

# UTS Hi seal



## Description

Dynamic IP68/IP69K - Waterproof connectors in mated and unmated condition

■ UTS Hi seal connector is a range of light-weight industrial plastic circular connectors compatible with MIL-DTL-26482 connectors. It offers **Dynamic IP68/IP69K** water protection in both mated & unmated conditions.

■ Available :

- in 5 shell sizes,
- up to 21 contact arrangements
- with multiple polarization options.

■ Connectors are standard supplied with preassembled handsolder contacts. For dispolder or crimp contacts, please consult factory.

## Applications

UTS Hi seal connector is suitable for a broad range of applications, such as

- Wet & submerged environments
- Instrumentation
- Meteorological measurement system
- Traffic control
- Videosurveillance
- Tunnel fans
- Water measurement

and there is more.

## Benefits

Protection of electronics inside the equipments/boxes in case of maintenance, unmated conditions or cable damage

Fully intermateable and interchangeable with existing solutions

- Design based on MIL-DTL-26482 connectors or equivalents such as : BS 9522 F0017, NFC93422, HE301B, VG 95328.

Ideal for indoor / outdoor applications

- Dynamic IP68/69K water protection (during vibration and cable movements)
- Corrosion resistance

Operational safety - ESD

- Plastic shells

Rapid and secure locking system

- Bayonet connector

Suitable for overmoulding

- Sealed insulator and contacts

Respect for environment

- RoHS compliant

Visual identification

- Coloured rings



**SOURIAU**  
Connection Technology

# UTS Hi seal



## Technical characteristics

### Mechanical

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

### Electrical

- Current per contact max. Size 16: 13A  
Size 20: 7.5A
- Insulation resistance  $\geq 5000 \text{ M}\Omega$  under 500Vcc at 25°C
- Test potential 1500 Veff between contacts size 20  
2300 Veff between contacts size 16
- Working voltage 600 V - contacts size 20  
1000 V - contacts size 16 according to MIL-DTL-26482

### Environmental

- Operating temperature -40°C to + 105°C
- Sealing (mated/unmated) Dynamic IP68 - under water for 1 week, 1 bar  
Dynamic IP69K per DIN 40050 500 hours
- Salt spray
- UV resistance No mechanical degradation or important variation of color after 5 years of exposure in natural environment (equivalence exposure to sun and moisture as per ISO4892)
- RoHS compliant & conform to the Chinese standard SJ/T1166-2006 (Chinese RoHS equivalent)

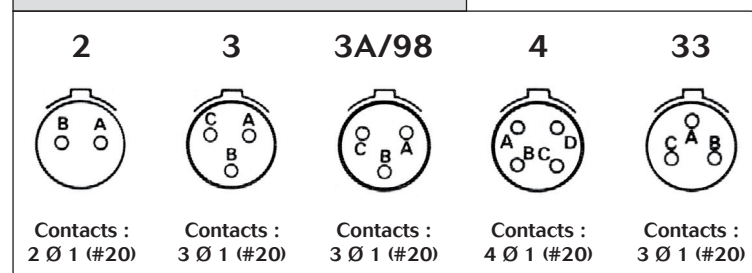
### Material

- Housing + Backshell Thermoplastic UL94-V0

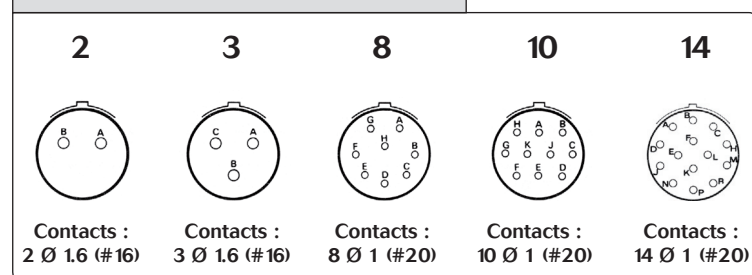
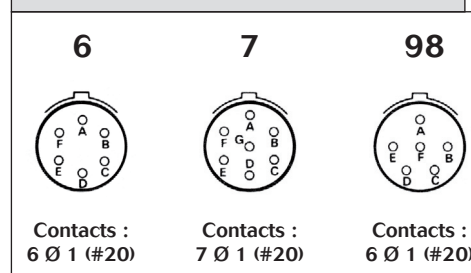


## Contacts arrangements

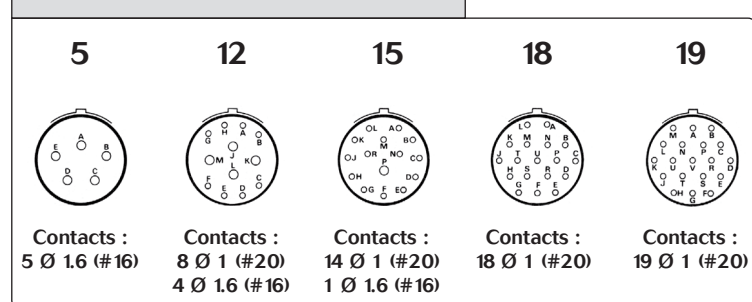
### Size 8



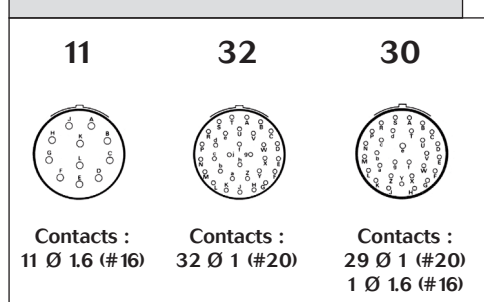
### Size 10



### Size 14



### Size 18\*



# UTS Hi seal

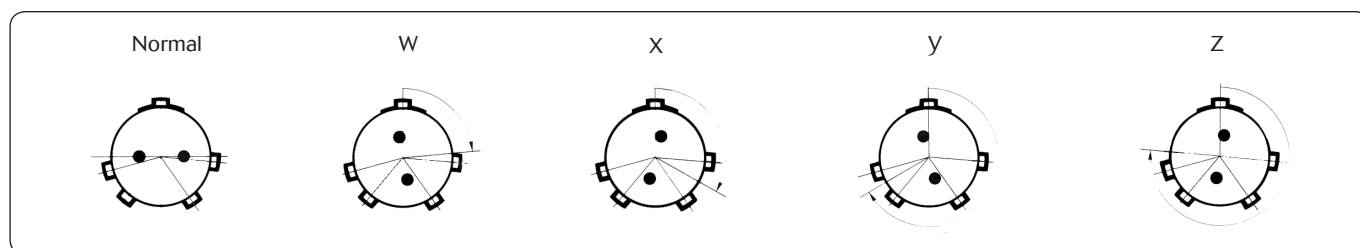


## Ordering information

|                                                                                                |     |   |    |   |   |   |   |   |
|------------------------------------------------------------------------------------------------|-----|---|----|---|---|---|---|---|
| Connector family                                                                               | UTS | 7 | -  | 8 | E | 2 | P | - |
|                                                                                                | UTS | 6 | JC | 8 | E | 2 | S | - |
| <b>Body variation</b>                                                                          |     |   |    |   |   |   |   |   |
| 6 Cable plug + backshell                                                                       |     |   |    |   |   |   |   |   |
| 7 Jam nut receptacle                                                                           |     |   |    |   |   |   |   |   |
| 0 Square flange receptacle                                                                     |     |   |    |   |   |   |   |   |
| <b>Backshell</b> : JC = Backshell (only for plug) / No digit = No backshell (only for plug)    |     |   |    |   |   |   |   |   |
| <b>Shell size</b> : 8, 10, 12, 14, 18                                                          |     |   |    |   |   |   |   |   |
| <b>Contact type</b>                                                                            |     |   |    |   |   |   |   |   |
| E = Handsolder contacts / R = Crimp contacts* / D = PC tail contacts*                          |     |   |    |   |   |   |   |   |
| <b>Insert arrangement</b> - see next page                                                      |     |   |    |   |   |   |   |   |
| <b>Contact gender</b> : P = Pin contacts / S = Socket contacts                                 |     |   |    |   |   |   |   |   |
| <b>Insert rotation</b> : No digit = Normal / W, X, Y, Z = Different orientations - see page 60 |     |   |    |   |   |   |   |   |

\* Please consult factory

## Insert orientation - Insert rotated in body (viewed from front face of male insert)

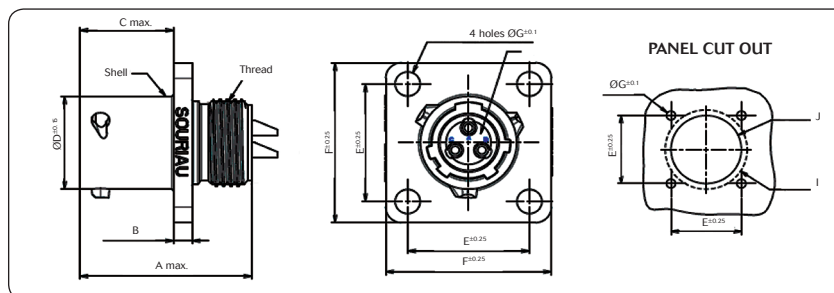


| Shell size       |   | 8   |     |         |    |    | 10 |    |     | 12  |     |     |   |     | 14  |    |     |     |     | 18  |     |     |
|------------------|---|-----|-----|---------|----|----|----|----|-----|-----|-----|-----|---|-----|-----|----|-----|-----|-----|-----|-----|-----|
| Layouts          |   | 2   | 3   | 3A(98)* | 4  | 33 | 6  | 7* | 98  | 3   | 8   | 10  | 2 | 14* | 5   | 12 | 15  | 18  | 19  | 11  | 32  | 30  |
| Angle in degrees | W | 58  | 60  | 60      | 45 | 90 | 90 | 90 | 90  | -   | 90  | 60  | - | 45  | 40  | 43 | 17  | 15  | 30  | 62  | 5   | 180 |
|                  | X | 122 | 210 | 210     | -  | -  | -  | -  | 180 | -   | 112 | 155 | - |     | 92  | 90 | 110 | 90  | 165 | 119 | 138 | 193 |
|                  | Y | -   | -   | -       | -  | -  | -  | -  | 240 | 180 | 203 | 270 | - |     | 184 | -  | 155 | 180 | 315 | 241 | 222 | 285 |
|                  | Z | -   | -   | -       | -  | -  | -  | -  | 270 | -   | 292 | 295 | - |     | 273 | -  | 234 | 270 | -   | 340 | 265 | 350 |

\* 8-98 layout, W and X non standard orientations / 10-7 & 12-14 layouts, X non standard orientation

## Range presentation

### Square flange receptacle with handsolder contacts



| Shell size | Part numbers     |                  | A    | B   | C    | Ø D  | E    | F    | G   | Ø I  | Ø J  |
|------------|------------------|------------------|------|-----|------|------|------|------|-----|------|------|
|            | Male contact     | Female contact   |      |     |      |      |      |      |     |      |      |
| 8          | UTS08E - - P -   | UTS08E - - S -   | 21.5 | 2.3 | 11.7 | 12.0 | 15.1 | 21.0 | 3.2 | 15.5 | 12.5 |
| 10         | UTS010E - - P -  | UTS010E - - S -  | 21.5 | 2.3 | 11.7 | 15.0 | 18.3 | 23.8 | 3.2 | 17.3 | 15.1 |
| 12         | UTS012E - - P -  | UTS012E - - S -  | 21.5 | 2.3 | 11.7 | 19.0 | 20.6 | 26.2 | 3.2 | 21.8 | 18.2 |
| 14         | UTS014E - - P -  | UTS014E - - S -  | 21.5 | 2.3 | 11.7 | 22.2 | 23.0 | 28.6 | 3.2 | 25.0 | 21.5 |
| 18         | UTS018E - - P -* | UTS018E - - S -* | 21.5 | 2.5 | 11.7 | 28.5 | 27.0 | 33.3 | 3.2 | 31.8 | 27.8 |

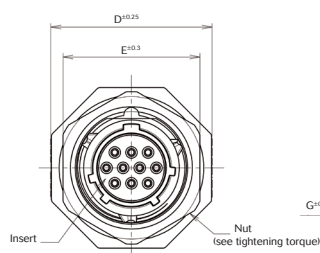
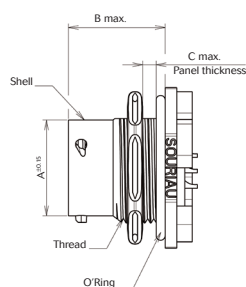
Note : all dimensions are in mm

# UTS Hi seal

**SEALED UNMATED**  
**MIL-DTL-26482**  
**COMPATIBLE**



## Jam nut receptacle with handsolder contacts

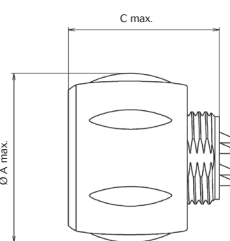
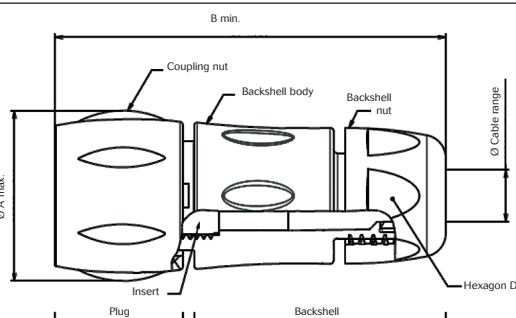


PANEL CUT OUT



| Shell size | Part numbers    |                 | Ø A  | B    | C   | D    | E    | F     | Ø G  | Tightening torque |
|------------|-----------------|-----------------|------|------|-----|------|------|-------|------|-------------------|
|            | Male contact    | Female contact  |      |      |     |      |      |       |      |                   |
| 8          | UTS78E -- P -   | UTS78E -- S -   | 12.0 | 19.3 | 3.2 | 24.0 | 19.3 | 13.75 | 14.6 | 2 Nm              |
| 10         | UTS710E -- P -  | UTS710E -- S -  | 14.9 | 19.3 | 3.2 | 27.0 | 22.2 | 16.5  | 17.7 | 3 Nm              |
| 12         | UTS712E -- P -  | UTS712E -- S -  | 19.0 | 19.3 | 3.2 | 31.8 | 27.0 | 21.2  | 22.5 | 4 Nm              |
| 14         | UTS714E -- P -  | UTS714E -- S -  | 22.2 | 19.3 | 3.2 | 34.9 | 30.2 | 24.3  | 25.7 | 5 Nm              |
| 18         | UTS718E -- P -* | UTS718E -- S -* | 28.5 | 19.3 | 3.2 | 41.3 | 36.6 | 30.6  | 32.0 | 5 Nm              |

## Cable plug with handsolder contacts



Cable plug without backshell

| Shell size | Part numbers        |                     | Ø A  | B    | Ø Cable range<br>Standard seal | Ø Cable range<br>Reducing seal | Hexagon D | C    |
|------------|---------------------|---------------------|------|------|--------------------------------|--------------------------------|-----------|------|
|            | Male contact        | Female contact      |      |      |                                |                                |           |      |
| 8          | UTS6 -- 8E -- P -   | UTS6 -- 8E -- S -   | 22.5 | 54.0 | 2.5 / 6.5                      | 1.5 / 5.0                      | 16.0      | 21.3 |
| 10         | UTS6 -- 10E -- P -  | UTS6 -- 10E -- S -  | 26.7 | 63.2 | 2.5 / 8.0                      | 1.5 / 5.0                      | 18.5      | 23.6 |
| 12         | UTS6 -- 12E -- P -  | UTS6 -- 12E -- S -  | 30.2 | 66.7 | 5.0 / 12.0                     | 3.0 / 9.0                      | 24.0      | 23.6 |
| 14         | UTS6 -- 14E -- P -  | UTS6 -- 14E -- S -  | 35.1 | 71.5 | 7.0 / 14.0                     | 5.0 / 12.0                     | 26.0      | 23.6 |
| 18         | UTS6 -- 18E -- P -* | UTS6 -- 18E -- S -* | 42.0 | 81.3 | 9.0 / 18.0                     | 7.0 / 16.0                     | 33.0      | -    |

Coloured ring supplied as optional extra / \* Please consult factory for

## Accessories: please refer to the UTS catalogue

For further information, visit our website [www.souriau-industrial.com](http://www.souriau-industrial.com)  
or contact us at [contactindustry@souriau.com](mailto:contactindustry@souriau.com)

Note : all dimensions are in mm / \* Please consult factory