

# UTS Hi seal

**SEALED  
UNMATED**



## 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 desolder 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**

**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

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## 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)

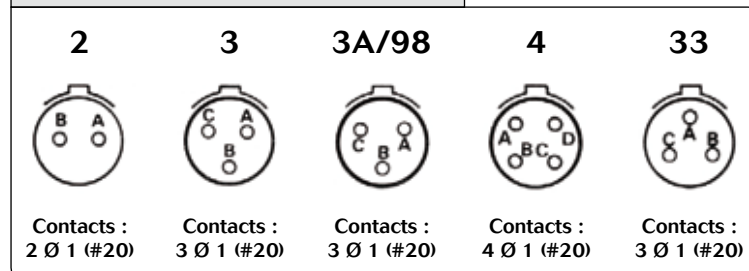
### Material

- Housing + Backshell Thermoplastic UL94-V0

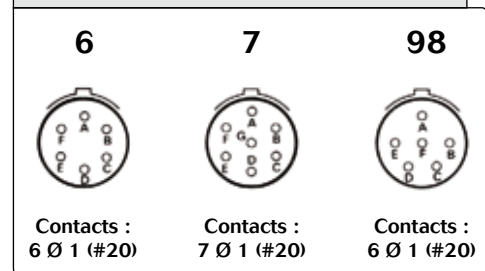


## Contacts arrangements

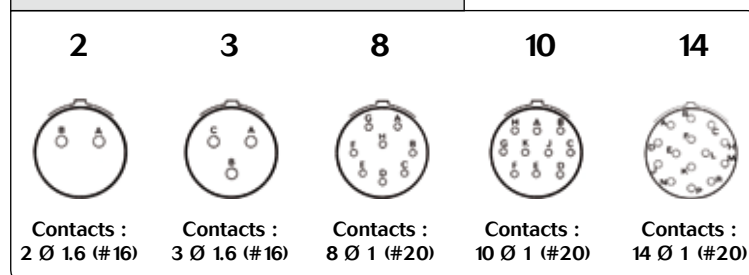
### Size 8



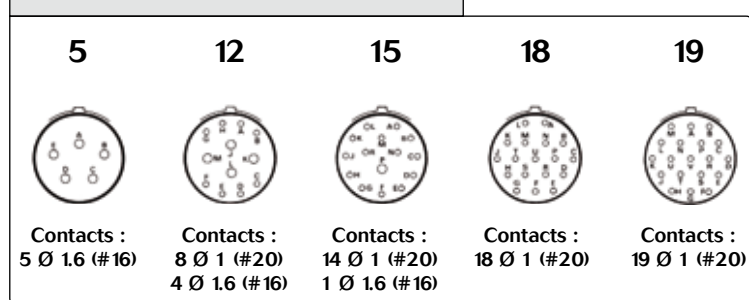
### Size 10



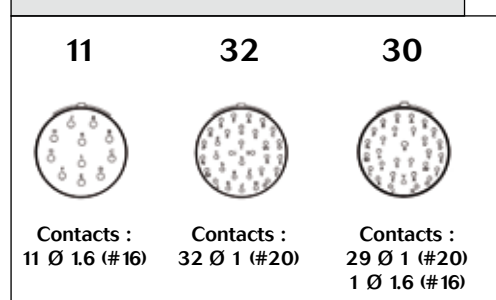
### Size 12



### Size 14



### Size 18\*



\* Please consult factory

# UTS Hi seal

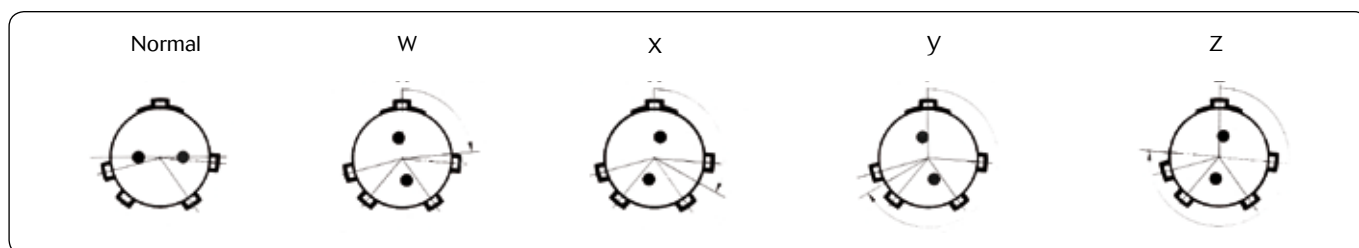
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## Ordering information

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

\* Please consult factory

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

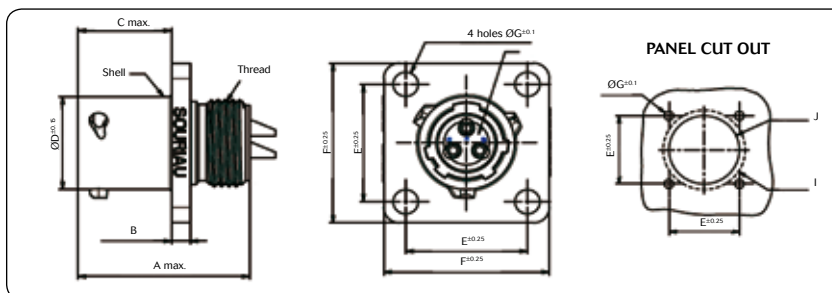


| Shell size       |   | 8   |     |         |    |    | 10 |    |     | 12  |     |     |   |     | 14  |    |     |     |     | 18  |     |     |
|------------------|---|-----|-----|---------|----|----|----|----|-----|-----|-----|-----|---|-----|-----|----|-----|-----|-----|-----|-----|-----|
| Layouts          |   | 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 $\pm 0.15$ | C    | $\varnothing D \pm 0.15$ | E $\pm 0.25$ | F $\pm 0.25$ | G $\pm 0.1$ | $\varnothing I \pm 0.10$ | $\varnothing J \pm 0.10$ |
|------------|-----------------|-----------------|------|--------------|------|--------------------------|--------------|--------------|-------------|--------------------------|--------------------------|
|            | 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                     |

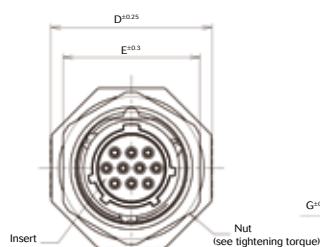
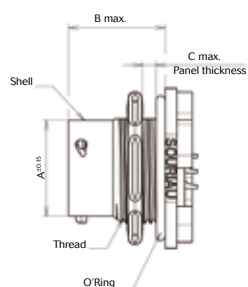
Note : all dimensions are in mm

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## Jam nut receptacle with handsolder contacts

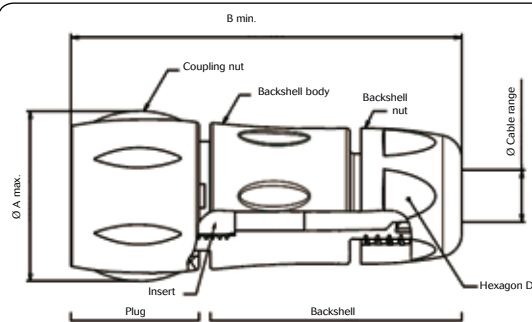


PANEL CUT OUT



| 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

## 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