



The next generation
of bayonet connectors
for harsh environments



Souriau UTGX series

Typical applications



Off-road vehicles



Heavy equipment



Energy



Power



Metal work



Instrumentation



Measurement



Robotic



Building automation & control



Infrastructure



Machinery

Souriau UTGX series

A versatile, ruggedized solution for industrial applications

Waterproof, shock-proof and UV resistant, the UTGX series can withstand continuous underwater immersion, routine pressure washing, dirt and dust and other harsh conditions.

Ideal for both indoor and outdoor applications with a lifespan of up to 27 years in-application, the UL/IEC certified UTGX series connectors are **a safe and reliable solution.**

Improve efficiency with lightweight, versatile and quick mating connectors

The UTGX series can be used in a wide range of configurations and electrical layouts, allowing you **to save space on your equipment.**

While the bayonet locking mechanism ensures a quick and secure connection and disconnection, other updates to the lightweight design make the UTGX series connectors easier than ever for operators to handle quickly. Especially in high-mating cycle applications, **UTGX will save time and money for your business.**

Upgrading has never been easier

The new Souriau UTGX Series uses Trim Trio® contacts. A single design for machined, stamped and formed and highspeed contacts, making **it quicker, easier and more cost effective to upgrade.** By using the same contacts, the switch from one connector series to another doesn't require tool or panel cut-out modifications.



Outdoor & shock proof

Waterproof

UV resistant

Quick mating

Souriau UTGX series

1

2

3

4

5



1 Overview

| | |
|--------------------------|----|
| Range overview | 06 |
| Technical specifications | 08 |
| Layouts size 10 | 09 |
| Layouts size 12 | 10 |
| Layouts size 14 | 11 |

2 Connectors

| | |
|----------------------------------|-----|
| Overmoulded cable assembly | 12 |
| UTGX12E2 / UTGX12D2 | 16 |
| UTGX103 | 20 |
| UTGX142G1 | 25 |
| UTGX12E3 / UTGX12D3 | 29 |
| UTGX124 / UTGX12E4 / UTGX12D4 | 33 |
| UTGX102W2 | 38 |
| UTGX104 | 43 |
| UTGX14E5 / 14D5 | 48 |
| UTGX103W3 | 52 |
| UTGX106 / UTGX10E6 / UTGX10D6 | 58 |
| UTGX10E98 / UTGX10D98 | 63 |
| UTGX147 / UTGX14E7 / UTGX14D7 | 67 |
| UTGX10E7 / UTGX10D7 | 72 |
| UTGX128 | 76 |
| UTGX12E8 / UTGX12D8 | 81 |
| UTGX148 | 85 |
| UTGX1210 / UTGX12E10 / UTGX12D10 | 91 |
| UTGX1412 | 96 |
| UTGX14E12 / UTGX14D12 | 101 |
| UTGX1492 | 105 |
| UTGX12E14 / UTGX12D14 | 110 |
| UTGX14E15 / UTGX14D15 | 114 |
| UTGX14E18 / UTGX14D18 | 118 |
| UTGX1419 / UTGX14E19 / UTGX14D19 | 122 |

3 Contacts

| | |
|--------------------------------|-----|
| Description | 128 |
| Contact plating selector guide | 128 |
| Contact selector guide | 129 |
| Packaging | 130 |
| Crimp contacts | 131 |
| Coaxial contacts | 133 |
| PCB contacts | 136 |
| Fiber optic contacts | 136 |

Souriau UTGX series



4 Technical information

| | | |
|---|-----|---|
| Automatic crimping tools | 141 | 1 |
| Extraction tool for crimp contacts | 141 | 2 |
| Crimping instructions | 142 | 3 |
| Crimping control | 143 | 4 |
| Handle & interchangeable heads | 144 | 5 |
| Mated connector length | 145 | |
| Overmoulded cable assembly dimensions | 145 | |
| Assembly instructions | 146 | |
| Mating procedure | 149 | |
| Rated current & working voltage | 150 | |
| UV resistance | 151 | |
| Protection provided by an enclosure | 151 | |
| Ethernet for the Layman | 152 | |

5 Appendices

| | |
|---|-----|
| Discrimination/Keying methods | 154 |
| Part number index. | 155 |

UTGX Series



Cable sealed

UTGX Standard



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



Corrosion-proof
Plastic housing

Contacts supplied separately



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

UTGX backshells

Cable sealing



Plug



Contacts loaded
Handsolder

UTGX sealed unmated



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



Corrosion-proof
Plastic housing

Overmoulded cable assembly



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

UTGX Standard receptacle

Jam nut



Square flange



In-line



Square flange



Contacts supplied separately



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

Contacts supplied separately



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

UTGX backshells

Cable sealing



UTGX sealed unmated receptacle

Jam nut



Square flange



**Contacts loaded PCB
Handsolder**

UTGX 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

Materials

- Body connector and backshell: Thermoplastic
- Insert:
 - UTGX Standard, UTGX Single Wire Sealed, UTGX Screw Termination Contacts: Thermoplastic
 - UTGX Sealed Unmated Handsolder & UTGX Sealed Unmated with PC Tails Contacts: Elastomer
- Nut: Metal
- Contacts: See page 128
- Halogen free
- RoHS compliant & conforms to the Chinese standard SJ/T1166-2006 (Chinese RoHS equivalent)



Environmental

- Temperature class: **IEC61984** from -40°C to +105°C
- Flammability rating:
 - **UL94 V-0** for UTGX standard
 - **UL94 HB** for UTGX Hi-seal
 - R22 HL2 / R23 HL2 according to NF EN 45545 for UTGX standard only
- 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:
 - UTGX Standard: **IP68/IP69K** dynamic (mated)
 - UTGX Sealed Unmated version: **IP68/IP69K** dynamic (unmated)

- UTGX Single Wire Sealed: **IP67/69K** (up to IP68 with double sealing backshell)
- UTGX 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
 - Chlorine

Electrical

- In accordance with:
 - **UL 1977:** Category ECBT2 File number: E169916
 - **C22.2 n°182.3:** Category ECBT8 File number: E169916
 - **IEC61984**



Notes: Scan the QR code to download the certificate.

- Voltage and current information available on pages 13 to 15 and on each layout pages

Mechanical

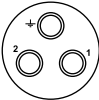
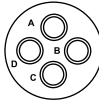
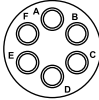
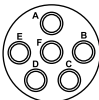
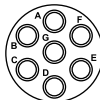
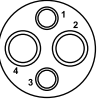
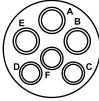
- Durability: 500 matings and unmatings according to **IEC 60512-9a**
- Vibration Sinus from 10 to 2000Hz ; 20grms according to **IEC60512-6-4**
- Thermal shock: According to **MIL-DTL-26482** and **EIA364 32**
- IK resistors: See table below for shock resistance

| Connector type | Size 10 | Size 12 | Size 14 |
|-------------------|--|--|--|
| UTGX0 / UTGX6JC | IK05 (0.7J) according to IEC62262 | IK06 (1J) according to IEC62262 | IK06 (1J) according to IEC62262 |
| UTGX7 / UTGX6JC | IK06 (1J) according to IEC62262 | IK07 (2J) according to IEC62262 | IK07 (2J) according to IEC62262 |
| UTGX1JC / UTGX6JC | Impact test (6.8J) according to UL746C | Impact test (6.8J) according to UL746C | Impact test (6.8J) according to UL746C |

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) | | |
|----------------------------------|--|--|---|
| Contact #16 (Ø 1.6 mm) |  |  | |
| | 103 16A/300V 2 + ground Page 20 | 104 13A/150V 4 contacts Page 43 | |
| Contact #20 (Ø 1.0 mm) |  |  |  |
| | 106 – 10E6/10D6 7A/32V 6 contacts Page 58 | 10E98/10D98 7A/50V 6 contacts Page 63 | 10E7/10D7 7A/50V 7 contacts Page 72 |
| | | | |
| Hybrid & others |  |  | |
| | 102W2 25A/150V 4 contact 2xØ 2.4 (#12) + 2xØ 1.0 (#20) Page 38 | 103W3 5A/32V 6 contacts 3xØ 1.6 (#16) + 3xØ 1.0 (#20) Page 52 | |

Note: Layouts in blue text are UTGX sealed in unmated condition

Contacts #20:
from AWG 26 to 18
0.13 to 0.93 mm²

Contacts #16:
from AWG 30 to 14
0.05 to 2.5 mm²

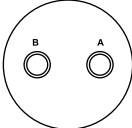
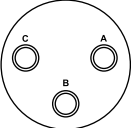
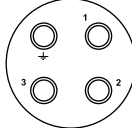
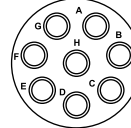
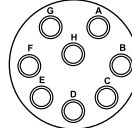
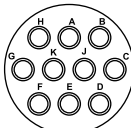
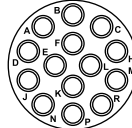
Contacts #12:
from AWG 20 to 12
0.13 to 4 mm²

Contacts #8:
from AWG 16 to 8
1.5 to 10 mm²

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) | | | |
|----------------------------------|---|---|--|---|
| Contact #16 (Ø 1.6 mm) |  |  |  |  |
| | 12E2/12D2 | 12E3/12D3 | 124 – 12E4/12D4 | 128 |
| | 16A/150V | 16A/150V | 16A/150V | 10A/80V |
| | 2 contacts Page 16 | 3 contacts Page 28 | 3 + ground Page 33 | 8 contacts Page 76 |
| Contact #20 (Ø 1.0 mm) |  |  |  | |
| | 12E8/12D8 | 1210 – 12E10/12D10 | 12E14/12D14 | |
| | 6A/32V 8 contacts Page 81 | 6A/50V 10 contacts Page 91 | 5A/32V 14 contacts Page 110 | |

Note: Layouts in blue text are UTGX sealed in unmated condition

Contacts #20:
from AWG 26 to 18
0.13 to 0.93 mm²

Contacts #16:
from AWG 30 to 14
0.05 to 2.5 mm²

Contacts #12:
from AWG 20 to 12
0.13 to 4 mm²

Contacts #8:
from AWG 16 to 8
1.5 to 10 mm²

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) | | | |
|--|---|---|--|--|
| Contact #16 (Ø 1.6 mm) | | | | |
| | 14E5/14D5 16A/150V 5 contacts Page 48 | 147 – 14E7/14D7 7A/150V 6 + ground Page 67 | 1412 10A/63V 12 contacts Page 96 | 1492 10A/63V 12 contacts Page 105 |
| | <hr/> | | | |
| | Contact #20 (Ø 1.0 mm) | | | |
| 14E18/14D18 5A/50V 18 contacts Page 118 | | 1419 – 14E19/14D19 5A/32V 19 contacts Page 122 | | |
| <hr/> | | | | |
| Contact #8 (Ø 3.6 mm) | | | | |
| | 142G1 40A/300V 2 + ground Page 25 | | | |
| <hr/> | | | | |
| Mixed power | | | | |
| | 148 17A/230V 8 contacts 4xØ 1.6 (#16) + 3xØ 2.4 (#12) + ground Page 85 | 14E12/14D12 4A/50V 12 contacts 4xØ 1.6 (#16) + 8xØ 1.0 (#20) Page 101 | 14E15/14D15 4A/50V 15 contacts 1xØ 1.6 (#16) + 14xØ 1.0 (#20) Page 114 | |
| | <hr/> | | | |

Note: Layouts in blue text are UTGX sealed in unmated condition

Contacts #20:
from AWG 26 to 18
0.13 to 0.93 mm²

Contacts #16:
from AWG 30 to 14
0.05 to 2.5 mm²

Contacts #12:
from AWG 20 to 12
0.13 to 4 mm²

Contacts #8:
from AWG 16 to 8
1.5 to 10 mm²

2

Connectors

Overmoulded cable assembly

2

Overmoulding is a process that further enhances the sealing properties of the **UTGX** range, especially over many years of

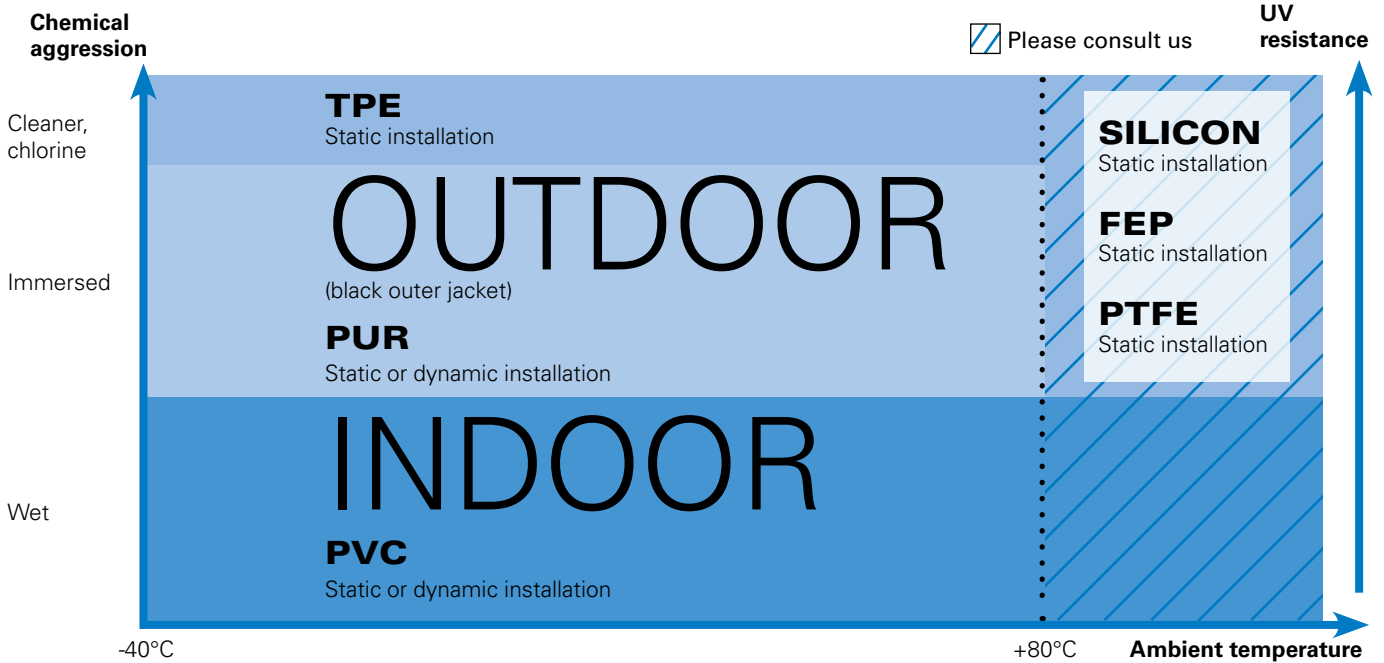
use. Overmoulding provides the opportunity to change the cable exit from straight to 90 degrees and avoid stress on

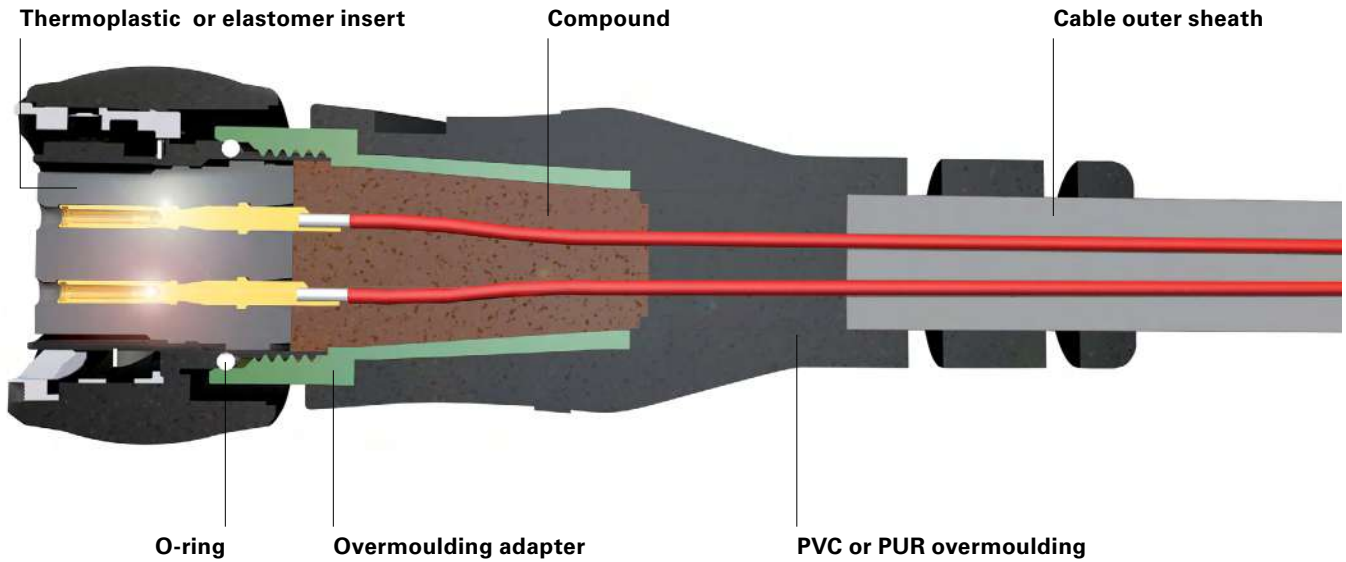
the cable terminated to the connector. Also, as the wires are encapsulated inside the moulding, a barrier is created

which prevents any liquid from entering the equipment through the connector if the cable jacket is breached.



How to choose the outer jacket material





Connector with cable gland backshell

GOOD



...water ingress unhampered, leading to damage.

Overmoulded connector

BEST



...prevents water ingress via capillary action.

2

Connectors

UTGX waterproof plastic overmould

2



HAUTGX standard offering

Cable

- PVC outer sheath (grey color)
- Wire section 1.5 mm² for #16 contact
- Wire section 0.5 mm² for #20 contact
- 300V
- Unshielded
- Flammability rating
- Operating temperature: -40°C +70°C

Overmoulding specifications

| Plating | Salt spray | Temperature* | Waterproof* | Mechanical |
|------------|------------|---------------------|----------------------------|-----------------------|
| No plating | 500 H | -40°C up to + 105°C | IP68/IP69K dynamic (mated) | 500 matings/unmatings |

* With appropriate cable and overmoulding

Cable information

| Range of temperature | Rated voltage | Wire section | Harmonized reference |
|--|----------------|---|----------------------|
| Occasional flexing: -5°C up to +70°C | U0/U: 300/500V | Layouts with #16 contact: wire section 1.5 mm ² | H05 VV - F XX |
| Fixed installation: -40°C up to +80°C | | Layouts with #20 contact: wire section 0.5 mm ² | |

Example of customized cable assemblies



Overmoulding on curly cable



Overmoulding with double ends



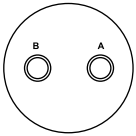
Harness for PCB connection



Connector part number

UTGX 12E2/12D2

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



| Contact type | Connector type | Backshell | Part number | |
|--|--|----------------------|--------------|---------------|
| | | | Male insert | Female insert |
| Hand solder electrical contacts loaded see page 19 | Square flange receptacle | Without (Fig. 1) | UTGX012E2P | UTGX012E2S |
| | Plug | Without (Fig. 5) | UTGX612E2P | UTGX612E2S |
| | | Cable gland (Fig. 3) | UTGX6JC12E2P | UTGX6JC12E2S |
| PCB contacts loaded see page 19 | Jam nut receptacle | Without (Fig. 4) | UTGX712E2P | UTGX712E2S |
| | Square flange receptacle | Without (Fig. 2) | UTGX012D2P | UTGX012D2S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig. 5) | UTGX712D2P | UTGX712D2S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 6) | UTGX712D2P32 | UTGX712D2S32 |

For discrimination/keying methods see page 154

Sealed unmatred

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|-----------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 3x1.5 | HAUTGX12E2PST1M | HAUTGX12E2SST1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 3x1.5 | HAUTGX12E2PRA1M | HAUTGX12E2SRA1M |

(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0

2

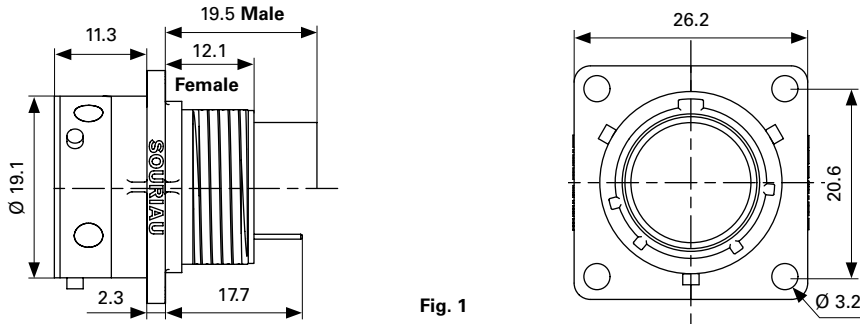


Fig. 1

Plug - UTGX6 & UTGX6JC

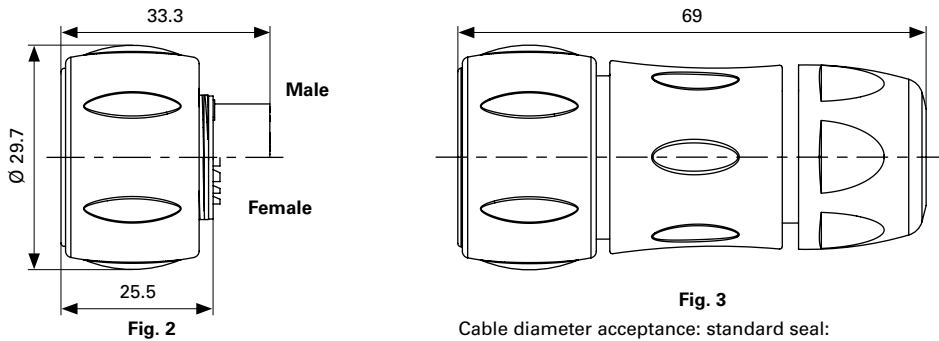


Fig. 3

Cable diameter acceptance: standard seal: from 2.5 mm to 12 mm, reduced seal: from 3 mm to 9 mm

Jam nut receptacle UTGX7

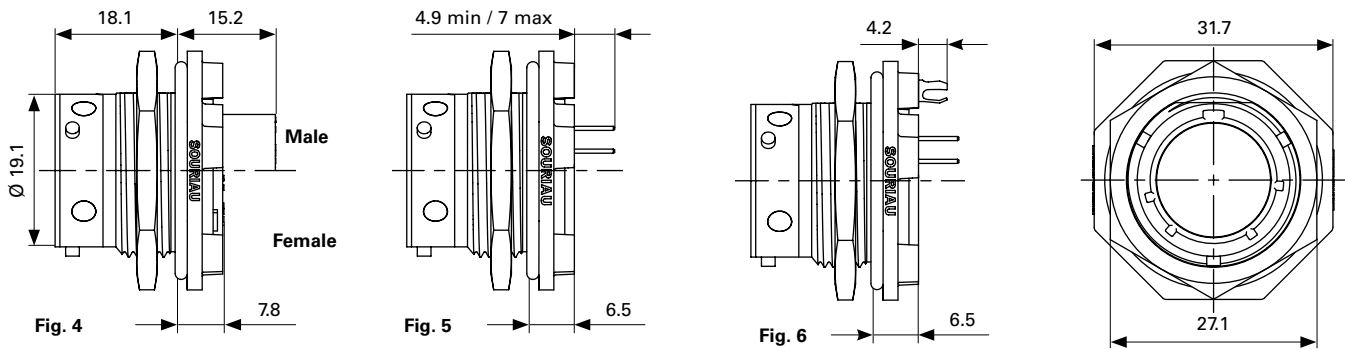


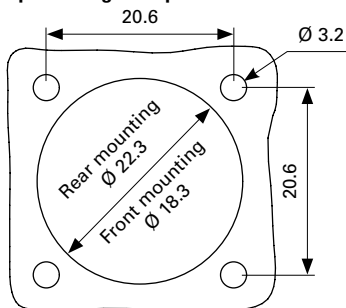
Fig. 4

Fig. 5

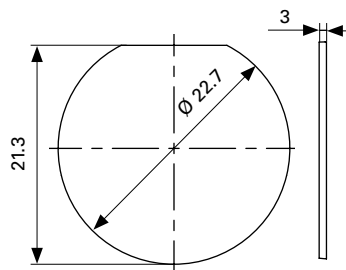
Fig. 6

Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

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

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX12DCG |
| IP68/69K - Metal terminal | UTGX12DCGR |

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX12DCGE |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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

| Contact size | Contact type | Plating | Cable acceptance (AWG) | Cable acceptance (mm ²) | Wire stripping length |
|--------------|------------------------------------|----------------------------|------------------------|-------------------------------------|-----------------------|
| #16 | Handsolder Loaded in the connector | Min 0.4μ gold over 0.8μ Ni | 18 - 14 | 0.80 - 2.48 | 5 mm |
| | PCB Machined ⁽¹⁾ | Min 0.4μ gold over 0.8μ Ni | — | — | — |

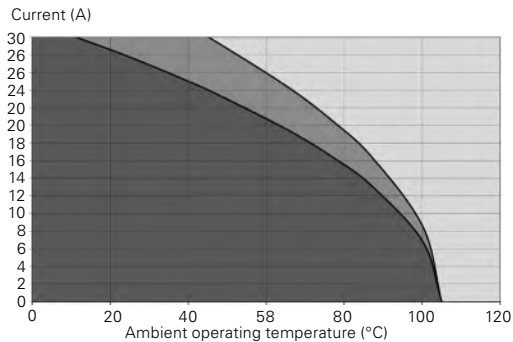
(1): For dimensions see pages 136 or 137

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.

UTGX 12E2/12D2 derating curves



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 1.31 mm²

Derating curves based on continuous current application.

2

Connectors

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

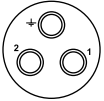
2



Connector part number

UTGX 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 24 | Square flange receptacle | Without (Fig. 1) | UTGX0103P | UTGX0103S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC103P | UTGX0JC103S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC103P | UTGX1JC103S |
| | Plug | Without (Fig. 4) | UTGX6103P | UTGX6103S |
| | | Cable gland (Fig. 5) | UTGX6JC103P | UTGX6JC103S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX7103P | UTGX7103S |
| PCB contacts supplied separately see page 24 | Jam nut receptacle | Without (Fig. 7) | UTGX7103P | UTGX7103S |

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|----------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 3x1.5 | HAUTGX103PST1M | HAUTGX103SST1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 3x1.5 | HAUTGX103PRA1M | HAUTGX103SRA1M |

(1) Other cable available on demand

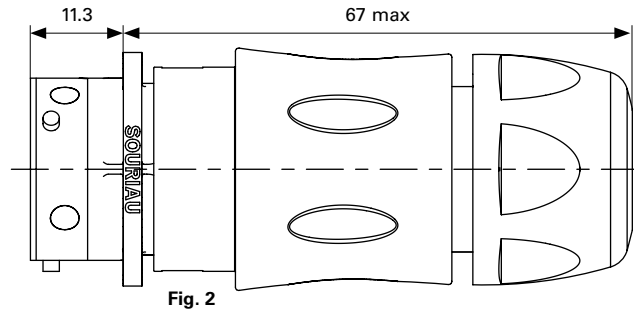
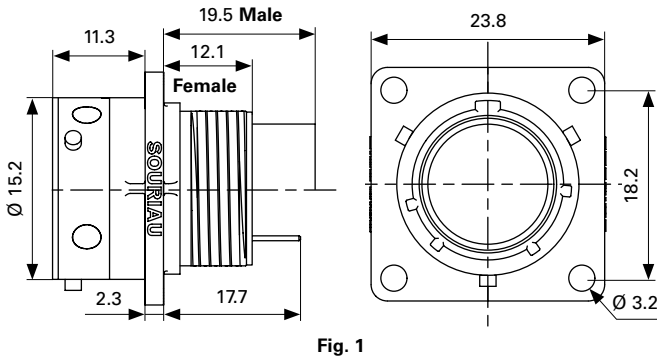
* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

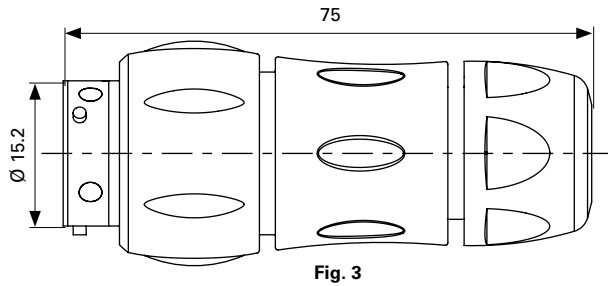
Square flange receptacle - UTGX0 and UTGX0JC

2



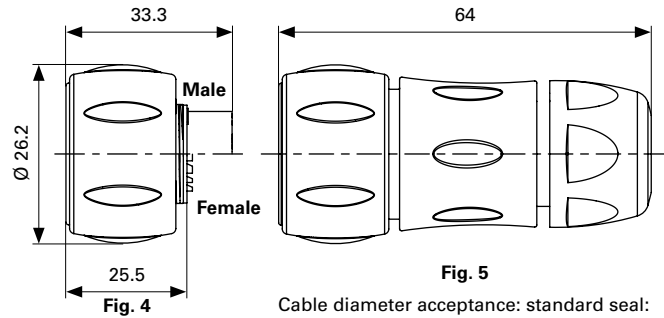
Cable diameter acceptance: standard seal: from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Free hanging - UTGX1JC



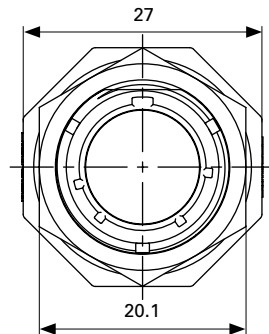
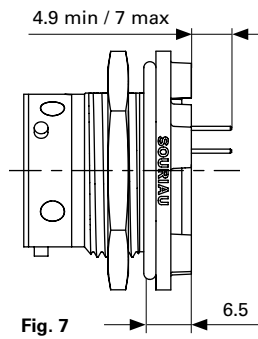
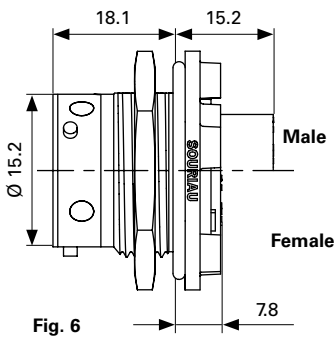
Cable diameter acceptance: standard seal: from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Plug - UTGX6 & UTGX6JC



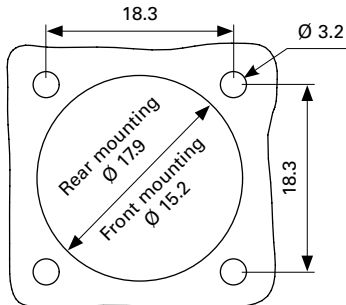
Cable diameter acceptance: standard seal: from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Jam nut receptacle UTGX7

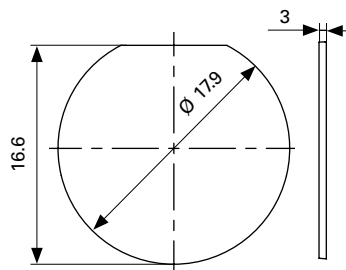


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

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

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX10DCG |
| IP68/69K - Metal terminal | UTGX10DCGR |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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

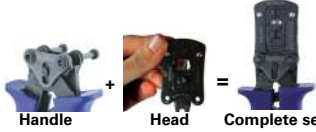
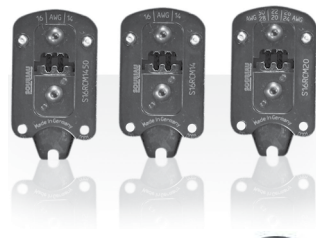
Tooling



| Description | Part number |
|---|-----------------|
| Handle (without head) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

2

Crimp tooling (without Shandles)



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

(1): Example of plating, for other plating options see page 129

* Heads to be used with handle PN: SHANDLES

Extraction tool #16



| Description | Part number |
|-------------------------------------|------------------|
| Fig. 1 | RX2025GE1 |
| Fig. 2 - Long endurance tool | RX2031J |

Contacts #16

2

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|--|------------------------|-------------------------------------|------------------------------------|------------------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 30-26 | 0.48-0.08 | RM28M1K⁽¹⁾ | RC28M1K⁽¹⁾ | 0.55 | 1.00 |
| | | 26-24 | 0.13-0.25 | RM24M9K⁽¹⁾ | RC24M9K⁽¹⁾ | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20M13K⁽¹⁾ | RC20M13K⁽¹⁾ | 1.15 | 1.80 |
| | | 20-20 | 0.32-0.52 | RM20M12K⁽¹⁾ | RC20M12K⁽¹⁾ | 1.15 | 2.20 |
| | | 20-16 | 0.52-1.48 | RM16M23K⁽¹⁾ | RC16M23K⁽¹⁾ | 1.80 | 3.20 |
| | | 16-14 | 1.48-2.48 | RM14M30K⁽¹⁾ | RC14M30K⁽¹⁾ | 2.30 | 3.20 |
| | Stamped & Formed reeled contacts See note ⁽²⁾ for loose piece | 26-24 | 0.13-0.25 | SM24M1TK6⁽¹⁾⁽²⁾ | SC24M1TK6⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20M1TK6⁽¹⁾⁽²⁾ | SC20M1TK6⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | | 18-16 | 0.80-1.48 | SM16M1TK6⁽¹⁾⁽²⁾ | SC16M1TK6⁽¹⁾⁽²⁾ | – | 3.20 |
| | | 18-16 | 0.80-1.48 | SM16M11TK6⁽¹⁾⁽²⁾ | SC16M11TK6⁽¹⁾⁽²⁾ | – | 3.00 |
| | 14 | 2.48 | SM14M1TK6⁽¹⁾⁽²⁾ | SC14M1TK6⁽¹⁾⁽²⁾ | – | 3.20 | |
| PCB | Machined ⁽³⁾ | – | | RM20M12E83K⁽¹⁾ | RC20M12E84K⁽¹⁾ | – | – |
| Coaxial | Cable multipiece | see pages 133 to 134 | | RMDXK10D28 | RCDXK1D28 | – | – |
| | Cable monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| | Twisted pair multipiece | | | RMDXK10D28 + yorx090 | RCDXK1D28 + yorx090 | – | – |
| | Twisted pair monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| Fiber optic | POF contacts (Plastic Optical Fiber) | – | | RMPOF1000 | RCPOF1000B | – | – |

(1): Example of plating, for other plating see page 129

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

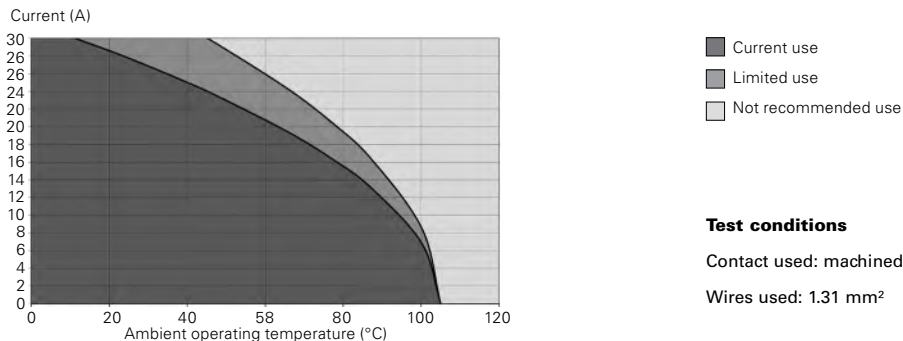
(3): For dimensions see page 136

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.

UTGX 103 derating curves

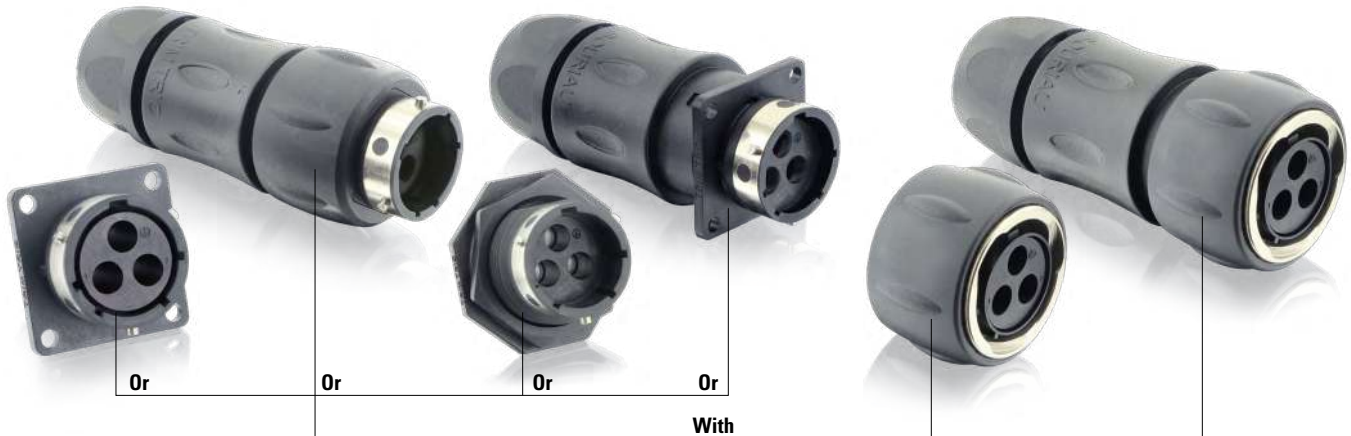


Test conditions
 Contact used: machined contacts
 Wires used: 1.31 mm²

Derating curves based on continuous current application.

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

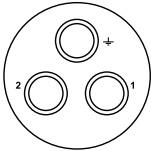
2



Connector part number

UTGX 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 28 | Square flange receptacle | Without (Fig. 1) | UTGX0142G1P | UTGX0142G1S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC142G1P | UTGX0JC142G1S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC142G1P | UTGX1JC142G1S |
| | Plug | Without (Fig. 4) | UTGX6142G1P | UTGX6142G1S |
| PCB contacts supplied separately see page 28 | Plug | Cable gland (Fig. 5) | UTGX6JC142G1P | UTGX6JC142G1S |
| | | Jam nut receptacle | Without (Fig. 6) | UTGX7142G1P |
| | Jam nut receptacle | Without (Fig. 7) | UTGX7142G1P | UTGX7142G1S |

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|-------------------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 0.5 | H05 VV - F 3x0.5 | HAUTGX142G1PST1M | HAUTGX142G1SST1M |
| Right angle ending | Plug | 0.5 | H05 VV - F 3x0.5 | HAUTGX142G1PRA1M | HAUTGX142G1SRA1M |

(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

2

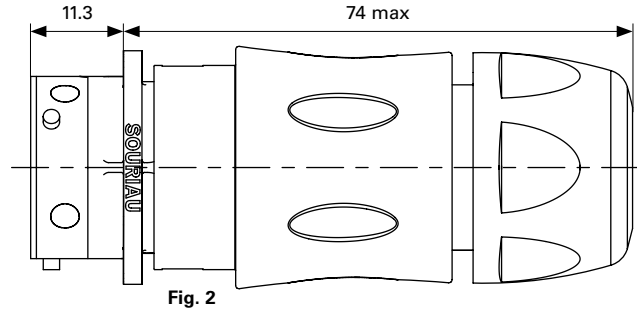
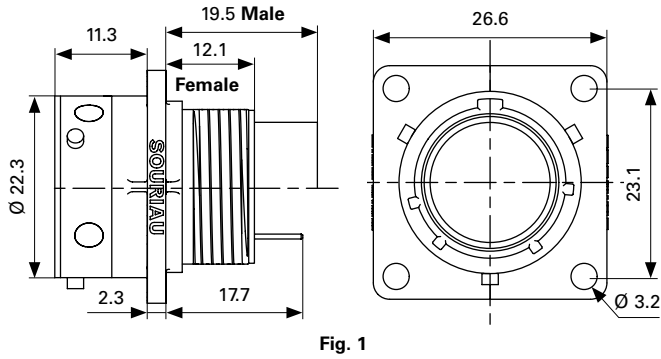
Connectors

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

Dimensions in mm (For mated connector lengths see page 145)

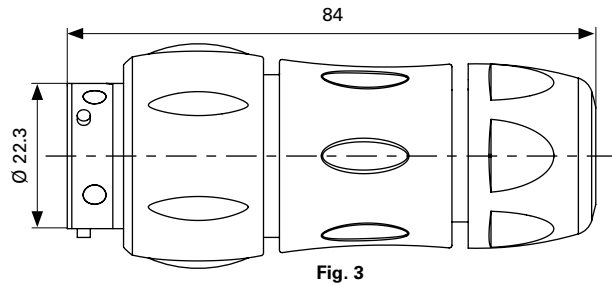
2

Square flange receptacle - UTGX0 and UTGX0JC



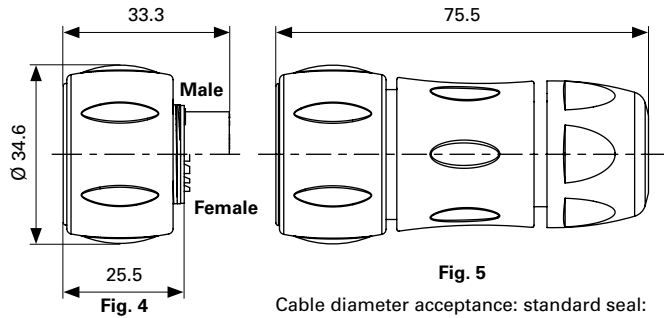
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Free hanging - UTGX1JC



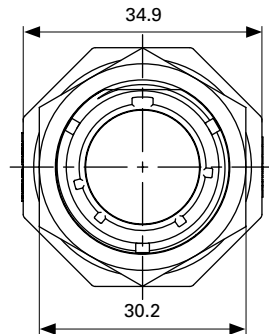
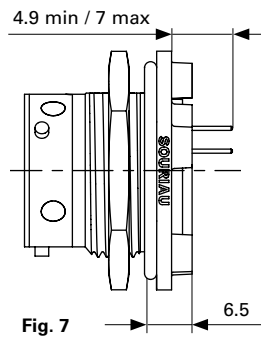
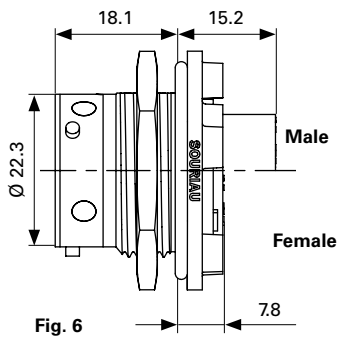
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Plug - UTGX6 & UTGX6JC



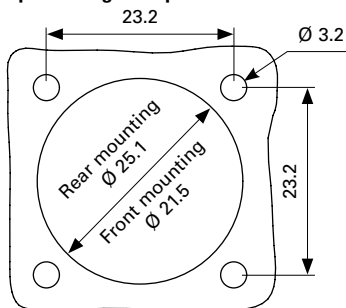
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm,
reduced seal: from 5 mm to 12 mm

Jam nut receptacle UTGX7

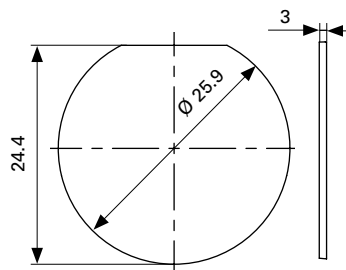


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



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

Accessories

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX14DCG |
| IP68/69K - Metal terminal | UTGX14DCGR |

2

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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" | VGE10078A |

Extraction tool #8



| Description | Part number |
|-----------------------|-------------|
| For crimp contacts #8 | 51060210936 |

Contacts #8

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|-------------------------|------------------------|-------------------------------------|----------------------------|----------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 16 | 1.48 | 82913601A ⁽¹⁾ | 82913600A ⁽¹⁾ | 1.72 | 6.5 |
| | | 14 | 2.48 | 82913603A ⁽¹⁾ | 82913602A ⁽¹⁾ | 2.20 | |
| | | 12 | 4.00 | 82913605A ⁽¹⁾ | 82913604A ⁽¹⁾ | 2.82 | |
| | | 10 | 6.00 | 82913607A ⁽¹⁾ | 82913606A ⁽¹⁾ | 3.48 | |
| | | 8 | 10.00 | 82913609A ⁽¹⁾ | 82913608A ⁽¹⁾ | 4.35 | |
| PCB | Machined ⁽²⁾ | – | – | 82911685NPC ⁽¹⁾ | 82911684NPC ⁽¹⁾ | – | – |

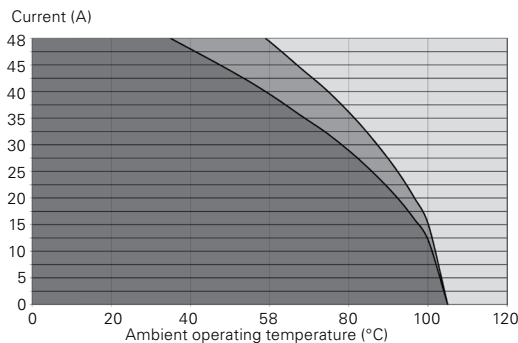
(1): Example of plating, for other plating see page 129

(2): for dimensions see pages 136 or 137

Electrical characteristics

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

UTGX 142G1 derating curves



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 8.37 mm²

Derating curves based on continuous current application.

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

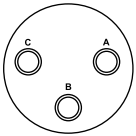


2

Connector part number

UTGX 12E3/12D3

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



| Contact type | Connector type | Backshell | Part number | |
|--|--|----------------------|--------------|---------------|
| | | | Male insert | Female insert |
| Hand solder electrical contacts loaded see page 32 | Square flange receptacle | Without (Fig. 1) | UTGX012E3P | UTGX012E3S |
| | Plug | Without (Fig. 2) | UTGX612E3P | UTGX612E3S |
| | | Cable gland (Fig. 3) | UTGX6JC12E3P | UTGX6JC12E3S |
| PCB contacts loaded see page 32 | Jam nut receptacle | Without (Fig. 4) | UTGX712E3P | UTGX712E3S |
| | Square flange receptacle | Without (Fig. 2) | UTGX012D3P | UTGX012D3S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig. 5) | UTGX712D3P | UTGX712D3S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 6) | UTGX712D3P32 | UTGX712D3S32 |

For discrimination/keying methods see page 154

Sealed unmatd

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|-----------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 3x1.5 | HAUTGX12E3PST1M | HAUTGX12E3SST1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 3x1.5 | HAUTGX12E3PRA1M | HAUTGX12E3SRA1M |

(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0

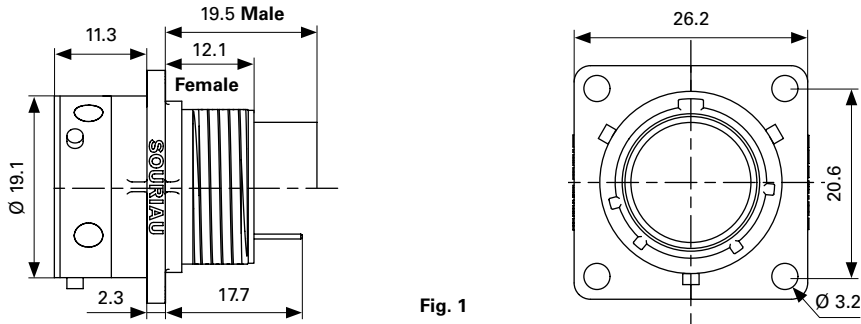


Fig. 1

Plug - UTGX6 & UTGX6JC

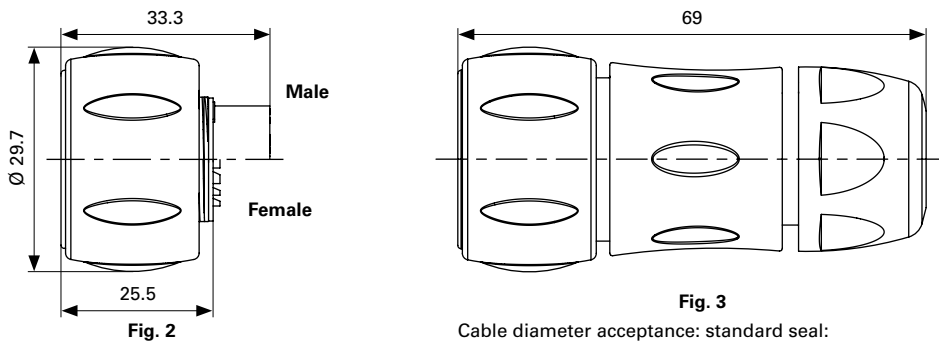


Fig. 3

Cable diameter acceptance: standard seal: from 2.5 mm to 12 mm, reduced seal: from 3 mm to 9 mm

Jam nut receptacle UTGX7

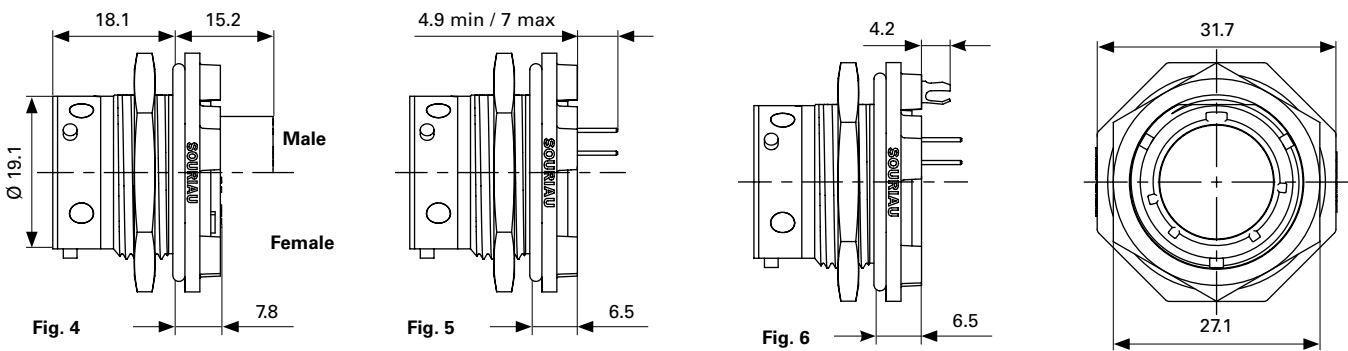


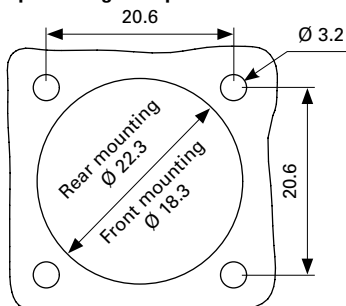
Fig. 4

Fig. 5

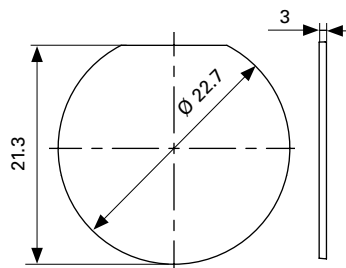
Fig. 6

Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



Accessories

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX12DCG |
| IP68/69K - Metal terminal | UTGX12DCGR |

2

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX12DCGE |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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

2

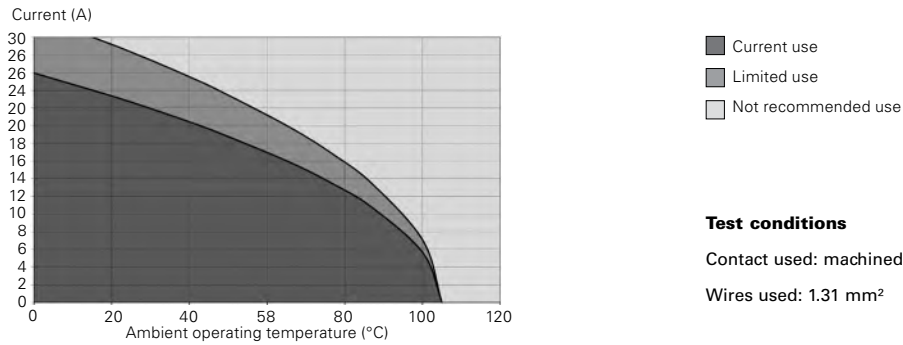
| Contact size | Contact type | Plating | Cable acceptance (AWG) | Cable acceptance (mm ²) | Wire stripping length |
|--------------|------------------------------------|----------------------------|------------------------|-------------------------------------|-----------------------|
| #16 | Handsolder Loaded in the connector | Min 0.4μ gold over 0.8μ Ni | 18 - 14 | 0.80 - 2.48 | 5 mm |
| | PCB Machined ⁽¹⁾ | Min 0.4μ gold over 0.8μ Ni | — | — | — |

(1): For dimensions see pages 136 or 137

Electrical characteristics

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

UTGX 12E3/12D3 derating curves



Derating curves based on continuous current application.

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

2



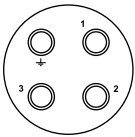
Connector part number

UTGX 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 | Male insert | Female insert | Part number |
|---|--|----------------------|----------------|----------------|-------------|
| Crimp contacts supplied separately see page 37 | Square flange receptacle | Without (Fig. 1) | UTGX0124P | UTGX0124S | |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC124P | UTGX0JC124S | |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC124P | UTGX1JC124S | |
| | Plug | Without (Fig. 4) | UTGX6124P | UTGX6124S | |
| | | Cable gland (Fig. 5) | UTGX6JC124P | UTGX6JC124S | |
| | Jam nut receptacle | Without (Fig. 6) | UTGX7124P | UTGX7124S | |
| Screw contacts loaded | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC124PSCR | UTGX1JC124SSCR | |
| | Plug | Cable gland (Fig. 5) | UTGX6JC124PSCR | UTGX6JC124SSCR | |
| | Jam nut receptacle | Without (Fig. 9) | UTGX7124PSCR | UTGX7124SSCR | |
| PCB contacts supplied separately see page 37 | Square flange receptacle | Without (Fig. 1) | UTGX0124P | UTGX0124S | |
| | Jam nut receptacle | Without (Fig. 7) | UTGX7124P | UTGX7124S | |
| Handsolder electrical contacts loaded see page 37 | Square flange receptacle | Without (Fig. 1) | UTGX012E4P | UTGX012E4S | |
| | | Without (Fig. 4) | UTGX612E4P | UTGX612E4S | |
| | Plug | Cable gland (Fig. 5) | UTGX6JC12E4P | UTGX6JC12E4S | |
| | | Without (Fig. 6) | UTGX712E4P | UTGX712E4S | |
| PCB contacts loaded | Square flange receptacle | Without (Fig. 3) | UTGX012D4P | UTGX012D4S | |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig.7) | UTGX712D4P | UTGX712D4S | |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 8) | UTGX712D4P32 | UTGX712D4S32 | |

Sealed unmatad

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|-----------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 4x1.5 | HAUTGX124PST1M | HAUTGX124SST1M |
| | | | | HAUTGX12E4PRA1M | HAUTGX12E4SRA1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 4x1.5 | HAUTGX124PRA1M | HAUTGX124SRA1M |
| | | | | HAUTGX12E4PRA1M | HAUTGX12E4SRA1M |

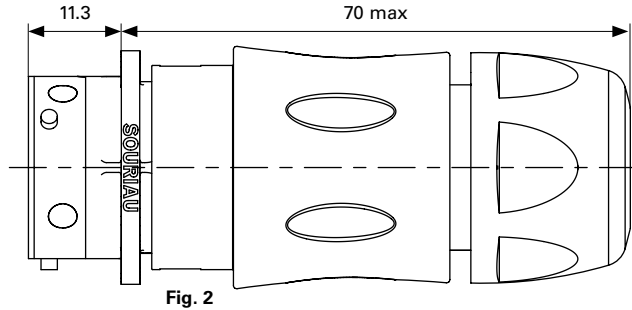
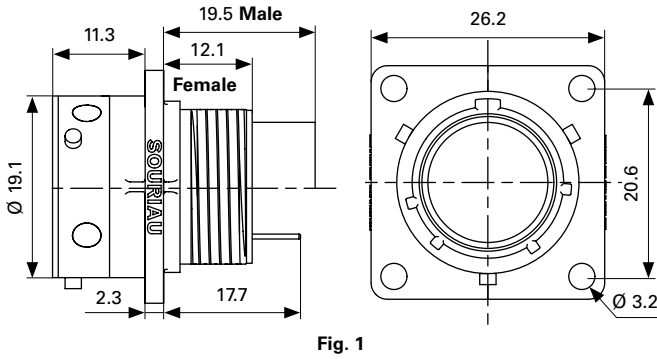
(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

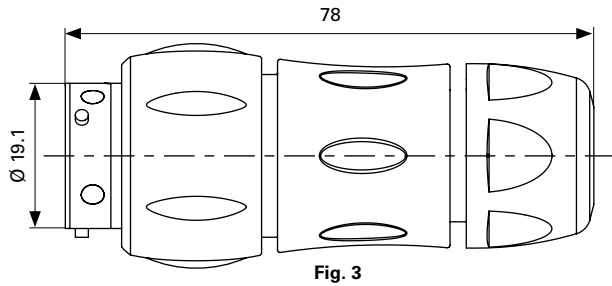
Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0 and UTGX0JC



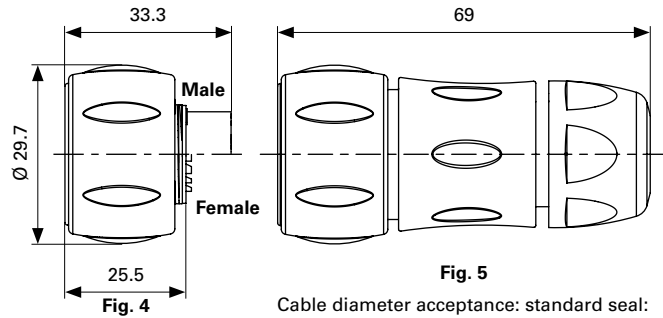
Cable diameter acceptance: standard seal:
from 2.5 mm to 12 mm, reduced seal: from 3 mm to 9 mm

Free hanging - UTGX1JC



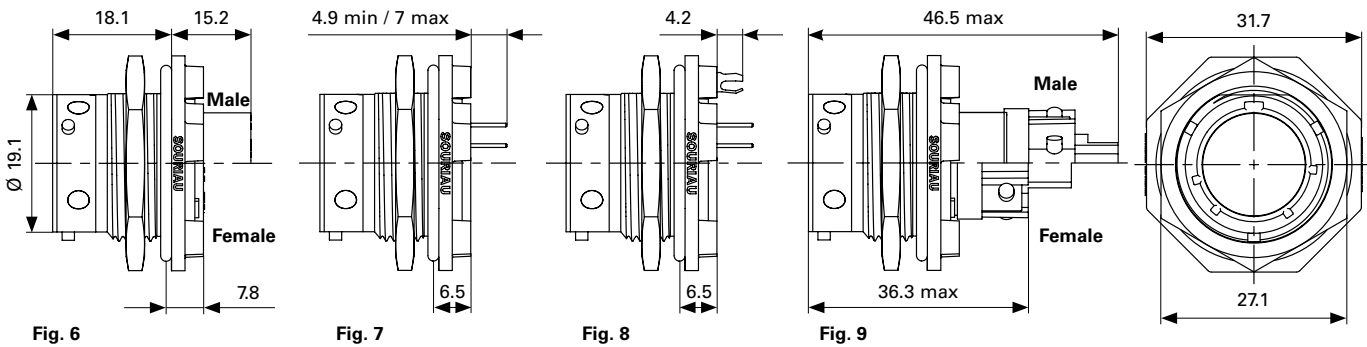
Cable diameter acceptance: standard seal:
from 2.5 mm to 12 mm, reduced seal: from 3 mm to 9 mm

Plug - UTGX6 & UTGX6JC



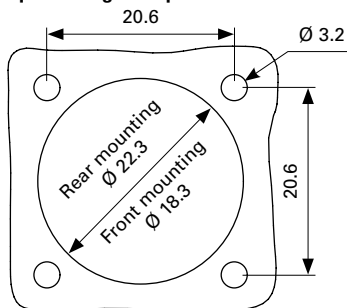
Cable diameter acceptance: standard seal:
from 2.5 mm to 12 mm,
reduced seal: from 3 mm to 9 mm

Jam nut receptacle UTGX7

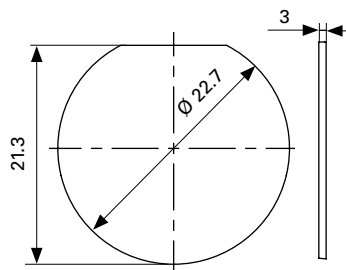


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



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

Accessories

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX12DCG |
| IP68/69K - Metal terminal | UTGX12DCGR |

2

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX12DCGE |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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

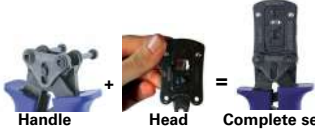
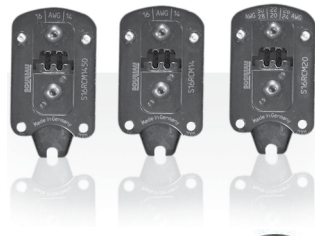
2

Tooling



| Description | Part number |
|---|-----------------|
| Handle (without head) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

Crimp tooling (without Shandles)



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

(1): Example of plating, for other plating options see page 129

* Heads to be used with handle PN: SHANGLES

Extraction tool #16



| Description | Part number |
|-------------------------------------|------------------|
| Fig. 1 | RX2025GE1 |
| Fig. 2 - Long endurance tool | RX2031J |

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

Contacts #16

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|--|------------------------|-------------------------------------|------------------------------|------------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 30-26 | 0.48-0.08 | RM28M1K ⁽¹⁾ | RC28M1K ⁽¹⁾ | 0.55 | 1.00 |
| | | 26-24 | 0.13-0.25 | RM24M9K ⁽¹⁾ | RC24M9K ⁽¹⁾ | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20M13K ⁽¹⁾ | RC20M13K ⁽¹⁾ | 1.15 | 1.80 |
| | | 20-20 | 0.32-0.52 | RM20M12K ⁽¹⁾ | RC20M12K ⁽¹⁾ | 1.15 | 2.20 |
| | | 20-16 | 0.52-1.48 | RM16M23K ⁽¹⁾ | RC16M23K ⁽¹⁾ | 1.80 | 3.20 |
| | | 16-14 | 1.48-2.48 | RM14M30K ⁽¹⁾ | RC14M30K ⁽¹⁾ | 2.30 | 3.20 |
| | Stamped & Formed reeled contacts See note ⁽²⁾ for loose piece | 26-24 | 0.13-0.25 | SM24M1TK6 ⁽¹⁾⁽²⁾ | SC24M1TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20M1TK6 ⁽¹⁾⁽²⁾ | SC20M1TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | | 18-16 | 0.80-1.48 | SM16M1TK6 ⁽¹⁾⁽²⁾ | SC16M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 |
| | | 18-16 | 0.80-1.48 | SM16M11TK6 ⁽¹⁾⁽²⁾ | SC16M11TK6 ⁽¹⁾⁽²⁾ | – | 3.00 |
| | 14 | 2.48 | SM14M1TK6 ⁽¹⁾⁽²⁾ | SC14M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 | |
| PCB | Machined ⁽³⁾ | – | | RM20M12E83K ⁽¹⁾ | RC20M12E84K ⁽¹⁾ | – | – |
| Coaxial | Cable multipiece | see pages 133 to 134 | | RMDXK10D28 | RCDXK1D28 | – | – |
| | Cable monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| | Twisted pair multipiece | | | RMDXK10D28 + yorx090 | RCDXK1D28 + yorx090 | – | – |
| | Twisted pair monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| Fiber optic | POF contacts (Plastic Optical Fiber) | – | | RMPOF1000 | RCPOF1000B | – | – |
| Handsolders | Loaded in the connector | 14-18 | 2.48-0.80 | – | – | – | – |

(1): Example of plating, for other plating see page 129

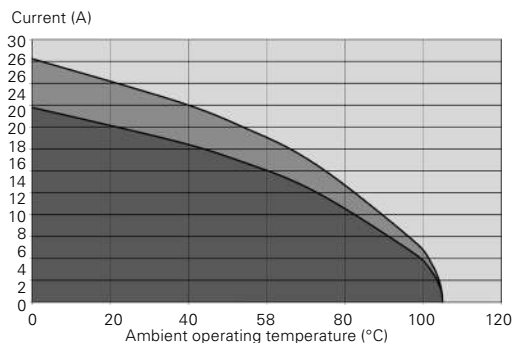
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

(3): for dimensions see pages 136 or 137

Electrical characteristics

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

UTGX 124 - 12E4/12D4 derating curves



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 1.31 mm²

Derating curves based on continuous current application.

2

Connectors

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

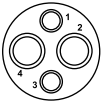
2



Connector part number

UTGX 102W2

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

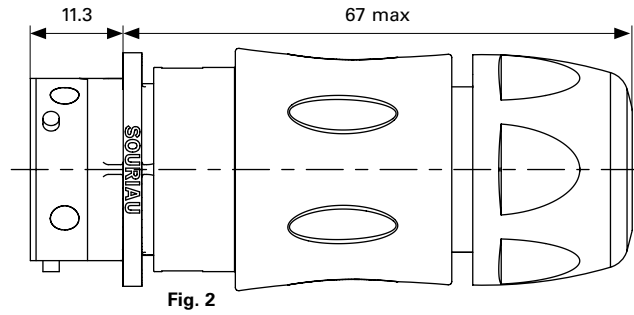
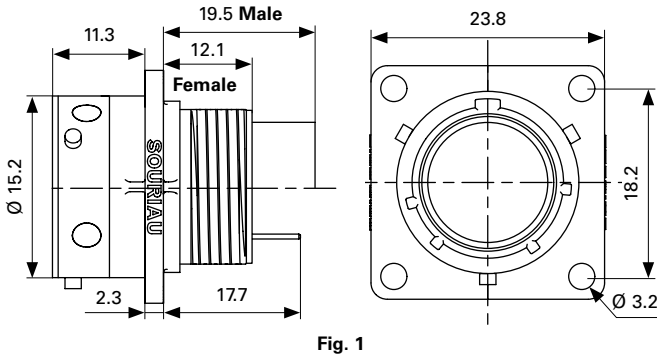


| Contact type | Connector type | Backshell | Part number | |
|---|--------------------------|----------------------|---------------|---------------|
| | | | Male insert | Female insert |
| Crimp contacts supplied separately see page 42 | Square flange receptacle | Without (Fig. 1) | UTGX0102W2P | UTGX0102W2S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC102W2P | UTGX0JC102W2S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC102W2P | UTGX1JC102W2S |
| | Plug | Without (Fig. 4) | UTGX6102W2P | UTGX6102W2S |
| | | Cable gland (Fig. 5) | UTGX6JC102W2P | UTGX6JC102W2S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX7102W2P | UTGX7102W2S |

Dimensions in mm (For mated connector lengths see page 145)

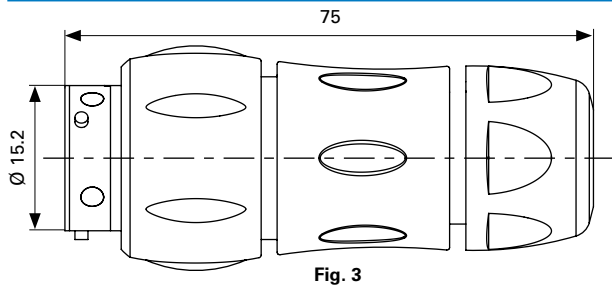
Square flange receptacle - UTGX0 and UTGX0JC

2



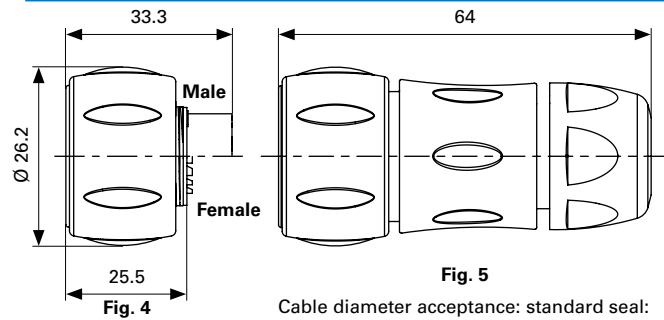
Cable diameter acceptance: standard seal:
from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Free hanging - UTGX1JC



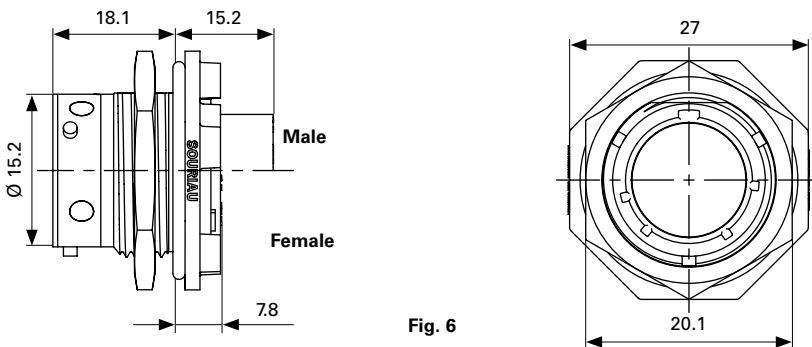
Cable diameter acceptance: standard seal:
from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Plug - UTGX6 & UTGX6JC



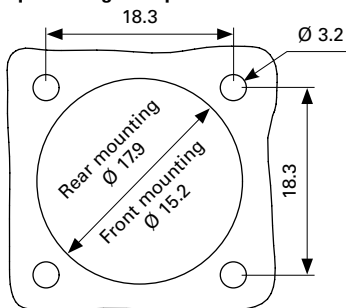
Cable diameter acceptance: standard seal:
from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Jam nut receptacle UTGX7

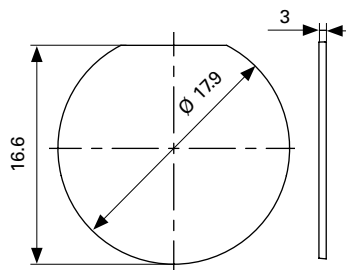


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

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

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX10DCG |
| IP68/69K - Metal terminal | UTGX10DCGR |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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

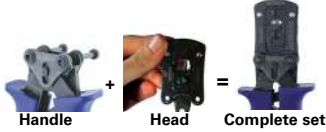
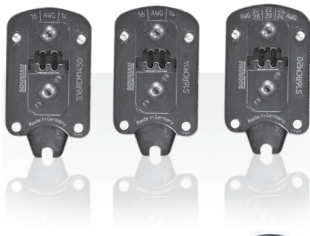
Tooling



| Description | Part number |
|---|-----------------|
| Handle (without head) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

2

Crimp tooling (without Shandles)



| Contact size | Contacts | Part number of Head |
|------------------------------------|-------------------------------------|---------------------|
| Standard contacts #20 Ø 1 mm | RM/RC 24W3K⁽¹⁾ | S20RCM* |
| | RM/RC 20W3K⁽¹⁾ | S20RCM* |
| | RM/RC 18W3K⁽¹⁾ | S20RCM* |
| | SM/SC 24WL3⁽¹⁾⁽²⁾ | S20SCM20* |
| | SM/SC 20WL3⁽¹⁾⁽²⁾ | S20SCM20* |

(1): Example of plating, for other plating options see page 129

(2): Loose contact

* Heads to be used with handle PN: SHANDLES

Crimp tooling #12



| Contact size | Part number hand tool | Part number positioner + locator setting |
|--------------------------------------|-----------------------|--|
| Standard contacts #12 Ø 2.4 mm | M317 | VGE10077A |

Extraction tool



| Description | Part number |
|------------------------------|--------------------|
| Fig. 1 - Contacts #20 | RX20D44 |
| Fig. 2 - Contacts #12 | 51060210924 |

Contacts #20

2

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|--|------------------------|-------------------------------------|-----------------------------------|-----------------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 26-24 | 0.13-0.25 | RM24W3K | RC24W3K | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20W3K | RC20W3K | 1.15 | 1.80 |
| | | 20-18 | 0.52-0.80 | RM18W3K | RC18W3K | 1.30 | 2.10 |
| | Stamped & Formed reeled contacts See note ⁽²⁾ for loose piece | 26-24 | 0.13-0.25 | SM24W3TK6⁽¹⁾⁽²⁾ | SC24W3TK6⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 26-24 | 0.13-0.25 | SM24W3S26⁽¹⁾⁽²⁾ | SC24W3S25⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20W3TK6⁽¹⁾⁽²⁾ | SC20W3TK6⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | | 20-20 | 0.32-0.52 | SM20W3S26⁽¹⁾⁽²⁾ | SC20W3S25⁽¹⁾⁽²⁾ | – | 1.20-2.10 |

(1): Example of plating, for other plating see page 129

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

Contacts #12

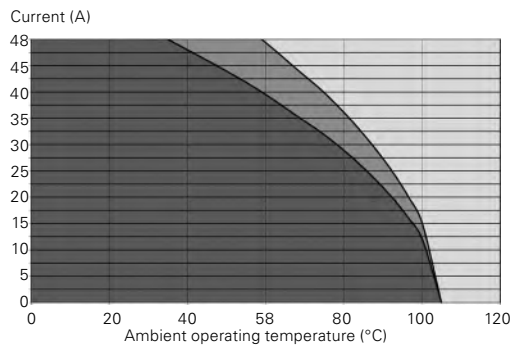
| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|--------------|------------------------|-------------------------------------|-------------------|--------------------|-----------------|----------------------|
| Crimp contacts | Machined | 20 | 0.52 | 82911457NA | 82911456A | 0.87 | 4.90 |
| | | 20 | 0.52 | 82911459NA | 82911458A | 1.12 | |
| | | 18 | 0.80 | 82911461NA | 82911460A | 1.42 | |
| | | 16 | 1.48 | 82911463NA | 82911462A | 1.72 | |
| | | 14 | 2.48 | 82911465NA | 82911464A | 2.20 | |
| | | 12 | 4.00 | 82911467NA | 82911466A | 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

UTGX 102W2 derating curves



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 0.518 mm²

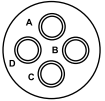
Derating curves based on continuous current application.



Connector part number

UTGX 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 47 | Square flange receptacle | Without (Fig. 1) | UTGX0104P | UTGX0104S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC104P | UTGX0JC104S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC104P | UTGX1JC104S |
| | Plug | Without (Fig. 4) | UTGX6104P | UTGX6104S |
| | | Cable gland (Fig. 5) | UTGX6JC104P | UTGX6JC104S |
| PCB contacts supplied separately see page 47 | Jam nut receptacle | Without (Fig. 6) | UTGX7104P | UTGX7104S |
| | Jam nut receptacle | Without (Fig. 7) | UTGX7104P | UTGX7104S |

For discrimination/keying methods see page 154

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|----------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 4x1.5 | HAUTGX104PST1M | HAUTGX104SST1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 4x1.5 | HAUTGX104PRA1M | HAUTGX104SRA1M |

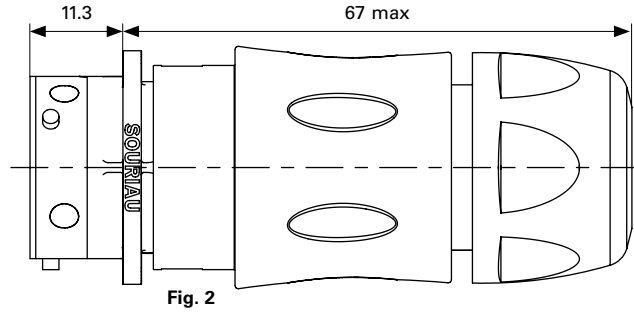
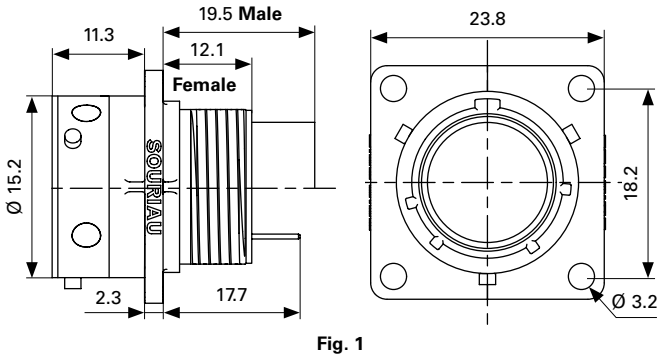
(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

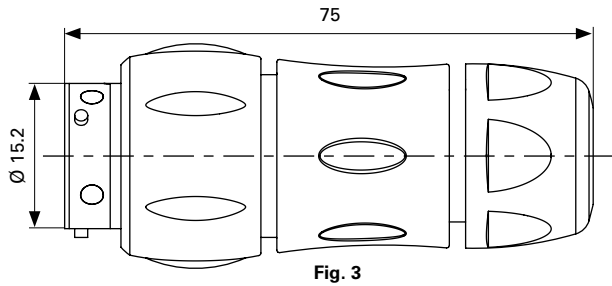
Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0 and UTGX0JC



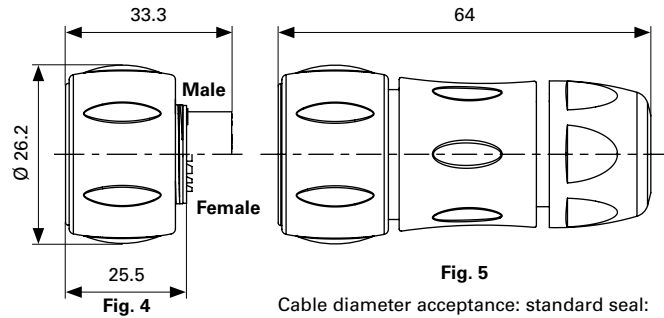
Cable diameter acceptance: standard seal:
from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Free hanging - UTGX1JC



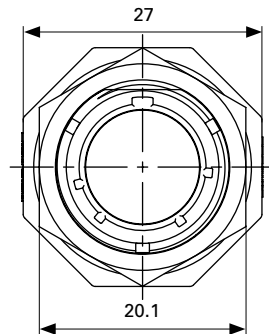
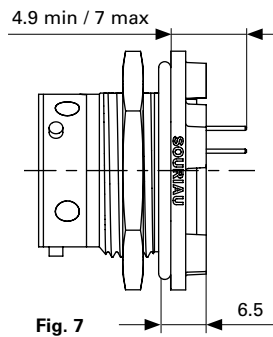
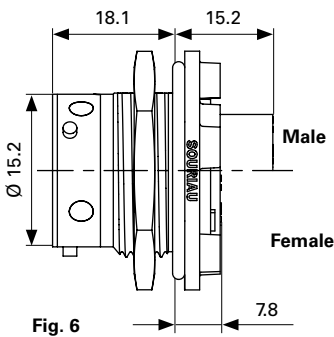
Cable diameter acceptance: standard seal:
from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Plug - UTGX6 & UTGX6JC



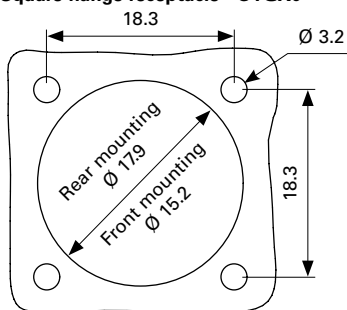
Cable diameter acceptance: standard seal:
from 2.5 mm to 8 mm,
reduced seal: from 1.5 mm to 5 mm

Jam nut receptacle UTGX7

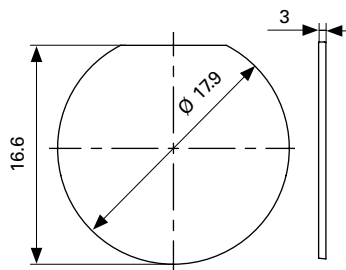


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



Accessories

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX10DCG |
| IP68/69K - Metal terminal | UTGX10DCGR |

2

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX10DCGE |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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

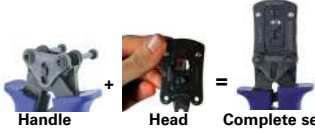
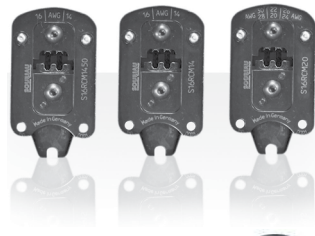
2

Tooling



| Description | Part number |
|---|-----------------|
| Handle (without head) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

Crimp tooling (without Shandles)



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

(1): Example of plating, for other plating options see page 129

* Heads to be used with handle PN: SHANDLES

Extraction tool #16



| Description | Part number |
|-------------------------------------|------------------|
| Fig. 1 | RX2025GE1 |
| Fig. 2 - Long endurance tool | RX2031J |

Contacts #16

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) | |
|-------------------------|--|------------------------|-------------------------------------|------------------------------|------------------------------|----------------------------|----------------------|---|
| Crimp contacts | Machined | 30-26 | 0.48-0.08 | RM28M1K ⁽¹⁾ | RC28M1K ⁽¹⁾ | 0.55 | 1.00 | |
| | | 26-24 | 0.13-0.25 | RM24M9K ⁽¹⁾ | RC24M9K ⁽¹⁾ | 0.80 | 1.58 | |
| | | 20-20 | 0.32-0.52 | RM20M13K ⁽¹⁾ | RC20M13K ⁽¹⁾ | 1.15 | 1.80 | |
| | | 20-20 | 0.32-0.52 | RM20M12K ⁽¹⁾ | RC20M12K ⁽¹⁾ | 1.15 | 2.20 | |
| | | 20-16 | 0.52-1.48 | RM16M23K ⁽¹⁾ | RC16M23K ⁽¹⁾ | 1.80 | 3.20 | |
| | | 16-14 | 1.48-2.48 | RM14M30K ⁽¹⁾ | RC14M30K ⁽¹⁾ | 2.30 | 3.20 | |
| | Stamped & Formed reeled contacts See note ⁽²⁾ for loose piece | 26-24 | 0.13-0.25 | SM24M1TK6 ⁽¹⁾⁽²⁾ | SC24M1TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 | |
| | | 20-20 | 0.32-0.52 | SM20M1TK6 ⁽¹⁾⁽²⁾ | SC20M1TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 | |
| | | 18-16 | 0.80-1.48 | SM16M1TK6 ⁽¹⁾⁽²⁾ | SC16M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 | |
| | | 18-16 | 0.80-1.48 | SM16M11TK6 ⁽¹⁾⁽²⁾ | SC16M11TK6 ⁽¹⁾⁽²⁾ | – | 3.00 | |
| | | 14 | 2.48 | SM14M1TK6 ⁽¹⁾⁽²⁾ | SC14M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 | |
| | | PCB | Machined ⁽³⁾ | – | RM20M12E83K ⁽¹⁾ | RC20M12E84K ⁽¹⁾ | – | – |
| | | Coaxial | Cable multipiece | see pages 133 to 134 | | RMDXK10D28 | RCDXK1D28 | – |
| Cable monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – | | |
| Twisted pair multipiece | | | RMDXK10D28 + yorx090 | RCDXK1D28 + yorx090 | – | – | | |
| Twisted pair monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – | | |
| Fiber optic | POF contacts (Plastic Optical Fiber) | – | RMPOF1000 | RCPOF1000B | – | – | | |

(1): Example of plating, for other plating see page 129

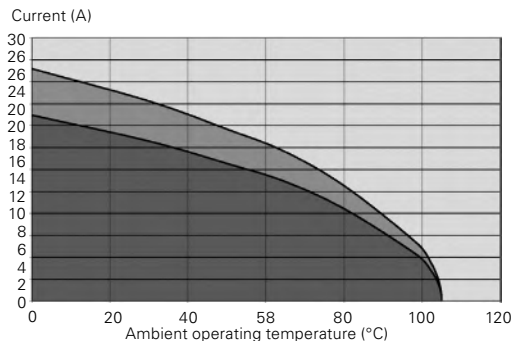
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

(3): for dimensions see pages 136 or 137

Electrical characteristics

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

UTGX 104 derating curves



Test conditions

Contact used: machined contacts

Wires used: 1.31 mm²

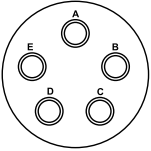
Derating curves based on continuous current application.



Connector part number

UTGX 14E5/14D5

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



| Contact type | Connector type | Backshell | Part number | |
|--|--|----------------------|--------------|---------------|
| | | | Male insert | Female insert |
| Hand solder electrical contacts loaded see page 51 | Square flange receptacle | Without (Fig. 1) | UTGX014E5P | UTGX014E5S |
| | Plug | Without (Fig. 2) | UTGX614E5P | UTGX614E5S |
| | | Cable gland (Fig. 3) | UTGX6JC14E5P | UTGX6JC14E5S |
| PCB contacts loaded see page 51 | Jam nut receptacle | Without (Fig. 4) | UTGX714E5P | UTGX714E5S |
| | Square flange receptacle | Without (Fig. 2) | UTGX014D5P | UTGX014D5S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig. 5) | UTGX714D5P | UTGX714D5S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 6) | UTGX714D5P32 | UTGX714D5S32 |

For discrimination/keying methods see page 154

Sealed unmatred

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|-----------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 5x1.5 | HAUTGX14E5PST1M | HAUTGX14E5SST1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 5x1.5 | HAUTGX14E5PRA1M | HAUTGX14E5SRA1M |

(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0

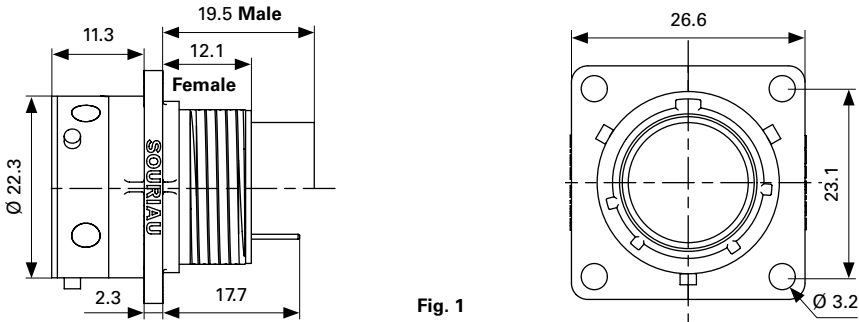


Fig. 1

Plug - UTGX6 & UTGX6JC

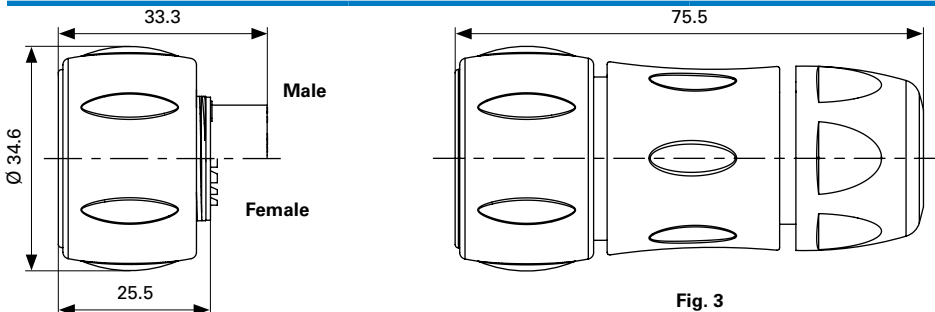
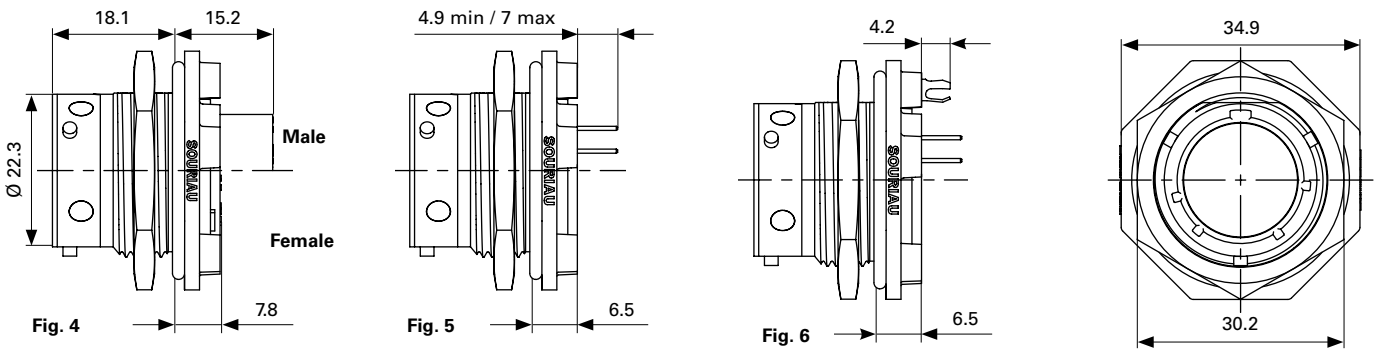


Fig. 3

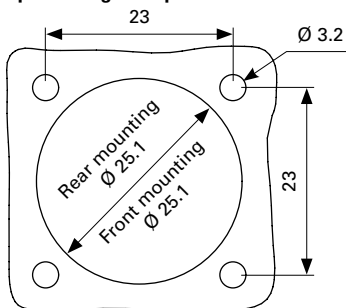
Cable diameter acceptance: standard seal: from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Jam nut receptacle UTGX7

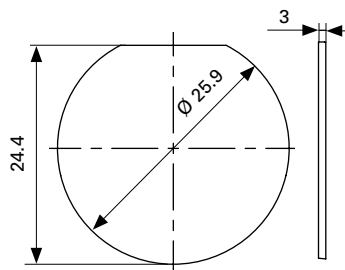


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

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

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX14DCG |
| IP68/69K - Metal terminal | UTGX14DCGR |

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX14DCGE |

Plug sealing cap



| Description | Part number |
|-------------|--------------|
| IP68/69K | 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 (mm ²) | Wire stripping length |
|--------------|-------------------------------------|----------------------------|------------------------|-------------------------------------|-----------------------|
| #16 | Hand solder Loaded in the connector | Min 0.4μ gold over 0.8μ Ni | 18 - 14 | 0.823 - 2.08 | 5 mm |
| | PCB Machined ⁽¹⁾ | Min 0.4μ gold over 0.8μ Ni | — | — | — |

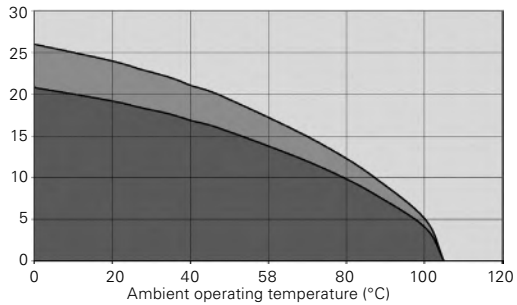
(1): For dimensions see pages 136 or 137

Electrical characteristics

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

UTGX 14E5/14D5 derating curves

Current (A)



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 1.31 mm²

Derating curves based on continuous current application.

2

Connectors

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

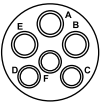
2



Connector part number

UTGX 103W3

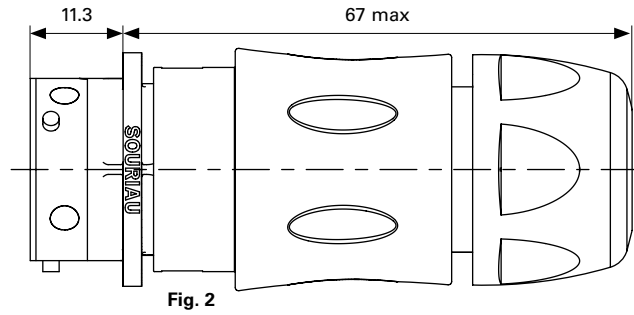
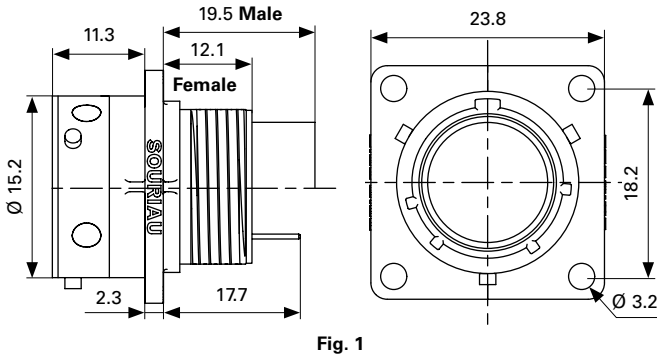
6 contacts
13A/500V per UL1977 with
AWG16 wire
7.5A/250V per UL1977 with
AWG20 wire
(qualification pending)



| Contact type | Connector type | Backshell | Part number | |
|---|--|----------------------|----------------------|----------------------|
| | | | Male insert | Female insert |
| Crimp contacts supplied separately see page 56 | Square flange receptacle | Without (Fig. 1) | UTGX0103W3P | UTGX0103W3S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC103P | UTGX0JC103S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC103W3P | UTGX1JC103W3S |
| | Plug | Without (Fig. 4) | UTGX6103W3P | UTGX6103W3S |
| | | Cable gland (Fig. 5) | UTGX6JC103W3P | UTGX6JC103W3S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX7103W3P | UTGX7103W3S |
| PCB contacts supplied separately see page 56 | Jam nut receptacle with stand off and without hold down clip | Without (Fig. 7) | UTGX7103W3P | UTGX7103W3S |

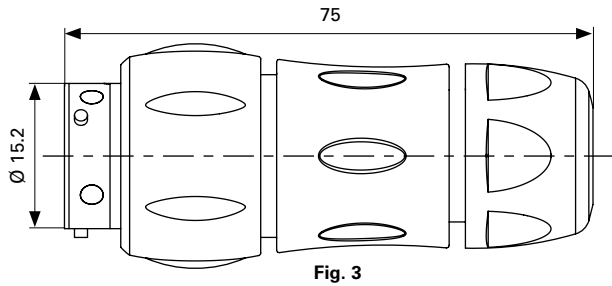
Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0 and UTGX0JC



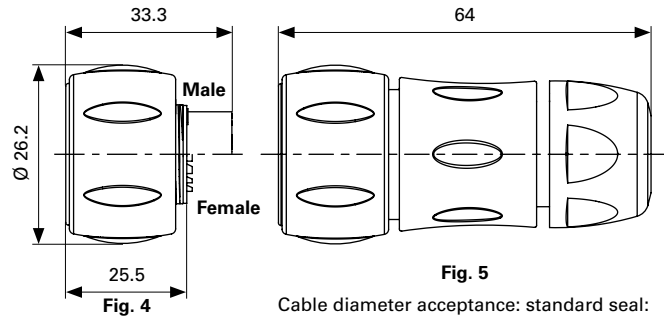
Cable diameter acceptance: standard seal:
from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Free hanging - UTGX1JC



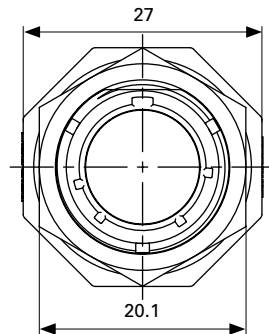
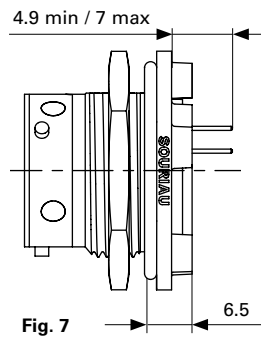
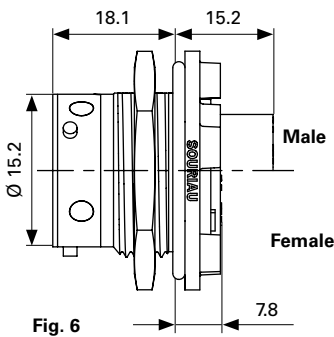
Cable diameter acceptance: standard seal:
from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Plug - UTGX6 & UTGX6JC



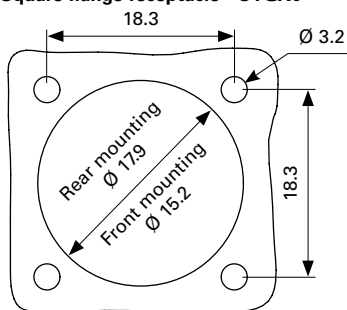
Cable diameter acceptance: standard seal:
from 2.5 mm to 8 mm,
reduced seal: from 1.5 mm to 5 mm

Jam nut receptacle UTGX7

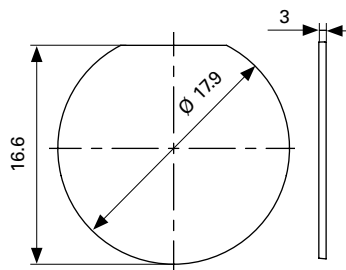


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

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

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX10DCG |
| IP68/69K - Metal terminal | UTGX10DCGR |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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 |

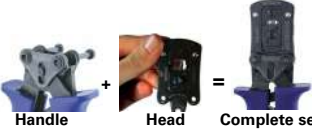
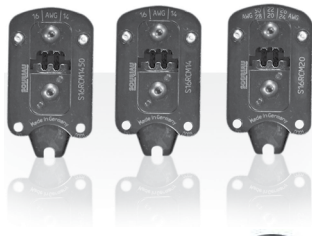
Tooling

Tooling



| Description | Part number |
|---|-----------------|
| Handle (without head) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

Crimp tooling (without Shandles)



| Contact size | Contacts | Part number of Head |
|--------------------------------------|-------------------------------------|---------------------|
| Standard contacts #16 Ø 1.6 mm | RM/RC 28M1K⁽¹⁾ | S16RCM20* |
| | RM/RC 24M9K⁽¹⁾ | S16RCM20* |
| | RM/RC 20M13K⁽¹⁾ | S16RCM20* |
| | RM/RC 20M12K⁽¹⁾ | S16RCM20* |
| | RM/RC 16M23K⁽¹⁾ | S16RCM16* |
| | RM/RC 14M30K⁽¹⁾ | S16RCM14* |
| | SM/SC 24ML1TK6⁽¹⁾ | S16SCM20* |
| | SM/SC 20ML1TK6⁽¹⁾ | S16SCM20* |
| | SM/SC 16ML1TK6⁽¹⁾ | S16SCML1* |
| | SM/SC 14ML1TK6⁽¹⁾ | S16SCML1* |
| Standard contacts #20 Ø 1 mm | RM/RC 24W3K⁽¹⁾ | S20RCM* |
| | RM/RC 20W3K⁽¹⁾ | S20RCM* |
| | RM/RC 18W3K⁽¹⁾ | S20RCM* |
| | SM/SC 24WL3⁽¹⁾⁽²⁾ | S20SCM20* |
| | SM/SC 20WL3⁽¹⁾⁽²⁾ | S20SCM20* |

(1): Example of plating, for other plating options see page 129

(2): Loose contact

* Heads to be used with handle PN: SHANGLES

Extraction tool #16



| Description | Part number |
|-------------------------------------|------------------|
| Fig. 1 | RX2025GE1 |
| Fig. 2 - Long endurance tool | RX2031J |

Contacts #16

2

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|--|------------------------|-------------------------------------|------------------------------|------------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 30-26 | 0.48-0.08 | RM28M1K ⁽¹⁾ | RC28M1K ⁽¹⁾ | 0.55 | 1.00 |
| | | 26-24 | 0.13-0.25 | RM24M9K ⁽¹⁾ | RC24M9K ⁽¹⁾ | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20M13K ⁽¹⁾ | RC20M13K ⁽¹⁾ | 1.15 | 1.80 |
| | | 20-20 | 0.32-0.52 | RM20M12K ⁽¹⁾ | RC20M12K ⁽¹⁾ | 1.15 | 2.20 |
| | | 20-16 | 0.52-1.48 | RM16M23K ⁽¹⁾ | RC16M23K ⁽¹⁾ | 1.80 | 3.20 |
| | | 16-14 | 1.48-2.48 | RM14M30K ⁽¹⁾ | RC14M30K ⁽¹⁾ | 2.30 | 3.20 |
| | Stamped & Formed reeled contacts See note ⁽²⁾ for loose piece | 26-24 | 0.13-0.25 | SM24M1TK6 ⁽¹⁾⁽²⁾ | SC24M1TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20M1TK6 ⁽¹⁾⁽²⁾ | SC20M1TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | | 18-16 | 0.80-1.48 | SM16M1TK6 ⁽¹⁾⁽²⁾ | SC16M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 |
| | | 18-16 | 0.80-1.48 | SM16M11TK6 ⁽¹⁾⁽²⁾ | SC16M11TK6 ⁽¹⁾⁽²⁾ | – | 3.00 |
| | 14 | 2.48 | SM14M1TK6 ⁽¹⁾⁽²⁾ | SC14M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 | |
| PCB | Machined ⁽³⁾ | – | RM20M12E83K ⁽¹⁾ | RC20M12E84K ⁽¹⁾ | – | – | |
| Coaxial | Cable multipiece | see pages 133 to 134 | | RMDXK10D28 | RCDXK1D28 | – | – |
| | Cable monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| | Twisted pair multipiece | | | RMDXK10D28 + yorx090 | RCDXK1D28 + yorx090 | – | – |
| | Twisted pair monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| Fiber optic | POF contacts (Plastic Optical Fiber) | – | RMPOF1000 | RCPOF1000B | – | – | |

(1): Example of plating, for other plating see page 129
(3): for dimensions see pages 136 or 137

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

Contacts #20

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|--|------------------------|-------------------------------------|-----------------------------|-----------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 26-24 | 0.13-0.25 | RM24W3K | RC24W3K | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20W3K | RC20W3K | 1.15 | 1.80 |
| | | 20-18 | 0.52-0.80 | RM18W3K | RC18W3K | 1.30 | 2.10 |
| | Stamped & Formed reeled contacts See note ⁽²⁾ for loose piece | 26-24 | 0.13-0.25 | SM24W3TK6 ⁽¹⁾⁽²⁾ | SC24W3TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 26-24 | 0.13-0.25 | SM24W3S26 ⁽¹⁾⁽²⁾ | SC24W3S25 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20W3TK6 ⁽¹⁾⁽²⁾ | SC20W3TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | 20-20 | 0.32-0.52 | SM20W3S26 ⁽¹⁾⁽²⁾ | SC20W3S25 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 | |

(1): Example of plating, for other plating see page 129

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

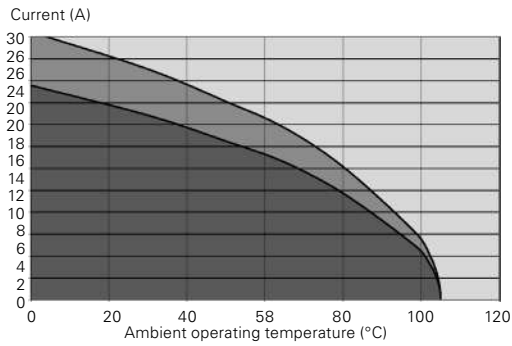
Electrical characteristics

| 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 temperature elevation: 50°C |

*qualification pending

2

UTGX 103W3 derating curves



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 1.31 mm²

Wires used: 0.518 mm²

Derating curves based on continuous current application.



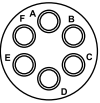
Connector part number

UTGX 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 62 | Square flange receptacle | Without (Fig. 1) | UTGX0106P | UTGX0106S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC106P | UTGX0JC106S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC106P | UTGX1JC106S |
| | Plug | Without (Fig. 4) | UTGX6106P | UTGX6106S |
| Cable gland (Fig. 5) | | UTGX6JC106P | UTGX6JC106S | |
| Jam nut receptacle | Without (Fig. 6) | UTGX7106P | UTGX7106S | |
| | Without (Fig. 7) | UTGX7106P | UTGX7106S | |
| PCB contacts supplied separately see page 62 | Jam nut receptacle | Without (Fig. 7) | UTGX7106P | UTGX7106S |
| Handsolder electrical contacts loaded | Square flange receptacle | Without (Fig. 1) | UTGX010E6P | UTGX010E6S |
| | Plug | Without (Fig. 4) | UTGX610E6P | UTGX610E6S |
| | | Cable gland (Fig. 5) | UTGX6JC10E6P | UTGX6JC10E6S |
| Jam nut receptacle | Without (Fig. 6) | UTGX710E6P | UTGX710E6S | |
| PCB contacts supplied separately see page 62 | Jam nut receptacle | Without (Fig.7) | UTGX710E6P | UTGX710E6S |
| PCB contacts loaded see page 62 | Square flange receptacle | Without (Fig.1) | UTGX010D6P | UTGX010D6S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig.8) | UTGX710D6P | UTGX710D6S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig.8) | UTGX710D6P32 | UTGX710D6S32 |

For discrimination/keying methods see page 154

Sealed unmatd

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|---------------------------------|--|-----------------------------|------------------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 0.5 | H05 VV - F 6x0.5 | HAUTGX106PST1M | HAUTGX106SST1M |
| | | | | HAUTGX10E6PRA1M | HAUTGX10E6SRA1M |
| Right angle ending | Plug | 0.5 | H05 VV - F 6x0.5 | HAUTGX106PRA1M | HAUTGX106SRA1M |
| | | | | HAUTGX106EPR1M | HAUTGX10E6SRA1M |

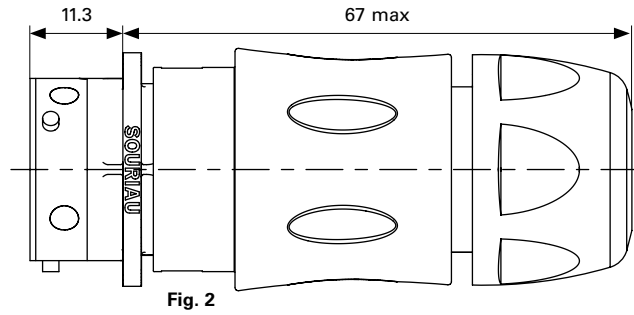
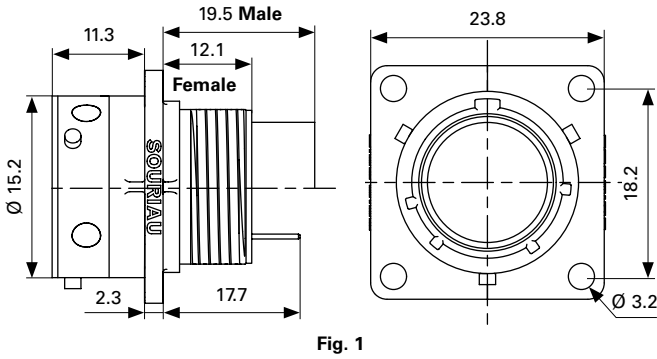
(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

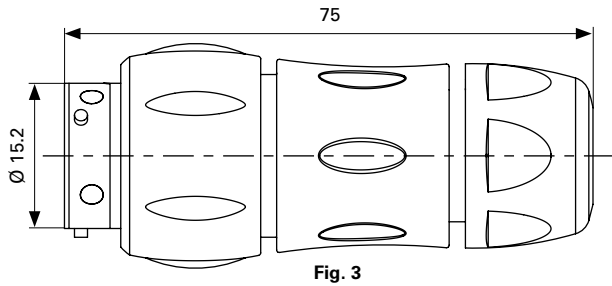
Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0 and UTGX0JC



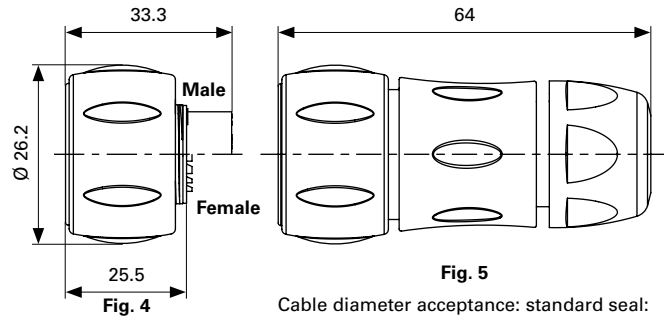
Cable diameter acceptance: standard seal:
from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Free hanging - UTGX1JC



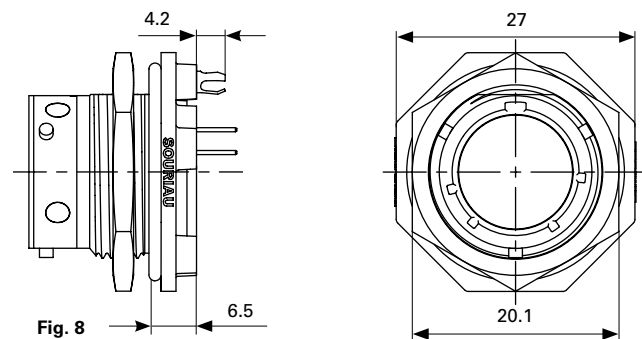
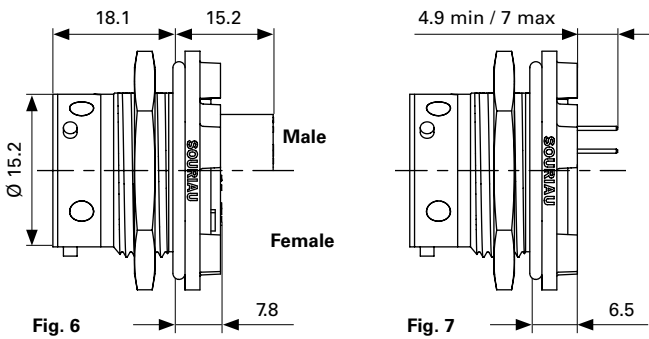
Cable diameter acceptance: standard seal:
from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Plug - UTGX6 & UTGX6JC



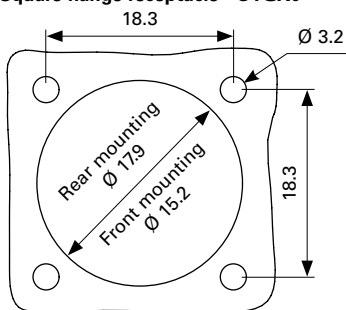
Cable diameter acceptance: standard seal:
from 2.5 mm to 8 mm,
reduced seal: from 1.5 mm to 5 mm

Jam nut receptacle UTGX7

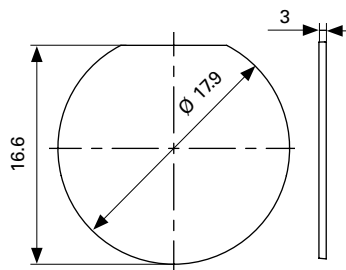


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

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

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX10DCG |
| IP68/69K - Metal terminal | UTGX10DCGR |

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX10DCGE |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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

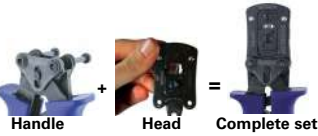
Tooling



| Description | Part number |
|---|-----------------|
| Handle (without head) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

2

Crimp tooling (without Shandles)



| Contact size | Contacts | Part number of Head |
|------------------------------------|-------------------------------------|---------------------|
| Standard contacts #20 Ø 1 mm | RM/RC 24W3K⁽¹⁾ | S20RCM* |
| | RM/RC 20W3K⁽¹⁾ | S20RCM* |
| | RM/RC 18W3K⁽¹⁾ | S20RCM* |
| | SM/SC 24WL3⁽¹⁾⁽²⁾ | S20SCM20* |
| | SM/SC 20WL3⁽¹⁾⁽²⁾ | S20SCM20* |

(1): Example of plating, for other plating options see page 129

(2): Loose contact

* Heads to be used with handle PN: SHANDLES

Extraction tool #20



| Description | Part number |
|--------------|----------------|
| Contacts #20 | RX20D44 |

Contacts #20

2

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|--|--------------|------------------------|-------------------------------------|------------------------------------|------------------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 26-24 | 0.13-0.25 | RM24W3K | RC24W3K | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20W3K | RC20W3K | 1.15 | 1.80 |
| | | 20-18 | 0.52-0.80 | RM18W3K | RC18W3K | 1.30 | 2.10 |
| Stamped & Formed reeled contacts See note (2) for loose piece | | 26-24 | 0.13-0.25 | SM24W3TK6 ⁽¹⁾⁽²⁾ | SC24W3TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 26-24 | 0.13-0.25 | SM24W3S26 ⁽¹⁾⁽²⁾ | SC24W3S25 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20W3TK6 ⁽¹⁾⁽²⁾ | SC20W3TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | | 20-20 | 0.32-0.52 | SM20W3S26 ⁽¹⁾⁽²⁾ | SC20W3S25 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |

(1): Example of plating, for other plating see page 129

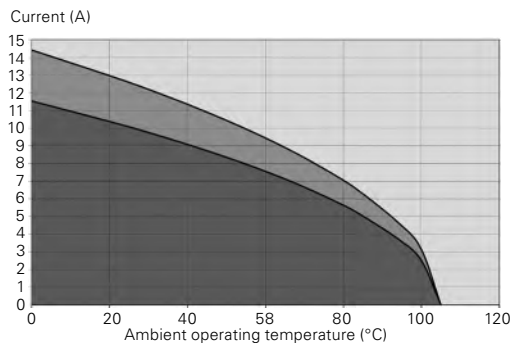
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20W3TK6 becomes SM20WL3TK6

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

Electrical characteristics

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

UTGX 106 - 10E6/10D6 derating curves



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 0.518 mm²

Derating curves based on continuous current application.

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

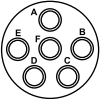
2



Connector part number

UTGX 10E98/10D98

6 contacts
6A/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 66 | Square flange receptacle | Without (Fig. 1) | UTGX010E98P | UTGX010E98S |
| | Plug | Without (Fig. 5) | UTGX610E98P | UTGX610E98S |
| | | Cable gland (Fig. 3) | UTGX6JC10E98P | UTGX6JC10E98S |
| PCB contacts loaded see page 66 | Jam nut receptacle | Without (Fig. 4) | UTGX710E98P | UTGX710E98S |
| | Square flange receptacle | Without (Fig. 2) | UTGX010D98P | UTGX010D98S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig. 5) | UTGX710D98P | UTGX710D98S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 6) | UTGX710D98P32 | UTGX710D98S32 |
| | | | | |
| | | | | |

For discrimination/keying methods see page 154

Sealed unmatd

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|------------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 0.5 | H05 VV - F 6x0.5 | HAUTGX10E98PST1M | HAUTGX10E98SST1M |
| Right angle ending | Plug | 0.5 | H05 VV - F 6x0.5 | HAUTGX10E98PRA1M | HAUTGX10E98SRA1M |

(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0

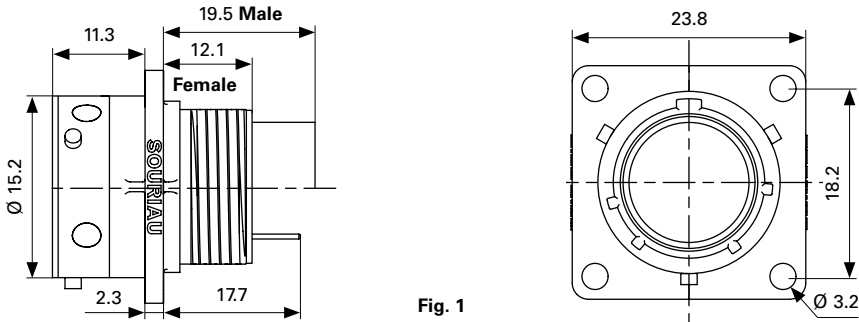


Fig. 1

Plug - UTGX6 & UTGX6JC

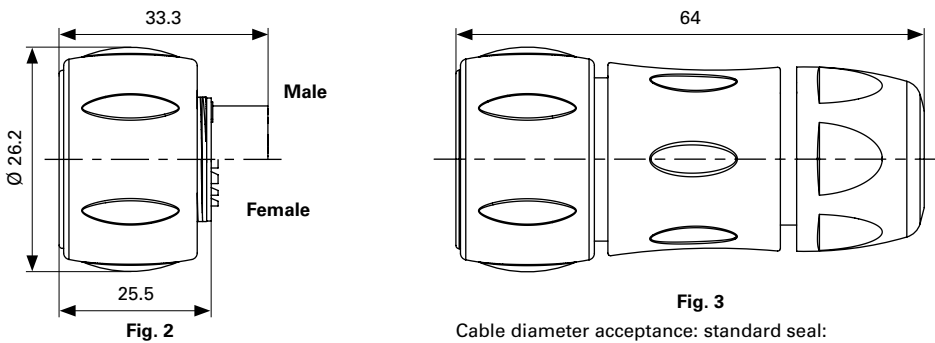
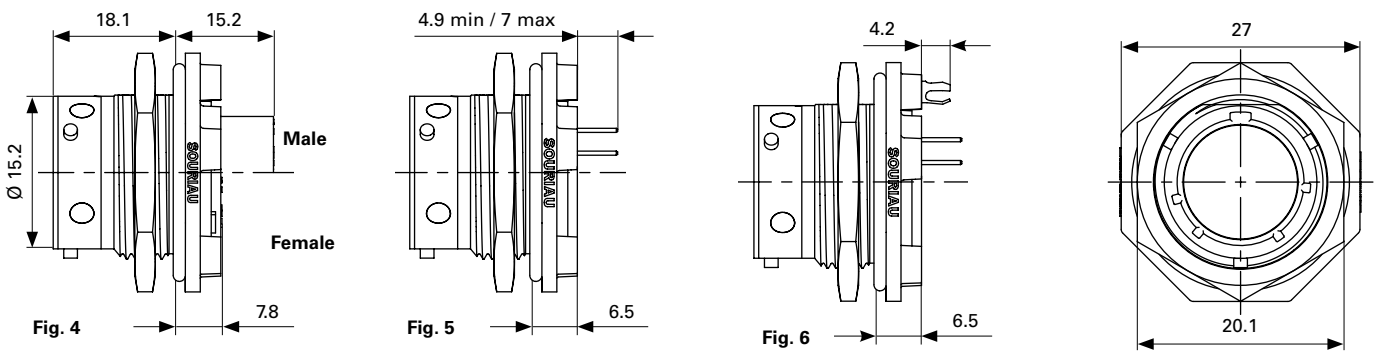


Fig. 3

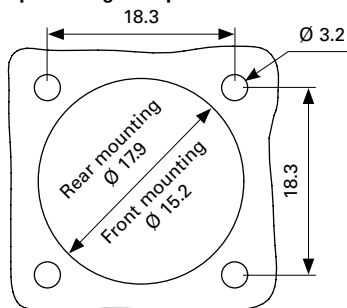
Cable diameter acceptance: standard seal: from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Jam nut receptacle UTGX7

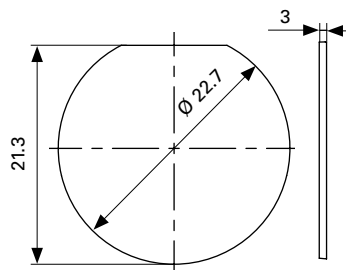


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



Accessories

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX10DCG |
| IP68/69K - Metal terminal | UTGX10DCGR |

2

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX10DCGE |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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 (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|--|--------------|------------------------|-------------------------------------|------------------------------------|------------------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 26-24 | 0.13-0.25 | RM24W3K | RC24W3K | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20W3K | RC20W3K | 1.15 | 1.80 |
| | | 20-18 | 0.52-0.80 | RM18W3K | RC18W3K | 1.30 | 2.10 |
| Stamped & Formed reeled contacts See note (2) for loose piece | | 26-24 | 0.13-0.25 | SM24W3TK6 ⁽¹⁾⁽²⁾ | SC24W3TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 26-24 | 0.13-0.25 | SM24W3S26 ⁽¹⁾⁽²⁾ | SC24W3S25 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20W3TK6 ⁽¹⁾⁽²⁾ | SC20W3TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | | 20-20 | 0.32-0.52 | SM20W3S26 ⁽¹⁾⁽²⁾ | SC20W3S25 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |

(1): Example of plating, for other plating see page 129 (2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20W3TK6 becomes SM20WL3TK6

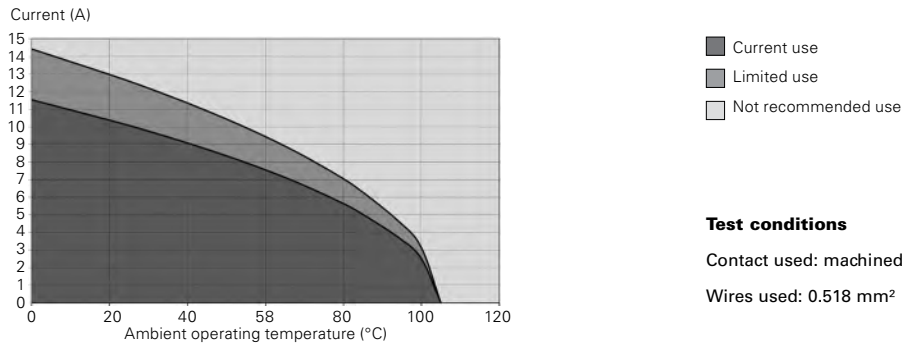
| Contact style | Contact type | Plating | Cable acceptance (AWG) | Wire stripping length (mm) |
|---------------|-------------------------|----------------------------|------------------------|----------------------------|
| Handsoldier | Loaded in the connector | Min 0.4µ gold over 0.8µ Ni | 20 to 18 | 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.

UTGX 10E98/10D98 derating curves



Derating curves based on continuous current application.

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



2

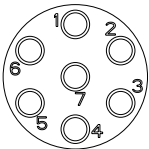
Connector part number

UTGX 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 71 | Square flange receptacle | Without (Fig. 1) | UTGX0147P | UTGX0147S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC147P | UTGX0JC147S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC147P | UTGX1JC147S |
| | Plug | Without (Fig. 4) | UTGX6147P | UTGX6147S |
| | | Cable gland (Fig. 5) | UTGX6JC147P | UTGX6JC147S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX7147P | UTGX7147S |
| Screw contacts loaded | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC147PSCR | UTGX1JC147SSCR |
| | Plug | Cable gland (Fig. 5) | UTGX6JC147PSCR | UTGX6JC147SSCR |
| | Jam nut receptacle | Without (Fig. 9) | UTGX7147PSCR | UTGX7147SSCR |
| PCB contacts supplied separately see page 71 | Square flange receptacle | Without (Fig. 1) | UTGX0147P | UTGX0147S |
| | Handsolder electrical contacts loaded see page 71 | Square flange receptacle | Without (Fig. 1) | UTGX014E7P |
| Plug | | Without (Fig. 4) | UTGX614E7P | UTGX614E7S |
| | | Cable gland (Fig. 5) | UTGX6JC14E7P | UTGX6JC14E7S |
| Jam nut receptacle | | Without (Fig. 6) | UTGX714E7P | UTGX714E7S |
| PCB contacts loaded | Square flange receptacle | Without (Fig. 3) | UTGX014D7P | UTGX014D7S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig.7) | UTGX714D7P | UTGX714D7S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 8) | UTGX714D7P32 | UTGX714D7S32 |

Sealed unmatd

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|------------------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 7x1.5 | HAUTGX147PST1M | HAUTGX147SST1M |
| | | | | HAUTGX14E7PRA1M | HAUTGX14E7SRA1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 7x1.5 | HAUTGX147PRA1M | HAUTGX147SRA1M |
| | | | | HAUTGX14E7PRA1M | HAUTGX14E7SRA1M |

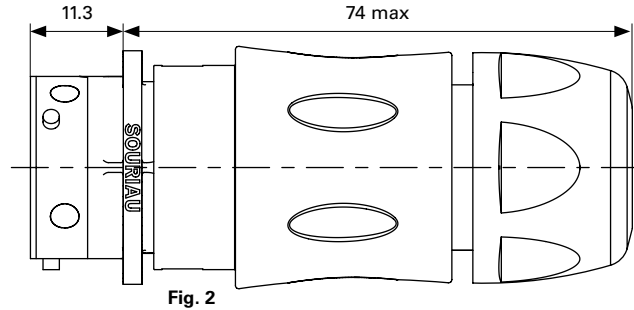
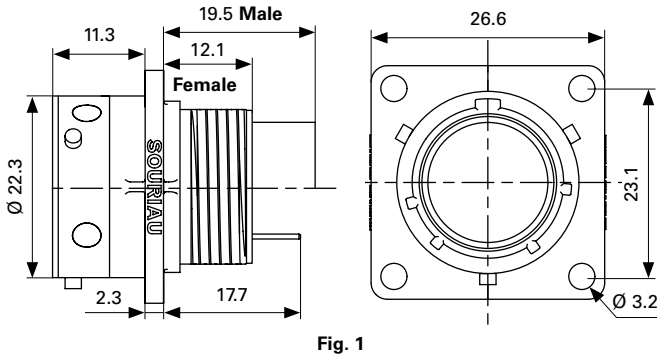
(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

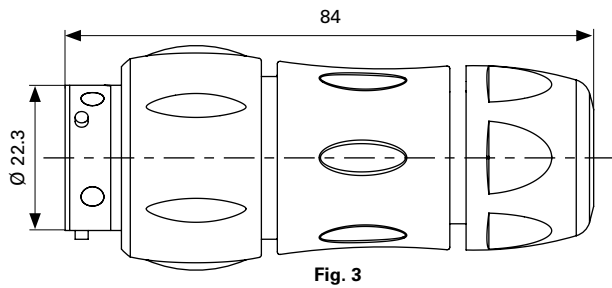
Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0 and UTGX0JC



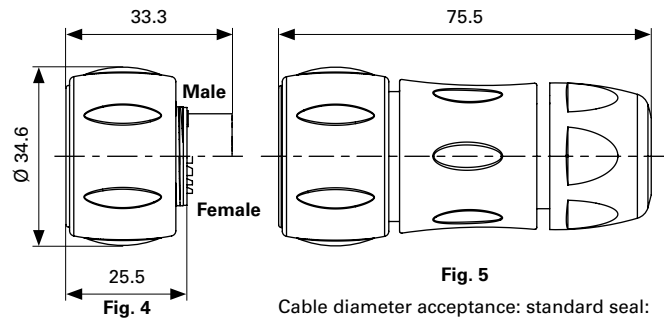
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Free hanging - UTGX1JC



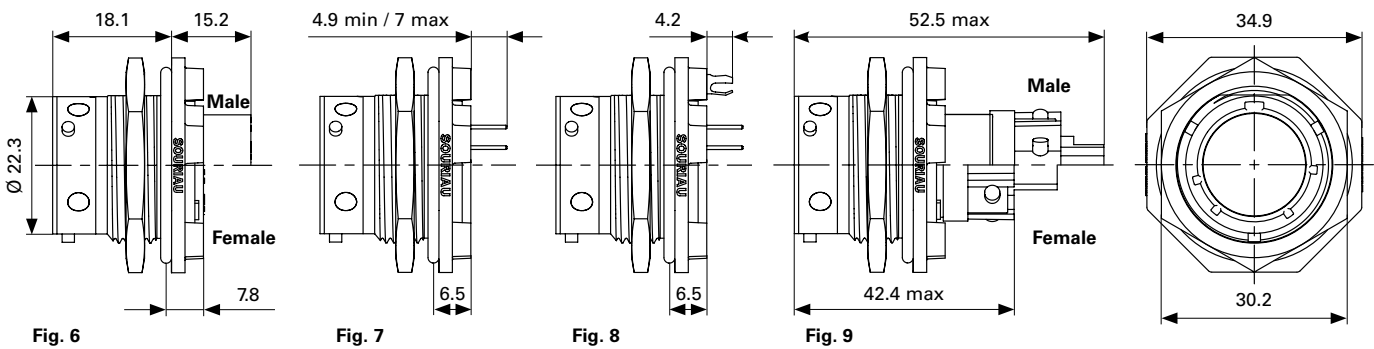
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Plug - UTGX6 & UTGX6JC



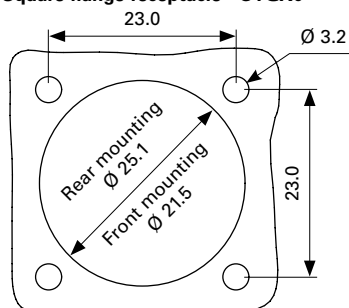
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Jam nut receptacle UTGX7

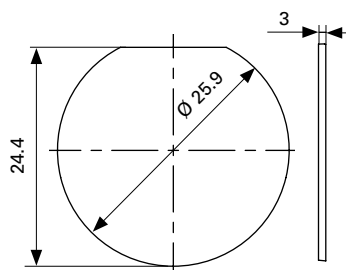


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



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

Accessories

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX14DCG |
| IP68/69K - Metal terminal | UTGX14DCGR |

2

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX14DCGE |

Plug sealing cap



| Description | Part number |
|-------------|--------------|
| IP68/69K | 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

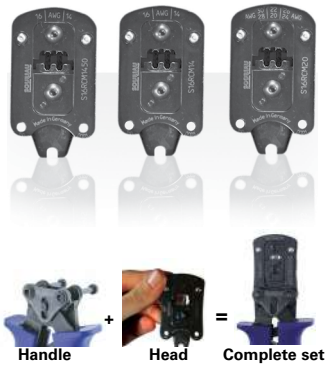
2

Tooling



| Description | Part number |
|---|-----------------|
| Handle (without head) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

Crimp tooling (without Shandles)



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

(1): Example of plating, for other plating options see page 129

* Heads to be used with handle PN: SHANGLES

Extraction tool #16



Fig. 1



Fig. 2

| Description | Part number |
|-------------------------------------|------------------|
| Fig. 1 | RX2025GE1 |
| Fig. 2 - Long endurance tool | RX2031J |

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

Contacts #16

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|--|------------------------|-------------------------------------|------------------------------|------------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 30-26 | 0.48-0.08 | RM28M1K ⁽¹⁾ | RC28M1K ⁽¹⁾ | 0.55 | 1.00 |
| | | 26-24 | 0.13-0.25 | RM24M9K ⁽¹⁾ | RC24M9K ⁽¹⁾ | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20M13K ⁽¹⁾ | RC20M13K ⁽¹⁾ | 1.15 | 1.80 |
| | | 20-20 | 0.32-0.52 | RM20M12K ⁽¹⁾ | RC20M12K ⁽¹⁾ | 1.15 | 2.20 |
| | | 20-16 | 0.52-1.48 | RM16M23K ⁽¹⁾ | RC16M23K ⁽¹⁾ | 1.80 | 3.20 |
| | | 16-14 | 1.48-2.48 | RM14M30K ⁽¹⁾ | RC14M30K ⁽¹⁾ | 2.30 | 3.20 |
| | Stamped & Formed reeled contacts See note ⁽²⁾ for loose piece | 26-24 | 0.13-0.25 | SM24M1TK6 ⁽¹⁾⁽²⁾ | SC24M1TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20M1TK6 ⁽¹⁾⁽²⁾ | SC20M1TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | | 18-16 | 0.80-1.48 | SM16M1TK6 ⁽¹⁾⁽²⁾ | SC16M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 |
| | | 18-16 | 0.80-1.48 | SM16M11TK6 ⁽¹⁾⁽²⁾ | SC16M11TK6 ⁽¹⁾⁽²⁾ | – | 3.00 |
| | 14 | 2.48 | SM14M1TK6 ⁽¹⁾⁽²⁾ | SC14M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 | |
| PCB | Machined ⁽³⁾ | – | | RM20M12E83K ⁽¹⁾ | RC20M12E84K ⁽¹⁾ | – | – |
| Coaxial | Cable multipiece | see pages 133 to 134 | | RMDXK10D28 | RCDXK1D28 | – | – |
| | Cable monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| | Twisted pair multipiece | | | RMDXK10D28 + yorx090 | RCDXK1D28 + yorx090 | – | – |
| | Twisted pair monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| Fiber optic | POF contacts (Plastic Optical Fiber) | – | | RMPOF1000 | RCPOF1000B | – | – |
| Handsold | Loaded in the connector | 14-18 | 2.48-0.80 | – | – | – | – |

(1): Example of plating, for other plating see page 129

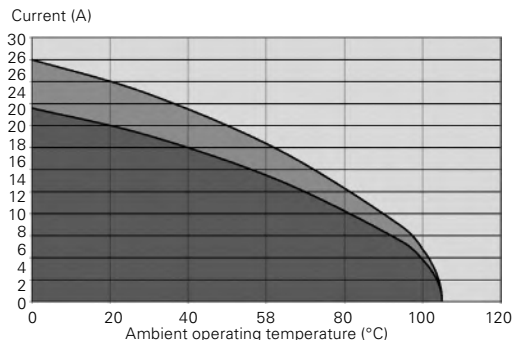
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

(3): for dimensions see pages 136 or 137

Electrical characteristics

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

UTGX 147 - 14E7/14D7 derating curves



■ Current use
 ■ Limited use
 □ Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 1.31 mm²

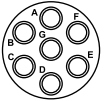
Derating curves based on continuous current application.



Connector part number

UTGX 10E7/10D7

7 contacts
6A/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 75 | Square flange receptacle | Without (Fig. 1) | UTGX010E7P | UTGX010E7S |
| | Plug | Without (Fig. 5) | UTGX610E7P | UTGX610E7S |
| | | Cable gland (Fig. 3) | UTGX6JC10E7P | UTGX6JC10E7S |
| PCB contacts loaded see page 75 | Jam nut receptacle | Without (Fig. 4) | UTGX710E7P | UTGX710E7S |
| | Square flange receptacle | Without (Fig. 2) | UTGX010D7P | UTGX010D7S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig. 5) | UTGX710D7P | UTGX710D7S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 6) | UTGX710D7P32 | UTGX710D7S32 |
| | | | | |
| | | | | |

For discrimination/keying methods see page 154

Sealed unmatred

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|-----------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 0.5 | H05 VV - F 7x0.5 | HAUTGX10E7PST1M | HAUTGX10E7SST1M |
| Right angle ending | Plug | 0.5 | H05 VV - F 7x0.5 | HAUTGX10E7PRA1M | HAUTGX10E7SRA1M |

(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0

2

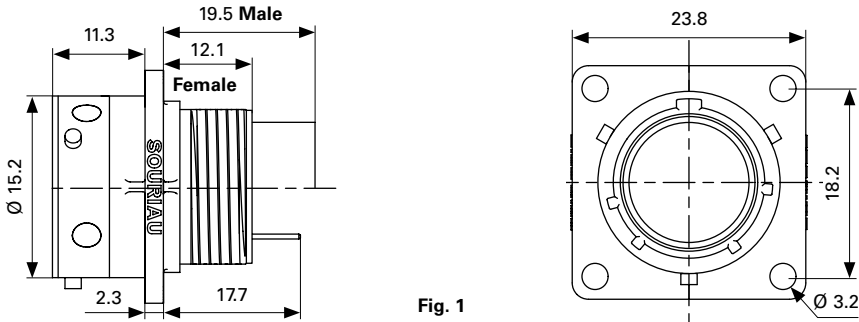


Fig. 1

Plug - UTGX6 & UTGX6JC

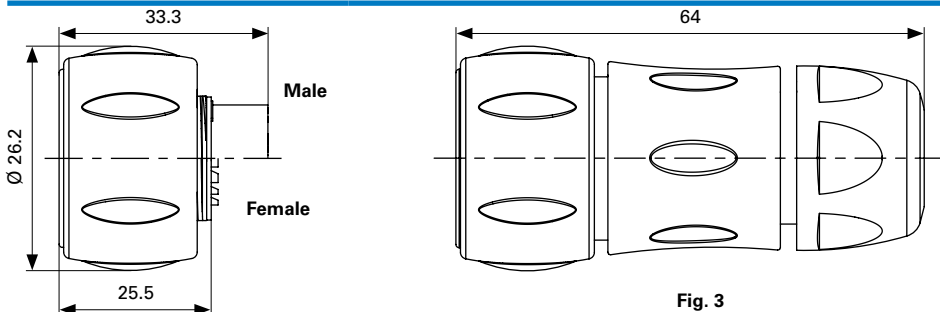


Fig. 3

Cable diameter acceptance: standard seal: from 2.5 mm to 8 mm, reduced seal: from 1.5 mm to 5 mm

Jam nut receptacle UTGX7

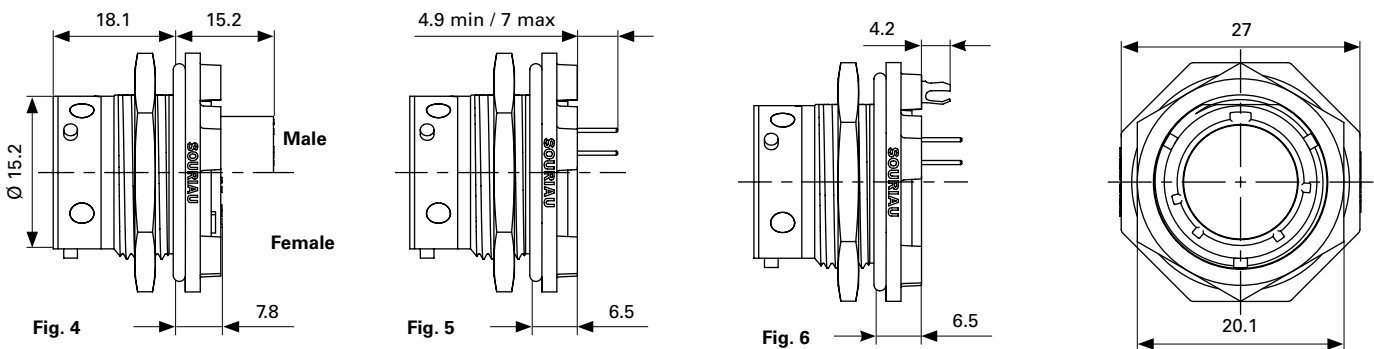


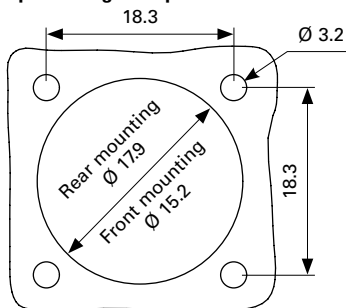
Fig. 4

Fig. 5

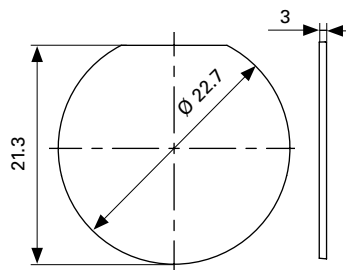
Fig. 6

Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

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

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX10DCG |
| IP68/69K - Metal terminal | UTGX10DCGR |

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX10DCGE |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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 (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|---|------------------------|-------------------------------------|------------------------------------|------------------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 26-24 | 0.13-0.25 | RM24W3K | RC24W3K | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20W3K | RC20W3K | 1.15 | 1.80 |
| | | 20-18 | 0.52-0.80 | RM18W3K | RC18W3K | 1.30 | 2.10 |
| | Stamped & Formed reeled contacts See note (2) for loose piece | 26-24 | 0.13-0.25 | SM24W3TK6 ⁽¹⁾⁽²⁾ | SC24W3TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 26-24 | 0.13-0.25 | SM24W3S26 ⁽¹⁾⁽²⁾ | SC24W3S25 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20W3TK6 ⁽¹⁾⁽²⁾ | SC20W3TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | | 20-20 | 0.32-0.52 | SM20W3S26 ⁽¹⁾⁽²⁾ | SC20W3S25 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |

(1): Example of plating, for other plating see page 129

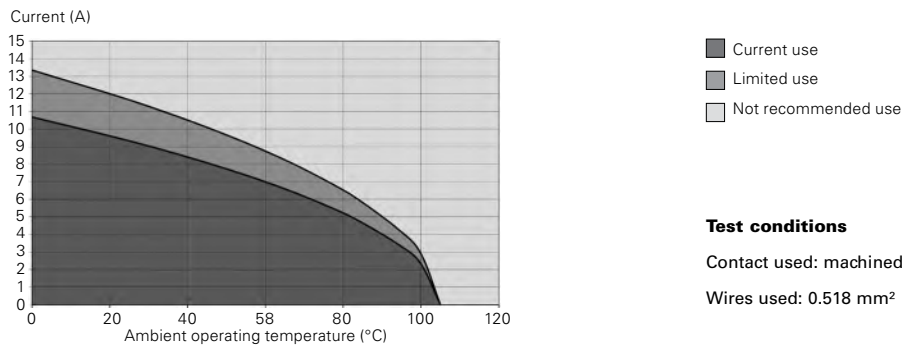
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20W3TK6 becomes SM20WL3TK6

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

Electrical characteristics

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

UTGX 10E7/10D7 derating curves



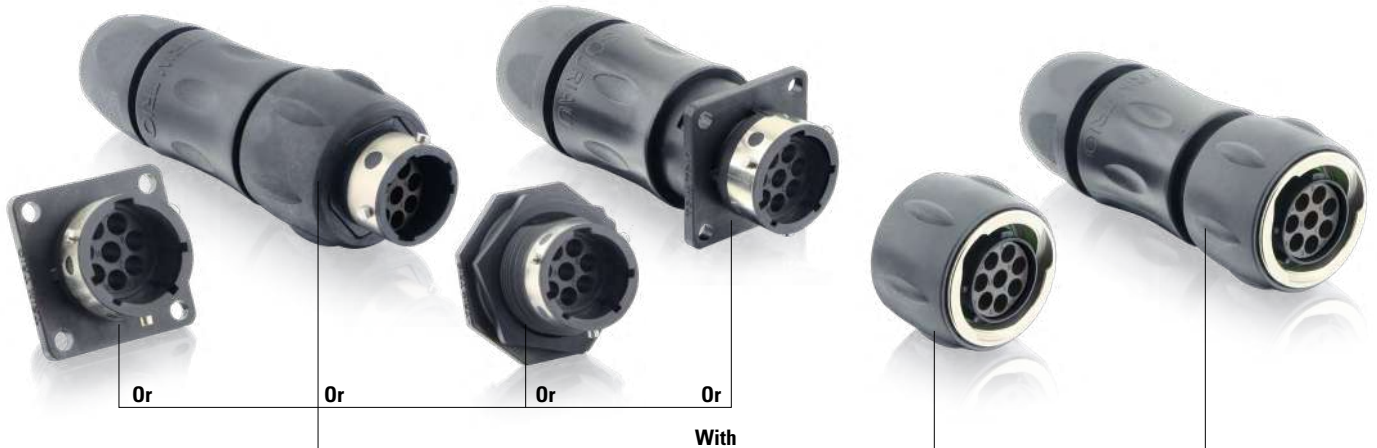
Derating curves based on continuous current application.

2

Connectors

128 (Shell size 12, 8x16)

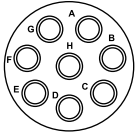
2



Connector part number

UTGX 128

8 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 80 | Square flange receptacle | Without (Fig. 1) | UTGX0128P | UTGX0128S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC128P | UTGX0JC128S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC128P | UTGX1JC128S |
| | Plug | Without (Fig. 4) | UTGX6128P | UTGX6128S |
| PCB contacts supplied separately see page 80 | Plug | Cable gland (Fig. 5) | UTGX6JC128P | UTGX6JC128S |
| | | Jam nut receptacle | UTGX7128P | UTGX7128S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX7128P | UTGX7128S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig. 7) | UTGX7128P | UTGX7128S |

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|-----------------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 3x1.5 | HAUTGX128PST1M | HAUTGX128SST1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 3x1.5 | HAUTGX128PRA1M | HAUTGX128SRA1M |

(1) Other cable available on demand

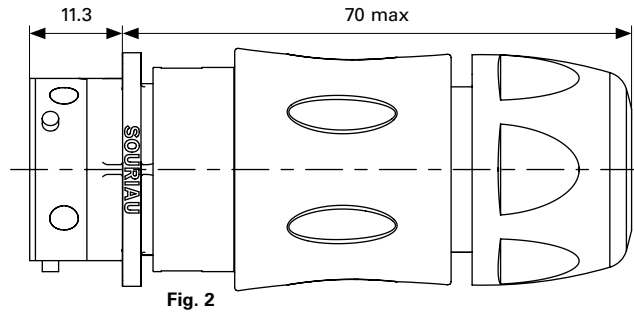
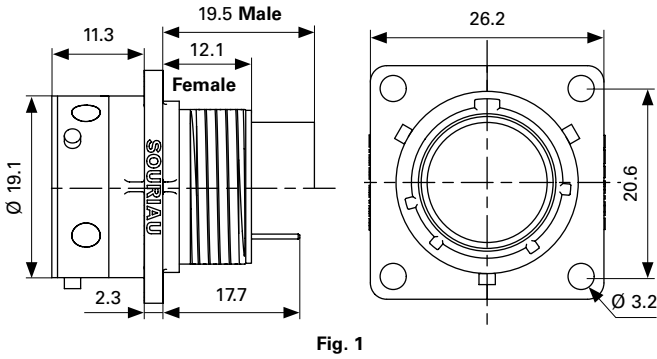
* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

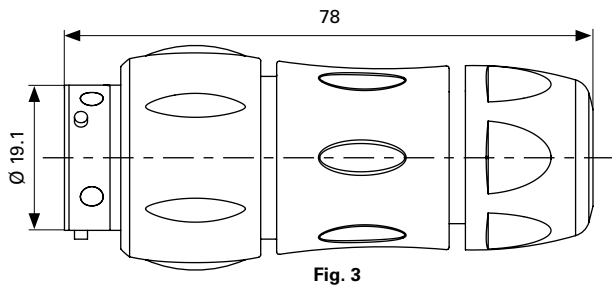
Square flange receptacle - UTGX0 and UTGX0JC

2



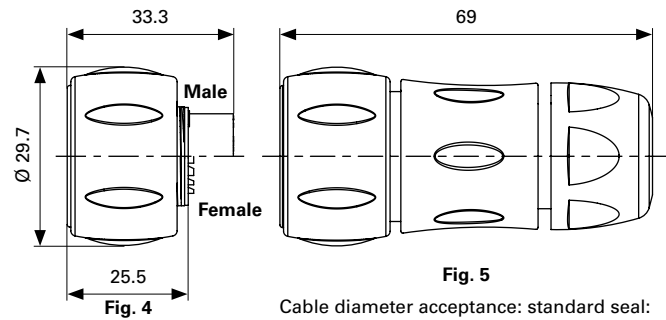
Cable diameter acceptance: standard seal:
from 2.5 mm to 12 mm, reduced seal: from 3 mm to 9 mm

Free hanging - UTGX1JC



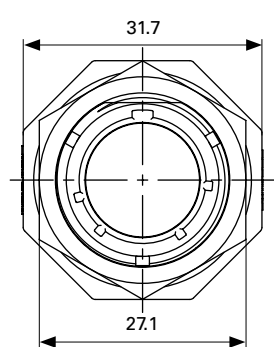
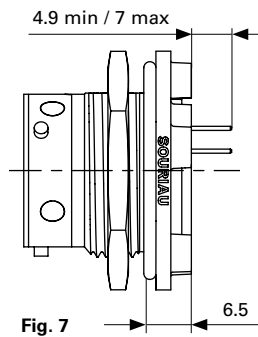
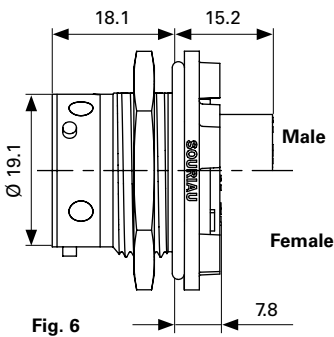
Cable diameter acceptance: standard seal:
from 2.5 mm to 12 mm, reduced seal: from 3 mm to 9 mm

Plug - UTGX6 & UTGX6JC



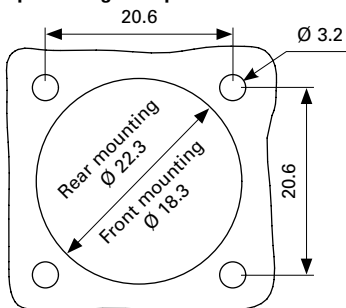
Cable diameter acceptance: standard seal:
from 2.5 mm to 12 mm,
reduced seal: from 3 mm to 9 mm

Jam nut receptacle UTGX7

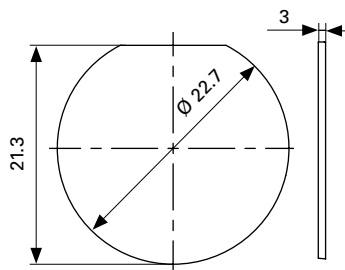


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

128 (Shell size 12, 8x16)

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX12DCG |
| IP68/69K - Metal terminal | UTGX12DCGR |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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

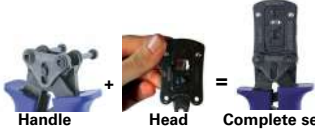
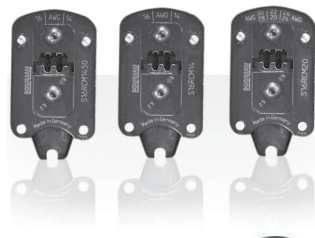
Tooling



| Description | Part number |
|---|-----------------|
| Handle (without head) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

2

Crimp tooling (without Shandles)



| Contact size | Contacts | Part number of Head |
|--------------------------------------|-------------------------------------|---------------------|
| Standard contacts #16 Ø 1.6 mm | RM/RC 28M1K⁽¹⁾ | S16RCM20* |
| | RM/RC 24M9K⁽¹⁾ | S16RCM20* |
| | RM/RC 20M13K⁽¹⁾ | S16RCM20* |
| | RM/RC 20M12K⁽¹⁾ | S16RCM20* |
| | RM/RC 16M23K⁽¹⁾ | S16RCM16* |
| | RM/RC 14M30K⁽¹⁾ | S16RCM14* |
| | SM/SC 24ML1TK6⁽¹⁾ | S16SCM20* |
| | SM/SC 20ML1TK6⁽¹⁾ | S16SCM20* |
| | SM/SC 16ML1TK6⁽¹⁾ | S16SCML1* |
| | SM/SC 14ML1TK6⁽¹⁾ | S16SCML1* |
| Standard contacts #20 Ø 1 mm | RM/RC 24W3K⁽¹⁾ | S20RCM* |
| | RM/RC 20W3K⁽¹⁾ | S20RCM* |
| | RM/RC 18W3K⁽¹⁾ | S20RCM* |
| | SM/SC 24WL3⁽¹⁾⁽²⁾ | S20SCM20* |
| | SM/SC 20WL3⁽¹⁾⁽²⁾ | S20SCM20* |

(1): Example of plating, for other plating options see page 129

(2): Loose contact

* Heads to be used with handle PN: SHANDLES

Extraction tool #16

Fig. 1



Fig. 2



| Description | Part number |
|-------------------------------------|------------------|
| Fig. 1 | RX2025GE1 |
| Fig. 2 - Long endurance tool | RX2031J |

Contacts #16

2

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|--|------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 30-26 | 0.48-0.08 | RM28M1K ⁽¹⁾ | RC28M1K ⁽¹⁾ | 0.55 | 1.00 |
| | | 26-24 | 0.13-0.25 | RM24M9K ⁽¹⁾ | RC24M9K ⁽¹⁾ | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20M13K ⁽¹⁾ | RC20M13K ⁽¹⁾ | 1.15 | 1.80 |
| | | 20-20 | 0.32-0.52 | RM20M12K ⁽¹⁾ | RC20M12K ⁽¹⁾ | 1.15 | 2.20 |
| | | 20-16 | 0.52-1.48 | RM16M23K ⁽¹⁾ | RC16M23K ⁽¹⁾ | 1.80 | 3.20 |
| | | 16-14 | 1.48-2.48 | RM14M30K ⁽¹⁾ | RC14M30K ⁽¹⁾ | 2.30 | 3.20 |
| | Stamped & Formed reeled contacts See note ⁽²⁾ for loose piece | 26-24 | 0.13-0.25 | SM24M1TK6 ⁽¹⁾⁽²⁾ | SC24M1TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20M1TK6 ⁽¹⁾⁽²⁾ | SC20M1TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | | 18-16 | 0.80-1.48 | SM16M1TK6 ⁽¹⁾⁽²⁾ | SC16M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 |
| | | 18-16 | 0.80-1.48 | SM16M11TK6 ⁽¹⁾⁽²⁾ | SC16M11TK6 ⁽¹⁾⁽²⁾ | – | 3.00 |
| | 14 | 2.48 | SM14M1TK6 ⁽¹⁾⁽²⁾ | SC14M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 | |
| PCB | Machined ⁽³⁾ | – | RM20M12E83K ⁽¹⁾ | RC20M12E84K ⁽¹⁾ | – | – | |
| Coaxial | Cable multipiece | see pages 133 to 134 | | RMDXK10D28 | RCDXK1D28 | – | – |
| | Cable monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| | Twisted pair multipiece | | | RMDXK10D28 + yorx090 | RCDXK1D28 + yorx090 | – | – |
| | Twisted pair monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| Fiber optic | POF contacts (Plastic Optical Fiber) | – | RMPOF1000 | RCPOF1000B | – | – | |
| Handsold | Loaded in the connector | 14-18 | 2.48-0.80 | – | – | – | – |

(1): Example of plating, for other plating see page 129

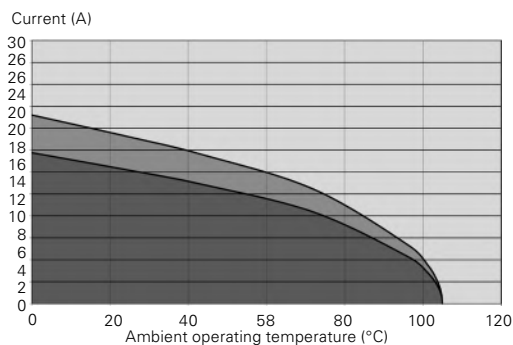
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

(3): for dimensions see pages 136 or 137

Electrical characteristics

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

UTGX 128 derating curves



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 1.31 mm²

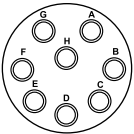
Derating curves based on continuous current application.



Connector part number

UTGX 12E8/12D8

8 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 84 | Square flange receptacle | Without (Fig. 1) | UTGX012E8P | UTGX012E8S |
| | Plug | Without (Fig. 2) | UTGX612E8P | UTGX612E8S |
| | | Cable gland (Fig. 3) | UTGX6JC12E8P | UTGX6JC12E8S |
| PCB contacts loaded see page 84 | Jam nut receptacle | Without (Fig. 4) | UTGX712E8P | UTGX712E8S |
| | Square flange receptacle | Without (Fig. 1) | UTGX012D8P | UTGX012D8S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig. 5) | UTGX712D8P | UTGX712D8S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 6) | UTGX712D8P32 | UTGX712D8S32 |
| | | | | |
| | | | | |

For discrimination/keying methods see page 154

Sealed unmatred

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|-----------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 3x1.5 | HAUTGX12E8PST1M | HAUTGX12E8SST1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 3x1.5 | HAUTGX12E8PRA1M | HAUTGX12E8SRA1M |

(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0

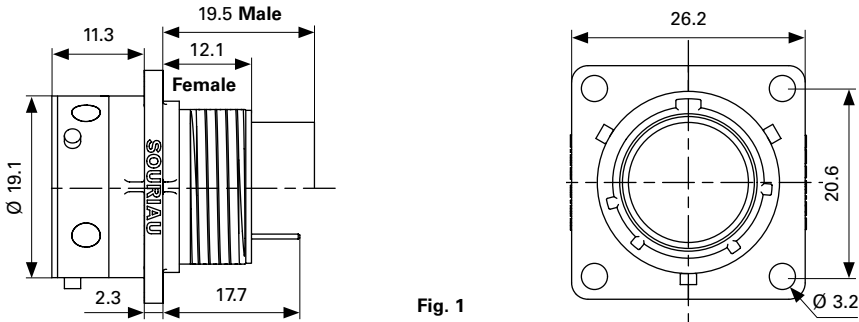


Fig. 1

Plug - UTGX6 & UTGX6JC

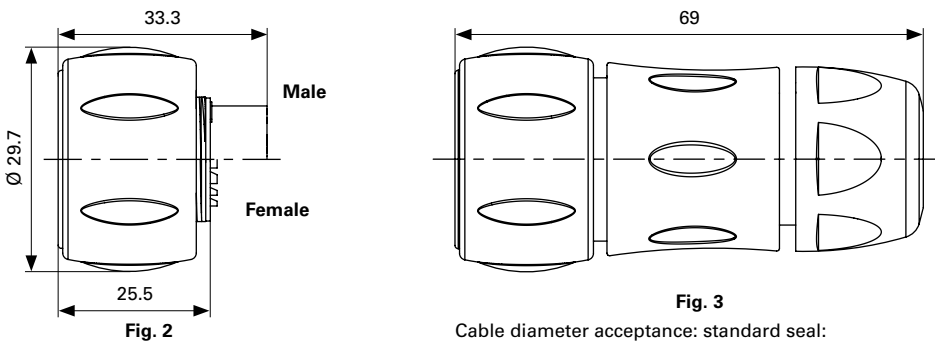


Fig. 3

Cable diameter acceptance: standard seal: from 2.5 mm to 12 mm, reduced seal: from 3 mm to 9 mm

Jam nut receptacle UTGX7

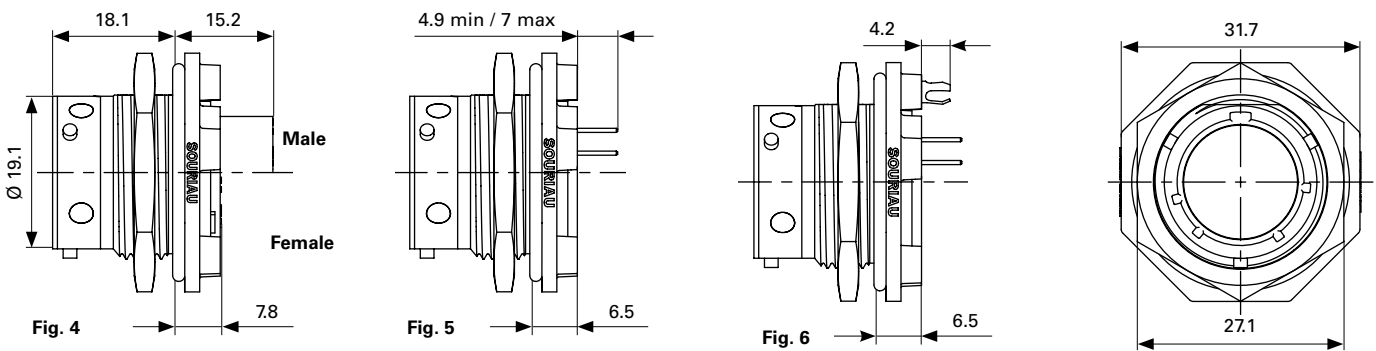


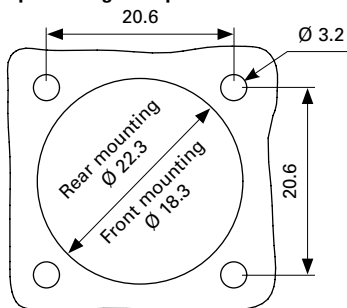
Fig. 4

Fig. 5

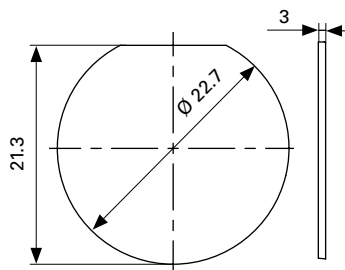
Fig. 6

Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



Accessories

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX12DCG |
| IP68/69K - Metal terminal | UTGX12DCGR |

2

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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

2

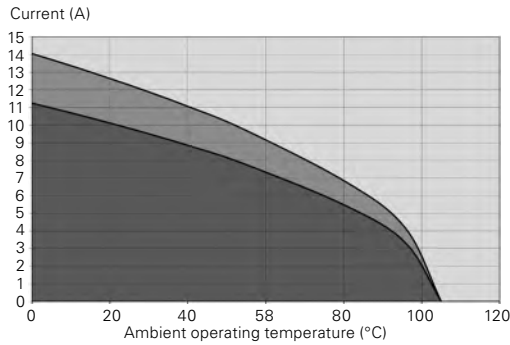
| Contact style | Contact type | Plating | Cable acceptance (AWG) | Wire stripping length (mm) |
|---------------|-------------------------|----------------------------|------------------------|----------------------------|
| Hand solder | Loaded in the connector | Min 0.4μ gold over 0.8μ Ni | 20 to 18 | 3.8 |
| PCB | Machined ⁽¹⁾ | Min 0.4μ gold over 0.8μ Ni | – | – |

(1): For dimensions see pages 136 or 137

Electrical characteristics

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

UTGX 12E8/12D8 derating curves



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts
Wires used: 0.518 mm²

Derating curves based on continuous current application.

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

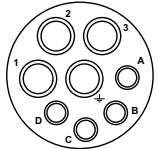


2

Connector part number

UTGX 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 89 | Square flange receptacle | Without (Fig. 1) | UTGX0148P | UTGX0148S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC148P | UTGX0JC148S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC148P | UTGX1JC148S |
| | Plug | Without (Fig. 4) | UTGX6148P | UTGX6148S |
| | | Cable gland (Fig. 5) | UTGX6JC148P | UTGX6JC148S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX7148P | UTGX7148S |

Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0 and UTGX0JC

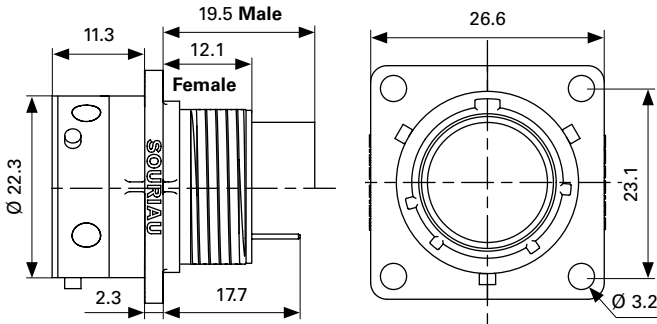


Fig. 1

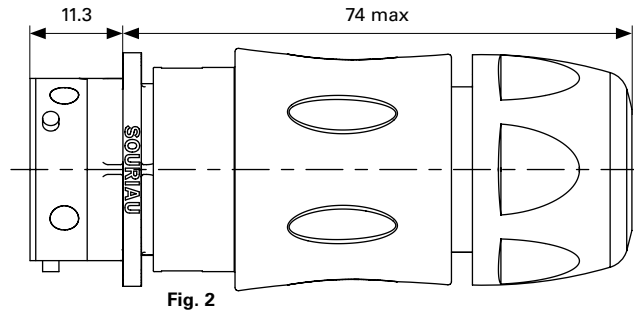


Fig. 2

Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Free hanging - UTGX1JC

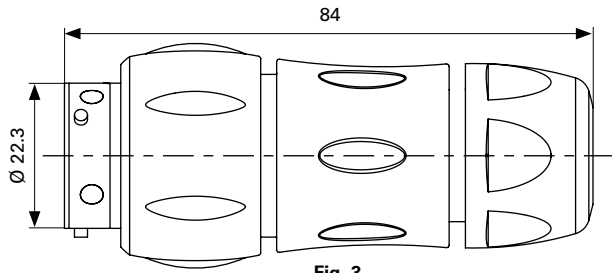


Fig. 3

Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Plug - UTGX6 & UTGX6JC

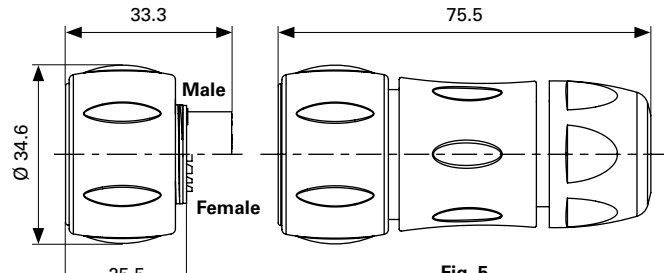


Fig. 4

Fig. 5

Cable diameter acceptance: standard seal:
from 7 mm to 14 mm,
reduced seal: from 5 mm to 12 mm

Jam nut receptacle UTGX7

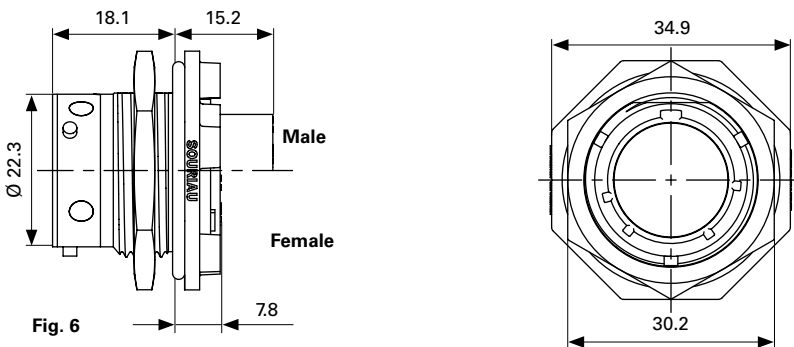
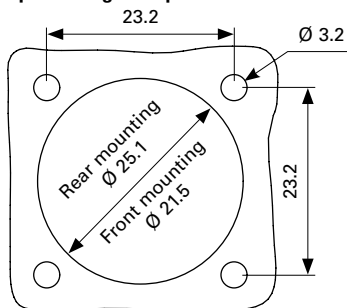


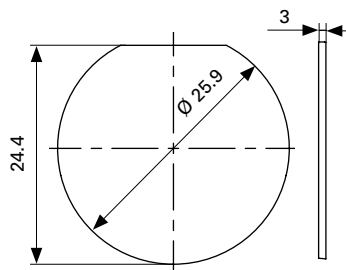
Fig. 6

Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



Accessories

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX14DCG |
| IP68/69K - Metal terminal | UTGX14DCGR |

2

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX14DCGE |

Plug sealing cap



| Description | Part number |
|-------------|--------------|
| IP68/69K | 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

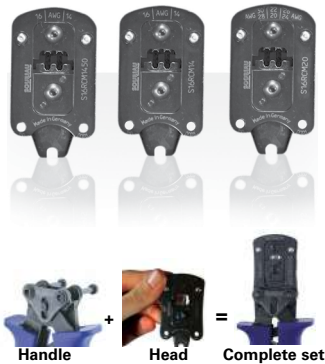
2

Tooling



| Description | Part number |
|---|-----------------|
| Handle (without head) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

Crimp tooling (without Shandles)



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

(1): Example of plating, for other plating options see page 129

* Heads to be used with handle PN: SHANDLES

Extraction tool #16



| Description | Part number |
|------------------------------|------------------|
| Fig. 1 | RX2025GE1 |
| Fig. 2 - Long endurance tool | RX2031J |

Crimp tooling #12



| Contact size | Part number hand tool | Part number positioner + locator setting |
|--------------------------------------|-----------------------|--|
| Standard contacts #12 Ø 2.4 mm | M317 | VGE10077A |

Extraction tool #20



| Description | Part number |
|--------------|--------------------|
| Contacts #12 | 51060210924 |

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

Contacts #16

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) | |
|------------------------|--|-------------------------|-------------------------------------|------------------------------|------------------------------|---------------------|----------------------|---|
| Crimp contacts | Machined | 30-26 | 0.48-0.08 | RM28M1K ⁽¹⁾ | RC28M1K ⁽¹⁾ | 0.55 | 1.00 | |
| | | 26-24 | 0.13-0.25 | RM24M9K ⁽¹⁾ | RC24M9K ⁽¹⁾ | 0.80 | 1.58 | |
| | | 20-20 | 0.32-0.52 | RM20M13K ⁽¹⁾ | RC20M13K ⁽¹⁾ | 1.15 | 1.80 | |
| | | 20-20 | 0.32-0.52 | RM20M12K ⁽¹⁾ | RC20M12K ⁽¹⁾ | 1.15 | 2.20 | |
| | | 20-16 | 0.52-1.48 | RM16M23K ⁽¹⁾ | RC16M23K ⁽¹⁾ | 1.80 | 3.20 | |
| | | 16-14 | 1.48-2.48 | RM14M30K ⁽¹⁾ | RC14M30K ⁽¹⁾ | 2.30 | 3.20 | |
| | Stamped & Formed reeled contacts See note ⁽²⁾ for loose piece | 26-24 | 0.13-0.25 | SM24M1TK6 ⁽¹⁾⁽²⁾ | SC24M1TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 | |
| | | 20-20 | 0.32-0.52 | SM20M1TK6 ⁽¹⁾⁽²⁾ | SC20M1TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 | |
| | | 18-16 | 0.80-1.48 | SM16M1TK6 ⁽¹⁾⁽²⁾ | SC16M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 | |
| | | 18-16 | 0.80-1.48 | SM16M11TK6 ⁽¹⁾⁽²⁾ | SC16M11TK6 ⁽¹⁾⁽²⁾ | – | 3.00 | |
| | | 14 | 2.48 | SM14M1TK6 ⁽¹⁾⁽²⁾ | SC14M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 | |
| | Coaxial | Cable multipiece | see pages 133 to 134 | | RMDXK10D28 | RCDXK1D28 | – | – |
| | | Cable monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| | | Twisted pair multipiece | | | RMDXK10D28 + yorx090 | RCDXK1D28 + yorx090 | – | – |
| Twisted pair monocrimp | | | | RMDX60xxD28 | RCDX60xxD28 | – | – | |

(1): Example of plating, for other plating see page 129

(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 (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|--------------|------------------------|-------------------------------------|---------------------------|--------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 20 | – | 82911457NA ⁽¹⁾ | 82911456A ⁽¹⁾ | 0.7 | 4.90 |
| | | 20 | – | 82911459NA ⁽¹⁾ | 82911458A ⁽¹⁾ | 1.12 | |
| | | 18 | – | 82911461NA ⁽¹⁾ | 82911460A ⁽¹⁾ | 1.42 | |
| | | 16 | – | 82911463NAv | 82911462A ⁽¹⁾ | 1.72 | |
| | | 14 | – | 82911465NA ⁽¹⁾ | 82911464A ⁽¹⁾ | 2.20 | |
| | | 12 | – | 82911467NA ⁽¹⁾ | 82911466A ⁽¹⁾ | 2.82 | |

(1): Example of plating, for other plating see page 129

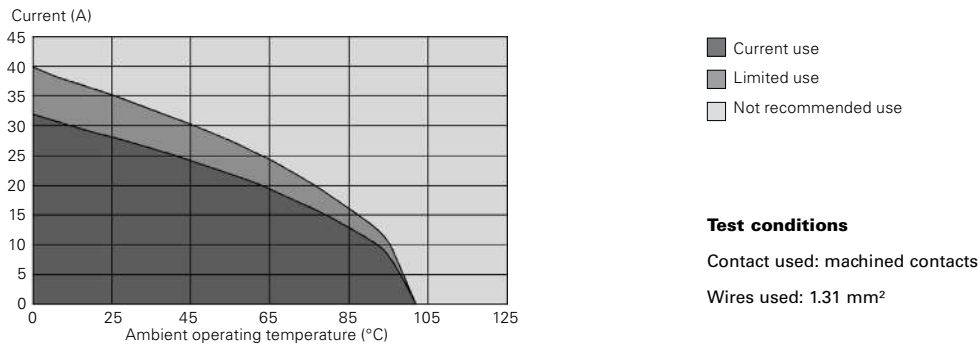
Electrical characteristics

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

UTGX 148 derating curves



Derating curves based on continuous current application.

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

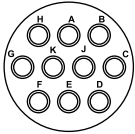


2

Connector part number

UTGX 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 95 | Square flange receptacle | Without (Fig. 1) | UTGX01210P | UTGX01210S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC1210P | UTGX0JC1210S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC1210P | UTGX1JC1210S |
| | Plug | Without (Fig. 4) | UTGX61210P | UTGX61210S |
| | Plug | Cable gland (Fig. 5) | UTGX6JC1210P | UTGX6JC1210S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX71210P | UTGX71210S |
| Handsolder electrical contacts loaded see page 95 | Square flange receptacle | Without (Fig. 1) | UTGX012E10P | UTGX012E10S |
| | Plug | Without (Fig. 4) | UTGX612E10P | UTGX612E10S |
| | Plug | Cable gland (Fig. 5) | UTGX6JC12E10P | UTGX6JC12E10S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX712E10P | UTGX712E10S |
| PCB contacts loaded | Square flange receptacle | Without (Fig. 3) | UTGX012D10P | UTGX012D10S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig.7) | UTGX712D10P | UTGX712D10S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 8) | UTGX712D10P32 | UTGX712D10S32 |

For discrimination/keying methods see page 154

Sealed unmatred

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|-------------------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 0.5 | H05 VV - F 10x0.5 | HAUTGX1210PST1M | HAUTGX1210SST1M |
| | | | | HAUTGX12E10PRA1M | HAUTGX12E10SRA1M |
| Right angle ending | Plug | 0.5 | H05 VV - F 10x0.5 | HAUTGX1210PRA1M | HAUTGX1210SRA1M |
| | | | | HAUTGX12E10PRA1M | HAUTGX12E10SRA1M |

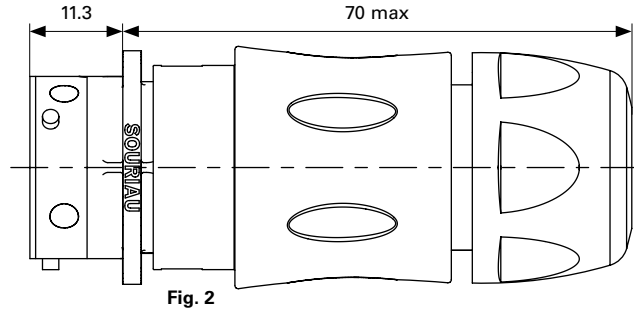
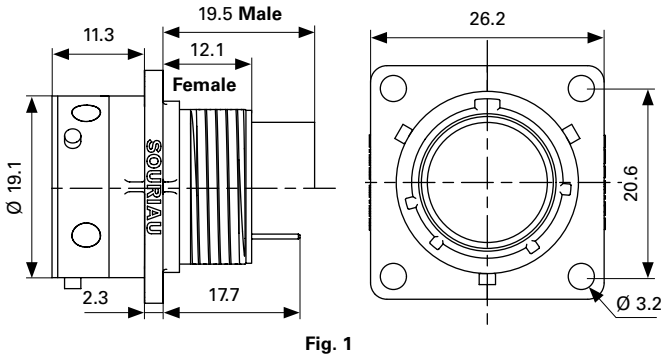
(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

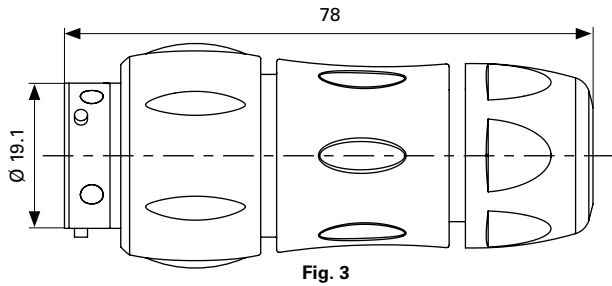
Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0 and UTGX0JC



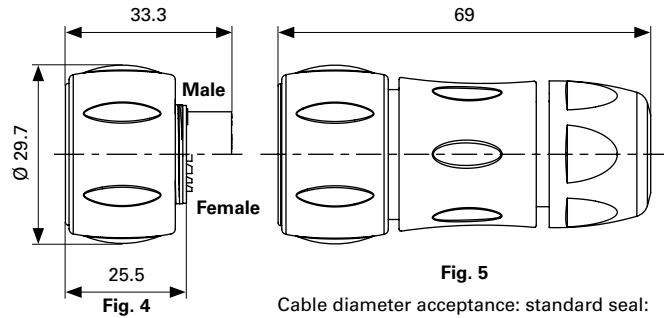
Cable diameter acceptance: standard seal:
from 2.5 mm to 12 mm, reduced seal: from 3 mm to 9 mm

Free hanging - UTGX1JC



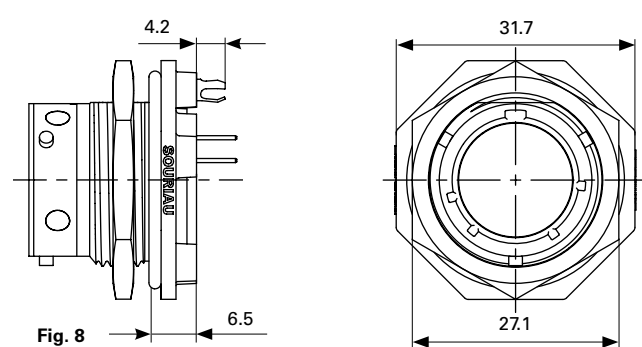
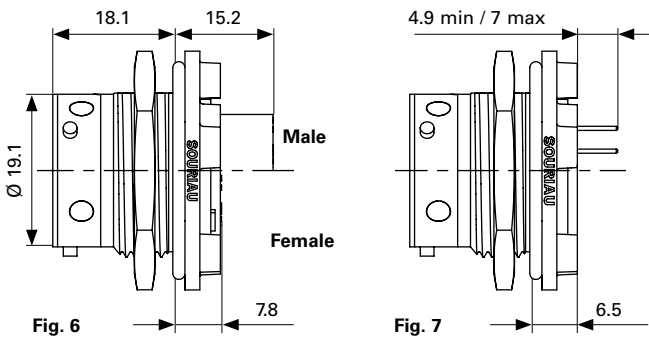
Cable diameter acceptance: standard seal:
from 2.5 mm to 12 mm, reduced seal: from 3 mm to 9 mm

Plug - UTGX6 & UTGX6JC



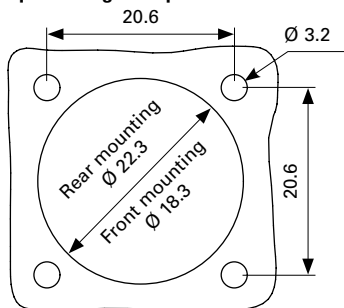
Cable diameter acceptance: standard seal:
from 2.5 mm to 12 mm,
reduced seal: from 3 mm to 9 mm

Jam nut receptacle UTGX7

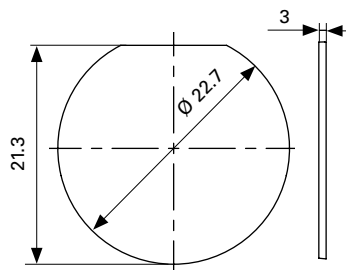


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



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

Accessories

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX12DCG |
| IP68/69K - Metal terminal | UTGX12DCGR |

2

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX12DCGE |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

Crimp tooling

(without Shandles)

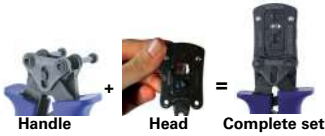


| Contact size | Contacts | Part number of Head |
|------------------------------------|-------------------------------------|---------------------|
| Standard contacts #20 Ø 1 mm | RM/RC 24W3K⁽¹⁾ | S20RCM* |
| | RM/RC 20W3K⁽¹⁾ | S20RCM* |
| | RM/RC 18W3K⁽¹⁾ | S20RCM* |
| | SM/SC 24WL3⁽¹⁾⁽²⁾ | S20SCM20* |
| | SM/SC 20WL3⁽¹⁾⁽²⁾ | S20SCM20* |

(1): Example of plating, for other plating options see page 129

(2): Loose contact

* Heads to be used with handle PN: SHANDLES



Extraction tool #20



| Description | Part number |
|--------------|----------------|
| Contacts #20 | RX20D44 |

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

Contacts #20

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|--|------------------------|-------------------------------------|-----------------------------------|-----------------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 26-24 | 0.13-0.25 | RM24W3K | RC24W3K | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20W3K | RC20W3K | 1.15 | 1.80 |
| | | 20-18 | 0.52-0.80 | RM18W3K | RC18W3K | 1.30 | 2.10 |
| | Stamped & Formed reeled contacts See note ⁽²⁾ for loose piece | 26-24 | 0.13-0.25 | SM24W3TK6⁽¹⁾⁽²⁾ | SC24W3TK6⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 26-24 | 0.13-0.25 | SM24W3S26⁽¹⁾⁽²⁾ | SC24W3S25⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20W3TK6⁽¹⁾⁽²⁾ | SC20W3TK6⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | | 20-20 | 0.32-0.52 | SM20W3S26⁽¹⁾⁽²⁾ | SC20W3S25⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| PCB | Machined ⁽³⁾ | – | RMW5016K | RCW5016K | – | – | |

(1): Example of plating, for other plating see page 129
 (3): for dimensions see pages 136 or 137

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

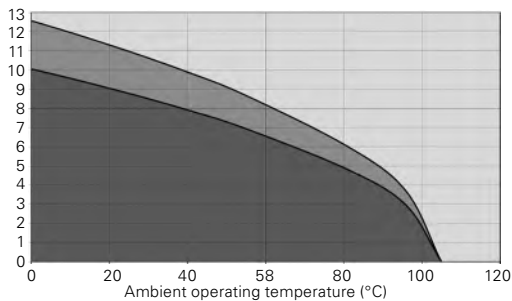
| Contact style | Contact type | Plating | Cable acceptance (AWG) | Wire stripping length (mm) |
|---------------|-------------------------|----------------------------|------------------------|----------------------------|
| Hand solder | Loaded in the connector | Min 0.4µ gold over 0.8µ Ni | 20 to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

Electrical characteristics

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

UTGX 1210 - 12E10/12D10 derating curves

Current (A)



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 0.518 mm²

Derating curves based on continuous current application.

2

Connectors

1412 (Shell size 14, 12x#16)

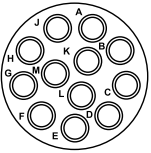
2



Connector part number

UTGX 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 100 | Square flange receptacle | Without (Fig. 1) | UTGX01412P | UTGX01412S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC1412P | UTGX0JC1412S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC1412P | UTGX1JC1412S |
| | Plug | Without (Fig. 4) | UTGX61412P | UTGX61412S |
| | | Cable gland (Fig. 5) | UTGX6JC1412P | UTGX6JC1412S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX71412P | UTGX71412S |
| PCB contacts supplied separately See page 100 | Square flange receptacle | Without (Fig. 1) | UTGX01412P | UTGX01412S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX71412P | UTGX71412S |

For discrimination/keying methods see page 154

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|-----------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 12x1.5 | HAUTGX1412PST1M | HAUTGX1412SST1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 12x1.5 | HAUTGX1412PRA1M | HAUTGX1412SRA1M |

(1) Other cable available on demand

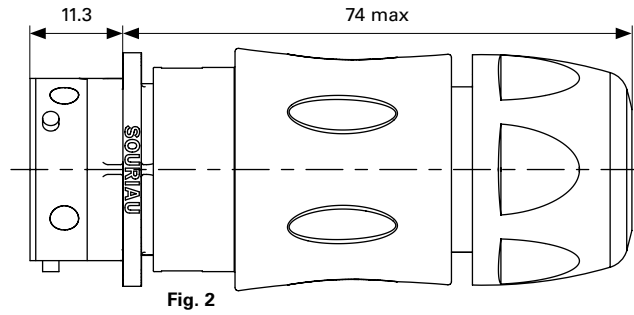
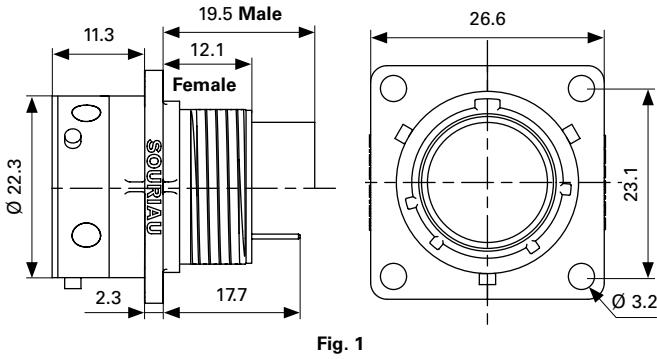
* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

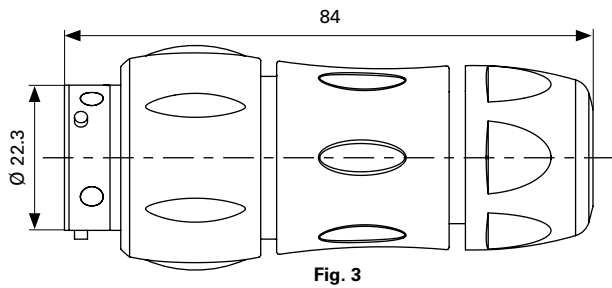
Square flange receptacle - UTGX0 and UTGX0JC

2



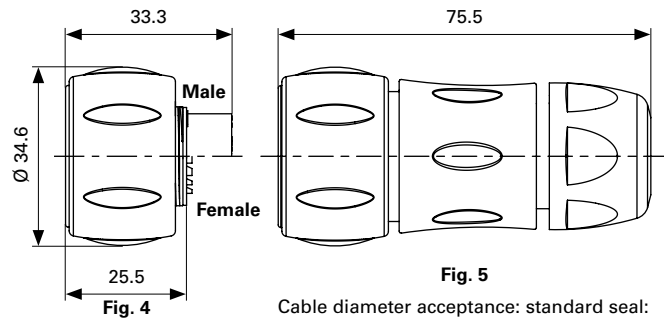
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Free hanging - UTGX1JC



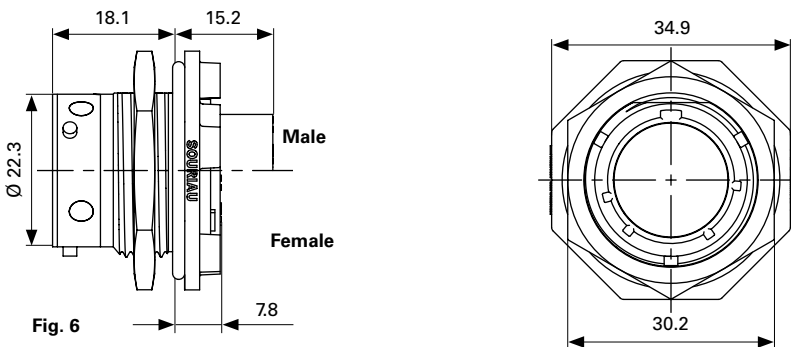
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Plug - UTGX6 & UTGX6JC



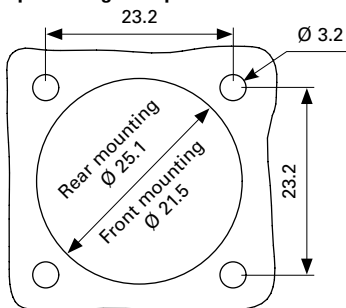
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm,
reduced seal: from 5 mm to 12 mm

Jam nut receptacle UTGX7

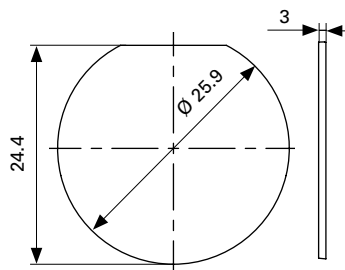


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

1412 (Shell size 14, 12x#16)

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX14DCG |
| IP68/69K - Metal terminal | UTGX14DCGR |

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX14DCGE |

Plug sealing cap



| Description | Part number |
|-------------|--------------|
| IP68/69K | 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

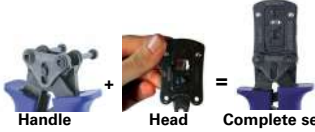
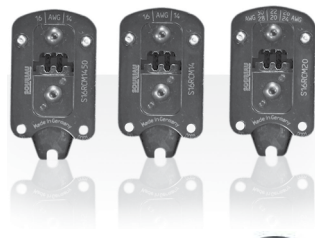


| Description | Part number |
|---|-----------------|
| Handle (without head) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

2

Crimp tooling

(without Shandles)



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

(1): Example of plating, for other plating options see page 129

* Heads to be used with handle PN: SHANDLES

Extraction tool #16

Fig. 1



Fig. 2



| Description | Part number |
|-------------------------------------|------------------|
| Fig. 1 | RX2025GE1 |
| Fig. 2 - Long endurance tool | RX2031J |

Contacts #16

2

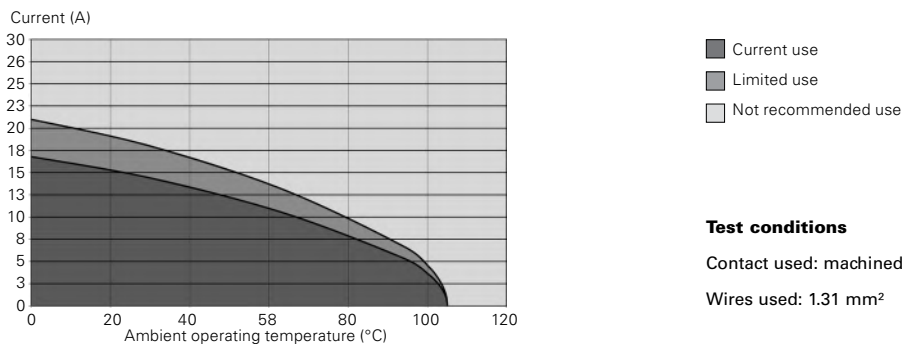
| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|--|------------------------|-------------------------------------|------------------------------|------------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 30-26 | 0.48-0.08 | RM28M1K ⁽¹⁾ | RC28M1K ⁽¹⁾ | 0.55 | 1.00 |
| | | 26-24 | 0.13-0.25 | RM24M9K ⁽¹⁾ | RC24M9K ⁽¹⁾ | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20M13K ⁽¹⁾ | RC20M13K ⁽¹⁾ | 1.15 | 1.80 |
| | | 20-20 | 0.32-0.52 | RM20M12K ⁽¹⁾ | RC20M12K ⁽¹⁾ | 1.15 | 2.20 |
| | | 20-16 | 0.52-1.48 | RM16M23K ⁽¹⁾ | RC16M23K ⁽¹⁾ | 1.80 | 3.20 |
| | | 16-14 | 1.48-2.48 | RM14M30K ⁽¹⁾ | RC14M30K ⁽¹⁾ | 2.30 | 3.20 |
| | Stamped & Formed reeled contacts See note ⁽²⁾ for loose piece | 26-24 | 0.13-0.25 | SM24M1TK6 ⁽¹⁾⁽²⁾ | SC24M1TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20M1TK6 ⁽¹⁾⁽²⁾ | SC20M1TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | | 18-16 | 0.80-1.48 | SM16M1TK6 ⁽¹⁾⁽²⁾ | SC16M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 |
| | | 18-16 | 0.80-1.48 | SM16M11TK6 ⁽¹⁾⁽²⁾ | SC16M11TK6 ⁽¹⁾⁽²⁾ | – | 3.00 |
| | 14 | 2.48 | SM14M1TK6 ⁽¹⁾⁽²⁾ | SC14M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 | |
| PCB | Machined ⁽³⁾ | – | | RM20M12E83K ⁽¹⁾ | RC20M12E84K ⁽¹⁾ | – | – |
| Coaxial | Cable multipiece | see pages 133 to 134 | | RMDXK10D28 | RCDXK1D28 | – | – |
| | Cable monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| | Twisted pair multipiece | | | RMDXK10D28 + yorx090 | RCDXK1D28 + yorx090 | – | – |
| | Twisted pair monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – |
| Fiber optic | POF contacts (Plastic Optical Fiber) | – | | RMPOF1000 | RCPOF1000B | – | – |
| Handsold | Loaded in the connector | 14-18 | 2.48-0.80 | – | – | – | – |

(1): Example of plating, for other plating see page 129 (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 136 or 137

Electrical characteristics

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

UTGX 1412 derating curves



Derating curves based on continuous current application.

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

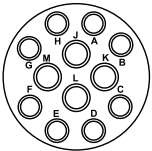
2



Connector part number

UTGX 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 |
| Hand solder electrical contacts loaded see page 104 | Square flange receptacle | Without (Fig. 1) | UTGX014E12P | UTGX014E12S |
| | Plug | Without (Fig. 2) | UTGX614E12P | UTGX614E12S |
| | | Cable gland (Fig. 3) | UTGX6JC14E12P | UTGX6JC14E12S |
| PCB contacts loaded see page 104 | Jam nut receptacle | Without (Fig. 4) | UTGX714E12P | UTGX714E12S |
| | Square flange receptacle | Without (Fig. 2) | UTGX014D12P | UTGX014D12S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig. 5) | UTGX714D12P | UTGX714D12S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 6) | UTGX714D12P32 | UTGX714D12S32 |
| | | | | |
| | | | | |

For discrimination/keying methods see page 154

Sealed unmatred

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|------------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 12x1.5 | HAUTGX14E12PST1M | HAUTGX14E12SST1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 12x1.5 | HAUTGX14E12PRA1M | HAUTGX14E12SRA1M |

(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

2

Square flange receptacle - UTGX0

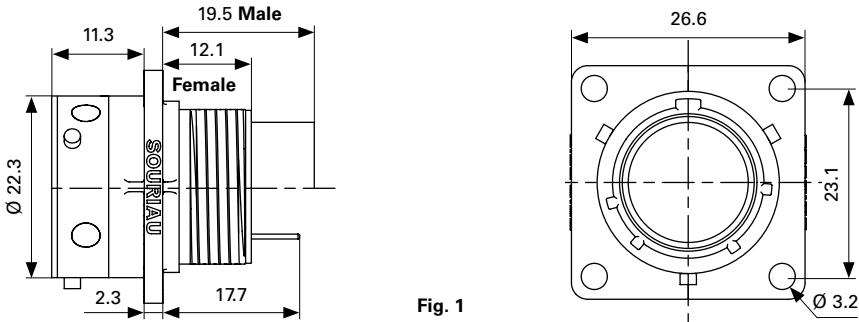


Fig. 1

Plug - UTGX6 & UTGX6JC

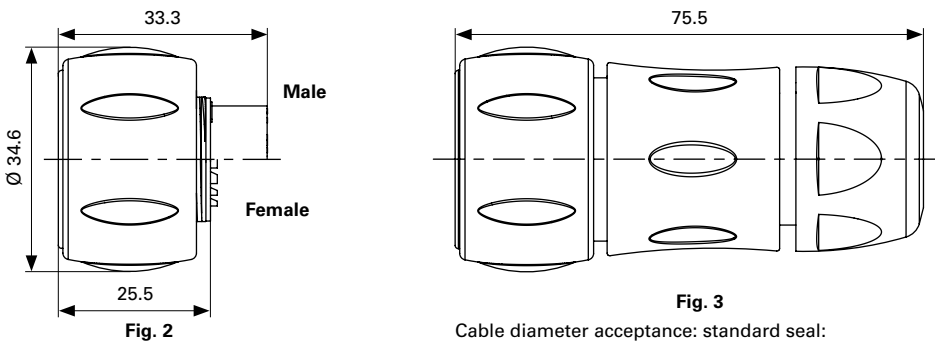
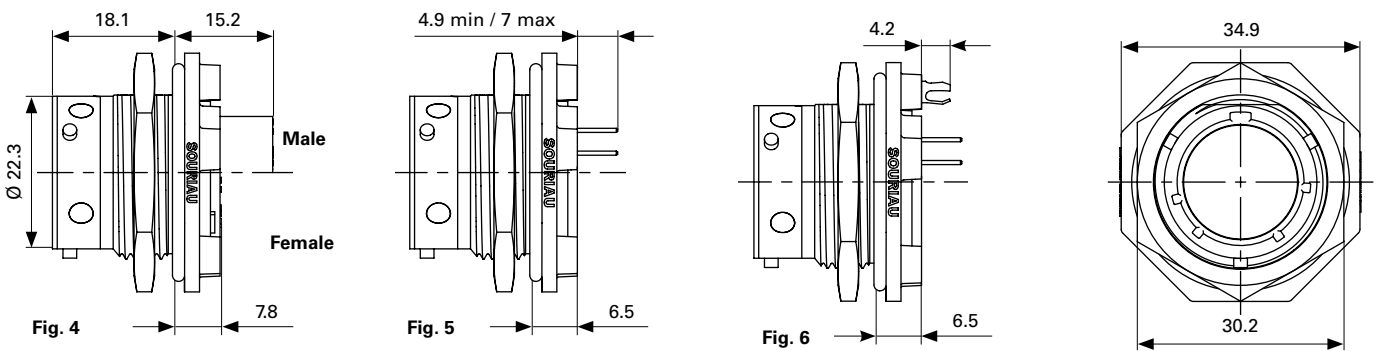


Fig. 3

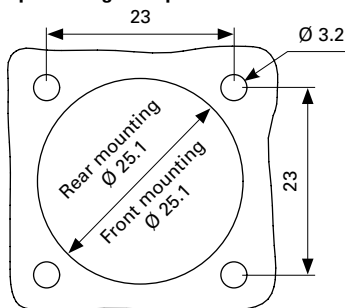
Cable diameter acceptance: standard seal: from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Jam nut receptacle UTGX7

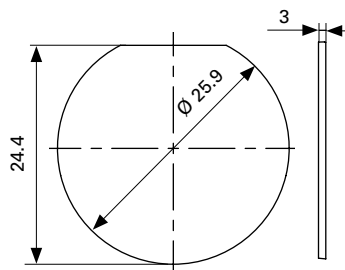


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



Accessories

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX14DCG |
| IP68/69K - Metal terminal | UTGX14DCGR |

2

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX14DCGE |

Plug sealing cap



| Description | Part number |
|-------------|--------------|
| IP68/69K | 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 (mm ²) | Wire stripping length (mm) |
|--------------|-------------------------------------|----------------------------|------------------------|-------------------------------------|----------------------------|
| #16 | Hand solder Loaded in the connector | Min 0.4μ gold over 0.8μ Ni | 18 - 14 | 0.823 - 2.08 | 5 |
| | PCB Machined ⁽¹⁾ | 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 | 0.32 - 0.75 | 3.8 |
| | PCB Machined ⁽¹⁾ | Min 0.4μ gold over 0.8μ Ni | — | — | — |

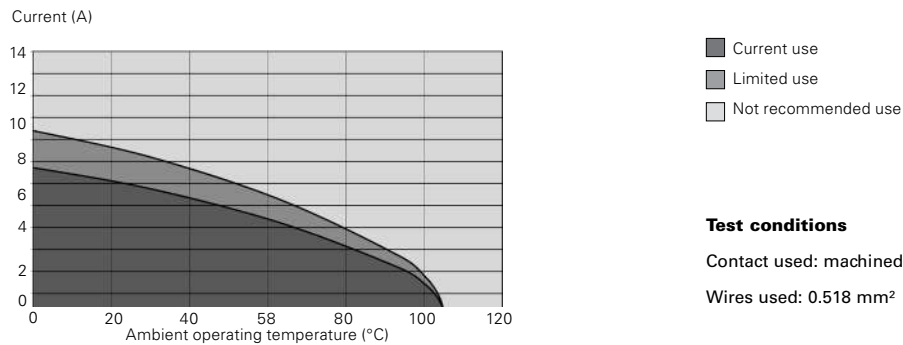
(1): For dimensions see pages 136 or 137

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

UTGX 14E12/14D12 derating curves



Test conditions
 Contact used: machined contacts
 Wires used: 0.518 mm²

Derating curves based on continuous current application.

1492 (Shell size 14, 12x#16)

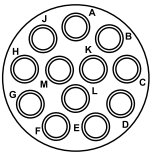


2

Connector part number

UTGX 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 109 | Square flange receptacle | Without (Fig. 1) | UTGX01492P | UTGX01492S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC1492P | UTGX0JC1492S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC1492P | UTGX1JC1492S |
| | Plug | Without (Fig. 4) | UTGX61492P | UTGX61492S |
| | | Cable gland (Fig. 5) | UTGX6JC1492P | UTGX6JC1492S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX71492P | UTGX71492S |
| PCB contacts supplied separately see page 109 | Square flange receptacle | Without (Fig. 1) | UTGX01492P | UTGX01492S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX71492P | UTGX71492S |

For discrimination/keying methods see page 154

2

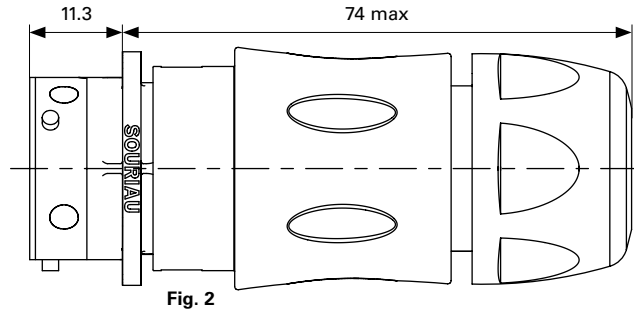
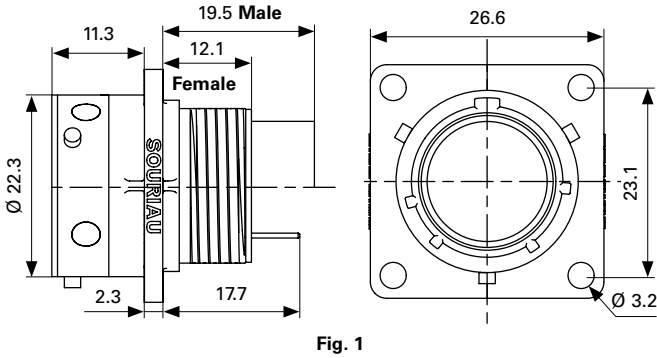
Connectors

1492 (Shell size 14, 12x#16)

Dimensions in mm (For mated connector lengths see page 145)

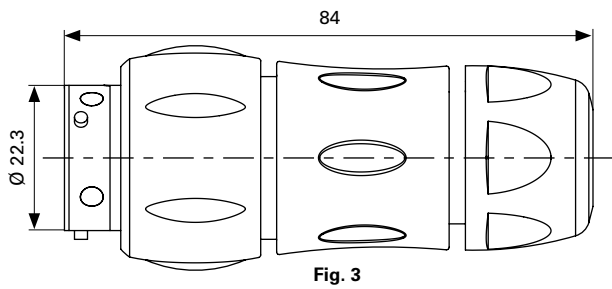
2

Square flange receptacle - UTGX0 and UTGX0JC



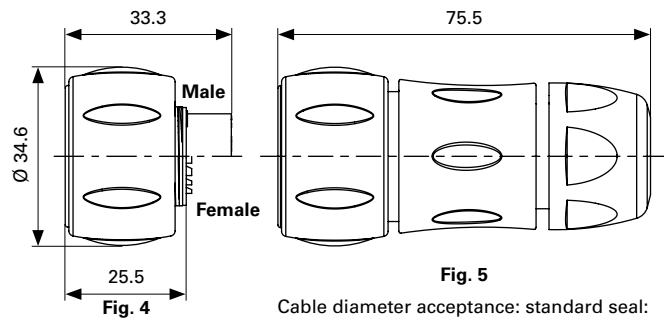
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Free hanging - UTGX1JC



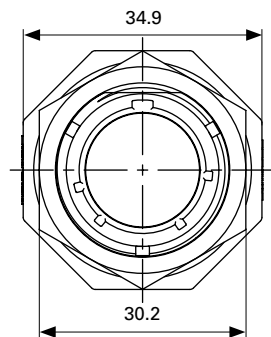
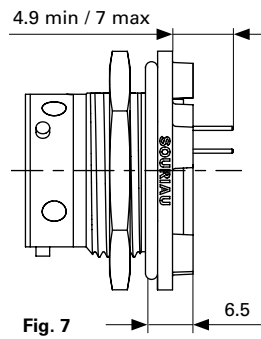
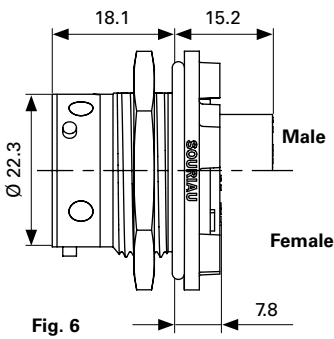
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Plug - UTGX6 & UTGX6JC



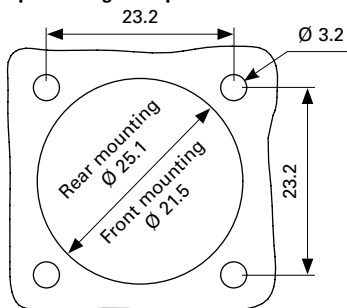
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm,
reduced seal: from 5 mm to 12 mm

Jam nut receptacle UTGX7

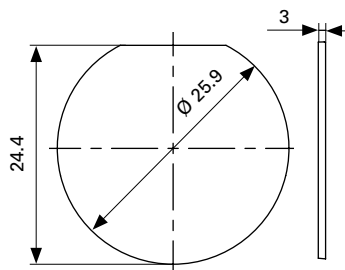


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



Accessories

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX14DCG |
| IP68/69K - Metal terminal | UTGX14DCGR |

2

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX14DCGE |

Plug sealing cap



| Description | Part number |
|-------------|--------------|
| IP68/69K | UTS614DCG133 |

Plastic protective cap



| Part number receptacle cap | Part number plug cap |
|----------------------------|----------------------|
| 8500588A | 8500597 |

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

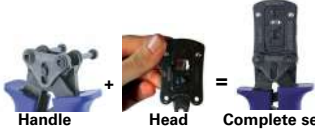
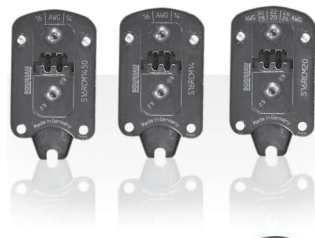
2

Tooling



| Description | Part number |
|---|-----------------|
| Handle (without head) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

Crimp tooling (without Shandles)



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

(1): Example of plating, for other plating options see page 129

* Heads to be used with handle PN: SHANDLES

Extraction tool #16



| Description | Part number |
|-------------------------------------|------------------|
| Fig. 1 | RX2025GE1 |
| Fig. 2 - Long endurance tool | RX2031J |

Contacts #16

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) | |
|-------------------------|--|------------------------|-------------------------------------|------------------------------|------------------------------|----------------------------|----------------------|---|
| Crimp contacts | Machined | 30-26 | 0.48-0.08 | RM28M1K ⁽¹⁾ | RC28M1K ⁽¹⁾ | 0.55 | 1.00 | |
| | | 26-24 | 0.13-0.25 | RM24M9K ⁽¹⁾ | RC24M9K ⁽¹⁾ | 0.80 | 1.58 | |
| | | 20-20 | 0.32-0.52 | RM20M13K ⁽¹⁾ | RC20M13K ⁽¹⁾ | 1.15 | 1.80 | |
| | | 20-20 | 0.32-0.52 | RM20M12K ⁽¹⁾ | RC20M12K ⁽¹⁾ | 1.15 | 2.20 | |
| | | 20-16 | 0.52-1.48 | RM16M23K ⁽¹⁾ | RC16M23K ⁽¹⁾ | 1.80 | 3.20 | |
| | | 16-14 | 1.48-2.48 | RM14M30K ⁽¹⁾ | RC14M30K ⁽¹⁾ | 2.30 | 3.20 | |
| | Stamped & Formed reeled contacts See note ⁽²⁾ for loose piece | 26-24 | 0.13-0.25 | SM24M1TK6 ⁽¹⁾⁽²⁾ | SC24M1TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 | |
| | | 20-20 | 0.32-0.52 | SM20M1TK6 ⁽¹⁾⁽²⁾ | SC20M1TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 | |
| | | 18-16 | 0.80-1.48 | SM16M1TK6 ⁽¹⁾⁽²⁾ | SC16M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 | |
| | | 18-16 | 0.80-1.48 | SM16M11TK6 ⁽¹⁾⁽²⁾ | SC16M11TK6 ⁽¹⁾⁽²⁾ | – | 3.00 | |
| | | 14 | 2.48 | SM14M1TK6 ⁽¹⁾⁽²⁾ | SC14M1TK6 ⁽¹⁾⁽²⁾ | – | 3.20 | |
| | | PCB | Machined ⁽³⁾ | – | RM20M12E83K ⁽¹⁾ | RC20M12E84K ⁽¹⁾ | – | – |
| | | Coaxial | Cable multipiece | see pages 133 to 134 | | RMDXK10D28 | RCDXK1D28 | – |
| Cable monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – | | |
| Twisted pair multipiece | | | RMDXK10D28 + yorx090 | RCDXK1D28 + yorx090 | – | – | | |
| Twisted pair monocrimp | | | RMDX60xxD28 | RCDX60xxD28 | – | – | | |
| Fiber optic | POF contacts (Plastic Optical Fiber) | – | RMPOF1000 | RCPOF1000B | – | – | | |
| Handsold | Loaded in the connector | 14-18 | 2.48-0.80 | – | – | – | – | |

(1): Example of plating, for other plating see page 129

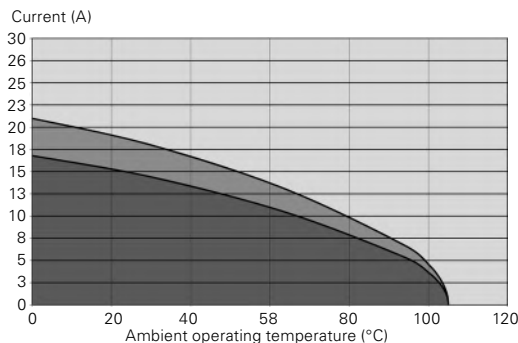
(2): Loose piece contact available by adding "L" after the "M" for the contact size and the plating. Example: SM20M1TK6 becomes SM20ML1TK6

(3): for dimensions see pages 136 or 137

Electrical characteristics

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

UTGX 1412 derating curves



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 1.31 mm²

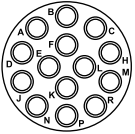
Derating curves based on continuous current application.



Connector part number

UTGX 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 113 | Square flange receptacle | Without (Fig. 1) | UTGX012E14P | UTGX012E14S |
| | Plug | Without (Fig. 2) | UTGX612E14P | UTGX612E14S |
| | | Cable gland (Fig. 3) | UTGX6JC12E14P | UTGX6JC12E14S |
| PCB contacts loaded see page 113 | Jam nut receptacle | Without (Fig. 4) | UTGX712E14P | UTGX712E14S |
| | Square flange receptacle | Without (Fig. 1) | UTGX012D14P | UTGX012D14S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig. 5) | UTGX712D14P | UTGX712D14S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 6) | UTGX712D14P32 | UTGX712D14S32 |

For discrimination/keying methods see page 154

Sealed unmatred

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|------------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 0.5 | H05 VV - F 14x0.5 | HAUTGX12E14PST1M | HAUTGX12E14SST1M |
| Right angle ending | Plug | 0.5 | H05 VV - F 14x0.5 | HAUTGX12E14PRA1M | HAUTGX12E14SRA1M |

(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0

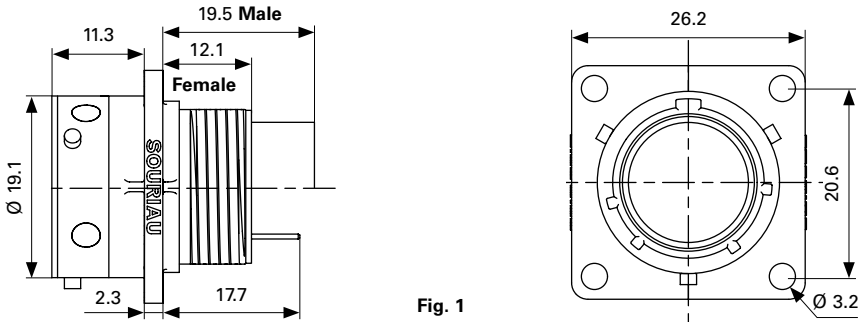


Fig. 1

Plug - UTGX6 & UTGX6JC

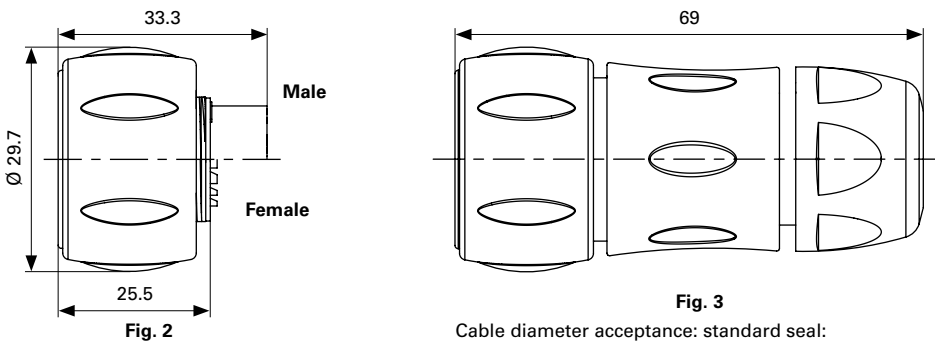


Fig. 3

Cable diameter acceptance: standard seal: from 2.5 mm to 12 mm, reduced seal: from 3 mm to 9 mm

Jam nut receptacle UTGX7

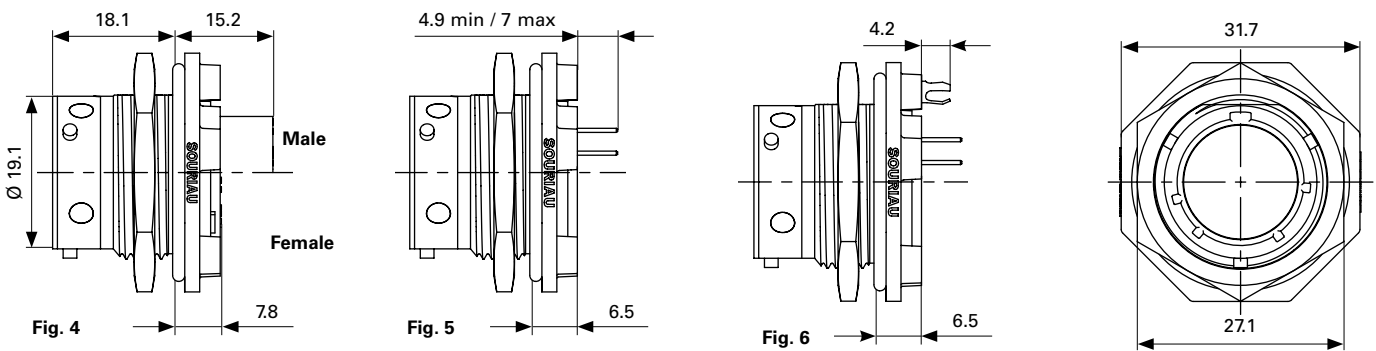


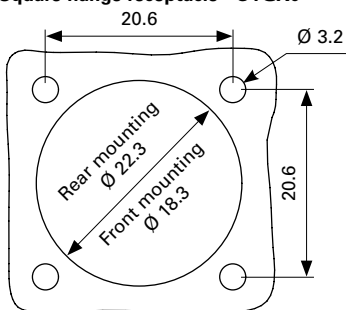
Fig. 4

Fig. 5

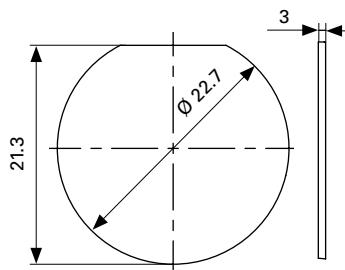
Fig. 6

Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

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

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX12DCG |
| IP68/69K - Metal terminal | UTGX12DCGR |

Plug sealing cap



| Description | Part number |
|-------------|-------------|
| IP68/69K | 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 style | Contact type | Plating | Cable acceptance (AWG) | Wire stripping length (mm) |
|---------------|-------------------------|----------------------------|------------------------|----------------------------|
| Handsold | Loaded in the connector | Min 0.4μ gold over 0.8μ Ni | 20 to 18 | 3.8 |
| PCB | Machined ⁽¹⁾ | Min 0.4μ gold over 0.8μ Ni | – | – |

(1): For dimensions see pages 136 or 137

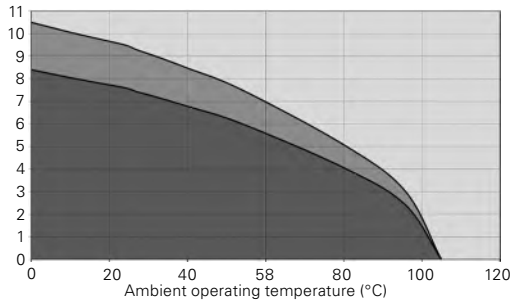
2

Electrical characteristics

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

UTGX 12E4/12D4 derating curves

Current (A)



- Current use
- Limited use
- Not recommended use

Test conditions
 Contact used: machined contacts
 Wires used: 0.518 mm²

Derating curves based on continuous current application.

2

Connectors

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

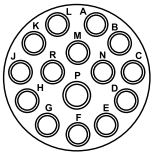
2



Connector part number

UTGX 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 |
| Hand solder electrical contacts loaded see page 117 | Square flange receptacle | Without (Fig. 1) | UTGX014E15P | UTGX014E15S |
| | Plug | Without (Fig. 2) | UTGX614E15P | UTGX614E15S |
| | | Cable gland (Fig. 3) | UTGX6JC14E15P | UTGX6JC14E15S |
| PCB contacts loaded see page 117 | Jam nut receptacle | Without (Fig. 4) | UTGX714E15P | UTGX714E15S |
| | Square flange receptacle | Without (Fig. 2) | UTGX014D15P | UTGX014D15S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig. 5) | UTGX714D15P | UTGX714D15S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 6) | UTGX714D15P32 | UTGX714D15S32 |

For discrimination/keying methods see page 154

Sealed unmated

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|------------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 15x1.5 | HAUTGX14E15PST1M | HAUTGX14E15SST1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 15x1.5 | HAUTGX14E15PRA1M | HAUTGX14E15SRA1M |

(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0

2

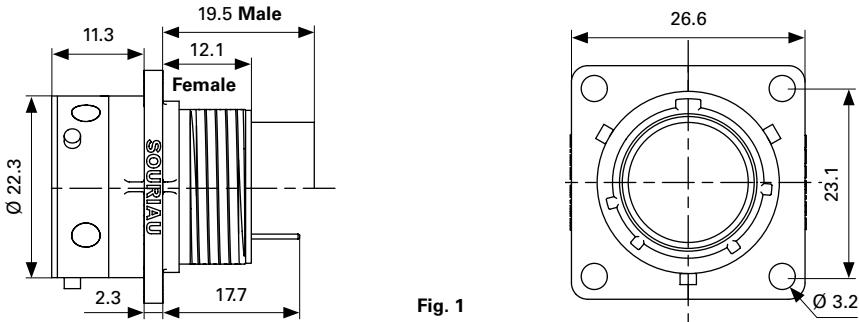


Fig. 1

Plug - UTGX6 & UTGX6JC

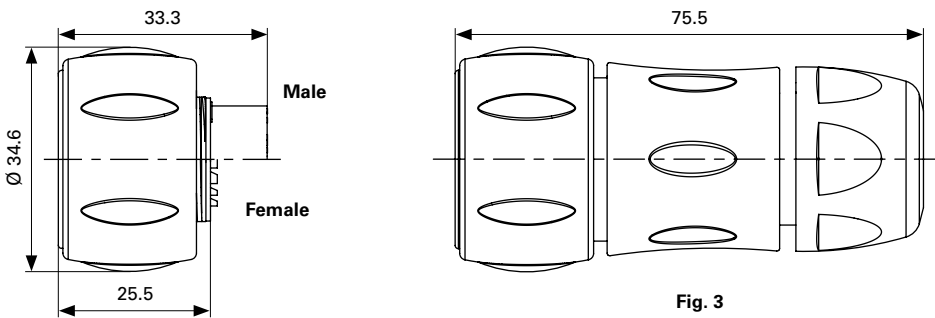


Fig. 2

Fig. 3

Cable diameter acceptance: standard seal: from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Jam nut receptacle UTGX7

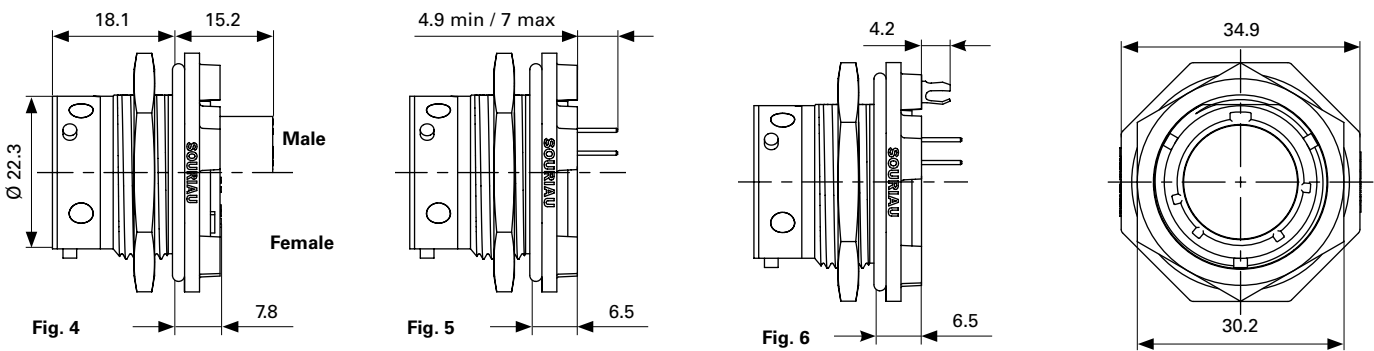


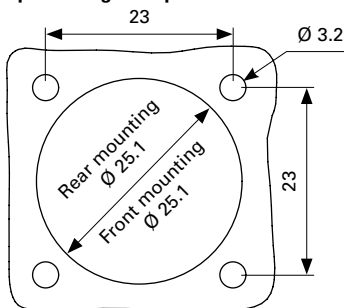
Fig. 4

Fig. 5

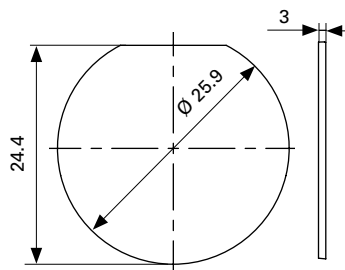
Fig. 6

Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

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

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX14DCG |
| IP68/69K - Metal terminal | UTGX14DCGR |

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX14DCGE |

Plug sealing cap



| Description | Part number |
|-------------|--------------|
| IP68/69K | 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 (mm ²) | Wire stripping length (mm) |
|--------------|-------------------------------------|-------------------------------|------------------------|-------------------------------------|----------------------------|
| #16 | Handsold Loaded in the connector | Min 0.4μ gold over 0.8μ Ni | 18 - 14 | 0.823 - 2.08 | 5 |
| | PCB Machined ⁽¹⁾ | Min 0.4μ gold over 0.8μ Ni | — | — | — |
| #20 | Handsold Loaded in the connector | Min 0.4μ gold over 0.8μ Ni | 20 - 18 | 0.32 - 0.75 | 3.8 |
| | PCB Machined ⁽¹⁾ | Min 0.4μ gold over 0.8μ Ni | — | — | — |

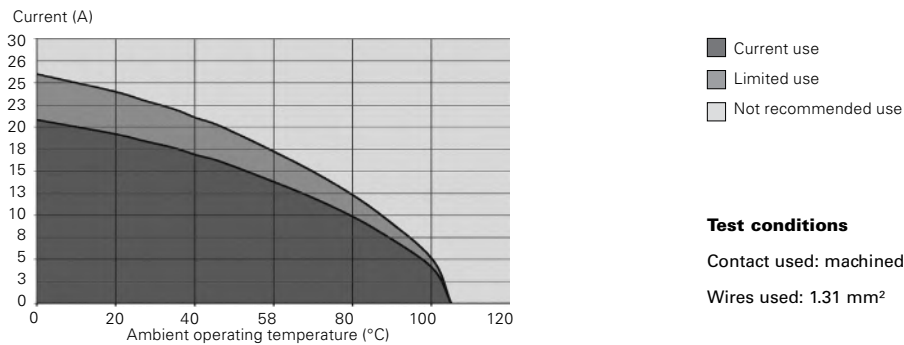
(1): For dimensions see pages 136 or 137

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

UTGX 14E15/14D15 derating curves



Test conditions

Contact used: machined contacts

Wires used: 1.31 mm²

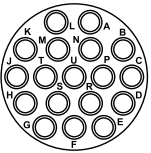
Derating curves based on continuous current application.



Connector part number

UTGX 14E18/14D18

18 contacts
4A/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 121 | Square flange receptacle | Without (Fig. 1) | UTGX014E18P | UTGX014E18S |
| | Plug | Without (Fig. 2) | UTGX614E18P | UTGX614E18S |
| | | Cable gland (Fig. 3) | UTGX6JC14E18P | UTGX6JC14E18S |
| PCB contacts loaded see page 121 | Jam nut receptacle | Without (Fig. 4) | UTGX714E18P | UTGX714E18S |
| | Square flange receptacle | Without (Fig. 2) | UTGX014D18P | UTGX014D18S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig. 5) | UTGX714D18P | UTGX714D18S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 6) | UTGX714D18P32 | UTGX714D18S32 |
| | | | | |
| | | | | |

For discrimination/keying methods see page 154

Sealed unmatred

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|-------------------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 0.5 | H05 VV - F 18x0.5 | HAUTGX14E18PST1M | HAUTGX14E18SST1M |
| Right angle ending | Plug | 0.5 | H05 VV - F 18x0.5 | HAUTGX14E18PRA1M | HAUTGX14E18SRA1M |

(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0

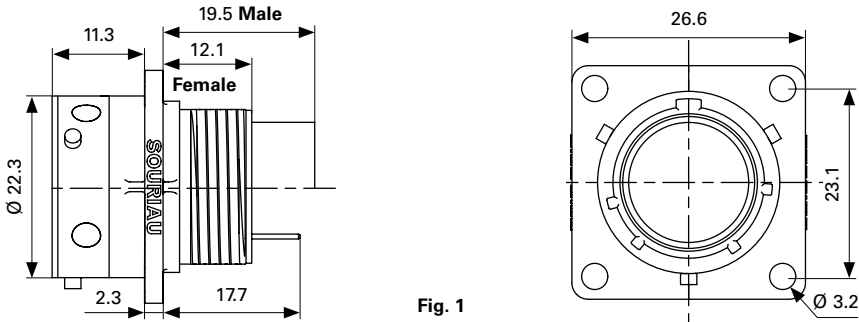


Fig. 1

Plug - UTGX6 & UTGX6JC

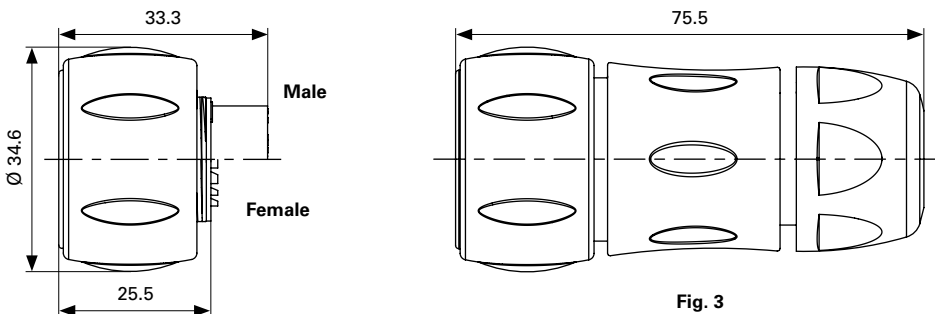


Fig. 2

Fig. 3

Cable diameter acceptance: standard seal: from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Jam nut receptacle UTGX7

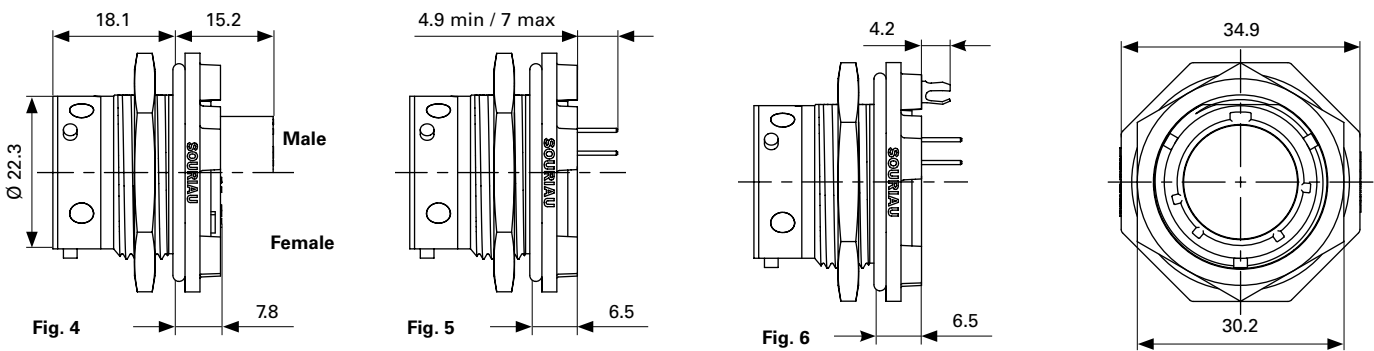


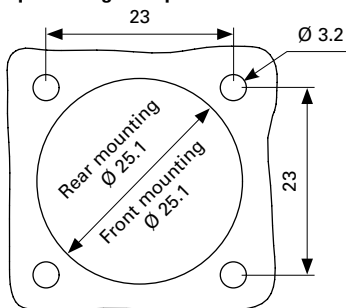
Fig. 4

Fig. 5

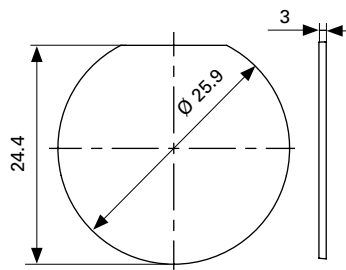
Fig. 6

Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

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

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX14DCG |
| IP68/69K - Metal terminal | UTGX14DCGR |

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX14DCGE |

Plug sealing cap



| Description | Part number |
|-------------|--------------|
| IP68/69K | UTS614DCG133 |

Plastic protective cap



| Part number receptacle cap | Part number plug cap |
|----------------------------|----------------------|
| 8500588A | 8500597 |

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 (mm ²) | Wire stripping length (mm) |
|--------------|-------------------------------------|----------------------------|------------------------|-------------------------------------|----------------------------|
| #20 | Hand solder Loaded in the connector | Min 0.4μ gold over 0.8μ Ni | 20 - 18 | 0.32 - 0.75 | 3.8 |
| | PCB Machined ⁽¹⁾ | Min 0.4μ gold over 0.8μ Ni | — | — | — |

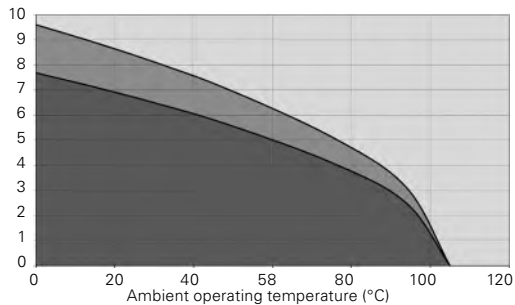
(1): For dimensions see pages 136 or 137

Electrical characteristics

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

UTGX 14E18/14D18 derating curves

Current (A)



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 0.518 mm²

Derating curves based on continuous current application.



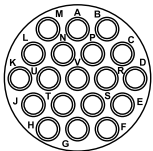
Connector part number

UTGX 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 126 | Square flange receptacle | Without (Fig. 1) | UTGX01419P | UTGX01419S |
| | Square flange receptacle | Cable gland (Fig. 2) | UTGX0JC1419P | UTGX0JC1419S |
| | Free hanging receptacle | Cable gland (Fig. 3) | UTGX1JC1419P | UTGX1JC1419S |
| | Plug | Without (Fig. 4) | UTGX61419P | UTGX61419S |
| PCB contacts supplied separately see page 126 | Square flange receptacle | Without (Fig. 1) | UTGX01419P | UTGX01419S |
| | | Cable gland (Fig. 5) | UTGX6JC1419P | UTGX6JC1419S |
| | Jam nut receptacle | Without (Fig. 6) | UTGX71419P | UTGX71419S |
| Handsolder electrical contacts loaded see page 126 | Square flange receptacle | Without (Fig. 1) | UTGX014E19P | UTGX014E19S |
| | Plug | Without (Fig. 4) | UTGX614E19P | UTGX614E19S |
| | | Cable gland (Fig. 5) | UTGX6JC14E19P | UTGX6JC14E19S |
| PCB contacts loaded | Square flange receptacle | Without (Fig. 3) | UTGX014D19P | UTGX014D19S |
| | Jam nut receptacle with stand off and without hold down clip | Without (Fig.7) | UTGX714D19P | UTGX714D19S |
| | Jam nut receptacle with stand off and with hold down clips | Without (Fig. 8) | UTGX714D19P32 | UTGX714D19S32 |

For discrimination/keying methods see page 154

Sealed unmatd

Overmoulded cable assembly part numbers

| Overmoulding type | Connector type | Wire size (mm ²) | Harmonized cable part number ⁽¹⁾ | Part number (length: 1 m.)* | |
|--------------------|----------------|------------------------------|---|-----------------------------|-------------------------|
| | | | | Male plug | Female plug |
| Straight ending | Plug | 1.5 | H05 VV - F 7x1.5 | HAUTGX1419PST1M | HAUTGX1419SST1M |
| | | | | HAUTGX14E19PRA1M | HAUTGX14E19SRA1M |
| Right angle ending | Plug | 1.5 | H05 VV - F 7x1.5 | HAUTGX1419PRA1M | HAUTGX1419SRA1M |
| | | | | HAUTGX14E19PRA1M | HAUTGX14E19SRA1M |

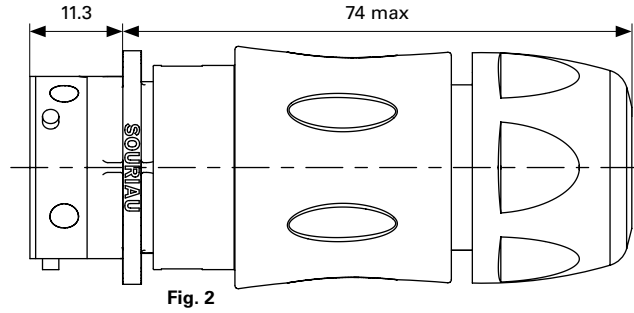
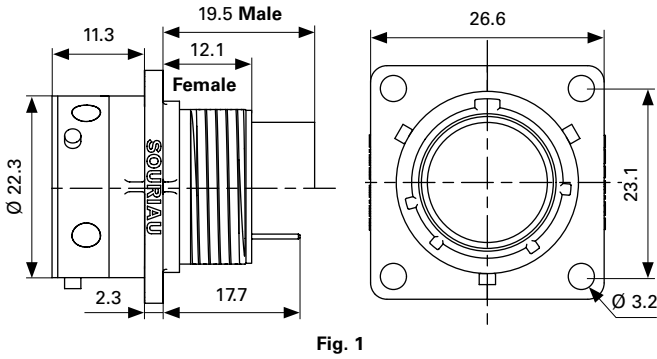
(1) Other cable available on demand

* Other lengths available on demand

Note: Overmoulded cable assembly dimensions available page 145

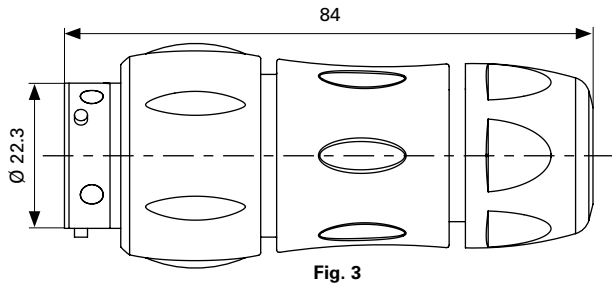
Dimensions in mm (For mated connector lengths see page 145)

Square flange receptacle - UTGX0 and UTGX0JC



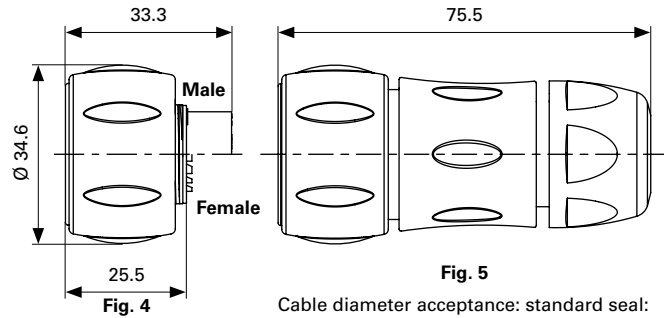
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Free hanging - UTGX1JC



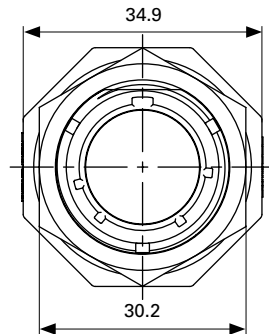
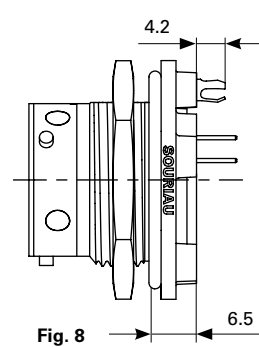
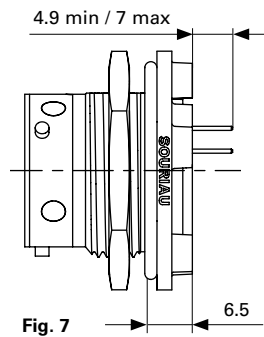
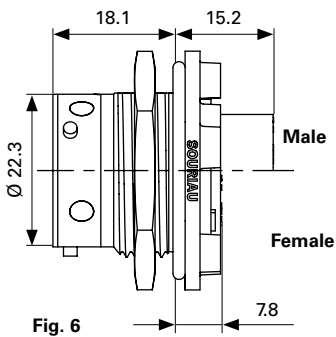
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm, reduced seal: from 5 mm to 12 mm

Plug - UTGX6 & UTGX6JC



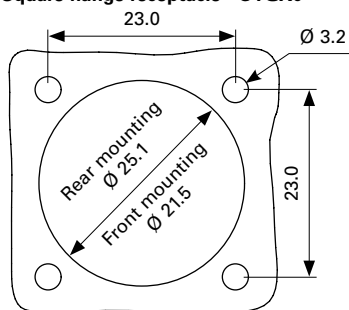
Cable diameter acceptance: standard seal:
from 7 mm to 14 mm,
reduced seal: from 5 mm to 12 mm

Jam nut receptacle UTGX7

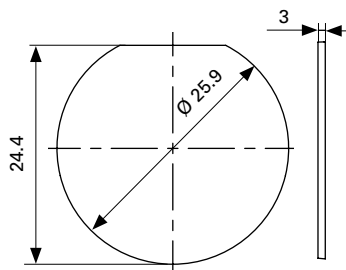


Panel cut out

Square flange receptacle - UTGX0



Jam nut receptacle - UTGX7



2

Connectors

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

Accessories

2

Jam nut & free hanging receptacle sealing caps



| Description | Part number |
|---------------------------|-------------|
| IP68/69K | UTGX14DCG |
| IP68/69K - Metal terminal | UTGX14DCGR |

Square flange sealing cap



| Description | Part number |
|---------------------------|-------------|
| IP68/69K - Metal terminal | UTGX14DCGE |

Plug sealing cap



| Description | Part number |
|-------------|--------------|
| IP68/69K | 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



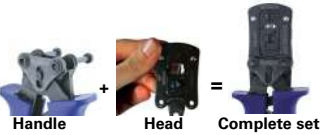
| Description | Part number |
|---|-----------------|
| Handle (without head) | Shandles |
| Box containing handle and several crimp tooling | Toolkit |

Crimp tooling (without Shandles)



| Contact size | Contacts | Part number of Head |
|------------------------------------|-------------------------------------|---------------------|
| Standard contacts #20 Ø 1 mm | RM/RC 24W3K⁽¹⁾ | S20RCM* |
| | RM/RC 20W3K⁽¹⁾ | S20RCM* |
| | RM/RC 18W3K⁽¹⁾ | S20RCM* |
| | SM/SC 24WL3⁽¹⁾⁽²⁾ | S20SCM20* |
| | SM/SC 20WL3⁽¹⁾⁽²⁾ | S20SCM20* |

(1): Example of plating, for other plating options see page 129
 (2): Loose contact
 * Heads to be used with handle PN: SHANDLES



Extraction tool #20



| Description | Part number |
|--------------|----------------|
| Contacts #20 | RX20D44 |

Contacts #20

2

| Contact style | Contact type | Cable acceptance (AWG) | Cable acceptance (mm ²) | Part number Male | Part number Female | Max wire Ø (mm) | Max insulator Ø (mm) |
|----------------|---|------------------------|-------------------------------------|------------------------------------|------------------------------------|-----------------|----------------------|
| Crimp contacts | Machined | 26-24 | 0.13-0.25 | RM24W3K | RC24W3K | 0.80 | 1.58 |
| | | 20-20 | 0.32-0.52 | RM20W3K | RC20W3K | 1.15 | 1.80 |
| | | 20-18 | 0.52-0.80 | RM18W3K | RC18W3K | 1.30 | 2.10 |
| | Stamped & Formed reeled contacts See note (2) for loose piece | 26-24 | 0.13-0.25 | SM24W3TK6 ⁽¹⁾⁽²⁾ | SC24W3TK6 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 26-24 | 0.13-0.25 | SM24W3S26 ⁽¹⁾⁽²⁾ | SC24W3S25 ⁽¹⁾⁽²⁾ | – | 0.90-1.58 |
| | | 20-20 | 0.32-0.52 | SM20W3TK6 ⁽¹⁾⁽²⁾ | SC20W3TK6 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| | | 20-20 | 0.32-0.52 | SM20W3S26 ⁽¹⁾⁽²⁾ | SC20W3S25 ⁽¹⁾⁽²⁾ | – | 1.20-2.10 |
| PCB | Machined ⁽³⁾ | – | – | RMW5016K | RCW5016K | – | – |

(1): Example of plating, for other plating see page 129

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

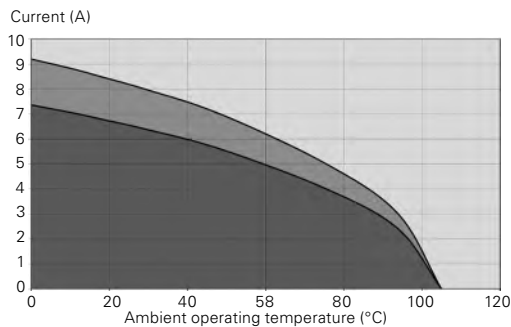
(3): for dimensions see pages 136 or 137

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

Electrical characteristics

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

UTGX 1419 - 14E19/14D19 derating curves



- Current use
- Limited use
- Not recommended use

Test conditions

Contact used: machined contacts

Wires used: 0.518 mm²

Derating curves based on continuous current application.

3

Contacts

Description

Trim Trio® contacts offer the unique feature of using the same contact style in any layout, with the same active part size (i.e. #20, #16, #12, etc.). This provides an easy solution allowing you to use only one type of contact to equip all of your Souriau connectors designed for Trim Trio® contacts.

3

Please note that the **UTGX 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.

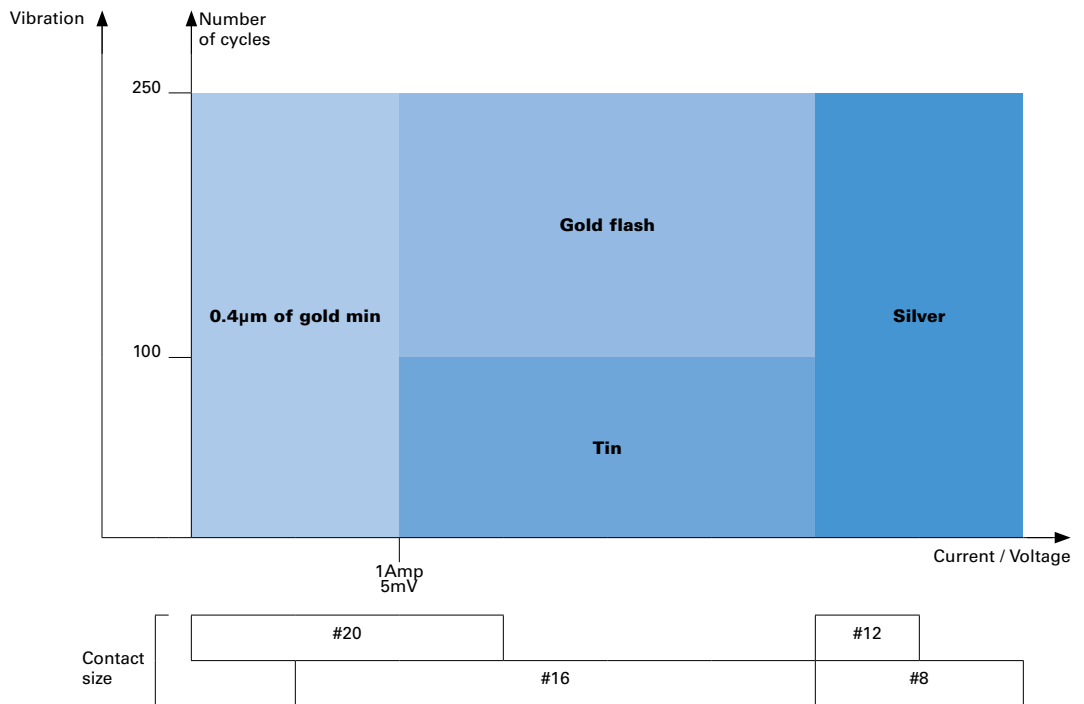


Machined contacts



Stamped & Formed contacts

Contact plating selector guide



Once the contact size has been selected, the next step is to decide on which type to use. **Eaton** offers two main types of electrical contacts:

- Machined
- Stamped & Formed

Machined contacts are generally chosen as a better solution for power applications or when lower quantities are needed.

Stamped & Formed contacts offer the ability to be crimped

automatically which makes them more suitable for high volume production applications.

The next decision to make is: What plating should I choose? The graph can help guide you

to recommendations based on application, mating cycles and current/voltage needs.

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 1 mm | K | 0.4µm Gold over 2µm Nickel min |
| #16 Ø 1.6 mm | 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 2.4 mm | A | 2µm Nickel + 2µm Ag |
| | K | 0.4µm Gold over 2µm Nickel min |
| #8 Ø 3.6 mm | A | 2µm Nickel + 2µm Ag |

Stamped & Formed contacts

| Contact size | Plating code | Plating description | |
|-----------------|--------------|-----------------------------|--|
| | | Active area | Other area |
| #20 Ø 1 mm | 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 1.6 mm | 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 |
|---|--------------------|------------|
| Electrical characteristics: contact resistance | | |
| #20 Ø 1 mm | Machined | < 6mΩ |
| | Stamped and Formed | < 6mΩ |
| #16 Ø 1.6 mm | Machined | < 3mΩ |
| | Stamped and Formed | < 6mΩ |
| #12 Ø 2.4 mm | Machined | < 5mΩ |
| #8 Ø 3.6 mm | Machined | < 5mΩ |

3

Contacts

Packaging

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 1 mm) & #16 (Ø 1.6 mm)

3

Stamped & Formed contacts



| Description | Number |
|---------------|--------------|
| Loose package | 25 pieces |
| Reeled | 3,000 pieces |

Machined contacts



| Description | Number |
|----------------------|--------------|
| Bulk package | 48 pieces |
| Bulk package | 1,000 pieces |
| Reeled size #16 only | 2,000 pieces |

Contacts machined size #12 (Ø 2.4 mm) & #8 (Ø 3.6 mm)

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 | | Part number | | Max insulator Ø (mm) | Available plating see page 129 | |
|------------------|------------------|-----------|-----------------|------------------|--------------------|----------------------|-----------------------------------|----------|
| | | AWG | mm ² | Male | Female | | | |
| #20 Ø 1 mm | Machined | 26-24 | 0.13-0.20 | RM24W3K | RC24W3K | 1.58 max | K | |
| | Stamped & Formed | 26-24 | 0.13-0.25 | SM24W3-(1) | SC24W3-(1) | 0.89-1.58 | TK6 S25 (female) S26 (male) | |
| | | | | SM24WL3-(2) | SC24WL3-(2) | | | |
| | Machined | 20-20 | 0.32-0.52 | RM20W3K | RC20W3K | 1.58 max | K | |
| | | | | Stamped & Formed | 20-20 | | | 0.35-0.5 |
| | | | | | | SM20WL3-(2) | SC20WL3-(2) | |
| | #16 Ø 1.6 mm | Machined | 30-26 | 0.05-0.08 | RM28M1- | RC28M1- | 1.1 | K, J |
| | | Machined | 26-24 | 0.13-0.2 | RM24M9- | RC24M9- | 1.6 | K, J |
| Stamped & Formed | | 26-24 | 0.13-0.25 | SM24M1-(1) | SC24M1-(1) | 0.89-1.58 | S31, S18, TK6 | |
| | | | | SM24ML1-(2) | SC24ML1-(2) | | | |
| Machined | | 20-20 | 0.32-0.52 | RM20M13- | RC20M13- | 1.8 | K, J | |
| | | | | RM20M12- | RC20M12- | | | 2.2 |
| Stamped & Formed | | 20-20 | 0.35-0.5 | SM20M1-(1) | SC20M1-(1) | 1.17-2.08 | S31, S18, TK6 | |
| | | | | SM20ML1-(2) | SC20ML1-(2) | | | |
| Machined | | 18-16 | 0.92-1.5 | RM16M23- | RC16M23- | 3.2 | K, J | |
| Stamped & Formed | | 18-16 | 0.8-1.5 | SM16M1-(1) | SC16M1-(1) | No insulation grip | S31, S18, TK6 | |
| | | | | SM16ML1-(2) | SC16ML1-(2) | | | |
| Stamped & Formed | | 18-16 | 0.8-1.5 | SM16M11-(1) | SC16M11-(1) | 2.08-3.0 | S31, S18, TK6 | |
| | | | | SM16ML11-(2) | SC16ML11-(2) | | | |
| Machined | 16-14 | 1.5-2.5 | RM14M30- | RC14M30- | 3.2 | K, J | | |
| Stamped & Formed | 14 | 2.0-2.5 | SM14M1-(1) | SC14M1-(1) | No insulation grip | S31, S18, TK6 | | |
| | | | SM14ML1-(2) | SC14ML1-(2) | | | | |
| #12 Ø 2.4 mm | Machined | 20 | 0.13-0.4 | 82911457N- | 82911456- | 4.0 | A, K | |
| | | 20 | 0.5 | 82911459N- | 82911458- | | | |
| | | 18 | 0.75-1.0 | 82911461N- | 82911460- | | | |
| | | 16 | 1.5 | 82911463N- | 82911462- | | | |
| | | 14 | 2.5 | 82911465N- | 82911464- | | | |
| | | 12 | 4 | 82911467N- | 82911466- | | | |
| #8 Ø 3.6 mm | Machined | 16 | 1.5 | 82913601A | 82913600A | 6.3 | A | |
| | | 14 | 2.5 | 82913603A | 82913602A | | | |
| | | 12 | 4 | 82913605A | 82913604A | | | |
| | | 10 | 6.0 | 82913607A | 82913606A | | | |
| | | 8 | 10.0 | 82913609A | 82913608A | | | |

(1) contact reeled

(2) loose contact

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

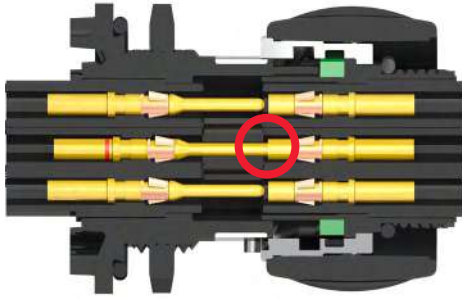
3

3

Contacts

Crimp contacts

3



First mate, last break male contacts

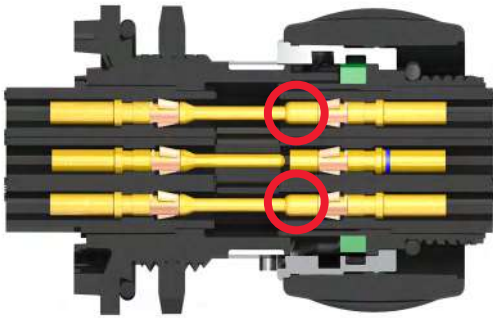
Description

The layouts UTGX103, UTGX124, UTGX12E4/12D4, UTGX142G1, UTGX147 and UTGX14E7/14D7 are already designed to have a first mate, last brake 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 | | Part number | Max wire Ø (mm) | Max insulator Ø (mm) | Color band | | Available plating see p. 129 |
|-------------------------------|----------|-----------|-----------------|--------------------|-----------------|----------------------|------------|--------|------------------------------|
| | | AWG | mm ² | | | | Male | Female | |
| #16 Ø 1.6 mm | Machined | 30-26 | 0.05-0.08 | RM28M1GE1K | 0.55 | 1.0 | - | Red | K |
| | | 26-24 | 0.13-0.2 | RM24M9GE1K | 0.8 | 1.6 | Red | Red | |
| Longer male contact (+1mm) | Machined | 20-20 | 0.32-0.52 | RM20M12GE1K | 1.15 | 2.2 | Blue | Red | |
| | | 18-16 | 0.92-1.5 | RM16M23GE1K | 1.8 | 3.2 | - | Red | |
| | | 16-14 | 1.5-2.5 | RM14M30GE1K | 2.26 | - | - | Red | |



Last break, first mate female contacts

Description

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 | | Part number | Max wire Ø (mm) | Max insulator Ø (mm) | Color band | | Available plating see p. 129 |
|-------------------------------------|----------|-----------|-----------------|--------------------|-----------------|----------------------|------------|------|------------------------------|
| | | AWG | mm ² | | | | Female | Male | |
| #16 Ø 1.6 mm | Machined | 30-26 | 0.05-0.08 | RC28M1GE7K | 0.55 | 1.0 | - | Blue | K |
| | | 26-24 | 0.13-0.2 | RC24M9GE7K | 0.8 | 1.6 | Red | Blue | |
| Shorter female contact (-0.7 mm) | Machined | 20-20 | 0.32-0.52 | RC20M13GE7K | 1.15 | 1.8 | Black | Blue | |
| | | 20-20 | 0.32-0.52 | RC20M12GE7K | 1.15 | 2.2 | Blue | Blue | |
| | | 18-16 | 0.92-1.5 | RC16M23GE1K | 1.8 | 3.2 | - | Blue | |
| | | 16-14 | 1.5-2.5 | RC14M30GE1K | 2.26 | - | - | Blue | |

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

Monocrimp coaxial contact



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

3

Multipiece crimp coaxial contact



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

Suitable for coaxial cable or twisted cable



- For jacket diameter from 1.78 to 3.05 mm. Inner conductor up to 2.42 mm diameter



- For jacket diameter from 0.64 to 1.45 mm. 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

3

| Cable type | Impe- dance | Contact type | Ø over jacket | | Ø over dielectric | | Inner cond size Ø outer braid | | Male contact kit for coaxial cable | Female contact kit for coaxial cable | | |
|-------------------------------|----------------|-----------------|------------------|----------|----------------------|--------|----------------------------------|--------|--|--|-------------|-------------|
| | | | inch | mm | inch | mm | Ext. Ø mm | inch | | | mm | |
| RG161/U | 75 | Multi piece | 0.09" | 2.29 | 0.057" | 1.45 | — | — | — | RMDXK10D28 | RCDXK1D28 | |
| RG179A/U | 75 | | 0.105" | 2.67 | 0.063" | 1.6 | 0.3 | 0.084" | 2.13 max | | | |
| RG179B/U | 75 | | 0.105" | 2.67 | 0.063" | 1.6 | 0.3 | 0.084" | 2.13 max | | | |
| RG187/U | 75 | | 0.11" | 2.79 max | 0.06" | 1.52 | 0.3 | — | — | | | |
| RG188/U | 48 | | 0.11" | 2.79 max | 0.06" | 1.52 | 0.51 | 0.078" | 1.98 max | | | |
| RG174/U | 48 | | 0.11" | 2.92 | 0.06" | 1.52 | 0.48 | 0.088" | 2.24 max | | | |
| AMPHENOL 21–598 | 48 | | 0.105" | 2.67 | 0.06" | 1.52 | 0.48 | — | — | | | |
| RG196/U | 48 | | 0.08" | 2.03 max | 0.034" | 0.086 | 0.3 | — | — | | | |
| RG152A/U | 48 | | 0.075" | 1.91 | 0.034" | 0.84 | 0.3 | 0.054" | 1.37 max | | | |
| RG188A/U | 48 | Mono crimp | 0.110" | 2.79 | 0.06" | 1.52 | 0.51 | 0.078" | 1.98 max | RMDX6036D28 | RCDX6036D28 | |
| KX21TVT (europe) RG152 B/U | 48 | | 0.075" | 1.91 | 0.034" | 0.84 | 0.3 | 0.054" | 1.37 max | RMDX6034D28 | RCDX6034D28 | |
| RG152 / BU | 48 | | 0.075" | 1.91 | 0.034" | 0.84 | 0.3 | 0.054" | 1.37 max | RMDX6050D28 | RCDX6016D28 | |
| RG174/U | 48 | | 0.115" | 2.92 | 0.06" | 1.52 | 0.48 | 0.088" | 2.24 max | RMDX6032D28 | RCDX6032D28 | |
| RG188A/U | 48 | | 0.11" | 2.79 | 0.06" | 1.52 | 0.51 | 0.078" | 1.98 max | RMDX6036D28 | RCDX6036D28 | |
| RG316/U | 48 | | 0.107" | 2.72 | 0.06" | 1.52 | 0.51 | 0.078" | 2.05 max | RMDX6036D28 | RCDX6036D28 | |
| raychem 5024A3111 | 48 | | 0.12" | 3.05 | 0.083" | 2.11 | 0.64 | 0.097" | 2.46 | RMDX6052D28 | RCDX6052D28 | |
| raychem 5026e1614 | 48 | | 0.083" | 2.11 | 0.05" | 1.27 | 0.48 | 0.067" | 1.7 | RMDX6036D28 | RCDX6036D28 | |
| surprenant pn 8134 | — | | Multi piece | 0.1" | 2.54 | 0.058" | 1.47 | 0.3 | — | — | RMDXK10D28 | RCDXK1D28 |
| PRD PN 247AS- C1123–001 | — | | Mono crimp | 0.103" | 2.62 | 0.06" | 1.52 | 0.51 | 0.078" | 1.98 | RMDX6018D28 | RCDX6018D28 |
| PRD PN 247AS–C1251 | — | | | 0.092" | 2.34 | 0.05" | 1.27 | 0.64 | 0.067" | 1.7 | RMDX6018D28 | RCDX6018D28 |
| JUDD C15013010902 | — | | | 0.087" | 2.13 | 0.05" | 1.27 | 0.48 | 0.066" | 1.67 | RMDX6036D28 | RCDX6036D28 |
| CDC PIN22939200 | — | | | 0.09" | 2.29 | 0.048" | 1.20 | 0.3 | 0.064" | 1.63 | RMDX6046D28 | RCDX6016D28 |
| CDC PIN22939200 | — | 0.09" | | 2.29 | 0.048" | 1.20 | 0.3 | 0.064" | 1.63 | RMDX6050D28 | RCDX6016D28 | |
| CDC PIN245670000 | — | 0.104" | | 2.64 | 0.067" | 1.7 | 0.3 | 0.083" | 2.11 | RMDX6050D28 | RCDX6016D28 | |
| ampex | — | 0.114" | | 2.9 | 0.075" | 1.91 | 0.36 | 0.09" | 1.29 | RMDX6032D28 | RCDX6032D28 | |
| TI PN 920580 | — | 0.7" | | 1.78 | 0.038" | 0.94 | 0.48 | 0.054" | 1.37 | RMDX6024D28 | RCDX6024D28 | |
| Honeywell PN 58000062 | — | 0.12" | | 3.05 | 0.077" | 1.94 | 0.41 solid | 0.096" | 2.42 | RMDX6026D28 | RCDX6026D28 | |
| — | — | 0.104" | | 2.64 | 0.067" | 1.7 | 0.3 | — | 2.11 | RMDX6050D28 | — | |
| — | — | 0.09" | | 2.29 | 0.048" | 1.20 | 0.3 | — | 1.63 | RMDX6050D28 | — | |
| — | — | 0.114" | | 2.9 | 0.075" | 1.91 | 0.36 | — | 1.29 | RMDX6032D28 | RCDX6032D28 | |
| — | — | 0.07" | | 1.78 | 0.038" | 0.94 | 0.48 | — | 1.37 | RMDX6024D28 | RCDX6024D28 | |
| — | — | 0.12" | 3.05 | 0.077" | 1.94 | 0.41 | — | 2.42 | RMDX6026D28 | RCDX6026D28 | | |

Twisted cable - Contact monocrimp and multipiece

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

3

PCB contacts supplied separately - UTGX standard series

PCB soldering

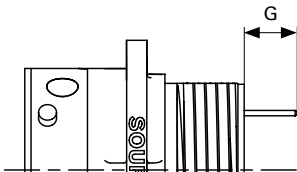
3



The UTGX 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 | | Plating see page 129 |
|-----------------|---------------|--------------|--------------|-------------------------|
| | | Male | Female | |
| #20 Ø 1 mm | Short version | RMW50A7K | RCW50A7K | K |
| | Long version | RMW5016K | RCW5016K | |
| #16 Ø 1.6 mm | Short version | RM20M12E8K | RC20M12E8K | K |
| | Long version | RM20M12E83K | RC20M12E83K | |
| | | RC20M12E84K | | |
| #8 Ø 3.6 mm | – | 82911685NPC | 82911684NPC | 2 µm Ni |
| | | 82911685NAPC | 82911684NAPC | 3 µm Ag |

Minimal length G (mm)



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

UTGX0 with PCB contacts #16

| Connector size | Pin contact | | | Socket contact | | | |
|----------------|-------------|--------------|--------------|----------------|--------------|--------------|--------------|
| | RM20M12E8K* | RM20M12E83K* | RM20M12E84K* | RC20M12E8K* | RC20M12E83K* | RC20M12E84K* | RC20M12E87K* |
| 10 | 4.2 | 9.4 | 12.9 | 4.2 | 9.4 | 12.9 | 6.5 |
| 12 | 3.6 | 8.8 | 12.3 | 4.2 | 9.4 | 12.9 | 6.5 |
| 14 | 3.3 | 8.5 | 12.0 | 2.6 | 7.8 | 11.3 | 4.9 |

UTGX7 with PCB contacts #20 and #16

| Connector size | Pin contact | | | Socket contact | | | |
|----------------|--------------|--------------|-----------|----------------|--------------|-----------|-----------|
| | RM20M12E83K* | RM20M12E84K* | RMW50A7K* | RMW5016K* | RC20M12E84K* | RCW50A7K* | RCW5016K* |
| 10 | 7.3 | 10.8 | 8.4 | 9.3 | 3.6 | 8.4 | 9.3 |
| 12 | 7.3 | 10.8 | 8.4 | 9.3 | 3.9 | 8.4 | 9.3 |
| 14 | 7.3 | 10.8 | 8.4 | 9.3 | 3.6 | – | – |

* Plating indication see page 129

UTGX7 with PCB contacts #16 and #8

| Connector size | Pin contact | | Socket contact | |
|----------------|--------------|--------------|----------------|--------------|
| | RM20M12E83K* | 82911685NPC* | RC20M12E87K* | 82911684NPC* |
| UTGX7142G1P | – | 6.4 | – | – |
| UTGX7142G1S | – | – | – | 8.2 |
| UTGX7142G1SNPT | – | 5.8 | – | 5.4 |
| UTGX718X2M3 | 4.9 | 4.5 | 3.6 | 5.2 |
| UTGX7183G1SNPT | – | – | – | 4.17 |

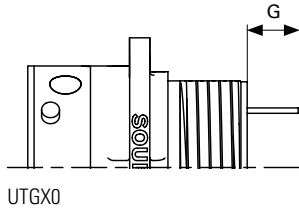
* Plating indication see page 129

PCB contacts loaded - UTGX sealed unmated series

PCB soldering

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

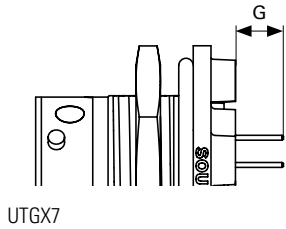
Minimal length G (mm)



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

UTGX0

| Connector size | Connector part Number | Pin contact | | Socket contact | | |
|----------------|------------------------------------|----------------------------|-------|----------------|-------|------|
| | | G min | G max | G min | G max | |
| 10 | 10D6 - 10D98 - 10D7 | 8.1 | 10.2 | 8.1 | 10.3 | |
| | 12 | 12D2 - 12D3 - 12D8 - 12D10 | 8.1 | 10.2 | 8.1 | 10.3 |
| | | 12D4 | 8.2 | 10 | 8.1 | 10.3 |
| 14 | 12D14 | 7.2 | 9 | 7.1 | 9.2 | |
| | 14D5 - 14D12 - 14D15 14D18 - 14D19 | 8.1 | 10.2 | 8.1 | 10.3 | |
| | | 14D7 | 8.2 | 10 | 8.1 | 10.3 |



UTGX7

| Connector size | Connector part Number | Pin contact | | Socket contact | | |
|----------------|------------------------------------|----------------------------|-------|----------------|-------|---|
| | | G min | G max | G min | G max | |
| 10 | 10D6 - 10D98 - 10D7 | 4.7 | 7.3 | 4.7 | 7 | |
| | 12 | 12D2 - 12D3 - 12D8 - 12D10 | 4.7 | 7.3 | 4.8 | 7 |
| | | 12D4 | 4.9 | 7.1 | 4.8 | 7 |
| 14 | 12D14 | 3.9 | 6.2 | 3.8 | 6 | |
| | 14D5 - 14D12 - 14D15 14D18 - 14D19 | 4.8 | 7.3 | 4.9 | 7 | |
| | | 14D7 | 4.9 | 7.1 | 4.9 | 7 |

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

POF

Description

3



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

The fiber optic contacts are designed to accommodate:

- Plastic Optical Fiber (POF) 1 mm core and 2.2 mm 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: 2.2mm
- 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, UTO, 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 0.5 mm, 0.6 mm, 0.7 mm & 3.8 mm |
| 80WM0006 | Ruler |
| 80WP0005 | Polishing plate |
| 80WP0013 | Non slip base (to hold the polishing plate) |
| 80WP0014 | Polishing disk (grain size 9µm) |
| 80WP0018 | Polishing tool |
| 80WP0019 | Polishing disk (grain size 30µm) |
| 80WS0002 | Crimping plier |

Specific tooling list - Can 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 1 mm | RM/RC 24W3K | S20RCM | SHANGLES | RX20D44 |
| | RM/RC 20W3K | | | |
| | RM/RC 18W3K | | | |
| | SM 24WL3S*(1) SC 24WL3S*(1) | S20SCM20 | | |
| | SM/SC 20WL3S*(1) | | | |
| #16 Ø 1.6 mm | RM/RC 28M1* | S16RCM20 | SHANGLES | RX2025GE1 or RX2031J long endurance tool |
| | RM/RC 24M9* | | | |
| | RM/RC 20M13* | | | |
| | RM/RC 20M12* | | | |
| | RM/RC 16M23* | | | |
| | RM/RC 14M30* | S16RCM14 | | |
| | SM/SC 24ML1*(1) | | | |
| | SM/SC 20ML1*(1) | | | |
| | SM/SC 16ML1*(1) | S16SCML1 | | |
| | SM/SC 14ML1*(1) | | | |
| | SM/SC 16ML11*(1) | | | |
| | | | | |

(1) loose contact

* endurance of SHANGLES & Head tools = 48,000 cycles

Tool with separate locator

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

* see page 129 for plating options and other contact details

Specific contacts (First mate, last break contacts)

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

* see page 132 for plating options and other contact details

Coaxial contacts

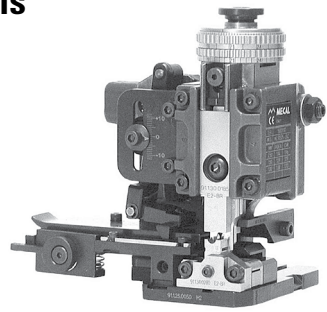
Please consult us.

Automatic crimping tools

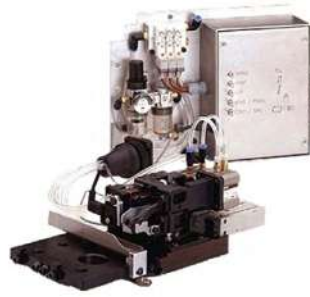
Contact Mecal for semi-automatic production tools.

Mecal sales network:

www.mecal.net



Min Applicator



Stripper



Presses

4

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.

4

Technical information

Crimping instructions

Wire stripping crimp version

Machined contact



| Contact size | Part number | | Stripping length L (mm) |
|----------------|---|---|-------------------------|
| | Male | Female | |
| #20 (Ø 1 mm) | RM24W3- / RM20W3- RM18W3- | RC24W3- / RC20W3- RC18W3- | 4.8 |
| #16 (Ø 1.6 mm) | RM28M1- / RM24M9- RM20M13- / RM20M12- | RC28M1- / RC24M9- RC20M13- / RC20M12- | 4.8 |
| | RM16M23- / RM14M30- | RC16M23- / RC14M30- | 7.1 |
| #8 (Ø 3.6 mm) | 82913601- / 82913603- 82913605- / 82913607- 82913609- | 82913600- / 82913602- 82913604- / 82913606- 82913608- | 6.5 to 7.5 |

Stamped & Formed with insulation support



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

Stamped & Formed without insulation support



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

Power contacts



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

Note: See page 129 for plating options and other contact details

Wire stripping solder and screw versions

Solder contact delivered with connector



| Contact size | Stripping length L (mm) |
|-------------------------------|-------------------------|
| #16 (Ø 1.6 mm) & #20 (Ø 1 mm) | 5 |

Screw contact delivered with connector



| Contact size | Stripping length L (mm) |
|----------------|-------------------------|
| #16 (Ø 1.6 mm) | 5.8 |

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 ²) | Tensile straight test (min) | Height (inch) W (±0.002") | Width (inch) W (±0.002") | Tooling head part number |
|---|--|-----------------------|--------------------|------------------------------|-----------------------------|---------------------------|--------------------------|--------------------------|
| Machined contacts size #20 Ø 0.039" | RM24W3K RC24W3K | 26/24 | 26 AWG | 0.004" min | 15 N | 0.037" | 0.05" | S20RCM |
| | | | 24 AWG | 0.009" max | 32 N | | | |
| | RM20W3K RC20W3K | 22/20 | 22 AWG | 0.012" min | 40 N | 0.049" | 0.070" | |
| | | | 20 AWG | 0.019" max | 60 N | | | |
| | RM18W3K RC18W3K | 20/18 | 20 AWG | 0.019" max | 60 N | 0.053" | 0.073" | |
| | | | 18 AWG | 0.032" max | 90 N | | | |
| S & F contacts size #20 Ø 0.039" | SM24WL3TK6* SC24WL3TK6* | 26/24 | 26 AWG | 0.004" min | 15 N | 0.031" | 0.058" | S20SCM20 |
| | | | 24 AWG | 0.009" max | 32 N | | | |
| | SM20WL3TK6* SC20WL3TK6* | 22/20 | 22 AWG | 0.012" min | 40 N | 0.039" | 0.060" | |
| | | | 20 AWG | 0.019" max | 60 N | | | |
| Machined contacts size #16 Ø 0.062" | RM28M1K* RC28M1K* | 30/28 | 30 AWG | 0.001" min | 11 N | 0.044" | 0.055" | S16RCM20 |
| | | | 28 AWG | 0.003" max | 6 N | | | |
| | RM24M9K* RC24M9K* | 26/24 | 26 AWG | 0.004" min | 15 N | 0.045" | 0.055" | |
| | | | 24 AWG | 0.009" max | 32 N | | | |
| | RM20M13K* RC20M13K* | 22/20 | 22 AWG | 0.012" min | 40 N | 0.049" | 0.069" | |
| | | | 20 AWG | 0.019" max | 60 N | | | |
| | RM20M12K* RC20M12K* | | 22 AWG | 0.012" min | 40 N | | | |
| | | | 20 AWG | 0.019" max | 60 N | | | |
| | RM16M23K* RC16M23K* | 18 | 18 AWG | 0.032" max | 90 N | 0.070" | 0.089" | S16RCM16 |
| | | | 16 AWG | 0.059" max | 150 N | | | |
| RM14M30K* RC14M30K* | 16 | 16 AWG | 0.059" min | 150 N | 0.082" | 0.105" | S16RCM14 | |
| | | 14 AWG | 0.098" min | 230 N | | | | 0.090" |
| S & F contacts size #16 Ø 0.062" | SM24ML1TK6* SC24ML1TK6* | 26/24 | 26 AWG | 0.004" min | 15 N | 0.033" | 0.059" | S16SCM20 |
| | | | 24 AWG | 0.009" max | 32 N | | | |
| | SM20ML1TK6* SC20ML1TK6* | 22/20 | 22 AWG | 0.012" min | 40 N | 0.040" | 0.060" | |
| | | | 20 AWG | 0.019" max | 60 N | | | |
| | SM16ML11TK6* SC16ML11TK6* | 18 | 18 AWG | 0.032" min | 90 N | 0.051" | 0.082" | S16SCML11 |
| | | | 16 AWG | 0.059" max | 150 N | | | |
| | SM16ML1TK6* SC16ML1TK6* | 18 | 18 AWG | 0.032" min | 90 N | 0.058" | 0.079" | S16SCML1 |
| | | | 16 AWG | 0.059" max | 150 N | | | |
| | SM14ML1TK6* SC14ML1TK6* | 14 | 14 AWG | 0.098" max | 230 N | 0.070" | 0.101" | |

* example of plating, for other plating see page 129

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

4

Technical information

Handle & interchangeable heads for crimp contacts

Crimping with Souriau tooling

4



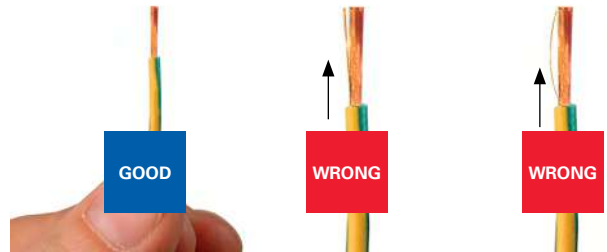
1) Fully close then release the tool, keep it open. Open the two pins.



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 142.



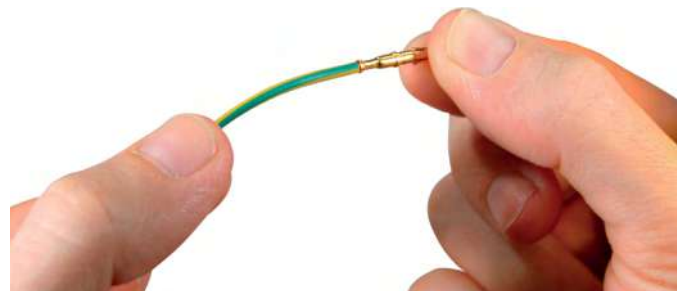
5) Place conductors, with no deterioration, in the contact bucket. All strands to be located in the crimp bucket.



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.

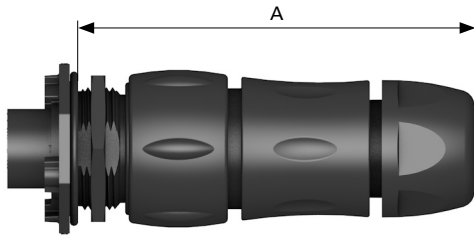


8) Control the quality of crimping (see page 143).

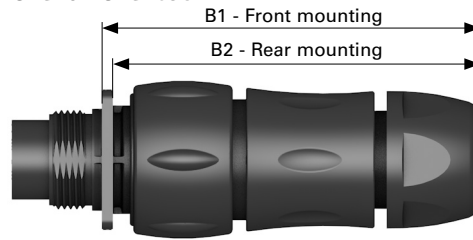
Note: Assembly operations mentioned above shall not interfere or to be in contradiction with the IPC-WHMA-A-620B

Mated connector lengths (mm)

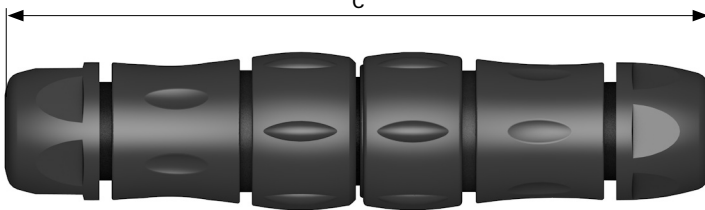
UTGX7 + UTGX6JC



UTGX0 + UTGX6JC



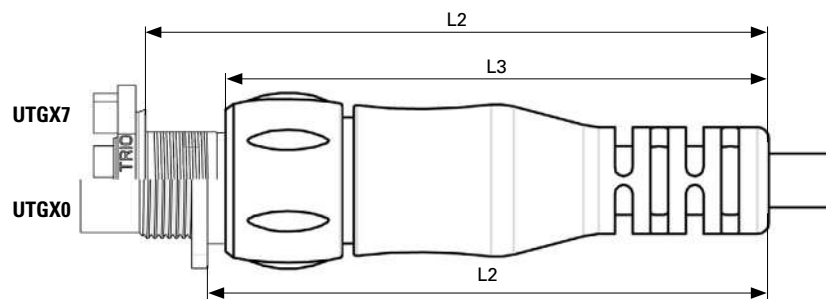
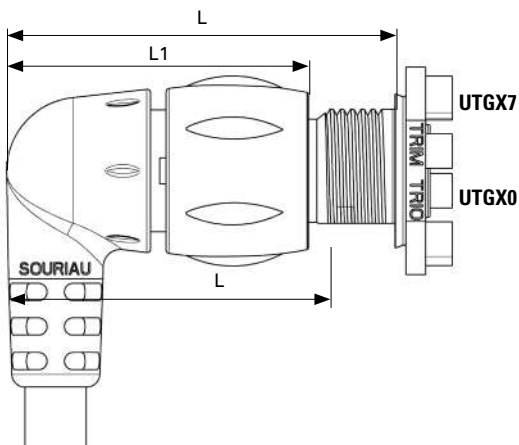
UTGX1JC + UTGX6JC



| Shell size | UTGX7 + UTGX6JC A max | UTGX0 + UTGX6JC B1 max | B2 max | UTGX1JC + UTGX6JC C max |
|------------|--------------------------|---------------------------|--------|----------------------------|
| 10 | 74 | 72 | 69.5 | 132 |
| 12 | 79 | 75 | 73 | 138 |
| 14 | 85.5 | 81.5 | 79 | 150.5 |

Overmoulded cable assembly dimensions (mm)

| Shell size | UTGX0 | | | | UTGX7 | | | |
|------------|-------|--------|--------|--------|-------|--------|--------|--------|
| | L max | L1 max | L2 max | L3 max | L max | L1 max | L2 max | L3 max |
| 8 | 42.8 | 36.8 | 80.7 | 57.2 | 46.8 | 36.8 | 85.8 | 57.2 |
| 10 | 55.8 | 48.3 | 98.6 | 92 | 58.5 | 48.3 | 100.7 | 92 |
| 12 | 57.1 | 51.4 | 99.3 | 93.7 | 61.4 | 51.4 | 106.4 | 93.7 |
| 14 | 62.5 | 56.3 | 100.3 | 94.6 | 67.6 | 56.3 | 104.8 | 94.6 |

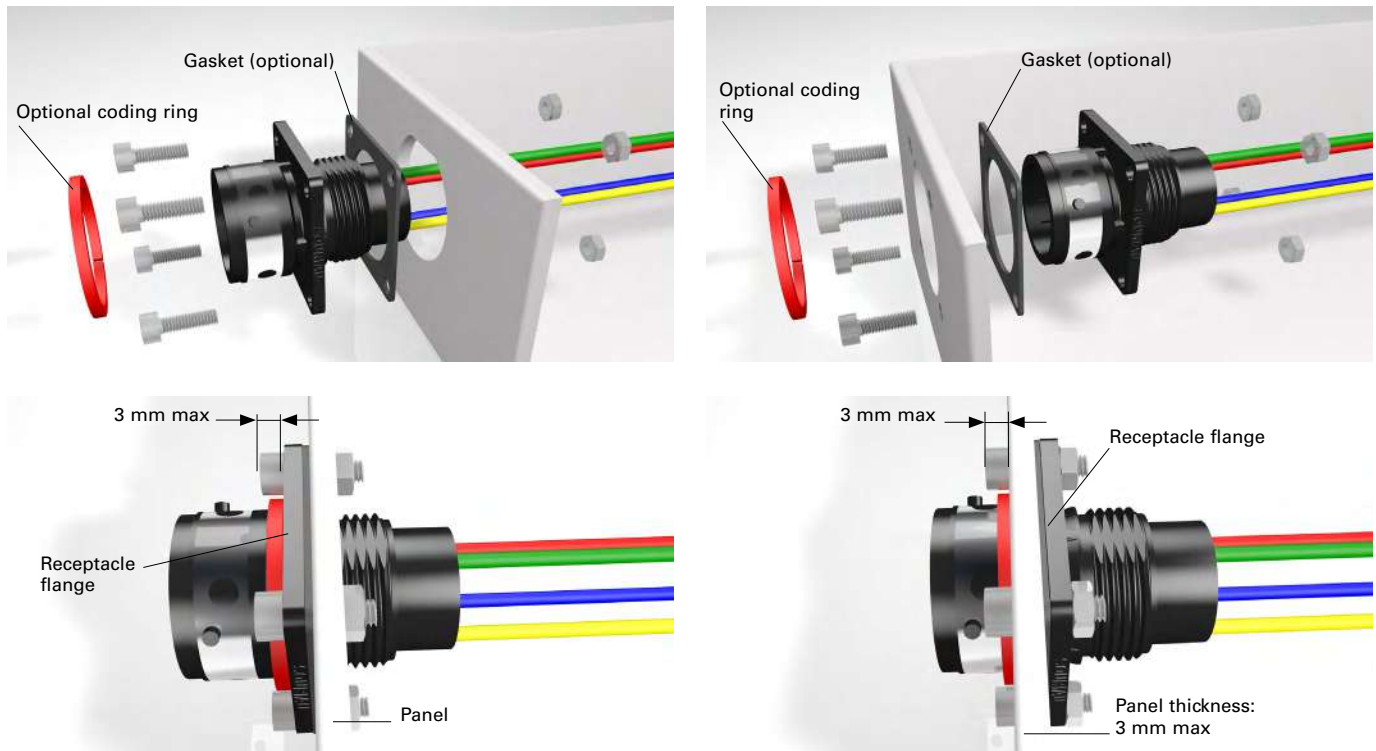


UTGX0 or UTGX0JC assembly (Mounting suggestion)

- Strip wires, crimp or solder contacts (see pages 142 & 143)
- 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).

4

Front mounting



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

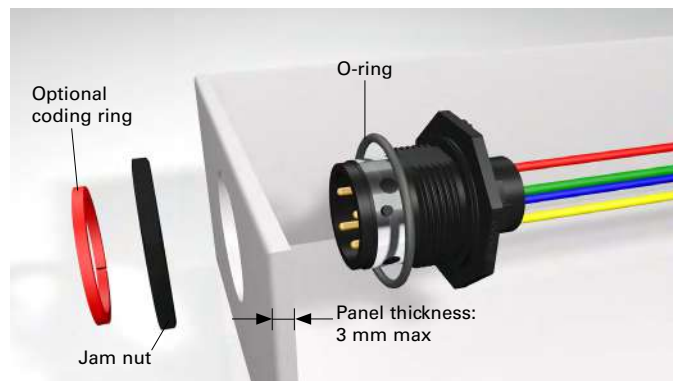
UTGX0JC rear mounting



UTGX7 assembly (Mounting suggestion)

- Strip wires and crimp contacts (see pages 142 & 143)
- 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

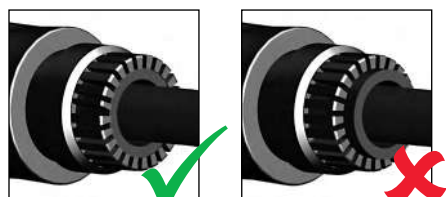
Crimp or solder version



| Shell size | Jam nut torque (Nm) max | Exterior jam nut dim. (mm) | Ø Wire | |
|------------|-------------------------|----------------------------|------------------|-----------------------|
| | | | Standard version | Discrete wire sealing |
| 10 | 3 | 20.2 | 3.2 mm | From |
| 12 | 4 | 27.0 | max. | 1.7 mm |
| 14 | 5 | 30.1 | | to 3.0 mm |

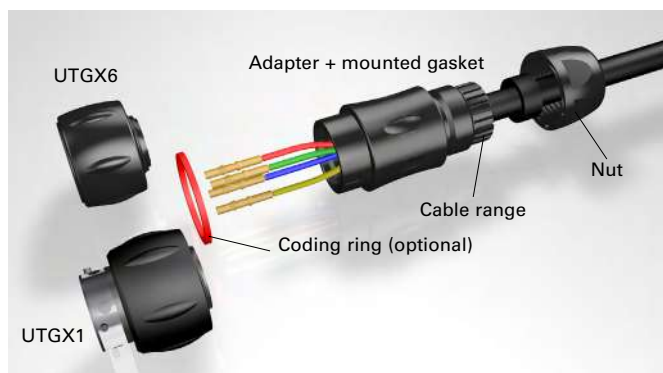
UTGX1JC or UTGX6JC assembly: Crimp version

- Slide accessories onto the cable

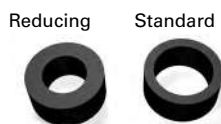


Make sure the seal is positioned as shown.

- Mate the plug with a corresponding counter part
- Strip external cable jacket
- Strip wires and crimp contacts (.)
- Insert contacts into connector cavities (insert manually or use tool RTM205)
- Tighten adapter with plug UTGX6 or receptacle UTGX1, choose right seal (waste the other seal)
- Tighten the nut to rear of either UTGX1 or UTGX6 (recommended torque values to be applied according to table below)
- Caution: only one of the two gaskets included should be used!



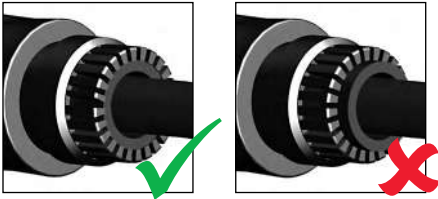
Cable ranges



| Shell size | Recommended jacket strip length (mm) | | Adapter tightening torque (Nm) | Nut tightening torque (Nm) | Ø Cable range Standard seal (mm) | Ø Cable range Reducing seal (mm) | Ø Wire |
|------------|--------------------------------------|--------|--------------------------------|----------------------------|----------------------------------|----------------------------------|-----------|
| | Male | Female | | | | | |
| 10 | 21 | 29 | 1.5 | 1 | 2.5/8.0 | 1.5/5.0 | From |
| 12 | 25 | 33 | 2.5 | 2 | 5.0/12.0 | 3.0/9.0 | 1.7 mm |
| 14 | 29 | 36 | 3 | 2.5 | 7.0/14.0 | 5.0/12.0 | to 3.0 mm |

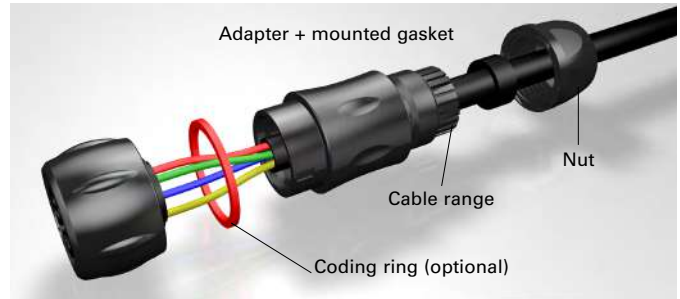
UTGX6JC assembly (Mounting suggestion)

- Slide accessories onto the cable

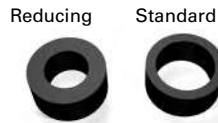


Make sure the seal is positioned as shown.

- Mate the plug with a corresponding receptacle
- Strip external cable jacket (see pages 142 & 143)
- Solder contacts
- Tighten adapter with plug, choose right seal (waste the other seal)
- Tighten the nut to rear of either UTGX6 (recommended torque values to be applied according table to the right)
- Caution: only one of the two gaskets included should be used!



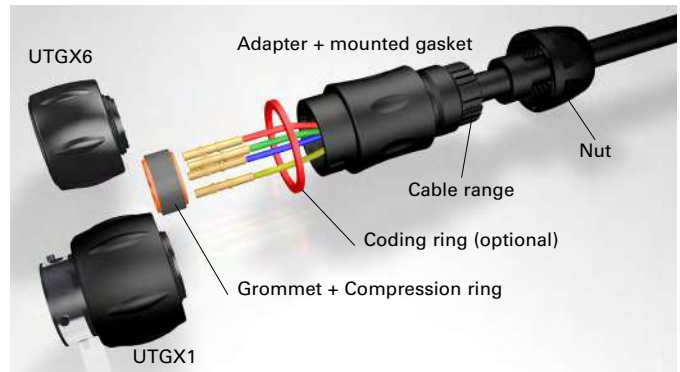
Cable ranges



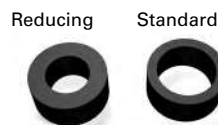
| Shell size | Recommended jacket strip length (mm) | | Adapter tightening torque (Nm) | Nut tightening torque (Nm) | Ø Cable range Standard seal (mm) | Ø Cable range Reducing seal (mm) | Ø Wire |
|------------|--------------------------------------|--------|--------------------------------|----------------------------|----------------------------------|----------------------------------|-----------------------|
| | Male | Female | | | | | |
| 10 | 21 | 29 | 1.5 | 1 | 2.5/8.0 | 1.5/5.0 | From 1.7 mm to 3.0 mm |
| 12 | 25 | 33 | 2.5 | 2 | 5.0/12.0 | 3.0/9.0 | |
| 14 | 29 | 36 | 3 | 2.5 | 7.0/14.0 | 5.0/12.0 | |

UTGX1GJC or UTGX6GJC 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 142 & 143)
- 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 UTGX6 or receptacle UTGX1, choose correct seal
- Tighten the nut to rear of either UTGX1 or UTGX6 (recommended torque values to be applied according to the table right).



Cable ranges



| Shell size | Recommended jacket strip length (mm) | | Adapter tightening torque (Nm) | Nut tightening torque (Nm) | Ø Cable range Standard seal (mm) | Ø Cable range Reducing seal (mm) | Ø Wire |
|------------|--------------------------------------|--------|--------------------------------|----------------------------|----------------------------------|----------------------------------|-----------------------|
| | Male | Female | | | | | |
| 10 | 21 | 29 | 1.5 | 1 | 2.5/8.0 | 1.5/5.0 | From 1.7 mm to 3.0 mm |
| 12 | 25 | 33 | 2.5 | 2 | 5.0/12.0 | 3.0/9.0 | |
| 14 | 29 | 36 | 3 | 2.5 | 7.0/14.0 | 5.0/12.0 | |

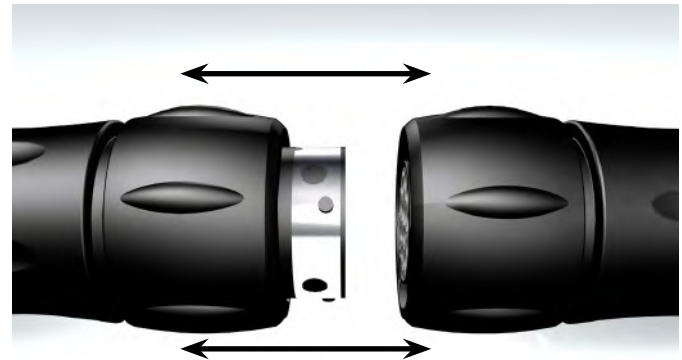
UTGX coupling procedure

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.

1 - Identify the primary key of each connector.



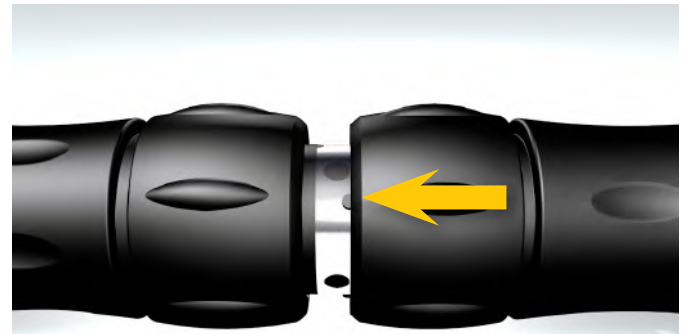
2 - Align the primary keys of the connectors.



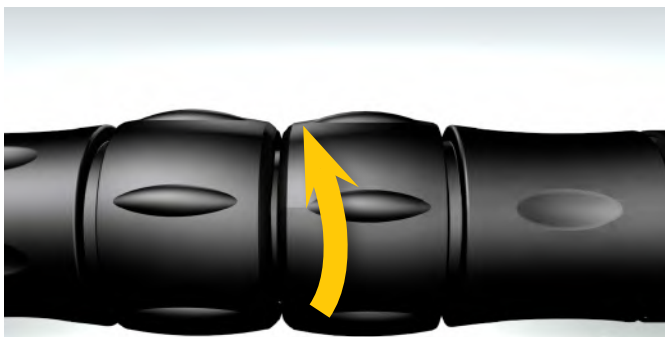
3 - Non correct positioning:



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.

4

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 & Fig.2). Wire size plays an important role in dissipating heat and avoiding overheating (Fig.1 & Fig.3).

4

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.

Fig.1: UTGX 12-4 – 1.5 mm² wires

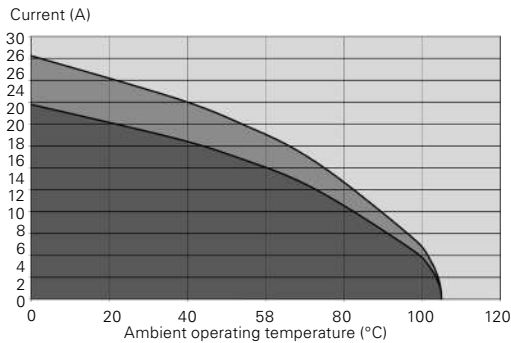


Fig.2: UTGX 12-8 – 1.5 mm² wires

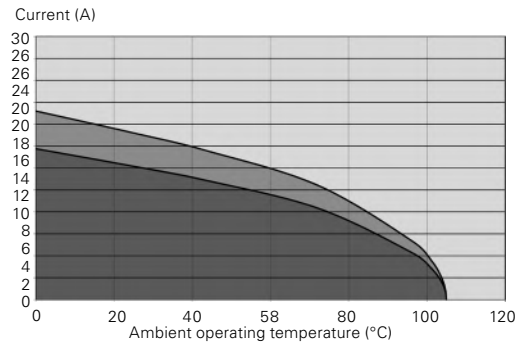
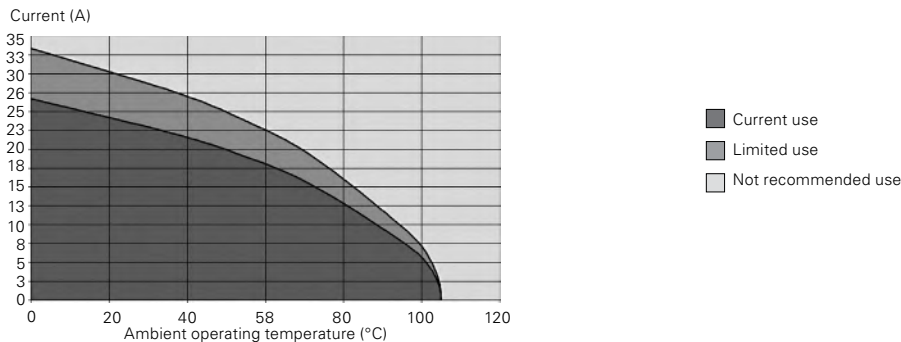


Fig.3: UTGX 12-4 – 2.5 mm² wires



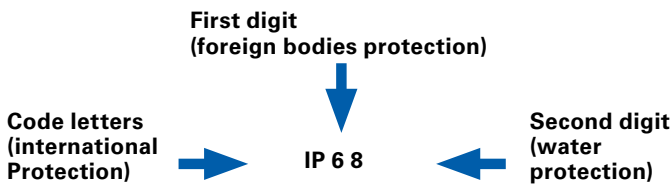
The rated current is defined as uninterrupted continuous current that a connector can take when all contacts are energized simultaneously without exceeding the maximum limit of temperature. The earth contact is never loaded.

UV resistance

Plastics can be susceptible to extreme degradation over time. The UTGX series is made with (f1) material according to UL746C. The UTGX material withstand a 1000h UV exposure according ISO4892 without significant color variation, cracking or variation of mechanical properties.

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.

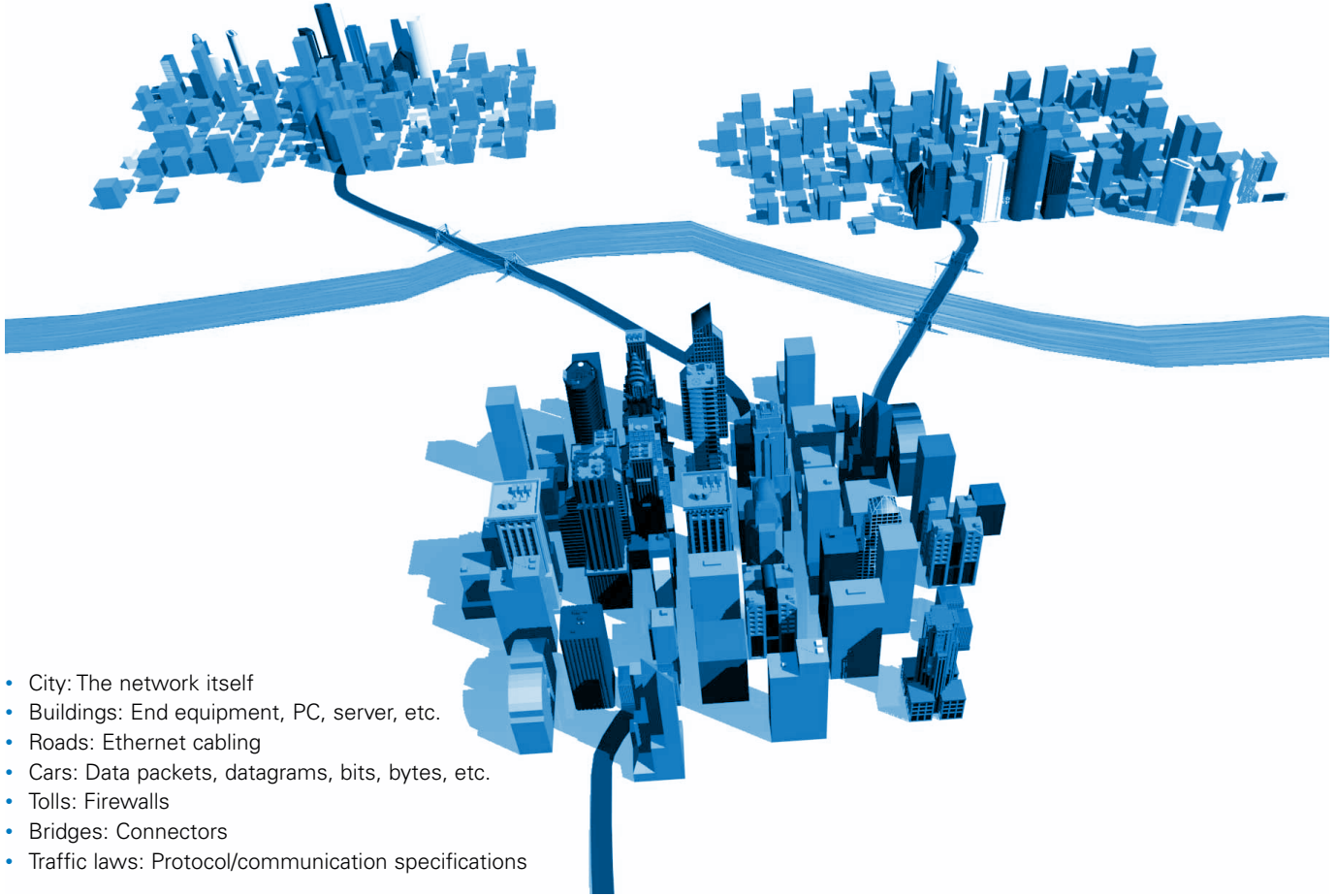


| 1st digit | Degree of protection | 2nd digit | Degree of protection |
|-----------|---|-----------|--|
| 0 | No protection against accidental contact. No protection against solid foreign bodies. | 0 | No protection against water. |
| 1 | Protection against contact with any large area by hand and against large solid foreign bodies with a diameter bigger than 48 mm. | 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 12 mm. | 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 2.5 mm. Protection against small solid bodies with a diameter bigger than 2.5 mm. | 3 | Spray-proof. Protection against diagonal water drips up to a 60° angle. |
| 4 | Same as 3 however diameter is bigger than 1 mm. | 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. |

UTGX 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:

In order to explain basic Ethernet theory, we can use a functional comparison to a busy city with highways, buildings and cars. To illustrate this, the table below provides correlation between the different components/pieces/links that encompass Ethernet network connectivity, and the larger scale infrastructure of a metropolitan city.



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

Ethernet basics

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.

Examining the differences between 100Mhz, 100 Base TX, Cat5e/Cat6. What does it all mean?

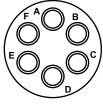
When discussing connectors and Ethernet, there are a few key details to be aware of

- 100Mhz is a measurement of Frequency for the signal
 - Comparable to the Speed Limit of 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.

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.

Eaton offering

Standard solutions.



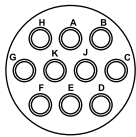
106* 10E6/10D6
4.5A 250V 6A 250V
6 contacts Ø 1 mm (#20)

UTGX 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 C&F.

Note: Shielding can be replaced by DC power.



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

UTGX size 12, 10 contacts

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

What about using coax contacts?

Ethernet twisted pairs carry a symmetrical (balanced) signal. With coax contacts, the inner core will be shielded, but not the outer core, resulting in an unbalanced signal due to electromagnetic interferences. Therefore, coax contacts will not work correctly and are not recommended.

What about using Quadrax contacts?

Quadrax 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. Quadrax contacts are not designed to terminate UTP cables and are not recommended.

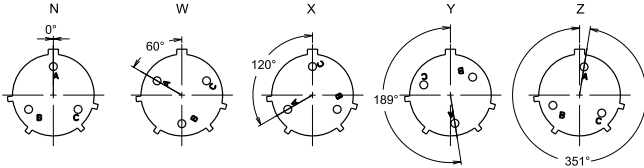
Conclusion

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.

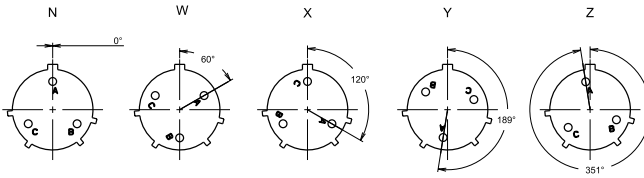
The UTGX has layouts with discrimination keys, which help avoid mismatching when operators mate the connectors.

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. **UTGX6JC104S** (N key) → **UTGX6JC104SW** (W key)

Consult us for overmolded harnesses.

Discrimination keys degrees

| Shell size | Layout | 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 | – | – | – | – |
| | 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 UTGX 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 UTGX 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

| | |
|----------------|-----|
| UTGX1JC102W2P | 38 |
| UTGX1JC102W2S | 38 |
| UTGX1JC103P | 20 |
| UTGX1JC103S | 20 |
| UTGX1JC103W3P | 52 |
| UTGX1JC103W3S | 52 |
| UTGX1JC104P | 43 |
| UTGX1JC104S | 43 |
| UTGX1JC106P | 58 |
| UTGX1JC106S | 58 |
| UTGX1JC1210P | 91 |
| UTGX1JC1210S | 91 |
| UTGX1JC124P | 33 |
| UTGX1JC124PSCR | 33 |
| UTGX1JC124S | 33 |
| UTGX1JC124SSCR | 33 |
| UTGX1JC128P | 76 |
| UTGX1JC128S | 76 |
| UTGX1JC1412P | 96 |
| UTGX1JC1412S | 96 |
| UTGX1JC1419P | 122 |
| UTGX1JC1419S | 122 |
| UTGX1JC142G1P | 25 |
| UTGX1JC142G1S | 25 |
| UTGX1JC147P | 67 |
| UTGX1JC147PSCR | 67 |
| UTGX1JC147S | 67 |
| UTGX1JC147SSCR | 67 |
| UTGX1JC148P | 85 |
| UTGX1JC148S | 85 |
| UTGX1JC1492P | 105 |
| UTGX1JC1492S | 105 |

Jam nut receptacle only

| | |
|---------------|----|
| UTGX7102W2P | 38 |
| UTGX7102W2S | 38 |
| UTGX7103P | 20 |
| UTGX7103S | 20 |
| UTGX7103W3P | 52 |
| UTGX7103W3S | 52 |
| UTGX7104P | 43 |
| UTGX7104S | 43 |
| UTGX7106P | 58 |
| UTGX7106S | 58 |
| UTGX710D6P | 58 |
| UTGX710D6P32 | 58 |
| UTGX710D6S | 58 |
| UTGX710D6S32 | 58 |
| UTGX710D7P | 72 |
| UTGX710D7P32 | 72 |
| UTGX710D7S | 72 |
| UTGX710D7S32 | 72 |
| UTGX710D98P | 63 |
| UTGX710D98P32 | 63 |
| UTGX710D98S | 63 |
| UTGX710D98S32 | 63 |
| UTGX710E6P | 58 |
| UTGX710E6S | 58 |
| UTGX710E7P | 72 |
| UTGX710E7S | 72 |
| UTGX710E98P | 63 |
| UTGX710E98S | 63 |
| UTGX71210P | 91 |
| UTGX71210S | 91 |
| UTGX7124P | 33 |

| | |
|---------------|-----|
| UTGX7124PSCR | 33 |
| UTGX7124S | 33 |
| UTGX7124SSCR | 33 |
| UTGX7128P | 76 |
| UTGX7128S | 76 |
| UTGX712D10P | 91 |
| UTGX712D10P32 | 91 |
| UTGX712D10S | 91 |
| UTGX712D10S32 | 91 |
| UTGX712D14P | 110 |
| UTGX712D14P32 | 110 |
| UTGX712D14S | 110 |
| UTGX712D14S32 | 110 |
| UTGX712D2P | 16 |
| UTGX712D2P32 | 16 |
| UTGX712D2S | 16 |
| UTGX712D2S32 | 16 |
| UTGX712D3P | 28 |
| UTGX712D3P32 | 28 |
| UTGX712D3S | 28 |
| UTGX712D3S32 | 28 |
| UTGX712D4P | 33 |
| UTGX712D4P32 | 33 |
| UTGX712D4S | 33 |
| UTGX712D4S32 | 33 |
| UTGX712D8P | 81 |
| UTGX712D8P32 | 81 |
| UTGX712D8S | 81 |
| UTGX712D8S32 | 81 |
| UTGX712E10P | 91 |
| UTGX712E10S | 91 |
| UTGX712E14P | 110 |
| UTGX712E14S | 110 |
| UTGX712E2P | 16 |
| UTGX712E2S | 16 |
| UTGX712E3P | 28 |
| UTGX712E3S | 28 |
| UTGX712E4P | 33 |
| UTGX712E4S | 33 |
| UTGX712E8P | 81 |
| UTGX712E8S | 81 |
| UTGX71412P | 96 |
| UTGX71412S | 96 |
| UTGX71419P | 122 |
| UTGX71419S | 122 |
| UTGX7142G1P | 25 |
| UTGX7142G1S | 25 |
| UTGX7147P | 67 |
| UTGX7147PSCR | 67 |
| UTGX7147S | 67 |
| UTGX7147SSCR | 67 |
| UTGX7148P | 85 |
| UTGX7148S | 85 |
| UTGX71492P | 105 |
| UTGX71492S | 105 |
| UTGX714D12P | 101 |
| UTGX714D12P32 | 101 |
| UTGX714D12S | 101 |
| UTGX714D12S32 | 101 |
| UTGX714D15P | 114 |
| UTGX714D15P32 | 114 |
| UTGX714D15S | 114 |
| UTGX714D15S32 | 114 |
| UTGX714D18P | 118 |
| UTGX714D18P32 | 118 |
| UTGX714D18S | 118 |
| UTGX714D18S32 | 118 |

| | | | |
|--------------------|-----|------------------------------|-----|
| UTGX714D19P..... | 122 | UTGX6147S..... | 67 |
| UTGX714D19P32..... | 122 | UTGX6148P..... | 85 |
| UTGX714D19S..... | 122 | UTGX6148S..... | 85 |
| UTGX714D19S32..... | 122 | UTGX61492P..... | 105 |
| UTGX714D5P..... | 48 | UTGX61492S..... | 105 |
| UTGX714D5P32..... | 48 | UTGX614E12P..... | 101 |
| UTGX714D5S..... | 48 | UTGX614E12S..... | 101 |
| UTGX714D5S32..... | 48 | UTGX614E15P..... | 114 |
| UTGX714D7P..... | 67 | UTGX614E15S..... | 114 |
| UTGX714D7P32..... | 67 | UTGX614E18P..... | 118 |
| UTGX714D7S..... | 67 | UTGX614E18S..... | 118 |
| UTGX714D7S32..... | 67 | UTGX614E19P..... | 110 |
| UTGX714E12P..... | 101 | UTGX614E19S..... | 110 |
| UTGX714E12S..... | 101 | UTGX614E5P..... | 114 |
| UTGX714E15P..... | 114 | UTGX614E5S..... | 114 |
| UTGX714E15S..... | 114 | UTGX614E7P..... | 67 |
| UTGX714E18P..... | 118 | UTGX614E7S..... | 67 |
| UTGX714E18S..... | 118 | | |
| UTGX714E19P..... | 122 | Plug with cable gland | |
| UTGX714E19S..... | 122 | UTGX6JC102W2P..... | 38 |
| UTGX714E5P..... | 48 | UTGX6JC102W2S..... | 38 |
| UTGX714E5S..... | 48 | UTGX6JC103P..... | 20 |
| UTGX714E7P..... | 67 | UTGX6JC103S..... | 20 |
| UTGX714E7S..... | 67 | UTGX6JC103W3P..... | 52 |
| | | UTGX6JC103W3S..... | 52 |
| Plug only | | UTGX6JC104P..... | 43 |
| UTGX6100W2P..... | 38 | UTGX6JC104S..... | 43 |
| UTGX6100W2S..... | 38 | UTGX6JC106P..... | 58 |
| UTGX6103P..... | 20 | UTGX6JC106S..... | 58 |
| UTGX6103S..... | 20 | UTGX6JC10E6P..... | 58 |
| UTGX6103W3P..... | 52 | UTGX6JC10E6S..... | 58 |
| UTGX6103W3S..... | 52 | UTGX6JC10E7P..... | 72 |
| UTGX6104P..... | 43 | UTGX6JC10E7S..... | 72 |
| UTGX6104S..... | 43 | UTGX6JC10E98P..... | 63 |
| UTGX6106P..... | 58 | UTGX6JC10E98S..... | 63 |
| UTGX6106S..... | 58 | UTGX6JC1210P..... | 91 |
| UTGX610E6P..... | 58 | UTGX6JC1210S..... | 91 |
| UTGX610E6S..... | 58 | UTGX6JC124P..... | 33 |
| UTGX610E7P..... | 72 | UTGX6JC124PSCR..... | 33 |
| UTGX610E7S..... | 72 | UTGX6JC124S..... | 33 |
| UTGX610E98P..... | 63 | UTGX6JC124SSCR..... | 33 |
| UTGX610E98S..... | 63 | UTGX6JC128P..... | 76 |
| UTGX61210P..... | 91 | UTGX6JC128S..... | 76 |
| UTGX61210S..... | 91 | UTGX6JC12E10P..... | 91 |
| UTGX6124P..... | 33 | UTGX6JC12E10S..... | 91 |
| UTGX6124S..... | 33 | UTGX6JC12E14P..... | 91 |
| UTGX6128P..... | 84 | UTGX6JC12E14S..... | 91 |
| UTGX6128S..... | 84 | UTGX6JC12E2P..... | 16 |
| UTGX612E10P..... | 91 | UTGX6JC12E2S..... | 16 |
| UTGX612E10S..... | 91 | UTGX6JC12E3P..... | 29 |
| UTGX612E14P..... | 110 | UTGX6JC12E3S..... | 29 |
| UTGX612E14S..... | 110 | UTGX6JC12E4P..... | 33 |
| UTGX612E2P..... | 16 | UTGX6JC12E4S..... | 33 |
| UTGX612E2S..... | 16 | UTGX6JC12E8P..... | 81 |
| UTGX612E3P..... | 32 | UTGX6JC12E8S..... | 81 |
| UTGX612E3S..... | 32 | UTGX6JC1412P..... | 85 |
| UTGX612E4P..... | 33 | UTGX6JC1412S..... | 85 |
| UTGX612E4S..... | 33 | UTGX6JC1419P..... | 110 |
| UTGX612E8P..... | 81 | UTGX6JC1419S..... | 110 |
| UTGX612E8S..... | 81 | UTGX6JC142G1P..... | 26 |
| UTGX61412P..... | 85 | UTGX6JC142G1S..... | 26 |
| UTGX61412S..... | 85 | UTGX6JC147P..... | 67 |
| UTGX61419P..... | 122 | UTGX6JC147PSCR..... | 67 |
| UTGX61419S..... | 122 | UTGX6JC147S..... | 67 |
| UTGX6142G1P..... | 26 | UTGX6JC147SSCR..... | 67 |
| UTGX6142G1S..... | 26 | UTGX6JC148P..... | 94 |
| UTGX6147P..... | 67 | UTGX6JC148S..... | 94 |

| | | | |
|--------------------------------------|-----|--|-----|
| UTGX6JC1492P | 105 | UTGX01412S | 96 |
| UTGX6JC1492S | 105 | UTGX01419P | 122 |
| UTGX6JC14E12P | 101 | UTGX01419S | 122 |
| UTGX6JC14E12S | 101 | UTGX0142G1P | 26 |
| UTGX6JC14E15P | 43 | UTGX0142G1S | 26 |
| UTGX6JC14E15S | 43 | UTGX0147P | 67 |
| UTGX6JC14E18P | 118 | UTGX0147S | 67 |
| UTGX6JC14E18S | 118 | UTGX0148P | 85 |
| UTGX6JC14E19P | 110 | UTGX0148S | 85 |
| UTGX6JC14E19S | 110 | UTGX01492P | 105 |
| UTGX6JC14E5P | 43 | UTGX01492S | 105 |
| UTGX6JC14E5S | 43 | UTGX014D12P | 101 |
| UTGX6JC14E7P | 67 | UTGX014D12S | 101 |
| UTGX6JC14E7S | 67 | UTGX014D15P | 114 |
| Square flange receptacle only | | UTGX014D15S | 114 |
| UTGX0102W2P | 38 | UTGX014D18P | 118 |
| UTGX0102W2S | 38 | UTGX014D18S | 118 |
| UTGX0103P | 20 | UTGX014D19P | 122 |
| UTGX0103S | 20 | UTGX014D19S | 122 |
| UTGX0103W3P | 52 | UTGX014D5P | 48 |
| UTGX0103W3S | 52 | UTGX014D5S | 48 |
| UTGX0104P | 43 | UTGX014D7P | 67 |
| UTGX0104S | 43 | UTGX014D7S | 67 |
| UTGX0106P | 58 | UTGX014E12P | 101 |
| UTGX0106S | 58 | UTGX014E12S | 101 |
| UTGX010D6P | 58 | UTGX014E15P | 114 |
| UTGX010D6S | 58 | UTGX014E15S | 114 |
| UTGX010D7P | 72 | UTGX014E18P | 118 |
| UTGX010D7S | 72 | UTGX014E18S | 118 |
| UTGX010D98P | 63 | UTGX014E19P | 122 |
| UTGX010D98S | 63 | UTGX014E19S | 122 |
| UTGX010E6P | 58 | UTGX014E5P | 48 |
| UTGX010E6S | 58 | UTGX014E5S | 48 |
| UTGX010E7P | 72 | UTGX014E7P | 67 |
| UTGX010E7S | 72 | UTGX014E7S | 67 |
| UTGX010E98P | 63 | Square flange receptacle with cable gland | |
| UTGX010E98S | 63 | UTGX0JC102W2P | 38 |
| UTGX01210P | 91 | UTGX0JC102W2S | 38 |
| UTGX01210S | 91 | UTGX0JC103P | 20 |
| UTGX0128P | 76 | UTGX0JC103S | 20 |
| UTGX0128S | 76 | UTGX0JC104P | 43 |
| UTGX012D10P | 91 | UTGX0JC104S | 43 |
| UTGX012D10S | 91 | UTGX0JC106P | 58 |
| UTGX012D14P | 110 | UTGX0JC106S | 58 |
| UTGX012D14S | 110 | UTGX0JC1210P | 91 |
| UTGX012D2P | 16 | UTGX0JC1210S | 91 |
| UTGX012D2S | 16 | UTGX0JC124P | 33 |
| UTGX012D3P | 29 | UTGX0JC124S | 33 |
| UTGX012D3S | 29 | UTGX0JC128P | 76 |
| UTGX012D4P | 33 | UTGX0JC128S | 76 |
| UTGX012D4S | 33 | UTGX0JC1412P | 96 |
| UTGX012D8P | 81 | UTGX0JC1412S | 96 |
| UTGX012D8S | 81 | UTGX0JC1419P | 122 |
| UTGX012E10P | 91 | UTGX0JC1419S | 122 |
| UTGX012E10S | 91 | UTGX0JC142G1P | 25 |
| UTGX012E14P | 110 | UTGX0JC142G1S | 25 |
| UTGX012E14S | 110 | UTGX0JC147P | 67 |
| UTGX012E2P | 16 | UTGX0JC147S | 67 |
| UTGX012E2S | 16 | UTGX0JC148P | 85 |
| UTGX012E3P | 29 | UTGX0JC148S | 85 |
| UTGX012E3S | 29 | UTGX0JC1492P | 105 |
| UTGX012E4P | 33 | UTGX0JC1492S | 105 |
| UTGX012E4S | 33 | | |
| UTGX012E8P | 81 | | |
| UTGX012E8S | 81 | | |
| UTGX01412P | 96 | | |

Accessories**Color coding rings**

| | |
|-------------|----|
| UTGX610CCRG | 22 |
| UTGX610CCRR | 22 |
| UTGX610CCRY | 22 |
| UTGX612CCRG | 18 |
| UTGX612CCRR | 18 |
| UTGX612CCRY | 18 |
| UTGX614CCRG | 27 |
| UTGX614CCRR | 27 |
| UTGX614CCRY | 27 |
| UTGX710CCRG | 22 |
| UTGX710CCRR | 22 |
| UTGX710CCRY | 22 |
| UTGX712CCRG | 18 |
| UTGX712CCRR | 18 |
| UTGX712CCRY | 18 |
| UTGX714CCRG | 27 |
| UTGX714CCRR | 27 |
| UTGX714CCRY | 27 |

Discrimination pin

| | |
|--------|-----|
| SMSPE0 | 154 |
|--------|-----|

Gasket

| | |
|---------|----|
| UTFD12B | 40 |
| UTFD13B | 18 |
| UTFD14B | 27 |

Plastic protective cap

| | |
|-----------|----|
| 85005586A | 22 |
| 85005587A | 18 |
| 85005588A | 27 |
| 85005595 | 22 |
| 85005596 | 18 |
| 85005597 | 27 |

Sealing caps

| | |
|--------------|----|
| UTGX10DCG | 22 |
| UTGS10DCGR | 22 |
| UTGS12DCG | 18 |
| UTGX12DCGE | 18 |
| UTGX12DCGR | 18 |
| UTGX14DCG | 27 |
| UTGX14DCGE | 50 |
| UTGX14DCGR | 27 |
| UTGX610DCG | 22 |
| UTGX612DCG | 18 |
| UTGX614DCG | 27 |
| UTS614DCG133 | 50 |

Contacts**Crimp contacts**

| | |
|------------|-----|
| 82911456A | 131 |
| 82911456K | 131 |
| 82911457NA | 131 |
| 82911457NK | 131 |
| 82911458A | 131 |
| 82911458K | 131 |
| 82911459NA | 131 |
| 82911459NK | 131 |
| 82911460A | 131 |
| 82911460K | 131 |
| 82911461NA | 131 |
| 82911461NK | 131 |
| 82911462A | 131 |
| 82911462K | 131 |
| 82911463NA | 131 |
| 82911463NK | 131 |

| | |
|-------------|-----|
| 82911464A | 131 |
| 82911464K | 131 |
| 82911465NA | 131 |
| 82911465NK | 131 |
| 82911466A | 131 |
| 82911466K | 131 |
| 82911467NA | 131 |
| 82911467NK | 131 |
| 82913600A | 131 |
| 82913601A | 131 |
| 82913602A | 131 |
| 82913603A | 131 |
| 82913604A | 131 |
| 82913605A | 131 |
| 82913606A | 131 |
| 82913607A | 131 |
| 82913608A | 131 |
| 82913609A | 131 |
| RC14M30GE1K | 131 |
| RC14M30J | 131 |
| RC14M30K | 131 |
| RC16M23GE1K | 131 |
| RC16M23J | 131 |
| RC16M23K | 131 |
| RC18W3K | 131 |
| RC20M12GE7K | 131 |
| RC20M12J | 131 |
| RC20M12K | 131 |
| RC20M13GE7K | 131 |
| RC20M13J | 131 |
| RC20M13K | 131 |
| RC20W3K | 131 |
| RC24M9GE7K | 131 |
| RC24M9J | 131 |
| RC24M9K | 131 |
| RC24W3K | 131 |
| RC28M1GE7K | 131 |
| RC28M1J | 131 |
| RC28M1K | 131 |
| RM14M30GE1K | 131 |
| RM14M30J | 131 |
| RM14M30K | 131 |
| RM16M23GE1K | 131 |
| RM16M23J | 131 |
| RM16M23K | 131 |
| RM18W3K | 131 |
| RM20M12GE1K | 131 |
| RM20M12J | 131 |
| RM20M12K | 131 |
| RM20M13J | 131 |
| RM20M13K | 131 |
| RM20W3K | 131 |
| RM24M9GE1K | 131 |
| RM24M9J | 131 |
| RM24M9K | 131 |
| RM24W3K | 131 |
| RM28M1GE1K | 131 |
| RM28M1J | 131 |
| RM28M1K | 131 |
| SC14M1S18 | 131 |
| SC14M1S31 | 131 |
| SC14M1TK6 | 131 |
| SC14ML1S18 | 131 |
| SC14ML1S31 | 131 |
| SC14ML1TK6 | 131 |
| SC16M11S18 | 131 |
| SC16M11S31 | 131 |

| | | | |
|--------------|-----|-----------------------------|-----|
| SC16M11TK6 | 131 | SM24W3TK6 | 131 |
| SC16M1S18 | 131 | SM24WL3TK6 | 131 |
| SC16M1S31 | 131 | SM24WL3TKS26 | 131 |
| SC16M1TK6 | 131 | Coaxial contacts | |
| SC16ML11S18 | 131 | RCDX6016D28 | 134 |
| SC16ML11S31 | 131 | RCDX6018D28 | 134 |
| SC16ML11TK6 | 131 | RCDX6024D28 | 134 |
| SC16ML1S18 | 131 | RCDX6026D28 | 134 |
| SC16ML1S31 | 131 | RCDX6032D28 | 134 |
| SC16ML1TK6 | 131 | RCDX6034D28 | 134 |
| SC20M1S18 | 131 | RCDX6036D28 | 134 |
| SC20M1S31 | 131 | RCDX6052D28 | 134 |
| SC20M1TK6 | 131 | RCDX60xxD28 | 133 |
| SC20ML1S18 | 131 | RCDXK1D28 | 134 |
| SC20ML1S31 | 131 | RMDX6018D28 | 134 |
| SC20ML1TK6 | 131 | RMDX6024D28 | 134 |
| SC20W3S26 | 131 | RMDX6026D28 | 134 |
| SC20W3TK6 | 131 | RMDX6032D28 | 134 |
| SC20WL3S25 | 131 | RMDX6034D28 | 134 |
| SC20WL3TK6 | 131 | RMDX6036D28 | 134 |
| SC24M1S18 | 131 | RMDX6046D28 | 134 |
| SC24M1S31 | 131 | RMDX6050D28 | 134 |
| SC24M1TK6 | 131 | RMDX6052D28 | 134 |
| SC24ML1S18 | 131 | RMDX60xxD28 | 133 |
| SC24ML1S31 | 131 | RMDXK10D28 | 134 |
| SC24ML1TK6 | 131 | Fiber optic contacts | |
| SC24W3S25 | 131 | RCPOF1000B | 139 |
| SC24W3S26 | 131 | RMPOF1000 | 139 |
| SC24W3TK6 | 131 | PCB contacts | |
| SC24WL3TK6 | 131 | 82911684NAPC | 136 |
| SC24WL3TKS25 | 131 | 82911684NPC | 136 |
| SM14M1S18 | 131 | 82911685NAPC | 136 |
| SM14M1S31 | 131 | 82911685NPC | 136 |
| SM14M1TK6 | 131 | RC20M12E83K | 136 |
| SM14ML1S18 | 131 | RC20M12E84K | 136 |
| SM14ML1S31 | 131 | RC20M12E8K | 136 |
| SM14ML1TK6 | 131 | RCW5016K | 136 |
| SM16M11S18 | 131 | RCW50A7K | 136 |
| SM16M11S31 | 131 | RM20M12E83K | 136 |
| SM16M11TK6 | 131 | RM20M12E8K | 136 |
| SM16M1S18 | 131 | RMW5016K | 136 |
| SM16M1S31 | 131 | RMW50A7K | 136 |
| SM16M1TK6 | 131 | Tooling | |
| SM16ML11S18 | 131 | 51060210924 | 140 |
| SM16ML11S31 | 131 | 51060210936 | 140 |
| SM16ML11TK6 | 131 | M317 | 140 |
| SM16ML1S18 | 131 | MH860 | 140 |
| SM16ML1S31 | 131 | RX2025GE1 | 141 |
| SM16ML1TK6 | 131 | RX2031J | 141 |
| SM20M1S18 | 131 | RX20D44 | 141 |
| SM20M1S31 | 131 | S16RCM14 | 140 |
| SM20M1TK6 | 131 | S16RCM16 | 140 |
| SM20ML1S18 | 131 | S16SCM20 | 140 |
| SM20ML1S31 | 131 | S16SCML1 | 140 |
| SM20ML1TK6 | 131 | S16SCML11 | 140 |
| SM20W3S26 | 131 | S20RCM | 140 |
| SM20W3TK6 | 131 | S20SCM20 | 140 |
| SM20WL3S26 | 131 | SHANDLES | 140 |
| SM20WL3TK6 | 131 | VEGE10077A | 140 |
| SM24M1S18 | 131 | VEGE10078A | 140 |
| SM24M1S31 | 131 | | |
| SM24M1TK6 | 131 | | |
| SM24ML1S18 | 131 | | |
| SM24ML1S31 | 131 | | |
| SM24ML1TK6 | 131 | | |
| SM24W3S26 | 131 | | |
| SM24W3S26 | 131 | | |

5

Appendices

Notes

5

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Aerospace Group
Souriau S.A.S
9, Rue de la Porte de Buc
78000 Versailles
France
Eaton.com/souriau

For more information:
technical.emear@souriau.com
(Europe-Asia-Africa)

© 2021 Eaton
All Rights Reserved
Printed in France
Document No. CAUTGXEU01
January 2021

Eaton is a registered trademark.

All other trademarks are property
of their respective owners.



Follow us on social media to get the latest
product and support information.

