

# 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 according to MIL-DTL-26482
- 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
- Salt spray: 500 hours
- RoHS compliant & conform to the Chinese standard SJ/T1166-2006 (Chinese RoHS equivalent)
- UV resistant: 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)

### Material

- Housing + Backshell: Thermoplastic UL94-V0
- Insert: Elastomer
- Contacts: Copper alloy - gold plated  
Other platings on request



## 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

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## UTS Hi seal contacts arrangements

**Size 8**

<b>2</b>	<b>3</b>	<b>3A/98</b>	<b>4</b>	<b>33</b>
Contacts : 2 Ø 1 (#20)	Contacts : 3 Ø 1 (#20)	Contacts : 3 Ø 1 (#20)	Contacts : 4 Ø 1 (#20)	Contacts : 3 Ø 1 (#20)

**Size 10**

<b>6</b>	<b>7</b>	<b>98</b>
Contacts : 6 Ø 1 (#20)	Contacts : 7 Ø 1 (#20)	Contacts : 6 Ø 1 (#20)

**Size 12**

<b>2</b>	<b>3</b>	<b>8</b>	<b>10</b>	<b>14</b>
Contacts : 2 Ø 1.6 (#16)	Contacts : 3 Ø 1.6 (#16)	Contacts : 8 Ø 1 (#20)	Contacts : 10 Ø 1 (#20)	Contacts : 14 Ø 1 (#20)

**Size 14**

<b>5</b>	<b>12</b>	<b>15</b>	<b>18</b>	<b>19</b>
Contacts : 5 Ø 1.6 (#16)	Contacts : 8 Ø 1 (#20) 4 Ø 1.6 (#16)	Contacts : 14 Ø 1 (#20) 1 Ø 1.6 (#16)	Contacts : 18 Ø 1 (#20)	Contacts : 19 Ø 1 (#20)

**Size 18\***

<b>11</b>	<b>32</b>	<b>30</b>
Contacts : 11 Ø 1.6 (#16)	Contacts : 32 Ø 1 (#20)	Contacts : 29 Ø 1 (#20) 1 Ø 1.6 (#16)

\* Please consult factory

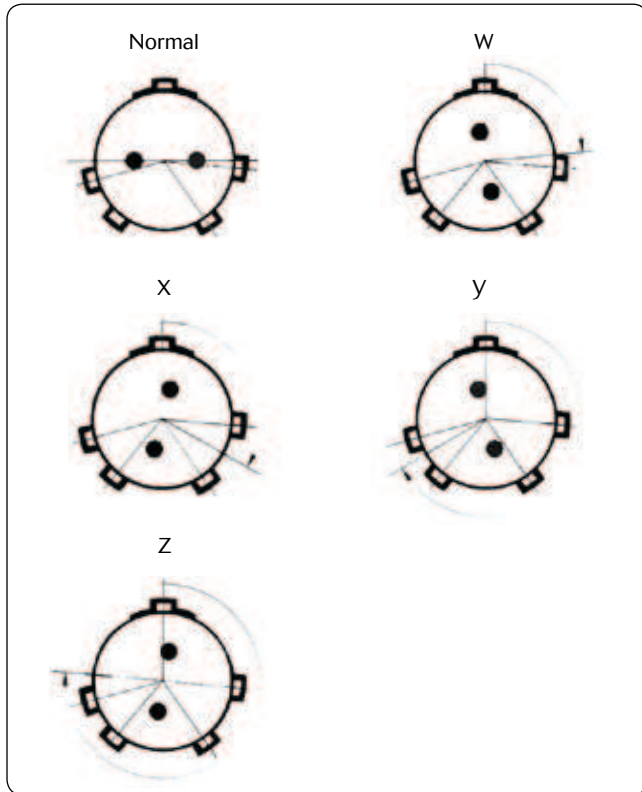
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**SEALED  
UNMATED**



## Insert orientation\*



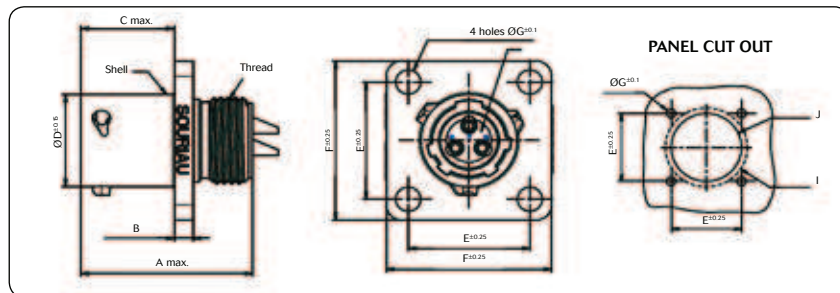
Shell sizes	layouts	angle in degrees			
		W	X	y	Z
8	2	58	122	-	-
	3	60	210	-	-
	3A (98)*	60	210	-	-
	4	45	-	-	-
	33	90	-	-	-
10	6	90	-	-	-
	7*	90	-	-	-
	98	90	180	240	270
12	3	-	-	180	-
	8	90	112	203	292
	10	60	155	270	295
	2	-	-	-	-
14	14*	45	-	-	-
	5	40	92	184	273
	12	43	90	-	-
	15	17	110	155	234
	18	15	90	180	270
18	19	30	165	315	-
	11	62	119	241	340
	32	85	138	222	265
	30	180	193	285	350

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

\* 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

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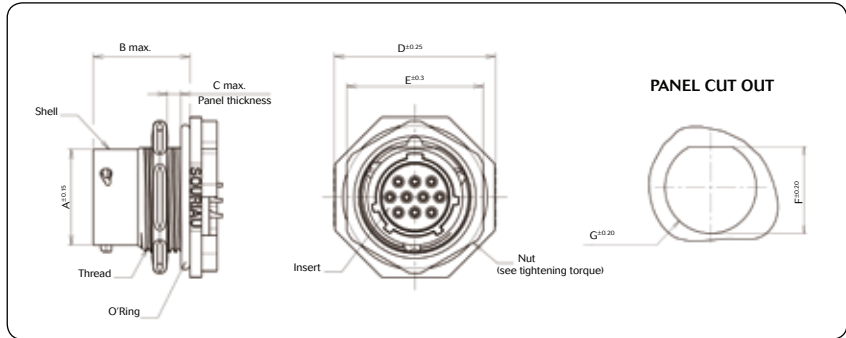
Note : all dimensions are in mm / \* Please consult factory

# UTS Hi seal

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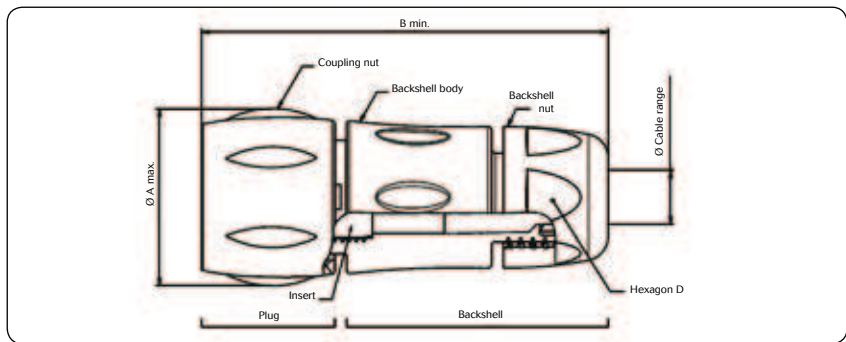


## Jam nut receptacle with handsolder contacts



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



Shell size	Part numbers		Ø A	B	Ø Cable range Standard seal	Ø Cable range Reducing seal	Hexagon D
	Male contact	Female contact					
8	UTS6JC8E -- P -	UTS6JC8E -- S -	22.5	54.0	2.5 / 6.5	1.5 / 5.0	16.0
10	UTS6JC10E -- P -	UTS6JC10E -- S -	26.7	63.2	2.5 / 8.0	1.5 / 5.0	18.5
12	UTS6JC 2E -- P -	UTS6JC12E -- S -	30.2	66.7	5.0 / 12.0	3.0 / 9.0	24.0
14	UTS6JC14E -- P -	UTS6JC14E -- S -	35.1	71.5	7.0 / 14.0	5.0 / 12.0	26.0
18	UTS6JC18E -- P -*	UTS6JC18E -- S -*	42.0	81.3	9.0 / 18.0	7.0 / 16.0	33.0

Coloured ring supplied as optional extra (see page 72).

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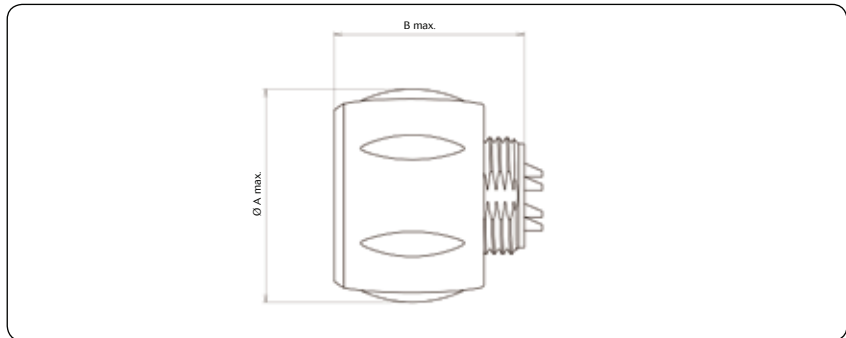
Note : all dimensions are in mm / \* Please consult factory

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UNMATED**



## Cable plug without backshell



Shell size*	Part numbers		Ø A	B
	Male contact	Female contact		
8	UTS68E - - P -	UTS68E - - S -	22.5	21.3
10	UTS610E - - P -	UTS610E - - S -	26.7	23.6
12	UTS612E - - P -	UTS612E - - S -	30.2	23.6
14	UTS614E - - P -	UTS614E - - S -	35.1	23.6

\* For shell size 18, please consult factory

Note : all dimensions are in mm

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