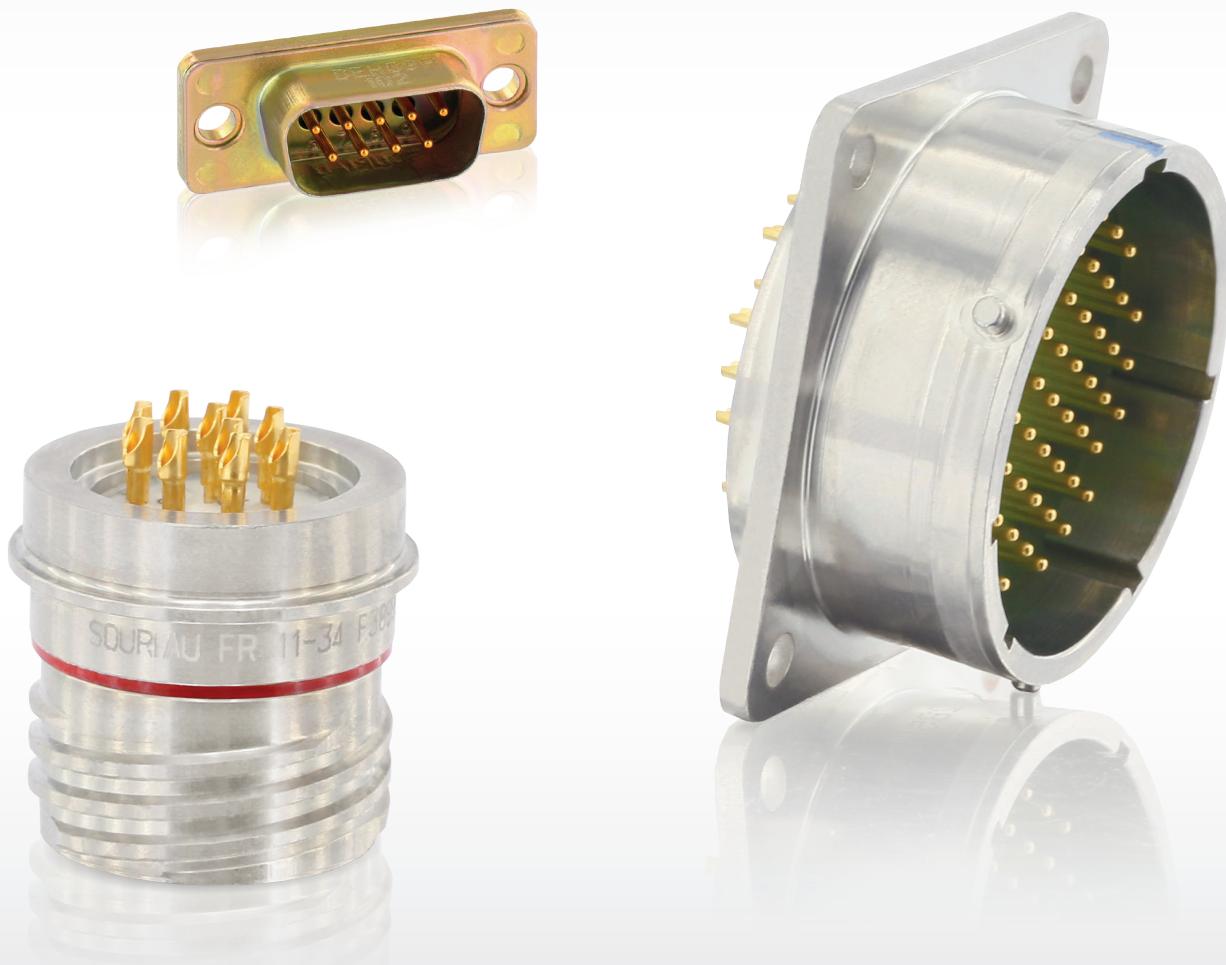


HERMETIC



## Hermetic Connectors High Performance Sealing Solutions





# Hermetic Connectors



## Presentation

Based on glass to metal seal technology, **SOURIAU** offers hermetic connectors to cover applications which require performances that supersede standard watertight connectors capability, such as high pressure, high temperature variations resistance, secured hermetic protection, ...

In addition to the various connector standards on which this technology has been developed, **SOURIAU** supports customers specific needs, from a shell or contact change to more complex and innovative solutions.

This hermetic connectors catalog aims to give an extensive outlook of **SOURIAU's** offering. After an overall view of the hermetic technology, you will find a detailed description of each connector range specifics features, as well as dimensions and ordering details. The end of the catalog will give you a flavor of some of the various specific extensions. Enjoy the reading!

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HERMETIC

Hermetic

# Overview

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## Typical applications



Actuators - Monitoring



Sensors



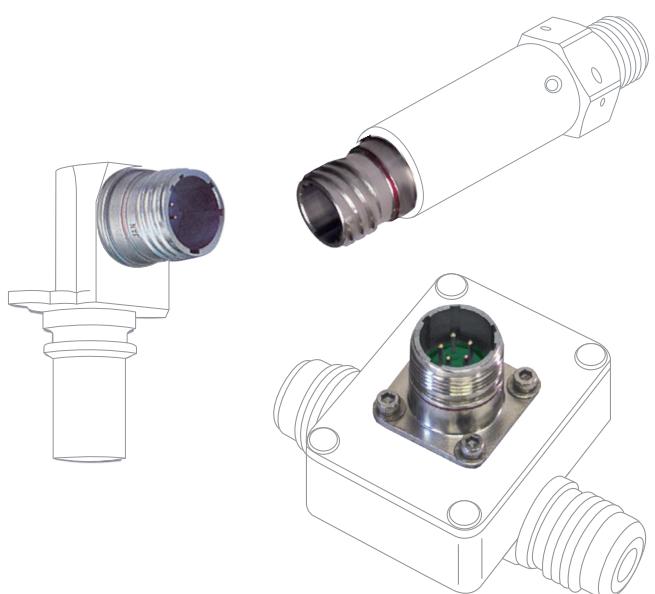
Valves - Flowmeters



Vacuum Pumps



High-Tech Cameras



## Features & Benefits

### HIGH SEALING

#### Hermetic connector

Leak rate less than  $10^{-7}\text{cm}^3/\text{s}$  at 1 bar pressure difference under helium.  
Less than 1  $\text{cm}^3$  leaks in 4 months.

### SPACE SAVING

#### Compacity

No need of additional rear accessories.  
1/3 shorter than watertight connector equivalent.  
Solder mount option for full equipment integration.

### LARGE OFFER

#### Wide range of standards

Large connectors offer available in circular as well as rectangular ranges: EN2997, MIL-C-26482 Series I & II, EN3646, MIL-C-38999, micro38999, D-Sub, ...

### CUSTOM SOLUTION

#### Adapted to specific need

Wide range of custom solutions based on standard definition: specific shell, materials, contact length, grounding, ...

### ROHS

#### Environment friendly

No lead content.

## Standard glass to metal

### Feedthrough

Easy MRO (Maintenance, Repair and Operations)

See page 63



### Solder contacts on both sides

Compact design

See page 64



### Standard hermetic

Glass to metal sealing



+ Added functions

### Removable crimp contacts

Ideal for fuel immersion

See page 62



### Rack & panel

Blind mating

See page 63



## sealing technologies

### Contact grounded on the shell

Integrated grounded function

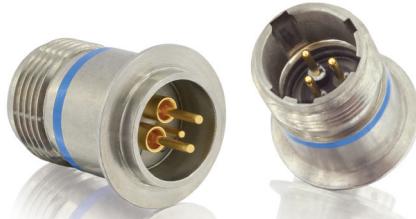
See page 65



### Thermocouples

Accurate temperature data communication

See page 65



+ Added functions



### Titanium

30% weight saving



### PCB contacts / Stand-offs

Robust PCB mount design

See page 62



## Standard glass to metal sealing technologies

### Capability to Provide Custom Solutions

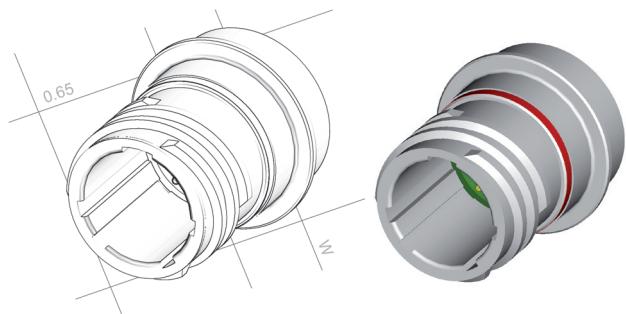
- ▶ Tight tolerances,
- ▶ Specific shells,
- ▶ Specific contacts,
- ▶ Filtering, ...



Ex: Custom EN2997

### Technical Support

- ▶ SOURIAU engineering team will proactively support your new designs. Contact us!
- ▶ Free 3D models available online: [www.tracepartsonline.net](http://www.tracepartsonline.net)



## Alternative sealing technologies

### Full plastic hermetic

Big volume low weight hermetic



### Resin sealed

Flexible low weight hermetic

See page 66



Hermetic range selector guide			
	► Standard	► Main feature	► Material
► <b>851 Series</b> see p.14	 MIL-C 26482 Series I	Economic	Steel housing
► <b>8525 Series</b> see p.20	 EN3646	Quick and robust bayonet coupling	Passivated stainless steel housing
► <b>8526 Series</b> see p.29	 MIL-C 26482 Series II	Quick and robust bayonet coupling	Tin plated steel housing
► <b>8533 Series</b> see p.36	 EN2997/ESC10	High temperature and high vibration (engine conditions)	Passivated stainless steel housing
► <b>8D Series</b> see p.44	 MIL-C-38999 Series III	High density	Passivated stainless steel housing
► <b>8STA Series</b> see p.53	 Derived from MIL-DTL-38999	Micro-miniature	Passivated stainless steel housing
► <b>D-Sub Series</b> see p.56	 MIL-DTL-24308	Rectangular	Tin or cadmium plated steel housing

HERMETIC

Hermetic

# Product Series

■	851 Series .....	14
■	8525 Series .....	20
■	8526 Series .....	29
■	8533 Series .....	36
■	8D Series .....	44
■	8STA Series .....	53
■	D-Sub Series .....	56



## Description

- Bayonet coupling connector
- MIL-DTL-26482 Series I, HE301 compliant and VG95328 qualified
- Glass sealed hermetic:
  - . high hermeticity performance
  - . compact low profile
- Various mounting styles:
  - . compact solder mount receptacle
  - . easy to install square flange receptacle
  - . easy to replace jam nut receptacle
- Solder cup or PC tail contacts

## Technical features

### Materials

- **Shell:**  
Steel
- **Plating:**  
Iridescent yellow cadmium  
Nickel
- **Contact:**  
Gold plated ferrous alloy
- **Seal:**  
Fluorocarbon elastomer

### Electrical

- Max current rating per contact:

Contact size	20	16
Rating (A)	5	10

- Dielectric withstand voltage:

Service	Standard pressure	10 mbar pressure
I	1 500 Vrms	200 Vrms
II	2 300 Vrms	300 Vrms

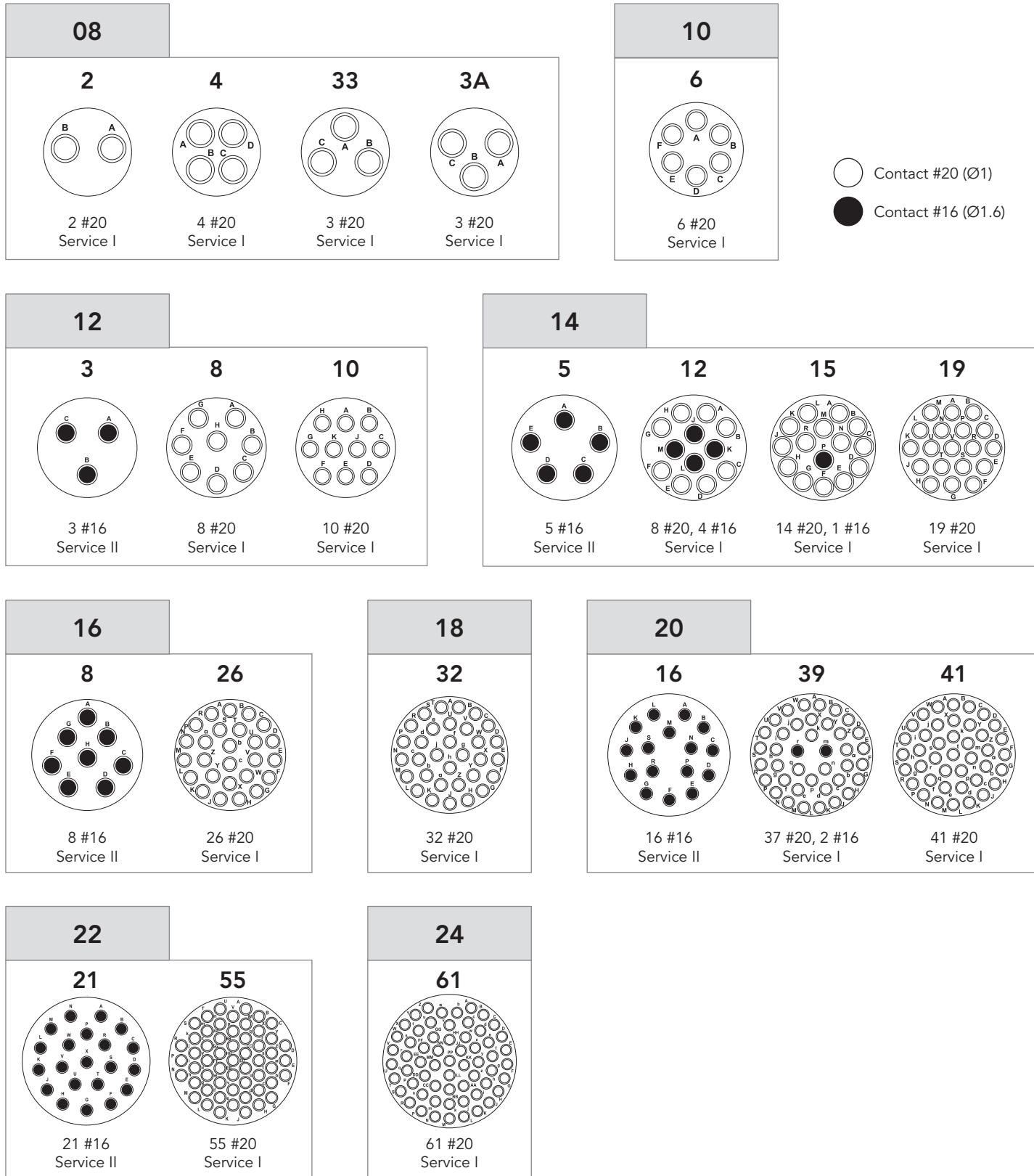
- Contact resistance:

Size 20  $\leq$  30 mΩ  
Size 16  $\leq$  14 mΩ

### Environmental

- **Operating temperature:**  
-55°C to +125°C
- **Hermeticity:**  
Leak rate  $< 1.10^{-7}$  atm.cm³/s  
(helium gas test)
- **Salt spray:**  
48 hours min

## Contact layouts



## Ordering information

### SOURIAU part numbers

<b>Basic series</b>	851	02H	18	32	P	50
<b>Shell type:</b>						
<b>IH:</b> Solder mount receptacle						
<b>02H:</b> Square flange receptacle						
<b>07H:</b> Jam nut receptacle						
<b>Shell size:</b>						
<b>08, 10, 12, 14, 16, 18, 20, 22, 24</b>						
<b>Contact layout:</b>						
See previous page						
<b>Contact type:</b>						
<b>P:</b> Pin						
<b>Orientation:</b>						
<b>None:</b> Normal (N)						
<b>W, X, Y, Z</b> - see page 19						
<b>Mandatory suffix:</b>						
<b>50:</b> Gold plating for contact size 20 and size 16						
<b>Specification:</b>						
<b>None:</b> Yellow cadmium plating - 02H and 07H only						
Nickel plated - IH only						
<b>44:</b> Nickel plated - 02H and 07H only						

### VG95328 qualified products

<b>Basic series</b>	VG95328	F	18	32	P	N
<b>Shell type:</b>						
<b>G:</b> Solder mount receptacle						
<b>P:</b> Square flange receptacle						
<b>F:</b> Jam nut receptacle						
<b>Shell size:</b>						
<b>08, 10, 12, 14, 16, 18, 20, 22, 24</b>						
<b>Contact layout:</b>						
See previous page						
<b>Contact type:</b>						
<b>P:</b> Pin						
<b>Orientation:</b>						
<b>N, W, X, Y, Z</b> - see page 19						

## Contact layouts (matrix)

Shell size	Layout	Hermetic			Number of contacts	
		851	MIL-DTL-26482G	VG95328	#20	#16
08	8-2	OK	OK		2	
	8-3	Available on request, please consult us			3	
	8-3A	OK		Q	3	
	8-98		OK		3	
	8-33	OK	OK		3	
	8-4	OK	OK		4	
10	10-6	OK	OK	Q	6	
	10-7	Available on request, please consult us			7	
	10-98	Available on request, please consult us			6	
12	12-2	Available on request, please consult us			2	
	12-3	OK	OK	Q		3
	12-8	OK	OK		8	
	12-10	OK	OK	Q	10	
	12-14	Available on request, please consult us			14	
14	14-5	OK	OK	Q		5
	14-12	OK	OK	Q	8	4
	14-15	OK	OK	Q	14	1
	14-18	Available on request, please consult us			18	
	14-19	OK	OK	Q	19	

OK = SOURIAU's layout

Q = SOURIAU's qualified layout

## Cross reference list

SOURIAU	NFC 93422 HE 301B	MIL-DTL-26482G Series I Not QPL
851 02H • • • P □ 50	HE 301 B 02 H • • • P □ 3A	-
851 07H • • • P □ 50	HE 301 B 07 H • • • P □ 3A	MS 3114 H • • C • • P □
851 IH • • • P □ 50	HE 301 B 1 H • • • P □ 3A	MS 3113 H • • C • • P □

● ● Shell size

○ ○ Layout

□ Orientation. Empty if orientation N - only for «Souriau», «NFC93422» and «MIL-DTL-26482G Series I»

## Maximum connector weights (in grams)

Shell type \ Shell size	8	10	12	14	16	18	20	22	24
Solder mount receptacle (type IH)	7	9	13	17	21	26	32	37	43
Square flange receptacle (type 02H)	10	12	16	21	26	33	41	47	55
Jam nut receptacle (type 07H)	20	25	38	45	52	63	86	96	115

## Dimensions

Solder mount receptacle (type IH)								
Shell size	A max	B $\pm 0.2$	C $\pm 0.2$	D $\pm 0.14$	E $^{+0.02}_{-0.13}$	F max	G max	H $\pm 0.1$
8	12.03	13.84	10.70	0.80	14.27	8.60	16.40	14.70
10	15.01	13.84	10.70	0.80	17.07	8.60	19.40	17.50
12	19.07	13.84	10.70	0.80	19.84	8.60	21.80	20.20
14	22.25	13.84	10.70	0.80	23.01	8.60	25.00	23.40
16	25.42	13.84	10.70	0.80	26.19	8.60	28.10	26.60
18	28.60	13.84	10.70	0.80	29.36	8.60	31.30	29.80
20	31.77	15.42	12.70	0.80	31.75	8.60	33.70	32.10
22	34.95	16.23	12.70	0.80	34.92	8.60	36.90	35.30
24	38.12	17.04	13.10	0.80	38.10	7.80	40.10	38.40

Square flange receptacle (type 02H)											
Shell size	A max	B $\pm 0.2$	C $\pm 0.2$	D $\pm 0.14$	E $^{+0.02}_{-0.13}$	F max	G max	H max	J	K $\pm 0.1$	L min
8	12.03	13.84	11.24	1.55	14.27	7.5	27.09	21.03	15.09	3.15	15.55
10	15.01	13.84	11.24	1.55	17.07	7.5	31.87	24.23	18.26	3.15	18.80
12	19.07	13.84	11.24	1.55	19.84	7.5	35.04	26.59	20.62	3.15	22.15
14	22.25	13.84	11.24	1.55	23.01	7.5	38.22	28.98	23.00	3.15	25.30
16	25.42	13.84	11.24	1.55	26.19	7.5	41.39	31.34	24.61	3.15	28.45
18	28.60	13.84	11.24	1.55	29.36	7.5	44.57	33.73	26.97	3.15	31.65
20	31.77	15.42	12.00	2.36	31.75	7.5	47.74	36.91	29.36	3.15	34.80
22	34.95	16.23	12.00	2.36	34.92	7.5	50.92	40.10	31.75	3.15	38.00
24	38.12	17.04	12.81	2.36	38.10	6.7	55.69	43.27	34.92	3.82	41.20

Note: All dimensions are in millimeters (mm)

## Dimensions

Jam nut receptacle (type 07H)										
Shell size	A max	B max	C $\pm 0.25$	D max	E max	F $\pm 0.1$	G max	H $\pm 0.1$	L $\pm 0.1$	
8	12.03	20.60	17.93	27.37	24.07	13.33	14.26	13.75	14.60	
10	15.01	20.60	17.93	30.57	27.22	16.51	17.43	16.95	17.75	
12	19.07	20.60	17.93	35.32	32.00	20.63	22.19	21.50	22.50	
14	22.25	20.60	17.93	38.50	35.17	23.78	25.36	24.20	25.70	
16	25.42	20.60	17.93	41.67	38.35	26.93	28.54	27.35	28.85	
18	28.60	20.60	17.93	44.85	41.52	30.10	31.71	30.55	32.05	
20	31.77	26.15	22.70	49.62	46.27	33.28	34.89	33.70	35.20	
22	34.95	26.15	22.70	52.77	49.47	36.45	38.06	36.90	38.40	
24	38.12	26.98	23.54	55.97	52.62	39.63	41.24	40.05	41.55	

## Orientation

Polarization code										
Shell size	Layout	Angle in degrees				Angle in degrees				W
		W	X	Y	Z	W	X	Y	Z	
8	2	58	122	-	-	16	54	152	180	331
	4	45	-	-	-		60	-	275	338
	33	90	-	-	-		85	138	222	265
	3A	60	210	-	-		238	318	333	347
10	6	90	-	-	-		45	126	225	-
	3	-	-	180	-	20	16	315	175	349
	8	90	112	203	292		41	30	142	226
12	10	60	155	270	295		55	90	180	314
	5	40	92	184	273		61	16	135	270
	12	43	90	-	-		17	110	155	234
	15	17	110	155	-		30	165	315	-
	19	30	165	315	-		90	180	270	324
14	12	43	90	-	-		110	155	234	-
	15	17	110	155	-		165	315	315	-
	19	30	165	315	-		90	180	270	324
	21	16	135	175	-		110	155	234	-

Viewed from receptacle front face.  
Insulator rotated inside metal body.

Note: All dimensions are in millimeters (mm)



## Description

- EN3646 standard qualified robust bayonet coupling according to HE302 standard
- Glass sealed hermetic
- Compact low profile - 30% shorter than the standard version
- Solder cup contacts as well as PCB contacts
- Specific fuel tank version for long term fuel immersion
- Specific large square flange option to adapt an O'ring for an improved panel to connector sealing

## Technical features

### Mechanical

- **Shell:**  
Passivated stainless steel
- **Seals:**  
Silicone elastomer
- **Contact:**  
Gold plated ferrous alloy
- **Shock:**  
As per EN3646
- **Endurance:**  
500 mating/unmating operations
- **Vibrations:**  
5Hz to 3000Hz at constant acceleration of 10g (3 x 4 hours)

### Electrical

- **Max current rating per contact:**

Contact size	20	16	12
Rating (A)	5	10	17
- **Dielectric withstand voltage:**

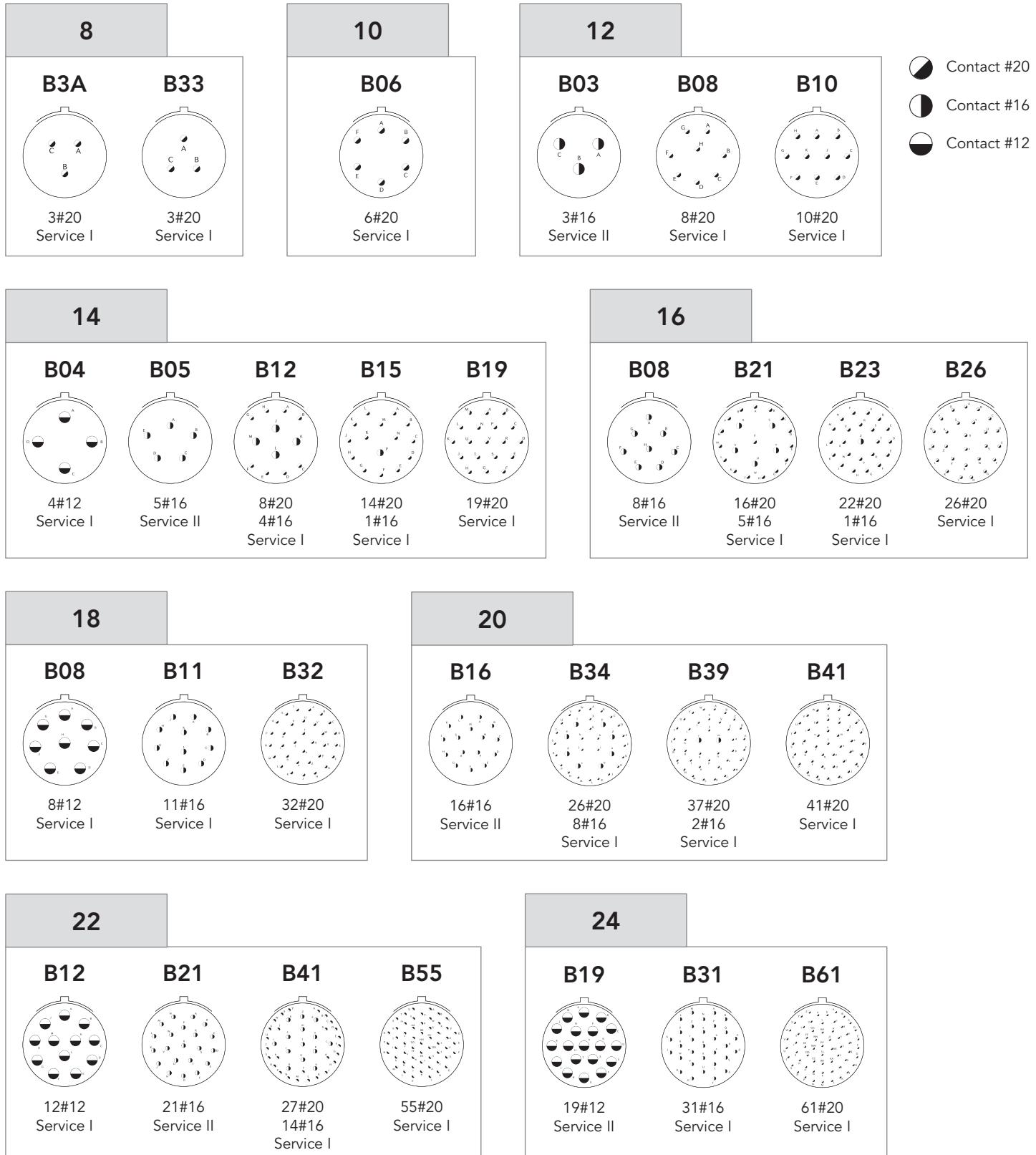
Service	Sea level	21 000 m
I	1 500 Vrms	375 Vrms
II	2 300 Vrms	500 Vrms
- **Shell continuity:**  
 $\leq 50 \text{ m}\Omega$
- **Contact resistance at rated current:**  
Maximum initial contact resistance at ambient temperature
 

Contact size	20	16	12
Resistance $\text{m}\Omega$	12	8	5

### Environmental

- **Operating temperature:**  
-65°C to 200°C
- **Hermeticity:**  
 $1.10^{-7} \text{ atm.cm}^3/\text{s}$  under a1 bar differential pressure
- **Salt spray:**  
48 hours min. as per EN3646
- **Resistance to fluids (standard):**  
As per EN3646, including fuel, hydraulic fluids and oils
- **Fuel immersion version:**
  - . JP5 long term immersion
  - . 105°C maximum

## Contact layouts



## Contact layouts (matrix)

Shell size	Layout	Hermetic 8525	Hermetic EN3646	8525 spec.			8525 spec. A76	Number of contacts		
				002	022	A76		#20	#16	#12
08	8B3A	OK	Q	OK	OK			3		
	8B33	OK	Q	OK				3		
10	10B6	OK	Q	OK				6		
	12B3	OK	Q	OK					3	
12	12B8	Available on request, please consult us						8		
	12B10	OK	Q	OK	OK	OK		10		
14	14B4	OK	Q	OK	OK					4
	14B5	OK	Q	OK					5	
	14B12	OK	Q	OK				8	4	
	14B15	OK	Q	OK				14	1	
	14B19	OK	Q	OK	OK	OK		19		
16	16B8	OK	Q	OK					8	
	16B21	OK	Q	OK				16	5	
	16B23	Available on request, please consult us						22	1	
	16B26	OK	Q	OK	OK			26		
18	18B8	OK	Q	OK						8
	18B11	Available on request, please consult us							11	
	18B32	OK	Q	OK				32		

OK = SOURIAU's layout

Q = SOURIAU's qualified layout

## Orientation

Polarization code							
Shell size	Layout	N	W	X	Y	Z	
08	B3A	0	60	210	-	-	
	B33	0	90	-	-	-	
10	B6	0	90	-	-	-	
	B3	0	140	220	180	-	
12	B10	0	60	155	270	295	
	B4	0	45	-	-	-	
14	B5	0	40	92	184	273	
	B12	0	43	90	-	-	
	B15	0	17	110	155	234	
	B19	0	30	165	315	-	
	Viewed from receptacle front face. Insulator rotated inside metal body.						
Shell size	Layout	N	W	X	Y	Z	
16	B8	0	54	152	180	331	
	B21	0	-	-	-	-	
	B26	0	60	-	275	338	
18	B8	0	180	-	-	-	
	B32	0	85	138	222	265	
20	B16	0	238	318	333	347	
	B39	0	63	144	252	333	
	B41	0	45	126	225	-	
22	B21	0	16	135	175	349	
	B41	0	39	135	264	-	
	B55	0	30	142	226	314	
24	B61	0	90	180	270	324	

## Ordering information

### SOURIAU part numbers

<b>Basic series</b>	8525	IH	18B32	P	N	H
<b>Shell type:</b>						
IH: Solder mount receptacle						
02H: Square flange receptacle						
07H: Jam nut receptacle						
<b>Contact layout:</b>						
See page 21						
<b>Contact type:</b>						
P: Pin						
<b>Orientation:</b>						
N, W, X, Y, Z - see page 22						
<b>Specification</b> (see previous page for available layouts):						
H: Standard hermetic version						
H002: Large flange - 02H version only						
H005: Short PC tail contacts - see page 28						
022: Fuel tank version						
H275: Long PC tail contacts - see page 28						
HA76: Fuel tank version with crimp contacts - Jam nut only						

## EN3646 qualified products

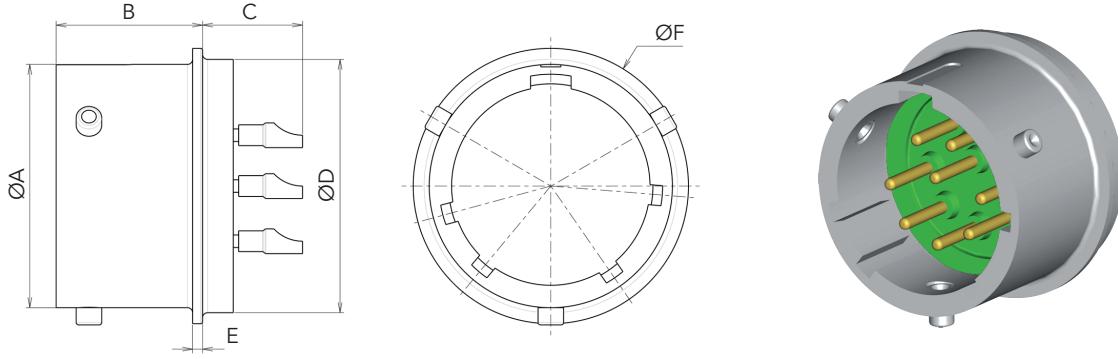
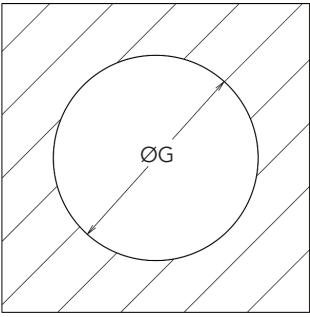
<b>Basic series</b>	EN3646	Y	0	08	03	M	N
<b>Mandatory suffix:</b>							
Y: Hermetic							
<b>Shell type:</b>							
0: Square flange receptacle							
1: Solder mount receptacle							
7: Jam nut receptacle							
<b>Shell size:</b>							
08, 10, 12, 14, 16, 18, 20, 22, 24							
<b>Contact layout:</b>							
See page 21							
<b>Contact type:</b>							
M: Pin							
<b>Orientation:</b>							
N, W, X, Y, Z - see page 22							

## Maximum connector weights (in grams)

Shell type \ Shell size	8	10	12	14	16	18	20	22	24
Solder mount receptacle (type IH)	7	9	13	17	21	26	32	37	43
Square flange receptacle (type 02H)	10	12	16	21	26	33	41	47	55
Large square flange receptacle (type 02H spec. 002)	16	18	24	29	34	40	56	60	70
Jam nut receptacle (type 07H)	20	25	38	45	52	63	86	96	115

## Dimensions

Solder mount receptacle (type IH)							
Shell size	A max	B $\pm 0.5$	C max	D $^{+0.02}_{-0.13}$	E $\pm 0.14$	F max	G $^{+0.25}_0$
8	12.02	11.5	10	14.27	0.8	16.1	14.79
10	14.99	11.5	10	17.07	0.8	19.3	17.59
12	19.05	11.5	10	19.84	0.8	21.7	20.36
14	22.23	11.5	10	23.01	0.8	24.9	23.53
16	25.4	11.5	10	26.19	0.8	28.1	26.71
18	28.58	11.5	10	29.36	0.8	31.2	29.88
20	31.75	13.5	10	31.75	0.8	33.8	32.27
22	34.93	13.5	11	34.92	0.8	36.8	35.42
24	38.1	13.9	11	38.1	0.8	40	38.60

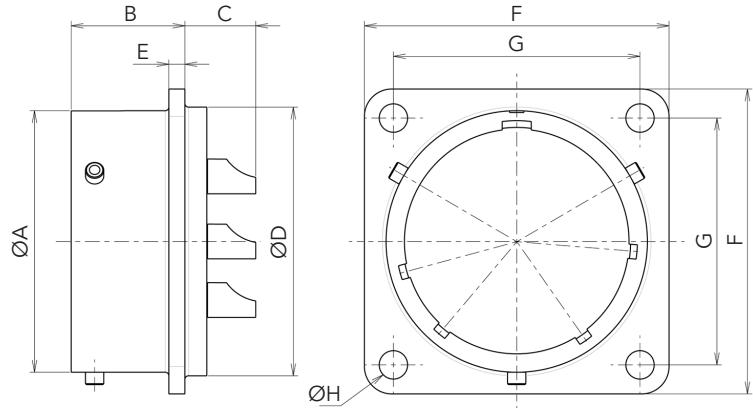



Panel cut-out

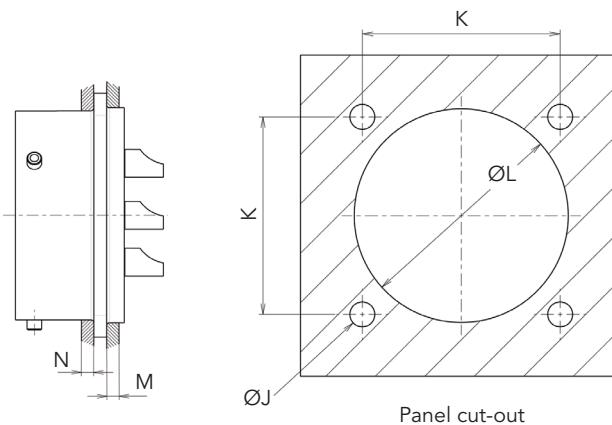
Note: All dimensions are in millimeters (mm)

## Dimensions

**Square flange receptacle (type 02H)**



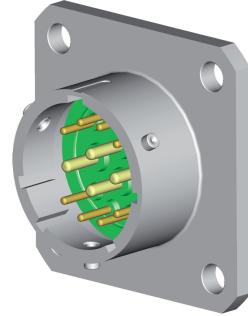
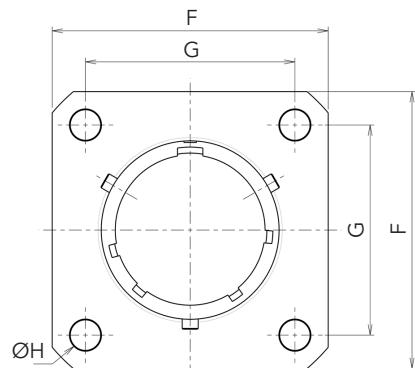
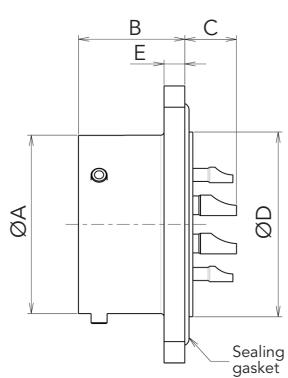
Shell size	A max	B $\pm 0.55$	C max	D $^{+0}_{-0.3}$	E	F max	G	H $\pm 0.15$	J $\pm 0.15$	K	L $^{+0}_{-0.3}$	M	N max
8	12.02	12.65	8.4	14.3	$1.63 \pm 0.28$	21.03	15.1	3.15	3.15	15.1	14.79	3.5	2.3
10	14.99	12.65	8.4	17.1	$1.63 \pm 0.28$	24.23	18.26	3.15	3.15	18.26	17.59	3.5	2.3
12	19.05	12.65	8.4	19.9	$1.63 \pm 0.28$	26.59	20.62	3.15	3.15	20.62	20.36	3.5	2.3
14	22.23	12.65	8.4	23.05	$1.63 \pm 0.28$	28.98	23.01	3.15	3.15	23.01	23.53	3.5	2.3
16	25.4	12.65	8.4	26.25	$1.63 \pm 0.28$	31.34	24.61	3.15	3.15	24.61	26.71	3.5	2.3
18	28.58	12.65	8.4	29.4	$1.63 \pm 0.28$	33.73	26.97	3.15	3.15	26.97	29.88	3.5	2.3
20	31.75	14.25	9.6	31.8	$1.93 \pm 0.58$	36.91	29.36	3.15	3.15	29.36	32.27	3.5	5.4
22	34.93	14.25	9.6	35	$1.93 \pm 0.58$	40.1	31.75	3.15	3.15	31.75	35.42	3.5	5.4
24	38.1	15.05	9.6	38.2	$1.93 \pm 0.58$	43.27	34.92	3.73	3.73	34.92	38.60	3.5	5.4



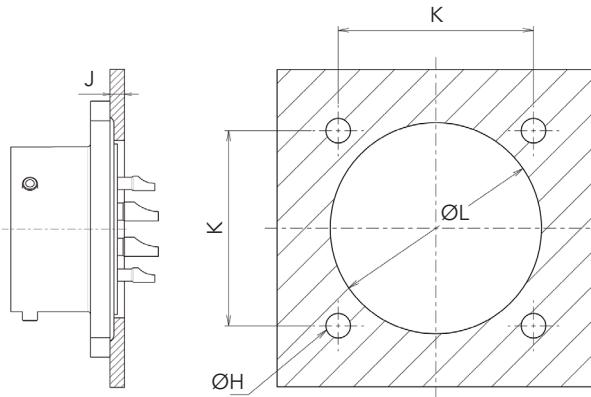
Note: All dimensions are in millimeters (mm)

## Dimensions

**Large square flange receptacle (type 02H spec. 002)**



Shell size	A max	B max	C		D max	E max	F max	G	H	J	K	$L^{+0}_{-0.3}$
			#20	#12/#16								
8	12.02	13.14	6.8	-	14.27	2.6	26.4	18.1	3.8	3.5	18.1	14.79
10	14.99	13.14	6.8	-	17.06	2.6	28.9	20.62	3.8	3.5	20.62	17.59
12	19.05	13.14	6.8	7.1	19.83	2.6	32.1	23.82	3.8	3.5	23.82	20.36
14	22.23	13.14	6.8	7.1	23.01	2.6	34.5	26.18	3.8	3.5	26.18	23.53
16	25.4	13.14	6.8	7.1	26.18	2.6	36.8	28.57	3.8	3.5	28.57	26.71
18	28.58	13.14	6.8	7.1	29.36	2.6	38.8	30.55	3.8	3.5	30.55	29.88
20	31.75	15.84	6	6.3	31.74	3.4	42.8	32.94	3.8	3.5	32.94	32.27
22	34.93	15.84	6	6.3	34.92	3.4	44.8	34.92	3.8	3.5	34.92	35.42
24	38.1	16.64	5.2	5.5	38.09	3.4	47.9	38.1	3.8	3.5	38.1	38.60

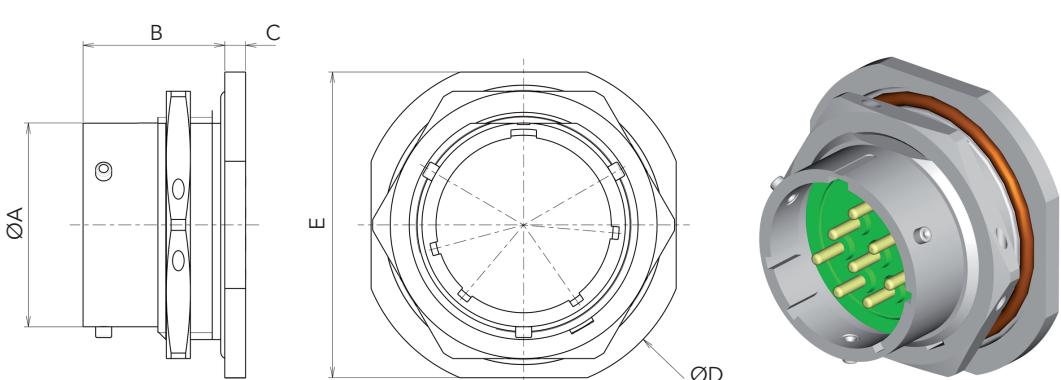
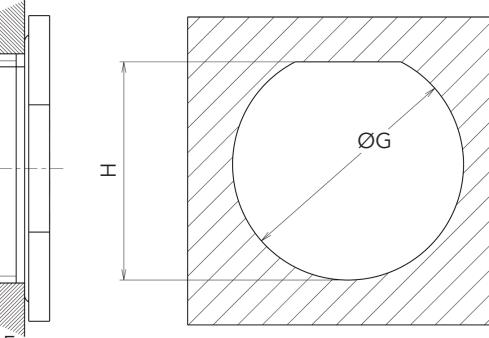


Panel cut-out

Note: All dimensions are in millimeters (mm)

## Dimensions

Jam nut receptacle (type 07H)									
Shell size	A max	B max	C $\pm 0.5$	D max	E $\pm 0.25$	F		G $^{+0.25}_{-0}$	H $^{+0.25}_{-0}$
						min	max		
8	12.02	18.34	2.4	27.37	23.82	1.57	4.75	14.4	13.48
10	14.99	18.34	2.4	30.57	26.97	1.57	4.75	17.58	16.66
12	19.05	18.34	2.4	35.32	31.75	1.57	4.75	22.6	20.8
14	22.23	18.34	2.4	38.5	34.92	1.57	4.75	25.52	23.95
16	25.4	18.34	2.4	41.67	38.1	1.57	4.75	28.7	27.1
18	28.58	18.34	2.4	44.85	41.27	1.57	4.75	31.87	30.27
20	31.75	23.12	3.2	49.62	46.02	1.57	6.35	35.05	33.45
22	34.93	23.12	3.2	52.77	49.22	1.57	6.35	38.22	36.62
24	38.1	23.95	3.2	55.97	52.37	1.57	5.56	41.4	39.8

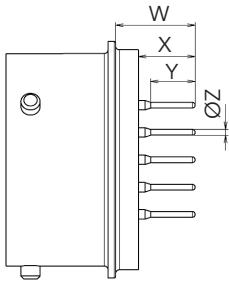



Panel cut-out

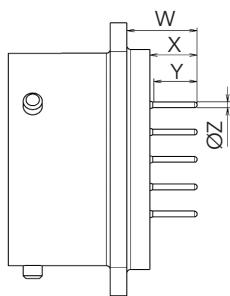
Note: All dimensions are in millimeters (mm)

## Contact variations

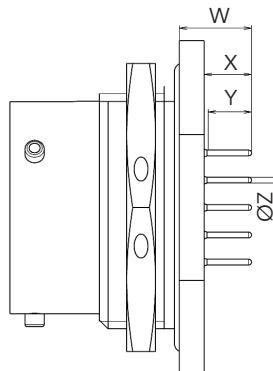
### Contact variations summary



Type IH: Solder mount receptacle



Type 02H: Square flange receptacle



Type 07H: Jam nut receptacle

Type of contact	Specification	Shell type	Contact size	W Max	X Min	Y Min	$\varnothing Z$ Max
Short PCB contact	005	IH	20	9.1	4.55	4.5	0.65
		02H	20	8.4	3.35	4.5	0.65
		07H	20	8.05	3.75	4.5	0.65
Long PCB contact	275	IH	20	13.87	8.5	6	0.65
		02H	20	12.9	7.3	6	0.65
		07H	20	12	7.7	6	0.65

Note: for other contact length, please consult us.

## Gaskets & O'rings

Shell size	Gasket for receptacle Type 0 (not delivered with connector)		O ring for receptacle Type 7 (delivered with connector)	
	Part number	Material	Part number	Material
08	85251431	Fluorosilicone	AS3582-016	Silicone
10	85251432	Fluorosilicone	AS3582-018	Silicone
12	85251433	Fluorosilicone	AS3582-021	Silicone
14	85251434	Fluorosilicone	AS3582-023	Silicone
16	85251435	Fluorosilicone	AS3582-025	Silicone
18	85251436	Fluorosilicone	AS3582-027	Silicone
20	85251437	Fluorosilicone	AS3582-029	Silicone
22	85251438	Fluorosilicone	AS3582-030	Silicone
24	85251439	Fluorosilicone	AS3582-031	Silicone

Note: All dimensions are in millimeters (mm)



## Description

- Bayonet coupling connector
- Derivated from HE312 standard  
Qualified per MIL-C 26482 Series 2 standard and PAN 6432
- Glass sealed hermetic:
  - . high hermeticity performance
  - . compact low profile
- Various mounting styles:
  - . compact solder mount receptacle
  - . easy to install square flange receptacle
  - . easy to replace jam nut receptacle
- Solder cup or PC tail contacts
- Specific fuel tank version for long term fuel immersion

## Technical features

### Mechanical

- **Shell:**  
Tin lead (no RoHS) over nickel plated steel
- **Seals:**  
Silicone elastomer
- **Contact:**  
Gold plated ferrous alloy
- **Endurance:**  
500 mating/unmating operations

### Electrical

- **Max current rating per contact:**

Contact size	20	16	12
Rating (A)	5	10	17
- **Dielectric withstand voltage:**

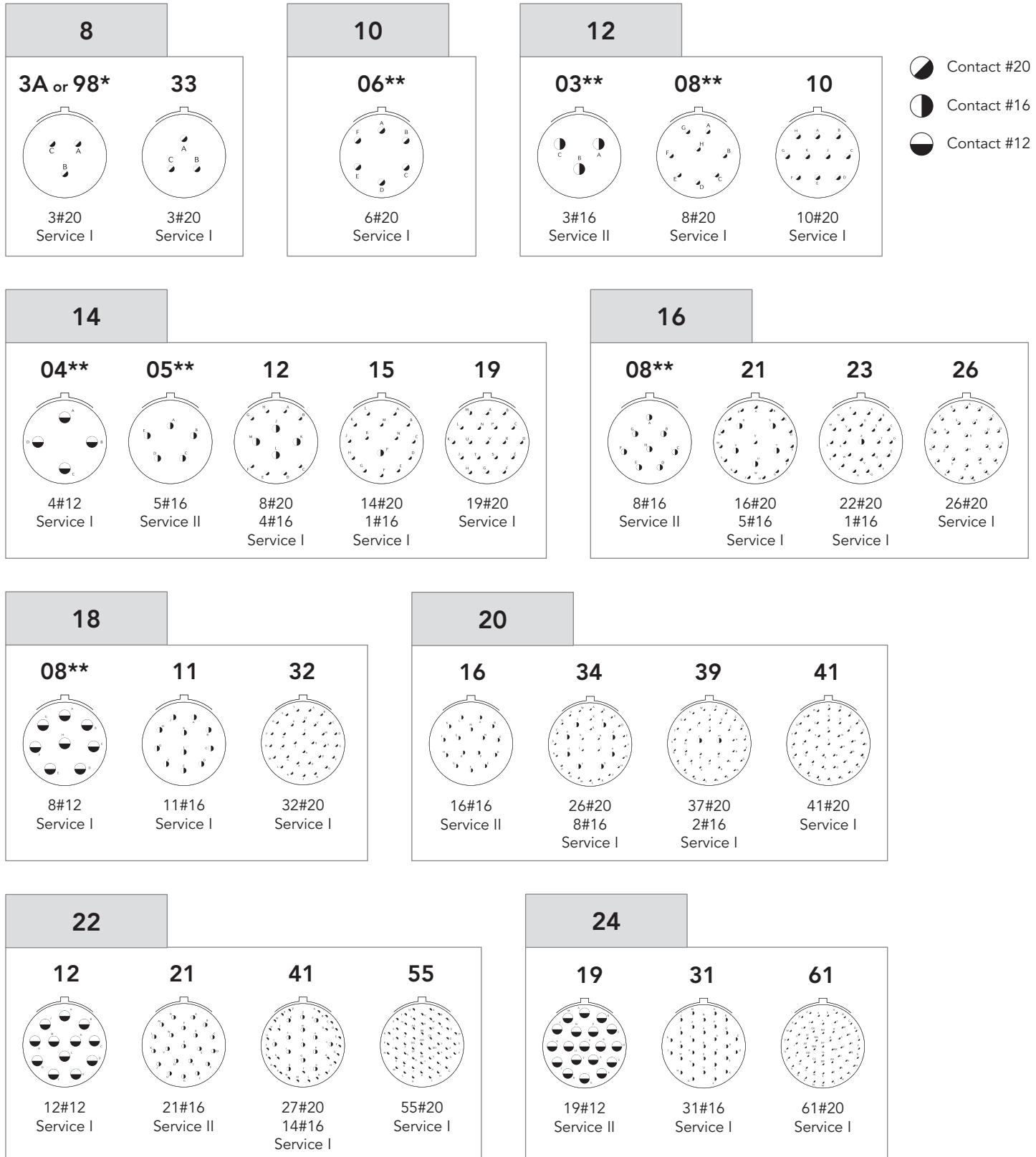
Service	Sea level	21 000 m
I	1 500 Vrms	375 Vrms
II	2 300 Vrms	500 Vrms
- **Shell continuity:**  
 $\leq 50 \text{ m}\Omega$
- **Contact resistance at rated current:**  
Maximum initial contact resistance at ambient temperature
 

Contact size	20	16	12
Resistance $\text{m}\Omega$	12	8	5
- **Insulation resistance:**  
 $\geq 5000 \text{ M}\Omega$  at 500 Vdc

### Environmental

- **Operating temperature:**  
-55°C to 200°C
- **Hermeticity:**  
Leak rate  $< 1.10^{-7} \text{ atm.cm}^3/\text{s}$   
(helium gas test)
- **Salt spray:**  
48 hours

## Contact layouts



\* 3A for 8526 part numbering / 98 for MS part numbering.

\*\* Remove digit "0" for MS part numbering.

## Contact layouts (matrix)

Shell size	Layout	Hermetic 8526	MIL-C 26482 G	PAN 6432	Number of contacts		
					#20	#16	#12
08	83A	OK		Q	3		
	898	OK		Q	3		
	833	OK	Q	Q	3		
10	106	OK	Q	Q	6		
12	123	OK	Q	Q		3	
	128	Available on request, please consult us			8		
	1210	OK	Q	Q	10		
14	144	OK		Q			4
	145	OK	Q	Q		5	
	1412	OK	Q	Q	8	4	
	1415	OK	Q		14	1	
	1419	OK	Q	Q	19		
16	168	OK	Q	Q		8	
	1621	OK			16	5	
	1623	Available on request, please consult us			22	1	
	1626	OK	Q	Q	26		
18	188	OK		Q			8
	1811			Q		11	
	1832	OK	Q	Q	32		

OK = SOURIAU's layout

Q = SOURIAU's qualified layout

## Orientation

Polarization code							
Shell size	Layout	N	W	X	Y	Z	
08	B3A	0	60	210	-	-	
	B33	0	90	-	-	-	
10	B6	0	90	-	-	-	
12	B3	0	140	220	180	-	
14	B10	0	60	155	270	295	
	B4	0	45	-	-	-	
	B5	0	40	92	184	273	
	B12	0	43	90	-	-	
	B15	0	17	110	155	234	
	B19	0	30	165	315	-	
Viewed from receptacle front face. Insulator rotated inside metal body.							
Shell size	Layout	N	W	X	Y	Z	
16	B8	0	54	152	180	331	
	B21	0	-	-	-	-	
	B26	0	60	-	275	338	
18	B8	0	180	-	-	-	
	B32	0	85	138	222	265	
20	B16	0	238	318	333	347	
	B39	0	63	144	252	333	
	B41	0	45	126	225	-	
22	B21	0	16	135	175	349	
	B41	0	39	135	264	-	
	B55	0	30	142	226	314	
24	B61	0	90	180	270	324	

## Ordering information

### SOURIAU part numbers

<b>Basic series</b>	8526	2H	10	06	P	N
<b>Shell type:</b>						
1H: Solder mount hermetic receptacle						
2H: Square flange hermetic receptacle						
7H: Jam nut hermetic receptacle						
<b>Shell size:</b>						
08, 10, 12, 14, 16, 18, 20, 22, 24						
<b>Contact layout:</b>						
See page 30						
<b>Contact type:</b>						
P: Pin						
<b>Orientation:</b>						
N, W, X, Y, Z - see previous page						

## MS qualified products

<b>Basic series</b>	MS	3440H	10	C	6	P
<b>Shell type:</b>						
3440H: Square flange hermetic receptacle						
3443H: Solder mount hermetic receptacle						
3449H: Jam nut hermetic receptacle						
<b>Shell size:</b>						
08, 10, 12, 14, 16, 18, 20, 22, 24						
<b>Materials and terminal:</b>						
C: Steel, solder bucket						
<b>Contact layout:</b>						
See page 30						
<b>Contact type:</b>						
P: Pin						
<b>Orientation:</b>						
None: Normal (N)						
W, X, Y, Z - see previous page						

## Cross reference list

Receptacle type	SOURIAU	HE312
Solder mount	8526 1H •••• P □	HE312 1H •••• P □ 2
Square flange	8526 2H •••• P □	HE312 2H •••• P □ 2
Jam nut	8526 7H •••• P □	HE312 7H •••• P □ 2

•••• Shell size & layout □ Orientation

## Dimensions

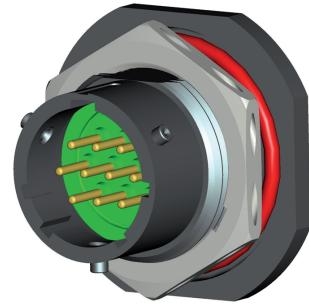
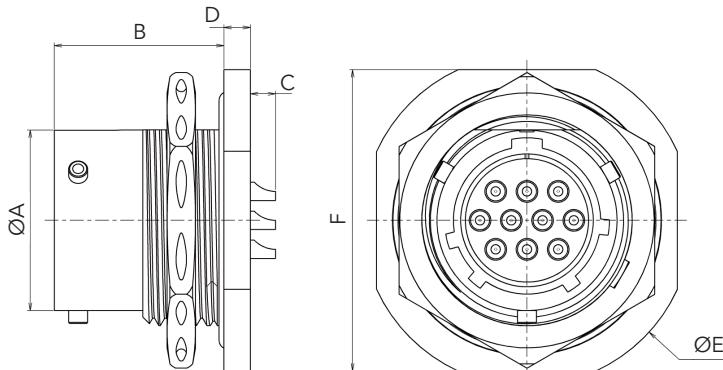
Solder mount receptacle (type 1H)							
Shell size	$\varnothing A$ max	$B \pm 0.3$	$C$ max	$\varnothing D \pm 0_{-0.15}$	$E \pm 0.15$	$F$ max	$\varnothing G \pm 0.1$
8	12.04	15.8	6.9	14.3	0.89	16.08	14.48
10	15.01	15.8	6.9	17.09	0.89	19.25	17.27
12	19.08	15.8	6.9	19.86	0.89	21.64	20.04
14	22.25	15.8	6.9	23.04	0.89	24.82	23.22
16	25.43	15.8	6.9	26.21	0.89	27.99	26.39
18	28.6	15.8	6.9	29.39	0.89	31.14	29.57
20	31.78	17.37	6.9	31.78	0.89	33.53	31.95
22	34.95	17.37	6.9	34.95	0.89	36.73	35.13
24	38.13	17.37	6.9	38.13	0.89	39.93	38.3

Square flange receptacle (type 2H)													
Shell size	$\varnothing A$ max	$B \pm 0.15$	$C$ max	$\varnothing D \pm 0_{-0.15}$	$E \pm 0.1$	$F$ max	$G$	$\varnothing H \pm 0.15$	$\varnothing J \pm 0.15$	$K$	$\varnothing L \pm 0.1$	$M$ max	$N$ max
8	12.04	16.79	7.1	14.3	1.86	21.03	15.09	3.05	3.05	15.09	14.48	3.15	3
10	15.01	16.79	7.1	17.09	1.86	24.23	18.26	3.05	3.05	18.26	17.27	3.15	3
12	19.08	16.79	7.1	19.86	1.86	26.59	20.62	3.05	3.05	20.62	20.04	3.15	3
14	22.25	16.79	7.1	23.04	1.86	28.98	23.01	3.05	3.05	23.01	23.22	3.15	3
16	25.43	16.79	7.1	26.21	1.86	31.34	24.61	3.05	3.05	24.61	26.39	3.15	3
18	28.6	16.79	7.1	29.39	1.86	33.73	26.97	3.05	3.05	26.97	29.57	3.15	3
20	31.78	18.78	6.7	31.78	2.27	36.91	29.36	3.05	3.05	29.36	31.95	3.15	5.4
22	34.95	18.78	6.7	34.95	2.27	40.08	31.75	3.05	3.05	31.75	35.13	3.15	5.4
24	38.13	18.78	6.7	38.13	2.27	43.26	34.93	3.73	3.73	34.93	38.3	3.15	5.4

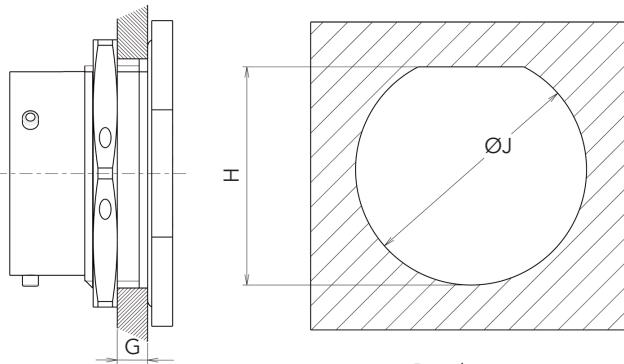
Note: All dimensions are in millimeters (mm)

## Dimensions

Jam nut receptacle (type 7H)



Shell size	ØA max	B max	C max	D $^{+0}_{-0.1}$	ØE max	F max	G		H	ØJ $\pm 0.1$
							min	max		
8	12.04	17.96	3.2	2.8	27.38	24.23	1.57	4.75	13.61	14.53
10	15.01	17.96	3.2	2.8	30.56	27.38	1.57	4.75	16.79	17.7
12	19.08	17.96	3.2	2.8	35.33	32.16	1.57	4.75	20.93	22.73
14	22.25	17.96	3.2	2.8	38.51	35.33	1.57	4.75	24.08	25.65
16	25.43	17.96	3.2	2.8	41.68	38.51	1.57	4.75	27.23	28.83
18	28.6	17.96	3.2	2.8	44.86	41.68	1.57	4.75	30.4	32
20	31.78	19.61	2.45	3.6	49.63	46.43	1.57	6.35	33.58	35.18
22	34.95	19.61	2.45	3.6	52.78	49.63	1.57	6.35	36.75	38.35
24	38.13	20.4	1.7	3.7	55.96	52.78	1.57	6.35	39.93	41.35



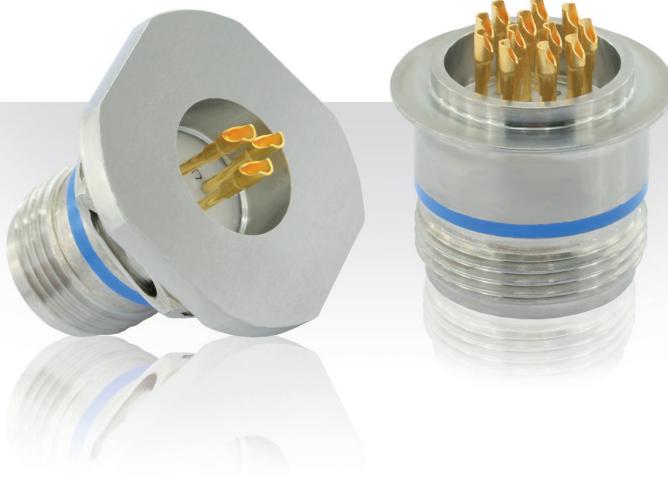
Panel cut-out

**Maximum connector weights** (in grams)

Shell type \ Shell size	8	10	12	14	16	18	20	22	24
Solder mount receptacle (type 1)	7.5	10.6	15	19	23.3	29.4	31	41	46.7
Square flange receptacle (type 2)	11	13.6	18	23	28.3	36.4	42	49	57
Jam nut receptacle (type 7)	20	25	38	44	51.5	62	85	94	116

**Gaskets & O'rings**

Shell size	Gasket for receptacle Type 0 (not delivered with connector)		O ring for receptacle Type 7 (delivered with connector)	
	Part number	Material	Part number	Material
08	85251431	Fluorosilicone	AS3582-016	Silicone
10	85251432	Fluorosilicone	AS3582-018	Silicone
12	85251433	Fluorosilicone	AS3582-021	Silicone
14	85251434	Fluorosilicone	AS3582-023	Silicone
16	85251435	Fluorosilicone	AS3582-025	Silicone
18	85251436	Fluorosilicone	AS3582-027	Silicone
20	85251437	Fluorosilicone	AS3582-029	Silicone
22	85251438	Fluorosilicone	AS3582-030	Silicone
24	85251439	Fluorosilicone	AS3582-031	Silicone



## Description

- Thread coupling connector
- EN2997 and ESC10 qualified connector
- High temperature and high vibration resistance (engine environment)
- Glass sealed hermetic:
  - . high hermeticity performance
  - . compact low profile
- Various mounting styles:
  - . compact solder mount receptacle
  - . easy to install square flange receptacle
  - . easy to replace jam nut receptacle
- Fully interchangeable with MIL 83723 hermetic connectors
- 230V qualified versions where higher voltage is used to reduce cable weight
- Solder cup or PC tail contacts
- Specific fuel tank version for long term fuel immersion

## Technical features

### Mechanical

- **Shell:**  
Passivated Stainless steel
- **Seals:**  
Silicone elastomer
- **Contact:**  
Ferrous alloy
- **Contact plating:**  
Gold
- **Endurance:**  
500 mating/unmating operations

### Electrical

- **Max current rating per contact:**

Contact size	20	16	12	6
Rating (A)	5	10	17	46

- **Dielectric withstand voltage:**

Altitude	Service I
Sea level	1500 Vrms
15 000 m	600 Vrms
21 000 m	400 Vrms
33 000 m	200 Vrms

- **Contact resistance at rated current:**

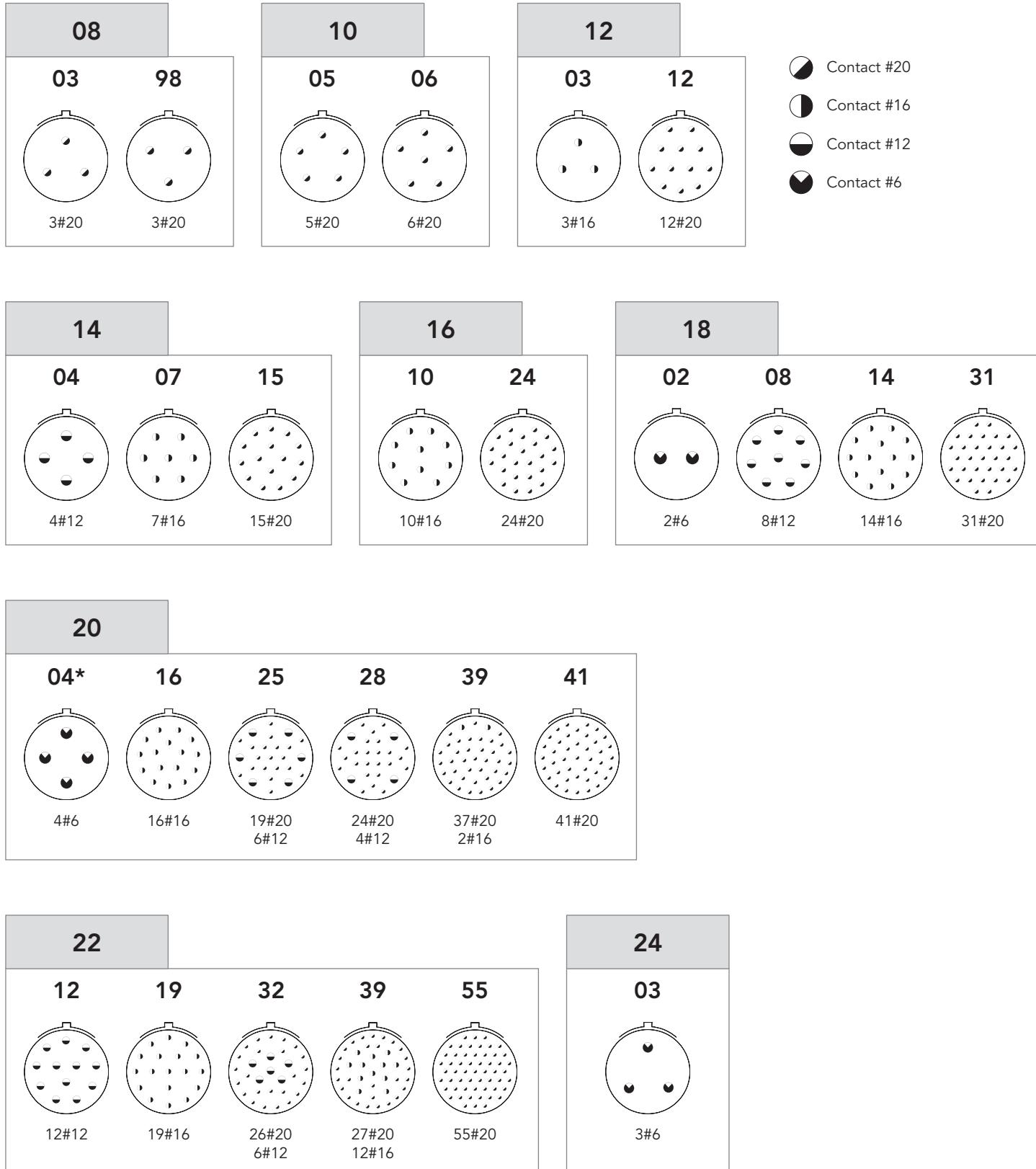
Maximum initial contact resistance at ambient temperature

Contact size	20	16	12	6
Resistance mΩ	12	8.5	5	2

### Environmental

- **Operating temperature:**  
Class Y : -65°C to 200°C  
Class YE : -65°C to 260°C cyclic
- **Hermeticity:**  
Leak rate < 1.10<sup>-7</sup> atm.cm<sup>3</sup>/s (helium gas test)
- **Salt spray:**  
500 hours

## Contact layouts



\* ABS Power correspondance.

## Contact layouts (matrix)

Shell size	Layout	Number of contacts					
		#22D	#20	#16	#12	#6	
08	08-03	OK	Q	Q	OK		3
	08-06	Available on request, please consult us			6		
	08-98	OK	Q	Q			3
10	10-05	OK	Q	Q			5
	10-06	OK	Q		OK		6
	10-12	Available on request, please consult us			12		
12	12-03	OK	Q	Q			3
	12-12	OK	Q	Q	OK		12
	12-21	Available on request, please consult us			21		
14	14-04	OK	Q	Q			4
	14-07	OK	Q	Q	OK		7
	14-15	OK	Q	Q			15
16	16-10	OK	Q	Q			10
	16-24	OK	Q	Q			24
18	18-02	Available on request, please consult us					2
	18-08	Available on request, please consult us					8
	18-14	Available on request, please consult us					14
	18-31	OK	Q	Q			31
20	20-04	OK					4
	20-16	Available on request, please consult us					16
	20-25	Available on request, please consult us					19
	20-28	Available on request, please consult us					24
	20-39	Available on request, please consult us					37
	20-41	OK	Q	Q	OK		41
22	22-12	Available on request, please consult us					12
	22-19	Available on request, please consult us					19
	22-32	Available on request, please consult us					26
	22-39	Available on request, please consult us					27
	22-55	OK	Q	Q			55
24	24-03	OK					3

OK = SOURIAU's layout

Q = SOURIAU's qualified layout

## Connector weights (in grams)

Shell size	Square flange receptacle	Jam nut receptacle	Solder mount receptacle
08	18	29	15
10	24	37	21
12	31	50	31
14	40	58	35
16	49	72	46
18	54	79	51
20	62	87	59
22	77	108	73
24	88	122	86

## Cross reference list

SOURIAU	MIL 83723
85332Y • • • • P □	M83723/88Y • • • • □
85337Y • • • • P □	M83723/89Y • • • • □
85331Y • • • • P □	M83723/90Y • • • • □

• • • • Shell size &amp; layout □ Orientation

## Ordering information

### SOURIAU part numbers

<b>Basic series</b>	8533	1	Y	10	05	P	N
<b>Shell type:</b>							
1: Solder mount receptacle 2: Square flange receptacle 7: Jam nut receptacle							
<b>Class:</b>							
Y: 200°C YE: 260°C							
<b>Shell size:</b> 08 - 10 - 12 - 14 - 16 - 18 - 20 - 22 - 24							
<b>Contact layout:</b> See page 37							
<b>P:</b> Pin contacts							
<b>Orientation:</b> N - 6 - 7 - 8 - 9 - T - V - Y (see page 43)							
<b>Specification</b> (other specification: see page 42):							
None: Standard hermetic version (solder cup) - except for layout 20-04 and 24-03							
112: Standard hermetic version (solder cup) - for layout 20-04 and 24-03 only							
22: Fuel tank version (solder cup)							
600: 230V qualified connector, delivered with contacts (layouts 12-03, 14-04, 14-07 & 20-04 - orientation T & V)							

## EN2997 qualified products

<b>Basic series</b>	EN 2997	Y	0	08	03	M	N
<b>Class:</b>							
Y: 200°C YE: 260°C							
<b>Shell type:</b>							
0: Square flange receptacle 1: Solder mount receptacle 7: Jam nut receptacle							
<b>Shell size:</b> 08 - 10 - 12 - 14 - 16 - 18 - 20 - 22							
<b>Contact layout:</b> See page 37							
<b>M:</b> Pin contacts							
<b>Orientation:</b> N - 6 - 7 - 8 - 9 - Y (see page 43)							

## ESC10 qualified products

<b>Basic series</b>	ESC 10	YE	1	08	03	P	N	0
<b>Class:</b>								
YE: 260°C								
<b>Shell type:</b>								
1: Solder mount receptacle 2: Square flange receptacle 3: Jam nut receptacle								
<b>Shell size:</b> 08 - 10 - 12 - 14 - 16 - 18 - 20 - 22								
<b>Contact layout:</b> See page 37								
<b>P:</b> Pin contacts								
<b>Orientation:</b> N - 6 - 7 - 8 - 9 - Y (see page 43)								
<b>Contact termination:</b>								
0: Solder cup contacts B: Eyelet contacts								

## Dimensions

Solder mount hermetic receptacle (Class Y & YE)									
Shell size	8	10	12	14	16	18	20	22	24
ØA Max	18.36	21.59	26.80	27.94	30.99	34.39	37.34	40.64	43.68
ØB Max	14.29	17.46	22.22	23.81	26.99	30.16	33.34	36.51	39.69
ØC Max	12.70	14.27	19.05	20.62	23.80	26.97	30.15	33.32	36.50

Jam nut hermetic receptacle (Class Y & YE)									
Shell size	8	10	12	14	16	18	20	22	24
A Max	21.06	24.23	29.01	30.61	33.76	36.96	40.11	43.31	46.46
B Max	24.89	28.04	32.79	35.33	38.51	41.68	44.86	49.63	52.81
ØC Max	27.38	30.28	35.05	38.51	41.68	44.86	49.63	52.78	55.42
ØD Max	14.29	17.46	22.22	23.81	26.99	30.16	33.34	36.51	39.69
E Max	3.48							3.76	
Tightening torque of attachment nut Torque in N.m $\pm 10\%$	7	10	12	15	18	22	25	27	29

Note: All dimensions are in millimeters (mm)

## Dimensions

Square flange hermetic receptacle (Class Y & YE)								
Shell size	8	10	12	14	16	18	20	22
Ø A Max	14.27	17.67	22.22	23.77	26.97	30.15	33.32	36.49
Ø B Max	12.70	14.27	19.05	20.62	23.80	26.97	30.15	33.82
C Max	20.75	23.93	26.32	28.71	31.88	34.24	36.63	39.80
D	15.09	18.26	20.62	23.01	24.61	26.97	29.36	31.75
E Max	3.30							3.91

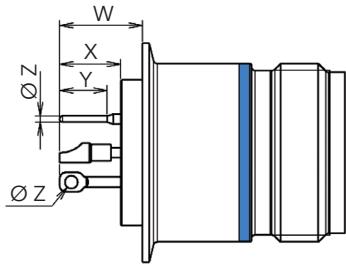
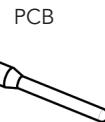
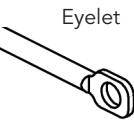
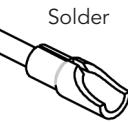
Panel cut out									
Type 1 Solder mount receptacle	Type 2 Square flange receptacle	Type 7 Jam nut receptacle							
Shell size	8	10	12	14	16	18	20	22	24
ØA Min	12.96	14.53	19.30	20.88	24.05	27.23	30.40	33.58	36.75
B min	15.8	18.7	23.4	24.9	28.3	31.1	34.5	37.5	40.6
C	3.2							3.8	
D	15.09	18.26	20.62	23.01	24.61	26.97	30.36	31.75	34.92
E	16.00	19.17	23.92	25.52	28.70	31.87	35.05	38.22	41.40
F	15.24	18.41	23.16	24.76	27.94	30.99	34.16	37.33	40.51

Note: All dimensions are in millimeters (mm)

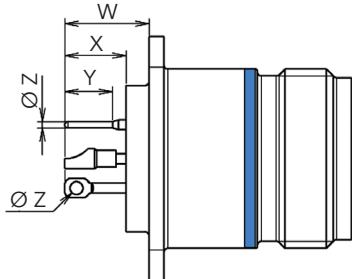
## Contact variations

### Contact variations summary

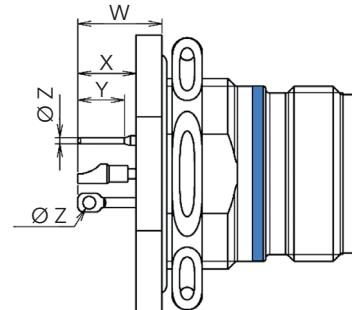
#### Contact variations



Type 1: Solder mount receptacle



Type 2: Square flange receptacle

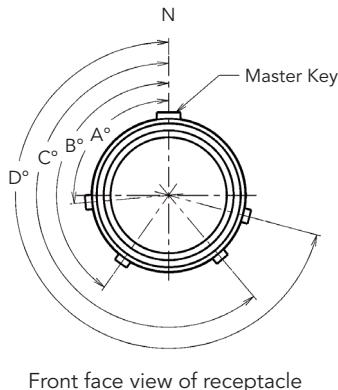


Type 7: Jam nut receptacle

Type of contact	Specification	Contact size	W Max	X Min	Y Min	Ø Z Max	Designation
PCB contacts	05	20	8.78	4.78	4.50	0.65	PCB contact
	118	20	10.88	6.88	6.25	0.65	Long PCB contact
Eyelet contacts	105	20	6.98	2.98	$4.05^{+0.2}$	$1.25^0_{-0.15}$	Eyelet contact
Solder cup contacts	Without specification or specification 22	20-16-12	7.78	2.98	-	-	Standard Solder cup contact
	112	6	9.03	5.13	-	-	
	62	20-16-12	7.78	2.98	-	-	Solder cup contact tin plated on rear part

Note: for other contact length, please consult us.

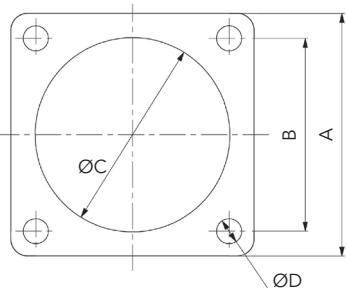
## Orientation



Shell size	Angles	N	6	7	8	9	T	V	Y
08	A°	105	102	80	35	64	-	-	-
	B°	140	132	118	140	155	-	-	-
	C°	215	248	230	205	234	-	-	-
	D°	265	320	312	275	304	-	-	-
10	A°	105	102	80	35	64	-	-	25
	B°	140	132	118	140	155	-	-	115
	C°	215	248	230	205	234	-	-	220
	D°	265	320	312	275	304	-	-	270
12 & 14	A°	105	18	92	84	24	55	50	98
	B°	140	149	152	152	135	145	156	152
	C°	215	192	222	204	199	228	218	268
	D°	265	259	342	334	240	280	290	338
20	A°	105	18	92	84	24	45	60	98
	B°	140	149	152	152	135	160	165	152
	C°	215	192	222	204	199	210	235	268
	D°	265	259	342	334	240	300	285	338
16, 18, 22 & 24	A°	105	18	92	84	24	-	-	98
	B°	140	149	152	152	135	-	-	152
	C°	215	192	222	204	199	-	-	268
	D°	265	259	342	334	240	-	-	338

## Gaskets &amp; O'rings

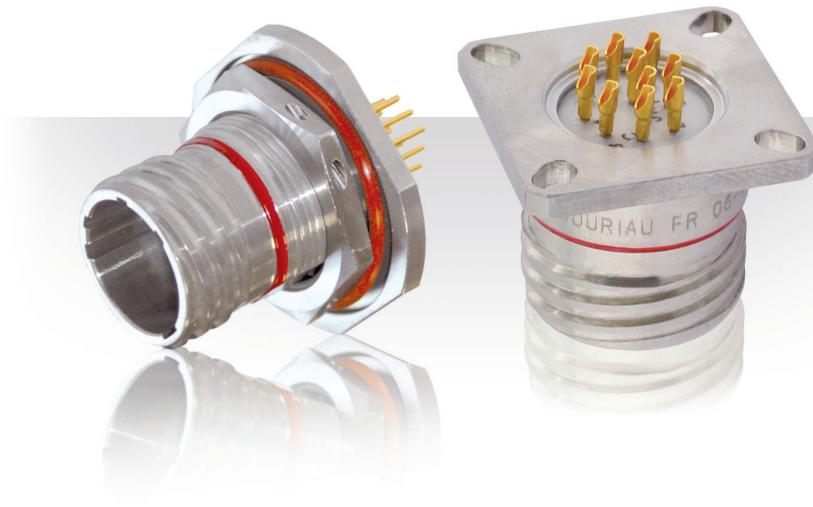
Shell size	Gasket for square flange receptacle (not delivered with connector)		O'ring for jam nut receptacle 200°C Class (delivered with connector)		O'ring for jam nut receptacle 260°C Class (delivered with connector)	
	Part number	Material	Part number	Material	Part number	Material
08	85251431	Fluorosilicone	8530455	Silicone	85227654	Silicone THT
10	85251432	Fluorosilicone	85300795	Silicone	85227655	Silicone THT
12	85251433	Fluorosilicone	8530458	Silicone	85227656	Silicone THT
14	85251434	Fluorosilicone	8530796	Silicone	85227632	Silicone THT
16	85251435	Fluorosilicone	8530797	Silicone	85227657	Silicone THT
18	85251436	Fluorosilicone	8530798	Silicone	85227658	Silicone THT
20	85251437	Fluorosilicone	85301548	Silicone	85227927	Silicone THT
22	85251438	Fluorosilicone	8530800	Silicone	85227659	Silicone THT
24	85251439	Fluorosilicone	-	-	-	-



Gasket for square flange receptacle

Shell size	08	10	12	14	16	18	20	22	24
$A^{\pm 0.4}$	20.62	24.00	26.18	28.56	30.93	33.32	36.50	39.67	42.86
$B^{\pm 0.12}$	15.09	18.00	20.62	23.01	24.61	26.97	29.37	31.75	34.92
$\emptyset C^{\pm 0.4}$	12.70	17.20	19.05	22.23	25.40	28.58	31.75	34.93	38.10
$\emptyset D^{\pm 0.12}$	3.30	3.20			3.30			4.00	

Note: All dimensions are in millimeters (mm)



## Description

- Thread coupling connector
- MIL-DTL-38999 Series III qualified  
EN3645 compliant
- Glass sealed hermetic:
  - . high hermeticity performance
  - . compact low profile
- Various mounting styles:
  - . compact solder mount receptacle
  - . easy to install square flange receptacle
  - . easy to replace jam nut receptacle
- Signal and power contacts - up to size #4
- Special fuel tank versions for long term fuel immersion
- 230V qualified versions where higher voltage is used to reduce cable weight
- Solder cup, PC tail or eyelet contacts

## Technical features

### Mechanical

- **Shell:**  
Class Y: passivated stainless steel  
Class N: nickel plated stainless steel
- **Seals:**  
Silicone elastomer
- **Contact:**  
Gold plated ferrous alloy
- **Endurance:**  
500 mating/unmating operations

### Electrical

- Max current rating per contact:

Contact size	22D	20	16	12	8	4
Rating (A)	3	5	10	17	33	60

- Dielectric withstand voltage:

Service	Sea level	30 000 m
M	1 300 Vrms	800 Vrms
I	1 800 Vrms	1 000 Vrms
II	2 300 Vrms	1 000 Vrms

- Insulation resistance:  
5000 MΩ (under 500 Vdc)

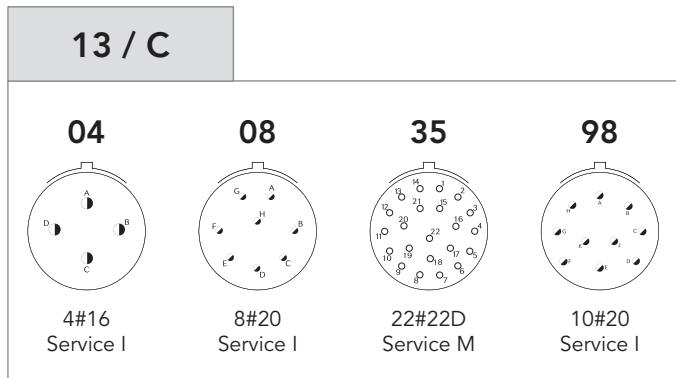
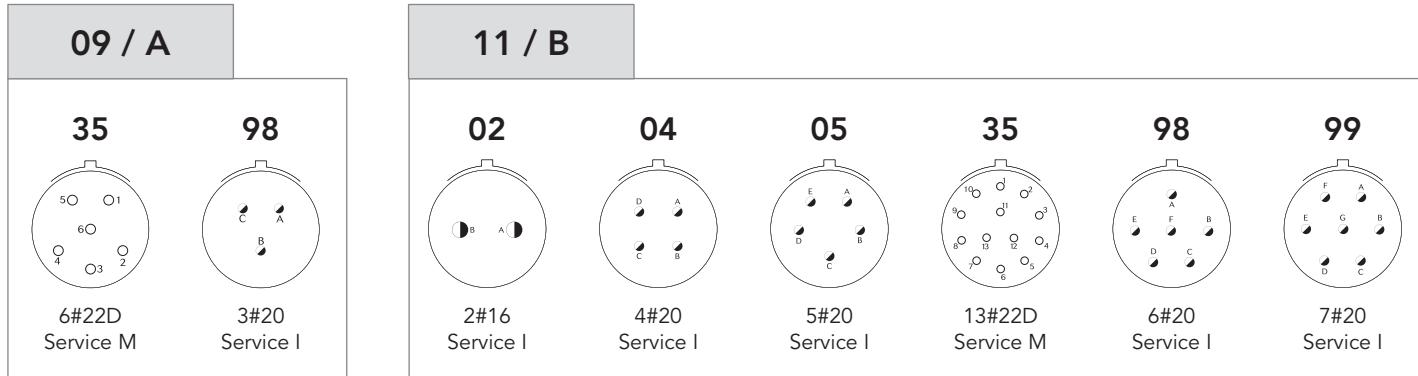
### Environmental

- Operating temperature:  
-65°C to 200°C

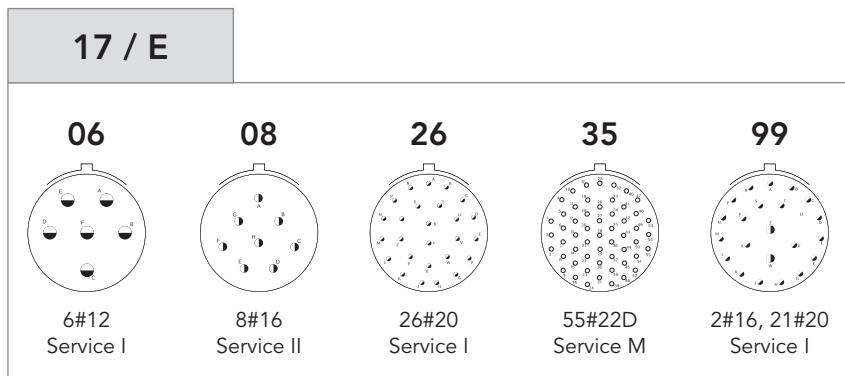
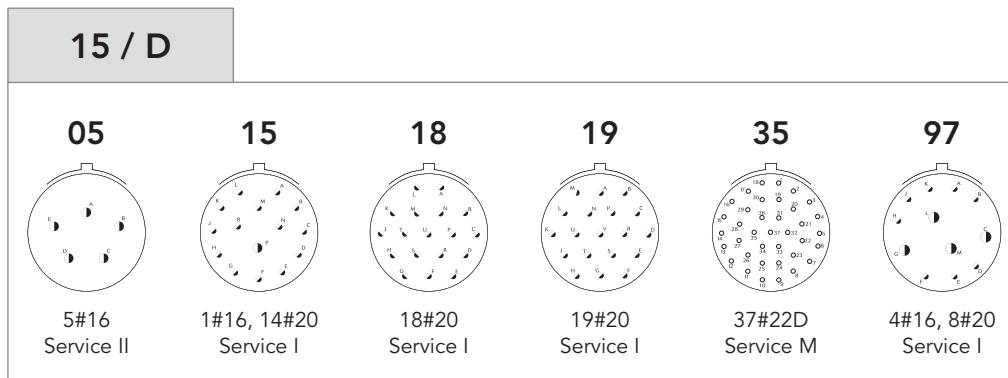
- Hermeticity:  
Leak rate < 1.10<sup>-7</sup> atm.cm<sup>3</sup>/s  
(helium gas test)

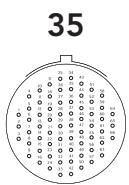
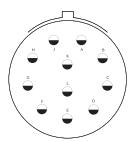
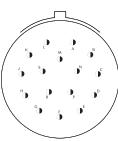
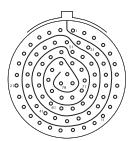
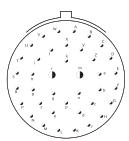
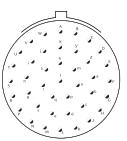
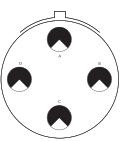
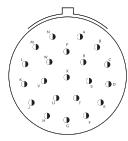
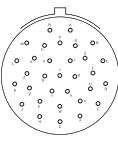
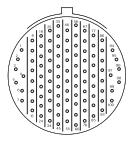
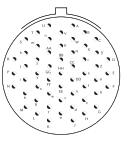
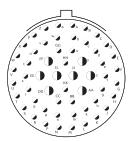
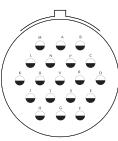
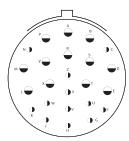
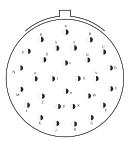
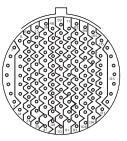
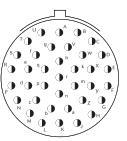
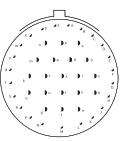
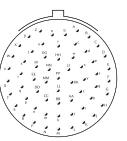
- Salt spray:  
Class Y: 500 hours  
Class N: 48 hours

## Contact layouts



- Contact #22D
- /● Contact #20
- Contact #16
- /● Contact #12
- /●/● Contact #8 Power



**Contact layouts****19 / F**11#16  
Service II26#20, 2#16  
Service I32#20  
Service I66#22D  
Service M**21 / G**11#12  
Service I16#16  
Service II79#22D  
Service M2#16, 37#20  
Service I41#20  
Service I4#8 Power  
Service I**23 / H**21#16  
Service II32#20  
Service I100#22D  
Service M53#20  
Service I55#20  
Service I**25 / J**48#20, 8#16  
Service I19#12  
Service I12#16, 12#12  
Service I29#16  
Service I128#22D  
Service M37#16  
Service II23#20, 20#16  
Service I61#20  
Service I

## Contact layouts (matrix)

Shell size	Layout	D38999 QPL	8D type 21 Spec. 600*	8D Spec. 022*	8D Spec. 840 & 850*	8D Spec. A76*	Number of contacts					
							#22D	#20	#16	#12	#8	#4
09 / A	09-35	Q		OK	OK		6					
	09-98	Q		OK	OK			3				
11 / B	11-02	Q			OK				2			
	11-04	Q			OK			4				
	11-05	Q			OK			5				
	11-12	OK	Available on request, please consult us						1			
	11-22	OK	Available on request, please consult us				4					
	11-35	Q		OK	OK	OK	13					
	11-98	Q			OK			6				
	11-99	Q		OK	OK			7				
13 / C	13-03	OK	Available on request, please consult us						3			
	13-04	Q	OK		OK				4			
	13-08	Q			OK			8				
	13-26	OK	Available on request, please consult us				6			2		
	13-35	Q		OK	OK		22					
	13-98	Q			OK			10				
15 / D	15-05	Q	Available on request, please consult us						5			
	15-15	Q	Available on request, please consult us					14	1			
	15-18	Q			OK			18				
	15-19	Q		OK	OK			19				
	15-35	Q		OK	OK	OK	37					
	15-97	Q	Available on request, please consult us				8	4				
17 / E	17-06	Q	OK	OK						6		
	17-08	Q	OK		OK				8			
	17-20	OK	Available on request, please consult us				16			4		
	17-26	Q			OK			26				
	17-35	Q		OK	OK	OK	55					
	17-99	Q	Available on request, please consult us					21	2			
19 / F	19-11	Q	Available on request, please consult us						11			
	19-28	Q	Available on request, please consult us					26	2			
	19-32	Q	Available on request, please consult us					32				
	19-35	Q			OK		66					
21 / G	21-11	Q							11			
	21-16	Q	Available on request, please consult us						16			
	21-35	Q		OK	OK		79					
	21-39	Q	Available on request, please consult us					37	2			
	21-41	Q			OK			41				
	21-48	OK	OK							4		
	21-59	OK	Available on request, please consult us				55			4		
23 / H	23-21	Q			OK				21			
	23-32	Q	Available on request, please consult us					32				
	23-35	Q			OK			100				
	23-53	Q			OK			53				
	23-54	OK	Available on request, please consult us				40		9	4		
	23-55	Q			OK			55				
25 / J	25-04	Q			OK			48	8			
	25-19	Q							19			
	25-24	Q	Available on request, please consult us					12	12			
	25-29	Q			OK			29				
	25-35	Q	Available on request, please consult us				128					
	25-37	Q	Available on request, please consult us					37				
	25-43	Q	Available on request, please consult us					23	20			
	25-44	OK	Available on request, please consult us					4				4
	25-61	Q	Available on request, please consult us					61				

OK = SOURIAU's layout

Q = SOURIAU's qualified layout

\* see next page for specifications details

## Connector part numbers

### MIL-DTL-38999 part number

<b>Basic Series</b>	D38999	21	Y	A	35	P	N
<b>Shell style:</b>							
21: Square flange receptacle 23: Jam nut receptacle 25: Solder mount receptacle 27: Weld mount receptacle							
<b>Class:</b>							
Y: Passivated stainless steel N: Nickel plated stainless steel							
<b>Shell size:</b>							
09=A, 11=B, 13=C, 15=D, 17=E, 19=F, 21=G, 23=H, 25=J							
<b>Contact layout:</b>							
See pages 45 & 46							
<b>Contact type:</b>							
P: Male solder cup C: Male PC tail contacts X: Male eyelet contacts							
<b>Orientation:</b>							
N, A, B, C, D, E							

### SOURIAU part number

<b>Basic Series</b>	8D	0	Y	13	35	P	N	022
<b>Shell style:</b>								
0: Square flange receptacle 1: Solder mount receptacle 4: Weld mount receptacle 7: Jam nut receptacle								
<b>Class:</b>								
Y: Passivated stainless steel N: Nickel plated stainless steel								
<b>Shell size:</b>								
09, 11, 13, 15, 17, 19, 21, 23, 25								
<b>Contact layout:</b>								
See pages 45 & 46								
<b>Contact type:</b>								
P: Male solder cup C: Male PC tail contacts X: Male eyelet contacts								
<b>Orientation:</b>								
N, A, B, C, D, E								
<b>Specification:</b>								
022: Fuel tank version 840: Short PCB contact 850: Long PCB contact 600: 230V qualified connector (layouts 13-04, 17-06, 17-08 & 21-48 - orientation T & V) A76: Fuel tank version with crimp removable contacts - Jam nut only								

## Dimensions

Square flange receptacle (type 21)										
Shell size	A $\pm 0.20$	B $\pm 0.20$	C	D	E $\pm 0.30$	F max	$\varnothing G$ Front mounting	$\varnothing H$ Rear mounting	J max	K max
A (9)	3.25	5.49	18.26	15.09	23.80	20.40	13.11	16.66	2.5	3.2
B (11)		4.93	20.62	18.26	26.20		15.88	20.22		
C (13)		23.01	20.62	28.60			19.05	23.42		
D (15)		4.39	24.61	23.01	31.00		23.01	26.59		
E (17)		26.97	24.61	33.30			25.81	30.96		
F (19)		4.93	29.36	26.97	36.50		28.98	32.94		
G (21)		31.75	29.36	39.70			32.16	36.12		
H (23)		34.93	31.75	42.90			34.93	39.29		
J (25)		6.15	38.10	34.93	46.00		37.69	42.47		

The technical drawings show four views of the connector: a side view showing internal components and dimensions F and 2.35/2.50; a top view showing internal parts and dimensions E, C, D, and B; a panel cut-out diagram showing the required hole diameter ØG or ØH and dimensions C or D; and a rear view showing the rear mounting plate with dimensions J and K. A 3D perspective view of the connector is also provided.

Solder mounting receptacle (type 25)				
Shell size	$\varnothing A$ max	B max	C max	D max
A (9)	19.40	17.20	23.80	17.10
B (11)	21.80			19.90
C (13)	24.90			23.10
D (15)	28.10			26.20
E (17)	31.30			29.40
F (19)	33.60			31.80
G (21)	36.80			35.00
H (23)	40.00			38.20
J (25)	43.20			41.30

The technical drawings show a side view with dimensions C, B, and D; a top view showing the outer diameter ØA; and a 3D perspective view of the connector.

Note: All dimensions are in millimeters (mm)

## Dimensions

Jam nut receptacle (type 23)										
Shell size	A flat $^{+0.10}_{-0.15}$	B max	$\varnothing C \pm 0.30$	D $\pm 0.40$	$\varnothing E \pm 0.30/0$	F thread	$\varnothing G +0.25$	H	J	
A (9)	16.53	9.10	30.20	27.00	16.30	M17 x 1-6g	17.60	16.70 $^{+0.10}_{-0.06}$	3.2	
B (11)	19.07		34.90	31.80	19.40	M20 x 1-6g	20.96	19.59 $^{+0}_{-0.25}$		
C (13)	23.82		38.10	34.90	22.70	M25 x 1-6g	25.65	24.26 $^{+0}_{-0.25}$		
D (15)	26.97		41.30	38.10	25.90	M28 x 1-6g	28.83	27.56 $^{+0}_{-0.25}$		
E (17)	30.15		44.50	41.30	29.00	M32 x 1-6g	32.01	30.73 $^{+0}_{-0.25}$		
F (19)	33.32		49.20	46.00	32.20	M35 x 1-6g	35.18	33.91 $^{+0}_{-0.25}$		
G (21)	36.50		52.40	49.20	35.40	M38 x 1-6g	38.35	37.08 $^{+0}_{-0.25}$		
H (23)	39.67		55.60	52.40	38.60	M41 x 1-6g	41.53	40.26 $^{+0}_{-0.25}$		
J (25)	42.85		58.70	55.60	41.70	M44 x 1-6g	44.70	43.43 $^{+0}_{-0.25}$		

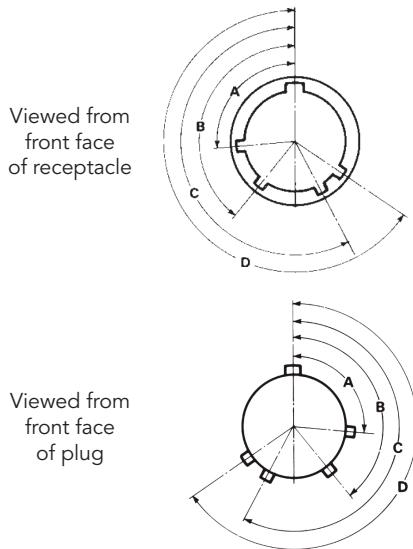
The technical drawings show four views of the jam nut receptacle: a front view with dimensions A, B, C, D, E, F, G, H, and J; a top view showing the internal threaded hole; a side view showing the mounting hole; and a cross-sectional view. A 3D perspective view shows the receptacle with its internal components and green O-rings.

Weld mounting receptacle (type 27)					
Shell size	$\varnothing A +0.3_{-0}$	$\varnothing B \pm 0.3$	C max	D $\pm 0.2$	
A (9)	24.70	23.90	23.20	3.20	
B (11)	27.80	27.00			
C (13)	31.00	30.20			
D (15)	34.20	33.40			
E (17)	36.40	35.60			
F (19)	40.10	39.30			
G (21)	43.70	42.90			
H (23)	47.90	47.10			
J (25)	50.10	49.30			

The technical drawings show three views of the weld mounting receptacle: a front view with dimensions A, B, C, D, and E; a top view showing the internal threaded hole; and a side view showing the mounting hole. A 3D perspective view shows the receptacle with its internal components and red O-rings.

Note: All dimensions are in millimeters (mm)

## Orientations



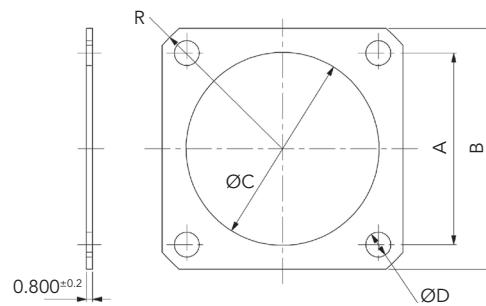
Shell size	Angles	N	A	B	C	D	E	T	V
9 (A)	A° B° C° D°	105 140 215 265	102 132 248 320	80 118 230 312	35 140 205 275	64 155 234 304	91 131 197 240	-	-
11 (B) 15 (D)	A° B° C° D°	95 141 208 236	113 156 182 292	90 145 195 252	53 156 220 255	119 146 176 298	51 141 184 242	-	-
13 (C)	A° B° C° D°	95 141 208 236	113 156 182 292	90 145 195 252	53 156 220 255	119 146 176 298	51 141 184 242	70 136 218 261	75 138 224 268
17 (E) 21 (G)	A° B° C° D°	80 142 196 293	135 170 200 310	49 169 200 244	66 140 200 257	62 145 200 280	79 153 197 272	58 162 188 316	85 150 191 307
19 (F) 23 (H) 25 (J)	A° B° C° D°	80 142 196 293	135 170 200 310	49 169 200 244	66 140 200 257	62 145 200 280	79 153 197 272	-	-

## Gaskets &amp; O' rings

Shell size	Gasket for receptacle Type 0 (not delivered with connector)		O ring for receptacle Type 7 (delivered with connector)	
	Part number	Material	Part number	Material
09 (A)	85995541	Fluorosilicone	AS3582-019	Silicone
11 (B)	85995542	Fluorosilicone	AS3582-022	Silicone
13 (C)	85995543	Fluorosilicone	AS3582-024	Silicone
15 (D)	85995544	Fluorosilicone	AS3582-026	Silicone
17 (E)	85995545	Fluorosilicone	AS3582-028	Silicone
19 (F)	85995546	Fluorosilicone	AS3582-128	Silicone
21 (G)	85995547	Fluorosilicone	AS3582-130	Silicone
23 (H)	85995548	Fluorosilicone	AS3582-132	Silicone
25 (J)	85995549	Fluorosilicone	AS3582-134	Silicone

## Gasket for square flange receptacle

Shell size	9	11	13	15	17	19	21	23	25
$A^{\pm 0.2}$	23.83	26.19	28.58	30.96	33.32	36.53	39.67	42.88	46.02
$B^{\pm 0.2}$	18.26	20.62	23.01	24.61	26.97	29.36	31.75	34.92	38.10
$R^{\pm 0.2}$	15.90	16.90	18.90	20.40	22.20	23.90	25.90	28.40	30.40
$\emptyset C^{\pm 0.2}$	14.60	17.80	21.60	24.80	28.00	30.70	33.90	37.10	40.20
$\emptyset D^{\pm 0.4}$					3.20				3.70



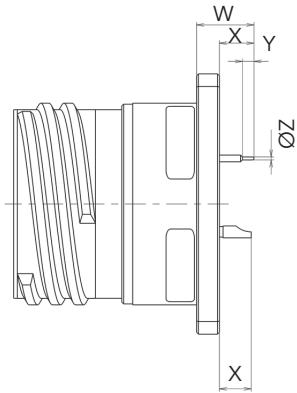
## Maximum connector weight (in grams)

Shell size	09 (A)	11 (B)	13 (C)	15 (D)	17 (E)	19 (F)	21 (G)	23 (H)	25 (J)
Square flange receptacle	23	28	35	41	57	60	65	75	91
Jam nut receptacle	39	53	63	73	92	106	118	132	154
Solder mount receptacle	21	25	31	38	53	55	57	68	83

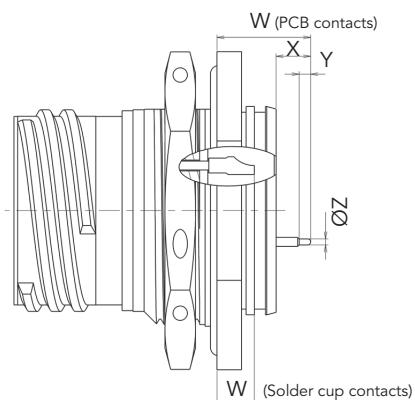
Note: All dimensions are in millimeters (mm)

## Contact variations

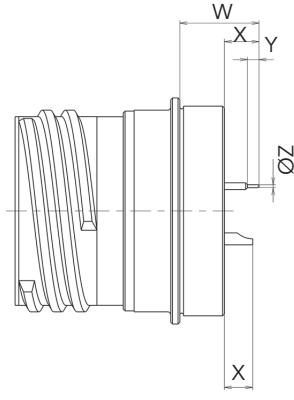
### Contact variations summary



Type 21: Square flange receptacle



Type 23: Jam nut receptacle



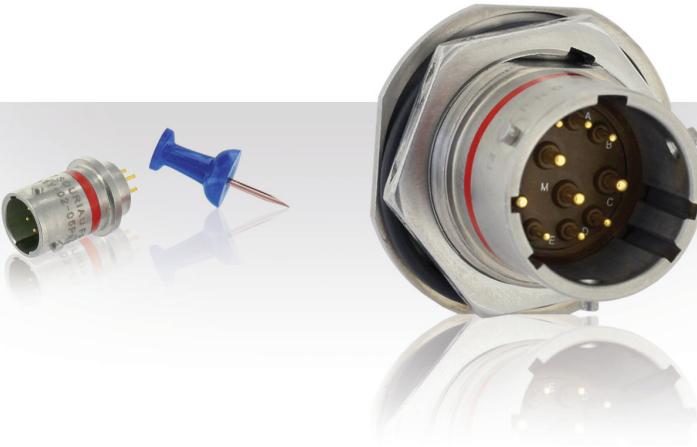
Type 25: Solder mount receptacle

Type of contact	Specification	Type of shell	Contact size	W max	X min	Y min	ØZ max
Solder cup ( P )	D38999	21	20 & 22	N/A	3.45	N/A	N/A
		23	20 & 22	4.5	N/A	N/A	N/A
		25	20 & 22	N/A	2.3	N/A	N/A
PCB ( C )	D38999	21	16	6.65	3.45	N/A	N/A
			20			0.89	0.71
			22			0.89	0.38
		23	16	11.5	3.3	N/A	N/A
			20			0.89	0.71
			22			0.89	0.38
		25	16	10.75	3.4	N/A	N/A
			20			0.89	0.71
			22			0.89	0.38
	840 (8D)	21	20	8.13	4.81	4.26	0.64
			22	7.39	4.08	3.57	0.55
		23	20	11.87	4.36	4.26	0.60
			22	10.67	3.16	5.51	0.55
		25	20	10.22	4.46	4.26	0.64
			22	9.49	3.73	3.58	0.55
	850 (8D)	21	20	13.08	9.76	5.76	0.64
			22	10.77	7.45	7.11	0.55
		23	20	15.37	7.89	6.01	0.64
			22	16.27	8.76	9.01	0.47
		25	20	15.17	9.41	6.11	0.64
			22	12.86	7.10	7.11	0.55

Note: for other contact length, please consult us.

## Description

- Bayonet coupling connector
- Micro miniature connector derived from VG96912, EN3372 and JN1003
- Glass sealed hermetic:
  - . high hermeticity performance
  - . compact low profile
- Various mounting styles:
  - . compact solder mount receptacle
  - . easy to replace jam nut receptacle
- Solder cup or PC tail contacts
- Specific fuel tank version for long term fuel immersion



## Technical features

### Mechanical

- **Shell:** Stainless steel
- **Shell plating:** Passivated
- **Insulator:** Glass bead
- **Contact:** Nickel iron
- **Contact plating:** Gold
- **Endurance:** 500 mating cycles

### Electrical

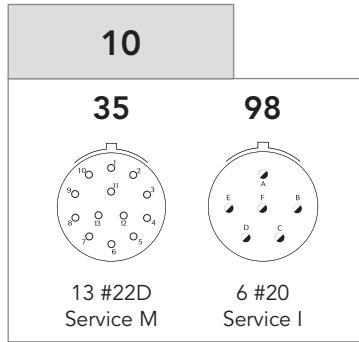
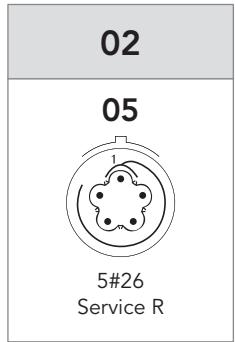
- **Test voltage:**  
Service I: 1800V  
Service M: 1300V
- **Contact resistance:** 2 mΩ
- **Insulation resistance:**  
≥ 5000MΩ (at 500Vdc)
- **Contact rating:**  
Size 16: 10 A  
Size 20: 5 A  
Size 22D: 3 A  
Size 26: 1.8 A

### Environmental

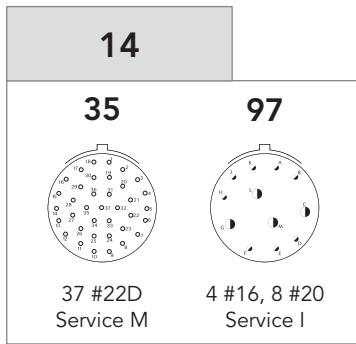
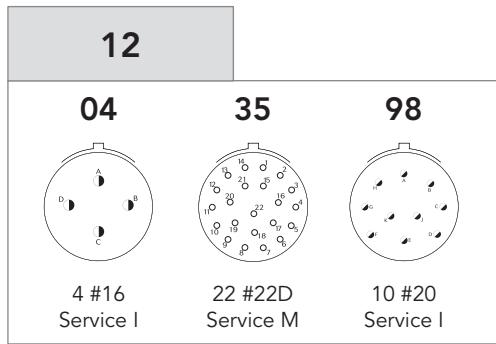
- **Operating temperature:**  
-55°C to +175°C
- **Sealing mated connectors:**  
IP67 (1 meter for 30 min minimum)
- **Salt spray:** 48 hours
- **Hermeticity:**  
Leak rate < 1.10<sup>-7</sup> atm.cm<sup>3</sup>/s  
(helium gas test)

## Ordering information

Basic series	8STA	1	Y	02	05	P	N	A73
Shell type								
1: Solder flange								
7: Jam nut receptacle								
Class								
Y: Hermetic version								
Shell size: 02, 04, 06, 08, 10, 12, 14								
Contact layout: See next page for available layouts								
Type of contact								
C: Male PC tail contacts								
P: Male solder cup contacts								
Orientation								
N: Red / A: Yellow / B: Blue / C: Orange / D: Green								
Specification (mandatory)								
022: Fuel immersible version								

**Contact layouts (viewed from front face of male insulator)**


- Contact #26
- Contact #22D
- ◐ Contact #20
- ◑ Contact #16

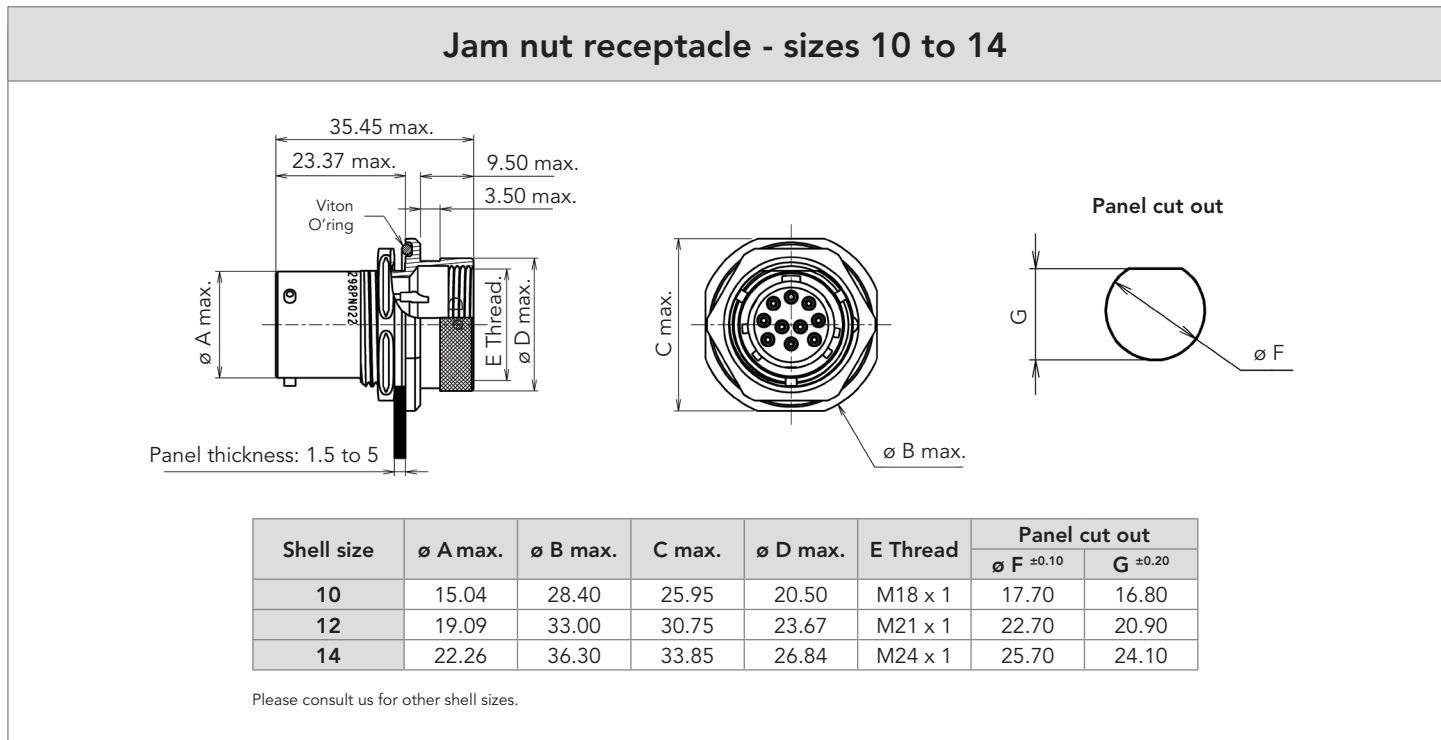
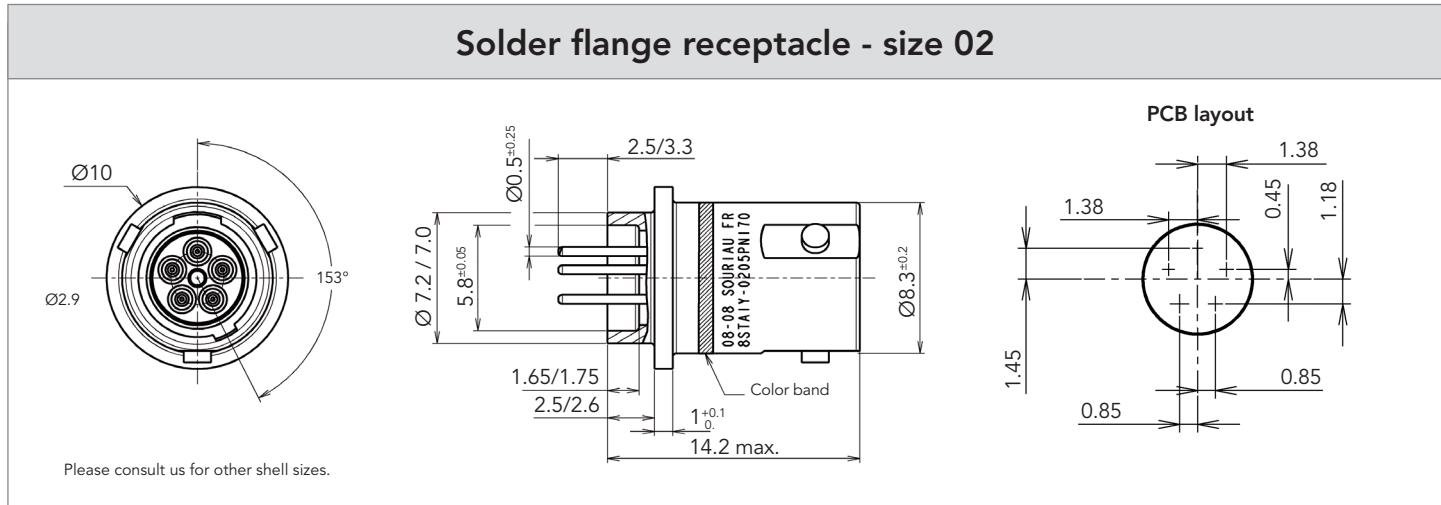

**Contact layouts (matrix)**

Shell size	Layout	Hermetic 8STA	Number of contacts			
			#26	#22D	#20	#16
<b>02</b>	02-05	OK	5			
	02-35	Available on request, please consult us		3		
<b>04</b>	04-05	Available on request, please consult us	5			
	04-06	Available on request, please consult us	6			
	04-35	Available on request, please consult us		3		
<b>06</b>	06-05	Available on request, please consult us	5			
	06-09	Available on request, please consult us	9			
	06-35	Available on request, please consult us		5		
<b>08</b>	08-12	Available on request, please consult us	12			
	08-35	Available on request, please consult us		6		
	08-98	Available on request, please consult us			3	
<b>10</b>	10-02	Available on request, please consult us				2
	10-04	Available on request, please consult us			4	
	10-05	Available on request, please consult us			5	
	10-22	Available on request, please consult us		4		
	10-26	Available on request, please consult us	26			
	10-35	OK		13		
	10-98	OK			6	

Shell size	Layout	Hermetic 8STA	Number of contacts				
			#26	#22D	#20	#16	#12
<b>12</b>	12-03	Available on request, please consult us					3
	12-04	OK					4
	12-08	Available on request, please consult us				8	
	12-26	Available on request, please consult us			6		2
	12-35	OK			22		
	12-43	Available on request, please consult us	43				
	12-98	OK				10	
<b>14</b>	14-05	Available on request, please consult us					5
	14-15	Available on request, please consult us				14	1
	14-18	Available on request, please consult us				18	
	14-19	Available on request, please consult us				19	
	14-35	OK			37		
	14-68	Available on request, please consult us	68				
	14-97	OK				8	4

OK = SOURIAU's layout

## Dimensions



Note: All dimensions are in millimeters (mm)

## Description

- Rackable/screw coupling connector
- MIL C 24308 C compliant
- High density D-Sub interface
- Glass sealed hermetic
- 2 fixing types:
  - . Fast and interchangeable screw mounting
  - . Hermetic solder mounting
- Solder cup or PC tail contacts
- Large shell plating type:
  - . Gold
  - . Tin
  - . Cadmium



## Technical features

### Mechanical

- **Shell:**  
Steel
- **Shell plating:**  
Cadmium, gold, bright tin lead, mat RoHS tin
- **Contact:**  
Ferrous alloy
- **Contact plating:**  
Gold, mat tin
- **Endurance:**  
500 mating/unmating operations

### Electrical

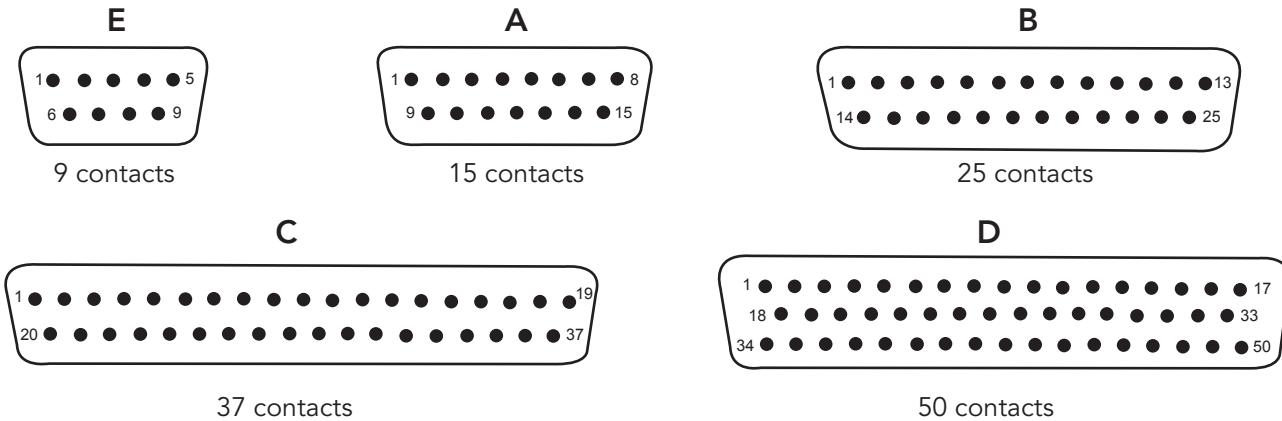
- **Contact rating:**  
5A max
- **Test voltage:**  
750 Vrms (max Vrms/50Hz)
- **Insulation resistance:**  
 $\geq 5000 \text{ M}\Omega$
- **Contact resistance:**  
 $\leq 14 \text{ m}\Omega$

### Environmental

- **Operating temperature:**  
-55°C to 125°C
- **Hermeticity:**  
Leak rate  $< 1.04 \cdot 10^{-5} \text{ atm.cm}^3/\text{s}$   
(helium gas test)
- **Salt spray:**  
48 hours (cadmium)  
24 hours (tin)

## Contact layouts

Viewed from front face of male insulator. Contacts are individually numbered on both side of insulator.



## Ordering information

Basic Series		D	E	H	09	P	002
Shell size:	E, A, B, C, D						
Class:	H: Hermetic						
Number of contacts:	09 (E), 15 (A), 25 (B), 37 (C), 50 (D)						
Contact type:	P: Pin						
Specification:							
Shell plating	Contacts plating	Solder mounting				Screw mounting	
		with locking stub		without locking stub		Solder bucket	Straight PCB contact
Cadmium	Gold	006	008	002	004	102	104
Tin lead	Gold	005	010	007	016	107	116
Mat tin	Mat tin	-	009	-	-	-	-
	Gold	-	-	-	026	-	-
Gold	Gold	-	-	-	-	122	124

## Cross reference list

SOURIAU	M24308 (not QPL)
DEH09P005	M24308/9-1
DAH15P005	M24308/9-2
DBH25P005	M24308/9-3
DCH37P005	M24308/9-4
DDH50P005	M24308/9-5

SOURIAU	M24308 (not QPL)
DEH09P007	M24308/9-11
DAH15P007	M24308/9-12
DBH25P007	M24308/9-13
DCH37P007	M24308/9-14
DDH50P007	M24308/9-15

## Dimensions

D-Sub hermetic									
Shell size	A $^{0/+0.30}$	B	C $^{0/+0.30}$	D	E $^{+0.10}_{-0.20}$	F max	G $_{\text{screw mounting}}$	H $\pm 0.20$	J $\pm 0.20$
<b>E</b>	30.80	16.94	12.54	8.41	2.50	8.65	24.99	18.40	9.40
<b>A</b>	39.14	25.27					33.32	23.70	
<b>B</b>	53.03	39.00					47.04	37.56	
<b>C</b>	69.29	55.45			2.70		63.50	53.97	
<b>D</b>	66.92	52.86		15.36	11.10		61.11	50.80	12.70

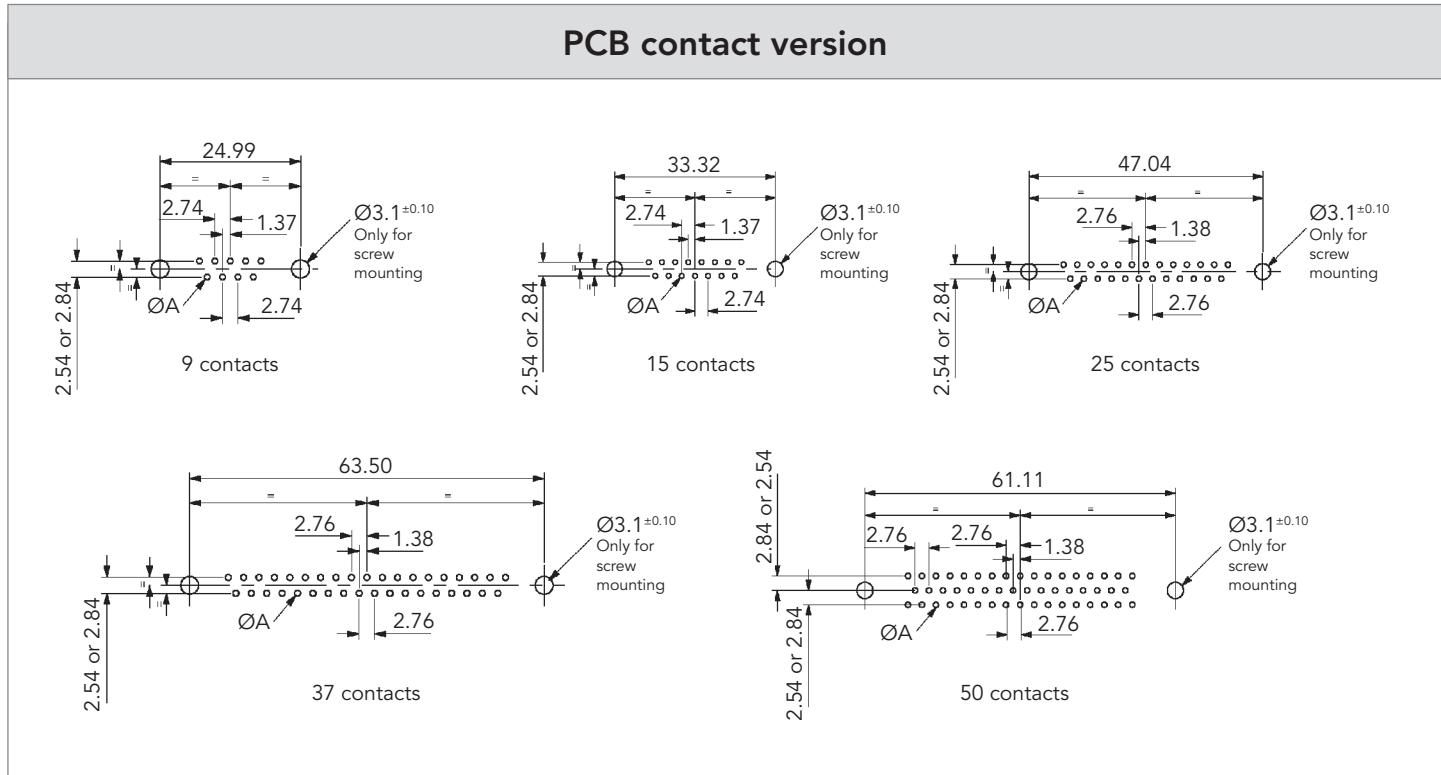
Solder bucket  
Straight PCB contact

## Panel cut-out

Screw mounting						
Shell size	Mounting type	A $\pm 0.1$	B $\pm 0.1$	C $\pm 0.1$	D $\pm 0.05$ only for screw mounting	E $\pm 0.1$
<b>E</b>	Front	18.80	9.90	24.99	3.20	-
	Rear	20.50	11.40			3.30
<b>A</b>	Front	24.10	9.90	33.32	3.20	-
	Rear	28.80	11.40			3.30
<b>B</b>	Front	37.90	9.90	47.04	3.20	-
	Rear	42.50	11.40			3.30
<b>C</b>	Front	54.30	9.90	63.50	3.20	-
	Rear	59.10	11.40			3.30
<b>D</b>	Front	51.20	13.20	61.11	3.20	-
	Rear	56.30	14.10			3.30

Note: All dimensions are in millimeters (mm)

## PCB drilling



## Accessories

**D-Sub hermetic cap**

Shell size	Cap part number
E	70 508
A	70 509
B	70 510
C	70 511
D	70 512

Note: All dimensions are in millimeters (mm)

HERMETIC

# Hermetic Range Extension

## Standard glass to metal sealing technologies:

Removable crimp contacts .....	62
Hermetic receptacles with stand-offs .....	62
8LT27 rack & panel hermetic connector .....	63
Panel bulkhead .....	63
Hermetic compact connector metallized .....	64
Solder contacts on both sides of bulkhead .....	64
Contact grounded on the shell .....	65
Thermocouple .....	65

## Alternative sealing technologies:

Resin sealed connector .....	66
------------------------------	----

## Standard glass to metal sealing technologies

### Removable Crimp Contacts

**A technology combining crimp contacts superiority with glass to metal perfect sealing**

**High hermetic performance:**

- . Glass to metal sealing: leakage of less than  $10^{-9}$  atm.cm<sup>3</sup>/s.

**Removable crimp contacts:**

- . RoHS: no lead used.
- . Long lifetime: superior to solder cup contacts in kerosene immersion.
- . Easy MRO: contact replacement.

**Long term fuel immersion materials:**

- . Performances guaranteed for minimum 90,000 hours in fuel immersion.
- . Operating temperature: 105°C max.

**Wide Availability:**

- . EN3646 (Airbus Qualified Products).
- . EN2997, EN3645, MIL-DTL-38999.



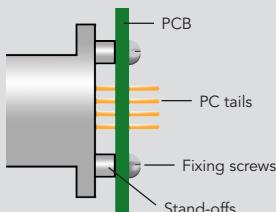
See «MIL-DTL-38999, EN3646, EN2997 Fuel Tank Connector» datasheet on [www.souriau.com](http://www.souriau.com)

### Hermetic Receptacles with Stand-offs

**Easy and robust PCB mount feature for hermetic receptacles.**

**User friendly - easy to assemble:**

- . 3 fixing screws.
- . No need of additional PCB fixing tool when soldering the contacts.



**Adapted to harsh environment:**

- . Stand-offs directly machined into the connector.
- . Excellent grounding of the PCB to the connector shell through the stand-offs.
- . Excellent vibration and shock resistance: PC tail to PCB stresses are eliminated by the stand-offs.

**Compact:**

- . Hermetic receptacle compact design maintained with a profile smaller than the double flange version.



See «Hermetic Receptacles with Stand-offs» datasheet on [www.souriau.com](http://www.souriau.com)

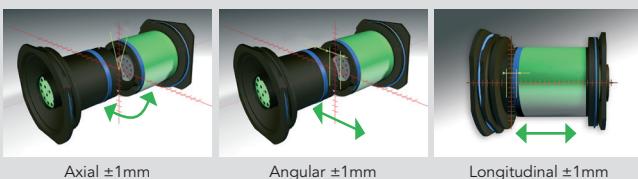
## Standard glass to metal sealing technologies

### 8LT27 Rack & Panel Hermetic Connector

**Rack & panel glass sealed receptacle. Combine the easy use of blind mateable connectors to excellent hermeticity.**

#### Blind connection:

- . Per HE308 standard.
- . Fixed receptacle to the float mounting plug: just push to connect... and release to disconnect!
- . Superior misalignment allowances:



#### High pressure performance:

- . Glass to metal sealing receptacle
- . Helium leakage of less than  $10^{-7}$  atm.cm<sup>3</sup>/s.
- . Pressure resistance.



See «8LT27 Series - Hermetic Connectors» datasheet on [www.souriau.com](http://www.souriau.com)

### Hermetic Feedthrough

**Glass fused hermetic through bulkhead. Connector derivatives from the bulkhead feed-through range.**

#### Simplified use. Quick and easy:

- . Each face of the receptacle mates to a plug.
- . Quick cable integration.
- . Easy maintenance.

#### Secured pressure differential:

- . Glass fused insert enables it to resist high pressure differences, even when unmated.
- . Leakage 1,000 times lower than standard connectors.

#### Male/male interface:

- . Each side of the receptacle is populated with male contacts.
- . For male/female options, see the reinforced sealing bulkhead range.



See «Hermetic Feed-through» datasheet on [www.souriau.com](http://www.souriau.com)

## Standard glass to metal sealing technologies

### Hermetic Compact Connector Metallized

**AM89 Series Servo Control Connector.**  
Shielded and space saving receptacle with hermetic performance.

#### High density solution:

- . 4 contacts #20 in standard.
- . Other arrangements available on request.

#### High hermeticity:

- . Glass to metal sealing technology.
- . Leak rate  $<1.10^{-7}$  atm.cm<sup>3</sup>/s.
- . Housing made of stainless steel.

#### Compact solution:

- . Oval flange solution.

#### Large range of applications:

- . Suitable for primary and secondary actuators.



### Solder Contacts on Both Sides of Bulkhead

**8STA connector designed for high vibration environment. Wire soldered on both sides of the feed-through: no plugs needed.**

#### Cost and space saving:

- . Adapted to space-constrained area.
- . No plugs necessary.

#### Easy to solder:

- . Contacts fully tin plated.
- . Different contact sizes available.

#### High performance sealing:

- .  $<1.10^{-7}$  atm.cm<sup>3</sup>/s.

#### Heat shrink boot version:

- . AM44 connector with specific shell:



## Standard glass to metal sealing technologies

### Contact Grounded on the Shell

**Hermetic connector with one or several contacts directly grounded on the shell.**

**Time saving:**

- . No specific wiring operation required.

**Quality control:**

- . Grounding operation done in controlled conditions.

**Compact:**

- . No additional pigtail needed.



### Thermocouple

**Hermetic connector with Kp/Kn contacts for integration into thermocouple sensors.**

**Standard interface:**

- . Solution compatible with EN2997, MIL-DTL-38999, MIL-DTL-26482 and EN3646 standards.

**High hermeticity:**

- . Leak rate <  $1.10^{-7}$  atm.cm<sup>3</sup>/s (helium gas test).

**Easy integration into thermocouple sensors:**

- . Same conductive materials used as thermocouple sensors.
- . Solder flange with specific dimensions available.
- . Housing available in 304L, 316L and other materials on request.



## Alternative sealing technologies

### Resin Sealed Connector

**Connector with reinforced sealing. Resin sealed for harsh environment applications. Up to 1000 times higher sealing than standard version.**

#### Wide availability:

- . All 38999 layouts.
- . Aluminum, including RoHS Black Zinc Nickel.
- . Composite for ultra low weight.
- . Titanium or stainless steel for outdoor application.

#### Temperature:

- . Fast temperature change: from -55°C to 125°C.
- . Compatible with wave or iron soldering.

#### Large contacts offer:

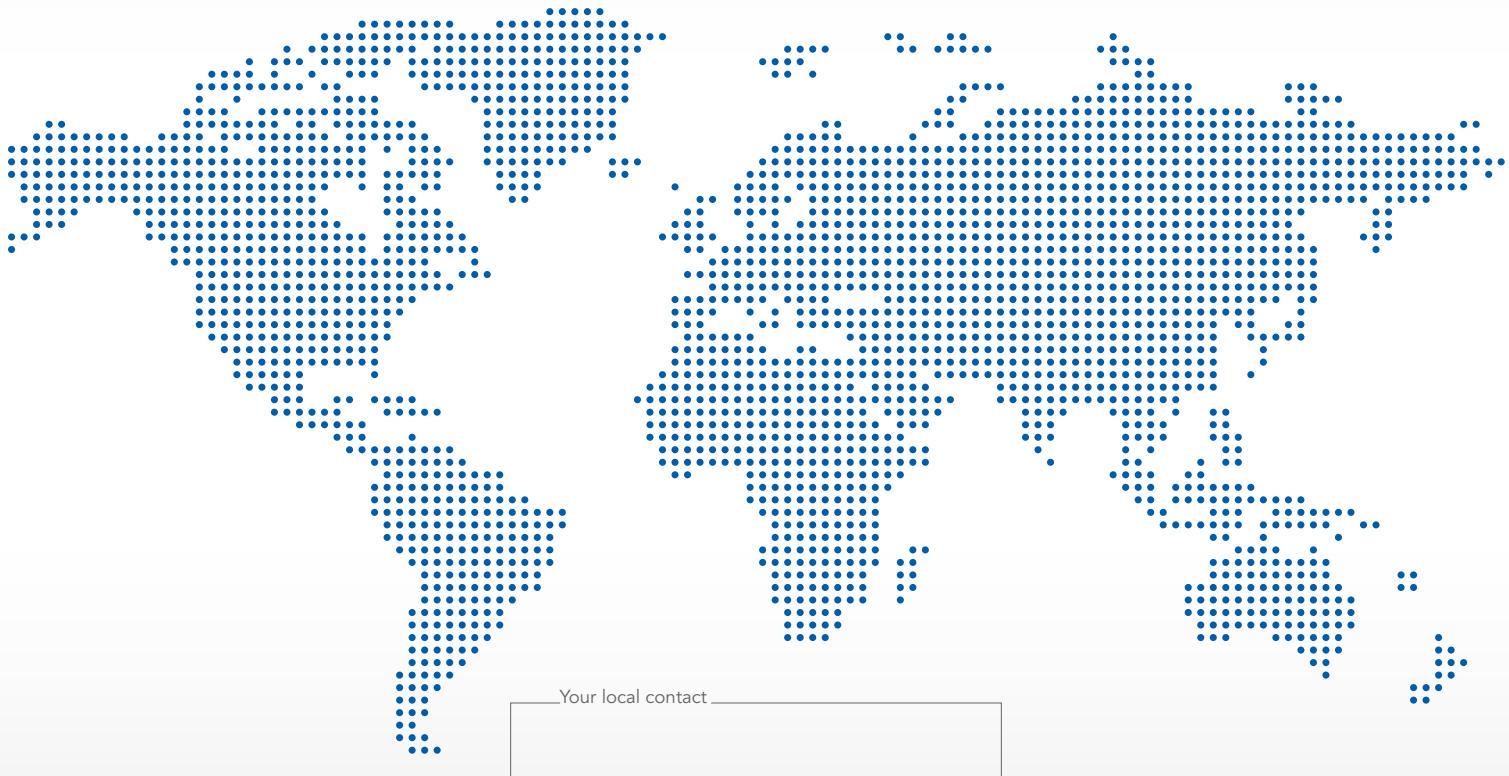
- . PC tail or solder contacts.
- . Male or female contacts.
- . Tin plated version available.
- . Shoulderless contact available, consult us.



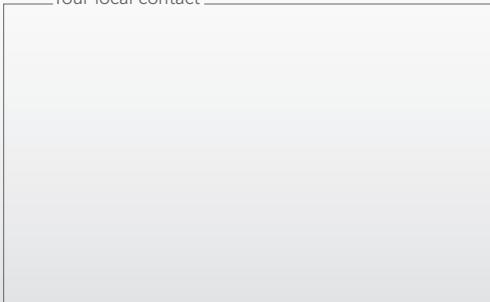
See «8LT, 8ST & 8D Series - Reinforced Sealing»  
datasheet on [www.souriau.com](http://www.souriau.com)



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