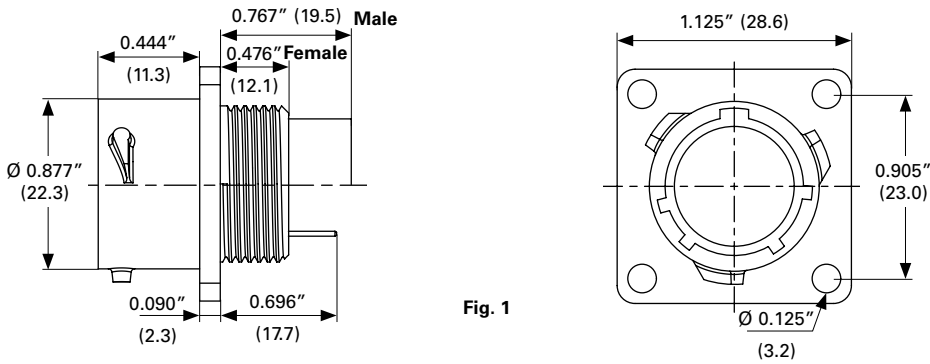


Fig. 1

**Plug - UTSX6 and UTSX6JC**

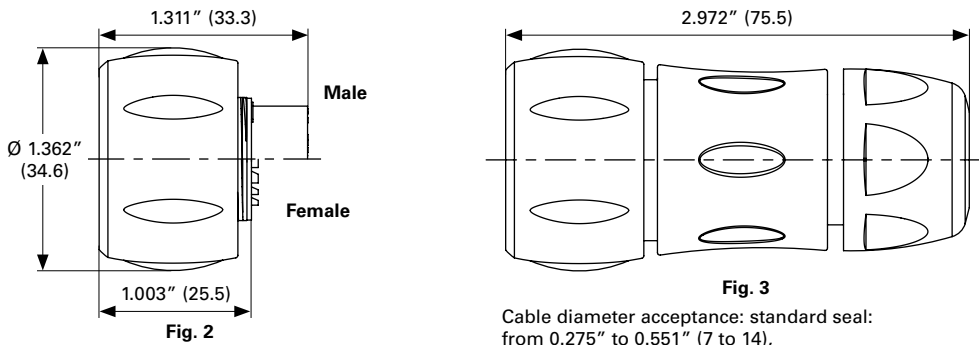
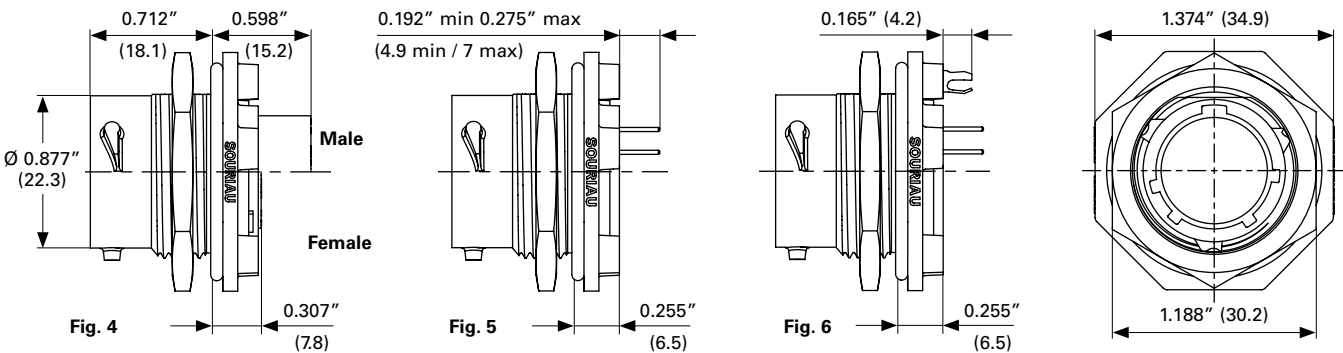


Fig. 3

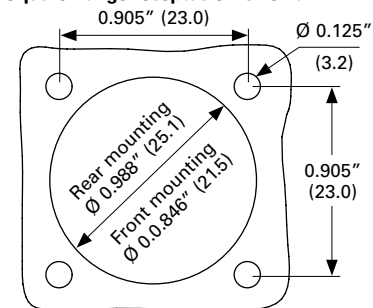
Cable diameter acceptance: standard seal:  
from 0.275" to 0.551" (7 to 14),  
reduced seal: from 0.196" to 0.472" (5 to 12)

**Jam nut receptacle UTSX7**

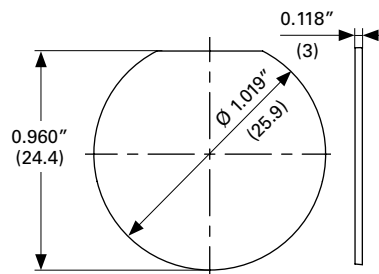


**Panel cut out**

**Square flange receptacle - UTSX0**



**Jam nut receptacle - UTSX7**



Dimensions in inches (millimeters)

# 2

## Connectors

14E5/14D5 (Shell size 14, 5x#16)

### Accessories

2

#### Jam nut and free hanging receptacle sealing caps



Description	Part number
IP68	UTGX14DCG
IP68 - Metal terminal	UTGX14DCGR

#### Square flange sealing cap



Description	Part number
IP68 - Metal terminal	UTGX14DCGE

#### Plug sealing cap



Description	Part number
IP68	UTS614DCG133

#### Plastic protective cap



Part number receptacle cap	Part number plug cap
85005588A	85005597

#### Gasket



Part number
UTFD14B

#### Color coding rings



Description	Part number receptacles	Part number plugs
G for Green	UTGX714CCRG	UTGX614CCRG
Y for Yellow	UTGX714CCRY	UTGX614CCRY
R for Red	UTGX714CCRR	UTGX614CCRR



**Contacts**

Contact size	Contact type	Plating	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Wire stripping length inch	Wire stripping length mm
#16	Hand solder Loaded in the connector	Min 0.4μ gold over 0.8μ Ni	18 - 14	0.031"-0.098"	0.80 - 2.48	0.196"	5
	PCB Machined (1)	Min 0.4μ gold over 0.8μ Ni	-	-	-	-	-

(1): For dimensions see pages 133 or 134

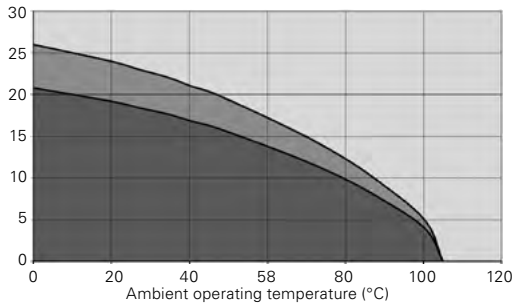
2

**Electrical characteristics**

UL	CSA	IEC
12A 600V with AWG16 wire	12A 600V with AWG16 wire	16A 150V 2.5kV 3

**UTSX 14E5/14D5 derating curves**

Current (A)



- Current use
- Limited use
- Not recommended use

**Test conditions**

Contact used: machined contacts

Wires used: 16 AWG

Derating curves based on continuous current application.

# 2

## Connectors

103W3 (Shell size 10, 3x#20, 3x16)

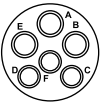
2



### Connector part number

#### UTSX 103W3

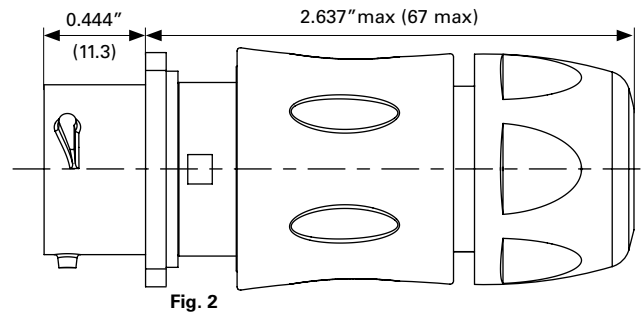
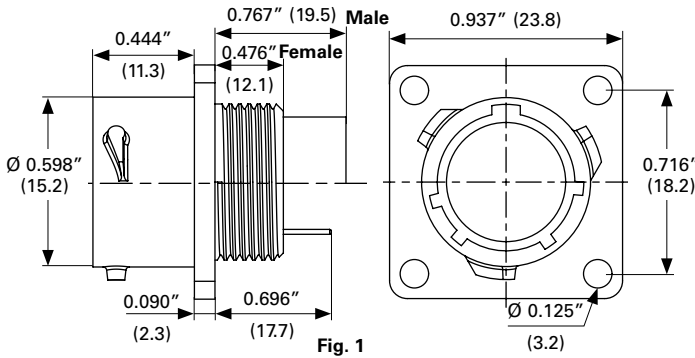
6 contacts  
13A/500V per UL1977 with  
AWG16 wire  
7.5A/250V per UL1977 with  
AWG20 wire  
(qualification pending)



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 54	Square flange receptacle	Without (Fig. 1)	<b>UTSX0103W3P</b>	<b>UTSX0103W3S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC103P</b>	<b>UTSX0JC103S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC103W3P</b>	<b>UTSX1JC103W3S</b>
		Plug	Without (Fig. 4)	<b>UTSX6103W3P</b>
	Plug	Cable gland (Fig. 5)	<b>UTSX6JC103W3P</b>	<b>UTSX6JC103W3S</b>
PCB contacts supplied separately see page 54	Jam nut receptacle	Without (Fig. 6)	<b>UTSX7103W3P</b>	<b>UTSX7103W3S</b>
		Without (Fig. 7)	<b>UTSX7103W3P</b>	<b>UTSX7103W3S</b>

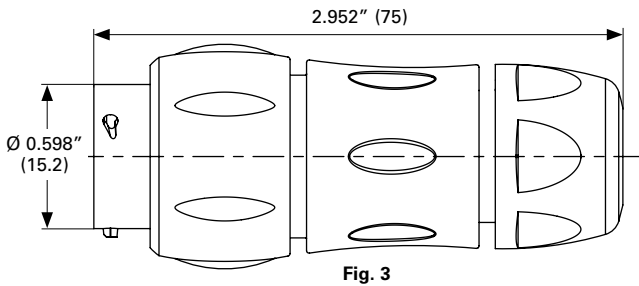
## Dimensions (For mated connector lengths see page 142)

### Square flange receptacle - UTSX0 and UTSX0JC



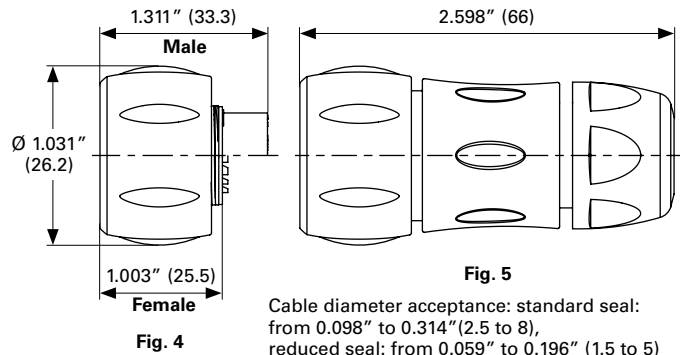
Cable diameter acceptance: standard seal: from 0.098" to 0.314" (2.5 to 8), reduced seal: from 0.059" to 0.196" (1.5 to 5)

### Free hanging - UTSX1JC



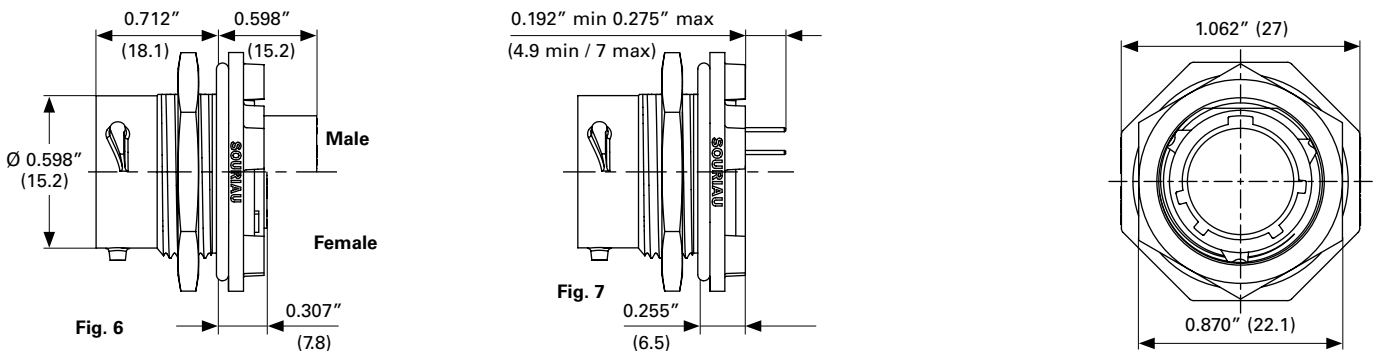
Cable diameter acceptance: standard seal: from 0.098" to 0.314" (2.5 to 8), reduced seal: from 0.059" to 0.196" (1.5 to 5)

### Plug - UTSX6 and UTSX6JC



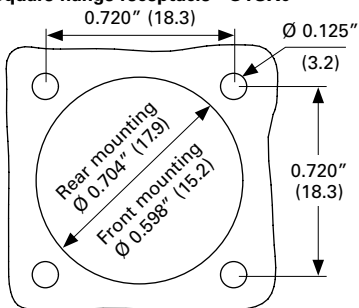
Cable diameter acceptance: standard seal: from 0.098" to 0.314" (2.5 to 8), reduced seal: from 0.059" to 0.196" (1.5 to 5)

### Jam nut receptacle UTSX7

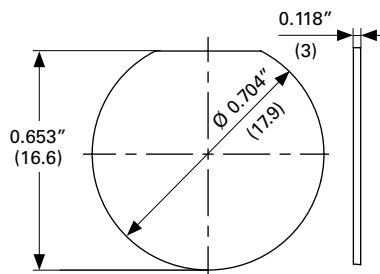


### Panel cut out

#### Square flange receptacle - UTSX0



#### Jam nut receptacle - UTSX7



# 2

## Connectors

103W3 (Shell size 10, 3x#20, 3x16)

### Accessories

2

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX10DCG
IP68 - Metal terminal	UTGX10DCGR

**Plug sealing cap**



Description	Part number
IP68	UTGX610DCG

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005586A	85005595

**Gasket**



Part number
UTFD12B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX710CCRG	UTGX610CCRG
Y for Yellow	UTGX710CCRY	UTGX610CCRY
R for Red	UTGX710CCRR	UTGX610CCRR

## Tooling

### Tooling

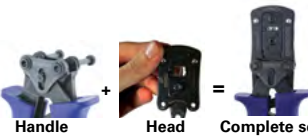


Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

2

### Crimp tooling

(without Shandles)



Contact size	Contacts	Part number of head
Standard contacts #16 Ø 0.062" (1.6)	<b>RM/RC 28M1K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 24M9K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M13K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M12K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 16M23K<sup>(1)</sup></b>	<b>S16RCM16*</b>
	<b>RM/RC 14M30K<sup>(1)</sup></b>	<b>S16RCM14*</b>
	<b>SM/SC 24ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 20ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 16ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 14ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
Standard contacts #20 Ø 0.039" (1.0)	<b>RM/RC 24W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>RM/RC 20W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>RM/RC 18W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>SM/SC 24WL3<sup>(1)(2)</sup></b>	<b>S20SCM20*</b>
	<b>SM/SC 20WL3<sup>(1)(2)</sup></b>	<b>S20SCM20*</b>

(1): Example of plating, for other plating options see page 126

(2): Loose contact

\* Heads to be used with handle PN: SHANDLES

### Extraction tool #16

Fig. 1



Fig. 2



Description	Part number
<b>Fig. 1</b>	<b>RX2025GE1</b>
<b>Fig. 2 - Long endurance tool</b>	<b>RX2031J</b>

## Contacts #16

2

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø inch	max mm	Insulator Ø inch	max mm	
Crimp contacts	Machined	30-28	0.002"-0.003"	0.05-0.08	<b>RM28M1K<sup>(1)</sup></b>	<b>RC28M1K<sup>(1)</sup></b>	0.021"	0.55	0.039"	1.00	
		26-24	0.005"-0.009"	0.13-0.25	<b>RM24M9K<sup>(1)</sup></b>	<b>RC24M9K<sup>(1)</sup></b>	0.031"	0.80	0.062"	1.58	
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M13K<sup>(1)</sup></b>	<b>RC20M13K<sup>(1)</sup></b>	0.045"	1.15	0.070"	1.80	
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M12K<sup>(1)</sup></b>	<b>RC20M12K<sup>(1)</sup></b>	0.045"	1.15	0.086"	2.20	
		20-16	0.020"-0.059"	0.52-1.48	<b>RM16M23K<sup>(1)</sup></b>	<b>RC16M23K<sup>(1)</sup></b>	0.070"	1.80	0.125"	3.20	
		16-14	0.059"-0.098"	1.48-2.48	<b>RM14M30K<sup>(1)</sup></b>	<b>RC14M30K<sup>(1)</sup></b>	0.090"	2.30	0.125"	3.20	
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6<sup>(1)(2)</sup></b>	<b>SC24M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58	
		22-20	0.012"-0.020"	0.32-0.52	<b>SM20M1TK6<sup>(1)(2)</sup></b>	<b>SC20M1TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10	
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M1TK6<sup>(1)(2)</sup></b>	<b>SC16M1TK6<sup>(1)(2)</sup></b>	-	-	0.125"	3.20	
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M11TK6<sup>(1)(2)</sup></b>	<b>SC16M11TK6<sup>(1)(2)</sup></b>	-	-	0.118"	3.00	
		14	0.098"	2.48	<b>SM14M1TK6<sup>(1)(2)</sup></b>	<b>SC14M1TK6<sup>(1)(2)</sup></b>	-	-	0.125"	3.20	
	PCB	Machined <sup>(3)</sup>	-	-	-	<b>RM20M12E83K<sup>(1)</sup></b>	<b>RC20M12E84K<sup>(1)</sup></b>	-	-	-	-
	Coaxial	Cable multipiece	see pages 130 to 132			<b>RMDXK10D28</b>	<b>RCDXK1D28</b>	-	-	-	-
Cable monocrimp					<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-	
Twisted pair multipiece					<b>RMDXK10D28 + yox090</b>	<b>RCDXK1D28 + yox090</b>	-	-	-	-	
Twisted pair monocrimp					<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-	
Fiber optic	POF contacts (Plastic optical fiber)	-	-	-	<b>RMPDF1000</b>	<b>RCPOF1000B</b>	-	-	-	-	

(1): Example of plating, for other plating see page 126

(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

(3): for dimensions see pages 133 or 134

## Contacts #20

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø inch	max mm	Insulator Ø inch	max mm
Crimp contacts	Machined	26-24	0.005"-0.009"	0.13-0.25	<b>RM24W3K</b>	<b>RC24W3K</b>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20W3K</b>	<b>RC20W3K</b>	0.045"	1.15	0.070"	1.80
		20-18	0.020"-0.031"	0.52-0.80	<b>RM18W3K</b>	<b>RC18W3K</b>	0.051"	1.30	0.082"	2.10
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6<sup>(1)(2)</sup></b>	<b>SC24M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		26-24	0.005"-0.009"	0.13-0.25	<b>SM20M1TK6<sup>(1)(2)</sup></b>	<b>SC20M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM16M1TK6<sup>(1)(2)</sup></b>	<b>SC16M1TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10
		22-20	0.012"-0.020"	0.32-0.52	<b>SM16M11TK6<sup>(1)(2)</sup></b>	<b>SC16M11TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10

(1): Example of plating, for other plating see page 126

(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20W3TK6 becomes SM20WL3TK6

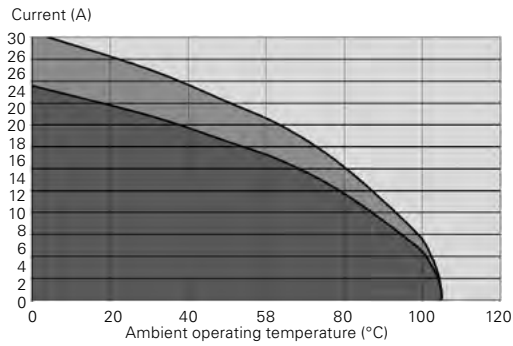
**Electrical characteristics**

UL	CSA	IEC
13A 500V with AWG 16* 7.5A 250V with AWG20*	7A 500V with AWG 16* 2.5A 250V with AWG20*	5A 32V 1.5kV 3 temperture elevation: 50°C

\*qualification pending

2

**UTSX 103W3 derating curves**



- Current use
- Limited use
- Not recommended use

**Test conditions**

Contact used: machined contacts

Wires used: 16 AWG

Wires used: 20 AWG

Derating curves based on continuous current application.



# 2

## Connectors

106 - 10E6/10D6 (Shell size 10, 6x#20)

2



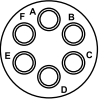
### Connector part number

#### UTSX 106

6 contacts  
4.5A/250V  
per UL 1977 with  
AWG20 wire

#### 10E6/10D6

6 contacts  
6A/250V  
per UL 1977 with  
AWG20 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 60	Square flange receptacle	Without (Fig. 1)	<b>UTSX0106P</b>	<b>UTSX0106S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC106P</b>	<b>UTSX0JC106S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC106P</b>	<b>UTSX1JC106S</b>
		Plug	Without (Fig. 4)	<b>UTSX6106P</b>
PCB contacts supplied separately see page 60	Plug	Cable gland (Fig. 5)	<b>UTSX6JC106P</b>	<b>UTSX6JC106S</b>
		Jam nut receptacle	Without (Fig. 6)	<b>UTSX7106P</b>
	Jam nut receptacle	Without (Fig. 7)	<b>UTSX7106P</b>	<b>UTSX7106S</b>
		Without (Fig. 1)	<b>UTSX010E6P</b>	<b>UTSX010E6S</b>
Handsolder electrical contacts loaded	Plug	Without (Fig. 4)	<b>UTSX610E6P</b>	<b>UTSX610E6S</b>
		Cable gland (Fig. 5)	<b>UTSX6JC10E6P</b>	<b>UTSX6JC10E6S</b>
	Jam nut receptacle	Without (Fig. 6)	<b>UTSX710E6P</b>	<b>UTSX710E6S</b>
PCB contacts supplied separately see page 60	Jam nut receptacle	Without (Fig.7)	<b>UTSX710E6P</b>	<b>UTSX710E6S</b>
PCB contacts loaded see page 60	Square flange receptacle	Without (Fig.1)	<b>UTSX010D6P</b>	<b>UTSX010D6S</b>
		Jam nut receptacle with stand off and without hold down clip	Without (Fig.8)	<b>UTSX710D6P</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig.8)	<b>UTSX710D6P32</b>	<b>UTSX710D6S32</b>

For discrimination/keying methods see page 150

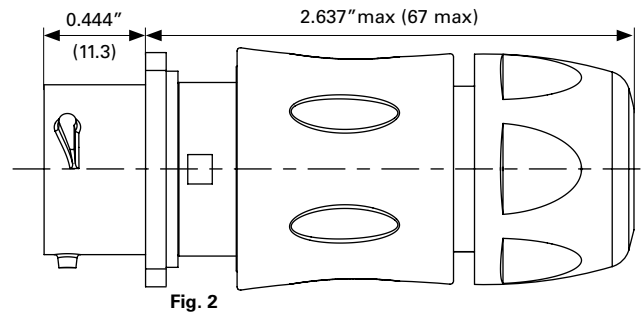
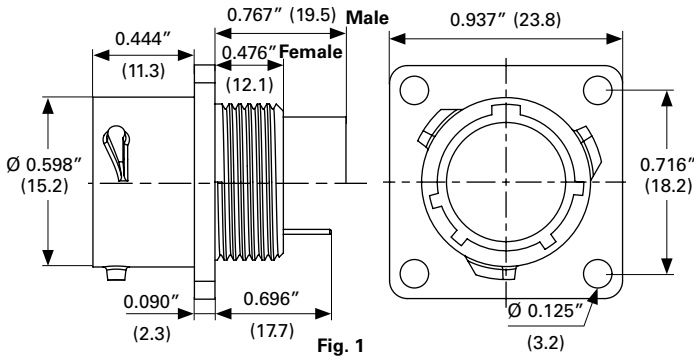
Sealed unmatd

### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.

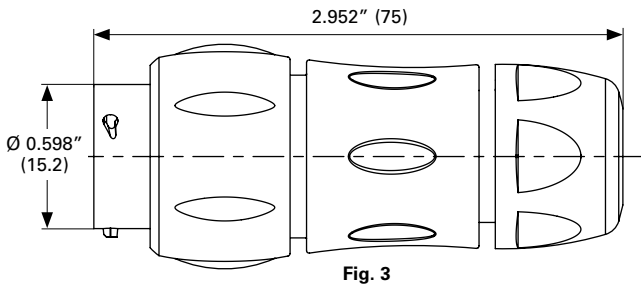
**Dimensions** (For mated connector lengths see page 142)

**Square flange receptacle - UTSX0 and UTSX0JC**



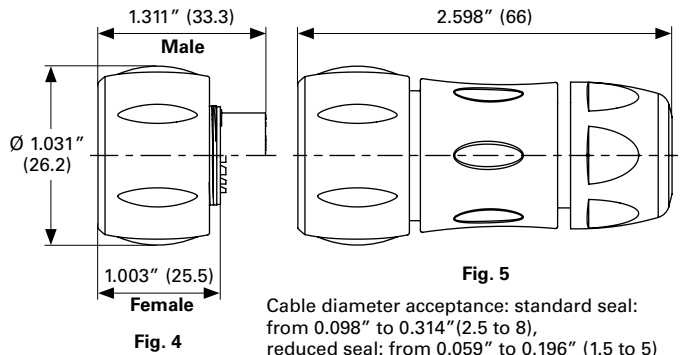
**Fig. 2**  
Cable diameter acceptance: standard seal: from 0.098" to 0.314" (2.5 to 8), reduced seal: from 0.059" to 0.196" (1.5 to 5)

**Free hanging - UTSX1JC**



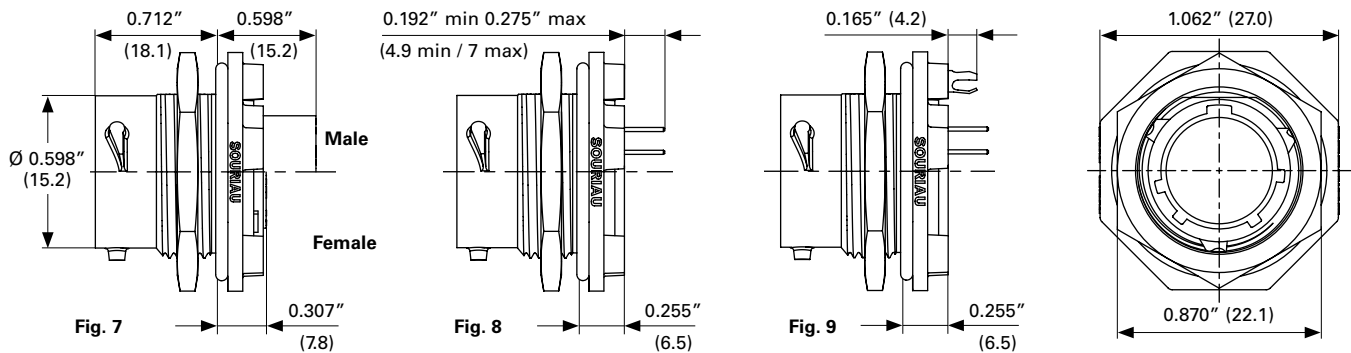
**Fig. 3**  
Cable diameter acceptance: standard seal: from 0.098" to 0.314" (2.5 to 8), reduced seal: from 0.059" to 0.196" (1.5 to 5)

**Plug - UTSX6 and UTSX6JC**



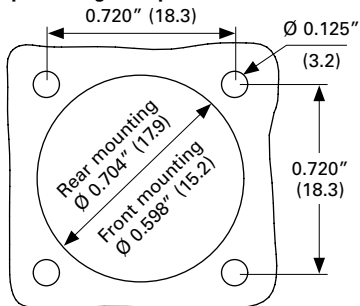
**Fig. 5**  
Cable diameter acceptance: standard seal: from 0.098" to 0.314" (2.5 to 8), reduced seal: from 0.059" to 0.196" (1.5 to 5)

**Jam nut receptacle UTSX7**

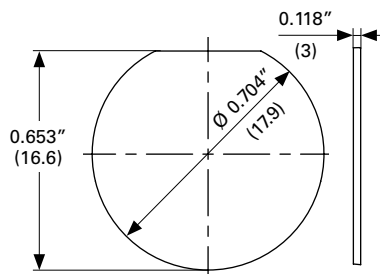


**Panel cut out**

**Square flange receptacle - UTSX0**



**Jam nut receptacle - UTSX7**



Dimensions in inches (millimeters)

# 2

## Connectors

106 - 10E6/10D6 (Shell size 10, 6x#20)

### Accessories

2

#### Jam nut and free hanging receptacle sealing caps



Description	Part number
IP68	UTGX10DCG
IP68 - Metal terminal	UTGX10DCGR

#### Square flange sealing cap



Description	Part number
IP68 - Metal terminal	UTGX10DCGE

#### Plug sealing cap



Description	Part number
IP68	UTGX610DCG

#### Plastic protective cap



Part number receptacle cap	Part number plug cap
85005586A	85005595

#### Gasket



Part number
UTFD12B

#### Color coding rings



Description	Part number receptacles	Part number plugs
G for Green	UTGX710CCRG	UTGX610CCRG
Y for Yellow	UTGX710CCRY	UTGX610CCRY
R for Red	UTGX710CCRR	UTGX610CCRR

106 - 10E6/10D6 (Shell size 10, 6x#20)

## Tooling

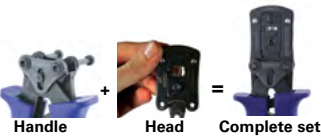
### Tooling



Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

2

### Crimp tooling (without Shandles)



Contact size	Contacts	Part number of Head
Standard contacts #20 Ø 0.039" (1.0)	<b>RM/RC 24W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>RM/RC 20W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>RM/RC 18W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>SM/SC 24WL3<sup>(1)(2)</sup></b>	<b>S20SCM20*</b>
	<b>SM/SC 20WL3<sup>(1)(2)</sup></b>	<b>S20SCM20*</b>

(1): Example of plating, for other plating options see page 126

(2): Loose contact

\* Heads to be used with handle PN: SHANDLES

### Extraction tool #20



Description	Part number
Contacts #20 Ø 0.039" (1.0)	<b>RX20D44</b>

### Contacts #20

2

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø max inch	Wire Ø max mm	Insulator Ø max inch	Insulator Ø max mm
Crimp contacts	Machined	26-24	0.005"-0.009"	0.13-0.25	<b>RM24W3K</b>	<b>RC24W3K</b>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20W3K</b>	<b>RC20W3K</b>	0.045"	1.15	0.070"	1.80
		20-18	0.020"-0.031"	0.52-0.80	<b>RM18W3K</b>	<b>RC18W3K</b>	0.051"	1.30	0.082"	2.10
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6<sup>(1)(2)</sup></b>	<b>SC24M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		26-24	0.005"-0.009"	0.13-0.25	<b>SM20M1TK6<sup>(1)(2)</sup></b>	<b>SC20M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM16M1TK6<sup>(1)(2)</sup></b>	<b>SC16M1TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10
22-20	0.012"-0.020"	0.32-0.52	<b>SM16M11TK6<sup>(1)(2)</sup></b>	<b>SC16M11TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10		

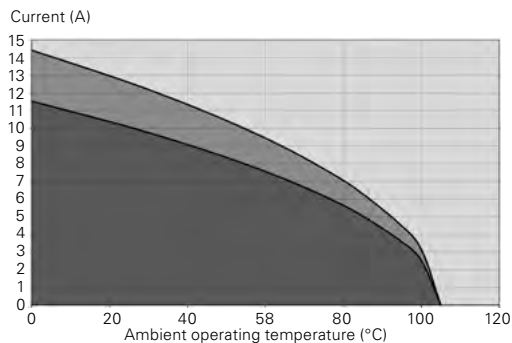
(1): Example of plating, for other plating see page 126 (2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20W3TK6 becomes SM20WL3TK6

Contact style	Contact type	Plating	Cable acceptance (AWG)	Wire stripping length inch	Wire stripping length mm
Hand solder	Loaded in the connector	Min 0.4µ gold over 0.8µ Ni	20 to 18	0.149"	3.8

### Electrical characteristics

UL	CSA	IEC
UTSX 106		
4.5A 250V with AWG20 wire	3A 250V with AWG20 wire	7A 32V 1.5kV 3
UTSX 10E6/10D6		
6A 250V with AWG20 wire	6A 250V with AWG20 wire	7A 32V 1.5kV 3

### UTSX 106 - 10E6/10D6 derating curves



- Current use
- Limited use
- Not recommended use

#### Test conditions

Contact used: machined contacts  
Wires used: 20 AWG

Derating curves based on continuous current application.

10E98/10D98 (Shell size 10, 6x#20)

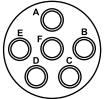
2



### Connector part number

#### UTSX 10E98/10D98

6 contacts  
6A/250V  
per UL 1977  
with AWG20 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Handsolder electrical contacts loaded see page 65	Square flange receptacle	Without (Fig. 1)	<b>UTSX010E98P</b>	<b>UTSX010E98S</b>
	Plug	Without (Fig. 5)	<b>UTSX610E98P</b>	<b>UTSX610E98S</b>
		Cable gland (Fig. 3)	<b>UTSX6JC10E98P</b>	<b>UTSX6JC10E98S</b>
PCB contacts loaded see page 65	Jam nut receptacle	Without (Fig. 4)	<b>UTSX710E98P</b>	<b>UTSX710E98S</b>
	Square flange receptacle	Without (Fig. 2)	<b>UTSX010D98P</b>	<b>UTSX010D98S</b>
	Jam nut receptacle with stand off and without hold down clip	Without (Fig. 5)	<b>UTSX710D98P</b>	<b>UTSX710D98S</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 6)	<b>UTSX710D98P32</b>	<b>UTSX710D98S32</b>

For discrimination/keying methods see page 150

Sealed unmated

#### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.

### Dimensions (For mated connector lengths see page 142)

#### Square flange receptacle - UTSX0

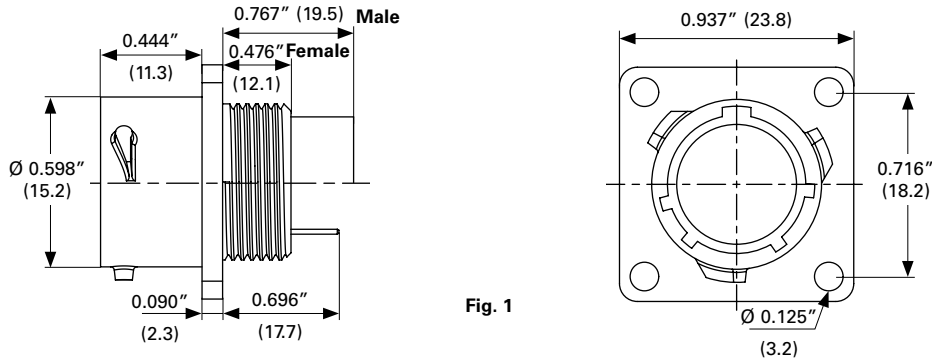


Fig. 1

#### Plug - UTSX6 and UTSX6JC

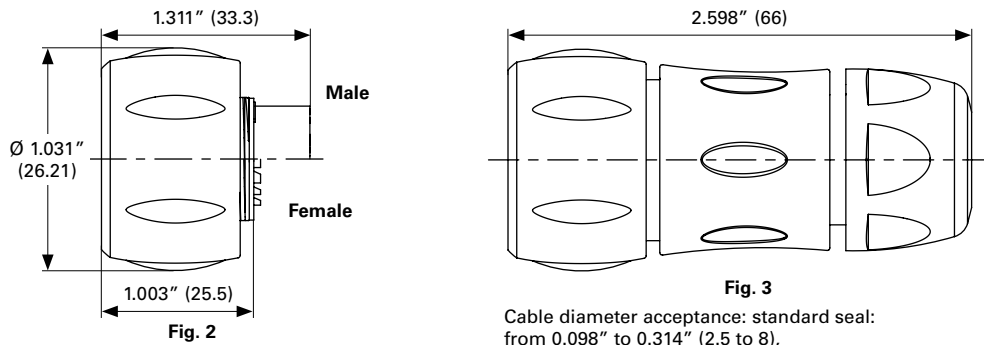


Fig. 3

Cable diameter acceptance: standard seal:  
from 0.098" to 0.314" (2.5 to 8),  
reduced seal: from 0.059" to 0.196" (1.5 to 5)

#### Jam nut receptacle UTSX7

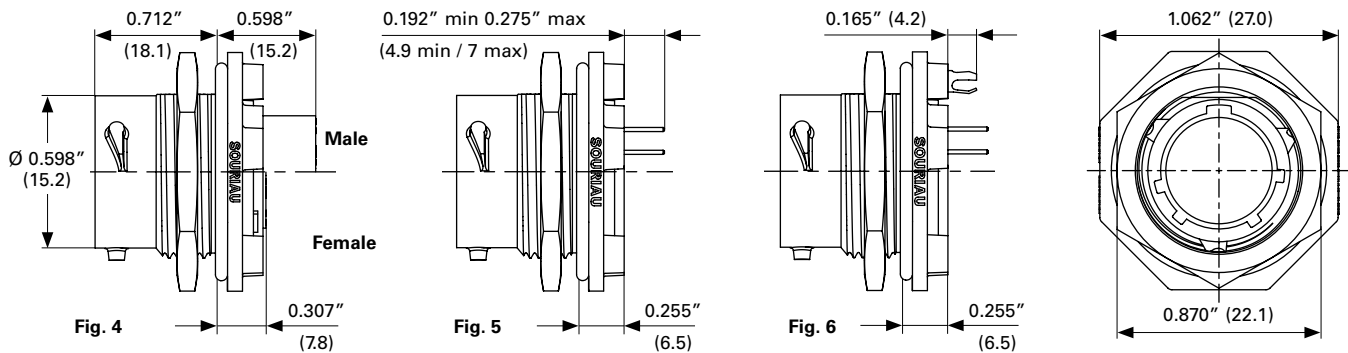


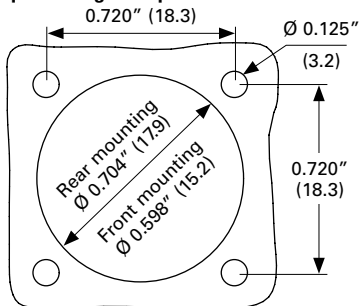
Fig. 4

Fig. 5

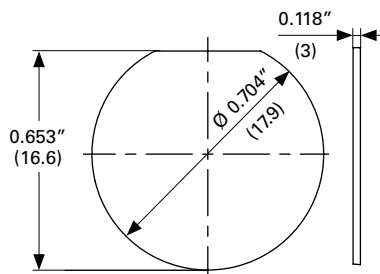
Fig. 6

#### Panel cut out

##### Square flange receptacle - UTSX0



##### Jam nut receptacle - UTSX7



Dimensions in inches (millimeters)



**Accessories**

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX10DCG
IP68 - Metal terminal	UTGX10DCGR

2

**Square flange sealing cap**



Description	Part number
IP68 - Metal terminal	UTGX10DCGE

**Plug sealing cap**



Description	Part number
IP68	UTGX610DCG

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005586A	85005595

**Gasket**



Part number
UTFD12B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX710CCRG	UTGX610CCRG
Y for Yellow	UTGX710CCRY	UTGX610CCRY
R for Red	UTGX710CCRR	UTGX610CCRR

### Contacts #20

2

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø max inch	Wire Ø max mm	Insulator Ø max inch	Insulator Ø max mm
Crimp contacts	Machined	26-24	0.005"-0.009"	0.13-0.25	<b>RM24W3K</b>	<b>RC24W3K</b>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20W3K</b>	<b>RC20W3K</b>	0.045"	1.15	0.070"	1.80
		20-18	0.020"-0.031"	0.52-0.80	<b>RM18W3K</b>	<b>RC18W3K</b>	0.051"	1.30	0.082"	2.10
Stamped and formed reeled contacts See note (2) for loose piece		26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6</b> <sup>(1)(2)</sup>	<b>SC24M1TK6</b> <sup>(1)(2)</sup>	-	-	0.035"-0.062"	0.90-1.58
		26-24	0.005"-0.009"	0.13-0.25	<b>SM20M1TK6</b> <sup>(1)(2)</sup>	<b>SC20M1TK6</b> <sup>(1)(2)</sup>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM16M1TK6</b> <sup>(1)(2)</sup>	<b>SC16M1TK6</b> <sup>(1)(2)</sup>	-	-	0.047"-0.082"	1.20-2.10
		22-20	0.012"-0.020"	0.32-0.52	<b>SM16M11TK6</b> <sup>(1)(2)</sup>	<b>SC16M11TK6</b> <sup>(1)(2)</sup>	-	-	0.047"-0.082"	1.20-2.10

(1): Example of plating, for other plating see page 126 (2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20W3TK6 becomes SM20WL3TK6

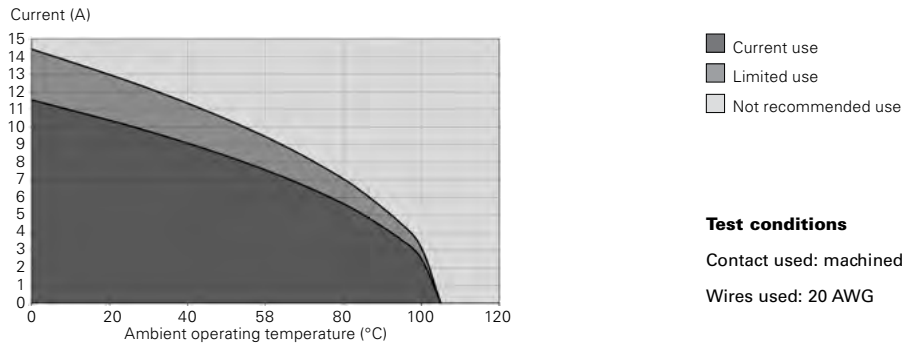
Contact style	Contact type	Plating	Cable acceptance (AWG)	Wire stripping length inch	Wire stripping length mm
Hand solder	Loaded in the connector	Min 0.4µ gold over 0.8µ Ni	20 to 18	0.149"	3.8

### Electrical characteristics

UL	CSA	IEC
6A 250V with AWG20 wire	6A 250V with AWG20 wire	7A 50V 1.5kV 3

Electrical information according to the IEC 61984, with pollution degree IV and overvoltage category III.

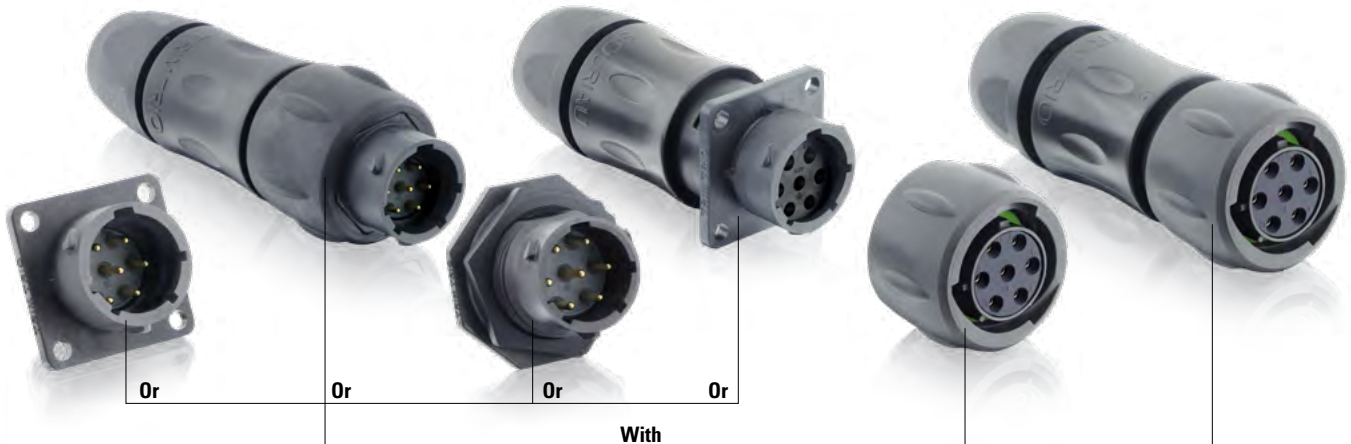
### UTSX 10E98/10D98 derating curves



**Test conditions**  
 Contact used: machined contacts  
 Wires used: 20 AWG

Derating curves based on continuous current application.

147 - 14E7/14D7 (Shell size 14, 6 + ground, 7x#16)



2

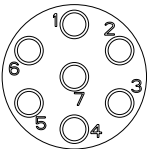
Connector part number

**UTSX 147**

6 contacts + ground  
10A/500V  
per UL 1977  
with AWG16 wire

**14E7/14D7**

6 contacts + ground  
12A/600V  
per UL 1977  
with AWG16 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 70	Square flange receptacle	Without (Fig. 1)	<b>UTSX0147P</b>	<b>UTSX0147S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC147P</b>	<b>UTSX0JC147S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC147P</b>	<b>UTSX1JC147S</b>
		Cable gland and grommet (Fig. 3)	<b>UTSX1GJC147P</b>	–
	Plug	Without (Fig. 4)	<b>UTSX6147P</b>	<b>UTSX6147S</b>
		Cable gland (Fig. 5)	<b>UTSX6JC147P</b>	<b>UTSX6JC147S</b>
		Cable gland and grommet (Fig. 5)	–	<b>UTSX6GJC147S</b>
	Jam nut receptacle	Without (Fig. 6)	<b>UTSX7147P</b>	<b>UTSX7147S</b>
		Cable gland and grommet (Fig. 10)	<b>UTSX7GJC147P</b>	–
	Screw contacts loaded	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC147PSCR</b>
Plug		Cable gland (Fig. 5)	<b>UTSX6JC147PSCR</b>	<b>UTSX6JC147SSCR</b>
Jam nut receptacle		Without (Fig. 9)	<b>UTSX7147PSCR</b>	<b>UTSX7147SSCR</b>
PCB contacts supplied separately see page 70	Square flange receptacle	Without (Fig. 1)	<b>UTSX0147PSEK9</b>	–
Hand solder electrical contacts loaded see page 70	Square flange receptacle	Without (Fig. 1)	<b>UTSX014E7P</b>	<b>UTSX014E7S</b>
	Plug	Without (Fig. 4)	<b>UTSX614E7P</b>	<b>UTSX614E7S</b>
		Cable gland (Fig. 5)	<b>UTSX6JC14E7P</b>	<b>UTSX6JC14E7S</b>
	Jam nut receptacle	Without (Fig. 6)	<b>UTSX714E7P</b>	<b>UTSX714E7S</b>
PCB contacts loaded	Square flange receptacle	Without (Fig. 3)	<b>UTSX014D7P</b>	<b>UTSX014D7S</b>
	Jam nut receptacle with stand off and without hold down clip	Without (Fig.7)	<b>UTSX714D7P</b>	<b>UTSX714D7S</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 8)	<b>UTSX714D7P32</b>	<b>UTSX714D7S32</b>

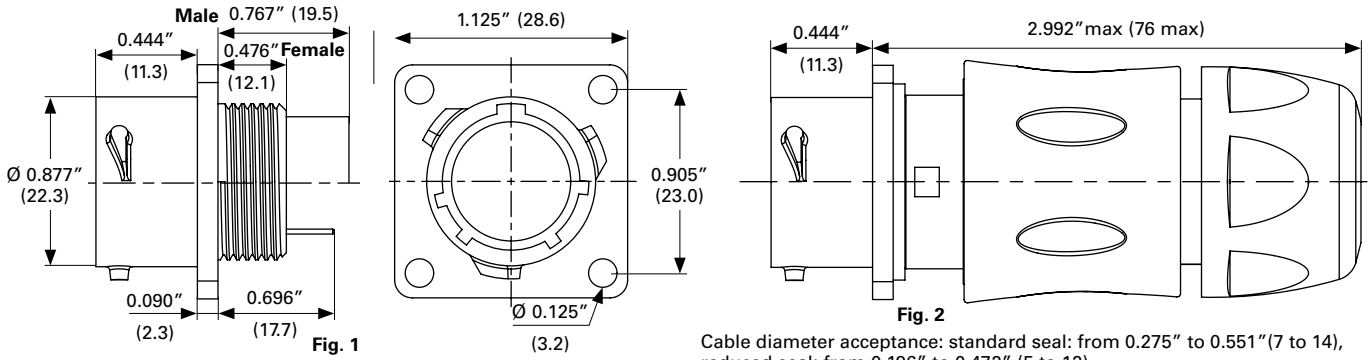
Sealed unmatd

Overmolded cable assembly part numbers

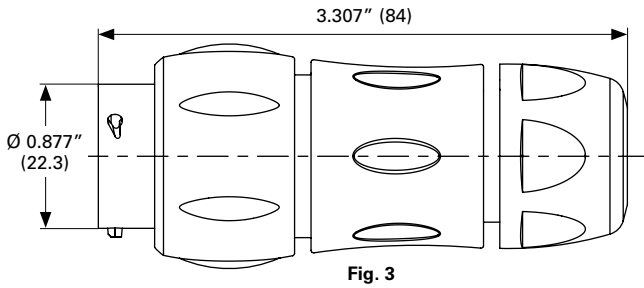
Please contact us directly for overmolded cable assemblies.

### Dimensions (For mated connector lengths see page 142)

#### Square flange receptacle - UTSX0 and UTSX0JC

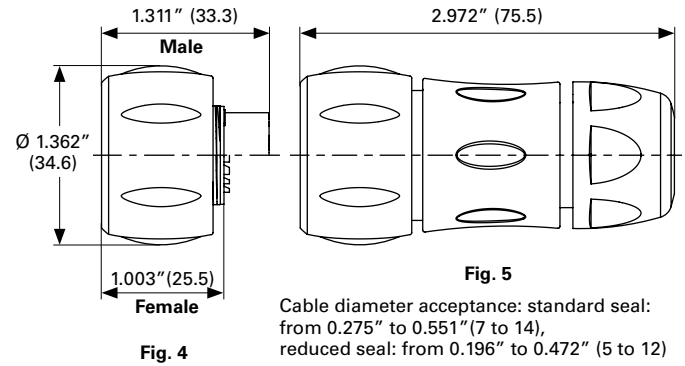


#### Free hanging - UTSX1JC and UTSXGJC

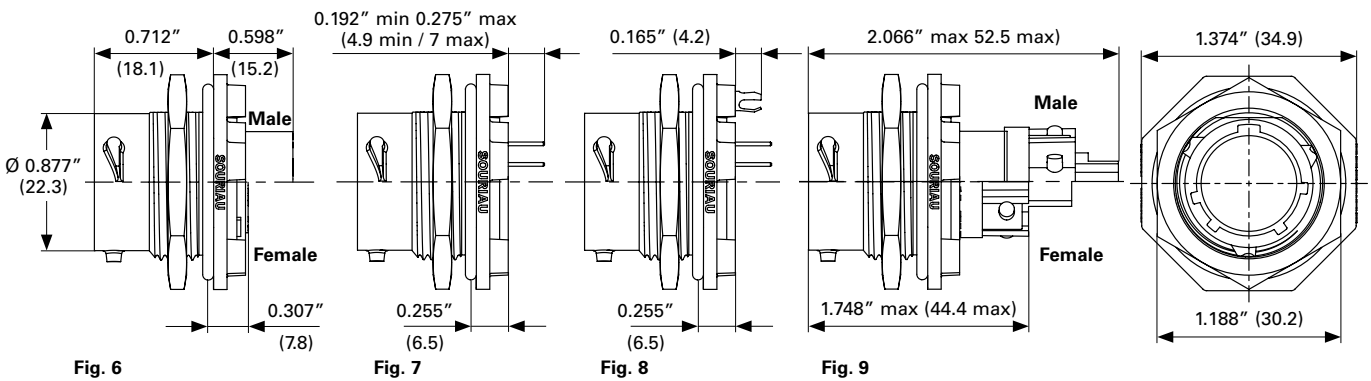


Cable diameter acceptance: standard seal: from 0.275" to 0.551" (7 to 14),  
 reduced seal: from 0.196" to 0.472" (5 to 12)

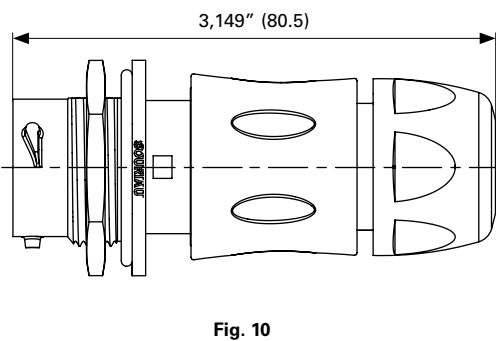
#### Plug - UTSX6, UTSX6JC and UTSX6GJC



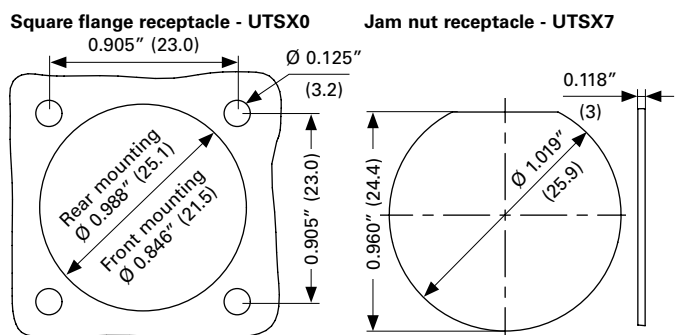
#### Jam nut receptacle UTSX7



#### Jam nut receptacle UTSX7GJC



#### Panel cut out



147 - 14E7/14D7 (Shell size 14, 6 + ground, 7x#16)

**Accessories**

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX14DCG
IP68 - Metal terminal	UTGX14DCGR

2

**Square flange sealing cap**



Description	Part number
IP68 - Metal terminal	UTGX14DCGE

**Plug sealing cap**



Description	Part number
IP68	UTS614DCG133

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005588A	85005597

**Gasket**



Part number
UTFD14B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX714CCRG	UTGX614CCRG
Y for Yellow	UTGX714CCRY	UTGX614CCRY
R for Red	UTGX714CCRR	UTGX614CCRR

# 2

## Connectors

147 - 14E7/14D7 (Shell size 14, 6 + ground, 7x#16)

### Tooling

2

#### Tooling



Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

#### Crimp tooling (without Shandles)



Contact size	Contacts	Part number of Head
Standard contacts #16 Ø 0.062" (1.6)	<b>RM/RC 28M1K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 24M9K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M13K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M12K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 16M23K<sup>(1)</sup></b>	<b>S16RCM16*</b>
	<b>RM/RC 14M30K<sup>(1)</sup></b>	<b>S16RCM14*</b>
	<b>SM/SC 24ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 20ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 16ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 14ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 16ML11TK6<sup>(1)</sup></b>	<b>S16SCML11*</b>

(1): Example of plating, for other plating options see page 126

\* Heads to be used with handle PN: SHANDLES

#### Extraction tool #16

Fig. 1



Fig. 2



Description	Part number
<b>Fig. 1</b>	<b>RX2025GE1</b>
<b>Fig. 2 - Long endurance tool</b>	<b>RX2031J</b>

147 - 14E7/14D7 (Shell size 14, 6 + ground, 7x#16)

## Contacts #16

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø max inch	Wire Ø max mm	Insulator Ø max inch	Insulator Ø max mm
Crimp contacts	Machined	30-28	0.002"-0.003"	0.05-0.08	<b>RM28M1K</b> <sup>(1)</sup>	<b>RC28M1K</b> <sup>(1)</sup>	0.021"	0.55	0.039"	1.00
		26-24	0.005"-0.009"	0.13-0.25	<b>RM24M9K</b> <sup>(1)</sup>	<b>RC24M9K</b> <sup>(1)</sup>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M13K</b> <sup>(1)</sup>	<b>RC20M13K</b> <sup>(1)</sup>	0.045"	1.15	0.070"	1.80
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M12K</b> <sup>(1)</sup>	<b>RC20M12K</b> <sup>(1)</sup>	0.045"	1.15	0.086"	2.20
		20-16	0.020"-0.059"	0.52-1.48	<b>RM16M23K</b> <sup>(1)</sup>	<b>RC16M23K</b> <sup>(1)</sup>	0.070"	1.80	0.125"	3.20
		16-14	0.059"-0.098"	1.48-2.48	<b>RM14M30K</b> <sup>(1)</sup>	<b>RC14M30K</b> <sup>(1)</sup>	0.090"	2.30	0.125"	3.20
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6</b> <sup>(1)(2)</sup>	<b>SC24M1TK6</b> <sup>(1)(2)</sup>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM20M1TK6</b> <sup>(1)(2)</sup>	<b>SC20M1TK6</b> <sup>(1)(2)</sup>	-	-	0.047"-0.082"	1.20-2.10
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M1TK6</b> <sup>(1)(2)</sup>	<b>SC16M1TK6</b> <sup>(1)(2)</sup>	-	-	0.125"	3.20
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M11TK6</b> <sup>(1)(2)</sup>	<b>SC16M11TK6</b> <sup>(1)(2)</sup>	-	-	0.118"	3.00
		14	0.098"	2.48	<b>SM14M1TK6</b> <sup>(1)(2)</sup>	<b>SC14M1TK6</b> <sup>(1)(2)</sup>	-	-	0.125"	3.20
PCB	Machined <sup>(3)</sup>	-			<b>RM20M12E83K</b> <sup>(1)</sup>	<b>RC20M12E84K</b> <sup>(1)</sup>	-	-	-	-
Coaxial	Cable multipiece	see pages 130 to 132			<b>RMDXK10D28</b>	<b>RCDXK1D28</b>	-	-	-	-
	Cable monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
	Twisted pair multipiece				<b>RMDXK10D28 + yox090</b>	<b>RCDXK1D28 + yox090</b>	-	-	-	-
	Twisted pair monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
Fiber optic	POF contacts (Plastic optical fiber)	-			<b>RMPOF1000</b>	<b>RCPOF1000B</b>	-	-	-	-
Hand solder	Loaded in the connector	14-18	0.098"-0.031"	2.48-0.80	-	-	-	-	-	-

(1): Example of plating, for other plating see page 126

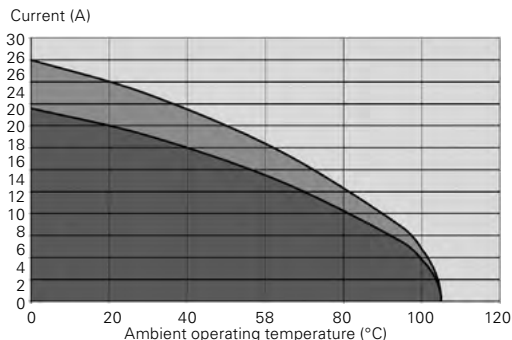
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

(3): For dimensions see page 133

## Electrical characteristics

UL	CSA	IEC
UTSX 147		
10A 500V with AWG16 wire	7A 500V with AWG16 wire	7A 150V 1.5kV 3
UTSX 14E7/14D7		
12A 600V with AWG16 wire	12A 600V with AWG16 wire	7A 150V 1.5kV 3

## UTSX 147 - 14E7/14D7 derating curves



■ Current use  
 ■ Limited use  
 □ Not recommended use

## Test conditions

Contact used: machined contacts

Wires used: 16 AWG

Derating curves based on continuous current application.

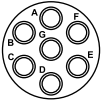




### Connector part number

#### UTSX 10E7/10D7

7 contacts  
6A/250V  
per UL 1977  
with AWG20 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Handsolder electrical contacts loaded see page 73	Square flange receptacle	Without (Fig. 1)	<b>UTSX010E7P</b>	<b>UTSX010E7S</b>
	Plug	Without (Fig. 5)	<b>UTSX610E7P</b>	<b>UTSX610E7S</b>
		Cable gland (Fig. 3)	<b>UTSX6JC10E7P</b>	<b>UTSX6JC10E7S</b>
	Jam nut receptacle	Without (Fig. 4)	<b>UTSX710E7P</b>	<b>UTSX710E7S</b>
PCB contacts loaded see page 73	Square flange receptacle	Without (Fig. 2)	<b>UTSX010D7P</b>	<b>UTSX010D7S</b>
	Jam nut receptacle with stand off and without hold down clip	Without (Fig. 5)	<b>UTSX710D7P</b>	<b>UTSX710D7S</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 6)	<b>UTSX710D7P32</b>	<b>UTSX710D7S32</b>

For discrimination/keying methods see page 150

Sealed unmated

#### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.

**Dimensions** (For mated connector lengths see page 142)

**Square flange receptacle - UTSX0**

2

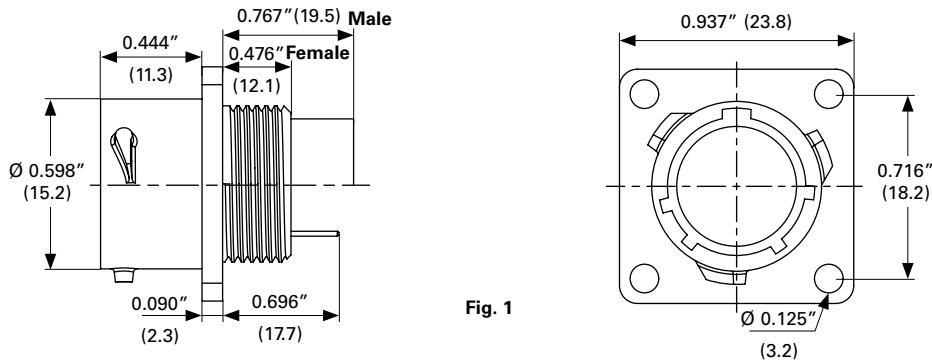


Fig. 1

**Plug - UTSX6 and UTSX6JC**

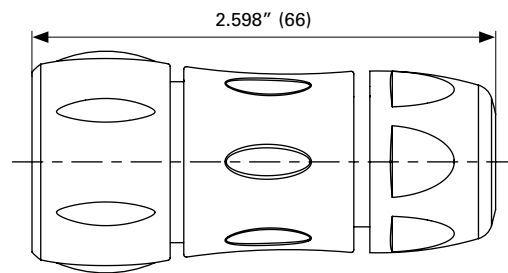
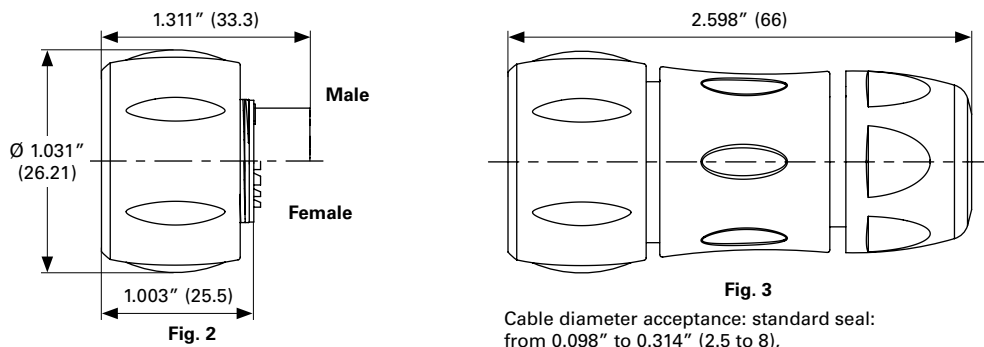
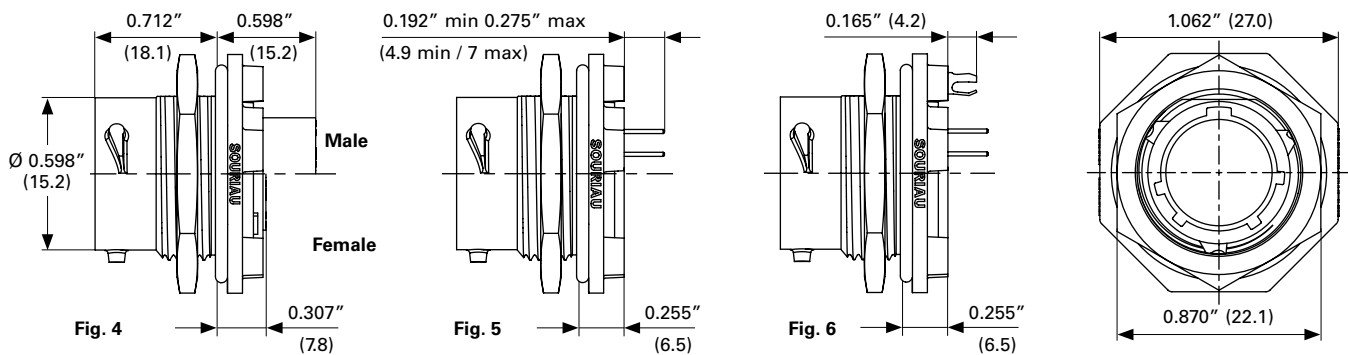


Fig. 3

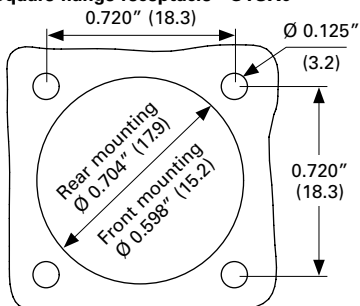
Cable diameter acceptance: standard seal:  
from 0.098" to 0.314" (2.5 to 8),  
reduced seal: from 0.059" to 0.196" (1.5 to 5)

**Jam nut receptacle UTSX7**

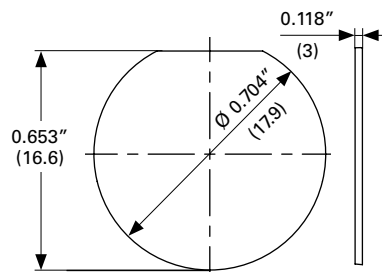


**Panel cut out**

**Square flange receptacle - UTSX0**



**Jam nut receptacle - UTSX7**



Dimensions in inches (millimeters)

# 2

## Connectors

10E7/10D7 (Shell size 10, 7x#20)

### Accessories

2

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX10DCG
IP68 - Metal terminal	UTGX10DCGR

**Square flange sealing cap**



Description	Part number
IP68 - Metal terminal	UTGX10DCGE

**Plug sealing cap**



Description	Part number
IP68	UTGX610DCG

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005586A	85005595

**Gasket**



Part number
UTFD12B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX710CCRG	UTGX610CCRG
Y for Yellow	UTGX710CCRY	UTGX610CCRY
R for Red	UTGX710CCRR	UTGX610CCRR

## Contacts #20

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø max inch	Wire Ø max mm	Insulator Ø max inch	Insulator Ø max mm
Crimp contacts	Machined	26-24	0.005"-0.009"	0.13-0.25	<b>RM24W3K</b>	<b>RC24W3K</b>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20W3K</b>	<b>RC20W3K</b>	0.045"	1.15	0.070"	1.80
		20-18	0.020"-0.031"	0.52-0.80	<b>RM18W3K</b>	<b>RC18W3K</b>	0.051"	1.30	0.082"	2.10
Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece		26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6<sup>(1)(2)</sup></b>	<b>SC24M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		26-24	0.005"-0.009"	0.13-0.25	<b>SM20M1TK6<sup>(1)(2)</sup></b>	<b>SC20M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM16M1TK6<sup>(1)(2)</sup></b>	<b>SC16M1TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10
		22-20	0.012"-0.020"	0.32-0.52	<b>SM16M11TK6<sup>(1)(2)</sup></b>	<b>SC16M11TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10

(1): Example of plating, for other plating see page 126

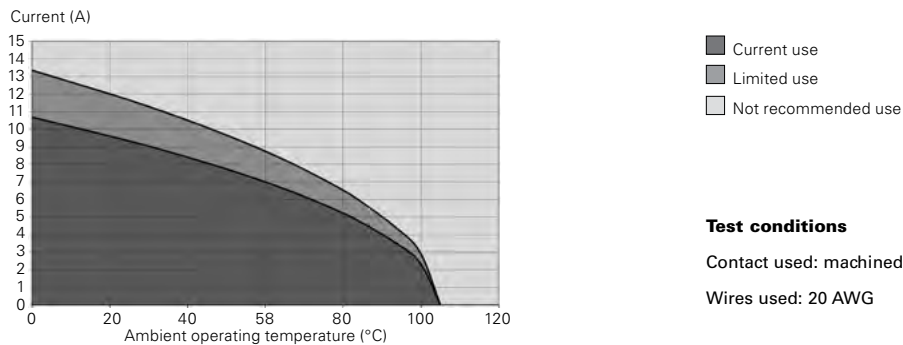
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20W3TK6 becomes SM20WL3TK6

Contact style	Contact type	Plating	Cable acceptance (AWG)	Wire stripping length inch	Wire stripping length mm
Hand solder	Loaded in the connector	Min 0.4µ gold over 0.8µ Ni	20 to 18	0.149"	3.8

## Electrical characteristics

UL	CSA	IEC
6A 250V with AWG20 wire	6A 250V with AWG20 wire	7A 50V 1.5kV 3

## UTSX 10E7/10D7 derating curves



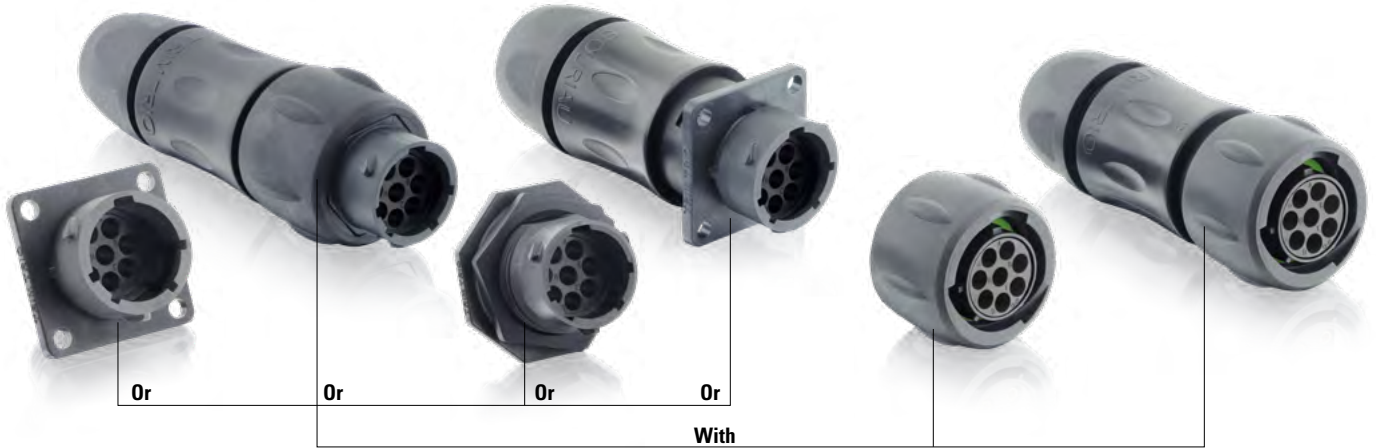
Derating curves based on continuous current application.

# 2

## Connectors

128 (Shell size 12, 8x16)

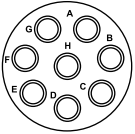
2



### Connector part number

#### UTSX 128

6 contacts  
10A/500V  
per UL 1977 with  
AWG16 wire



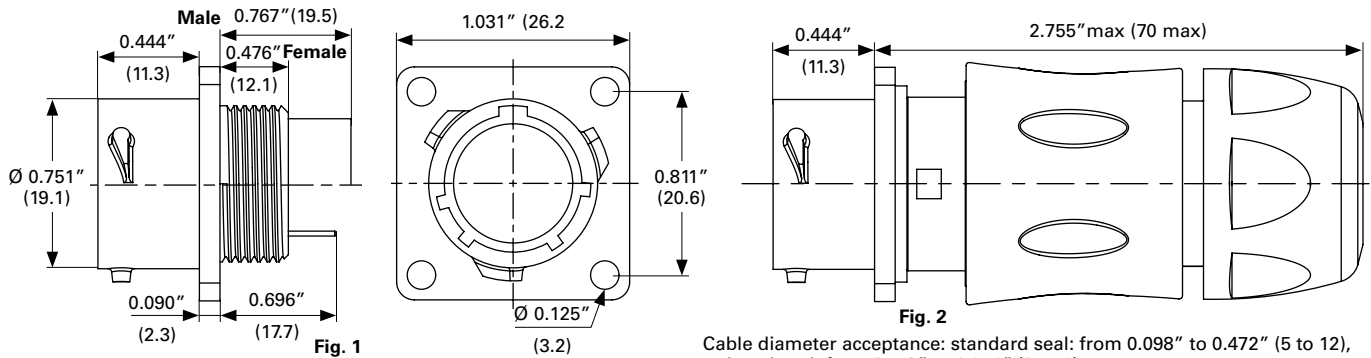
Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 78	Square flange receptacle	Without (Fig. 1)	<b>UTSX0128P</b>	<b>UTSX0128S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC128P</b>	<b>UTSX0JC128S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC128P</b>	<b>UTSX1JC128S</b>
		Cable gland and grommet (Fig. 3)	<b>UTSX1GJC128P</b>	–
Plug	Jam nut receptacle	Without (Fig. 4)	<b>UTSX6128P</b>	<b>UTSX6128S</b>
		Cable gland (Fig. 5)	<b>UTSX6JC128P</b>	<b>UTSX6JC128S</b>
		Cable gland and grommet (Fig. 5)	–	<b>UTSX6GJC128S</b>
PCB contacts supplied separately see page 78	Jam nut receptacle with stand off and without hold down clip	Without (Fig. 6)	<b>UTSX7128P</b>	<b>UTSX7128S</b>
		Cable gland and grommet (Fig. 8)	<b>UTSX7GJC128P</b>	–
PCB contacts loaded see page 78	Jam nut receptacle with stand off and hold down clip	Without (Fig. 7)	<b>UTSX7128PSEK9</b>	–

#### Overmolded cable assembly part numbers

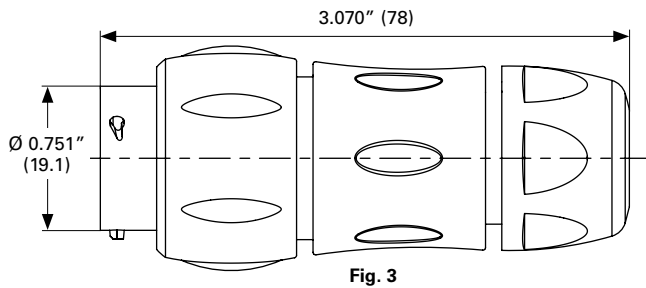
Please contact us directly for overmolded cable assemblies.

## Dimensions (For mated connector lengths see page 142)

### Square flange receptacle - UTSX0 and UTSX0JC

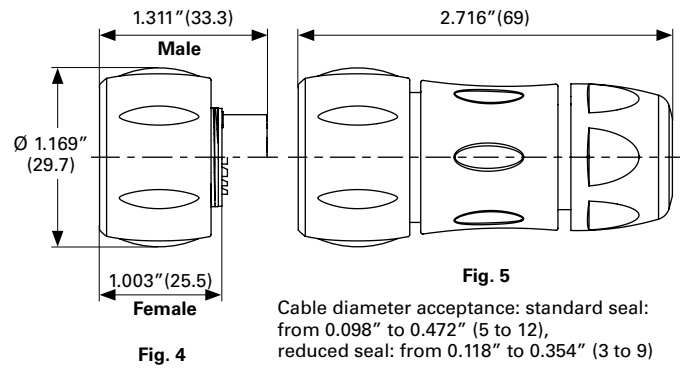


### Free hanging - UTSX1JC and UTSX1GJC

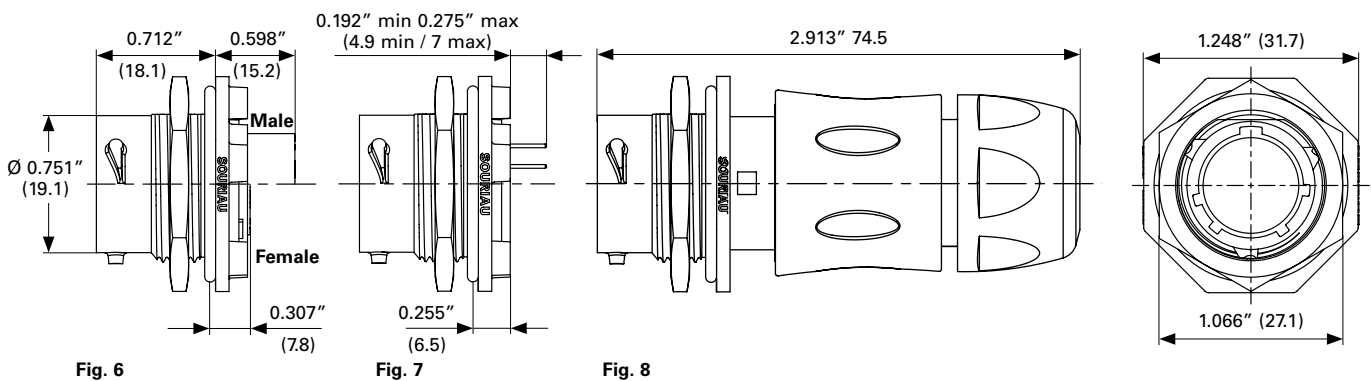


Cable diameter acceptance: standard seal: from 0.098" to 0.472" (5 to 12), reduced seal: from 0.118" to 0.354" (3 to 9)

### Plug - UTSX6, UTSX6JC and UTSX6GJC

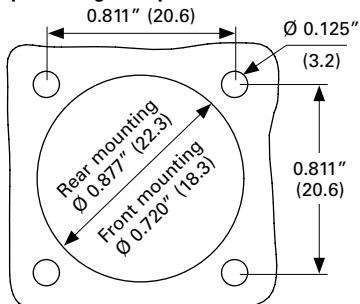


### Jam nut receptacle UTSX7 and UTSX7GJC

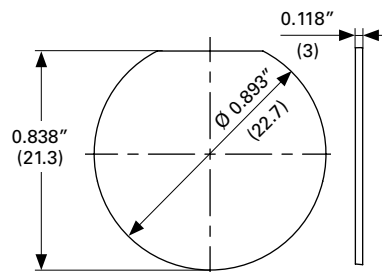


### Panel cut out

#### Square flange receptacle - UTSX0



#### Jam nut receptacle - UTSX7



# 2

## Connectors

128 (Shell size 12, 8x16)

### Accessories

2

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX12DCG
IP68 - Metal terminal	UTGX12DCGR

**Plug sealing cap**



Description	Part number
IP68	UTGX612DCG

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005587A	85005596

**Gasket**



Part number
UTFD13B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX712CCRG	UTGX612CCRG
Y for Yellow	UTGX712CCRY	UTGX612CCRY
R for Red	UTGX712CCRR	UTGX612CCRR



## Tooling

### Tooling



Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

### Crimp tooling (without Shandles)



Contact size	Contacts	Part number of Head
Standard contacts #16 Ø 0.062" (1.6)	<b>RM/RC 28M1K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 24M9K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M13K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M12K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 16M23K<sup>(1)</sup></b>	<b>S16RCM16*</b>
	<b>RM/RC 14M30K<sup>(1)</sup></b>	<b>S16RCM14*</b>
	<b>SM/SC 24ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 20ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 16ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 14ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 16ML11TK6<sup>(1)</sup></b>	<b>S16SCML11*</b>

(1): Example of plating, for other plating options see page 126

\* Heads to be used with handle PN: SHANDLES

### Extraction tool #16

Fig. 1



Fig. 2



Description	Part number
<b>Fig. 1</b>	<b>RX2025GE1</b>
<b>Fig. 2 - Long endurance tool</b>	<b>RX2031J</b>

### Contacts #16

2

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø max inch	Wire Ø max mm	Insulator Ø max inch	Insulator Ø max mm
Crimp contacts	Machined	30-28	0.002"-0.003"	0.05-0.08	<b>RM28M1K</b> <sup>(1)</sup>	<b>RC28M1K</b> <sup>(1)</sup>	0.021"	0.55	0.039"	1.00
		26-24	0.005"-0.009"	0.13-0.25	<b>RM24M9K</b> <sup>(1)</sup>	<b>RC24M9K</b> <sup>(1)</sup>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M13K</b> <sup>(1)</sup>	<b>RC20M13K</b> <sup>(1)</sup>	0.045"	1.15	0.070"	1.80
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M12K</b> <sup>(1)</sup>	<b>RC20M12K</b> <sup>(1)</sup>	0.045"	1.15	0.086"	2.20
		20-16	0.020"-0.059"	0.52-1.48	<b>RM16M23K</b> <sup>(1)</sup>	<b>RC16M23K</b> <sup>(1)</sup>	0.070"	1.80	0.125"	3.20
		16-14	0.059"-0.098"	1.48-2.48	<b>RM14M30K</b> <sup>(1)</sup>	<b>RC14M30K</b> <sup>(1)</sup>	0.090"	2.30	0.125"	3.20
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6</b> <sup>(1)(2)</sup>	<b>SC24M1TK6</b> <sup>(1)(2)</sup>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM20M1TK6</b> <sup>(1)(2)</sup>	<b>SC20M1TK6</b> <sup>(1)(2)</sup>	-	-	0.047"-0.082"	1.20-2.10
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M1TK6</b> <sup>(1)(2)</sup>	<b>SC16M1TK6</b> <sup>(1)(2)</sup>	-	-	0.125"	3.20
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M11TK6</b> <sup>(1)(2)</sup>	<b>SC16M11TK6</b> <sup>(1)(2)</sup>	-	-	0.118"	3.00
		14	0.098"	2.48	<b>SM14M1TK6</b> <sup>(1)(2)</sup>	<b>SC14M1TK6</b> <sup>(1)(2)</sup>	-	-	0.125"	3.20
PCB	Machined <sup>(3)</sup>	-			<b>RM20M12E83K</b> <sup>(1)</sup>	<b>RC20M12E84K</b> <sup>(1)</sup>	-	-	-	-
Coaxial	Cable multipiece	see pages 130 to 132			<b>RMDXK10D28</b>	<b>RCDXK1D28</b>	-	-	-	-
	Cable monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
	Twisted pair multipiece				<b>RMDXK10D28 + yorex090</b>	<b>RCDXK1D28 + yorex090</b>	-	-	-	-
	Twisted pair monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
Fiber optic	POF contacts (Plastic optical fiber)	-			<b>RMPOF1000</b>	<b>RCPOF1000B</b>	-	-	-	-
Hand solder	Loaded in the connector	14-18	0.098"-0.031"	2.48-0.80	-	-	-	-	-	-

(1): Example of plating, for other plating see page 126

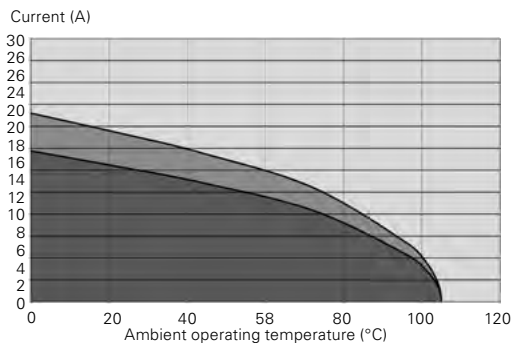
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

(3): For dimensions see page 133

### Electrical characteristics

UL	CSA	IEC
10A 500V with AWG16 wire	7A 500V with AWG16 wire	10A 80V 1.5kV 3

### UTSX 128 derating curves



- Current use
- Limited use
- Not recommended use

#### Test conditions

Contact used: machined contacts

Wires used: 16 AWG

Derating curves based on continuous current application.

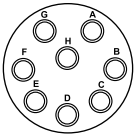
12E8/12D8 (Shell size 12, 8x20)



### Connector part number

#### UTSX 12E8/12D8

8 contacts  
4.5A/250V  
per UL 1977 with  
AWG20 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Handsolder electrical contacts loaded see page 82	Square flange receptacle	Without (Fig. 1)	<b>UTSX012E8P</b>	<b>UTSX012E8S</b>
	Plug	Without (Fig. 2)	<b>UTSX612E8P</b>	<b>UTSX612E8S</b>
		Cable gland (Fig. 3)	<b>UTSX6JC12E8P</b>	<b>UTSX6JC12E8S</b>
PCB contacts loaded see page 82	Jam nut receptacle	Without (Fig. 4)	<b>UTSX712E8P</b>	<b>UTSX712E8S</b>
	Square flange receptacle	Without (Fig. 1)	<b>UTSX012D8P</b>	<b>UTSX012D8S</b>
		Jam nut receptacle with stand off and without hold down clip	Without (Fig. 5)	<b>UTSX712D8P</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 6)	<b>UTSX712D8P32</b>	<b>UTSX712D8S32</b>

For discrimination/keying methods see page 150

Sealed unmated

#### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.

### Dimensions (For mated connector lengths see page 142)

#### Square flange receptacle - UTSX0

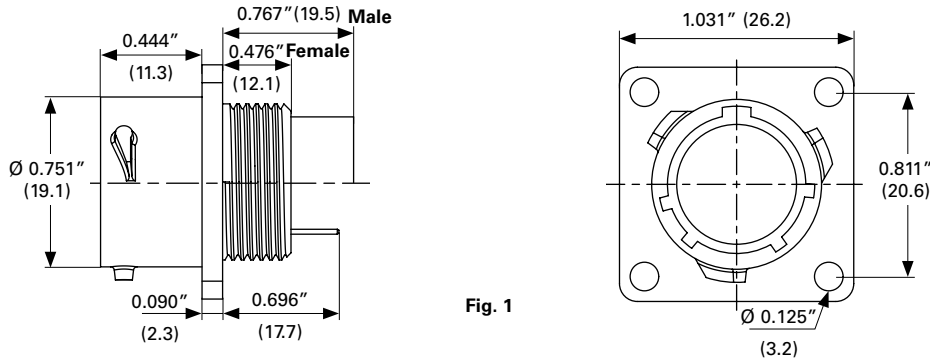


Fig. 1

#### Plug - UTSX6 and UTSX6JC

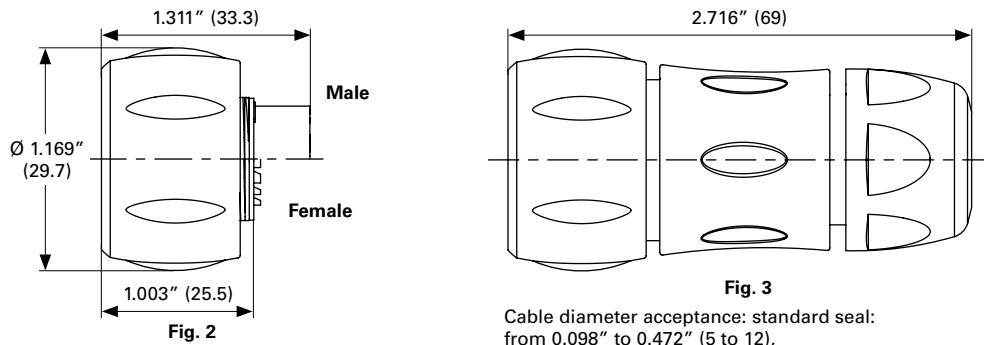


Fig. 3

Cable diameter acceptance: standard seal:  
from 0.098" to 0.472" (5 to 12),  
reduced seal: from 0.118" to 0.354" (3 to 9)

#### Jam nut receptacle UTSX7

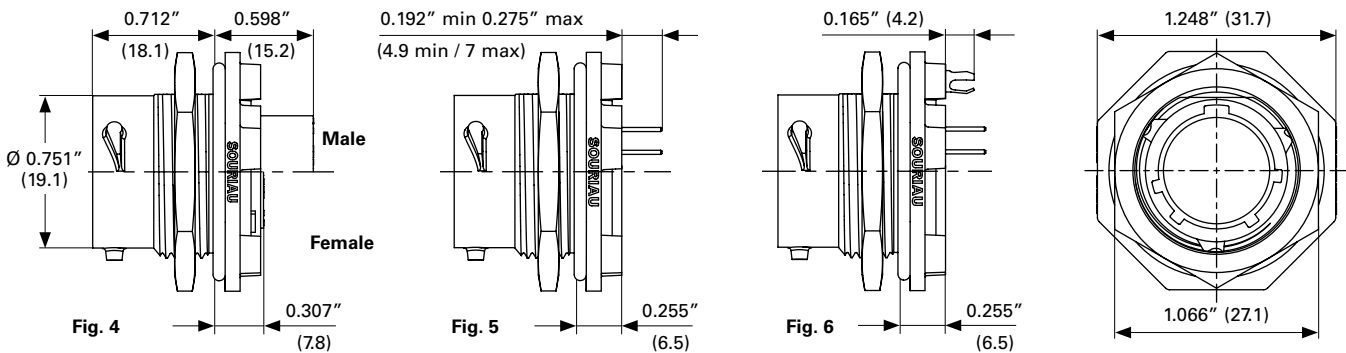


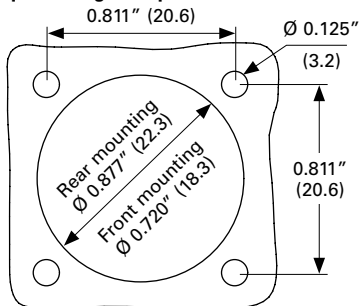
Fig. 4

Fig. 5

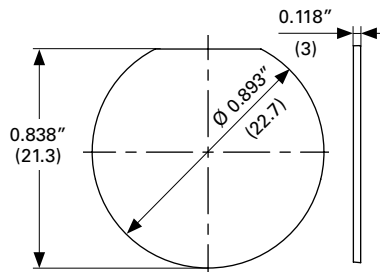
Fig. 6

#### Panel cut out

##### Square flange receptacle - UTSX0



##### Jam nut receptacle - UTSX7



Dimensions in inches (millimeters)

**Accessories**

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX12DCG
IP68 - Metal terminal	UTGX12DCGR

2

**Plug sealing cap**



Description	Part number
IP68	UTGX612DCG

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005587A	85005596

**Gasket**



Part number
UTFD13B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX712CCRG	UTGX612CCRG
Y for Yellow	UTGX712CCRY	UTGX612CCRY
R for Red	UTGX712CCRR	UTGX612CCRR

# 2

## Connectors

12E8/12D8 (Shell size 12, 8x20)

### Contacts #20

2

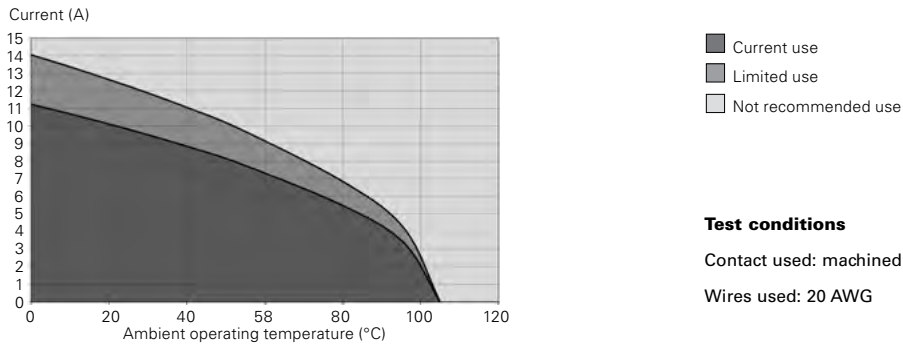
Contact type	Plating	Cable acceptance (AWG)	Cable acceptance		Wire stripping length	
			inch <sup>2</sup>	mm <sup>2</sup>	inch	mm
Hand solder Loaded in the connector	Min 0.4μ gold over 0.8μ Ni	20-18	0.020"-0.031"	0.32-0.80	0.149"	3.8
PCB Machined <sup>(1)</sup>	Min 0.4μ gold over 0.8μ Ni	—	—	—	—	—

(1): For dimensions see pages 133 or 134

### Electrical characteristics

UL	CSA	IEC
4.5A 250V with AWG20 wire	4.5A 250V with AWG20 wire	6A 32V 1.5kV 3

### UTSX 12E8/12D8 derating curves

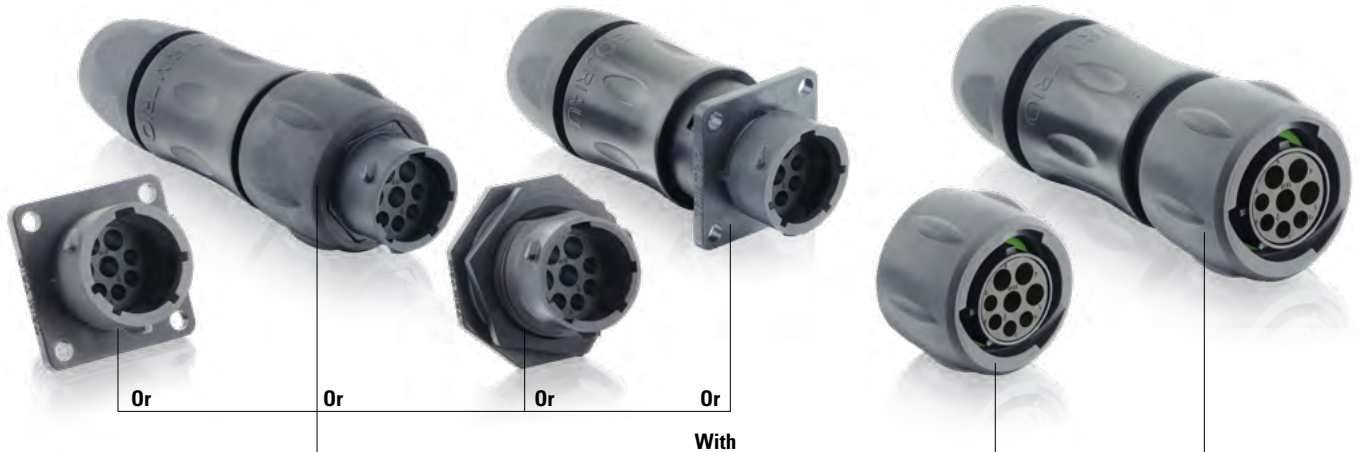


**Test conditions**  
 Contact used: machined contacts  
 Wires used: 20 AWG

Derating curves based on continuous current application.

148 (Shell size 14, 4x#16, 4x#12)

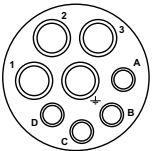
2



**Connector part number**

**UTSX 148**

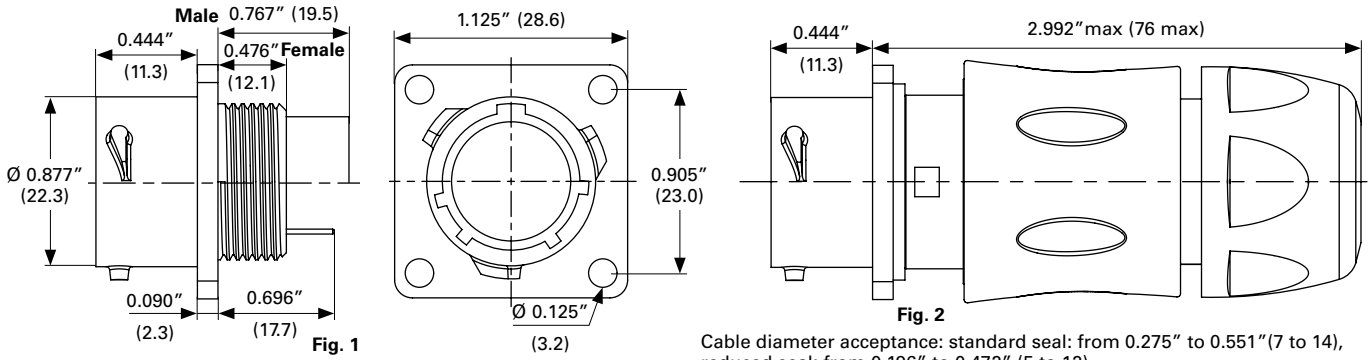
8 contacts  
 25A 600V per UL1977 with  
 AWG14 wire  
 5A 600V per UL1977  
 AWG20 wire  
 (qualification pending)



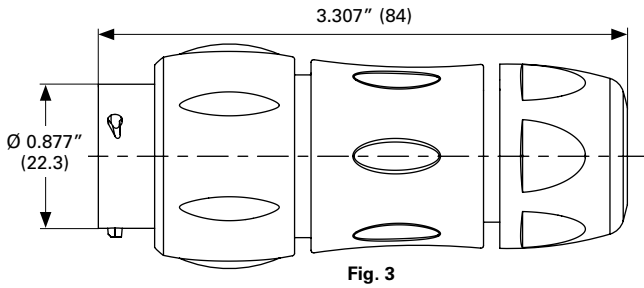
Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 87	Square flange receptacle	Without (Fig. 1)	<b>UTSX0148P</b>	<b>UTSX0148S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC148P</b>	<b>UTSX0JC148S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC148P</b>	<b>UTSX1JC148S</b>
		Plug	Without (Fig. 4)	<b>UTSX6148P</b>
	Cable gland (Fig. 5)		<b>UTSX6JC148P</b>	<b>UTSX6JC148S</b>
	Jam nut receptacle	Without (Fig. 6)	<b>UTSX7148P</b>	<b>UTSX7148S</b>

### Dimensions (For mated connector lengths see page 142)

#### Square flange receptacle - UTSX0 and UTSX0JC

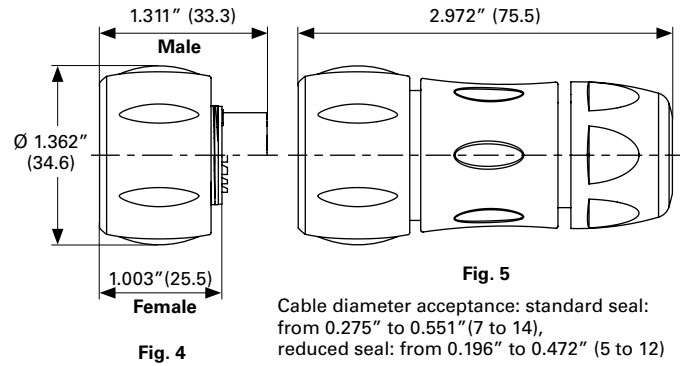


#### Free hanging - UTSX1JC

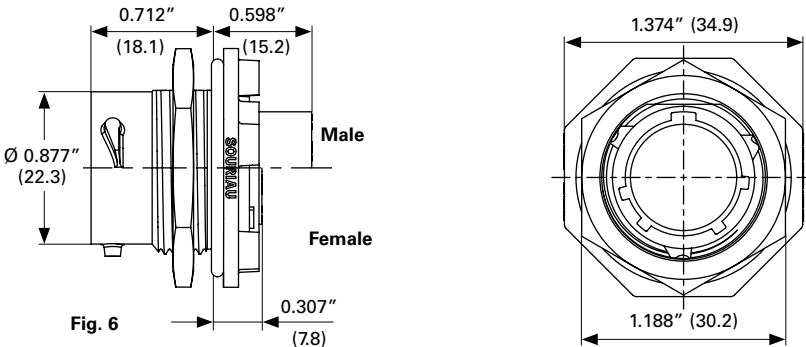


Cable diameter acceptance: standard seal: from 0.275" to 0.551" (7 to 14),  
reduced seal: from 0.196" to 0.472" (5 to 12)

#### Plug - UTSX6 and UTSX6JC

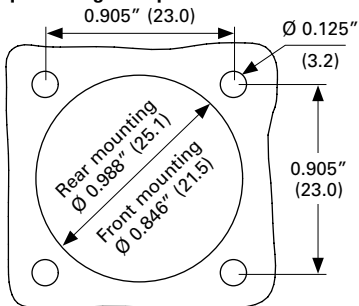


#### Jam nut receptacle UTSX7

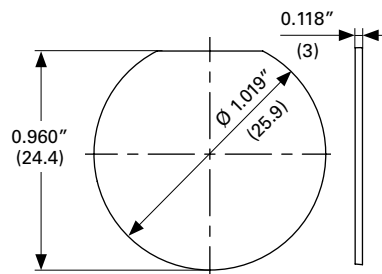


#### Panel cut out

##### Square flange receptacle - UTSX0



##### Jam nut receptacle - UTSX7



Dimensions in inches (millimeters)



**Accessories**

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX14DCG
IP68 - Metal terminal	UTGX14DCGR

2

**Square flange sealing cap**



Description	Part number
IP68 - Metal terminal	UTGX14DCGE

**Plug sealing cap**



Description	Part number
IP68	UTS614DCG133

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005588A	85005597

**Gasket**



Part number
UTFD14B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX714CCRG	UTGX614CCRG
Y for Yellow	UTGX714CCRY	UTGX614CCRY
R for Red	UTGX714CCRR	UTGX614CCRR

# 2

## Connectors

148 (Shell size 14, 4x#16, 4x#12)

### Tooling

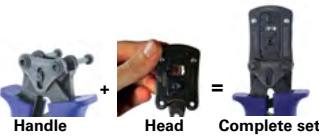
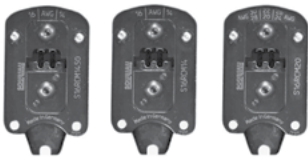
2

#### Tooling



Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

#### Crimp tooling (without Shandles)



Contact size	Contacts	Part number of Head
Standard contacts #16 Ø 0.062" (1.6)	RM/RC 28M1K <sup>(1)</sup>	<b>S16RCM20*</b>
	RM/RC 24M9K <sup>(1)</sup>	<b>S16RCM20*</b>
	RM/RC 20M13K <sup>(1)</sup>	<b>S16RCM20*</b>
	RM/RC 20M12K <sup>(1)</sup>	<b>S16RCM20*</b>
	RM/RC 16M23K <sup>(1)</sup>	<b>S16RCM16*</b>
	RM/RC 14M30K <sup>(1)</sup>	<b>S16RCM14*</b>
	SM/SC 24ML1TK6 <sup>(1)</sup>	<b>S16SCM20*</b>
	SM/SC 20ML1TK6 <sup>(1)</sup>	<b>S16SCM20*</b>
	SM/SC 16ML1TK6 <sup>(1)</sup>	<b>S16SCML1*</b>
	SM/SC 14ML1TK6 <sup>(1)</sup>	<b>S16SCML1*</b>
	SM/SC 16ML11TK6 <sup>(1)</sup>	<b>S16SCML11*</b>

(1): Example of plating, for other plating options see page 126

\* Heads to be used with handle PN: SHANDLES

#### Extraction tool #16

Fig. 1



Fig. 2



Description	Part number
Fig. 1	<b>RX2025GE1</b>
Fig. 2 - Long endurance tool	<b>RX2031J</b>

#### Crimp tooling #12



Contact size	Part number hand tool	Part number positioner + locator setting
Standard contacts #12 Ø 0.094" (2.4)	<b>M317</b>	<b>VGE10077A</b>

#### Extraction tool #20



Description	Part number
Contacts #12 Ø 0.094" (2.4)	<b>51060210924</b>

Dimensions in inches (millimeters)

148 (Shell size 14, 4x#16, 4x#12)

## Contacts #16

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø inch	max mm	Insulator Ø inch	max mm	
Crimp contacts	Machined	30-28	0.002"-0.003"	0.05-0.08	RM28M1K <sup>(1)</sup>	RC28M1K <sup>(1)</sup>	0.021"	0.55	0.039"	1.00	
		26-24	0.005"-0.009"	0.13-0.25	RM24M9K <sup>(1)</sup>	RC24M9K <sup>(1)</sup>	0.031"	0.80	0.062"	1.58	
		22-20	0.012"-0.020"	0.32-0.52	RM20M13K <sup>(1)</sup>	RC20M13K <sup>(1)</sup>	0.045"	1.15	0.070"	1.80	
		22-20	0.012"-0.020"	0.32-0.52	RM20M12K <sup>(1)</sup>	RC20M12K <sup>(1)</sup>	0.045"	1.15	0.086"	2.20	
		20-16	0.020"-0.059"	0.52-1.48	RM16M23K <sup>(1)</sup>	RC16M23K <sup>(1)</sup>	0.070"	1.80	0.125"	3.20	
		16-14	0.059"-0.098"	1.48-2.48	RM14M30K <sup>(1)</sup>	RC14M30K <sup>(1)</sup>	0.090"	2.30	0.125"	3.20	
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	SM24M1TK6 <sup>(1)(2)</sup>	SC24M1TK6 <sup>(1)(2)</sup>	-	-	0.035"-0.062"	0.90-1.58	
		22-20	0.012"-0.020"	0.32-0.52	SM20M1TK6 <sup>(1)(2)</sup>	SC20M1TK6 <sup>(1)(2)</sup>	-	-	0.047"-0.082"	1.20-2.10	
		18-16	0.031"-0.059"	0.80-1.48	SM16M1TK6 <sup>(1)(2)</sup>	SC16M1TK6 <sup>(1)(2)</sup>	-	-	0.125"	3.20	
		18-16	0.031"-0.059"	0.80-1.48	SM16M11TK6 <sup>(1)(2)</sup>	SC16M11TK6 <sup>(1)(2)</sup>	-	-	0.118"	3.00	
		14	0.098"	2.48	SM14M1TK6 <sup>(1)(2)</sup>	SC14M1TK6 <sup>(1)(2)</sup>	-	-	0.125"	3.20	
	PCB	Machined <sup>(3)</sup>	-	-	-	RM20M12E83K <sup>(1)</sup>	RC20M12E84K <sup>(1)</sup>	-	-	-	-
	Coaxial	Cable multipiece	see pages 130 to 132			RMDXK10D28	RCDXK1D28	-	-	-	-
Cable monocrimp					RMDX60xxD28	RCDX60xxD28	-	-	-	-	
Twisted pair multipiece					RMDXK10D28 + yox090	RCDXK1D28 + yox090	-	-	-	-	
Twisted pair monocrimp					RMDX60xxD28	RCDX60xxD28	-	-	-	-	

(1): Example of plating, for other plating see page 126

(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

## Contacts #12

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø inch	max mm	Insulator Ø inch	max mm
Crimp contacts	Machined	20	-	-	82911457NA <sup>(1)</sup>	82911456A <sup>(1)</sup>	0.027"	0.7	0.192"	4.90
		20	-	-	82911459NA <sup>(1)</sup>	82911458A <sup>(1)</sup>	0.044"	1.12		
		18	-	-	82911461NA <sup>(1)</sup>	82911460A <sup>(1)</sup>	0.055"	1.42		
		16	-	-	82911463NA <sub>v</sub>	82911462A <sup>(1)</sup>	0.067"	1.72		
		14	-	-	82911465NA <sup>(1)</sup>	82911464A <sup>(1)</sup>	0.087"	2.20		
		12	-	-	82911467NA <sup>(1)</sup>	82911466A <sup>(1)</sup>	0.111"	2.82		

(1): Example of plating, for other plating see page 126

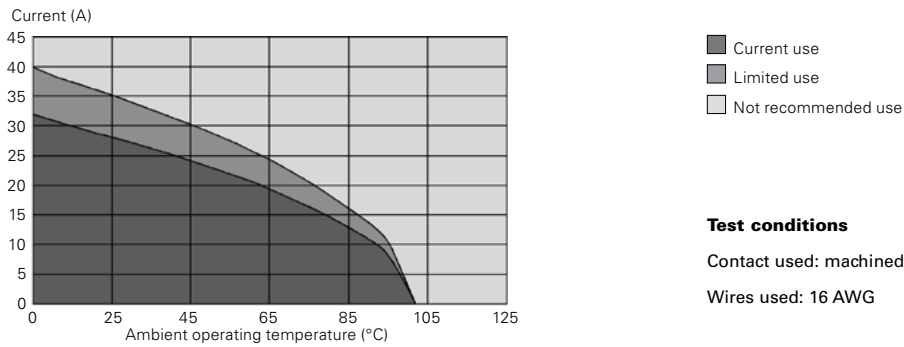
### Electrical characteristics

2

UL	CSA	IEC
25A 600V with AWG14* 5A 600V with AWG20*	17A 600V with AWG14* 5A 600V with AWG20*	17A 230V 1.5kV 3

\* qualification pending

### UTSX 148 derating curves



- Current use
- Limited use
- Not recommended use

**Test conditions**  
 Contact used: machined contacts  
 Wires used: 16 AWG

Derating curves based on continuous current application.

12 10 - 12E10/12D10 (Shell size 12, 10x#20)

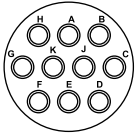


2

### Connector part number

#### UTSX 1210 - 12E10/12D10

10 contacts  
4.5A/250V  
per UL 1977  
with AWG20 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 93	Square flange receptacle	Without (Fig. 1)	<b>UTSX01210P</b>	<b>UTSX01210S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC1210P</b>	<b>UTSX0JC1210S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC1210P</b>	<b>UTSX1JC1210S</b>
	Plug	Without (Fig. 4)	<b>UTSX61210P</b>	<b>UTSX61210S</b>
		Cable gland (Fig. 5)	<b>UTSX6JC1210P</b>	<b>UTSX6JC1210S</b>
	Jam nut receptacle	Without (Fig. 6)	<b>UTSX71210P</b>	<b>UTSX71210S</b>
Handsolder electrical contacts loaded see page 93	Square flange receptacle	Without (Fig. 1)	<b>UTSX012E10P</b>	<b>UTSX012E10S</b>
	Plug	Without (Fig. 4)	<b>UTSX612E10P</b>	<b>UTSX612E10S</b>
		Cable gland (Fig. 5)	<b>UTSX6JC12E10P</b>	<b>UTSX6JC12E10S</b>
	Jam nut receptacle	Without (Fig. 6)	<b>UTSX712E10P</b>	<b>UTSX712E10S</b>
PCB contacts loaded	Square flange receptacle	Without (Fig. 3)	<b>UTSX012D10P</b>	<b>UTSX012D10S</b>
	Jam nut receptacle with stand off and without hold down clip	Without (Fig.7)	<b>UTSX712D10P</b>	<b>UTSX712D10S</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 8)	<b>UTSX712D10P32</b>	<b>UTSX712D10S32</b>

For discrimination/keying methods see page 150

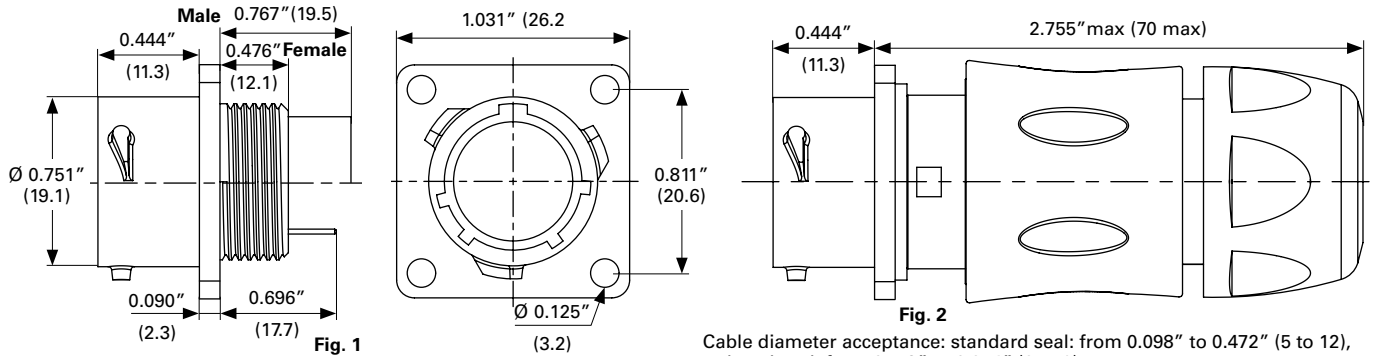
Sealed unmatred

#### Overmolded cable assembly part numbers

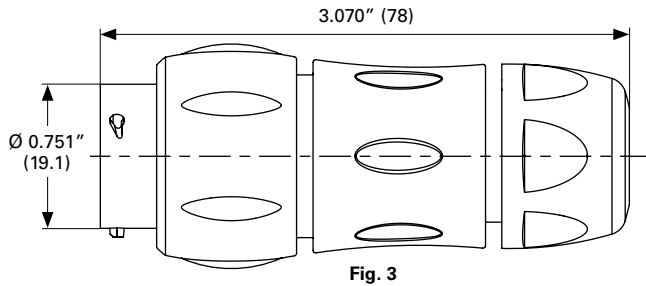
Please contact us directly for overmolded cable assemblies.

### Dimensions (For mated connector lengths see page 142)

#### Square flange receptacle - UTSX0 and UTSX0JC

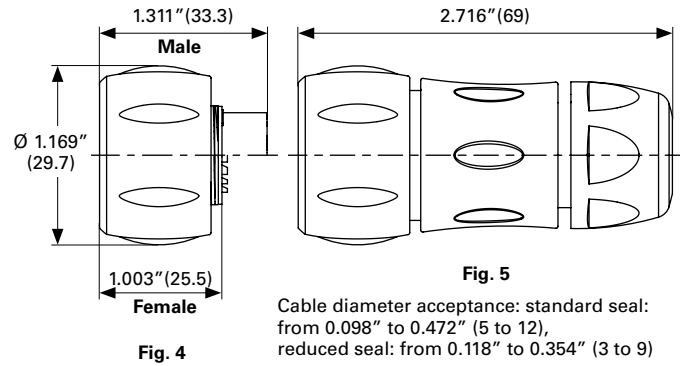


#### Free hanging - UTSX1JC

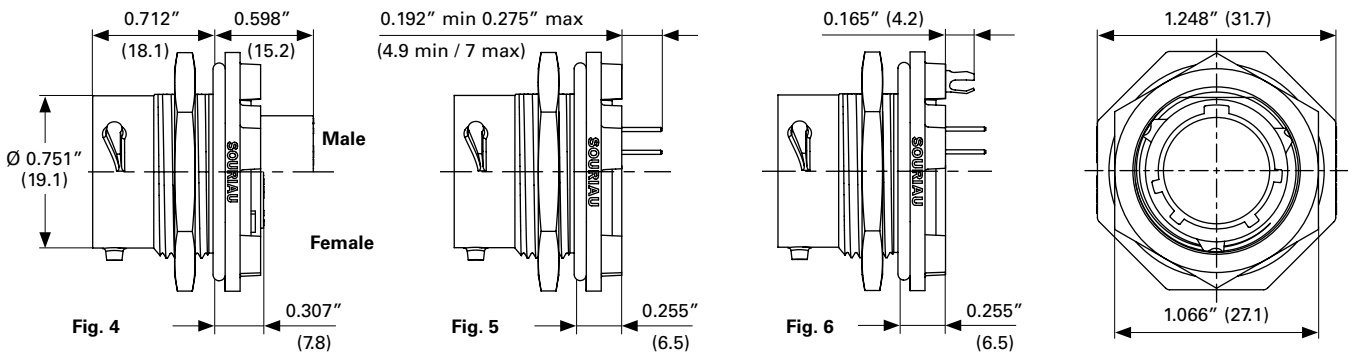


Cable diameter acceptance: standard seal: from 0.098" to 0.472" (5 to 12), reduced seal: from 0.118" to 0.354" (3 to 9)

#### Plug - UTSX6 and UTSX6JC

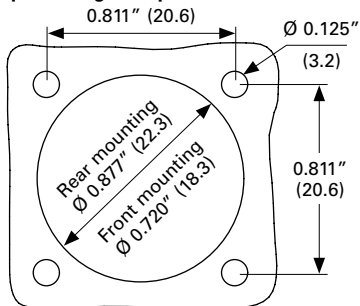


#### Jam nut receptacle UTSX7

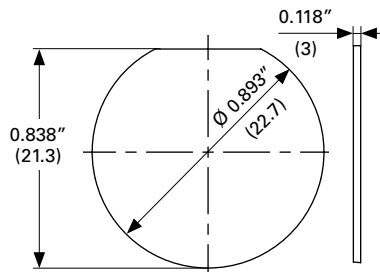


#### Panel cut out

##### Square flange receptacle - UTSX0



##### Jam nut receptacle - UTSX7



Dimensions in inches (millimeters)

**Accessories**

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX12DCG
IP68 - Metal terminal	UTGX12DCGR

2

**Square flange sealing cap**



Description	Part number
IP68 - Metal terminal	UTGX12DCGE

**Plug sealing cap**



Description	Part number
IP68	UTGX612DCG

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005587A	85005596

**Gasket**



Part number
UTFD13B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX712CCRG	UTGX612CCRG
Y for Yellow	UTGX712CCRY	UTGX612CCRY
R for Red	UTGX712CCRR	UTGX612CCRR

# 2

## Connectors

1210 - 12E10/12D10 (Shell size 12, 10x#20)

### Tooling

2

#### Tooling



Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

#### Crimp tooling (without Shandles)

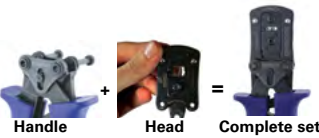


Contact size	Contacts	Part number of Head
Standard contacts #20 Ø 0.039" (1)	<b>RM/RC 24W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>RM/RC 20W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>RM/RC 18W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>SM/SC 24WL3<sup>(1)(2)</sup></b>	<b>S20SCM20*</b>
	<b>SM/SC 20WL3<sup>(1)(2)</sup></b>	<b>S20SCM20*</b>

(1): Example of plating, for other plating options see page 126

(2): Loose contact

\* Heads to be used with handle PN: SHANDLES



#### Extraction tool #20



Description	Part number
Contacts #20 Ø 0.039" (1)	<b>RX20D44</b>



1210 - 12E10/12D10 (Shell size 12, 10x#20)

## Contacts #20

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø max inch	Wire Ø max mm	Insulator Ø max inch	Insulator Ø max mm
Crimp contacts	Machined	26-24	0.005"-0.009"	0.13-0.25	<b>RM24W3K</b>	<b>RC24W3K</b>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20W3K</b>	<b>RC20W3K</b>	0.045"	1.15	0.070"	1.80
		20-18	0.020"-0.031"	0.52-0.80	<b>RM18W3K</b>	<b>RC18W3K</b>	0.051"	1.30	0.082"	2.10
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6<sup>(1)(2)</sup></b>	<b>SC24M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		26-24	0.005"-0.009"	0.13-0.25	<b>SM20M1TK6<sup>(1)(2)</sup></b>	<b>SC20M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM16M1TK6<sup>(1)(2)</sup></b>	<b>SC16M1TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10
PCB	Machined <sup>(3)</sup>	-	-	-	<b>RMW5016K</b>	<b>RCW5016K</b>	-	-	-	-

(1): Example of plating, for other plating see page 126

(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20W3TK6 becomes SM20WL3TK6

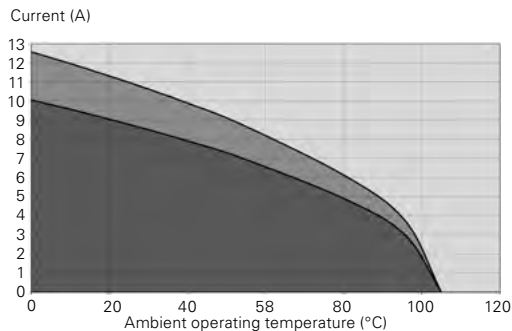
(3): for dimensions see pages 133 or 134

Contact style	Contact type	Plating	Cable acceptance (AWG)	Wire stripping length inch	Wire stripping length mm
Hand solder	Loaded in the connector	Min 0.4µ gold over 0.8µ Ni	20 to 18	0.149"	3.8

## Electrical characteristics

UL	CSA	IEC
UTSX 1210 4.5A 250V with AWG20 wire	3A 250V with AWG20 wire	6A 50V 1.5kV 3
UTSX 12E10/12D10 4.5A 250V with AWG20 wire	4.5A 250V with AWG20 wire	6A 50V 1.5kV 3

## UTSX 1210 - 12E10/12D10 derating curves



- Current use
- Limited use
- Not recommended use

## Test conditions

Contact used: machined contacts

Wires used: 20 AWG

Derating curves based on continuous current application.

# 2

## Connectors

1412 (Shell size 14, 12x#16)

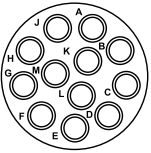
2



### Connector part number

#### UTSX 1412

12 contacts  
16A/500V  
per UL 1977 with  
AWG14 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately See page 98	Square flange receptacle	Without (Fig. 1)	<b>UTSX01412P</b>	<b>UTSX01412S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC1412P</b>	<b>UTSX0JC1412S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC1412P</b>	<b>UTSX1JC1412S</b>
		Cable gland and grommet (Fig. 3)	<b>UTSX1GJC1412P</b>	–
	Plug	Without (Fig. 4)	<b>UTSX61412P</b>	<b>UTSX61412S</b>
		Cable gland (Fig. 5)	<b>UTSX6JC1412P</b>	<b>UTSX6JC1412S</b>
Cable gland and grommet (Fig. 5)		–	<b>UTSX6GJC1412S</b>	
Jam nut receptacle	Without (Fig. 6)	<b>UTSX71412P</b>	<b>UTSX71412S</b>	
	Cable gland and grommet (Fig. 7)	<b>UTSX7GJC1412P</b>	–	
PCB contacts supplied separately See page 98	Square flange receptacle	Without (Fig. 1)	<b>UTSX01412P</b>	<b>UTSX01412S</b>
	Jam nut receptacle	Without (Fig. 6)	<b>UTSX71412P</b>	<b>UTSX71412S</b>

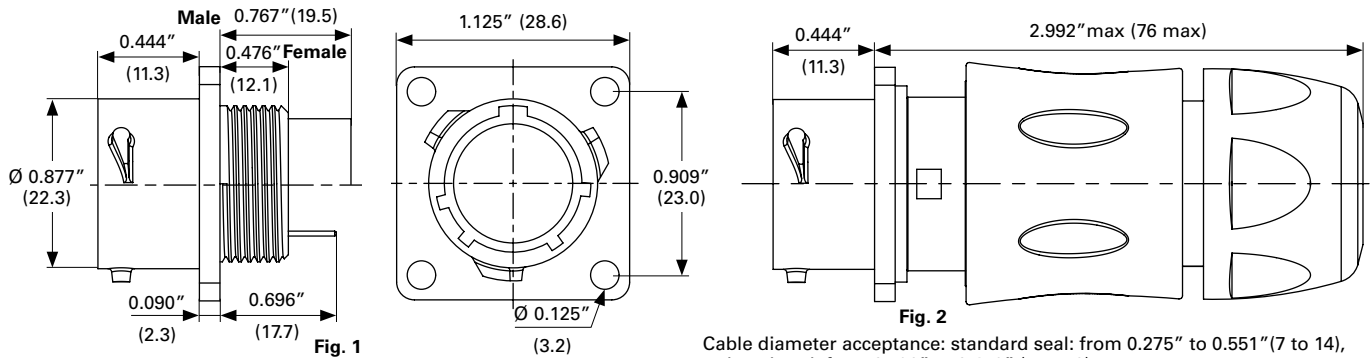
For discrimination/keying methods see page 150

#### Overmolded cable assembly part numbers

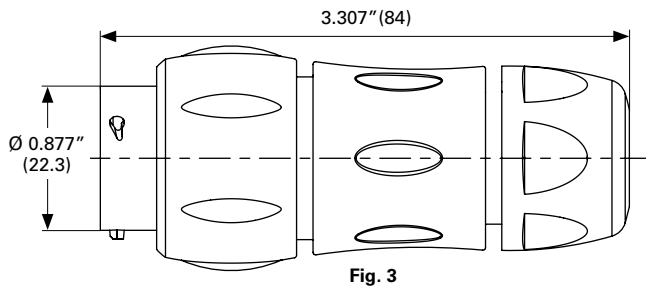
Please contact us directly for overmolded cable assemblies.

## Dimensions (For mated connector lengths see page 142)

### Square flange receptacle - UTSX0 and UTSX0JC

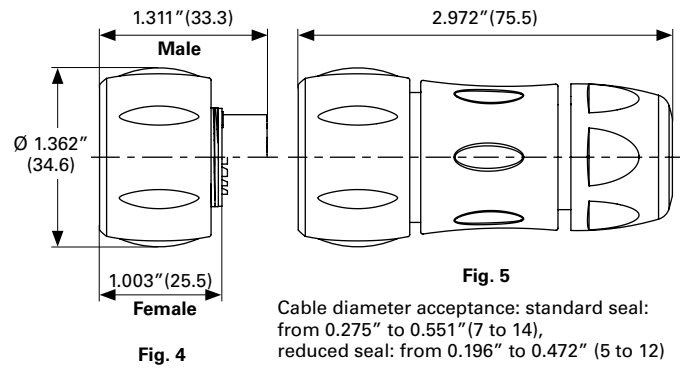


### Free hanging - UTSX1JC and UTSC1GJC

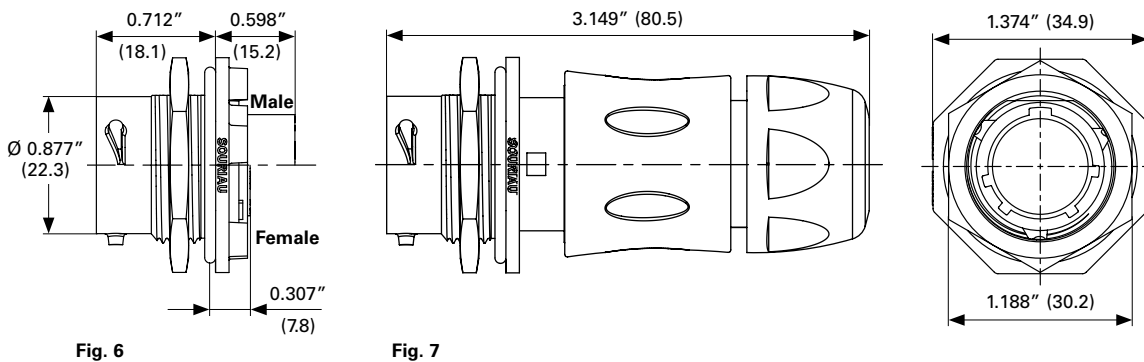


Cable diameter acceptance: standard seal: from 0.275" to 0.551" (7 to 14),  
reduced seal: from 0.196" to 0.472" (5 to 12)

### Plug - UTSX6, UTSX6JC and UTSX6GJC

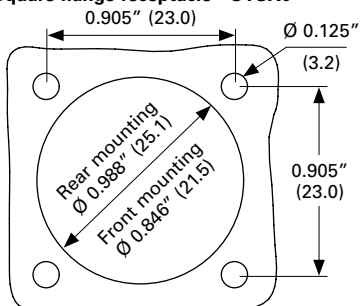


### Jam nut receptacle UTSX7 and UTSX7GJC

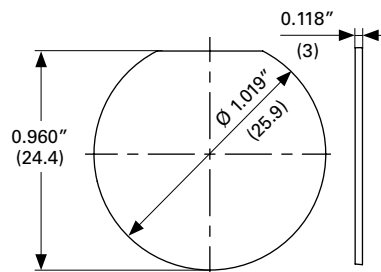


### Panel cut out

#### Square flange receptacle - UTSX0



#### Jam nut receptacle - UTSX7



# 2

## Connectors

1412 (Shell size 14, 12x#16)

### Accessories

2

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX14DCG
IP68 - Metal terminal	UTGX14DCGR

**Square flange sealing cap**



Description	Part number
IP68 - Metal terminal	UTGX14DCGE

**Plug sealing cap**



Description	Part number
IP68	UTS614DCG133

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005588A	85005597

**Gasket**



Part number
UTFD14B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX714CCRG	UTGX614CCRG
Y for Yellow	UTGX714CCRY	UTGX614CCRY
R for Red	UTGX714CCRR	UTGX614CCRR

## Tooling

### Tooling



Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

2

### Crimp tooling (without Shandles)



Contact size	Contacts	Part number of Head
Standard contacts #16 Ø 0.062" (1.6)	<b>RM/RC 28M1K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 24M9K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M13K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M12K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 16M23K<sup>(1)</sup></b>	<b>S16RCM16*</b>
	<b>RM/RC 14M30K<sup>(1)</sup></b>	<b>S16RCM14*</b>
	<b>SM/SC 24ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 20ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 16ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 14ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 16ML11TK6<sup>(1)</sup></b>	<b>S16SCML11*</b>

(1): Example of plating, for other plating options see page 126

\* Heads to be used with handle PN: SHANDLES

### Extraction tool #16

Fig. 1



Fig. 2



Description	Part number
<b>Fig. 1</b>	<b>RX2025GE1</b>
<b>Fig. 2 - Long endurance tool</b>	<b>RX2031J</b>

### Contacts #16

2

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø max inch	Wire Ø max mm	Insulator Ø max inch	Insulator Ø max mm
Crimp contacts	Machined	30-28	0.002"-0.003"	0.05-0.08	<b>RM28M1K</b> <sup>(1)</sup>	<b>RC28M1K</b> <sup>(1)</sup>	0.021"	0.55	0.039"	1.00
		26-24	0.005"-0.009"	0.13-0.25	<b>RM24M9K</b> <sup>(1)</sup>	<b>RC24M9K</b> <sup>(1)</sup>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M13K</b> <sup>(1)</sup>	<b>RC20M13K</b> <sup>(1)</sup>	0.045"	1.15	0.070"	1.80
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M12K</b> <sup>(1)</sup>	<b>RC20M12K</b> <sup>(1)</sup>	0.045"	1.15	0.086"	2.20
		20-16	0.020"-0.059"	0.52-1.48	<b>RM16M23K</b> <sup>(1)</sup>	<b>RC16M23K</b> <sup>(1)</sup>	0.070"	1.80	0.125"	3.20
		16-14	0.059"-0.098"	1.48-2.48	<b>RM14M30K</b> <sup>(1)</sup>	<b>RC14M30K</b> <sup>(1)</sup>	0.090"	2.30	0.125"	3.20
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6</b> <sup>(1)(2)</sup>	<b>SC24M1TK6</b> <sup>(1)(2)</sup>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM20M1TK6</b> <sup>(1)(2)</sup>	<b>SC20M1TK6</b> <sup>(1)(2)</sup>	-	-	0.047"-0.082"	1.20-2.10
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M1TK6</b> <sup>(1)(2)</sup>	<b>SC16M1TK6</b> <sup>(1)(2)</sup>	-	-	0.125"	3.20
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M11TK6</b> <sup>(1)(2)</sup>	<b>SC16M11TK6</b> <sup>(1)(2)</sup>	-	-	0.118"	3.00
		14	0.098"	2.48	<b>SM14M1TK6</b> <sup>(1)(2)</sup>	<b>SC14M1TK6</b> <sup>(1)(2)</sup>	-	-	0.125"	3.20
PCB	Machined <sup>(3)</sup>	-			<b>RM20M12E83K</b> <sup>(1)</sup>	<b>RC20M12E84K</b> <sup>(1)</sup>	-	-	-	-
Coaxial	Cable multipiece	see pages 130 to 132			<b>RMDXK10D28</b>	<b>RCDXK1D28</b>	-	-	-	-
	Cable monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
	Twisted pair multipiece				<b>RMDXK10D28 + yorx090</b>	<b>RCDXK1D28 + yorx090</b>	-	-	-	-
	Twisted pair monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
Fiber optic	POF contacts (Plastic optical fiber)	-			<b>RMPOF1000</b>	<b>RCPOF1000B</b>	-	-	-	-
Hand solder	Loaded in the connector	14-18	0.098"-0.031"	2.48-0.80	-	-	-	-	-	-

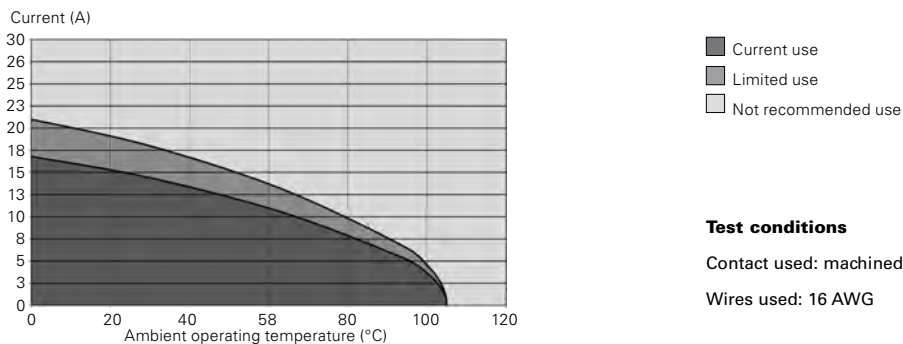
(1): Example of plating, for other plating see page 126  
(3): for dimensions see pages 133 or 134

(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

### Electrical characteristics

UL	CSA	IEC
16A 500V with AWG14 wire	16A 500V with AWG14 wire	10A 63V 1.5kV 3

### UTSX 1412 derating curves



Derating curves based on continuous current application.

14E12/14D12 (Shell size 14, 8x#20, 4#16)

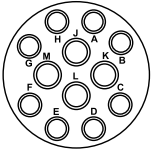
2



### Connector part number

#### UTSX 14E12/14D12

12 contacts  
5A 250V per UL1977 with AWG20 wire  
10A 600V per UL1977 with AWG16 wire (qualification pending)



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Handsolder electrical contacts loaded see page 102	Square flange receptacle	Without (Fig. 1)	<b>UTSX014E12P</b>	<b>UTSX014E12S</b>
	Plug	Without (Fig. 2)	<b>UTSX614E12P</b>	<b>UTSX614E12S</b>
		Cable gland (Fig. 3)	<b>UTSX6JC14E12P</b>	<b>UTSX6JC14E12S</b>
PCB contacts loaded see page 102	Jam nut receptacle	Without (Fig. 4)	<b>UTSX714E12P</b>	<b>UTSX714E12S</b>
	Square flange receptacle	Without (Fig. 2)	<b>UTSX014D12P</b>	<b>UTSX014D12S</b>
	Jam nut receptacle with stand off and without hold down clip	Without (Fig. 5)	<b>UTSX714D12P</b>	<b>UTSX714D12S</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 6)	<b>UTSX714D12P32</b>	<b>UTSX714D12S32</b>

For discrimination/keying methods see page 150

Sealed unmated

#### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.

### Dimensions (For mated connector lengths see page 142)

#### Square flange receptacle - UTSX0

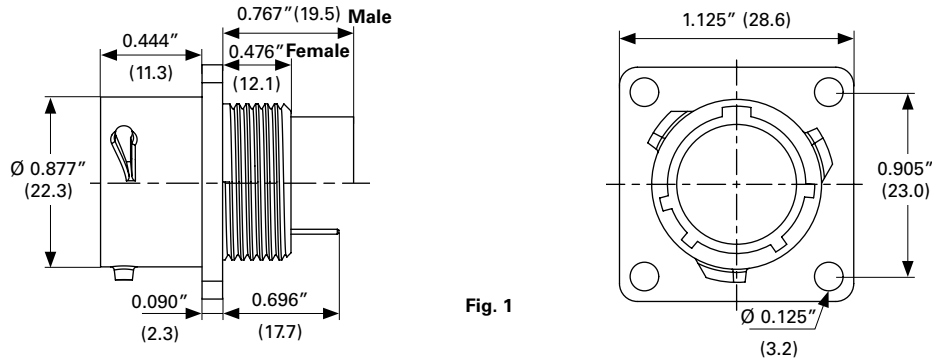


Fig. 1

#### Plug - UTSX6 and UTSX6JC

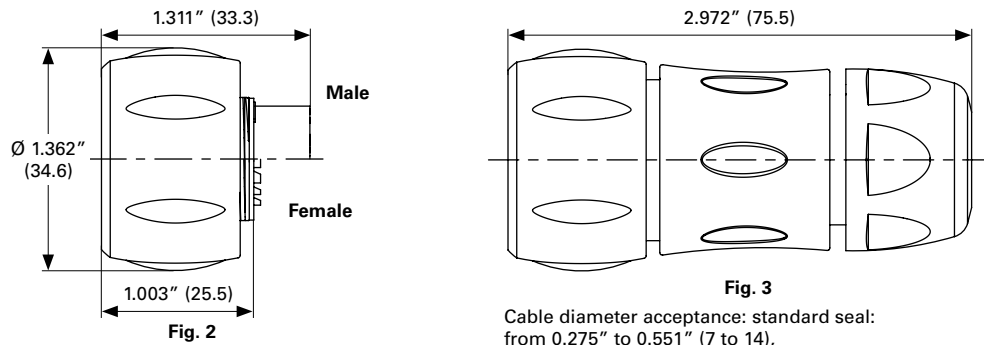


Fig. 3

Cable diameter acceptance: standard seal:  
from 0.275" to 0.551" (7 to 14),  
reduced seal: from 0.196" to 0.472" (5 to 12)

#### Jam nut receptacle UTSX7

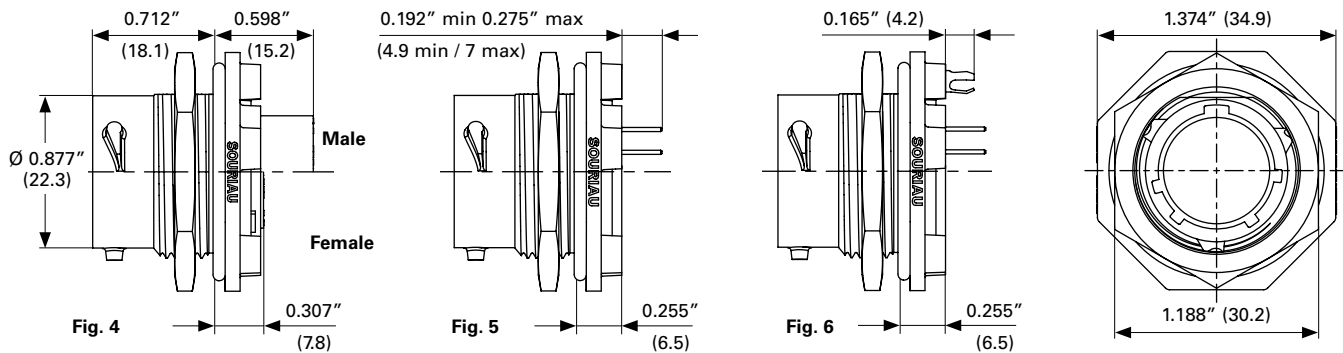


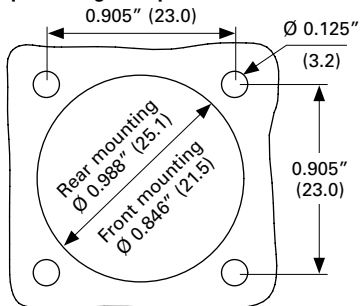
Fig. 4

Fig. 5

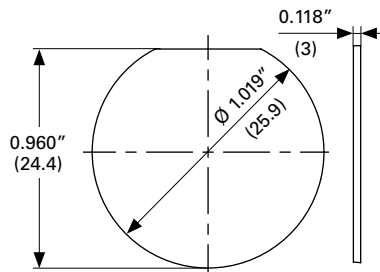
Fig. 6

#### Panel cut out

##### Square flange receptacle - UTSX0



##### Jam nut receptacle - UTSX7



Dimensions in inches (millimeters)



**Accessories**

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX14DCG
IP68 - Metal terminal	UTGX14DCGR

2

**Square flange sealing cap**



Description	Part number
IP68 - Metal terminal	UTGX14DCGE

**Plug sealing cap**



Description	Part number
IP68	UTS614DCG133

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005588A	85005597

**Gasket**



Part number
UTFD14B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX714CCRG	UTGX614CCRG
Y for Yellow	UTGX714CCRY	UTGX614CCRY
R for Red	UTGX714CCRR	UTGX614CCRR

### Contacts

2

Contact size	Contact type	Plating	Cable acceptance (AWG)	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Wire stripping length inch	Wire stripping length mm
#16	Handsold Loaded in the connector	Min 0.4μ gold over 0.8μ Ni	18 - 14	0.032"-0.081"	0.823 - 2.08	0.196"	5
	PCB Machined <sup>(1)</sup>	Min 0.4μ gold over 0.8μ Ni	—	—	—	—	—
#20	Handsold Loaded in the connector	Min 0.4μ gold over 0.8μ Ni	20 - 18	0.012"-0.029"	0.32 - 0.75	0.149"	3.8
	PCB Machined <sup>(1)</sup>	Min 0.4μ gold over 0.8μ Ni	—	—	—	—	—

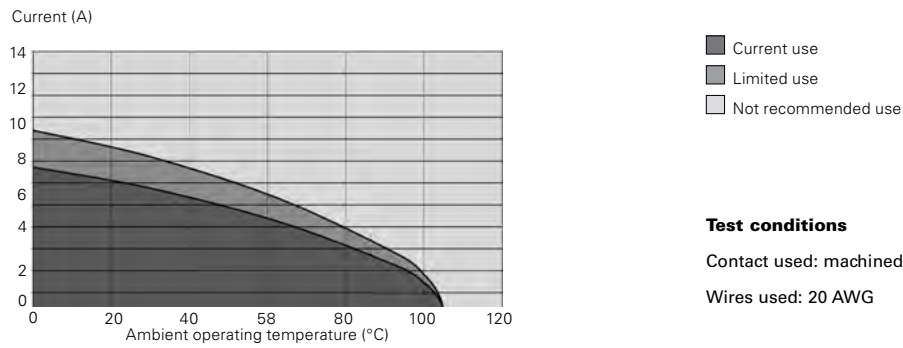
(1): For dimensions see pages 133 or 134

### Electrical characteristics

UL	CSA	IEC
5A 250V with AWG20* 10A 600V with AWG16*	5A 250V with AWG20* 10A 600V with AWG16*	4A 50V 1.5kV 3

\* qualification pending

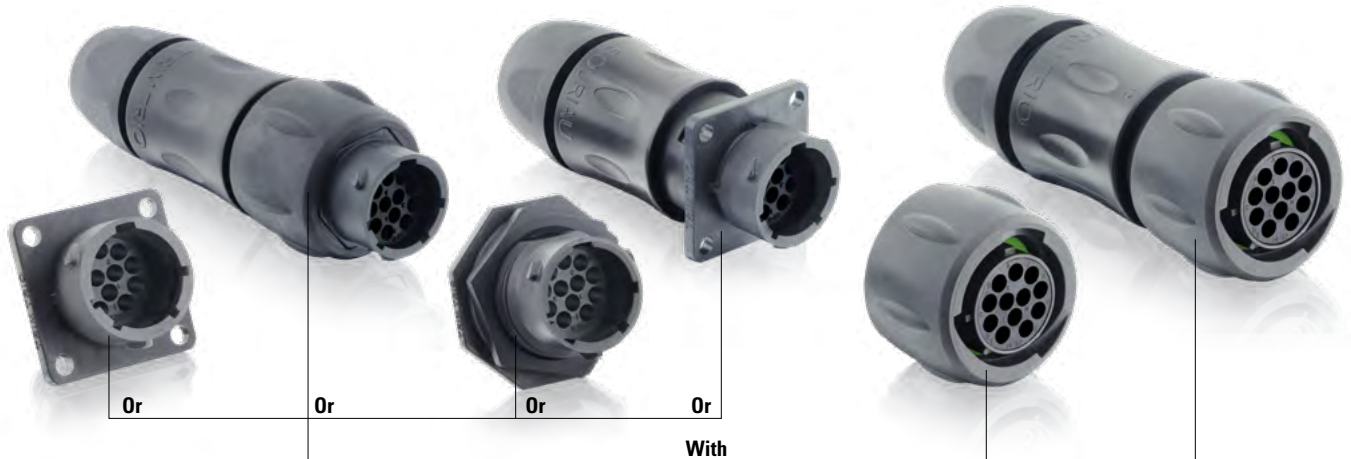
### UTSX 14E12/14D12 derating curves



**Test conditions**  
 Contact used: machined contacts  
 Wires used: 20 AWG

Derating curves based on continuous current application.

1492 (Shell size 14, 12x#16)

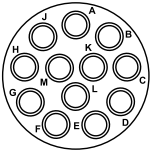


2

### Connector part number

**UTSX 1492**

12 contacts  
10A/500V  
per UL 1977 with  
AWG16 wire

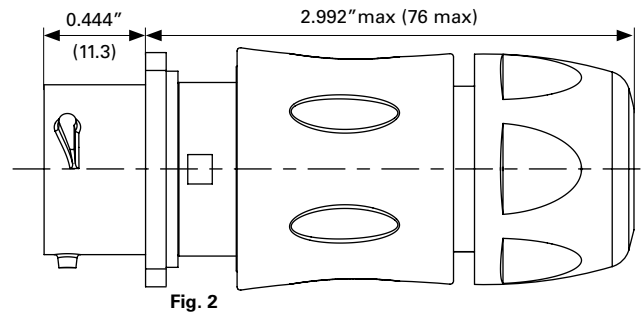
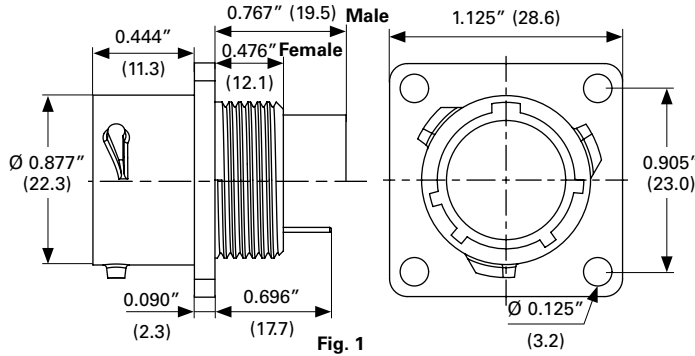


Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 107	Square flange receptacle	Without (Fig. 1)	<b>UTSX01492P</b>	<b>UTSX01492S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC1492P</b>	<b>UTSX0JC1492S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC1492P</b>	<b>UTSX1JC1492S</b>
	Plug	Without (Fig. 4)	<b>UTSX61492P</b>	<b>UTSX61492S</b>
Cable gland (Fig. 5)		<b>UTSX6JC1492P</b>	<b>UTSX6JC1492S</b>	
PCB contacts supplied separately see page 107	Square flange receptacle	Without (Fig. 1)	<b>UTSX01492P</b>	<b>UTSX01492S</b>
		Jam nut receptacle	<b>UTSX71492P</b>	<b>UTSX71492S</b>
	Jam nut receptacle	Without (Fig. 6)	<b>UTSX01492P</b>	<b>UTSX01492S</b>
		Without (Fig. 6)	<b>UTSX71492P</b>	<b>UTSX71492S</b>

For discrimination/keying methods see page 150

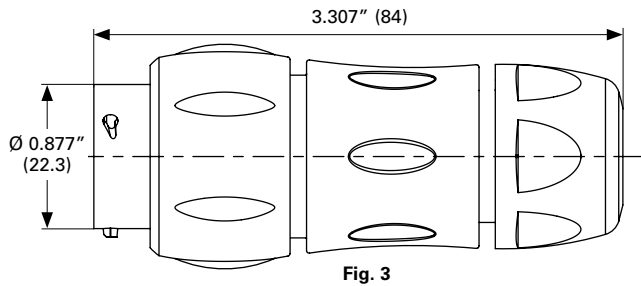
### Dimensions (For mated connector lengths see page 142)

#### Square flange receptacle - UTSX0 and UTSX0JC



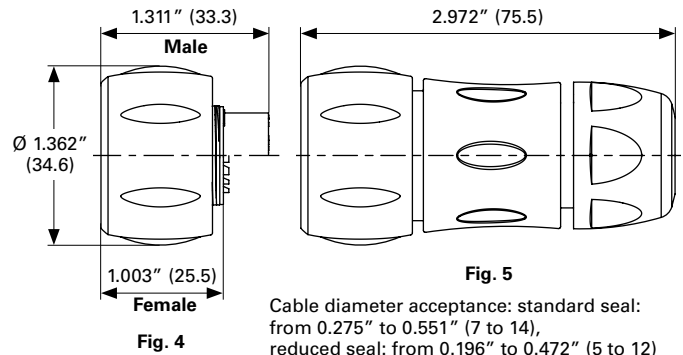
Cable diameter acceptance: standard seal: from 0.275" to 0.551" (7 to 14), reduced seal: from 0.196" to 0.472" (5 to 12)

#### Free hanging - UTSX1JC



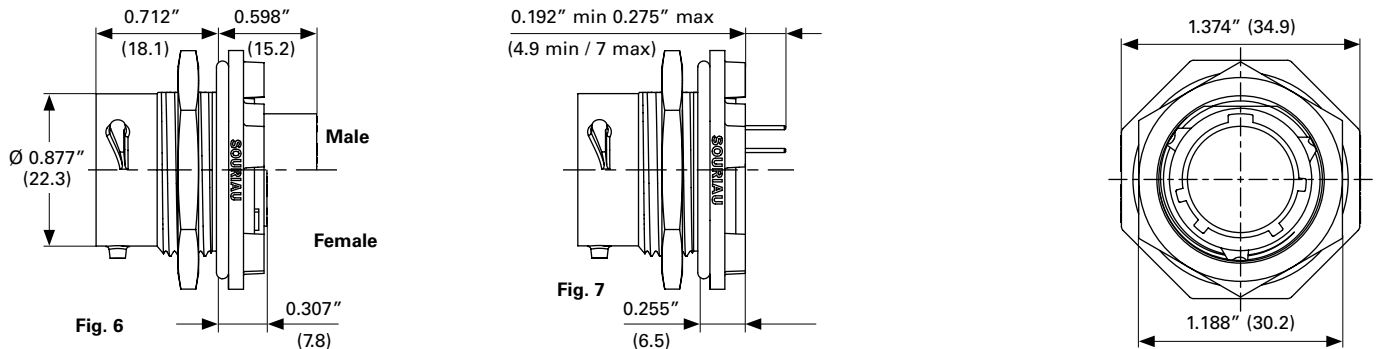
Cable diameter acceptance: standard seal: from 0.275" to 0.551" (7 to 14), reduced seal: from 0.196" to 0.472" (5 to 12)

#### Plug - UTSX6 and UTSX6JC



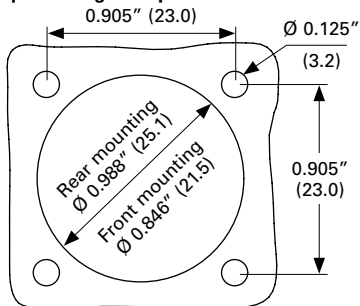
Cable diameter acceptance: standard seal: from 0.275" to 0.551" (7 to 14), reduced seal: from 0.196" to 0.472" (5 to 12)

#### Jam nut receptacle UTSX7

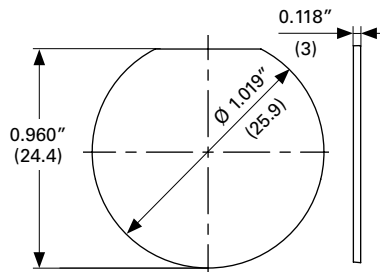


#### Panel cut out

##### Square flange receptacle - UTSX0



##### Jam nut receptacle - UTSX7



Dimensions in inches (millimeters)

## Accessories

### Jam nut and free hanging receptacle sealing caps



Description	Part number
IP68	UTGX14DCG
IP68 - Metal terminal	UTGX14DCGR

2

### Square flange sealing cap



Description	Part number
IP68 - Metal terminal	UTGX14DCGE

### Plug sealing cap



Description	Part number
IP68	UTS614DCG133

### Plastic protective cap



Part number receptacle cap	Part number plug cap
85005588A	85005597

### Gasket



Part number
UTFD14B

### Color coding rings



Description	Part number receptacles	Part number plugs
G for Green	UTGX714CCRG	UTGX614CCRG
Y for Yellow	UTGX714CCRY	UTGX614CCRY
R for Red	UTGX714CCRR	UTGX614CCRR

# 2

## Connectors

1492 (Shell size 14, 12x#16)

### Tooling

2

#### Tooling



Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

#### Crimp tooling (without Shandles)



Contact size	Contacts	Part number of Head
Standard contacts #16 Ø 0.062" (1.6)	<b>RM/RC 28M1K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 24M9K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M13K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 20M12K<sup>(1)</sup></b>	<b>S16RCM20*</b>
	<b>RM/RC 16M23K<sup>(1)</sup></b>	<b>S16RCM16*</b>
	<b>RM/RC 14M30K<sup>(1)</sup></b>	<b>S16RCM14*</b>
	<b>SM/SC 24ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 20ML1TK6<sup>(1)</sup></b>	<b>S16SCM20*</b>
	<b>SM/SC 16ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 14ML1TK6<sup>(1)</sup></b>	<b>S16SCML1*</b>
	<b>SM/SC 16ML11TK6<sup>(1)</sup></b>	<b>S16SCML11*</b>

(1): Example of plating, for other plating options see page 126

\* Heads to be used with handle PN: SHANDLES

#### Extraction tool #16

Fig. 1



Fig. 2



Description	Part number
<b>Fig. 1</b>	<b>RX2025GE1</b>
<b>Fig. 2 - Long endurance tool</b>	<b>RX2031J</b>

## Contacts #16

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø max inch	Wire Ø max mm	Insulator Ø max inch	Insulator Ø max mm
Crimp contacts	Machined	30-28	0.002"-0.003"	0.05-0.08	<b>RM28M1K<sup>(1)</sup></b>	<b>RC28M1K<sup>(1)</sup></b>	0.021"	0.55	0.039"	1.00
		26-24	0.005"-0.009"	0.13-0.25	<b>RM24M9K<sup>(1)</sup></b>	<b>RC24M9K<sup>(1)</sup></b>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M13K<sup>(1)</sup></b>	<b>RC20M13K<sup>(1)</sup></b>	0.045"	1.15	0.070"	1.80
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20M12K<sup>(1)</sup></b>	<b>RC20M12K<sup>(1)</sup></b>	0.045"	1.15	0.086"	2.20
		20-16	0.020"-0.059"	0.52-1.48	<b>RM16M23K<sup>(1)</sup></b>	<b>RC16M23K<sup>(1)</sup></b>	0.070"	1.80	0.125"	3.20
		16-14	0.059"-0.098"	1.48-2.48	<b>RM14M30K<sup>(1)</sup></b>	<b>RC14M30K<sup>(1)</sup></b>	0.090"	2.30	0.125"	3.20
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6<sup>(1)(2)</sup></b>	<b>SC24M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM20M1TK6<sup>(1)(2)</sup></b>	<b>SC20M1TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M1TK6<sup>(1)(2)</sup></b>	<b>SC16M1TK6<sup>(1)(2)</sup></b>	-	-	0.125"	3.20
		18-16	0.031"-0.059"	0.80-1.48	<b>SM16M11TK6<sup>(1)(2)</sup></b>	<b>SC16M11TK6<sup>(1)(2)</sup></b>	-	-	0.118"	3.00
	14	0.098"	2.48	<b>SM14M1TK6<sup>(1)(2)</sup></b>	<b>SC14M1TK6<sup>(1)(2)</sup></b>	-	-	0.125"	3.20	
PCB	Machined <sup>(3)</sup>	-			<b>RM20M12E83K<sup>(1)</sup></b>	<b>RC20M12E84K<sup>(1)</sup></b>	-	-	-	-
Coaxial	Cable multipiece	see pages 130 to 132			<b>RMDXK10D28</b>	<b>RCDXK1D28</b>	-	-	-	-
	Cable monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
	Twisted pair multipiece				<b>RMDXK10D28 + yorex090</b>	<b>RCDXK1D28 + yorex090</b>	-	-	-	-
	Twisted pair monocrimp				<b>RMDX60xxD28</b>	<b>RCDX60xxD28</b>	-	-	-	-
Fiber optic	POF contacts (Plastic optical fiber)	-			<b>RMPOF1000</b>	<b>RCPOF1000B</b>	-	-	-	-
Hand solder	Loaded in the connector	14-18	0.098"-0.031"	2.48-0.80	-	-	-	-	-	-

(1): Example of plating, for other plating see page 126

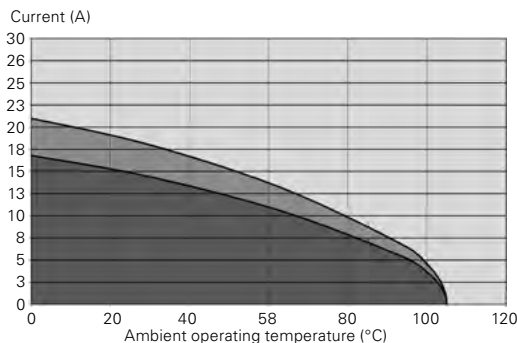
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

(3): for dimensions see pages 133 or 134

## Electrical characteristics

UL	CSA	IEC
10A 500V with AWG16 wire	7A 500V with AWG16 wire	10A 63V 1.5kV 3

## UTSX 1412 derating curves



- Current use
- Limited use
- Not recommended use

## Test conditions

Contact used: machined contacts

Wires used: 16 AWG

Derating curves based on continuous current application.

# 2

## Connectors

12E14/12D14 (Shell size 12, 14x20)

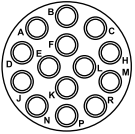
2



### Connector part number

#### UTSX 12E14/12D14

14 contacts  
4.5A/250V  
per UL 1977 with  
AWG20 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Hand solder electrical contacts loaded see page 111	Square flange receptacle	Without (Fig. 1)	<b>UTSX012E14P</b>	<b>UTSX012E14S</b>
	Plug	Without (Fig. 2)	<b>UTSX612E14P</b>	<b>UTSX612E14S</b>
		Cable gland (Fig. 3)	<b>UTSX6JC12E14P</b>	<b>UTSX6JC12E14S</b>
	Jam nut receptacle	Without (Fig. 4)	<b>UTSX712E14P</b>	<b>UTSX712E14S</b>
PCB contacts loaded see page 111	Square flange receptacle	Without (Fig. 1)	<b>UTSX012D14P</b>	<b>UTSX012D14S</b>
	Jam nut receptacle with stand off and without hold down clip	Without (Fig. 5)	<b>UTSX712D14P</b>	<b>UTSX712D14S</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 6)	<b>UTSX712D14P32</b>	<b>UTSX712D14S32</b>

For discrimination/keying methods see page 150

Sealed unmated

### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.



**Dimensions** (For mated connector lengths see page 142)

**Square flange receptacle - UTSX0**

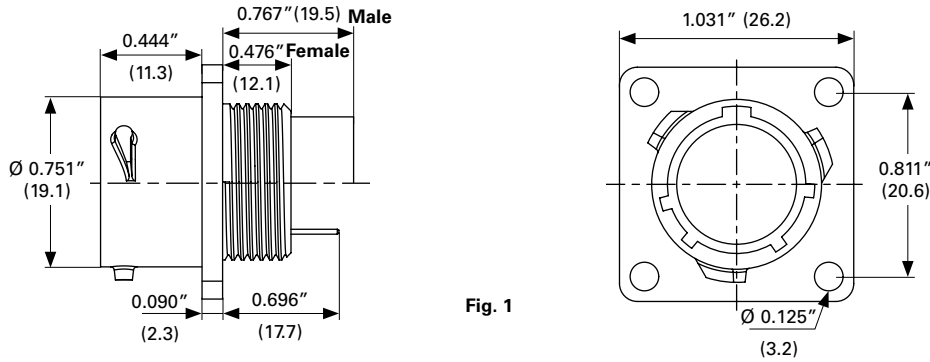


Fig. 1

**Plug - UTSX6 and UTSX6JC**

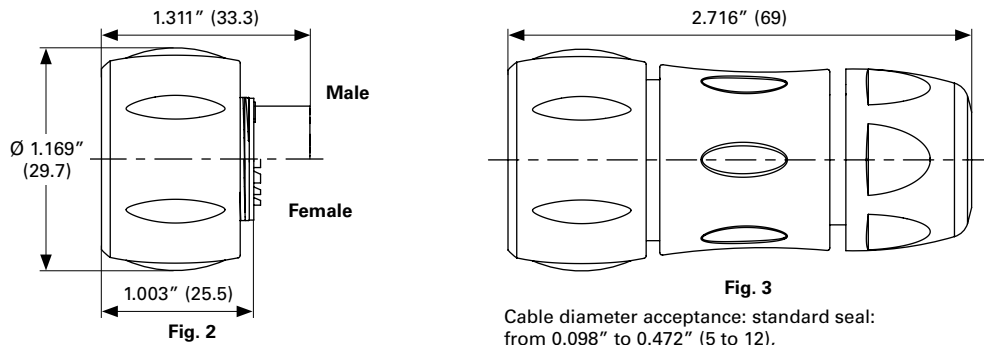


Fig. 3

Cable diameter acceptance: standard seal:  
from 0.098" to 0.472" (5 to 12),  
reduced seal: from 0.118" to 0.354" (3 to 9)

**Jam nut receptacle UTSX7**

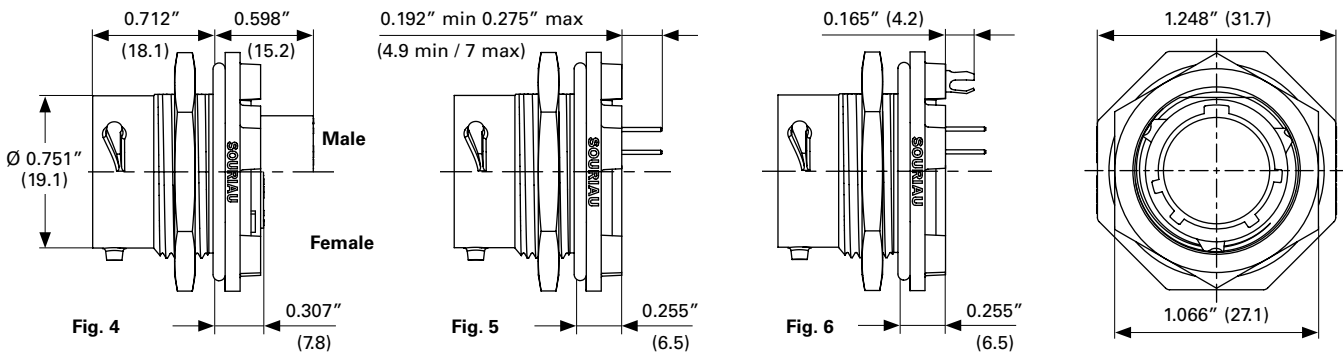


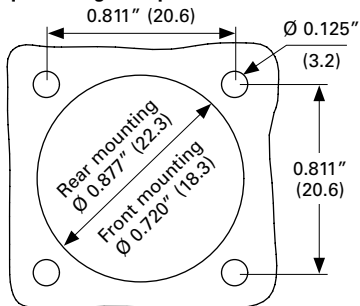
Fig. 4

Fig. 5

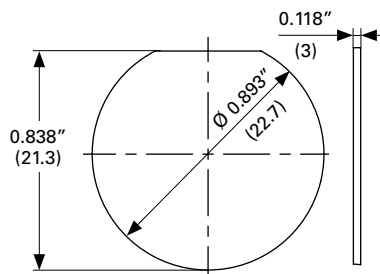
Fig. 6

**Panel cut out**

**Square flange receptacle - UTSX0**



**Jam nut receptacle - UTSX7**



# 2

## Connectors

12E14/12D14 (Shell size 12, 14x20)

### Accessories

2

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX12DCG
IP68 - Metal terminal	UTGX12DCGR

**Plug sealing cap**



Description	Part number
IP68	UTGX612DCG

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005587A	85005596

**Gasket**



Part number
UTFD13B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX712CCRG	UTGX612CCRG
Y for Yellow	UTGX712CCRY	UTGX612CCRY
R for Red	UTGX712CCRR	UTGX612CCRR

### Contacts #20

Contact type	Plating	Cable acceptance (AWG)	Cable acceptance		Wire stripping length	
			inch <sup>2</sup>	mm <sup>2</sup>	inch	mm
Hand solder Loaded in the connector	Min 0.4μ gold over 0.8μ Ni	20-18	0.020"-0.031"	0.32-0.80	0.149"	3.8
PCB Machined <sup>(1)</sup>	Min 0.4μ gold over 0.8μ Ni	—	—	—	—	—

(1): For dimensions see pages 133 or 134

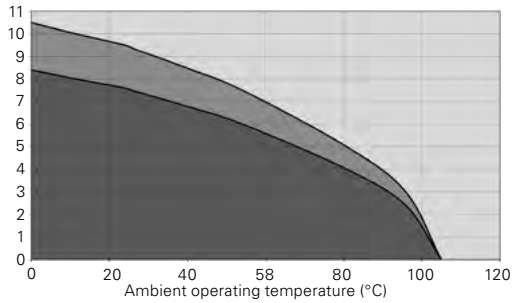
2

### Electrical characteristics

UL	CSA	IEC
4.5A 250V with AWG20 wire	4.5A 250V with AWG20 wire	5A 32V 1.5kV 3

### UTSX 12E4/12D4 derating curves

Current (A)



- Current use
- Limited use
- Not recommended use

**Test conditions**

Contact used: machined contacts

Wires used: 20 AWG

Derating curves based on continuous current application.

# 2

## Connectors

14E15/14D15 (Shell size 14, 14x#20, 1#16)

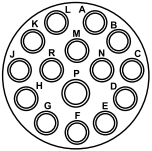
2



### Connector part number

#### UTSX 14E15/14D15

15 contacts  
12A 600V per UL1977 with  
AWG16 wire  
5A 250V per UL1977 with  
AWG20 wire  
(qualification pending)



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Handsolder electrical contacts loaded see page 115	Square flange receptacle	Without (Fig. 1)	<b>UTSX014E15P</b>	<b>UTSX014E15S</b>
	Plug	Without (Fig. 2)	<b>UTSX614E15P</b>	<b>UTSX614E15S</b>
		Cable gland (Fig. 3)	<b>UTSX6JC14E15P</b>	<b>UTSX6JC14E15S</b>
PCB contacts loaded see page 115	Jam nut receptacle	Without (Fig. 4)	<b>UTSX714E15P</b>	<b>UTSX714E15S</b>
	Square flange receptacle	Without (Fig. 2)	<b>UTSX014D15P</b>	<b>UTSX014D15S</b>
		Jam nut receptacle with stand off and without hold down clip	Without (Fig. 5)	<b>UTSX714D15P</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 6)	<b>UTSX714D15P32</b>	<b>UTSX714D15S32</b>

For discrimination/keying methods see page 150

Sealed unmated

### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.

**Dimensions** (For mated connector lengths see page 142)

**Square flange receptacle - UTSX0**

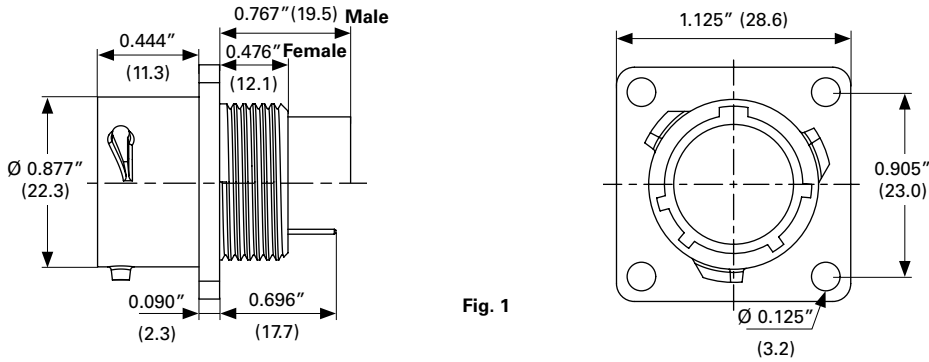


Fig. 1

**Plug - UTSX6 and UTSX6JC**

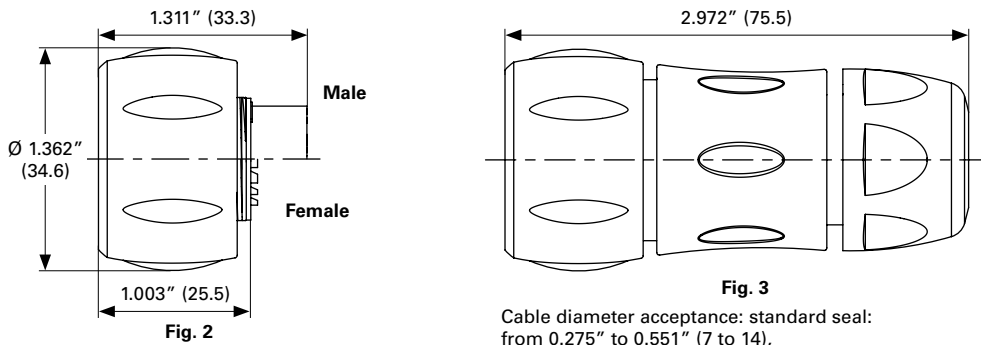
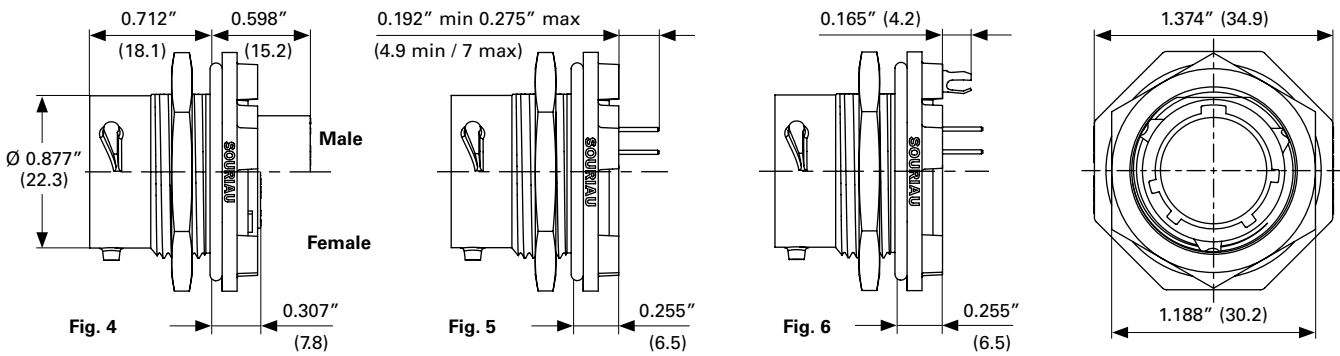


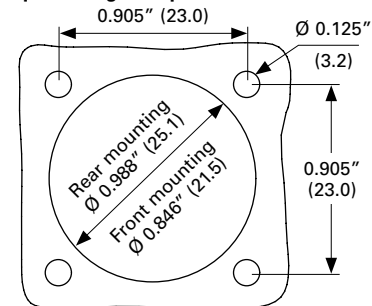
Fig. 3  
Cable diameter acceptance: standard seal:  
from 0.275" to 0.551" (7 to 14),  
reduced seal: from 0.196" to 0.472" (5 to 12)

**Jam nut receptacle UTSX7**

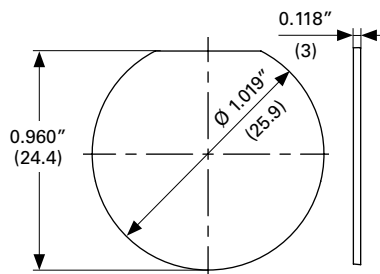


**Panel cut out**

**Square flange receptacle - UTSX0**



**Jam nut receptacle - UTSX7**



# 2

## Connectors

14E15/14D15 (Shell size 14, 14x#20, 1#16)

### Accessories

2

#### Jam nut and free hanging receptacle sealing caps



Description	Part number
IP68	UTGX14DCG
IP68 - Metal terminal	UTGX14DCGR

#### Square flange sealing cap



Description	Part number
IP68 - Metal terminal	UTGX14DCGE

#### Plug sealing cap



Description	Part number
IP68	UTS614DCG133

#### Plastic protective cap



Part number receptacle cap	Part number plug cap
85005588A	85005597

#### Gasket



Part number
UTFD14B

#### Color coding rings



Description	Part number receptacles	Part number plugs
G for Green	UTGX714CCRG	UTGX614CCRG
Y for Yellow	UTGX714CCRY	UTGX614CCRY
R for Red	UTGX714CCRR	UTGX614CCRR

14E15/14D15 (Shell size 14, 14x#20, 1#16)

## Contacts

Contact size	Contact type	Plating	Cable acceptance (AWG)	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Wire stripping length inch	Wire stripping length mm
#16	Hand solder Loaded in the connector	Min 0.4μ gold over 0.8μ Ni	18 - 14	0.032"-0.081"	0.823 - 2.08	0.196"	5
	PCB Machined <sup>(1)</sup>	Min 0.4μ gold over 0.8μ Ni	—	—	—	—	—
#20	Hand solder Loaded in the connector	Min 0.4μ gold over 0.8μ Ni	20 - 18	0.012"-0.029"	0.32 - 0.75	0.149"	3.8
	PCB Machined <sup>(1)</sup>	Min 0.4μ gold over 0.8μ Ni	—	—	—	—	—

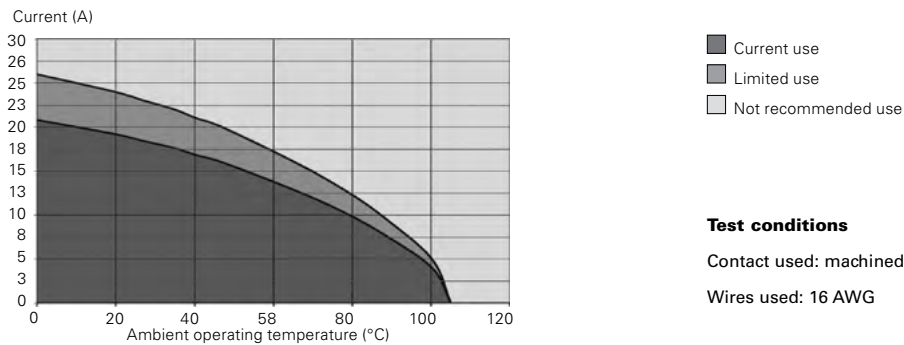
(1): For dimensions see pages 133 or 134

## Electrical characteristics

UL	CSA	IEC
12A 600V with AWG16* 5A 250V with AWG20*	12A 600v with AWG16* 5A 250V with AWG20*	4A 50V 1.5kV 3

\* qualification pending

## UTSX 14E15/14D15 derating curves



### Test conditions

Contact used: machined contacts

Wires used: 16 AWG

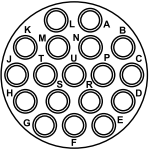
Derating curves based on continuous current application.



### Connector part number

#### UTSX 14E18/14D18

18 contacts  
4A/250V  
per UL 1977  
with AWG20 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Handsolder electrical contacts loaded see page 119	Square flange receptacle	Without (Fig. 1)	<b>UTSX014E18P</b>	<b>UTSX014E18S</b>
	Plug	Without (Fig. 2)	<b>UTSX614E18P</b>	<b>UTSX614E18S</b>
		Cable gland (Fig. 3)	<b>UTSX6JC14E18P</b>	<b>UTSX6JC14E18S</b>
	Jam nut receptacle	Without (Fig. 4)	<b>UTSX714E18P</b>	<b>UTSX714E18S</b>
PCB contacts loaded see page 119	Square flange receptacle	Without (Fig. 2)	<b>UTSX014D18P</b>	<b>UTSX014D18S</b>
	Jam nut receptacle with stand off and without hold down clip	Without (Fig. 5)	<b>UTSX714D18P</b>	<b>UTSX714D18S</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 6)	<b>UTSX714D18P32</b>	<b>UTSX714D18S32</b>

For discrimination/keying methods see page 150

Sealed unmatd ■

#### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.



**Dimensions** (For mated connector lengths see page 142)

**Square flange receptacle - UTSX0**

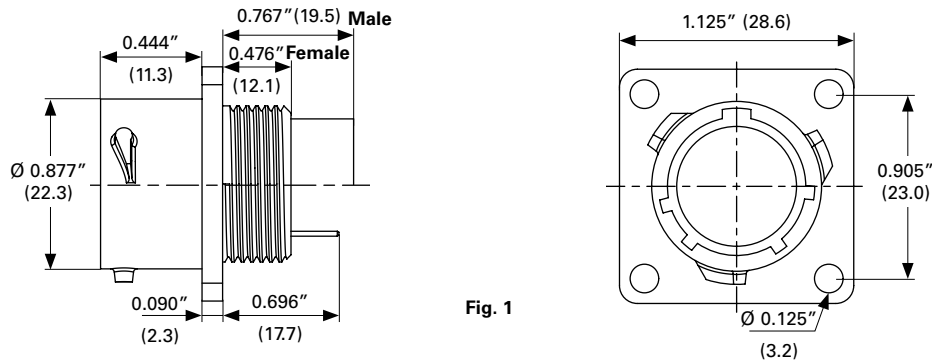


Fig. 1

**Plug - UTSX6 and UTSX6JC**

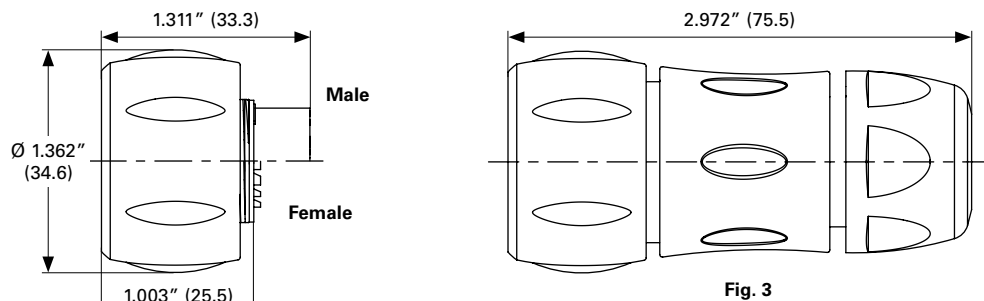


Fig. 2

Fig. 3

Cable diameter acceptance: standard seal:  
from 0.275" to 0.551" (7 to 14),  
reduced seal: from 0.196" to 0.472" (5 to 12)

**Jam nut receptacle UTSX7**

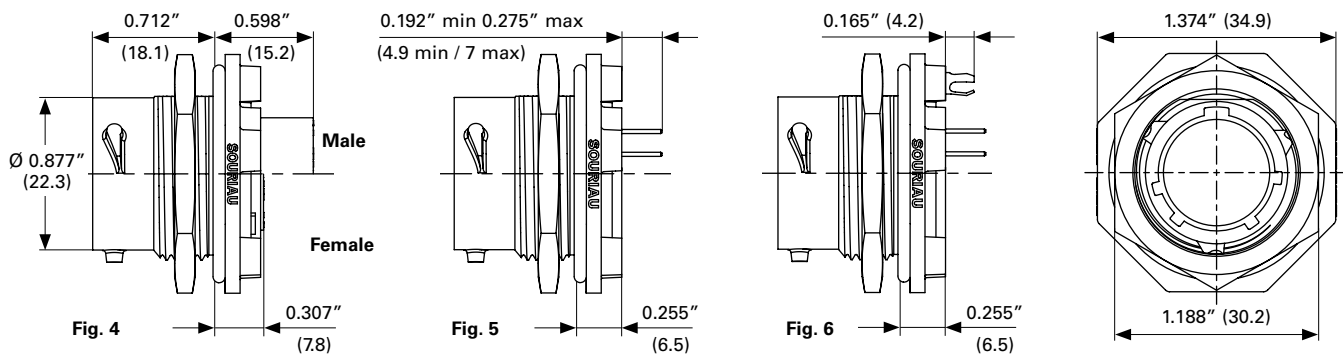


Fig. 4

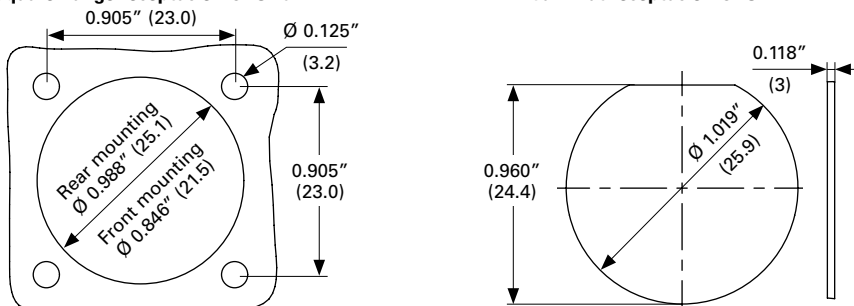
Fig. 5

Fig. 6

**Panel cut out**

**Square flange receptacle - UTSX0**

**Jam nut receptacle - UTSX7**



# 2

## Connectors

14E18/14D18 (Shell size 14, 18x#20)

### Accessories

2

**Jam nut and free hanging receptacle sealing caps**



Description	Part number
IP68	UTGX14DCG
IP68 - Metal terminal	UTGX14DCGR

**Square flange sealing cap**



Description	Part number
IP68 - Metal terminal	UTGX14DCGE

**Plug sealing cap**



Description	Part number
IP68	UTS614DCG133

**Plastic protective cap**



Part number receptacle cap	Part number plug cap
85005588A	85005597

**Gasket**



Part number
UTFD14B

**Color coding rings**



Description	Part number receptacles	Part number plugs
G for Green	UTGX714CCRG	UTGX614CCRG
Y for Yellow	UTGX714CCRY	UTGX614CCRY
R for Red	UTGX714CCRR	UTGX614CCRR

### Contacts #20

Contact type	Plating	Cable acceptance (AWG)	Cable acceptance		Wire stripping length	
			inch <sup>2</sup>	mm <sup>2</sup>	inch	mm
Hand solder Loaded in the connector	Min 0.4μ gold over 0.8μ Ni	20-18	0.020"-0.031"	0.32-0.80	0.149"	3.8
PCB Machined <sup>(1)</sup>	Min 0.4μ gold over 0.8μ Ni	—	—	—	—	—

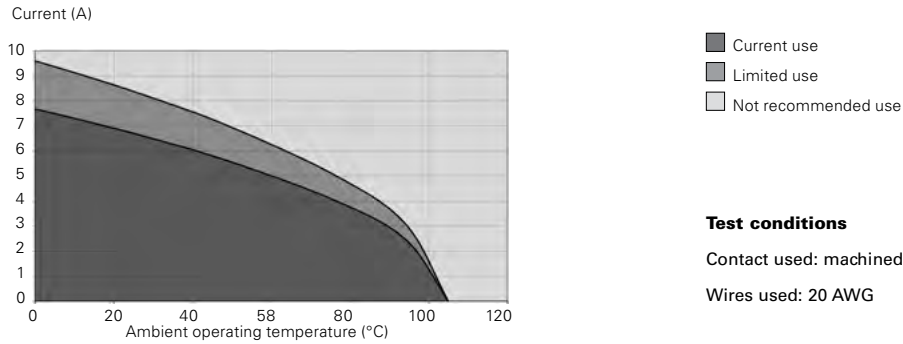
(1): For dimensions see pages 133 or 134

2

### Electrical characteristics

UL	CSA	IEC
4A 250V with AWG20 wire	4A 250V with AWG20 wire	5A 50V 1.5kV 3

### UTSX 14E18/14D18 derating curves



**Test conditions**  
 Contact used: machined contacts  
 Wires used: 20 AWG

Derating curves based on continuous current application.



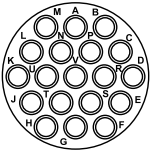
### Connector part number

#### UTSX 1419

19 contacts + ground  
4.5A/250V  
per UL 1977  
with AWG20 wire

#### 14E19/14D19

19 contacts + ground  
4A/250V  
per UL 1977  
with AWG20 wire



Contact type	Connector type	Backshell	Part number Male insert	Female insert
Crimp contacts supplied separately see page 124	Square flange receptacle	Without (Fig. 1)	<b>UTSX01419P</b>	<b>UTSX01419S</b>
		Cable gland (Fig. 2)	<b>UTSX0JC1419P</b>	<b>UTSX0JC1419S</b>
	Free hanging receptacle	Cable gland (Fig. 3)	<b>UTSX1JC1419P</b>	<b>UTSX1JC1419S</b>
	Plug	Without (Fig. 4)	<b>UTSX61419P</b>	<b>UTSX61419S</b>
		Cable gland (Fig. 5)	<b>UTSX6JC1419P</b>	<b>UTSX6JC1419S</b>
	Jam nut receptacle	Without (Fig. 6)	<b>UTSX71419P</b>	<b>UTSX71419S</b>
PCB contacts supplied separately see page 124	Square flange receptacle	Without (Fig. 1)	<b>UTSX01419P</b>	<b>UTSX01419S</b>
Handsolder electrical contacts loaded see page 124	Square flange receptacle	Without (Fig. 1)	<b>UTSX014E19P</b>	<b>UTSX014E19S</b>
		Without (Fig. 4)	<b>UTSX614E19P</b>	<b>UTSX614E19S</b>
	Plug	Cable gland (Fig. 5)	<b>UTSX6JC14E19P</b>	<b>UTSX6JC14E19S</b>
		Jam nut receptacle	Without (Fig. 6)	<b>UTSX714E19P</b>
PCB contacts loaded	Square flange receptacle	Without (Fig. 3)	<b>UTSX014D19P</b>	<b>UTSX014D19S</b>
	Jam nut receptacle with stand off and without hold down clip	Without (Fig.7)	<b>UTSX714D19P</b>	<b>UTSX714D19S</b>
	Jam nut receptacle with stand off and with hold down clips	Without (Fig. 8)	<b>UTSX714D19P32</b>	<b>UTSX714D19S32</b>

For discrimination/keying methods see page 150

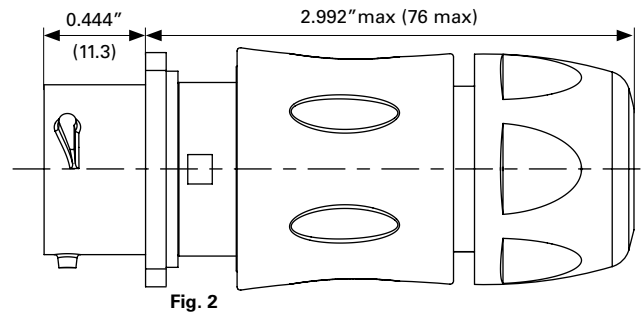
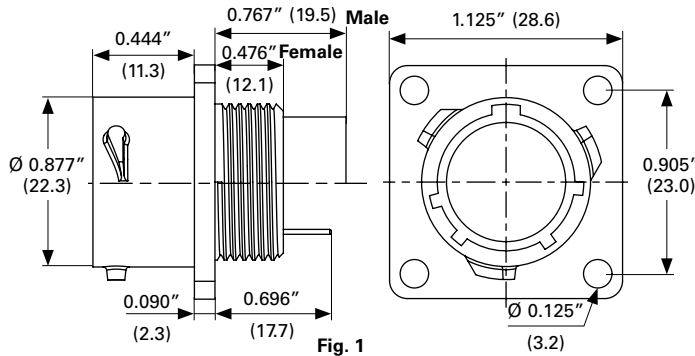
Sealed unmated

### Overmolded cable assembly part numbers

Please contact us directly for overmolded cable assemblies.

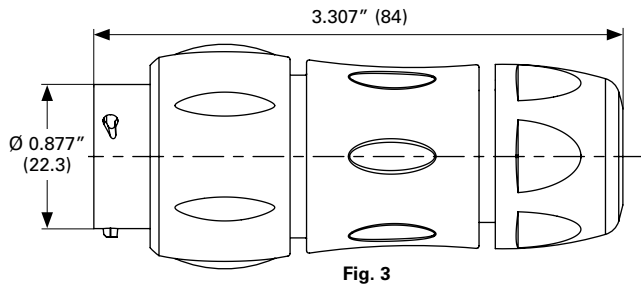
**Dimensions** (For mated connector lengths see page 142)

**Square flange receptacle - UTSX0 and UTSX0JC**



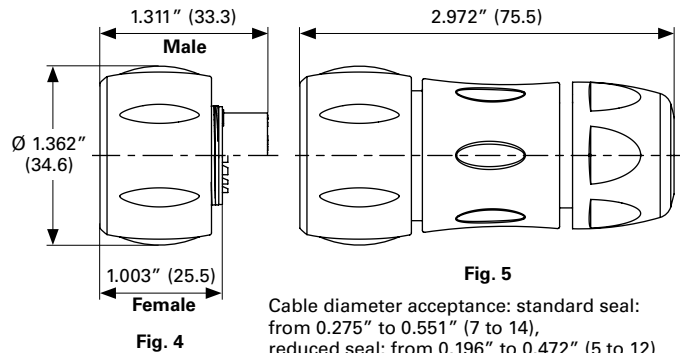
Cable diameter acceptance: standard seal: from 0.275" to 0.551" (7 to 14), reduced seal: from 0.196" to 0.472" (5 to 12)

**Free hanging - UTSX1JC**



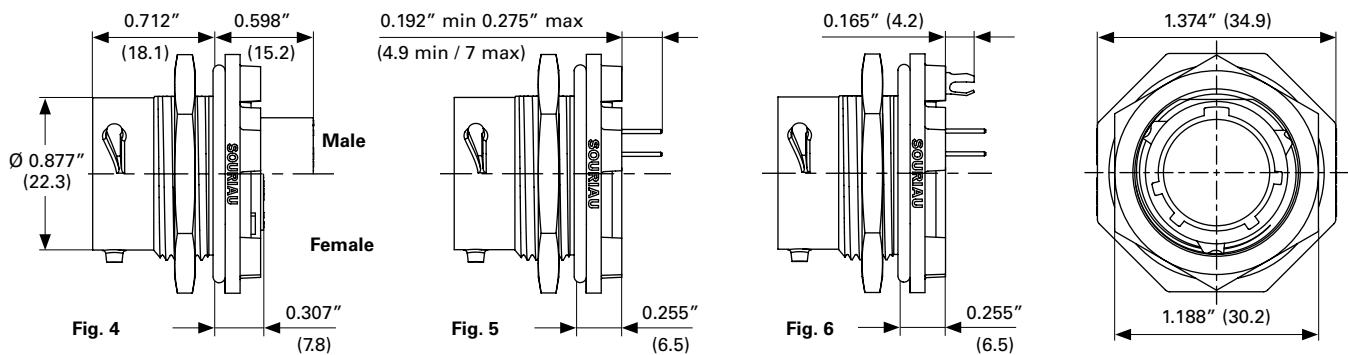
Cable diameter acceptance: standard seal: from 0.275" to 0.551" (7 to 14), reduced seal: from 0.196" to 0.472" (5 to 12)

**Plug - UTSX6 and UTSX6JC**



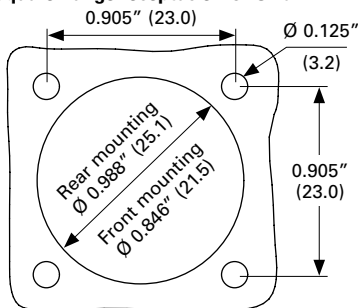
Cable diameter acceptance: standard seal: from 0.275" to 0.551" (7 to 14), reduced seal: from 0.196" to 0.472" (5 to 12)

**Jam nut receptacle UTSX7**

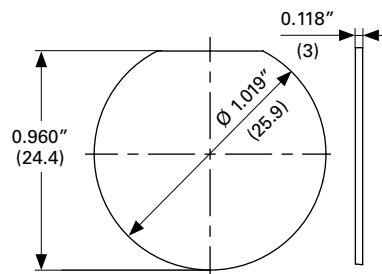


**Panel cut out**

**Square flange receptacle - UTSX0**



**Jam nut receptacle - UTSX7**



# 2

## Connectors

1419 - 14E19/14D19 (Shell size 14, 19x#20)

### Accessories

2

#### Jam nut and free hanging receptacle sealing caps



Description	Part number
IP68	UTGX14DCG
IP68 - Metal terminal	UTGX14DCGR

#### Square flange sealing cap



Description	Part number
IP68 - Metal terminal	UTGX14DCGE

#### Plug sealing cap



Description	Part number
IP68	UTS614DCG133

#### Plastic protective cap



Part number receptacle cap	Part number plug cap
85005588A	85005597

#### Gasket



Part number
UTFD14B

#### Color coding rings



Description	Part number receptacles	Part number plugs
G for Green	UTGX714CCRG	UTGX614CCRG
Y for Yellow	UTGX714CCRY	UTGX614CCRY
R for Red	UTGX714CCRR	UTGX614CCRR

1419 - 14E19/14D19 (Shell size 14, 19x#20)

## Tooling

### Tooling



Description	Part number
Handle (without head)	<b>Shandles</b>
Box containing handle and several crimp tooling	<b>Toolkit</b>

2

### Crimp tooling (without Shandles)

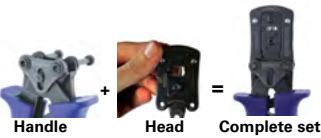


Contact size	Contacts	Part number of Head
Standard contacts #20 Ø 0.039" (1)	<b>RM/RC 24W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>RM/RC 20W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>RM/RC 18W3K<sup>(1)</sup></b>	<b>S20RCM*</b>
	<b>SM/SC 24WL3<sup>(1)(2)</sup></b>	<b>S20SCM20*</b>
	<b>SM/SC 20WL3<sup>(1)(2)</sup></b>	<b>S20SCM20*</b>

(1): Example of plating, for other plating options see page 126

(2): Loose contact

\* Heads to be used with handle PN: SHANDLES



### Extraction tool #20



Description	Part number
Contacts #20 Ø 0.039" (1)	<b>RX20D44</b>

### Contacts #20

2

Contact style	Contact type	Cable acceptance AWG	Cable acceptance inch <sup>2</sup>	Cable acceptance mm <sup>2</sup>	Part number Male	Female	Wire Ø max inch	mm	Insulator Ø max inch	mm
Crimp contacts	Machined	26-24	0.005"-0.009"	0.13-0.25	<b>RM24W3K</b>	<b>RC24W3K</b>	0.031"	0.80	0.062"	1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>RM20W3K</b>	<b>RC20W3K</b>	0.045"	1.15	0.070"	1.80
		20-18	0.020"-0.031"	0.52-0.80	<b>RM18W3K</b>	<b>RC18W3K</b>	0.051"	1.30	0.082"	2.10
	Stamped and formed reeled contacts See note <sup>(2)</sup> for loose piece	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1TK6<sup>(1)(2)</sup></b>	<b>SC24M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		26-24	0.005"-0.009"	0.13-0.25	<b>SM20M1TK6<sup>(1)(2)</sup></b>	<b>SC20M1TK6<sup>(1)(2)</sup></b>	-	-	0.035"-0.062"	0.90-1.58
		22-20	0.012"-0.020"	0.32-0.52	<b>SM16M1TK6<sup>(1)(2)</sup></b>	<b>SC16M1TK6<sup>(1)(2)</sup></b>	-	-	0.047"-0.082"	1.20-2.10
PCB	Machined <sup>(3)</sup>	-	-	-	<b>RMW5016K</b>	<b>RCW5016K</b>	-	-	-	-

(1): Example of plating, for other plating see page 126  
 (3): for dimensions see pages 133 or 134

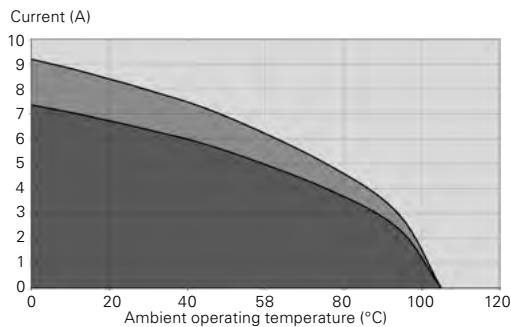
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20W3TK6 becomes SM20WL3TK6

Contact style	Contact type	Plating	Cable acceptance (AWG)	Wire stripping length inch	mm
Hand solder	Loaded in the connector	Min 0.4µ gold over 0.8µ Ni	20 to 18	0.149"	3.8

### Electrical characteristics

UL	CSA	IEC
UTSX 1419		
4.5A 250V with AWG20 wire	3A 250V with AWG20 wire	5A 32V 1.5kV 3
UTSX 14E19/14D19		
4A 250V with AWG20 wire	4A 250V with AWG20 wire	5A 32V 1.5kV 3

### UTSX 1419 - 14E19/14D19 derating curves



■ Current use  
 ■ Limited use  
 □ Not recommended use

#### Test conditions

Contact used: machined contacts  
 Wires used: 20 AWG

Derating curves based on continuous current application.



## UTSX contacts

The TRIM TRIO® product line uses the same contact style in any layout, with the same active part size (i.e. #20, #16, #12, etc.). This allows you to use one type of contact to equip all of your Souriau connectors in the TRIM TRIO® product line.

Please note that the UTSX series is delivered with solder or PCB contacts for Hi-seal versions and without contacts for standard crimp versions. The benefit of this standardization is to drastically reduce inventory costs. In addition, it eliminates the need for additional tooling and simplifies the assembly process. Souriau TRIM TRIO® contacts are designed for simple snap-in installation and further eliminate the need for an insertion tool.

3

## Contact plating selector guide

Once the contact size has been selected, the next step determine which electrical contact type should be used. We offers two main types of electrical contacts:

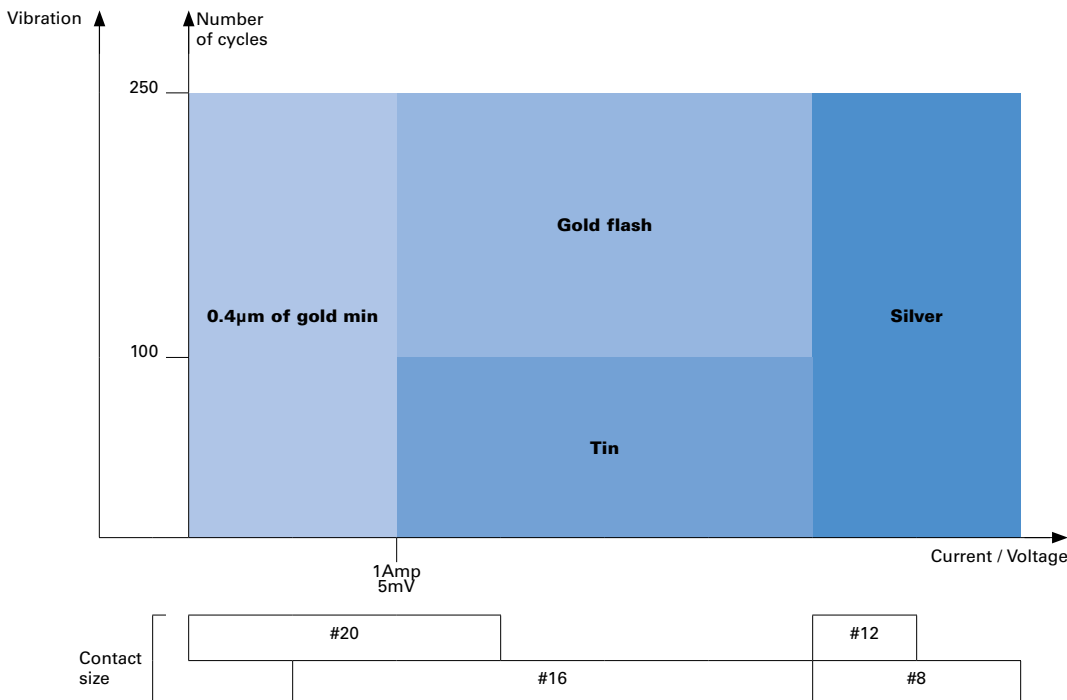
- Machined
- Stamped and formed



Machined contacts are generally selected as a better solution for power applications or when lower quantities are needed. Stamped and formed contacts offer the ability to be crimped automatically which makes them more suitable for high volume production applications.

The ideal plating is selected based on your application. Use the graph below to identify a plating based on the number of mating cycles, vibration and current/voltage needs for your application.

**Note:** Do not mix different plating (i.e. tin plated pin contacts with gold plated socket contacts).



## Machined contacts

Contact size	Contact type	Active area
#20 Ø 0.039" (1)	K	0.4µm Gold over 2µm Nickel min
#16 Ø 0.062" (1.6)	K	0.4µm Gold over 2µm Nickel min
	J	Gold flash over Nickel 2µm min
	T	Tin 3µm (-0/+2) over 1.3µm Nickel min
	D28 for Coax contacts only	0.75µm min Gold over 2µm Nickel min
#12 Ø 0.094" (2.4)	A	2µm Nickel + 2µm Ag
	K	0.4µm Gold over 2µm Nickel min
#8 Ø 0.141" (3.6)	A	2µm Nickel + 2µm Ag

## Stamped and formed contacts

Contact size	Plating code	Plating description Active area	Other area
#20 Ø 0.039" (1)	S25 (female)	0.75µm Gold min over Nickel	Gold flash over Nickel
	S26 (male)	0.75µm Gold min over Nickel	Gold flash over Nickel
	TK6	0.5µm - 2.5µm Sn pre-plated	-
#16 Ø 0.062" (1.6)	S31	Gold flash over Nickel	Crimped area: 1.3µm Tin min over Nickel
	S18	0.75µm Gold min over Nickel	Other areas: 1.3µm Tin min
	D70	0.13µm Gold min over Nickel	Gold flash over Nickel
	TK6	0.5µm - 2.5µm Sn pre-plated	-

## Contacts supplied separately

Contact size	Contact type	Resistance
<b>Electrical characteristics: contact resistance</b>		
#20 Ø 0.039" (1)	Machined	< 6mΩ
	Stamped and formed	< 6mΩ
#16 Ø 0.062" (1.6)	Machined	< 3mΩ
	Stamped and formed	< 6mΩ
#12 Ø 0.094" (2.4)	Machined	< 5mΩ
#8 Ø 0.141" (3.6)	Machined	< 5mΩ

TRIM TRIO® contacts are available in a wide variety of packaging, from very small quantities (small bulk packaging) to very large quantities (reeled parts).

### Contacts size #20 / Ø 0.039" (1) and #16 / Ø 0.062" (1.6)

#### Stamped and formed contacts



Description	Number
Loose package	25 pieces
Reeled	3,000 pieces

3

#### Machined contacts



Description	Number
Bulk package	50 pieces
Bulk package	1,000 pieces
Reeled size #16 only	2,000 pieces

### Contacts machined size #12 / Ø 0.094" (2.4) and #8 / Ø 0.141" (3.6)

#### Machined contacts



Description	Number
Bulk package	100 pieces

**Note:** 1,000 pieces bulk package available by adding 1000 at the end of the part number: e.g. RC16M23K1000  
 2,000 pieces reeled package available by adding K at the beginning of the part number: e.g. KRC16M23K

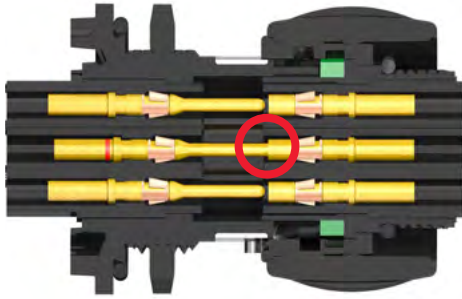
## Standard version

Contact size	Type	Wire size AWG	inch <sup>2</sup>	mm <sup>2</sup>	Part number Male	Female	Insulator Ø max		Available plating see page 126
							inch	mm	
<b>#20</b> Ø 0.039" (1)	Machined	26-24	0.005"-0.007"	0.13-0.20	<b>RM24W3K</b>	<b>RC24W3K</b>	0.062" max	1.58 max	K
	Stamped and formed	26-24	0.005"-0.009"	0.13-0.25	<b>SM24W3<sup>-</sup>(1)</b>	<b>SC24W3<sup>-</sup>(1)</b>	0.035"-0.062"	0.89-1.58	TK6 S25 (female) S26 (male)
					<b>SM24WL3<sup>-</sup>(2)</b>	<b>SC24WL3<sup>-</sup>(2)</b>			
	Machined	22-20	0.012"-0.020"	0.32-0.52	<b>RM20W3K</b>	<b>RC20W3K</b>	0.062" max	1.58 max	K
					Stamped and formed	22-20			
							<b>SM20WL3<sup>-</sup>(2)</b>	<b>SC20WL3<sup>-</sup>(2)</b>	
<b>#16</b> Ø 0.062" (1.6)	Machined	20-18	0.019"-0.031"	0.05-0.80	<b>RM18W3K</b>	<b>RC18W3K</b>	0.082" max	2.10 max	K
	Machined	30-28	0.002"-0.003"	0.05-0.08	<b>RM28M1-</b>	<b>RC28M1-</b>	0.043"	1.1	K, J
					<b>RM24M9-</b>	<b>RC24M9-</b>			
	Stamped and formed	26-24	0.005"-0.009"	0.13-0.25	<b>SM24M1<sup>-</sup>(1)</b>	<b>SC24M1<sup>-</sup>(1)</b>	0.089"-0.062"	0.89-1.58	S31, S18, TK6
					<b>SM24ML1<sup>-</sup>(2)</b>	<b>SC24ML1<sup>-</sup>(2)</b>			
	Machined	22-20	0.012"-0.020"	0.32-0.52	<b>RM20M13-</b>	<b>RC20M13-</b>	0.070"	1.8	K, J
					<b>RM20M12-</b>	<b>RC20M12-</b>			
	Stamped and formed	22-20	0.013"-0.019"	0.35-0.5	<b>SM20M1<sup>-</sup>(1)</b>	<b>SC20M1<sup>-</sup>(1)</b>	0.046"-0.081"	1.17-2.08	S31, S18, TK6
					<b>SM20ML1<sup>-</sup>(2)</b>	<b>SC20ML1<sup>-</sup>(2)</b>			
	Machined	18-16	0.031"-0.059"	0.92-1.5	<b>RM16M23-</b>	<b>RC16M23-</b>	0.125"	3.2	K, J
	Stamped and formed	18-16	0.031"-0.059"	0.8-1.5	<b>SM16M1<sup>-</sup>(1)</b>	<b>SC16M1<sup>-</sup>(1)</b>	No insulation grip	No insulation grip	S31, S18, TK6
					<b>SM16ML1<sup>-</sup>(2)</b>	<b>SC16ML1<sup>-</sup>(2)</b>			
Stamped and formed	18-16	0.031"-0.059"	0.8-1.5	<b>SM16M11<sup>-</sup>(1)</b>	<b>SC16M11<sup>-</sup>(1)</b>	0.081"-0.118"	2.08-3.0	S31, S18, TK6	
				<b>SM16ML11<sup>-</sup>(2)</b>	<b>SC16ML11<sup>-</sup>(2)</b>				
Machined	16-14	0.059"-0.098"	1.5-2.5	<b>RM14M30-</b>	<b>RC14M30-</b>	0.125"	3.2	K, J	
Stamped and formed	14	0.078"-0.098"	2.0-2.5	<b>SM14M1<sup>-</sup>(1)</b>	<b>SC14M1<sup>-</sup>(1)</b>	No insulation grip	No insulation grip	S31, S18, TK6	
				<b>SM14ML1<sup>-</sup>(2)</b>	<b>SC14ML1<sup>-</sup>(2)</b>				
<b>#12</b> Ø 0.094" (2.4)	Machined	20	0.020"-0.015"	0.52-0.4	<b>82911457N-</b>	<b>82911456-</b>	0.157"	4.0	A, K
		20	0.019"	0.5	<b>82911459N-</b>	<b>82911458-</b>			
		18	0.2.952"-0.039"	0.75-1.0	<b>82911461N-</b>	<b>82911460-</b>			
		16	0.059"	1.5	<b>82911463N-</b>	<b>82911462-</b>			
		14	0.098"	2.5	<b>82911465N-</b>	<b>82911464-</b>			
		12	0.157"	4	<b>82911467N-</b>	<b>82911466-</b>			
<b>#8</b> Ø 0.141" (Ø 3.6)	Machined	16	0.059"	1.5	<b>82913601A</b>	<b>82913600A</b>	0.248"	6.3	A
		14	0.098"	2.5	<b>82913603A</b>	<b>82913602A</b>			
		12	0.157"	4	<b>82913605A</b>	<b>82913604A</b>			
		10	0.236"	6.0	<b>82913607A</b>	<b>82913606A</b>			
		8	0.393"	10.0	<b>82913609A</b>	<b>82913608A</b>			

(1) contact reeled

(2) loose contact

Example: RM24W3K - Size #20, Machined, AWG24 wire.



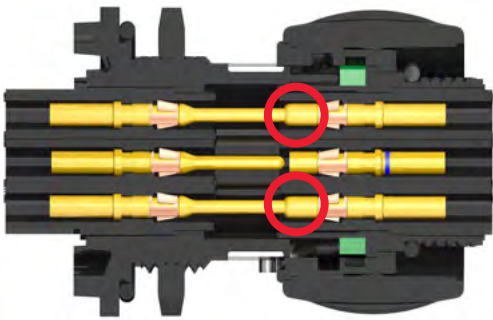
### First mate, last break male contacts

The layouts UTSX103, UTSX124, UTSX12E4/12D4, UTSX142G1, UTSX147 and UTSX14E7/14D7 are already designed to have a first mate, last break connection on the ground line. That's why, for cavities marked with the ground symbol, standard contacts will fulfill the same role as a first mate, last break contact used in a standard cavity.

For the other layouts (without ground marking) a specific contact is necessary to achieve ground connection.

Please choose your contact from the table below.

Contact size	Type	Wire size AWG	inch <sup>2</sup>	mm <sup>2</sup>	Part number Male	Wire Ø max inch	mm	Insulator Ø max inch	mm	Color band		Available plating see page 126
										Front	Rear	
#16 Ø 0.062" (1.6)	Machined	30-28	0.002"-0.003"	0.05-0.08	<b>RM28M1GE1K</b>	0.021"	0.55	0.039"	1.0	-	Red	K
		26-24	0.005"-0.007"	0.13-0.2	<b>RM24M9GE1K</b>	0.031"	0.8	0.062"	1.6	Red	Red	
Longer male contact +0.039" (+1)	Machined	22-20	0.012"-0.020"	0.32-0.52	<b>RM20M12GE1K</b>	0.045"	1.15	0.086"	2.2	Blue	Red	
		18-16	0.031"-0.059"	0.92-1.5	<b>RM16M23GE1K</b>	0.070"	1.8	0.125"	3.2	-	Red	
		16-14	0.059"-0.098"	1.5-2.5	<b>RM14M30GE1K</b>	0.089"	2.26	-	-	-	Red	



### Last break, first mate female contacts

In order to create a last break, first mate connection, a shorter female contact is necessary. On the other side, a standard male contact can be used.

A complete offer of contacts is available to realize this connection type according the wire section used for our contact #16. Please choose your contact from the table below.

Contact size	Type	Wire size AWG	inch <sup>2</sup>	mm <sup>2</sup>	Part number Male	Wire Ø max inch	mm	Insulator Ø max inch	mm	Color band		Available plating see page 126
										Front	Rear	
#16 Ø 0.062" (1.6)	Machined	30-28	0.002"-0.003"	0.05-0.08	<b>RC28M1GE7K</b>	0.021"	0.55	0.039"	1.0	-	Blue	K
		26-24	0.005"-0.007"	0.13-0.2	<b>RC24M9GE7K</b>	0.031"	0.8	0.062"	1.6	Red	Blue	
Shorter female contact -0.027" (-0.7)	Machined	22-20	0.012"-0.020"	0.32-0.52	<b>RC20M13GE7K</b>	0.045"	1.15	0.070"	1.8	Black	Blue	
		22-20	0.012"-0.020"	0.32-0.52	<b>RC20M12GE7K</b>	0.045"	1.15	0.086"	2.2	Blue	Blue	
		18-16	0.031"-0.059"	0.92-1.5	<b>RC16M23GE1K</b>	0.070"	1.8	0.125"	3.2	-	Blue	
		16-14	0.059"-0.098"	1.5-2.5	<b>RC14M30GE1K</b>	0.089"	2.26	-	-	-	Blue	

# 3

## Contacts

### Coaxial contacts

We provides two types of coaxial contacts suitable for 48 or 75Ω, coaxial cable or twisted pair cable.

#### Monocrimp coaxial contact

3



- 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 is achieved by simultaneously crimping both the inner conductor and outer braid or drain wire.

#### Multipiece crimp coaxial contact

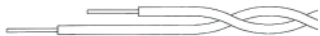


- The inner conductor and outer braid is crimped individually.
- The thermoplastic insulating bushing in the outer body is designed to accept and permanently retain the inner contact.
- An outer ferrule is used to connect the braid to the outer contact and provide cable support to ensure against bending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

#### Suitable for coaxial cable or twisted cable



- For jacket diameter from 0.070" to 0.120" (1.78 to 3.05).  
Inner conductor up to 0.096" (2.42) diameter



- For jacket diameter from 0.025" to 0.057" (0.64 to 1.45).  
Inner conductor from AWG30 to AWG24

#### Contacts for coaxial cable summary

Contact type	Contact range Male contact	Female contact
Multipiece	RMDXK10D28	RCDXK1D28
Monocrimp	RMDX60xxD28	RCDX60xxD28

#### Contacts for twisted pairs cable summary

Contact type	Contact range Male contact	Female contact
Multipiece	RMDXK10D28 + Yorx090	RCDXK1D28 + Yorx090
Monocrimp	RMDX60xxD28	RCDX60xxD28

### Coaxial cable - contact monocrimp and multipiece

Cable type	Impe- dance	Contact type	Ø over jacket inch mm	Ø over dielectric inch mm	Inner cond size Ext. Ø inch mm		Ø outer braid inch mm		Male contact kit for coaxial cable	Female contact kit for coaxial cable
<b>RG161/U</b>	75	Multi piece	0.09" 2.29	0.057" 1.45	–	–	–	–	<b>RMDXK10D28</b>	<b>RCDXK1D28</b>
<b>RG179A/U</b>	75		0.105" 2.67	0.063" 1.6	0.011" 0.3	0.084" max 2.13 max				
<b>RG179B/U</b>	75		0.105" 2.67	0.063" 1.6	0.011" 0.3	0.084" max 2.13 max				
<b>RG187/U</b>	75		0.11" max 2.79 max	0.06" 1.52	0.011" 0.3	–	–			
<b>RG188/U</b>	48		0.11" max 2.79 max	0.06" 1.52	0.020" 0.51	0.078" max 1.98 max				
<b>RG174/U</b>	48		0.11" 2.92	0.06" 1.52	0.018" 0.05	0.088" max 2.24 max				
<b>AMPHENOL 21–598</b>	48		0.105" 2.67	0.06" 1.52	0.018" 0.05	–	–			
<b>RG196/U</b>	48		0.08" max 2.03 max	0.034" 0.86	0.011" 0.3	–	–			
<b>RG152A/U</b>	48		0.075" 1.91	0.034" 0.84	0.011" 0.3	0.054" max 1.37 max				
<b>RG/188A/U</b>	48		Mono crimp	0.110" 2.79	0.06" 1.52	0.020" 0.51	0.078" max 1.98 max	<b>RMDX6036D28</b>	<b>RCDX6036D28</b>	
<b>KX21TVT (europe)</b>	48	0.075" 1.91		0.034" 0.84	0.011" 0.3	0.054" max 1.37 max	<b>RMDX6034D28</b>	<b>RCDX6034D28</b>		
<b>RG152 B/U</b>										
<b>RG152 / BU</b>	48	0.075" 1.91		0.034" 0.84	0.011" 0.3	0.054" max 1.37 max	<b>RMDX6050D28</b>	<b>RCDX6016D28</b>		
<b>RG174/U</b>	48	0.115" 2.92		0.06" 1.52	0.018" 0.05	0.088" max 2.24 max	<b>RMDX6032D28</b>	<b>RCDX6032D28</b>		
<b>RG188A/U</b>	48	0.11" 2.79		0.06" 1.52	0.020" 0.51	0.078" max 1.98 max	<b>RMDX6036D28</b>	<b>RCDX6036D28</b>		
<b>RG316/U</b>	48	0.107" 2.72		0.06" 1.52	0.020" 0.51	0.078" max 2.05 max	<b>RMDX6036D28</b>	<b>RCDX6036D28</b>		
<b>raychem 5024A3111</b>	48	0.12" 3.05		0.083" 2.11	0.025" 0.64	0.097" 2.46	<b>RMDX6052D28</b>	<b>RCDX6052D28</b>		
<b>raychem 5026e1614</b>	48	0.083" 2.11		0.05" 1.27	0.018" 0.05	0.067" 1.7	<b>RMDX6036D28</b>	<b>RCDX6036D28</b>		
<b>surprenant pn 8134</b>	–	Multi piece		0.1" 2.54	0.058" 1.47	0.011" 0.3	–	–	<b>RMDXK10D28</b>	<b>RCDXK1D28</b>
<b>PRD PN 247AS- C1123–001</b>	–	Mono crimp	0.103" 2.62	0.06" 1.52	0.020" 0.51	0.078" 1.98	<b>RMDX6018D28</b>	<b>RCDX6018D28</b>		
<b>PRD PN 247AS–C1251</b>	–		0.092" 2.34	0.05" 1.27	0.025" 0.64	0.067" 1.7	<b>RMDX6018D28</b>	<b>RCDX6018D28</b>		
<b>JUDD C15013010902</b>	–		0.087" 2.13	0.05" 1.27	0.018" 0.05	0.066" 1.67	<b>RMDX6036D28</b>	<b>RCDX6036D28</b>		
<b>CDC PIN22939200</b>	–		0.09" 2.29	0.048" 1.20	0.011" 0.3	0.064" 1.63	<b>RMDX6046D28</b>	<b>RCDX6016D28</b>		
<b>CDC PIN22939200</b>	–		0.09" 2.29	0.048" 1.20	0.011" 0.3	0.064" 1.63	<b>RMDX6050D28</b>	<b>RCDX6016D28</b>		
<b>CDC PIN245670000</b>	–		0.104" 2.64	0.067" 1.7	0.011" 0.3	0.083" 2.11	<b>RMDX6050D28</b>	<b>RCDX6016D28</b>		
<b>ampex</b>	–		0.114" 2.9	0.075" 1.91	0.014" 0.36	0.09" 1.29	<b>RMDX6032D28</b>	<b>RCDX6032D28</b>		
<b>TI PN 920580</b>	–		0.7" 1.78	0.038" 0.94	0.018" 0.05	0.054" 1.37	<b>RMDX6024D28</b>	<b>RCDX6024D28</b>		
<b>Honeywell PN 58000062</b>	–		0.12" 3.05	0.077" 1.94	0.016" solid 0.41 solid	0.096" 2.42	<b>RMDX6026D28</b>	<b>RCDX6026D28</b>		
–	–			0.104" 2.64	0.067" 1.7	0.011" 0.3	–	2.11	<b>RMDX6050D28</b>	–
–	–		0.09" 2.29	0.048" 1.20	0.011" 0.3	–	1.63	<b>RMDX6050D28</b>	–	
–	–		0.114" 2.9	0.075" 1.91	0.014" 0.36	–	1.29	<b>RMDX6032D28</b>	<b>RCDX6032D28</b>	
–	–		0.07" 1.78	0.038" 0.94	0.018" 0.05	–	1.37	<b>RMDX6024D28</b>	<b>RCDX6024D28</b>	
–	–		0.12" 3.05	0.077" 1.94	0.016" 0.41	–	2.42	<b>RMDX6026D28</b>	<b>RCDX6026D28</b>	

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## Twisted cable - contact monocrimp and multipiece

Cable type	Contact type	Inner AWG cond	Ø over jacket (single wire) inch	1.24 max mm	Inner cond Stranded definition	size Ext. Ø inch	mm	Ø outer braid inch	mm	Male contact kit for coaxial cable	Female contact kit for coaxial cable
<b>2#24 stranded MIL-W-16878 type B</b>	Multi piece	24	0.049" max	1.24 max	7/.008	–	–	–	–	RMDXK10D28	RCDXK1D28
<b>2#24 solid MIL-W-74 type LW</b>		24	0.047" max	1.12 max	1/.0201	–	–	–	–	RMDXK10D28	RCDXK1D28
<b>2#26 stranded MIL-W-74 type LW or MIL-W-16878 type B&amp;E</b>		26	0.043" max	1.09 max	7/.0063	0.006"	0.16	–	–	RMDXK10D28	RCDXK1D28
<b>2#26 solid MIL-W-81822/3</b>		26	0.028" max	0.71 max	–	–	–	–	–	RMDXK10D28	RCDXK1D28
<b>Twisted pair 1/.201 solid MIL-W-74 type LW or MIL-W-16878</b>		26	0.044" max	1.12 max	1/.0201	0.020"	0.511	–	–	RMDXK10D28	RCDXK1D28
<b>Twisted pair solid MIL-W-81822/3</b>	26	0.028" max	0.71 max	1/.0126	0.012"	0.32	–	–	RMDXK10D28	RCDXK1D28	
<b>#26 7/.0036 per Hitachi spec ec-711 (13-2820)</b>	Mono crimp	–	0.046"	1.17	7/.0036	–	–	–	–	RMDX6031D28 + YORX090	RCDX6031D28 + YORX090
<b>20218201</b>		–	0.028"	0.71	–	–	–	–	–	RMDX6031D28 + YORX090	RCDX6031D28 + YORX090
<b>#30 solid</b>		–	0.025"	0.64	–	–	–	–	–	RMDX6015D28 + YORX090	RCDX6015D28 + YORX090
<b>#26 7/.0063</b>		26	0.028"	0.71	7/.063	0.006"	0.16	–	–	RMDX6031D28 + YORX090	RCDX6031D28 + YORX090
<b>#26 19/.004</b>		26	0.049"	1.24	19/.004	–	–	–	–	RMDX6019D28 + YORX090	RCDX6019D28 + YORX090
<b>#24 7/.008</b>		24	0.049"	1.24	7/.008	–	–	–	–	RMDX6019D28 + YORX090	RCDX6019D28 + YORX090
<b>#24 19/.005</b>		24	0.057"	1.45	19/.005	–	–	–	–	RMDX6019D28 + YORX090	RCDX6019D28 + YORX090
–		26	–	1.25	–	–	–	0.748" x 0.004"	19x0.1	RMDX6019D28 + YORX090	RCDX6019D28 + YORX090
–		24	–	1.25	–	–	–	0.275" x 0.007"	7x0.2	RMDX6019D28 + YORX090	RCDX6019D28 + YORX090
–		24	–	1.45	–	–	–	0.748" x 0.005"	19x0.13	RMDX6019D28 + YORX090	RCDX6019D28 + YORX090
–	26	–	0.7	–	–	–	0.275" x 0.006"	7x0.16	RMDX6031D28 + YORX090	RCDX6031D28 + YORX090	



## PCB contacts supplied separately - UTSX standard series

### PCB soldering

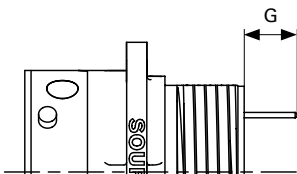


The UTSX series can be used in a wave soldering process but not reflow soldering process. All high temperature processes are prohibited.

Contact size	Type	Part number Male	Female	Plating see page 126
#20 Ø 0.039" (1)	Short version	RMW50A7K	RCW50A7K	K
	Long version	RMW5016K	RCW5016K	
#16 Ø 0.062" (1.6)	Short version	RM20M12E8K	RC20M12E8K	K
	Long version	RM20M12E83K	RC20M12E83K	
		RC20M12E84K		
#8 Ø 0.141" (3.6)	-	82911685NPC	82911684NPC	2 µm Ni
		82911685NAPC	82911684NAPC	3 µm Ag

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### Minimal length G



Dimension of dip solder contacts out of connector (contacts to be ordered separately).

#### UTSX0 with PCB contacts #16

Connector size	Pin contact RM20M12E8K*		RM20M12E83K*		RM20M12E84K*		Socket contact RC20M12E8K*		RC20M12E83K*		RC20M12E84K*		RC20M12E87K*	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
10	0.165"	4.2	0.370"	9.4	0.507"	12.9	0.165"	4.2	0.370"	9.4	0.507"	12.9	0.255"	6.5
12	0.141"	3.6	0.346"	8.8	0.484"	12.3	0.165"	4.2	0.370"	9.4	0.507"	12.9	0.255"	6.5
14	0.129"	3.3	0.334"	8.5	0.472"	12.0	0.102"	2.6	0.307"	7.8	0.444"	11.3	0.192"	4.9

#### UTSX7 with PCB contacts #20 and #16

Connector size	Pin contact RM20M12E83K*		RM20M12E84K*		RMW50A7K*		Socket contact RMW5016K*		RC20M12E84K*		RCW50A7K*		RCW5016K*	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
10	0.287"	7.3	0.425"	10.8	0.330"	8.4	0.366"	9.3	0.141"	3.6	0.330"	8.4	0.366"	9.3
12	0.287"	7.3	0.425"	10.8	0.330"	8.4	0.366"	9.3	0.153"	3.9	0.330"	8.4	0.366"	9.3
14	0.287"	7.3	0.425"	10.8	0.330"	8.4	0.366"	9.3	0.141"	3.6	-	-	-	-

\* Plating indication see page 126

#### UTSX7 with PCB contacts #16 and #8

Connector size	Pin contact RM20M12E83K*		82911685NPC*		Socket contact RC20M12E87K*		82911684NPC*	
	inch	mm	inch	mm	inch	mm	inch	mm
UTSX7142G1P	-	-	0.251"	6.4	-	-	-	-
UTSX7142G1S	-	-	-	-	-	-	0.322"	8.2
UTSX7142G1SNPT	-	-	0.228"	5.8	-	-	0.212"	5.4
UTSX718X2M3	0.192"	4.9	4.5	4.5	0.141"	3.6	0.204"	5.2
UTSX7183G1SNPT	-	-	-	-	-	-	0.164"	4.17

\* Plating indication see page 126

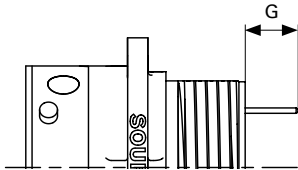
### PCB contacts loaded - UTSX sealed unmated series

#### PCB soldering

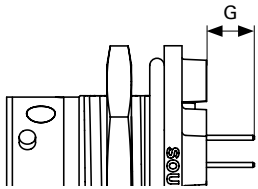
The UTSX series can be used in a wave soldering process, but not reflow soldering process. All high temperature processes are prohibited.

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#### Minimal length G



UTSX0



UTSX7

Dimension of dipsolder contacts out of connector (contacts to be ordered separately).

#### UTSX0

Connector size	Connector part Number	Pin contact		G max		Socket contact		G max	
		G min inch	mm	inch	mm	G min inch	mm	inch	mm
10	10D6 - 10D98 - 10D7	0.318"	8.1	0.401"	10.2	0.318"	8.1	0.405"	10.3
12	12D2 - 12D3 - 12D8 - 12D10	0.318"	8.1	0.401"	10.2	0.318"	8.1	0.405"	10.3
	12D4	0.322"	8.2	0.393"	10	0.318"	8.1	0.405"	10.3
	12D14	0.283"	7.2	0.354"	9	0.279"	7.1	0.362"	9.2
14	14D5 - 14D12 - 14D15 14D18 - 14D19	0.318"	8.1	0.401"	10.2	0.318"	8.1	0.405"	10.3
	14D7	0.322"	8.2	0.393"	10	0.318"	8.1	0.405"	10.3

#### UTSX7

Connector size	Connector part Number	Pin contact		G max		Socket contact		G max	
		G min inch	mm	inch	mm	G min inch	mm	inch	mm
10	10D6 - 10D98 - 10D7	0.185"	4.7	0.287"	7.3	0.185"	4.7	0.275"	7
12	12D2 - 12D3 - 12D8 - 12D10	0.185"	4.7	0.287"	7.3	0.188"	4.8	0.275"	7
	12D4	0.192"	4.9	0.279"	7.1	0.188"	4.8	0.275"	7
	12D14	0.153"	3.9	0.244"	6.2	0.149"	3.8	0.236"	6
14	14D5 - 14D12 - 14D15 14D18 - 14D19	0.188"	4.8	0.287"	7.3	0.192"	4.9	0.275"	7
	14D7	0.192"	4.9	0.279"	7.1	0.192"	4.9	0.275"	7

## Size 16 fiber optic contacts for UTSX and other TRIM TRIO® connectors

POF

### Description



Size 16 fiber optic contacts are designed for the integration of optical links in UTSX and other TRIM TRIO® cable connectors.

The fiber optic contacts are designed to accommodate:

- Plastic optical fiber (POF) 0.039" (1) core and 0.086" (2.2) jacket

Typical features and benefits are:

- Socket contact is spring loaded to avoid any air gap between the two optical faces.
- High precision pieces provide low insertion loss.
- We can provide custom harness solutions for specific customer requirements including single jumpers, multiways harness and active device housings.

### Technical specifications

Performance

- Fiber type: POF
- Wave length: 650 nm
- Optical insertion loss (typ.): 2 dB max.
- Jacketed external diameter: 0.086" (2.2)
- Temperature range: -25°C to +70°C
- Cable retention: 49N
- Mating cycles without cleaning: 48
- 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, UTGX, UTS, UTSX, UTO and UTL.

## Ordering information

### Plastic optical fiber contact

Male contact	Female contact
RMPOF1000	—

## Plastic optical fiber tools

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 number	Descriptions
80WD0005	Stripping tool
80WD0025	Automatic stripping tool for Ø 0.196" (0.5), 0.023" (0.6), 0.027" (0.7) and 0.149" (3.8)
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 only be ordered separately

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

### Crimping tools for standard contacts

Contact size	Part number	Head*	Handles*	Extraction tools
#20 Ø 0.039" (1)	RM/RC 24W3K	<b>S20RCM</b>	<b>SHANDLES</b>	<b>RX20D44</b>
	RM/RC 20W3K			
	RM/RC 18W3K			
	SM 24WL3S*(1) SC 24WL3S*(1)	<b>S20SCM20</b>		
	SM/SC 20WL3S*(1)			
#16 Ø 0.062" (1.6)	RM/RC 28M1*	<b>S16RCM20</b>	<b>SHANDLES</b>	<b>RX2025GE1 or RX2031J long endurance tool</b>
	RM/RC 24M9*			
	RM/RC 20M13*			
	RM/RC 20M12*			
	RM/RC 16M23*			
	RM/RC 14M30*	<b>S16RCM14</b>		
	SM/SC 24ML1*(1)	<b>S16SCM20</b>		
	SM/SC 20ML1*(1)			
	SM/SC 16ML1*(1)		<b>S16SCML1</b>	
	SM/SC 14ML1*(1)			
	SM/SC 16ML11*(1)	<b>S16SCML11</b>		

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(1) loose contact \* endurance of SHANDLES and Head tools = 48,000 cycles

Contact size	Part number	Tool with separate locator Hand tool	Positioner + locator setting	Extraction tools	
#12 Ø 0.094" (2.4)	82911457N* / 82911456*	<b>M317</b>	<b>VGE10077A</b>	<b>1/2</b>	<b>51060210924</b>
	82911459N* / 82911458*			<b>2</b>	
	82911461N* / 82911460*			<b>2</b>	
	82911463N* / 82911462*			<b>3</b>	
	82911465N* / 82911464*			<b>3</b>	
	82911467N* / 82911466*			<b>4</b>	
#8 Ø 0.141" (3.6)	82913601A / 82913600A	<b>M317</b>	<b>VGE10078A</b>	<b>3</b>	<b>51060210936</b>
	82913603A / 82913602A			<b>3</b>	
	82913605A / 82913604A			<b>4</b>	
	82913607A / 82913606A			<b>5</b>	
	82913609A / 82913608A			<b>6/7</b>	

\* see page 126 for plating options and other contact details

### Crimping tools for specific contacts (First mate, last break contacts)

Contact size	Part number*	Hand tools (SHANDLES) Head	Tool with separate locator Hand tool	Positioner + locator setting	Extraction tools	
#16 Ø 0.094" (1.6) Longer RM contact	RM28M1GE1K	<b>S16RCM20</b>	<b>MH860</b>	<b>MH86186</b>	<b>4/6</b>	<b>RX2025GE1 or RX2031J long endurance tool</b>
	RM24M9GE1K			<b>5/6</b>		
	RM16M23GE1K RM20M12GE1K	<b>S16RCM16</b>	<b>MH860</b>	<b>MH86186</b>	<b>6/8</b>	
	RM14M30GE1K			<b>S16RCM14</b>	<b>M317</b>	
#16 Ø 0.094" (1.6) Shorter RC contact	RC28M1GE7K	<b>S16RCM20</b>	<b>MH860</b>	<b>MH86164G</b>	<b>4/6</b>	
	RC24M9GE7K			<b>5/6</b>		
	RC20M13GE7K RC20M12GE7K			<b>5/7</b>		
	RC16M23GE7K	<b>S16RCM16</b>		<b>6/8</b>		
	RC14M30GE7K		<b>S16RCM14</b>	<b>M317</b>	<b>UH25</b>	<b>3</b>

\* see page 129 for plating options and other contact details

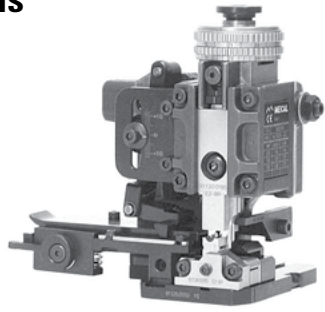
### Coaxial contacts

Please consult us.

Dimensions in inches (millimeters)

### Automatic crimping tools

Contact Mecal for semi-automatic production tools.



Min Applicator



Stripper



Presses

4

Mecal sales network:

[www.mecal.net](http://www.mecal.net)

### Extraction tool



RX20D44



RX2025GE1



51060210924



51060210936



RX2031J

#### Contact size

#### Part number

#20

RX20D44

#16

RX2025GE1

#16 Long endurance tool

RX2031J

#12

51060210924

#8

51060210936

### Contact extraction instruction



Place the tool into the cavity from front face of the connector, push on the handle, then remove the contact.

### Wire stripping crimp version

#### Machined contact



Contact size	Part number Male	Female	Stripping length L	
			inch	mm
#20 Ø 0.039" (1)	RM24W3- / RM20W3- RM18W3-	RC24W3- / RC20W3- RC18W3-	0.188"	4.8
#16 Ø 0.062" (1.6)	RM28M1- / RM24M9- RM20M13- / RM20M12- RM16M23- / RM14M30-	RC28M1- / RC24M9- RC20M13- / RC20M12- RC16M23- / RC14M30-	0.188"	4.8
#8 Ø 0.141" (3.6)	82913601- / 82913603- 82913605- / 82913607- 82913609-	82913600- / 82913602- 82913604- / 82913606- 82913608-	0.255" to 0.295"	6.5 to 7.5

#### Stamped and formed with insulation support



Contact size	Part number Male	Female	Stripping length L	
			inch	mm
#20 Ø 0.039" (1)	SM24W3- / SM24WL3- SM20W3- / SM20WL3-	SC24W3- / SC24WL3- SC20W3- / SC20WL3-	0.157"	4
#16 Ø 0.062" (1.6)	SM24M1- / SM24ML1- SM20M1- / SM20ML1- SM16M11- / SM16ML11-	SC24M1- / SC24ML1- SC20M1- / SC20ML1- SC16M11- / SC16ML11-	0.157"	4
			0.183"	4.65

#### Stamped and formed without insulation support



Contact size	Part number Male	Female	Stripping length L	
			inch	mm
#16 Ø 0.062" (1.6)	SM16M1- / SM16ML1- SM14M1- / SM14ML1-	SC16M1- / SC16ML1- SC14M1- / SC14ML1-	0.250"	6.35
			0.250"	6.35

#### Power contacts

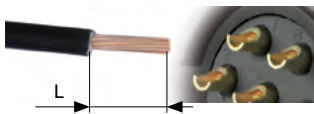


Contact size	Part number Male	Female	Stripping length L	
			inch	mm
#12 Ø 0.094" (2.4)	82911457- / 82911459- 82911461- / 82911463- 82911465- / 82911467-	82911456- / 82911458- 82911460- / 82911462- 82911464- / 82911466-	0.275" to 0.314"	7 to 8
#8 Ø 0.141" (3.6)	82913601- / 82913603- 82913605- / 82913607- 82913609-	82913600- / 82913602- 82913604- / 82913606- 82913608-	0.255" to 0.295"	6.5 to 7.5

Note: See page 126 for plating options and other contact details

### Wire stripping solder and screw versions

#### Solder contact delivered with connector



Contact size	Stripping length L	mm
	inch	
#16 / Ø 0.062" (1.6) and #20 / Ø 0.039" (1)	0.196"	5

#### Screw contact delivered with connector



Contact size	Stripping length L	mm
	inch	
#16 / Ø 0.062" (1.6)	0.228"	5.8

Dimensions in inches (millimeters)

## Crimping

One of the key factors which affects the performance of a connector is the way contacts are terminated. Crimped connections are nowadays seen as the best solution to ensure quality throughout the lifetime of the product.



Active contact part	Contact type	Die location on heads	Wire section range	Section inch <sup>2</sup>	mm <sup>2</sup>	Tensile straight test (min)	Height W ±0.002" (±0.075) inch	mm	Width W ±0.002" (±0.075) inch	mm	Tooling head part number
<b>Machined contacts size #20 Ø 0.039" (1)</b>	<b>RM24W3K</b>	26/24	26 AWG	0.004" min	0.12 min	15 N	0.037"	0.95	0.05"	1.27	<b>S20RCM</b>
	<b>RC24W3K</b>		24 AWG	0.009" max	0.25 max	32 N					
	<b>RM20W3K</b>	22/20	22 AWG	0.012" min	0.32 min	40 N	0.049"	1.26	0.070"	1.78	
	<b>RC20W3K</b>		20 AWG	0.019" max	0.50 max	60 N					
<b>S and F contacts size #20 Ø 0.039" (1)</b>	<b>SM24WL3TK6*</b>	26/24	26 AWG	0.004" min	0.12 min	15 N	0.031"	0.80	0.058"	1.49	<b>S20SCM20</b>
	<b>SC24WL3TK6*</b>		24 AWG	0.009" max	0.25 max	32 N					
	<b>SM20WL3TK6*</b>	22/20	22 AWG	0.012" min	0.32 min	40 N	0.039"	1.01	0.060"	1.53	
	<b>SC20WL3TK6*</b>		20 AWG	0.019" max	0.50 max	60 N					
<b>Machined contacts size #16 Ø 0.062" (1.6)</b>	<b>RM28M1K*</b>	30/28	30 AWG	0.002" min	0.05 min	11 N	0.044"	1.14	0.055"	1.41	<b>S16RCM20</b>
	<b>RC28M1K*</b>		28 AWG	0.003" max	0.08 max	6 N					
	<b>RM24M9K*</b>	26/24	26 AWG	0.004" min	0.12 min	15 N	0.045"	1.15	0.055"	1.41	
	<b>RC24M9K*</b>		24 AWG	0.009" max	0.25 max	32 N					
	<b>RM20M13K*</b>	22/20	22 AWG	0.012" min	0.32 min	40 N	0.049"	1.26	0.069"	1.76	
	<b>RC20M13K*</b>		20 AWG	0.019" max	0.50 max	60 N					
	<b>RM20M12K*</b>	22 AWG	22 AWG	0.012" min	0.32 min	40 N	0.049"	1.26	0.069"	1.76	
	<b>RC20M12K*</b>		20 AWG	0.019" max	0.50 max	60 N					
	<b>RM16M23K*</b>	18	18 AWG	0.032" max	0.82 max	90 N	0.070"	1.80	0.089"	2.28	<b>S16RCM16</b>
	<b>RC16M23K*</b>	16	16 AWG	0.059" max	1.50 max	150 N	0.077"	1.96	0.095"	2.43	
<b>RM14M30K*</b>	16	16 AWG	0.059" min	1.50 min	150 N	0.082"	2.10	0.105"	2.68	<b>S16RCM14</b>	
<b>RC14M30K*</b>	14	14 AWG	0.098" min	2.50 min	230 N	2.3	2.30	0.109"	2.78		
<b>S and F contacts size #16 Ø 0.062" (1.6)</b>	<b>SM24ML1TK6*</b>	26/24	26 AWG	0.004" min	0.12 min	15 N	0.033"	0.84	0.059"	1.50	<b>S16SCM20</b>
	<b>SC24ML1TK6*</b>		24 AWG	0.009" max	0.25 max	32 N					
	<b>SM20ML1TK6*</b>	22/20	22 AWG	0.012" min	0.32 min	40 N	0.040"	1.02	0.060"	1.54	
	<b>SC20ML1TK6*</b>		20 AWG	0.019" max	0.50 max	60 N					
	<b>SM16ML11TK6*</b>	18	18 AWG	0.032" min	0.82 min	90 N	0.051"	1.32	0.082"	2.09	<b>S16SCML11</b>
	<b>SC16ML11TK6*</b>	16	16 AWG	0.059" max	1.50 max	150 N	0.053"	1.36	0.082"	2.10	
	<b>SM16ML1TK6*</b>	18	18 AWG	0.032" min	0.82 min	90 N	0.058"	1.149	0.079"	2.02	<b>S16SCML1</b>
	<b>SC16ML1TK6*</b>	16	16 AWG	0.059" max	1.50 max	150 N	0.066"	1.70	0.080"	2.05	
	<b>SM14ML1TK6*</b>	14	14 AWG	0.098" max	2.50 max	230 N	0.070"	1.79	0.101"	2.58	
	<b>SC14ML1TK6*</b>										

\* example of plating, for other plating see page 126

**Note:** Assembly operations mentioned above shall not interfere with or be in contradiction with the IPC-WHMA-A-620B



### Crimping tooling



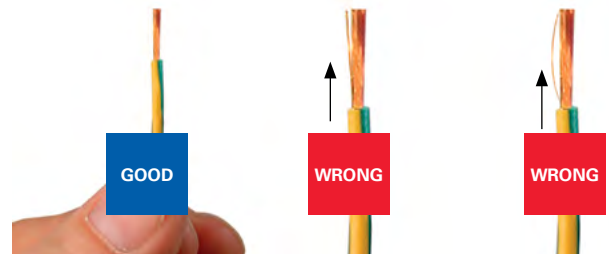
1) Fully close then release the tool, keep it open. Open the two pins.



2) Choose the adapter head (sold separately). Keep vertical and slide it into the handle until the mechanical stop.



3) Close the two pins simultaneously to maintain the head.



4) Strip the cable properly by checking the recommended size in the catalog on page 139.



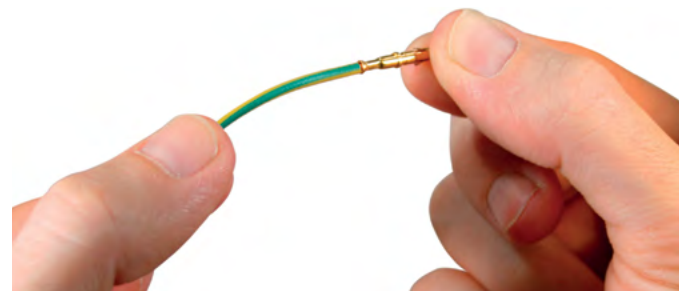
5) Place conductors, with no deterioration, in the contact bucket. All strands to be located in the crimp bucket.



6) Position the contact in the bottom of the tool by checking its orientation. Maintain the wire in position.



7) Tighten the handles to the end of the mechanism (max 175 N). After handles are opened, extract the contact.



8) Control the quality of crimping (see page 140).

**Note:** Assembly operations mentioned above shall not interfere or to be in contradiction with the IPC-WHMA-A-620B

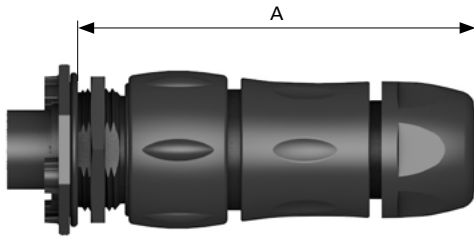
# 4

## Technical information

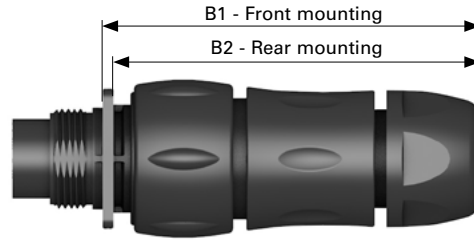
### Dimensions

#### Mated connector lengths

*UTSX7 + UTSX6JC*



*UTSX0 + UTSX6JC*



*UTSX1JC + UTSX6JC*



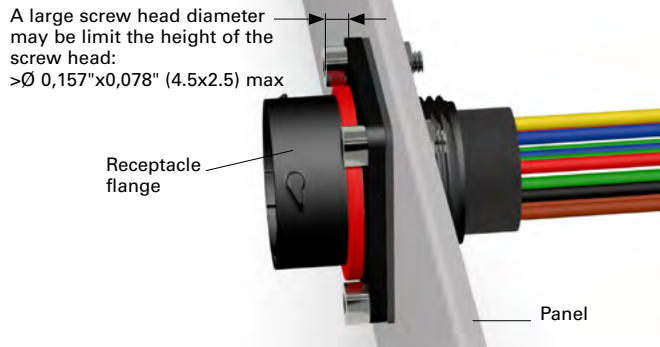
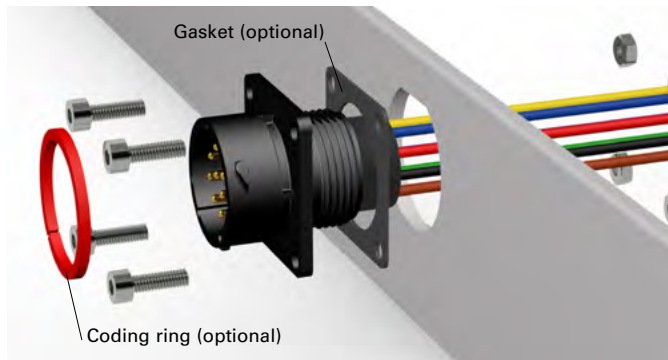
Shell size	UTSX7 + UTSX6JC		UTSX0 + UTSX6JC		B2 max inch	mm	UTSX1JC + UTSX6JC	
	A max inch	mm	B1 max inch	mm			C max inch	mm
10	2.992"	74	2.836"	72	2.736"	69.5	5.196"	132
12	3.110"	79	2.952"	75	2.874"	73	5.433"	138
14	3.366"	85.5	3.208"	81.5	3.110"	79	5.925"	150.5

4

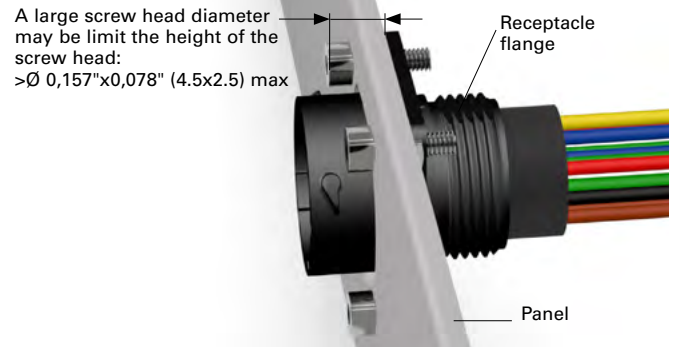
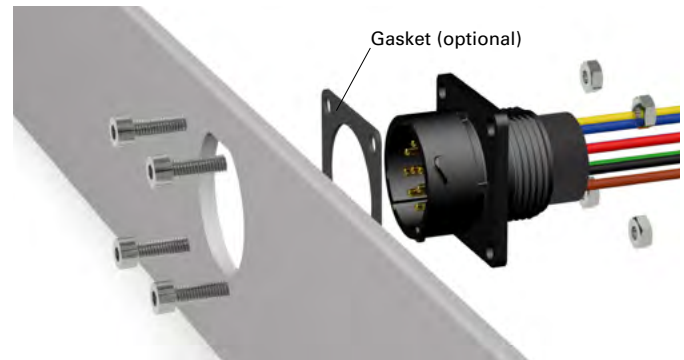
### UTSX0 or UTSX0JC assembly (mounting suggestion)

- Strip wires, crimp or solder contacts (see pages 139 and 140)
- Insert contacts into connector cavities (insert manually or use tool RTM205 crimp contacts)
- Place receptacle in the panel cut-out
- Secure receptacle with screws (not supplied)
- Tighten screws: M2.5 (recommended torque: see table below)
- Warning: to prevent any mating issue with the plug counterpart, take into account the following dimensions of screw heads and panel thickness
- For complete sealing of the system use optional gasket and sealed screw solution (not sold by Eaton).

#### Front mounting

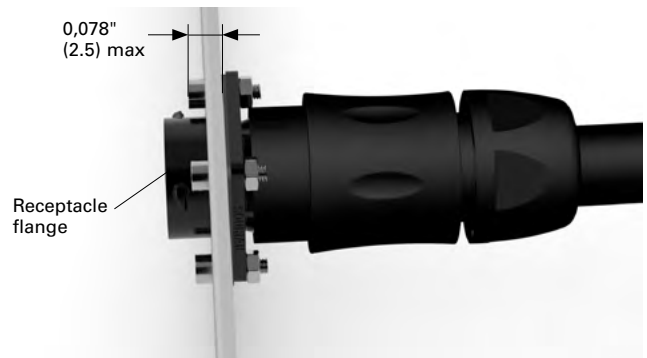
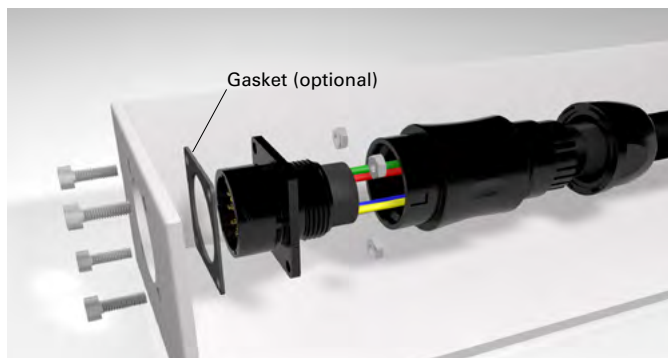


#### Rear mounting



Shell size	Screw tightening torque (Nm)
10	0.30/0.40
12	0.30/0.40
14	0.30/0.40

#### UTSX0JC rear mounting



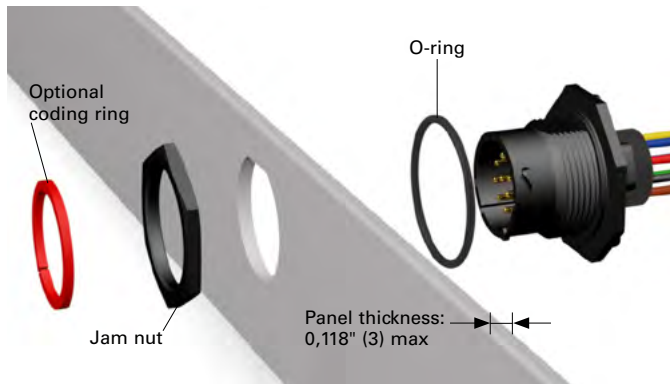
Dimensions in inches (millimeters)

### UTSX7 assembly (mounting suggestion)

- Strip wires and crimp contacts (see pages 139 and 140)
- Insert contacts into connector cavities (insert manually or use tool RTM205 crimp contacts)
- Seat o-ring, place receptacle in the panel cut-out
- Tighten jam nut

4

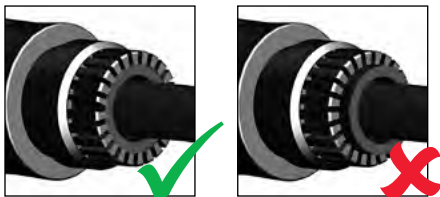
#### Crimp or solder version



Shell size	Jam nut torque (Nm) max	Exterior jam nut dim.		Ø Wire Standard version max		Discrete wire sealing	
		inch	mm	inch	mm	inch	mm
10	3	0.874"	20.2	1.125"	3.2	From	From
12	4	1.062"	27.0			0.066"	1.7
14	5	1.185"	30.1			to	to
						0.118"	3.0

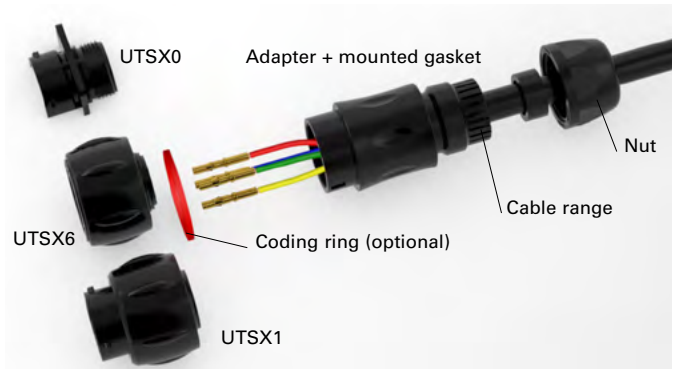
### UTSX0JC, UTSX1JC or UTSX6JC assembly: crimp version

- Slide accessories onto the cable

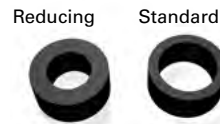


Make sure the seal is positioned as shown.

- Mate the plug with a corresponding counter part
- Strip external cable jacket
- Strip wires and crimp contacts (see pages 139 and 140)
- Insert contacts into connector cavities (insert manually or use tool RTM205)
- Tighten adapter with plug UTSX6 or receptacle UTSX1, choose right seal (waste the other seal)
- Tighten the nut to rear of either UTSX1 or UTSX6 (recommended torque values to be applied according to table below)
- Caution: only one of the two gaskets included should be used!



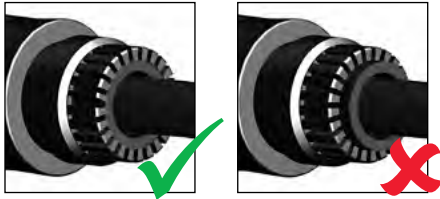
#### Cable ranges



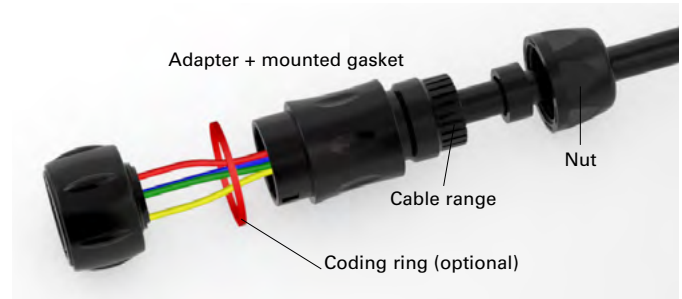
Shell size	Recommended jacket strip length		Female inch	mm	Adapter tightening torque (Nm)	Nut tightening torque (Nm)	Ø Cable range Standard seal		Ø Cable range Reducing seal		Ø Wire inch	mm
	Male inch	mm					inch	mm	inch	mm		
10	0.826"	21	1.141"	29	1.5	1	0.098"/0.314"	2.5/8.0	0.059"/0.196"	1.5/5.0	From	From
12	0.984"	25	1.299"	33	2.5	2	0.196"/0.472"	5.0/12.0	0.118"/0.354"	3.0/9.0	0.066"	1.7
14	1.141"	29	1.417"	36	3	2.5	0.275"/0.551"	7.0/14.0	0.196"/0.472"	5.0/12.0	to	to
											0.118"	3.0

### UTSX6JC assembly: solder version

- Slide accessories onto the cable

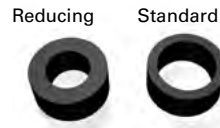


Make sure the seal is positioned as shown.



- Mate the plug with a corresponding receptacle
- Strip external cable jacket (see pages 139 and 140)
- Solder contacts
- Tighten adapter with plug, choose right seal (waste the other seal)
- Tighten the nut to rear of either UTSX6 (recommended torque values to be applied according table to the right)
- Caution: only one of the two gaskets included should be used!

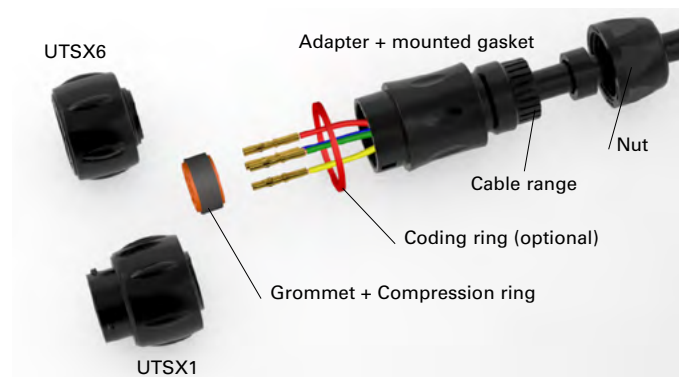
#### Cable ranges



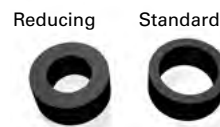
Shell size	Recommended jacket strip length		Adapter tightening torque (Nm)	Nut tightening torque (Nm)	Ø Cable range Standard seal		Ø Cable range Reducing seal		Ø Wire	
	Male inch	mm			inch	mm	inch	mm	inch	mm
10	0.826"	21	1.5	1	0.098"/0.314"	2.5/8.0	0.059"/0.196"	1.5/5.0	From 0.066"	From 1.7
12	0.984"	25	2.5	2	0.196"/0.472"	5.0/12.0	0.118"/0.354"	3.0/9.0	to	to
14	1.141"	29	3	2.5	0.275"/0.551"	7.0/14.0	0.196"/0.472"	5.0/12.0	0.118"	3.0

### UTSX1GJC or UTSX6GJC assembly

- Slide accessories onto the cable (make sure to keep compression ring on the grommet)
- Strip external cable jacket
- Strip wires and crimp contacts (see pages 139 and 140)
- Insert first contact into the grommet (first contact in cavity A, no tool is required). Then insert the contact in the connector cavity A (insert manually or use tool RTM205)
- Place the grommet and compression ring on the insulator
- Insert the other contacts
- Tighten adapter with plug UTSX6 or receptacle UTSX1, choose correct seal
- Tighten the nut to rear of either UTSX1 or UTSX6 (recommended torque values to be applied according to the table right).



#### Cable ranges



Shell size	Recommended jacket strip length				Adapter tightening torque (Nm)	Nut tightening torque (Nm)	Ø Cable range Standard seal		Ø Cable range Reducing seal		Ø Wire	
	Male inch	mm	Female inch	mm			inch	mm	inch	mm	inch	mm
10	0.826"	21	1.141"	29	1.5	1	0.098"/0.314"	2.5/8.0	0.059"/0.196"	1.5/5.0	From 0.066"	From 1.7
12	0.984"	25	1.299"	33	2.5	2	0.196"/0.472"	5.0/12.0	0.118"/0.354"	3.0/9.0	to	to
14	1.141"	29	1.417"	36	3	2.5	0.275"/0.551"	7.0/14.0	0.196"/0.472"	5.0/12.0	0.118"	3.0



# 4

## Technical information

### Mating procedure

#### UTSX coupling procedure

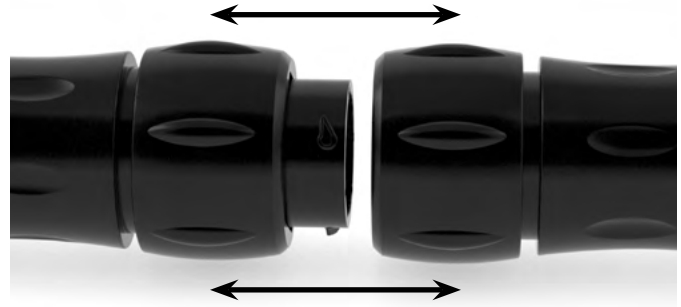
The pictures below provides step by step instructions on how to mate a plug and receptacle connector in order to avoid damaging any of the contacts.

4

**1 - Identify the primary key of each connector.**



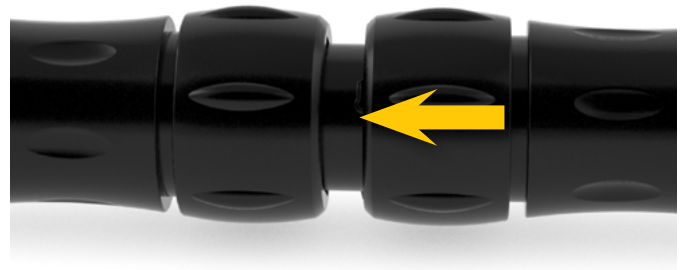
**2 - Align the primary keys of the connectors.**



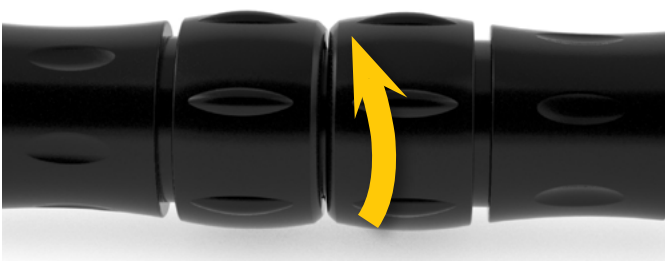
**3 - Non correct positioning:**



**4 - Offer the plug to the receptacle.**



**5 - Turn coupling ring until you hear a 'click'**



**6 - Example of installation**



Fastening of cable: In order to avoid any mechanical stress on the connection, cable should be clamp closed to the connector in such a way there is no bending or traction applying on the connector.

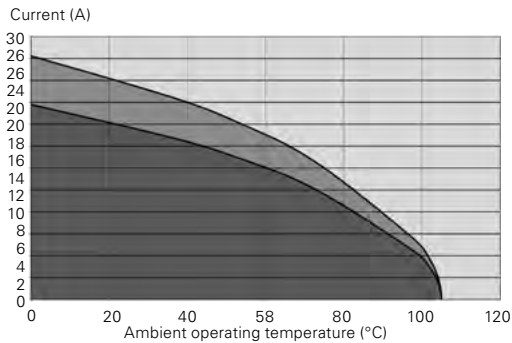
### Current carrying capacity

The current carrying capacity of a connector is limited by the thermal properties of materials used in its construction. The amount of current that can be handled depends on the size of cable used, the ambient temperature and the heat that is generated inside the connector. Part 3 of the IEC 60512 standard determines through a derating curve, the maximum current permissible, which varies from one layout to another (Fig.1 and Fig.2). Wire size plays an important role in dissipating heat and avoiding overheating (Fig.1 and Fig.3).

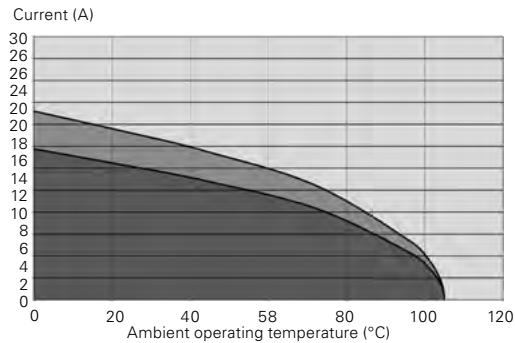
Please note that the curve should be adjusted when dealing with potential hot spots, which can occur as a result of unequal loading of current across a number of contacts. As a general rule, it is best to avoid placing power handling contacts in the middle of the connector. Try to locate them towards the edge where heat can be dissipated more effectively. Eventually you should find a level which represents the permissible operating range.

4

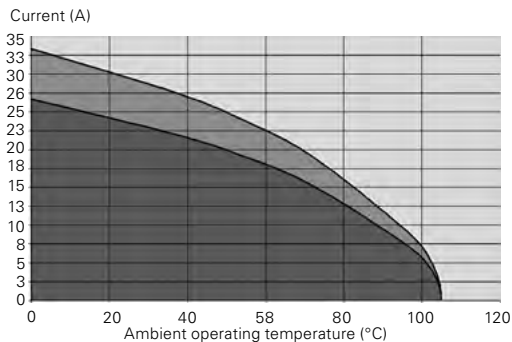
**Fig.1: UTSX 12-4 – 16 AWG**



**Fig.2: UTSX 12-8 – 16 AWG**



**Fig.3: UTSX 12-4 – 20 AWG**



Current use  
 Limited use  
 Not recommended use

The rated current is defined as uninterrupted continuous current that a connector can take when all contacts are energized simultaneously without exceeding the maximum limit of temperature. The earth contact is never loaded.

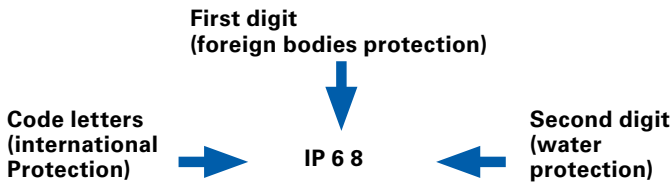
## UV resistance

Plastics can be susceptible to extreme degradation over time. The UTSX series is made with (f1) material according to UL746C. The UTSX material withstand a 1,000 h UV exposure according ISO4892 without significant color variation, cracking or variation of mechanical properties.

## 4

## Protection provided by an enclosure

For safety reasons, electrical equipment needs to be protected against outside influences. The basis for the determination is the standard IEC 60529. IP is a coding system that provides information regarding the accessibility of live parts against ingress of water or other foreign bodies.



1st digit	Degree of protection	2nd digit	Degree of protection
0	No protection against accidental contact. No protection against solid foreign bodies.	0	No protection against water.
1	Protection against contact with any large area by hand and against large solid foreign bodies with a diameter bigger than 1.889" (48).	1	Drip-proof. Protection against vertical water drips.
2	Protection against contact with the fingers. Protection against solid foreign bodies with a diameter bigger than 0.472" (12).	2	Drip-proof. Protection against water drips up to a 15° angle.
3	Protection against tools, wires or similar objects with a diameter bigger than 0.078" (2.5). Protection against small solid bodies with a diameter bigger than 0.078" (2.5).	3	Spray-proof. Protection against diagonal water drips up to a 60° angle.
4	Same as 3 however diameter is bigger than 0.039" (1).	4	Splash-proof. Protection against splashed water from all directions.
5	Full protection against contact. Protection against interior injurious dust deposits.	5	Hose-proof. Protection against water (out of a nozzle) from all directions.
6	Total protection against contact. Protection against penetration of dust.	6	Protection against powerful water jets .
		7	Protection against temporary immersions.
		8	Protection against water pressure. Pressure and immersion time to be specified by supplier.
		9K	High pressure hose-proof. Protection against high pressure water (out of a nozzle) from all directions.

UTSX offers high sealing: IP68/69K even in dynamic situations.

In addition to the IEC 60529 we conjointly use the ISO 20653 for the implementation of IPx9K testing:



To understand Ethernet theory, a functional comparison to a busy city with highways, buildings and cars is often used. The table below provides the correlation between the different components/pieces/links that encompass Ethernet network connectivity, and the larger scale infrastructure of a metropolitan city.

City	Buildings	Roads	Cars	Tolls	Bridges	Traffic laws
The network itself	End equipment, PC, server, etc.	Ethernet cabling	Data packets, datagrams, bits, bytes, etc.	Firewalls	Connectors	Protocol Communication specifications

4

Ethernet is a widely used communications protocol that is used to transmit data packets (datagrams) between network devices. Imagine a highway in a large metropolitan area six lanes wide at rush hour. The vehicles on the highway need rules to follow so that they get to their destination without crashing into each other. In an Ethernet network link, there could be 100 million bits of information transmitted in one second. In the Ethernet standard, there exist rules to govern packet structure, transmission requirements, error correction, communication with end equipment, etc.

### Ethernet connectors

To understand the differences between 100Mhz, 100 Base TX and Cat5e/Cat6, the comparison to the city is helpful.

- 100Mhz is a measurement of frequency for the signal, comparable to the speed limit on a highway.
- 100BaseTX (or Fast Ethernet) is an Ethernet link standard and identifies available link bandwidth. The bandwidth is measured in units of MBits/S (megabits per second), comparable to the number of cars that pass a point in one second.
- Cat5e/Cat6 are an EIA/TIA standard for performance and physical characteristics for cables and connectors, comparable to performance specifications of the car and highway.

### Specifying Ethernet connectors and contacts

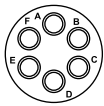
In connectors and cables, Fast Ethernet uses two pairs, one for transmit and one for receive. This way data traffic can flow in both directions simultaneously. To carry 100Mb/s data signals, 100BaseTX or Fast Ethernet, it is recommended to use Cat5e connectors as well as Cat5e cables with the support of a 100MHz signal. However, a 100Mb/s signal can be transmitted in certain conditions: short distance, only one connector, lower frequency, and so does not necessarily need to be Cat5e rated.

Ethernet twisted pairs carry a symmetrical (balanced) signal. With coax contacts, the inner core will be shield, but not the other core. This will result in an unbalanced signal due to electromagnetic interferences. Coax contacts will not work correctly and are not recommended.

Quadrx contacts are used in railway applications because of the use of quad cables. In this specific industry, the standard Ethernet twisted pair cables cannot be used as they are too thin and usually solid, not stranded. In other industries, UTP (Unshielded Twisted Pair) cables are widely used. Quadrx contacts are not designed to terminate UTP cables and are not recommended.

## Standard offering

### Standard solutions



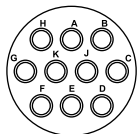
106\* - 10E6/10D6  
4.5A 250V 6A 250V  
6 contacts #20 Ø 0.039" (1)

#### UTSX size 10, 6 contacts

- 1 (Pair 1) = A
- 2 (Pair 1) = B
- 3 (Pair 2) = E
- 4 (Pair 2) = D

Shielding continuity done in cavity CandF.

**Note:** \*Shielding can be replaced by DC power.



1210 - 12E10/12D10  
4.5A 250V  
10 contacts #20 Ø 0.039" (1)

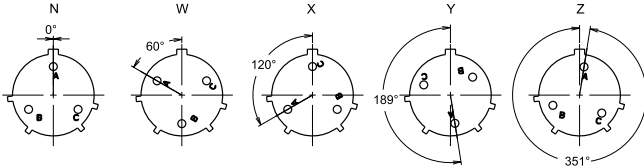
#### UTSX size 12, 10 contacts

- 1 (Pair 1) = C
- 2 (Pair 1) = B
- 3 (Pair 2) = G
- 4 (Pair 2) = H

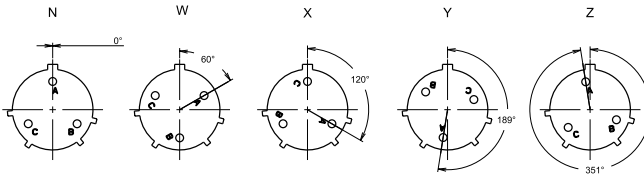
The UTSX series has layouts with discrimination keys, which help avoid mismatching when operators mate the connectors.

This safety feature is particularly important when similar connectors are placed next to each other. Mismatching connectors can lead to serious problems including system failures and even physical injury.

5



**Note:** Insert rotated in body (viewed from front face of female insert)



**Note:** Insert rotated in body (viewed from front face of male insert)

Connectors with rotated inserts can be ordered by adding the suffix W, X, Y or Z to the standard part number.

e.g. **UTSX6JC104S** (N key) → **UTSX6JC104SW** (W key)

Consult us for overmolded harnesses.

Shell size	Layout	Discrimination keys degrees			
		W	X	Y	Z
10	102W2/103	–	–	–	–
	104	45°	–	–	–
	103W3	–	–	–	–
	106 10E6/10D6	90°	–	–	–
	10E7/10D7	90°	–	–	–
	10E98/10D98	90°	180°	240°	270°
	12	12E2/12D2	–	–	–
12E3/12D3		–	–	180°	–
124		–	–	–	–
12E4/12D4		–	–	–	–
128		26°	–	–	–
12E8/12D8		90°	112°	203°	292°
1210		60°	155°	270°	295°
12E10/12D10		60°	155°	270°	295°
12E14/12D14		45°	–	–	–
14		14E5/14D5	40°	92°	184°
	142G1	–	–	–	–
	147	–	–	–	–
	14E7/14D7	–	–	–	–
	148	–	–	–	–
	1412	60°	–	–	–
	1492	49°	71°	145°	–
	14E12/14D12	43°	90°	–	–
	14E15/14D15	17°	110°	155°	234°
	14E18/14D18	15°	90°	180°	270°
	1419	30°	165°	315°	–
14E19/14D19	30°	165°	315°	–	

### SMSPKE0: discrimination pin for male UTSX connectors (#16 contacts only)

Another solution to eliminate mismatching is to use a SMSPKE0 dummy contact, which can be inserted into an empty #16 male contact cavity. The UTSX series male connector will only mate with a female connector that has a vacant contact cavity at the corresponding position.



**Connectors****Free hanging receptacle with cable gland**

UTSX1JC102W2P	36
UTSX1JC102W2S	36
UTSX1JC103P	18
UTSX1JC103S	18
UTSX1JC103W3P	50
UTSX1JC103W3S	50
UTSX1JC104P	41
UTSX1JC104S	41
UTSX1JC106P	56
UTSX1JC106S	56
UTSX1JC1210P	89
UTSX1JC1210S	89
UTSX1JC124P	31
UTSX1JC124PSCR	31
UTSX1JC124S	31
UTSX1JC124SSCR	31
UTSX1JC128P	74
UTSX1JC128S	74
UTSX1JC1412P	94
UTSX1JC1412S	94
UTSX1JC1419P	120
UTSX1JC1419S	120
UTSX1JC142G1P	23
UTSX1JC142G1S	23
UTSX1JC147P	65
UTSX1JC147PSCR	65
UTSX1JC147S	65
UTSX1JC147SSCR	65
UTSX1JC148P	83
UTSX1JC148S	83
UTSX1JC1492P	103
UTSX1JC1492S	103

**Jam nut receptacle only**

UTSX7102W2P	36
UTSX7102W2S	36
UTSX7103P	18
UTSX7103S	18
UTSX7103W3P	50
UTSX7103W3S	50
UTSX7104P	41
UTSX7104S	41
UTSX7106P	55
UTSX7106S	55
UTSX710D6P	55
UTSX710D6P32	55
UTSX710D6S	55
UTSX710D6S32	55
UTSX710D7P	70
UTSX710D7P32	70
UTSX710D7S	70
UTSX710D7S32	70
UTSX710D98P	61
UTSX710D98P32	61
UTSX710D98S	61
UTSX710D98S32	61
UTSX710E6P	55
UTSX710E6S	55
UTSX710E7P	70
UTSX710E7S	70
UTSX710E98P	61
UTSX710E98S	61
UTSX71210P	89
UTSX71210S	89
UTSX7124P	31

UTSX7124PSCR	31
UTSX7124S	31
UTSX7124SSCR	31
UTSX7128P	74
UTSX7128PSEK9	74
UTSX7128S	74
UTSX712D10P	89
UTSX712D10P32	89
UTSX712D10S	89
UTSX712D10S32	89
UTSX712D14P	108
UTSX712D14P32	108
UTSX712D14S	108
UTSX712D14S32	108
UTSX712D2P	14
UTSX712D2P32	14
UTSX712D2S	14
UTSX712D2S32	14
UTSX712D3P	27
UTSX712D3P32	27
UTSX712D3S	27
UTSX712D3S32	27
UTSX712D4P	31
UTSX712D4P32	31
UTSX712D4S	31
UTSX712D4S32	31
UTSX712D8P	79
UTSX712D8P32	79
UTSX712D8S	79
UTSX712D8S32	79
UTSX712E10P	89
UTSX712E10S	89
UTSX712E14P	108
UTSX712E14S	108
UTSX712E2P	14
UTSX712E2S	14
UTSX712E3P	27
UTSX712E3S	27
UTSX712E4P	31
UTSX712E4S	31
UTSX712E8P	79
UTSX712E8S	79
UTSX71412P	94
UTSX71412S	94
UTSX71419P	120
UTSX71419S	120
UTSX7142G1P	23
UTSX7142G1S	23
UTSX7147P	65
UTSX7147PSCR	65
UTSX7147S	65
UTSX7147SSCR	65
UTSX7148P	83
UTSX7148S	83
UTSX71492P	103
UTSX71492S	103
UTSX714D12P	99
UTSX714D12P32	99
UTSX714D12S	99
UTSX714D12S32	99
UTSX714D15P	112
UTSX714D15P32	112
UTSX714D15S	112
UTSX714D15S32	112
UTSX714D18P	116
UTSX714D18P32	116
UTSX714D18S	116

UTSX714D18S32	116	UTSX6147P	65
UTSX714D19P	120	UTSX6147S	65
UTSX714D19P32	120	UTSX6148P	83
UTSX714D19S	120	UTSX6148S	83
UTSX714D19S32	120	UTSX61492P	103
UTSX714D5P	46	UTSX61492S	103
UTSX714D5P32	46	UTSX614E12P	99
UTSX714D5S	46	UTSX614E12S	99
UTSX714D5S32	46	UTSX614E15P	112
UTSX714D7P	65	UTSX614E15S	112
UTSX714D7P32	65	UTSX614E18P	116
UTSX714D7S	65	UTSX614E18S	116
UTSX714D7S32	65	UTSX614E19P	108
UTSX714E12P	99	UTSX614E19S	108
UTSX714E12S	99	UTSX614E5P	112
UTSX714E15P	112	UTSX614E5S	112
UTSX714E15S	112	UTSX614E7P	65
UTSX714E18P	116	UTSX614E7S	65
UTSX714E18S	116		
UTSX714E19P	120	<b>Plug with cable gland</b>	
UTSX714E19S	120	UTSX6JC102W2P	36
UTSX714E5P	46	UTSX6JC102W2S	36
UTSX714E5S	46	UTSX6JC103P	18
UTSX714E7P	65	UTSX6JC103S	18
UTSX714E7S	65	UTSX6JC103W3P	50
		UTSX6JC103W3S	50
<b>Plug only</b>		UTSX6JC104P	41
UTSX6100W2P	36	UTSX6JC104S	41
UTSX6100W2S	36	UTSX6JC106P	56
UTSX6103P	18	UTSX6JC106S	56
UTSX6103S	18	UTSX6JC10E6P	56
UTSX6103W3P	50	UTSX6JC10E6S	56
UTSX6103W3S	50	UTSX6JC10E7P	70
UTSX6104P	41	UTSX6JC10E7S	70
UTSX6104S	41	UTSX6JC10E98P	61
UTSX6106P	56	UTSX6JC10E98S	61
UTSX6106S	56	UTSX6JC1210P	89
UTSX610E6P	56	UTSX6JC1210S	89
UTSX610E6S	56	UTSX6JC124P	31
UTSX610E7P	70	UTSX6JC124PSCR	31
UTSX610E7S	70	UTSX6JC124S	31
UTSX610E98P	61	UTSX6JC124SSCR	31
UTSX610E98S	61	UTSX6JC128P	74
UTSX61210P	89	UTSX6JC128S	74
UTSX61210S	89	UTSX6JC12E10P	89
UTSX6124P	31	UTSX6JC12E10S	89
UTSX6124S	31	UTSX6JC12E14P	89
UTSX6128P	83	UTSX6JC12E14S	89
UTSX6128S	83	UTSX6JC12E2P	14
UTSX612E10P	89	UTSX6JC12E2S	14
UTSX612E10S	89	UTSX6JC12E3P	27
UTSX612E14P	108	UTSX6JC12E3S	27
UTSX612E14S	108	UTSX6JC12E4P	31
UTSX612E2P	14	UTSX6JC12E4S	31
UTSX612E2S	14	UTSX6JC12E8P	79
UTSX612E3P	31	UTSX6JC12E8S	79
UTSX612E3S	31	UTSX6JC1412P	83
UTSX612E4P	31	UTSX6JC1412S	83
UTSX612E4S	31	UTSX6JC1419P	108
UTSX612E8P	79	UTSX6JC1419S	108
UTSX612E8S	79	UTSX6JC142G1P	23
UTSX61412P	83	UTSX6JC142G1S	23
UTSX61412S	83	UTSX6JC147P	65
UTSX61419P	120	UTSX6JC147PSCR	65
UTSX61419S	120	UTSX6JC147S	65
UTSX6142G1P	23	UTSX6JC147SSCR	65
UTSX6142G1S	23	UTSX6JC148P	83

UTSX6JC148S.....	83	UTSX01412P.....	94
UTSX6JC1492P.....	103	UTSX01412S.....	94
UTSX6JC1492S.....	103	UTSX01419P.....	120
UTSX6JC14E12P.....	99	UTSX01419S.....	120
UTSX6JC14E12S.....	99	UTSX0142G1P.....	23
UTSX6JC14E15P.....	41	UTSX0142G1S.....	23
UTSX6JC14E15S.....	41	UTSX0147P.....	65
UTSX6JC14E18P.....	116	UTSX0147PSEK9.....	65
UTSX6JC14E18S.....	116	UTSX0147S.....	65
UTSX6JC14E19P.....	108	UTSX0148P.....	83
UTSX6JC14E19S.....	108	UTSX0148S.....	83
UTSX6JC14E5P.....	41	UTSX01492P.....	103
UTSX6JC14E5S.....	41	UTSX01492S.....	103
UTSX6JC14E7P.....	65	UTSX014D12P.....	99
UTSX6JC14E7S.....	65	UTSX014D12S.....	99
<b>Square flange receptacle only</b>			
UTSX0102W2P.....	36	UTSX014D15P.....	112
UTSX0102W2S.....	36	UTSX014D15S.....	112
UTSX0103P.....	18	UTSX014D18P.....	116
UTSX0103S.....	18	UTSX014D18S.....	116
UTSX0103W3P.....	50	UTSX014D19P.....	120
UTSX0103W3S.....	50	UTSX014D19S.....	120
UTSX0104P.....	41	UTSX014D5P.....	46
UTSX0104S.....	41	UTSX014D5S.....	46
UTSX0106P.....	56	UTSX014D7P.....	65
UTSX0106S.....	56	UTSX014D7S.....	65
UTSX010D6P.....	56	UTSX014E12P.....	99
UTSX010D6S.....	56	UTSX014E12S.....	99
UTSX010D7P.....	70	UTSX014E15P.....	112
UTSX010D7S.....	70	UTSX014E15S.....	112
UTSX010D98P.....	61	UTSX014E18P.....	116
UTSX010D98S.....	61	UTSX014E18S.....	116
UTSX010E6P.....	56	UTSX014E19P.....	120
UTSX010E6S.....	56	UTSX014E19S.....	120
UTSX010E7P.....	70	UTSX014E5P.....	46
UTSX010E7S.....	70	UTSX014E5S.....	46
UTSX010E98P.....	61	UTSX014E7P.....	65
UTSX010E98S.....	61	UTSX014E7S.....	65
UTSX01210P.....	89	<b>Square flange receptacle with cable gland</b>	
UTSX01210S.....	89	UTSX0JC102W2P.....	36
UTSX0128P.....	74	UTSX0JC102W2S.....	36
UTSX0128S.....	74	UTSX0JC103P.....	18
UTSX012D10P.....	89	UTSX0JC103S.....	18
UTSX012D10S.....	89	UTSX0JC104P.....	41
UTSX012D14P.....	108	UTSX0JC104S.....	41
UTSX012D14S.....	108	UTSX0JC106P.....	56
UTSX012D2P.....	14	UTSX0JC106S.....	56
UTSX012D2S.....	14	UTSX0JC1210P.....	89
UTSX012D3P.....	27	UTSX0JC1210S.....	89
UTSX012D3S.....	27	UTSX0JC124P.....	31
UTSX012D4P.....	31	UTSX0JC124S.....	31
UTSX012D4S.....	31	UTSX0JC128P.....	74
UTSX012D8P.....	79	UTSX0JC128S.....	74
UTSX012D8S.....	79	UTSX0JC1412P.....	94
UTSX012E10P.....	89	UTSX0JC1412S.....	94
UTSX012E10S.....	89	UTSX0JC1419P.....	120
UTSX012E14P.....	108	UTSX0JC1419S.....	120
UTSX012E14S.....	108	UTSX0JC142G1P.....	23
UTSX012E2P.....	14	UTSX0JC142G1S.....	23
UTSX012E2S.....	14	UTSX0JC147P.....	65
UTSX012E3P.....	27	UTSX0JC147S.....	65
UTSX012E3S.....	27	UTSX0JC148P.....	83
UTSX012E4P.....	31	UTSX0JC148S.....	83
UTSX012E4S.....	31	UTSX0JC1492P.....	103
UTSX012E8P.....	79	UTSX0JC1492S.....	103
UTSX012E8S.....	79		

**Accessories****Color coding rings**

UTGX610CCRG	20
UTGX610CCRR	20
UTGX610CCRY	20
UTGX612CCRG	16
UTGX612CCRR	16
UTGX612CCRY	16
UTGX614CCRG	25
UTGX614CCRR	25
UTGX614CCRY	25
UTGX710CCRG	20
UTGX710CCRR	20
UTGX710CCRY	20
UTGX712CCRG	16
UTGX712CCRR	16
UTGX712CCRY	16
UTGX714CCRG	25
UTGX714CCRR	25
UTGX714CCRY	25

**Discrimination pin**

SMSPKE0	150
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**Gasket**

UTFD12B	38
UTFD13B	16
UTFD14B	25

**Plastic protective cap**

85005586A	20
85005587A	16
85005588A	25
85005595	20
85005596	16
85005597	25

**Sealing caps**

UTGX10DCG	20
UTGX10DCGR	20
UTGX12DCG	16
UTGX12DCGE	16
UTGX12DCGR	16
UTGX14DCG	25
UTGX14DCGE	49
UTGX14DCGR	25
UTGX610DCG	20
UTGX612DCG	16
UTGX614DCG	25
UTS614DCG133	49

**Contacts****Crimp contacts**

82911456A	128
82911456K	128
82911457NA	128
82911457NK	128
82911458A	128
82911458K	128
82911459NA	128
82911459NK	128
82911460A	128
82911460K	128
82911461NA	128
82911461NK	128
82911462A	128
82911462K	128
82911463NA	128
82911463NK	128

82911464A	128
82911464K	128
82911465NA	128
82911465NK	128
82911466A	128
82911466K	128
82911467NA	128
82911467NK	128
82913600A	128
82913601A	128
82913602A	128
82913603A	128
82913604A	128
82913605A	128
82913606A	128
82913607A	128
82913608A	128
82913609A	128
RC14M30GE1K	128
RC14M30J	128
RC14M30K	128
RC16M23GE1K	128
RC16M23J	128
RC16M23K	128
RC18W3K	128
RC20M12GE7K	128
RC20M12J	128
RC20M12K	128
RC20M13GE7K	128
RC20M13J	128
RC20M13K	128
RC20W3K	128
RC24M9GE7K	128
RC24M9J	128
RC24M9K	128
RC24W3K	128
RC28M1GE7K	128
RC28M1J	128
RC28M1K	128
RM14M30GE1K	128
RM14M30J	128
RM14M30K	128
RM16M23GE1K	128
RM16M23J	128
RM16M23K	128
RM18W3K	128
RM20M12GE1K	128
RM20M12J	128
RM20M12K	128
RM20M13J	128
RM20M13K	128
RM20W3K	128
RM24M9GE1K	128
RM24M9J	128
RM24M9K	128
RM24W3K	128
RM28M1GE1K	128
RM28M1J	128
RM28M1K	128
SC14M1S18	128
SC14M1S31	128
SC14M1TK6	128
SC14ML1S18	128
SC14ML1S31	128
SC14ML1TK6	128
SC16M11S18	128
SC16M11S31	128

SC16M11TK6	128	SM24W3TK6	128
SC16M1S18	128	SM24WL3TK6	128
SC16M1S31	128	SM24WL3TKS26	128
SC16M1TK6	128	<b>Coaxial contacts</b>	
SC16ML11S18	128	RCDX6016D28	131
SC16ML11S31	128	RCDX6018D28	131
SC16ML11TK6	128	RCDX6024D28	131
SC16ML1S18	128	RCDX6026D28	131
SC16ML1S31	128	RCDX6032D28	131
SC16ML1TK6	128	RCDX6034D28	131
SC20M1S18	128	RCDX6036D28	131
SC20M1S31	128	RCDX6052D28	131
SC20M1TK6	128	RCDX60xxD28	131
SC20ML1S18	128	RCDXK1D28	131
SC20ML1S31	128	RMDX6018D28	131
SC20ML1TK6	128	RMDX6024D28	131
SC20W3S26	128	RMDX6026D28	131
SC20W3TK6	128	RMDX6032D28	131
SC20WL3S25	128	RMDX6034D28	131
SC20WL3TK6	128	RMDX6036D28	131
SC24M1S18	128	RMDX6046D28	131
SC24M1S31	128	RMDX6050D28	131
SC24M1TK6	128	RMDX6052D28	131
SC24ML1S18	128	RMDX60xxD28	131
SC24ML1S31	128	RMDXK10D28	131
SC24ML1TK6	128	<b>Fiber optic contacts</b>	
SC24W3S25	128	RCPOF1000B	136
SC24W3S26	128	RMPOF1000	136
SC24W3TK6	128	<b>PCB contacts</b>	
SC24WL3TK6	128	82911684NAPC	133
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SM14M1S18	128	82911685NAPC	133
SM14M1S31	128	82911685NPC	133
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SM16M11S31	128	RM20M12E83K	133
SM16M11TK6	128	RM20M12E8K	133
SM16M1S18	128	RMW5016K	133
SM16M1S31	128	RMW50A7K	133
SM16M1TK6	128	<b>Tooling</b>	
SM16ML11S18	128	51060210924	137
SM16ML11S31	128	51060210936	137
SM16ML11TK6	128	M317	137
SM16ML1S18	128	MH860	137
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SM16ML1TK6	128	RX2031J	138
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SM20ML1S31	128	S16SCML1	137
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SM24M1TK6	128		
SM24ML1S18	128		
SM24ML1S31	128		
SM24ML1TK6	128		
SM24W3S26	128		
SM24W3S26	128		

