

# 851 Series Hermetic Connectors



## Hermetic and Small Bayonet Connectors Per MIL-DTL-26482 Series I

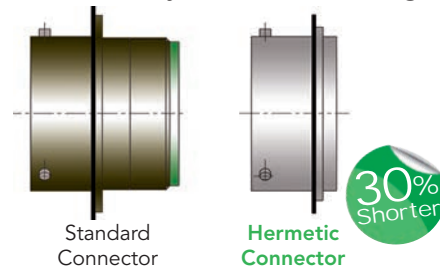
Hermeticity and compacity applied to a world wide proven connector series.

**High pressure performance** ■ Glass to metal sealing.  
Helium leakage of less than  $10^{-7}$  atm.cm<sup>3</sup>/s.



Pressure resistant.

**Compact design** ■ No rear accessory thread and no grommet.



Standard Connector

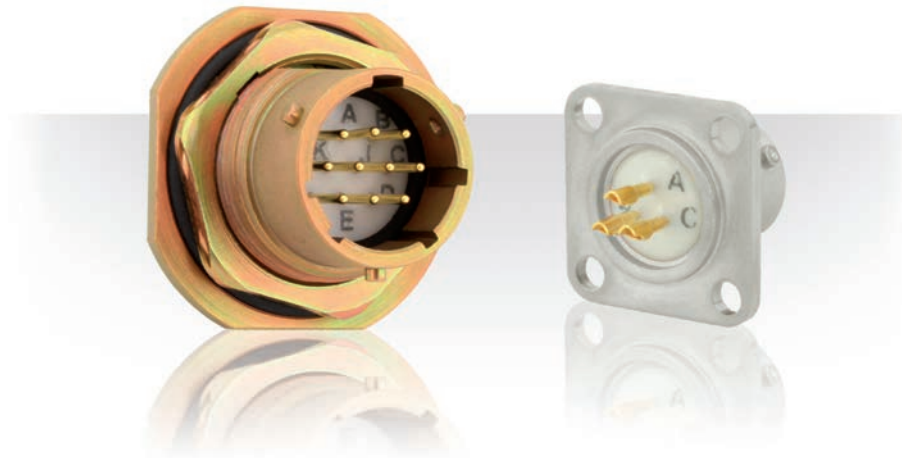
Hermetic Connector

30%  
Shorter

**Easy use** ■ Quick bayonet coupling.

## Description

- Glass sealed hermetic
- Compact low profile - 30% shorter than the standard version
- Quick bayonet coupling per:
  - MIL-DTL-26482 Series I
  - HE301
  - VG95328
- Solder cup 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	12
Rating (A)	5	10	17

- **Dielectric withstanding voltage:**

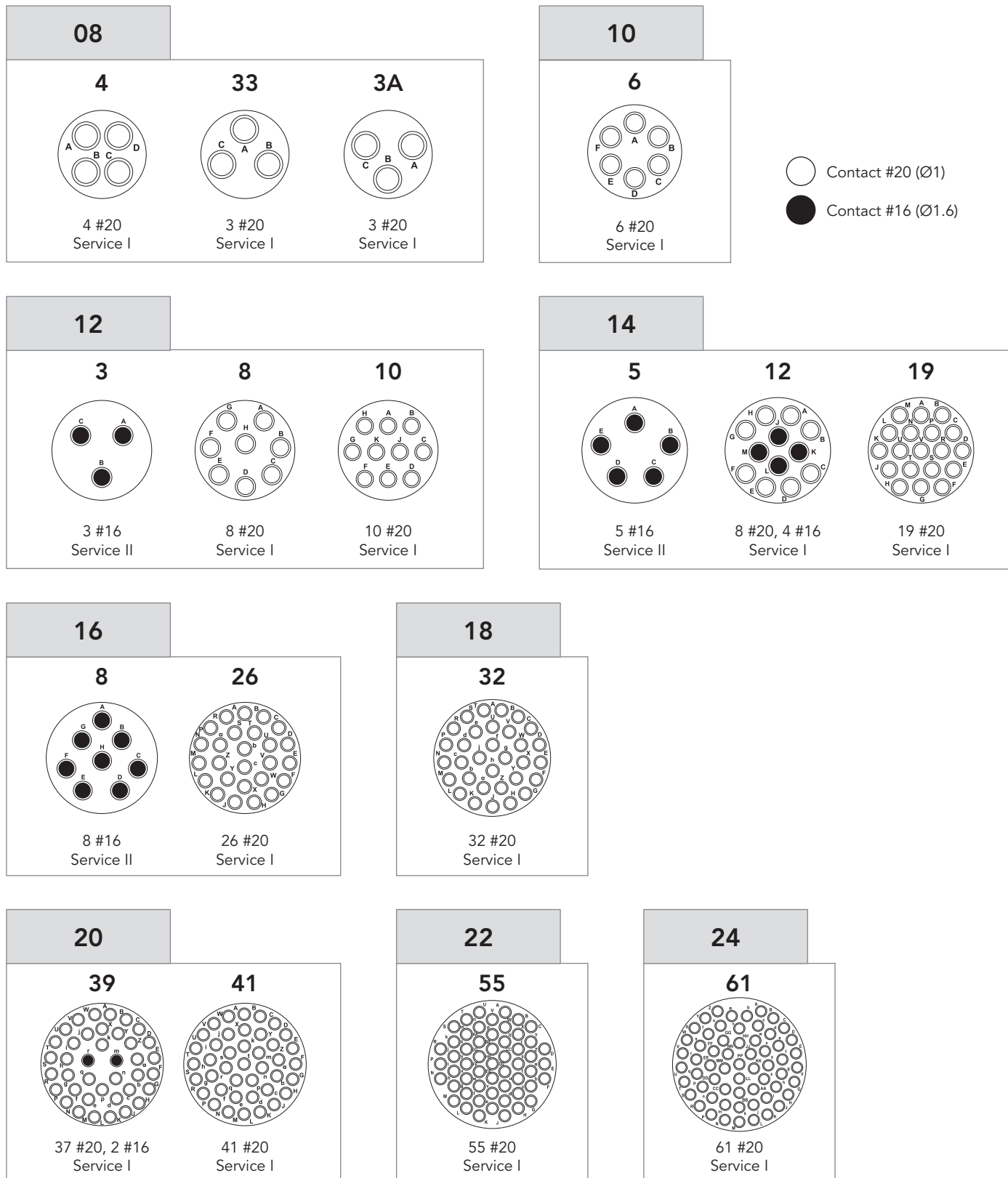
Service	Standard pressure	10 mbar pressure
I	1 500 Vrms	200 Vrms
II	2 300 Vrms	300 Vrms

- **Contact resistance:**  
Size 20  $\leq$  30 m $\Omega$   
Size 16  $\leq$  14 m $\Omega$
- **Shielding:**  
70 dB to 5 MHz  
40 dB to 100 MHz

### Environmental

- **Operating temperature:**  
-55°C to +125°C
- **Hermeticity:**  
1 bar differential pressure,  
leakage  $\leq$  2.8 mm<sup>3</sup>/hr
- **Salt spray:**  
48 hours min
- **Chemical resistance:**  
To MIL-DTL-26482G Series I
- **Damp heat:** 21 days

## Contact layouts



## Ordering information

### SOURIAU part numbers

<b>Basic series</b>	851	02H	18	32	P		50
<b>Shell type:</b>							
IH: Solder mount receptacle							
02H: Square flange receptacle							
07H: Jam nut receptacle							
<b>Shell size:</b>							
08, 10, 12, 14, 16, 18, 20, 22, 24							
<b>Contact layout:</b>							
See previous page							
<b>Contact type:</b>							
P: Pin							
<b>Orientation:</b>							
None: Normal (N)							
W, X, Y, Z - see page 7							
<b>Mandatory suffix:</b>							
50: Gold plating for contact size 20 and size 16							
<b>Specification:</b>							
None: Yellow cadmium plating - 02H and 07H only							
Nickel plated - IH only							
44: Nickel plated - 02H and 07H only							

### VG95328 qualified products

<b>Basic series</b>	VG95328	F	18	32	P	N
<b>Shell type:</b>						
G: Solder mount receptacle						
F: Jam nut receptacle						
<b>Shell size:</b>						
08, 10, 12, 14, 16, 18, 20, 22, 24						
<b>Contact layout:</b>						
See previous page						
<b>Contact type:</b>						
P: Pin						
<b>Orientation:</b>						
N, W, X, Y, Z - see page 7						

## Contact layouts (matrix)

Shell size	Layout	Hermetic 851	Hermetic MIL-DTL-26482G	Hermetic VG95328	Number of contacts	
					#20	#16
08	8-3A	Yes		Q	3	
	8-98		Yes		3	
	8-33	Yes	Yes		3	
	8-4	Yes	Yes		4	
10	10-6	Yes	Yes	Q	6	
12	12-3	Yes	Yes	Q		3
	12-8	Yes	Yes		8	
	12-10	Yes	Yes	Q	10	
14	14-5	Yes	Yes	Q		5
	14-12	Yes	Yes	Q	8	4
	14-15	Yes	Yes	Q	14	1
	14-19	Yes	Yes	Q	19	
16	16-8	Yes	Yes	Q		8
	16-26	Yes	Yes	Q	26	
18	18-32	Yes	Yes	Q	32	
20	20-39	Yes	Yes	Q	37	2
	20-41	Yes	Yes	Q	41	
22	22-55	Yes	Yes	Q	55	
24	24-61	Yes	Yes	Q	61	

## 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 □

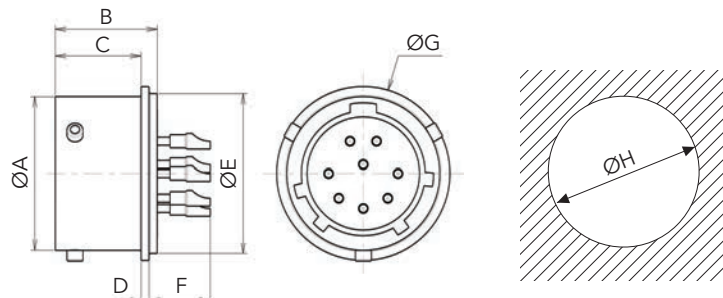
- Shell size
- Layout
- Orientation. Empty if orientation N - only for «Souriau», «NFC93422» and «MIL-DTL-26482G Series I»

## Maximum connector weights (in grams)

Shell 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

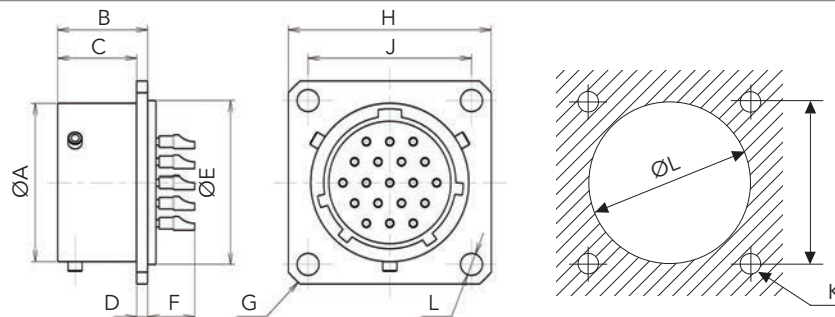
## Dimensions

### Solder mount receptacle (type IH)



Shell size	A max	B ±0.2	C ±0.2	D ±0.14	E <sup>+0.02</sup> / <sub>-0.13</sub>	F max	G max	H ±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

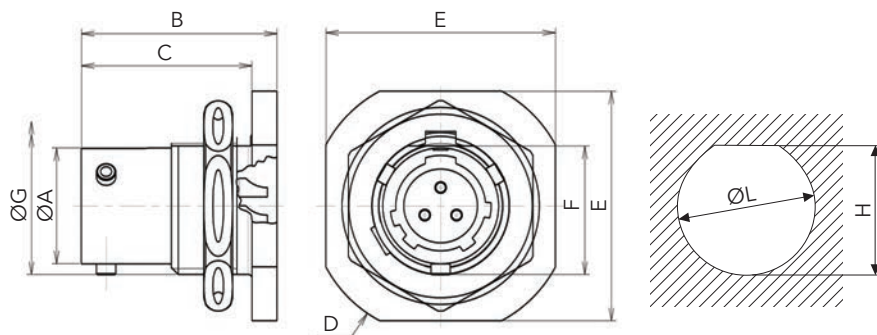
### Square flange receptacle (type O2H)



Shell size	A max	B ±0.2	C ±0.2	D ±0.14	E <sup>+0.02</sup> / <sub>-0.13</sub>	F max	G max	H max	J	K ±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)

**Jam nut receptacle (type 07H)**

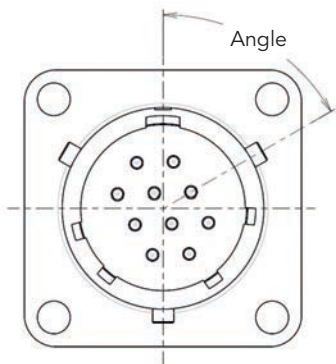


Shell size	A max	B max	C ±0.25	D max	E max	F ±0.1	G max	H ±0.1	L ±0.1
8	12.03	20.60	17.93	27.37	24.07	13.33	14.26	13.75	14.60
10	15.01	20.60	17.93	30.57	27.22	16.51	17.43	16.95	17.75
12	19.07	20.60	17.93	35.32	32.00	20.63	22.19	21.50	22.50
14	22.25	20.60	17.93	38.50	35.17	23.78	25.36	24.20	25.70
16	25.42	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

Note: All dimensions are in millimeters (mm)

**Orientation**

**Polarization code**



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

Shell size	Layout	Angle in degrees			
		W	X	Y	Z
8	4	45	-	-	-
	33	90	-	-	-
	3A	60	210	-	-
10	6	90	-	-	-
12	3	-	-	180	-
	8	90	112	203	292
	10	60	155	270	295

Shell size	Layout	Angle in degrees			
		W	X	Y	Z
14	5	40	92	184	273
	12	43	90	-	-
	19	30	165	315	-
16	8	54	152	180	331
	26	60	-	275	338
18	32	85	138	222	265
20	41	45	126	225	-
22	55	30	142	226	314
24	61	90	180	270	324

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