

# UTS Hi seal with PC tail contacts



## PCB mounted UTS Hi seal: rugged & plastic

Jam nut & Square flange receptacles with PC tail contacts were designed for applications in harsh environments where connectors are used in wet, corrosive and tight-space conditions.

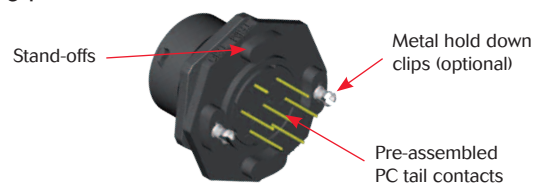
Wave soldering suitable ✓

PC Tail contacts

Hold down clips for secure mechanical retention

Standoffs to ensure consistent height off PCB and to aid cleaning process

**SEALED  
UNMATED**



Excellent corrosion resistance ✓

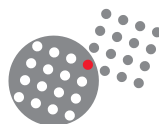
Plastic connector  
> 500 hr salt spray

Leakage prevention when no cap ✓

IP68/69K mated / unmated

UV-resistant ✓

5 years of exposure without mechanical & visual degradation



**SOURIAU**  
Connection Technology



# UTS

## Hi seal with PC tail contacts



### Technical features

#### Mechanical

- **Housing & Backshell:** Thermoplastic UL94-V0
- **Insert:** Elastomer
- **Contacts:** Copper alloy - gold plated  
Other platings on request
- **Endurance:** 250 mating/unmating
- **Vibrations:** 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 rating per contact max:**
  - Size 16: 13A
  - Size 20: 7.5A

- **Insulation resistance:**  
≥ 5000 MΩ 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

- **Temperature range:** -40°C to + 105°C
- **Salt spray resistance:** 500 hours
- **Sealing (mated/unmated):**
  - Dynamic IP68 - under water for 1 week, 1 bar
  - Dynamic IP69K per DIN 40050

- **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)



### Ordering information

Connector family	UTS	7	-	8	D	2	P	-	-
Body variation	7 Jam nut receptacle 0 Square flange receptacle								
Backshell	No digit: No backshell								
Shell size	8, 10, 12, 14, 18								
Contact type	D = PC tail contacts								
Insert arrangement	See next page								
Contact gender	P = Pin contacts S = Socket contacts								
Insert rotation	No digit = Normal W, X, Y, Z = Different orientations								
Specification	No digit: Standard version 32: version with hold down clips (only for Jam nut receptacle)								

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### Contacts layouts

**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>
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)
<b>18</b>	<b>19</b>	
Contacts : 18 Ø 1 (#20)	Contacts : 19 Ø 1 (#20)	

**Size 18\***

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

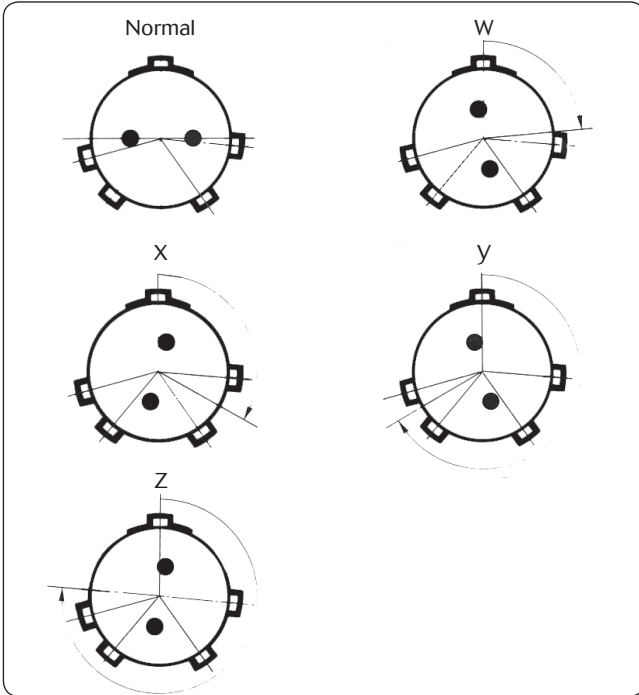
\* Please consult factory

# UTS

## Hi seal with PC tail contacts



### Insert orientation\*



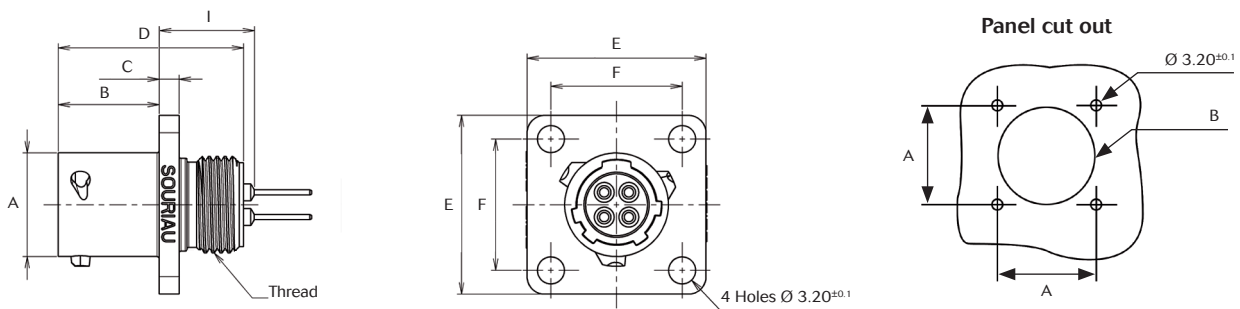
\* Insert rotated in body (viewed from front face of male insert)

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*	45	-	-	-
14	5	40	92	184	273
	12	43	90	-	-
	15	17	110	155	234
	18	15	90	180	270
	19	30	165	315	-
18	11	62	119	241	340
	32	85	138	222	265
	30	180	193	285	350

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

### Range presentation

#### Square flange receptacle with PCB contacts



Shell size	Ø A±0.15	B max.	C±0.15	D max.	E±0.25	F±0.25	I		Thread	Panel cut out	
							Male connector	Female connector		A±0.25	Ø B±0.1
8	11.9	11.7	2.3	21.5	21	15.1	9.76 / 11.86 <sup>(1)</sup> 10.78 / 13.09 <sup>(2)</sup>	9.55 / 11.71 <sup>(1)</sup> 10.82 / 12.79 <sup>(2)</sup>	7 / 16 28 UNEF-2A	15.1	12.5
10	14.9				23.8	18.3	10.98 / 13.39	10.82 / 12.79	9 / 16 24 UNEF-2A	18.3	15.1
12	18.95				26.2	20.6	9.76 / 11.86 <sup>(3)</sup> 10.98 / 13.39	9.55 / 11.71 <sup>(3)</sup> 10.82 / 12.79	11 / 16 24 UNEF-2A	20.6	18.2
14	22.15				28.6	23.0	10.98 / 13.39	10.82 / 12.79	13 / 16 20 UNEF-2A	23.0	21.4
18	Please consult us										

<sup>(1)</sup> for layouts 8-2, 8-3, 8-4 / <sup>(2)</sup> for layouts 8-3A, 8-89, 8-33 / <sup>(3)</sup> for layout 12-14

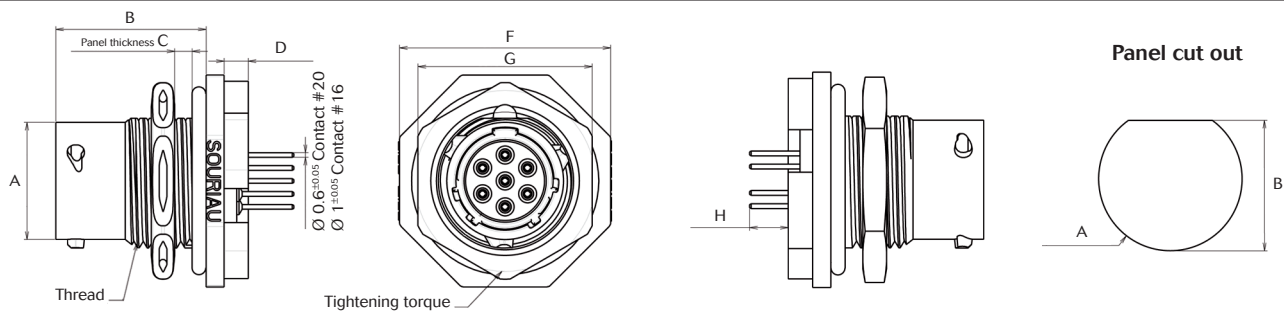
Note : all dimensions are in mm

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## Hi seal with PC tail contacts



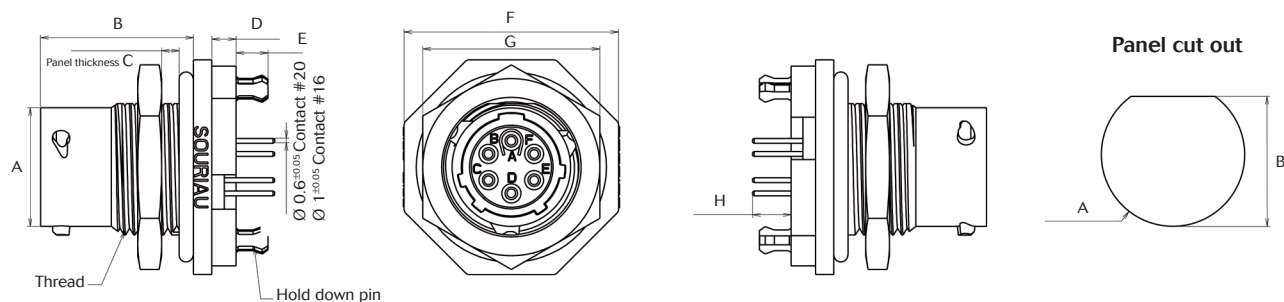
### Jam nut receptacle with PCB contacts



Shell size	Ø A <sup>±0.15</sup>	B max.	C max. Panel thickness	D max.	F	G	H		Thread	Tightening torque (Nm)	Panel cut out	
							Male connector	Female connector			Ø A <sup>±0.2</sup>	B <sup>±0.2</sup>
8	12.0	19.3	3.2	3.4	24.0	19.3	3.8 / 6.0 <sup>(1)</sup> 4.7 / 7.25 <sup>(2)</sup>	3.75 / 5.8 <sup>(1)</sup> 4.8 / 6.9 <sup>(2)</sup>	9 / 16 24 UNEF 2A	2	14.6	13.75
10	14.9				28.0	22.2	4.8 / 7.28	4.91 / 6.96	9 / 16 24 UNEF 2A	2	17.7	16.5
12	19.0				31.8	27.0	4.8 / 7 <sup>(3)</sup> 3.85 / 5.9 <sup>(4)</sup>	5.2 / 7 <sup>(3)</sup> 3.85 / 5.9 <sup>(4)</sup>	7 / 8 20 UNEF 2A	4	22.5	21.2
14	22.2				34.9	30.2	4.8 / 7	5.3 / 7	1" 20 UNEF 2A	5	25.7	24.3
18	Please consult us											

<sup>(1)</sup> for layouts 8-2, 8-3, 8-4 / <sup>(2)</sup> for layouts 8-3A, 8-98, 8-33 / <sup>(3)</sup> for layouts 12-3, 12-, 12-10 / <sup>(4)</sup> for layout 12-14

### Jam nut receptacle with PCB contacts & hold on clips



Shell size	Ø A <sup>±0.15</sup>	B max.	C max. Panel thickness	D max.	E <sup>±0.2</sup>	F	G	H		Thread	Tightening torque (Nm)	Panel cut out	
								Male connector	Female connector			Ø A <sup>±0.2</sup>	B <sup>±0.2</sup>
8	12.0	19.3	3.2	3.4	4	24.0	19.3	3.8 / 6.0 <sup>(1)</sup> 4.7 / 7.25 <sup>(2)</sup>	3.75 / 5.8 <sup>(1)</sup> 4.8 / 6.9 <sup>(2)</sup>	9 / 16 24 UNEF 2A	2	14.6	13.75
10	14.9					28.0	22.2	4.8 / 7.28	4.91 / 6.96	9 / 16 24 UNEF 2A	2	17.7	16.5
12	19.0					31.8	27.0	4.8 / 7 <sup>(3)</sup> 3.85 / 5.9 <sup>(4)</sup>	5.2 / 7 <sup>(3)</sup> 3.85 / 5.9 <sup>(4)</sup>	7 / 8 20 UNEF 2A	4	22.5	21.2
14	22.2					34.9	30.2	4.8 / 7	5.3 / 7	1" 20 UNEF 2A	5	25.7	24.3
18	Please consult us												

<sup>(1)</sup> for layouts 8-2, 8-3, 8-4 / <sup>(2)</sup> for layouts 8-3A, 8-98, 8-33 / <sup>(3)</sup> for layouts 12-3, 12-, 12-10 / <sup>(4)</sup> for layout 12-14

Note : all dimensions are in mm

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### Accessories

#### Jam nut sealing caps



Part numbers	Shell size
UTS8DCG	8
UTS10DCG	10
UTS12DCG	12
UTS14DCG	14
UTS18DCG	18



Metal terminal\*

Part numbers	Shell size
UTS8DCGR	8
UTS10DCGR	10
UTS12DCGR	12
UTS14DCGR	14
UTS18DCGR	18

#### Square flange sealing cap



Metal terminal\*

Part numbers	Shell size
UTS8DCGE	8
UTS10DCGE	10
UTS12DCGE	12
UTS14DCGE	14
UTS18DCGE	18

#### Colour coding rings



Part numbers		Shell size
Receptacles	Plugs	
UTS710CCR*	UTS610CCR*	10
UTS712CCR*	UTS612CCR*	12
UTS714CCR*	UTS614CCR*	14

\* Add G for Green, Y for Yellow, R for Red  
For shell sizes 8 & 18, please consult factory

#### Gasket



Part numbers / neoprene	Shell size
UTFD 11B	8
UTFD 12B	10
UTFD 13B	12
UTFD 14B	14
UTFD 16B	18

#### Plastic protective cap



Part numbers		Shell size
Receptacle cap	Plug cap	
8500-5585A	8500-5594	8
8500-5586A	8500-5595	10
8500-5587A	8500-5596	12
8500-5588A	8500-5597	14
8500-5590A	8500-5599	18

Note : all dimensions are in mm

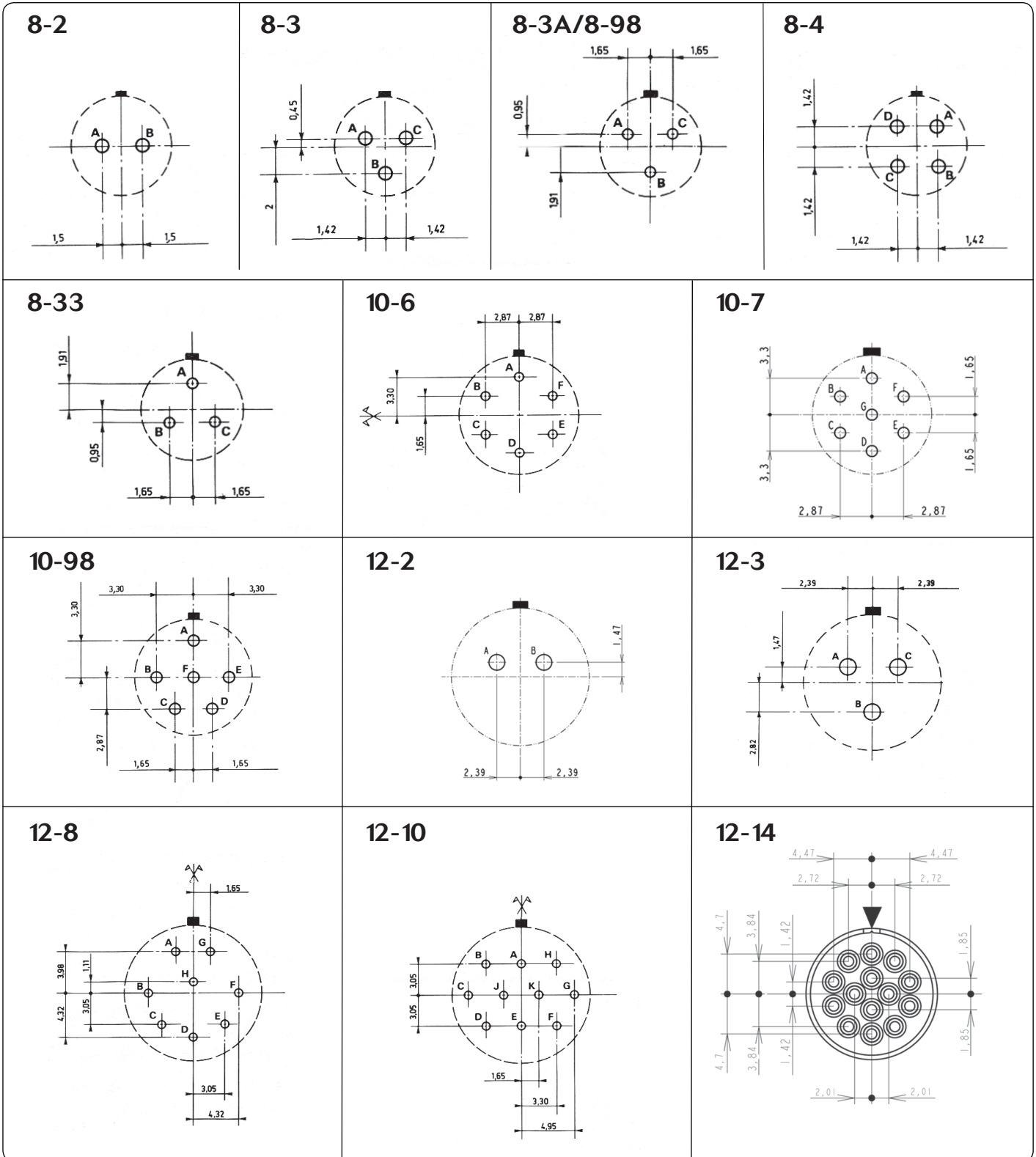


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## Hi seal with PC tail contacts



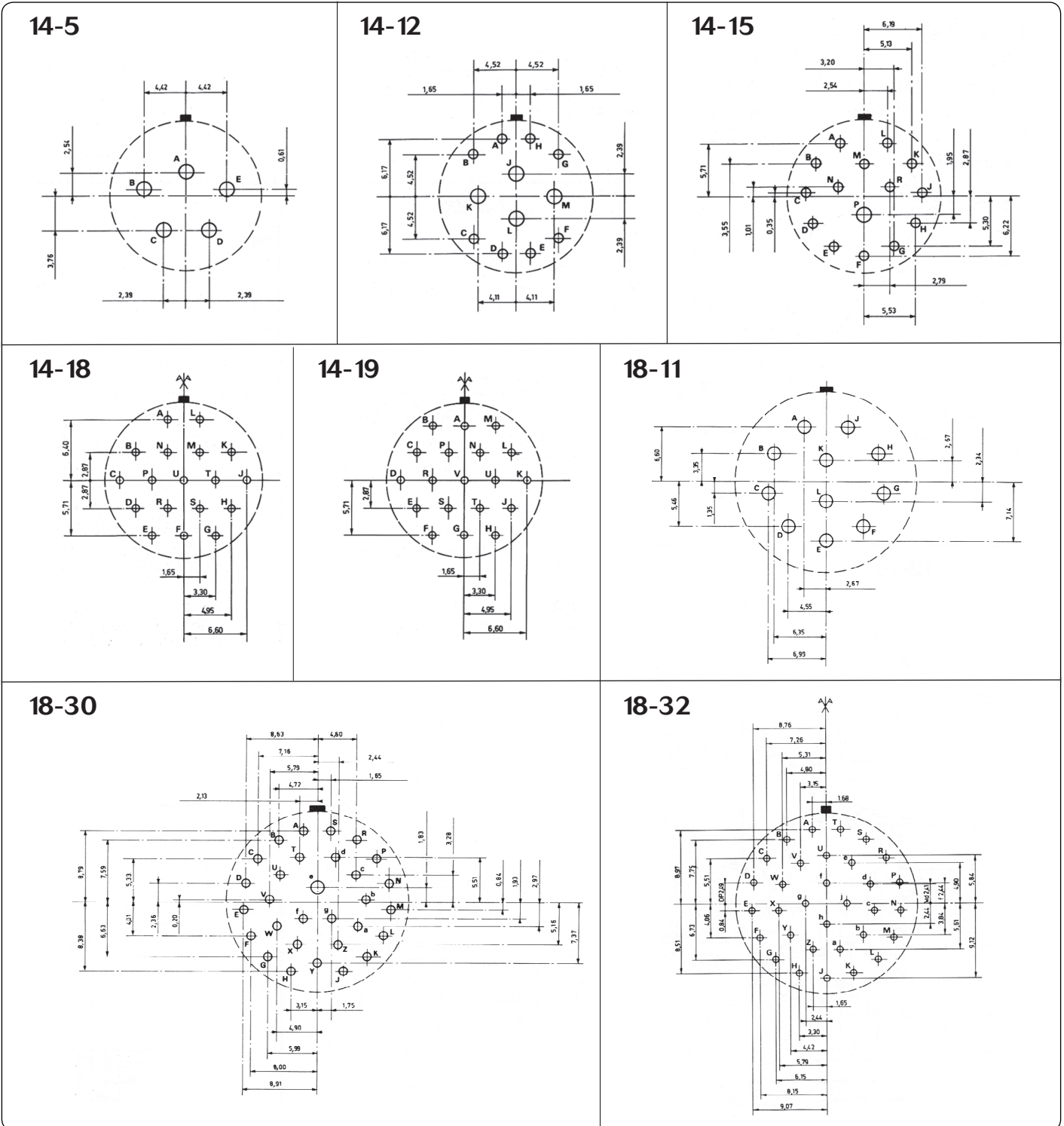
### Drilling patterns



Note : all dimensions are in mm

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## Hi seal with PC tail contacts



Note : all dimensions are in mm

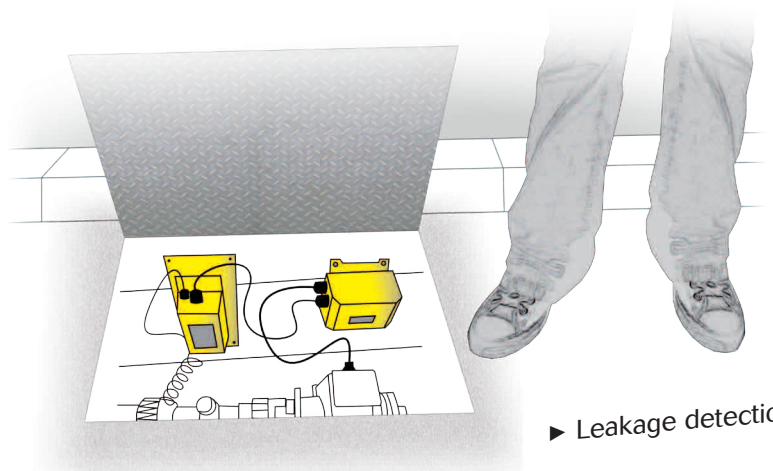
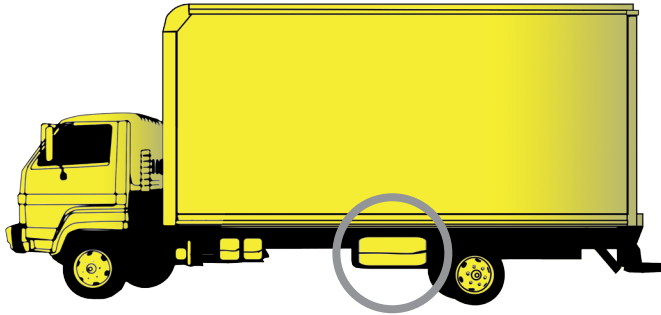
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or contact us at [contactindustry@souriau.com](mailto:contactindustry@souriau.com)



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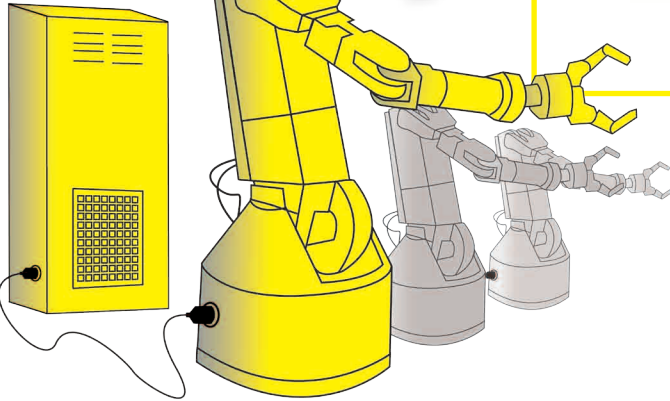


► Active steering system

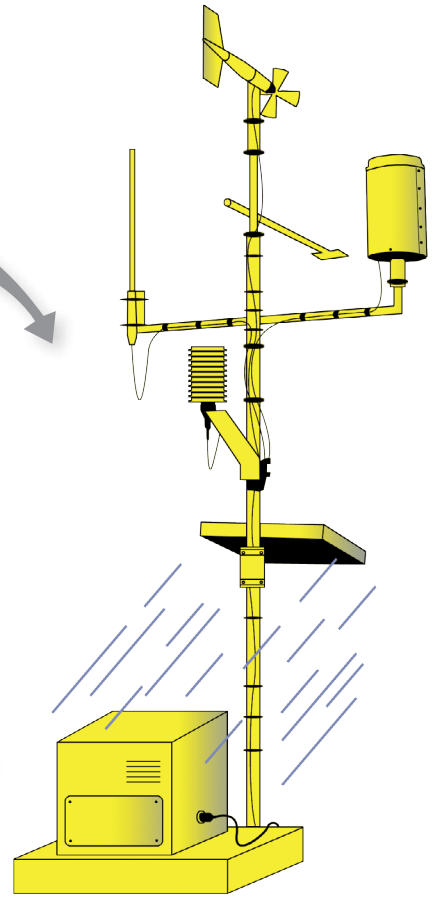
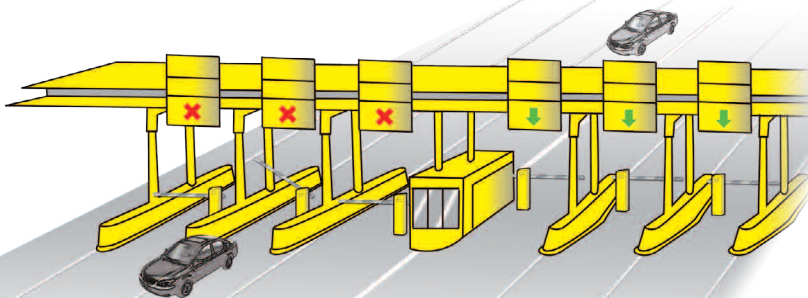


► Leakage detection

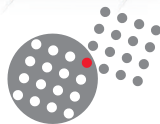
► Robot



► Road traffic management



► Outdoor weather station



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