



## Bayonet Coupling Lightweight Connectors MIL-C 26482G Series 2 / EN3646 Qualified



# 852 Series



## Presentation

The 852 range is a lightweight version of MIL-C-26482 Series 2 connectors. Locking is achieved by a bayonet quick-release system. Hermetic stainless steel version is available.

852 design characteristics, performances and reliability meet the requirements of the following applications:

- civil and military aeronautics
- armored vehicle equipment
- civil, military, telecommunications and radars
- ballistic and tactical missiles
- spacecraft equipment
- weapons

Plugs, receptacles and accessories are manufactured from stainless steel or light aluminum alloy with black anodized (non-conductive plating), nickel plating (conductive plating), olive drab or yellow cadmium (conductive plating).

Gold plated crimp contacts are removable from the rear and retained by metallic clips. Mini-coax and thermocouple contacts may also be installed instead of standard contacts.

The hard insulator is a thermoplastic material. The insulators are fluid resistant as specified by MIL-C-26482G Series II / HE302 / EN3646, including Standard norms coming from earlier norms NFL54130 / NAS 1599 / LN 29504.

Front and rear silicone elastomer parts provide an effective seal between connector and cable and also at connector interface.

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# 852 SERIES

## 852 Series

# Overview

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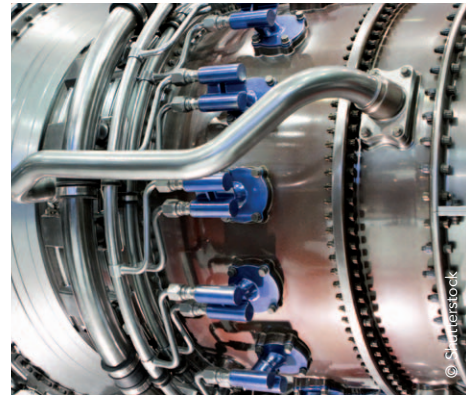
## Typical applications



Airframe Pressurized Area



Aircraft Cabin / IFE



Fuel Management



Military Aerospace / Weapons Systems



Radar & Detection

## Features & Benefits

**QPL**

### Qualified Connectors

SOURIAU is the first manufacturer to offer all EN3646 qualified connectors (8525 Series).  
MIL-C-26482 Series 2 qualified (8526 Series).

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**TIME  
SAVING**

### Quick Bayonet Mating

Bayonet locking system: one of the quickest in the aerospace connectors market.

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**RELIABLE**

### Proven Technology

Used on many applications: aerospace, railway, nuclear, telecom/datacom infrastructures.

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**LARGE  
OFFER**

### Customizable Product

Various PC tail contacts lengths.  
Connectors can be delivered with backshells.  
Shunted version available.

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**HIGH  
SEALING**

### High Sealing Performance

Fuel tank and resin sealed version.  
Hermetic stainless steel version.

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## A wide product range



### Aluminum

- Black Anodized
- Nickel RoHS
- Olive Green Cadmium
- Yellow Cadmium

### Stainless Steel

- Passivated RoHS



### EN3646

8525 Series

### MIL-C 26482G Series 2

8526 Series

### Qualified accessories

Backshells and caps



### Contact offer

Crimp / Solder / PCB  
Quadrax technology  
Shunted version

### High sealing

Hermetic full range  
Resin sealed version  
Fuel tank version

## 8525/8526 Series comparison

### 8525 Series

#### Dedicated Characteristics

- EN3646 qualified
- Low profile design
- Improved shielding with 360° teeth option

### 8525/8526 Series

#### Common Characteristics

- Quick mating bayonet locking
- Signal integrity plug with or without RFI shielding
- Up to 200°C
- Improved sealing

### 8526 Series

#### Dedicated Characteristics

- MIL-C 26482G Series 2 qualified
- 3 rear teeth at 120°

## Worldwide sales network

Esterline Connection Technologies (SOURIAU-SUNBANK) is recognized as one of the top international manufacturers of connectors and backshells for harsh environment and is continuously strengthening its leading position through its solid structure as an international group. Today the Esterline Connection Technologies group has a strong worldwide global presence on 4 continents.

Our international presence is reinforced by franchised and value added distributors in many countries.

We also rely upon an extensive network of distributors and resellers worldwide. This coverage, together with a strong commitment towards service, ensures rapid responses to the specific needs of our customers.

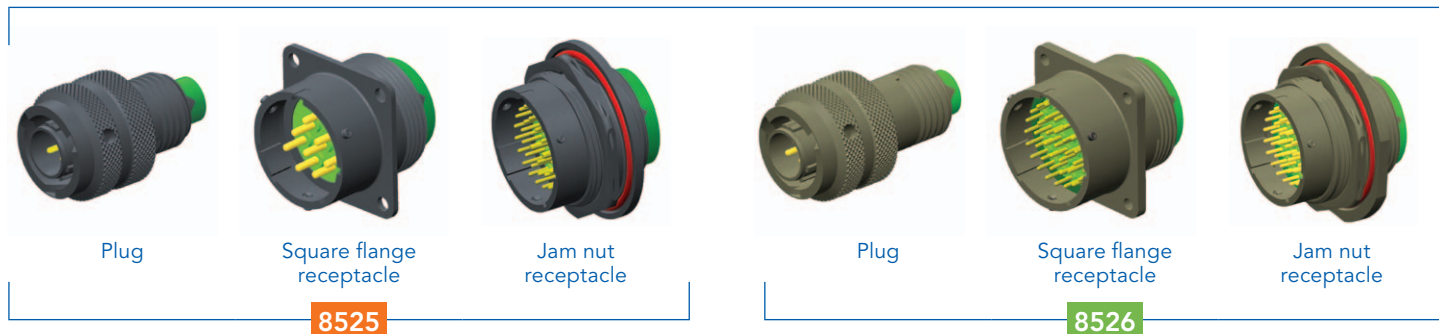


- Operations and Sales Offices
- Franchised and Value Added Distributors



## 8525/8526 Series overview

### STANDARD VERSION see p.16 & 20



### HERMETIC VERSION see p.26 & 33



### QUADRAX VERSION see p.24



### CAPS see p.44



### BACKSHELLS see p.40



## 8525 Series cross reference list

Designation		SOURIAU	EN	ABS / ASN-E	NFC 93422 / HE302
Aluminum connectors	Square flange receptacle	8525 10 R •• P/S • H Δ 8525 10 N •• P/S • H Δ 8525 10 R •• P/S • H L 8525 10 N •• P/S • H L 8525 10 R •• P/S • H • 8525 10 N •• P/S • H •	EN3646 A0 •• C/D • EN3646 RS0 •• C/D • EN3646 A0 •• A/B • EN3646 RS0 •• A/B • EN3646 A0 •• M/F • EN3646 RS0 •• M/F •	ASNE-E 0053 R •••• P/S E ASNE-E 0053 N •••• P/S E ASNE-E 0053 R •••• P/S F ASNE-E 0053 N •••• P/S F	HE 302-0N •••• P/S 1F HE 302-0G •••• P/S 6
	Jam nut receptacle	8525 17 R •• P/S • H Δ 8525 17 N •• P/S • H Δ 8525 17 R •• P/S • H L 8525 17 N •• P/S • H L 8525 17 R •• P/S • H • 8525 17 N •• P/S • H •	EN3646 A7 •• C/D • EN3646 RS7 •• C/D • EN3646 A7 •• A/B • EN3646 RS7 •• A/B • EN3646 A7 •• M/F • EN3646 RS7 •• M/F •	ASNE-E 0054 R •••• P/S E ASNE-E 0054 N •••• P/S E ASNE-E 0054 R •••• P/S F ASNE-E 0054 N •••• P/S F	HE 302-7N •••• P/S 1F HE 302-7G •••• P/S 6
	Plug without shielding	8525 16 R •• P/S • H Δ 8525 16 N •• P/S • H Δ 8525 16 R •• P/S • H L 8525 16 N •• P/S • H L 8525 16 R •• P/S • H • 8525 16 N •• P/S • H •	EN3646 A6 •• C/D •  EN3646 A6 •• A/B •  EN3646 A6 •• M/F •	ASNE-E 0052 R •••• P/S E  ASNE-E 0052 R •••• P/S F	HE 302-6N •••• P/S 1F HE 302-6G •••• P/S 6
	RFI shielded plug	8525 36 N •• P/S • H Δ 8525 36 N •• P/S • H L 8525 36 N •• P/S • H •	EN3646 RS6 •• C/D • EN3646 RS6 •• A/B • EN3646 RS6 •• M/F •	ASNE-E 0052 N •••• P/S E ASNE-E 0052 N •••• P/S F	HE 302-8G •••• P/S 6
Stainless Steel connectors	Square flange receptacle	8525 10 K •• P/S • H Δ 8525 10 K •• P/S • H L			
	Jam nut receptacle	8525 17 K •• P/S • H Δ 8525 17 K •• P/S • H L			
	RFI shielded plug	8525 36 K •• P/S • H Δ 8525 36 K •• P/S • H L			
Hermetic version	Square flange receptacle	8525 02 H ••• P H	EN3646 Y0 •• M •		HE 302-2H •••• P 0F
	Jam nut receptacle	8525 07 H ••• P H	EN3646 Y7 •• M •		HE 302-7H •••• P 0F
	Solder mount receptacle	8525 1 H ••• P H	EN3646 Y1 •• M •		HE 302-1H •••• P 0F
Backshells	Backnut	852 01 R •• 852 01 N ••			HE 302-01R ••• B1 HE 302-01G ••• AG
	Straight cable clamp	852 02 R •• 852 02 N ••			HE 302-02R ••• B1 HE 302-02G ••• AG
	Elbow cable clamp	852 03 R •• 852 03 N ••			HE 302-03R ••• B1 HE 302-03G ••• AG
	For heatshrink sleeving	852 17 R •• 852 17 N ••			HE 302-04R ••• B1 HE 302-04G ••• AG
	For solder shield termination	852 18 R •• 852 18 N ••			HE 302-05R ••• B1 HE 302-05G ••• AG
Caps	For receptacle	852 27 R •• 852 27 N •• 852 27 W ••	EN3646 A3C •• EN3646 RS3C •• EN3646 WS3C ••		
	For plug	852 28 R •• 852 28 N •• 852 28 W ••	EN3646 A4C •• EN3646 RS4C •• EN3646 WS4C ••		
Contacts	Male contacts	8522 2349 A 8526 1349 8526 1350 8526 1348 8522 6179 A 8526 5041	EN3155018M2018 EN3155018M1616 EN3155018M1212 EN3155018M2020 EN3155018M1614 EN31555018M1218		
	Female contacts	8520 292 8526 1346 A 900 8526 1347 A 900 8526 1344 900 8522 6180 B 900 8526 5591 A 900	EN3155019F2018 EN3155019F1616 EN3155019F1212 EN3155019F2020 EN3155019F1614 EN3155019F1218		
	Thermocouple male contacts	8522 875 8522 876	EN3155056M2020 EN3155054M2020		
	Thermocouple female contacts	8522 877 900 8522 878 900	EN3155057F2020 EN3155055F2020		

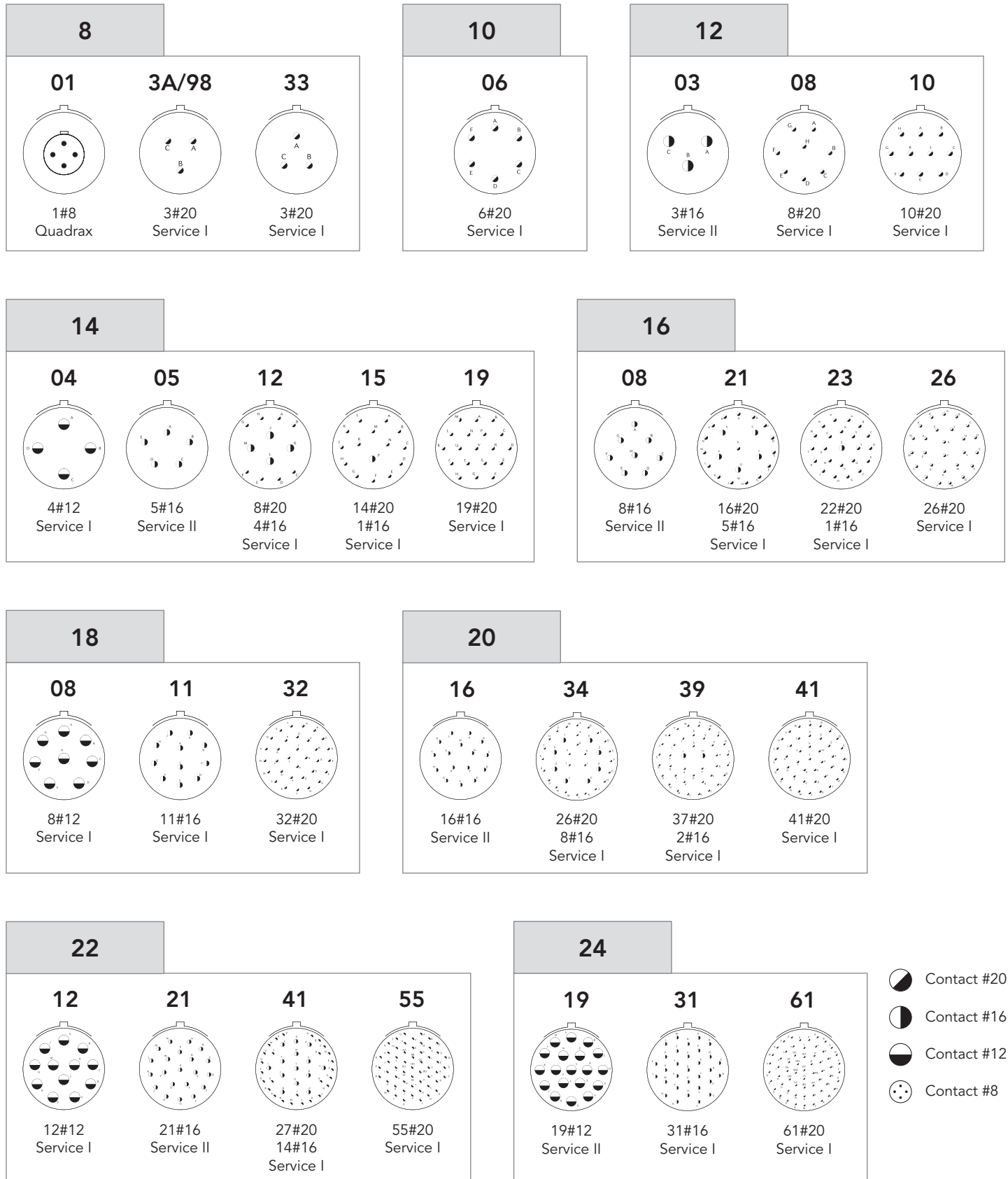
Δ = Specification : 008: for #20 contacts layouts  
068: for mixed #16 and #20 contacts layouts  
empty: for #12 or #16 contacts layouts

## 8526 Series cross reference list

Designation		SOURIAU	NFC 93422 / HE312
Aluminum connectors	Square flange receptacle	8526 00 G ●● B ●● P/S ● 8526 00 N ●● B ●● P/S ●	HE 312 0E ●●●● P/S ● 7 HE 312 0E ●●●● P/S ● 6
	Jam nut receptacle	8526 07 G ●● B ●● P/S ● 8526 07 N ●● B ●● P/S ●	HE 312 7E ●●●● P/S ● 7 HE 312 7E ●●●● P/S ● 6
	Plug without shielding	8526 16 G ●● B ●● P/S ● 8526 16 N ●● B ●● P/S ●	HE 312 6E ●●●● P/S ● 7 HE 312 6E ●●●● P/S ● 6
	RFI shielded plug	8526 36 G ●● B ●● P/S ● 8526 36 N ●● B ●● P/S ●	HE 312 5E ●●●● P/S ● 7 HE 312 5E ●●●● P/S ● 6
Hermetic version	Square flange receptacle	8526 2H ●●●● P ●	HE 312 2H ●●●● P ● 2
	Jam nut receptacle	8526 7H ●●●● P ●	HE 312 7H ●●●● P ● 2
	Solder mount receptacle	8526 1H ●●●● P ●	HE 312 1H ●●●● P ● 2
Backshells	Backnut	852 01 G ●● 852 01 N ●●	HE 312 01 ●● 7 HE 312 01 ●● 6
	Straight cable clamp	852 02 G ●● 852 02 N ●●	HE 312 02 ●● 7 HE 312 02 ●● 6
	Elbow cable clamp	852 03 G ●● 852 03 N ●●	HE 312 03 ●● 7 HE 312 03 ●● 6
	For shield termination and heatshrink sleeving	852 32 G ●● 852 32 N ●●	HE 312 06 ●● 7 HE 312 06 ●● 6
Caps	For receptacle	852 26 G ●● 852 26 N ●● 852 28 G ●● 852 28 N ●●	HE 312 B06 ●● 7 HE 312 B06 ●● 6 HE 312 B16 ●● 7 HE 312 B16 ●● 6
	For plug	852 27 G ●● 852 27 N ●● 852 29 G ●● 852 29 N ●●	HE 312 B00 ●● 7 HE 312 B00 ●● 6 HE 312 B07 ●● 7 HE 312 B07 ●● 6

Designation		SOURIAU	MIL-C 26482G Series 2
Aluminum connectors  delivered with contacts	Square flange receptacle	8526 0 W ●●●● P/S ● 8526 0 L ●●●● P/S ●	MS3470 W ●●●● P/S ● MS3470 L ●●●● P/S ●
	Jam nut receptacle	8526 7 W ●●●● P/S ● 8526 7 L ●●●● P/S ●	MS3474 W ●●●● P/S ● MS3474 L ●●●● P/S ●
	Plug without shielding	8526 6 W ●●●● P/S ● 8526 6 L ●●●● P/S ●	MS3476 W ●●●● P/S ● MS3476 L ●●●● P/S ●
	RFI shielded plug	8526 5 W ●●●● P/S ● 8526 5 L ●●●● P/S ●	MS3475 W ●●●● P/S ● MS3475 L ●●●● P/S ●
Aluminum connectors  delivered without contacts	Square flange receptacle	8526 0 W ●●●● P/S ● L 8526 0 L ●●●● P/S ● L	MS3470 W ●●●● A/B ● MS3470 L ●●●● A/B ●
	Jam nut receptacle	8526 7 W ●●●● P/S ● L 8526 7 L ●●●● P/S ● L	MS3474 W ●●●● A/B ● MS3474 L ●●●● A/B ●
	Plug without shielding	8526 6 W ●●●● P/S ● L 8526 6 L ●●●● P/S ● L	MS3476 W ●●●● A/B ● MS3476 L ●●●● A/B ●
	RFI shielded plug	8526 5 W ●●●● P/S ● L 8526 5 L ●●●● P/S ● L	MS3475 W ●●●● A/B ● MS3475 L ●●●● A/B ●
Hermetic version	Square flange receptacle	8526 2H ●●●● P ●	MS3440 H ●● C ●● P ●
	Jam nut receptacle	8526 7H ●●●● P ●	MS3449 H ●● C ●● P ●
	Solder mount receptacle	8526 1H ●●●● P ●	MS3443 H ●● C ●● P ●
Backshells	Backnut	852 31 W ●● 852 31 A ●● 852 31 N ●●	M85049/31 ●● W M85049/31 ●● A M85049/31 ●● N
	Straight cable clamp	852 52 W ●● 852 52 A ●● 852 52 N ●●	M85049/52-1 ●● W M85049/52-1 ●● A M85049/52-1 ●● N
	Elbow cable clamp	852 51 W ●● 852 51 A ●● 852 51 N ●●	M85049/51-1 ●● W M85049/51-1 ●● A M85049/51-1 ●● N
	For heatshrink sleeving	852 60 W ●● 852 60 A ●● 852 60 N ●●	M85049/60-1 W ●● M85049/60-1 A ●● M85049/60-1 N ●●
	Backnut for heatshrink sleeving	852 57 W ●● 852 57 A ●● 852 57 N ●●	M85049/60-2G ●● W M85049/60-2G ●● A M85049/60-2G ●● N

### Contact layouts 8525/8526 Series



### Contact layouts 8525/8526 Series (matrix)

Shell size & layout	8525	8525 Hermetic	Shell size & layout	EN3646	EN3646 Hermetic	Shell size & layout	8526	8526 Hermetic	Shell size & layout	MIL-C 26482G	MIL-C 26482G Hermetic	Number of contacts								
												#20	#16	#12	#8					
8B01	OK																			1
8B3A	OK	OK	83A	Q	Q	8B3A	OK	OK	83A	Q			3							
8B98	OK	OK	898	Q	Q	8B98	OK	OK	898	Q			3							
8B33	OK	OK	833	Q	Q	8B33	OK	OK	833	Q	Q		3							
10B06	OK	OK	1006	Q	Q	10B06	OK	OK	106	Q	Q		6							
12B03	OK	OK	1203	Q	Q	12B03	OK	OK	123	Q	Q			3						
12B08	OK		1208	Q		12B08	OK		128	Q			8							
12B10	OK	OK	1210	Q	Q	12B10	OK	OK	1210	Q	Q		10							
14B04	OK	OK	1404	Q	Q	14B04	OK	OK	144	Q					4					
14B05	OK	OK	1405	Q	Q	14B05	OK	OK	145	Q	Q			5						
14B12	OK	OK	1412	Q	Q	14B12	OK	OK	1412	Q	Q		8	4						
14B15	OK	OK	1415	Q	Q	14B15	OK	OK	1415	Q	Q		14	1						
14B19	OK	OK	1419	Q	Q	14B19	OK	OK	1419	Q	Q		19							
16B08	OK	OK	1608	Q	Q	16B08	OK	OK	168	Q	Q			8						
16B21	OK	OK	1621	Q		16B21		OK					16	5						
16B23	OK		1623	Q		16B23	OK						22	1						
16B26	OK	OK	1626	Q	Q	16B26	OK	OK	1626	Q	Q		26							
18B08	OK	OK	1808	Q	Q	18B08	OK	OK	188	Q					8					
18B11	OK		1811	Q		18B11	OK		1811	Q				11						
18B32	OK	OK	1832	Q	Q	18B32	OK	OK	1832	Q	Q		32							
20B16	OK	OK	2016	Q	Q	20B16	OK	OK	2016	Q	Q			16						
20B34	OK		2034	Q									26	8						
20B39	OK	OK	2039	Q		20B39	OK	OK	2039	Q			37	2						
20B41	OK	OK	2041	Q	Q	20B41	OK	OK	2041	Q	Q		41							
22B12	OK		2212	Q		22B12	OK		2212	Q					12					
22B21	OK	OK	2221	Q	Q	22B21	OK	OK	2221	Q	Q			21						
22B41	OK	OK	2241	Q	Q	22B41	OK	OK	2241	Q	Q		27	14						
22B55	OK	OK	2255	Q	Q	22B55	OK	OK	2255	Q	Q		55							
24B19	OK		2419	Q		24B19	OK		2419	Q					19					
24B31	OK		2431	Q		24B31	OK		2431	Q				31						
24B61	OK	OK	2461	Q	Q	24B61	OK	OK	2461	Q	Q		61							

OK = SOURIAU's layout  
 Q = SOURIAU's qualified layout

# 852 SERIES

## 852 Series

# Product Ranges

■ 8525 Series - Standard Version .....	16
■ 8526 Series - Standard Version .....	20
■ 8525 Series - Quadrax Version .....	24
■ 8525 Series - Hermetic Version .....	26
■ 8526 Series - Hermetic Version .....	33



## Description

- Bayonet coupling
- EN3646 and ABS2426 qualified
- Intermateable with MIL-C 26482G Series I and II
- RFI shielding plug
- Gold plated crimp contacts #20, #16, #12
- Minicoax contacts #16
- Available in aluminum and stainless steel

## Technical features

### Mechanical

- **Shell & plating:**
  - Aluminum:
    - Black anodized (R)
    - Nickel (N)
    - Olive green cadmium (W)
    - Yellow cadmium (G)
  - Stainless steel:
    - Passivated (K)
    - Nickerled (S)
- **Insulator:** Thermoplastic
- **Seal:** Silicone elastomer
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:**
  - 500 mating cycles (R and K)
  - 250 mating cycles (N, G and W)
- **Shock:** As per EN3646
- **Vibration:**
  - From 10 to 2000 Hz - acceleration: 20G
- **Contact retention in insert:**
  - Size 20: 90 N
  - Size 16: 115 N
  - Size 12: 136 N

### Electrical

- **Contact resistance:**
  - Size 20:  $\leq 1 \text{ m}\Omega$
  - Size 16:  $\leq 0.55 \text{ m}\Omega$
  - Size 12:  $\leq 0.35 \text{ m}\Omega$
- **Insulation resistance:**
  - $\geq 5000 \text{ M}\Omega$  at 500 Vdc
- **Max current rating per contact:**
  - Size 20: 7.5A
  - Size 16: 13A
  - Size 12: 23A
- **Shell continuity:**
  - $\leq 5 \text{ m}\Omega$ , plug with grounding ring and receptacle
- **Dielectric withstanding voltage:**

Service	sea level	at 21000 m
I	1500 Vrms	375 Vrms
II	2300 Vrms	550 Vrms

### Environmental

- **Temperature range:**
  - 65°C to +175°C (G and W)
  - 65°C to +200°C (R, N and K)
- **Damp heat:** 56 days
- **Salt spray:**
  - 500 hours (G, W and K)
  - 48 hours (N and R)
- **Leakage:**
  - Method B differential pressure: 100kPa
  - Maximum leakage flow:  $16 \times 10^{-6} \text{ m}^3/\text{h}$
- **Corrosion resistance:** As per EN3646-001
- **Fluid resistance:**
  - As per EN3646-001
  - D suffix version: Skydrol withstanding



## Ordering information

### SOURIAU part number

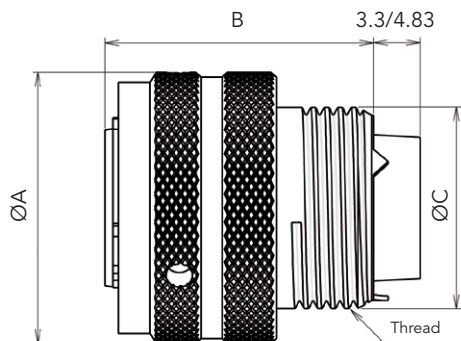
<b>Basic series</b>	<b>8525</b>	<b>10</b>	<b>R</b>	<b>18B32</b>	<b>P</b>	<b>N</b>	<b>H</b>
<b>Shell type</b>							
<ul style="list-style-type: none"> <li><b>16:</b> Plug without shielding</li> <li><b>36:</b> RFI shielded plug</li> <li><b>10:</b> Square flange receptacle</li> <li><b>17:</b> Jam nut receptacle</li> </ul>							
<b>Material &amp; Plating</b>							
<ul style="list-style-type: none"> <li><b>R:</b> Aluminum - black anodized non conductive plating</li> <li><b>N:</b> Aluminum - nickel conductive plating</li> <li><b>G:</b> Aluminum - yellow cadmium conductive plating</li> <li><b>W:</b> Aluminum - olive drab cadmium conductive plating</li> <li><b>K:</b> Passivated stainless steel</li> <li><b>S:</b> Nickered stainless steel</li> </ul>							
<b>Shell size &amp; Contact layout:</b> See pages 12 & 13							
<b>Contact type</b>							
<ul style="list-style-type: none"> <li><b>P:</b> Male</li> <li><b>S:</b> Female</li> </ul>							
<b>Orientation:</b> N, W, X, Y, Z see page 53							
<b>Mandatory suffix</b>							
<ul style="list-style-type: none"> <li><b>D:</b> Aluminum version with 3 rear teeth at 120° with fluorsilicon grommet and interfacial seal</li> <li><b>H:</b> Aluminum version with 3 rear teeth at 120° or Stainless steel version with rear teeth over 360°</li> <li><b>K:</b> Aluminum version with rear teeth over 360°</li> </ul>							
<b>Specification</b>							
<ul style="list-style-type: none"> <li><b>empty:</b> Delivered with standard contacts</li> <li><b>L:</b> Delivered without contacts, without backshell</li> <li><b>008:</b> Delivered with special contacts - #20 for 0.38 to 0.93mm<sup>2</sup> cable or #16 for 0.93 to 1.91mm<sup>2</sup> cable</li> <li><b>009:</b> Delivered with PC tail contacts #20, Ø 0.6mm or #16, Ø 1mm - 7.3mm length max for receptacle type 10 and 17 only</li> <li><b>068:</b> Mixed contacts layouts - delivered with special contacts #20 for 0.38 to 0.93 mm<sup>2</sup> cable and standard contacts #16</li> <li><b>022:</b> Fuel tank version</li> <li><b>001:</b> Delivered with backnut backshell</li> <li><b>002:</b> Delivered with straight cable clamp backshell</li> <li><b>003:</b> Delivered with elbow cable clamp backshell</li> <li><b>007:</b> Delivered with backshell for heatshrink sleeving</li> <li><b>011:</b> Delivered with backnut backshell and special contacts (large barrel)</li> <li><b>012:</b> Delivered with straight cable clamp backshell and special contacts (large barrel)</li> <li><b>013:</b> Delivered with elbow cable clamp backshell and special contacts (large barrel)</li> <li><b>017:</b> Delivered with backshell for heatshrink sleeving and special contacts (large barrel)</li> <li><b>018:</b> Delivered with backshell for solder shield termination and special contacts (large barrel)</li> <li><b>057:</b> Delivered with backnut backshell for heatshrink sleeving</li> </ul>							

### EN3646 part number

<b>Basic series</b>	<b>EN3646</b>	<b>RS0</b>	<b>10</b>	<b>06</b>	<b>M</b>	<b>N</b>
<b>Shell type, temperature, plating and rear teeth</b>						
<ul style="list-style-type: none"> <li><b>A6:</b> Aluminum plug without grounding spring, 200°C, black anodized plated, 3 rear teeth at 120°</li> <li><b>RS6:</b> Aluminum plug with grounding spring, 200°C, nickel plated, 3 rear teeth at 120°</li> <li><b>WS6:</b> Aluminum plug with grounding spring, 175°C, olive green cadmium plated, rear teeth over 360°</li> <li><b>A0:</b> Aluminum square flange receptacle, 200°C, black anodized plated, 3 rear teeth at 120°</li> <li><b>RS0:</b> Aluminum square flange receptacle, 200°C, nickel plated, 3 rear teeth at 120°</li> <li><b>WS0:</b> Aluminum square flange receptacle, 175°C, olive green cadmium plated, rear teeth over 360°</li> <li><b>A7:</b> Aluminum jam nut receptacle, 200°C, black anodized plated, 3 rear teeth at 120°</li> <li><b>RS7:</b> Aluminum jam nut receptacle, 200°C, nickel plated, 3 rear teeth at 120°</li> <li><b>WS7:</b> Aluminum jam nut receptacle, 175°C, olive green cadmium plated, rear teeth over 360°</li> </ul>						
<b>Shell size:</b> 08, 10, 12, 14, 16, 18, 20, 22, 24						
<b>Contact layout:</b> See pages 12 & 13						
<b>Contact type</b>						
<ul style="list-style-type: none"> <li><b>M:</b> Male</li> <li><b>A:</b> Connector delivered without male contact</li> <li><b>C:</b> Connector delivered with male contact #20 large barrel</li> <li><b>F:</b> Female</li> <li><b>B:</b> Connector delivered without female contact</li> <li><b>D:</b> Connector delivered with female contact #20 large barrel</li> </ul>						
<b>Orientation:</b> N, W, X, Y, Z see page 53						

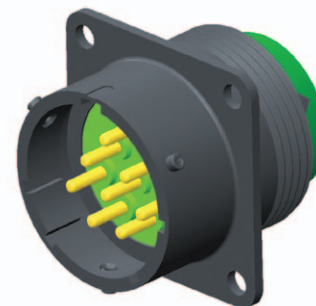
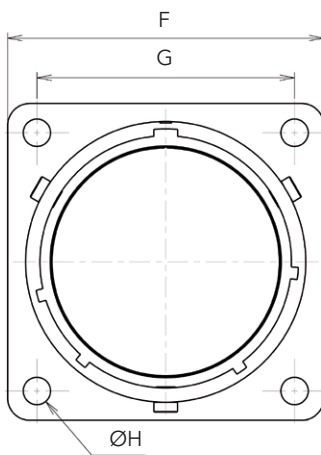
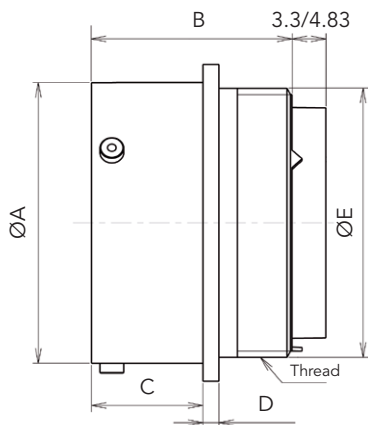
## Dimensions

### Plug (types 16 & 36)



Shell size	ØA Max	B Max	ØC Max	Thread
8	18.86	25.50	12.10	0.5-20 UNF 2A
10	23.52		15.30	0.625-24 UNEF 2A
12	26.48		18.40	0.75-20 UNEF 2A
14	30.05		21.60	0.875-20 UNEF 2A
16	33.15		24.75	1-20 UNEF 2A
18	35.33		26.20	1.0625-18 UNEF 2A
20	38.89	27.00	29.40	1.1875-18 UNEF 2A
22	42.06		32.50	1.3125-18 UNEF 2A
24	45.14		35.70	1.4375-18 UNEF 2A

### Square flange receptacle (type 10)

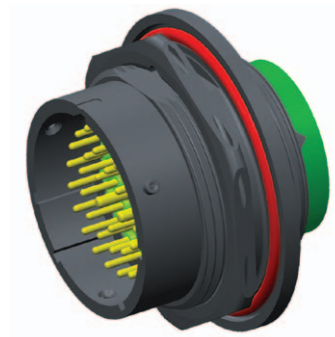
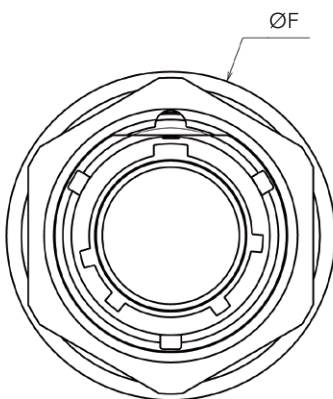
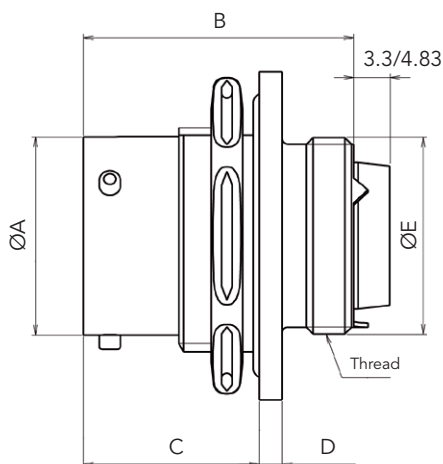


Panel cut-out, see page 52.

Shell size	ØA Max	B Max	C Max	D Max	ØE Max	Thread	F Max	G	ØH Max
8	12.04	25.35	11.70	1.37	12.10	0.5-20 UNF 2A	21.00	15.09	3.19
10	15.01				15.30	0.625-24 UNEF 2A	24.25	18.26	
12	19.07				18.40	0.75-20 UNEF 2A	26.55	20.62	
14	22.25				21.60	0.875-20 UNEF 2A	28.90	23.01	
16	25.42				24.75	1-20 UNEF 2A	31.30	24.61	
18	28.60				26.20	1.0625-18 UNEF 2A	33.70	26.97	
20	31.77	27.15	14.35	2.20	29.40	1.1875-18 UNEF 2A	36.90	29.36	
22	34.95				32.50	1.3125-18 UNEF 2A	40.00	31.75	
24	38.12				35.70	1.4375-18 UNEF 2A	43.30	34.92	3.80

Note: All dimensions are in millimeters (mm)

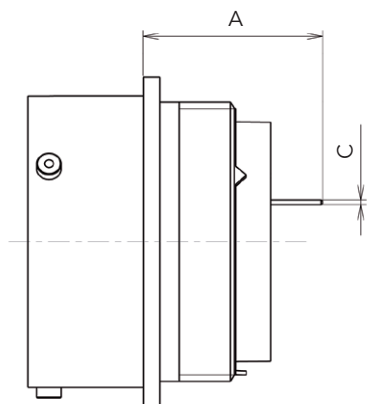
### Jam nut receptacle (type 17)



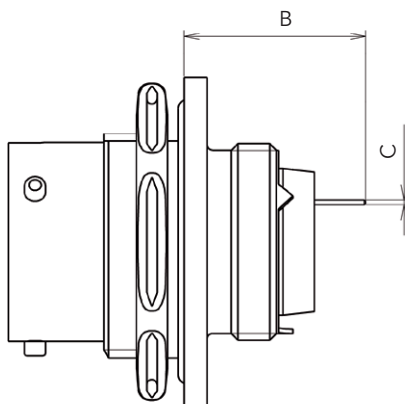
Panel cut-out, see page 52.

Shell size	ØA Max	B Max	C Max	D Max	ØE Max	Thread	ØF Max
8	12.04	25.90	16.85	2.35	12.10	0.5-20 UNF 2A	23.60
10	15.01				15.30	0.625-24 UNEF 2A	26.60
12	19.07				18.40	0.75-20 UNEF 2A	31.35
14	22.25				21.60	0.875-20 UNEF 2A	34.70
16	25.42				24.75	1-20 UNEF 2A	37.75
18	28.60				26.20	1.0625-18 UNEF 2A	40.95
20	31.77	27.50	18.45	2.55	29.40	1.1875-18 UNEF 2A	45.70
22	34.95				32.50	1.3125-18 UNEF 2A	48.90
24	38.12				35.70	1.4375-18 UNEF 2A	52.05

### PCB version



Type 10



Type 17

Shell size		08 to 18	20 & 22	24
A	Min	25.05	23.95	23.10
	Max	26.00	24.90	24.05
B	Min	19.75		
	Max	20.85		
C ±0.1	#20	0.6		
	#16	1.0		

Note: All dimensions are in millimeters (mm)



## Description

- Bayonet coupling
- MIL-C 26482G Series 2 qualified
- Intermateable with MIL-C 26482G Series 1
- Aluminum olive green or nickel plating
- Gold plated crimp contacts #20, #16, #12
- Minicoax contacts #16

## Technical features

### Mechanical

- **Shell & plating:**  
Aluminum nickel (N)  
Aluminum olive green cadmium (G)
- **Insulator:** Thermoplastic
- **Seal:** Silicone elastomer
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:**  
500 mating cycles  
250 mating cycles (RFI shielded plug)
- **Shock:** According to NFC 93422 - HE 312
- **Vibration:**  
From 10 to 2000 Hz - acceleration: 20G
- **Contact retention in insert:**  
Size 20: 90 N  
Size 16: 115 N  
Size 12: 133 N

### Electrical

- **Contact resistance:**  
Size 20:  $\leq 1 \text{ m}\Omega$   
Size 16:  $\leq 0.55 \text{ m}\Omega$   
Size 12:  $\leq 0.35 \text{ m}\Omega$
- **Insulation resistance:**  
 $\geq 5000 \text{ M}\Omega$  at 500 Vdc
- **Max current rating per contact:**  
Size 20: 7.5A  
Size 16: 13A  
Size 12: 23A
- **Shell continuity:**  
 $\leq 5 \text{ m}\Omega$ , plug with grounding ring and receptacle
- **Dielectric withstanding voltage:**

Service	sea level	at 21000 m
I	1500 Vrms	375 Vrms
II	2300 Vrms	550 Vrms

### Environmental

- **Temperature range:**  
-55°C to +175°C (G)  
-55°C to +200°C (N)
- **Damp heat:** 56 days
- **Salt spray:**  
500 hours (G)  
48 hours (N)
- **Leakage:**  
Method B differential pressure: 100kPa  
Maximum leakage flow:  $16 \times 10^{-6} \text{ m}^3/\text{h}$
- **Fluid resistance:**  
According to NFC 93422 - HE 3121

## Ordering information

### SOURIAU part number

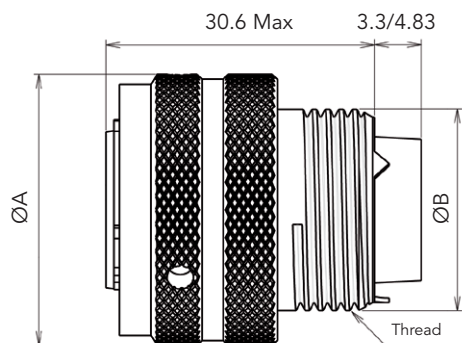
<b>Basic series</b>	8526	00	G	10B6	P	N
<b>Shell type</b>						
16: Plug without shielding						
36: RFI shielded plug						
00: Square flange receptacle						
07: Jam nut receptacle						
<b>Material &amp; Plating</b>						
N: Aluminum - nickel conductive plating						
G: Aluminum - olive green cadmium conductive plating						
<b>Shell size &amp; Contact layout:</b> See pages 12 & 13						
<b>Contact type</b>						
P: Male						
S: Female						
<b>Orientation:</b> N, W, X, Y, Z see page 53						
<b>Specification</b>						
empty: Delivered with standard contacts and without backshell						
L: Delivered without contacts						
01: Delivered with standard contacts and backnut backshell						
02: Delivered with standard contacts and straight cable clamp backshell						
03: Delivered with standard contacts and elbow cable clamp backshell						
17: Delivered with standard contacts and backshell for heatshrink sleeving						
32: Delivered with standard contacts and backshell for shield termination and heatshrink sleeving						
09: Delivered with PC tail contacts size 20, Ø 0.60 mm, 7.30 mm length max - for receptacle type 00 and 07 only						

### MS part number

<b>Basic series</b>	MS	3470	W	106	P
<b>Shell type</b>					
3470: Square flange receptacle					
3474: Jam nut receptacle					
3475: RFI shielded plug					
3476: Plug without shielding					
<b>Material &amp; Plating</b>					
L: Aluminum - nickel conductive plating					
W: Aluminum - olive green cadmium conductive plating					
<b>Shell size &amp; Contact layout:</b> See pages 12 & 13					
<b>Contact type</b>					
P: Male					
S: Female					
A: Without male contacts					
B: Without female contacts					
<b>Orientation</b>					
empty: N					
W, X, Y, Z: See page 53					

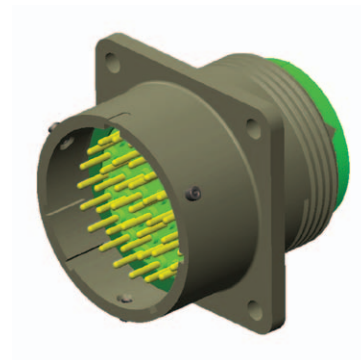
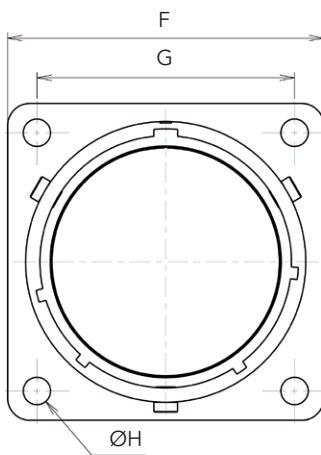
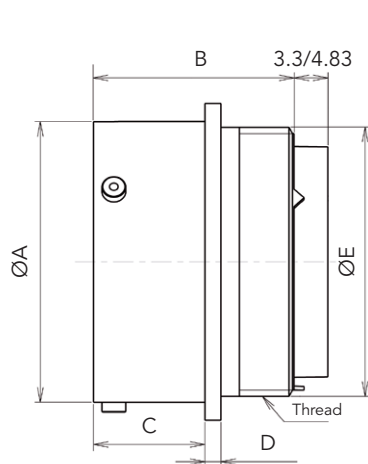
## Dimensions

### Plug (types 16 & 36)



Shell size	ØA Max	ØB Max	Thread
8	18.86	12.10	0.5-20 UNF 2A
10	23.52	15.30	0.625-24 UNEF 2A
12	26.48	18.40	0.75-20 UNEF 2A
14	30.05	21.60	0.875-20 UNEF 2A
16	33.15	24.75	1-20 UNEF 2A
18	35.33	26.20	1.0625-18 UNEF 2A
20	38.89	29.40	1.1875-18 UNEF 2A
22	42.06	32.50	1.3125-18 UNEF 2A
24	45.14	35.70	1.4375-18 UNEF 2A

### Square flange receptacle (type 00)

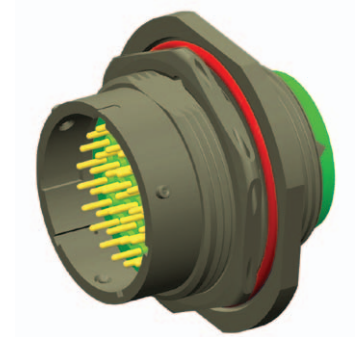
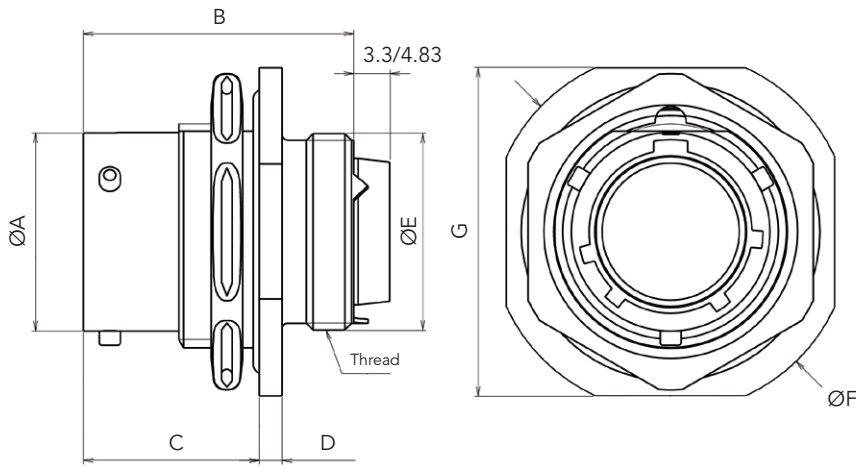


Panel cut-out, see page 52.

Shell size	ØA Max	B Max	C Max	D Max	ØE Max	Thread	F Max	G	ØH Max
8	12.04	30.50	11.70	1.95	12.10	0.5-20 UNF 2A	21.00	15.09	3.19
10	15.01				15.30	0.625-24 UNEF 2A	24.25	18.26	
12	19.07				18.40	0.75-20 UNEF 2A	26.55	20.62	
14	22.25				21.60	0.875-20 UNEF 2A	28.90	23.01	
16	25.42				24.75	1-20 UNEF 2A	31.30	24.61	
18	28.60	31.63	14.35	2.75	26.20	1.0625-18 UNEF 2A	33.70	26.97	
20	31.77				29.40	1.1875-18 UNEF 2A	36.90	29.36	
22	34.95				32.50	1.3125-18 UNEF 2A	40.00	31.75	
24	38.12				35.70	1.4375-18 UNEF 2A	43.30	34.92	3.80

Note: All dimensions are in millimeters (mm)

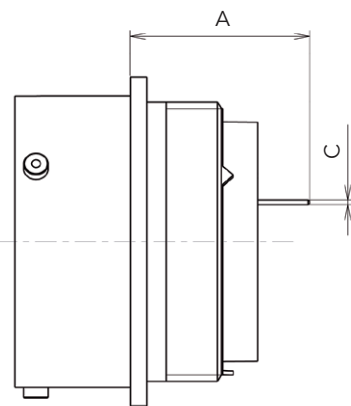
Jam nut receptacle (type 07)



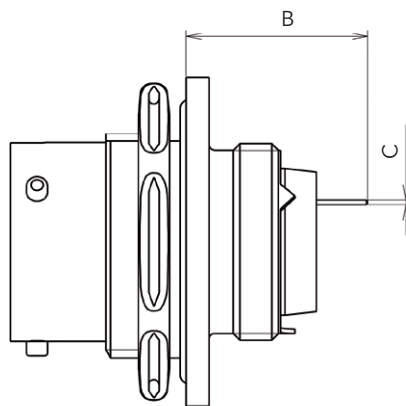
Panel cut-out, see page 52.

Shell size	ØA Max	B Max	C Max	D Max	ØE Max	Thread	ØF Max	G Max
8	12.04	30.60	17.65	2.56	12.10	0.5-20 UNF 2A	27.20	24.05
10	15.01				15.30	0.625-24 UNEF 2A	30.40	27.20
12	19.07				18.40	0.75-20 UNEF 2A	35.15	32.00
14	22.25				21.60	0.875-20 UNEF 2A	38.35	35.15
16	25.42				24.75	1-20 UNEF 2A	41.50	38.35
18	28.60	32.20	19.25	3.35	26.20	1.0625-18 UNEF 2A	44.70	41.50
20	31.77				29.40	1.1875-18 UNEF 2A	49.45	46.25
22	34.95				32.50	1.3125-18 UNEF 2A	52.60	49.45
24	38.12				35.70	1.4375-18 UNEF 2A	55.80	52.60

PCB version



Type 00



Type 07

Shell size		08 to 18	20 & 22	24
A	Min	32.75	31.65	30.80
	Max	33.70	32.60	31.75
B	Min	26.75		
	Max	27.75		
C ±0.1	#20	0.6		

Note: All dimensions are in millimeters (mm)

## Description

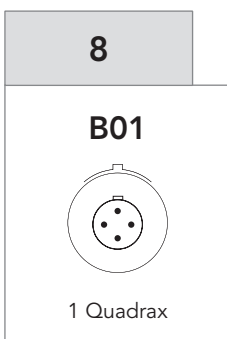
- Robust bayonet coupling system withstanding high vibrations
- ABS 1054 qualified design derived from EN3645/MIL 26482 Series 2
- Environmental stainless steel version or aluminum shell
- Smallest aeronautical quadrax on the market



## Ordering information

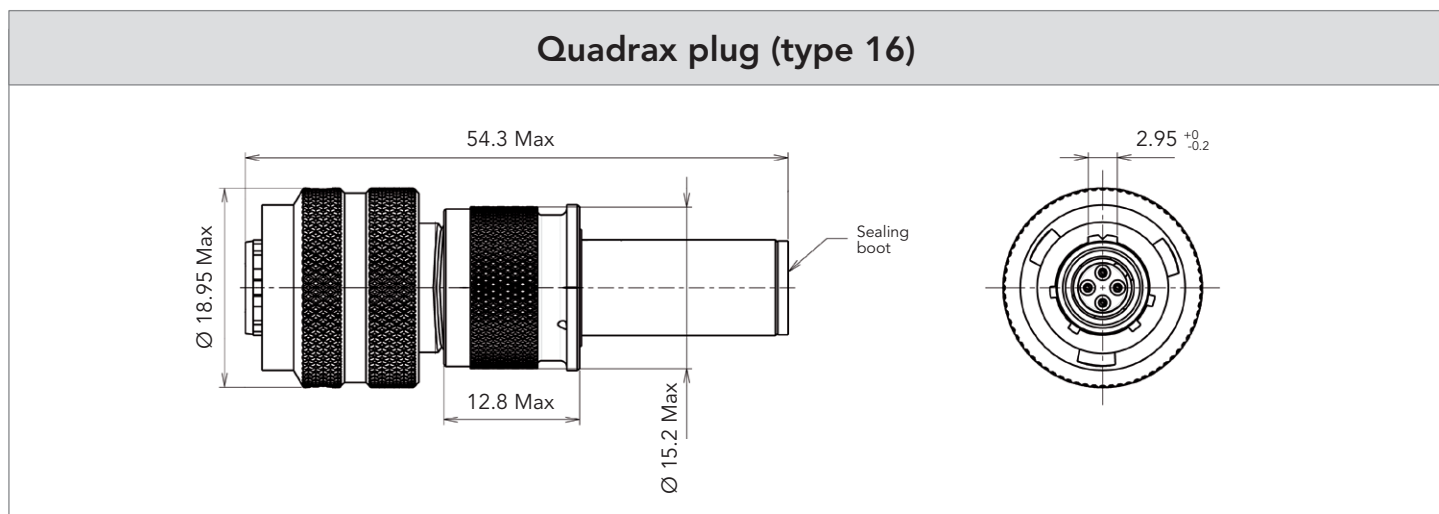
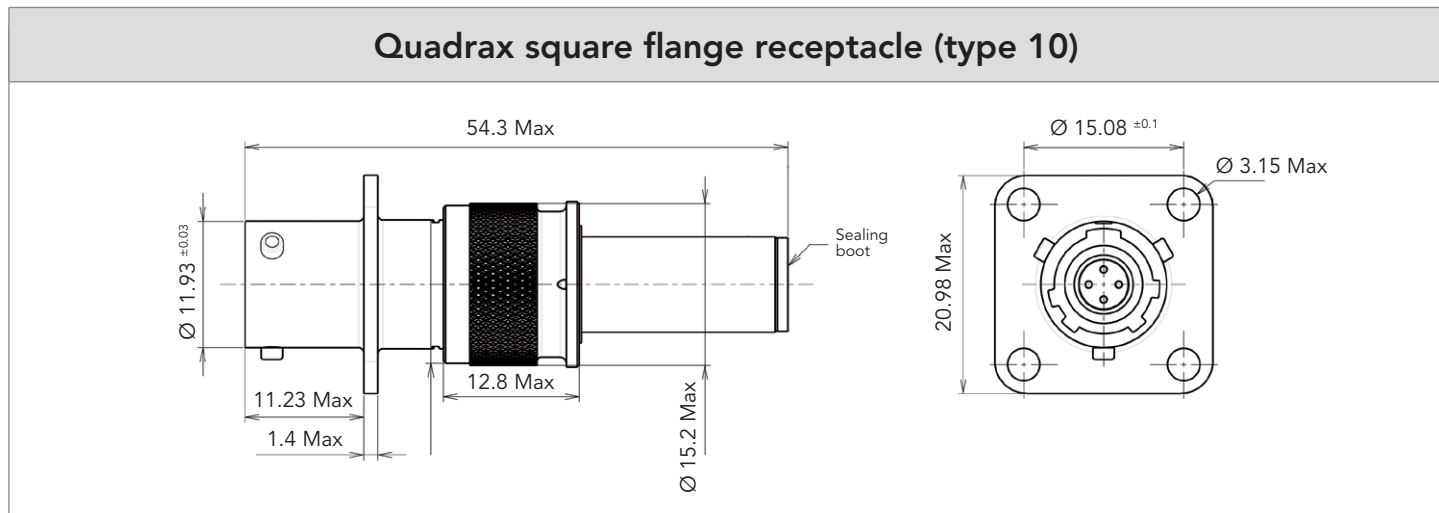
Basic series	8525	10	R	8B01	P	N		
<b>Shell type</b>								
10: Square flange receptacle								
16: Plug								
<b>Material &amp; Plating</b>								
R: Aluminum - black anodized non conductive plating								
K: Passivated stainless steel								
<b>Shell size &amp; Contact layout:</b> 8B01								
<b>Contact type</b>								
P: Male contact in square flange receptacle (mandatory)								
S: Female contact in plug (mandatory)								
<b>Orientation:</b> N								
<b>Mandatory suffix</b>								
H: Aluminum version with 3 rear teeth at 120° or Stainless steel version with rear teeth over 360°								
<b>Mandatory specification</b>								
164: Delivered with contact and with backshell								
164L: Delivered without contact and with backshell								
304: Delivered with contact and without backshell								
304L: Delivered without contact and without backshell								

## Contact layout



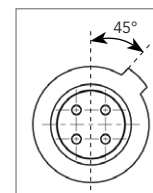


## Dimensions



## #8 Quadrax contacts

Contact type		SOURIAU part number	ABS part number	Impedance	Release	T° Max
Crimp	Pin	ETH1-1100A	ABS0973 M08A	100Ω	Rear	125°C
	Socket	ETH1-1101A	ABS0974 F08A	100Ω	Rear	125°C



Crimp contacts are unsealed. Sealing boots are available. All contacts delivered without boot.

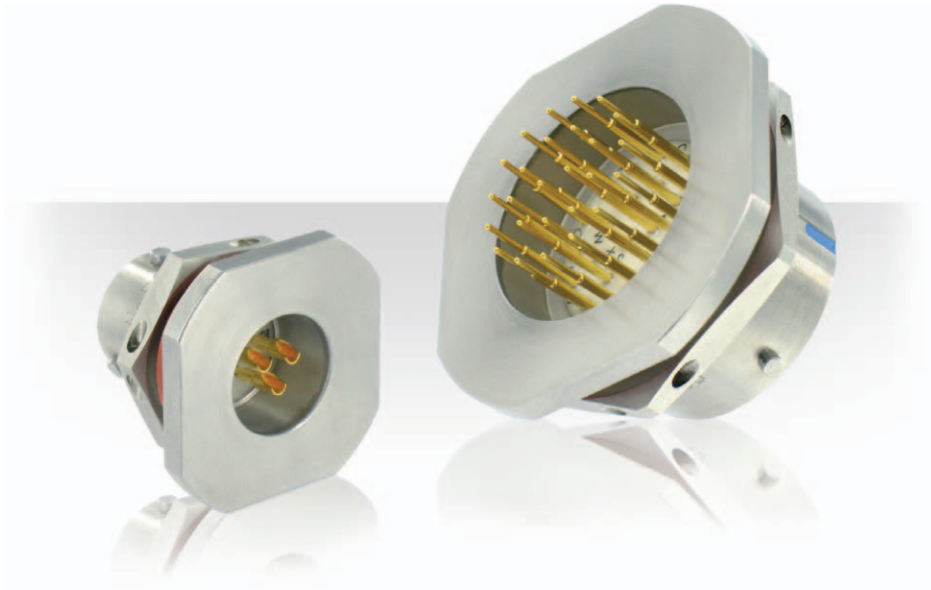
## Recommended cable

Impedance	Reference	Cable type	Number of pairs
100Ω	ABS 1503 KD24	Star quad	2

Note: All dimensions are in millimeters (mm)

## Backshell & Tooling

For more information about backshell (material, dimensions) and about tooling, please see common section p.39.



## 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, 100 m/s<sup>2</sup> (10g) during 6 ms in the X, Y and Z axis
- **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 withstanding voltage:**

Service	Sea level	21 000 m
I	1 500 Vrms	375 Vrms
II	2 300 Vrms	500 Vrms

- **Shell continuity:**  
≤ 50 mΩ
- **Contact resistance at rated current:**  
Maximum initial contact resistance at ambient temperature

Contact size	20	16	12
Resistance mΩ	12	8	5

### Environmental

- **Operating temperature:**  
-55°C to 200°C
- **Hermeticity:**  
1.10<sup>-7</sup> atm.cm<sup>3</sup>/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

## 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 pages 12 & 13						
<b>Contact type</b> P: Pin						
<b>Orientation</b> N, W, X, Y, Z - see page 53						
<b>Mandatory suffix</b> H: Hermetic						
<b>Specification</b> None: Standard hermetic version 002: Large flange - 02H version only 022: Fuel tank version Other specification (PCB contacts): see page 32						

### EN3646 qualified products

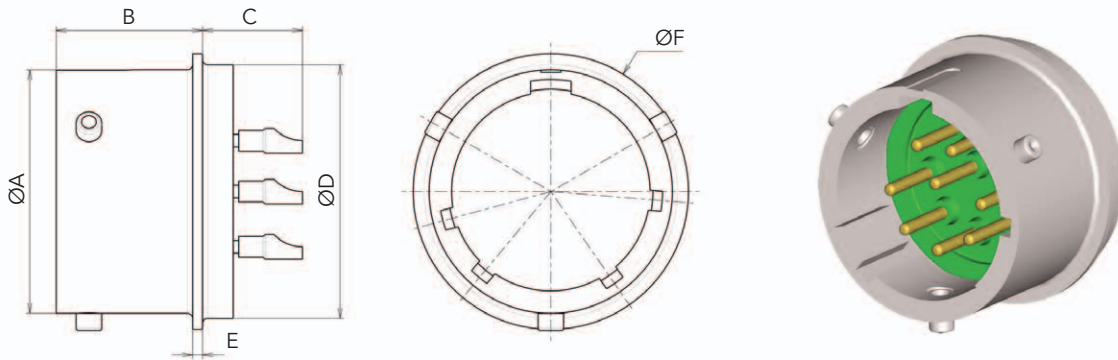
<b>Basic series</b>	EN3646	Y	0	08	03	M	N
<b>Mandatory suffix</b> Y: Hermetic							
<b>Shell type</b> 0: Square flange receptacle 1: Solder mount receptacle 7: Jam nut receptacle							
<b>Shell size</b> 08, 10, 12, 14, 16, 18, 20, 22, 24							
<b>Contact layout</b> See pages 12 & 13							
<b>Contact type</b> M: Pin							
<b>Orientation</b> N, W, X, Y, Z - see page 53							

## Maximum connector weights (in grams)

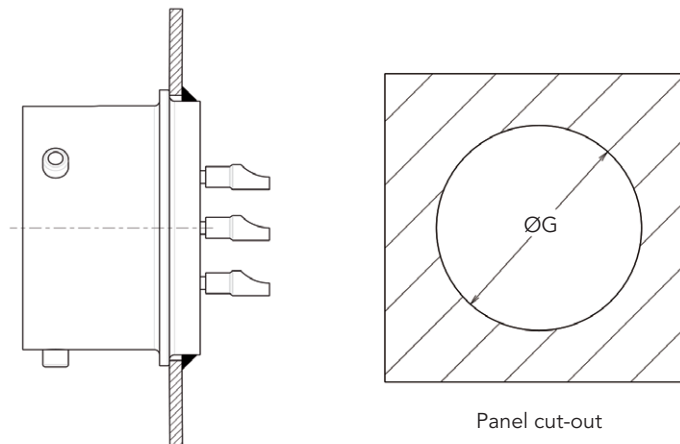
Shell type \ Shell size	8	10	12	14	16	18	20	22	24
Solder mount receptacle (type IH)	7	9	13	17	21	26	32	37	43
Square flange receptacle (type 02H)	10	12	16	21	26	33	41	47	55
Large square flange receptacle (type 02H spec. 002)	16	18	24	29	34	40	56	60	70
Jam nut receptacle (type 07H)	20	25	38	45	52	63	86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

## Dimensions

### Solder mount receptacle (type IH)

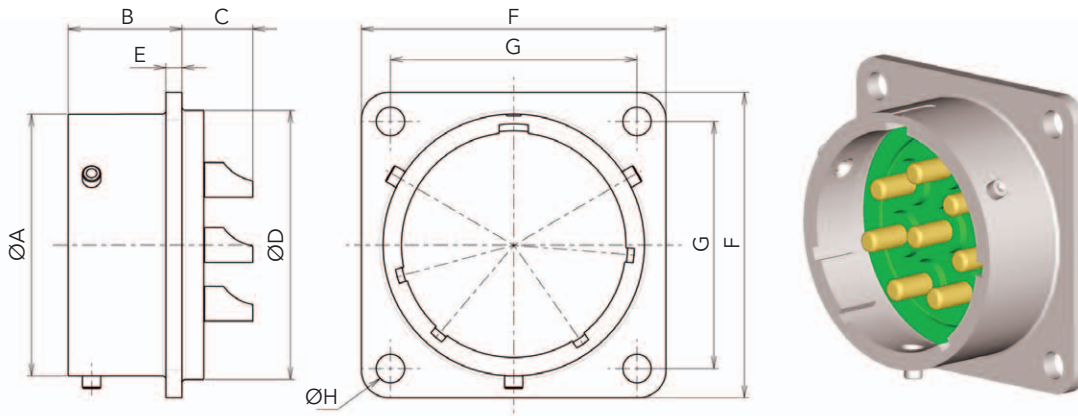


Shell size	A max	B ±0.5	C max	D $^{+0.02}_{-0.13}$	E ±0.14	F max	G $^{+0.25}_{0}$
8	12.02	11.5	10	14.27	0.8	16.1	14.79
10	14.99	11.5	10	17.07	0.8	19.3	17.59
12	19.05	11.5	10	19.84	0.8	21.7	20.36
14	22.23	11.5	10	23.01	0.8	24.9	23.53
16	25.4	11.5	10	26.19	0.8	28.1	26.71
18	28.58	11.5	10	29.36	0.8	31.2	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

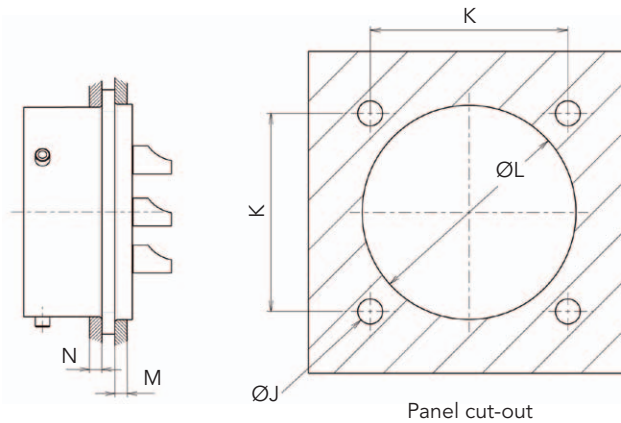


Note: All dimensions are in millimeters (mm)

Square flange receptacle (type 02H)

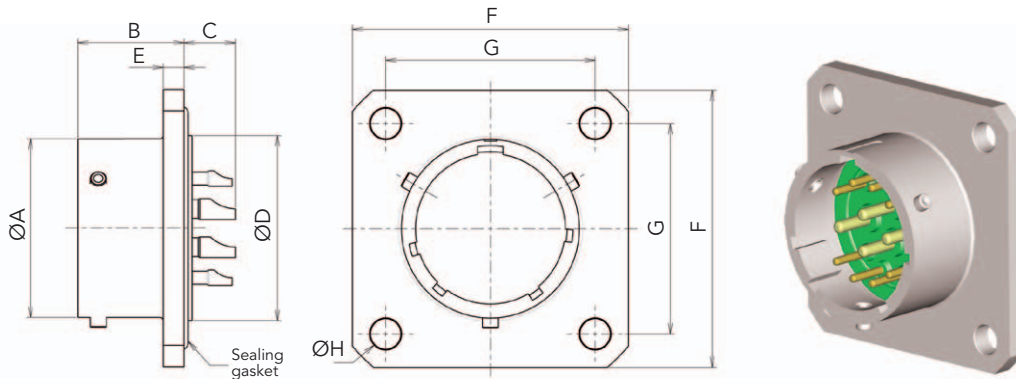


Shell size	A max	B ±0.55	C max	D <sup>+0</sup> <sub>-0.3</sub>	E	F max	G	H ±0.15	J ±0.15	K	L <sup>+0</sup> <sub>-0.3</sub>	M	N max
8	12.02	12.65	8.4	14.3	1.63 <sup>+0.28</sup>	21.03	15.1	3.15	3.15	15.1	14.79	3.5	2.3
10	14.99	12.65	8.4	17.1	1.63 <sup>+0.28</sup>	24.23	18.26	3.15	3.15	18.26	17.59	3.5	2.3
12	19.05	12.65	8.4	19.9	1.63 <sup>+0.28</sup>	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 <sup>+0.28</sup>	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 <sup>+0.28</sup>	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 <sup>+0.28</sup>	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 <sup>+0.58</sup>	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 <sup>+0.58</sup>	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 <sup>+0.58</sup>	43.27	34.92	3.73	3.73	34.92	38.60	3.5	5.4

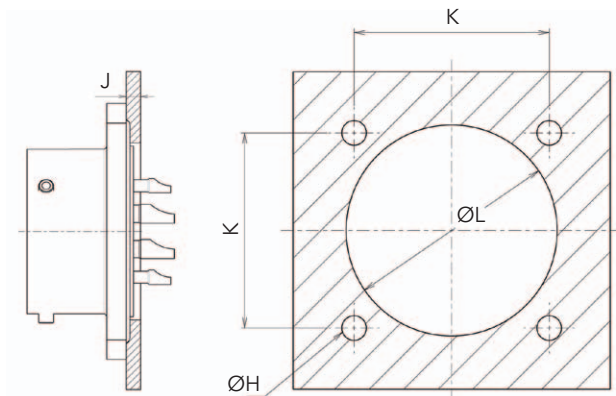


Note: All dimensions are in millimeters (mm)

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



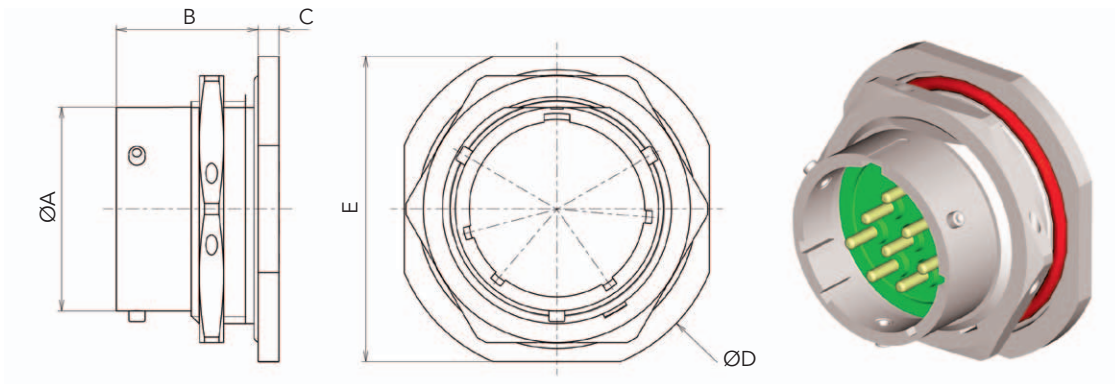
Shell size	A max	B max	C		D max	E max	F max	G	H	J	K	L $^{+0.3}$
			#20	#12/#16								
8	12.02	13.14	6.8	-	14.27	2.6	26.4	18.1	3.8	3.5	18.1	14.79
10	14.99	13.14	6.8	-	17.06	2.6	28.9	20.62	3.8	3.5	20.62	17.59
12	19.05	13.14	6.8	7.1	19.83	2.6	32.1	23.82	3.8	3.5	23.82	20.36
14	22.23	13.14	6.8	7.1	23.01	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



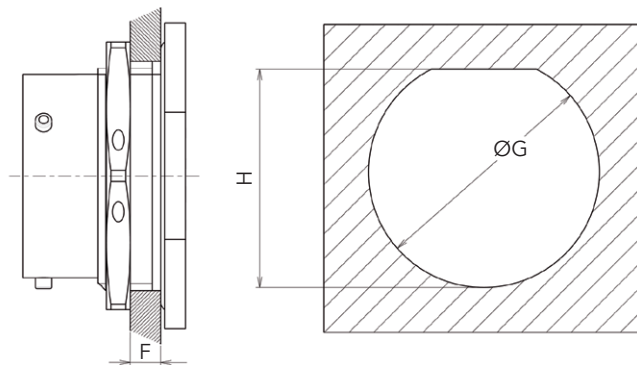
Panel cut-out

Note: All dimensions are in millimeters (mm)

Jam nut receptacle (type 07H)



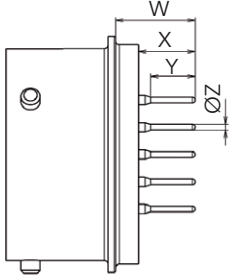
Shell size	A max	B max	C ±0.5	D max	E ±0.25	F		G $^{+0.25}_0$	H $^{+0.25}_0$
						min	max		
8	12.02	18.34	2.4	27.37	23.82	1.57	4.75	14.4	13.48
10	14.99	18.34	2.4	30.57	26.97	1.57	4.75	17.58	16.66
12	19.05	18.34	2.4	35.32	31.75	1.57	4.75	22.6	20.8
14	22.23	18.34	2.4	38.5	34.92	1.57	4.75	25.52	23.95
16	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



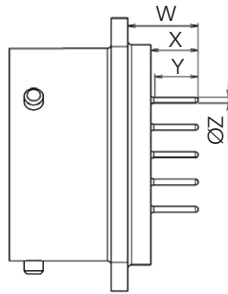
Panel cut-out

Note: All dimensions are in millimeters (mm)

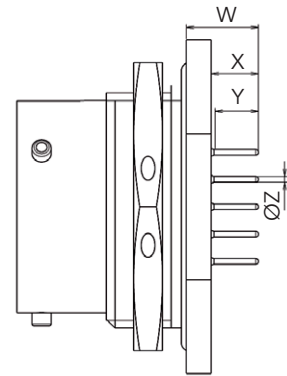
**Contact variations**



**Type IH:** Solder mount receptacle



**Type 02H:** Square flange receptacle

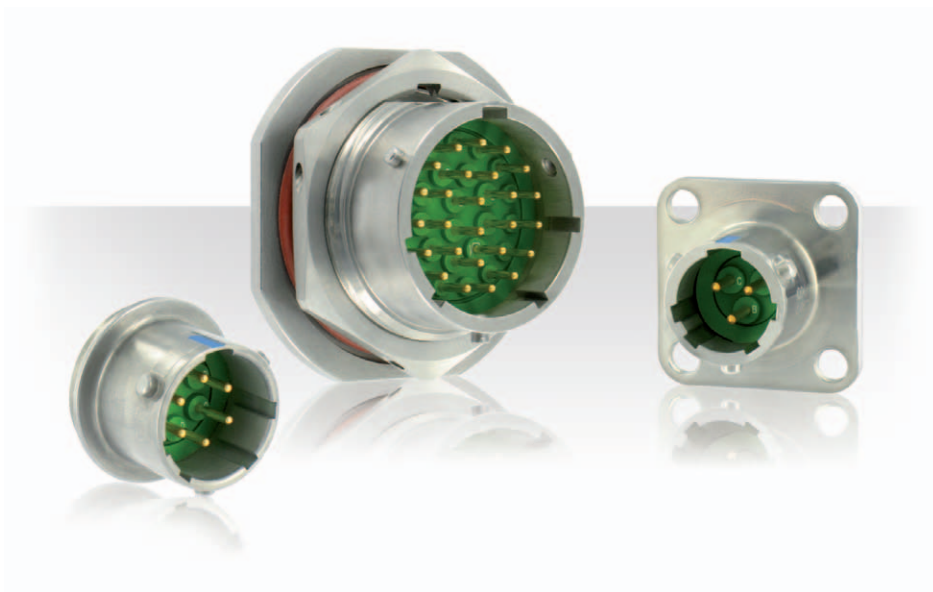


**Type 07H:** Jam nut receptacle

Type of contact	Specification	Shell type	Contact size	W Max	X Min	Y Min	Ø 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: All dimensions are in millimeters (mm)





## Description

- Glass to metal sealed hermetic receptacles:
  - . High hermeticity
  - . Compact low profile
- Quick bayonet coupling
- Derived from HE312 standard, and qualified per MIL-C 26482 Series 2 standard

## Technical features

### Mechanical

- **Shell:**  
RoHS mat tin over nickel plated steel
- **Seals:**  
Silicone elastomer
- **Contact:**  
Gold plated ferrous alloy
- **Shock:**  
According to NFC 93422 - HE 312  
300g - ms in three axe
- **Endurance:**  
500 mating/unmating operations
- **Vibrations:**  
10 to 2000 Hz, 20g  
MIL STD 202, method 214,  
test condition 2, letter J  
(50 - 2000 Hz; 41.7g eff.)

### Electrical

- **Max current rating per contact:**

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

- **Dielectric withstanding voltage:**

Service	Sea level	21 000 m
I	1 500 Vrms	375 Vrms
II	2 300 Vrms	500 Vrms

- **Shell continuity:**  
≤ 50 mΩ

- **Contact resistance at rated current:**  
Maximum initial contact resistance at ambient temperature

Contact size	20	16	12
Resistance mΩ	12	8	5

- **Insulation resistance:**  
≥5000 MΩ at 500 Vdc

### Environmental

- **Operating temperature:**  
-55°C to 200°C
- **Hermeticity:**  
1.10<sup>-7</sup> atm.cm<sup>3</sup>/s under a1 bar differential pressure
- **Salt spray:**  
48 hours
- **Resistance to fluids (standard):**  
In accordance with NFC 93422 - HE312  
MIL-L 7808  
MIL-L 23699  
MIL-H 5606  
Hydraulic fluids M 2 V  
MIL-C 25769 diluted  
MIL-A 8243  
MIL-T 5624 (JP5)  
MIL-G 3056  
Solvents

## Ordering information

### SOURIAU part numbers

Basic series	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: 08, 10, 12, 14, 16, 18, 20, 22, 24</b>						
<b>Contact layout:</b> See pages 12 & 13						
P: Pin contact						
<b>Orientation:</b> N, W, X, Y, Z - see page 53						

### MS qualified products

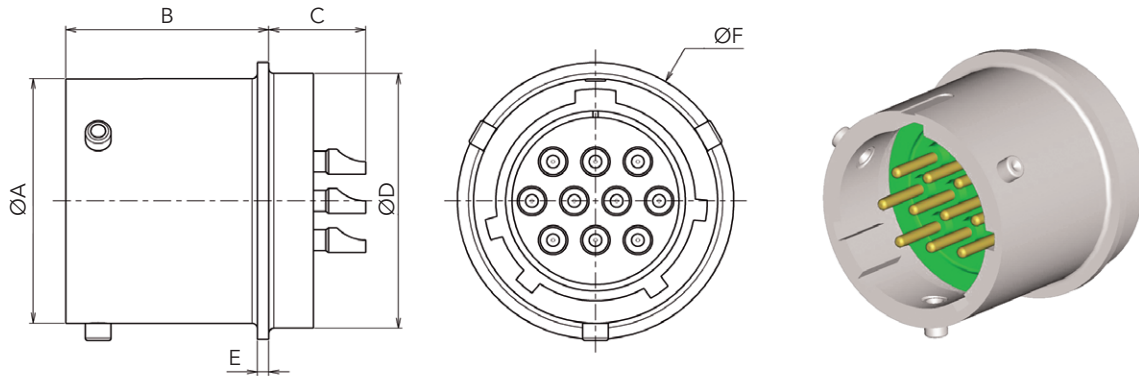
Basic series	MS	3440H	10	C	6	P
<b>Shell type</b>						
3440H: Square flange hermetic receptacle						
3443H: Solder mount hermetic receptacle						
3449H: Jam nut hermetic receptacle						
<b>Shell size: 08, 10, 12, 14, 16, 18, 20, 22, 24</b>						
<b>Materials and terminal</b>						
C: Steel, solder bucket						
<b>Contact layout:</b> See pages 12 & 13						
P: Pin contact						
<b>Orientation:</b> N, W, X, Y, Z - see page 53						

## Maximum connector weights (in grams)

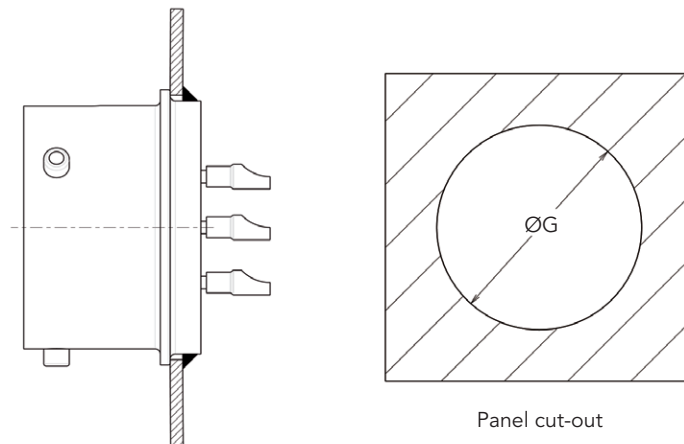
Shell type \ Shell size	8	10	12	14	16	18	20	22	24
Solder mount receptacle (type 1H)	7.5	10.6	15	19	23.3	29.4	31	41	46.7
Square flange receptacle (type 2H)	11	13.6	18	23	28.3	36.4	42	49	57
Jam nut receptacle (type 7H)	20	25	38	44	51.5	62	85	94	116

## Dimensions

### Solder mount receptacle (type 1H)

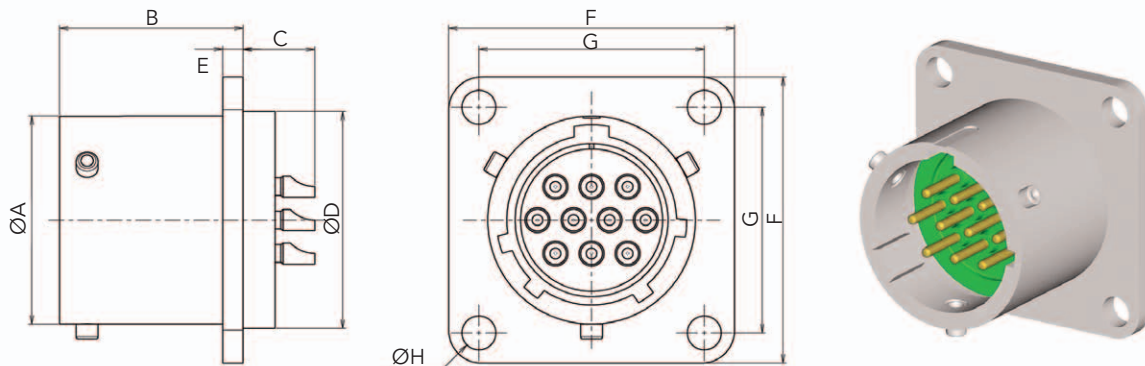


Shell size	ØA max	B ±0.3	C max	ØD +0	E ±0.15	F max	ØG ±0.1
8	12.04	15.8	6.9	14.3	0.89	16.08	14.48
10	15.01	15.8	6.9	17.09	0.89	19.25	17.27
12	19.08	15.8	6.9	19.86	0.89	21.64	20.04
14	22.25	15.8	6.9	23.04	0.89	24.82	23.22
16	25.43	15.8	6.9	26.21	0.89	27.99	26.39
18	28.6	15.8	6.9	29.39	0.89	31.14	29.57
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

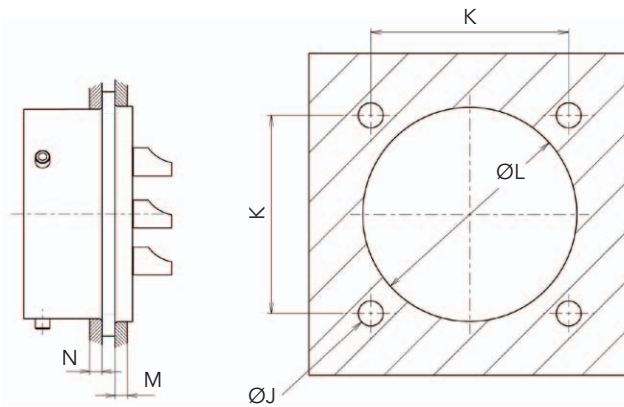


Note: All dimensions are in millimeters (mm)

Square flange receptacle (type 2H)



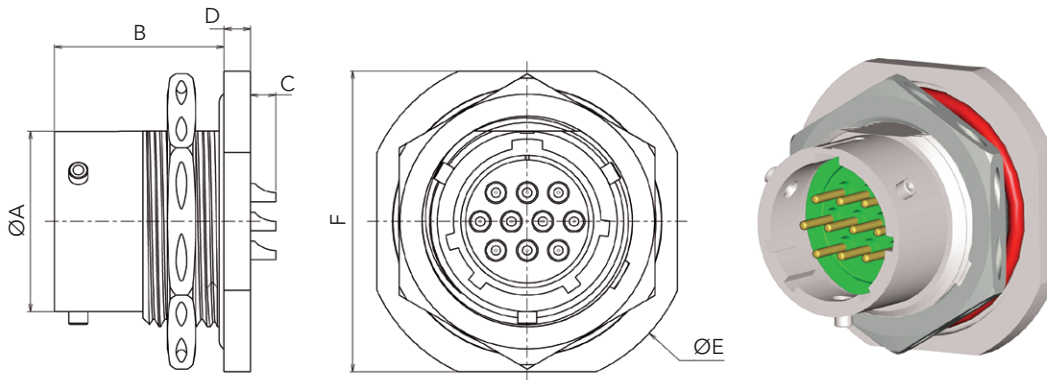
Shell size	ØA max	B ±0.15	C max	ØD +0	E ±0.1	F max	G	ØH ±0.15	ØJ ±0.15	K	ØL ±0.1	M max	N max
8	12.04	16.79	7.1	14.3	1.86	21.03	15.09	3.05	3.05	15.09	14.48	3.15	3
10	15.01	16.79	7.1	17.09	1.86	24.23	18.26	3.05	3.05	18.26	17.27	3.15	3
12	19.08	16.79	7.1	19.86	1.86	26.59	20.62	3.05	3.05	20.62	20.04	3.15	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



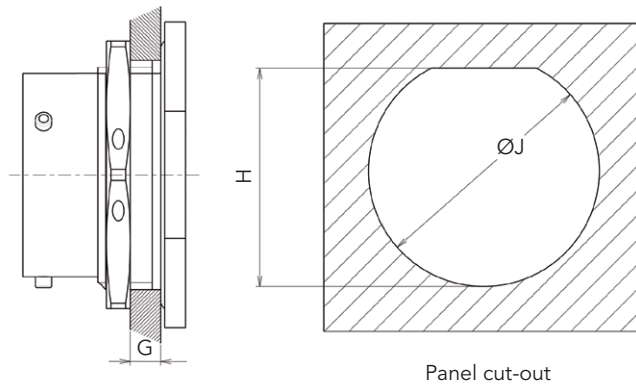
Panel cut-out

Note: All dimensions are in millimeters (mm)

Jam nut receptacle (type 7H)



Shell size	ØA max	B max	C max	D <sup>+0</sup>	ØE max	F max	G		H	ØJ <sup>±0.1</sup>
							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



Note: All dimensions are in millimeters (mm)

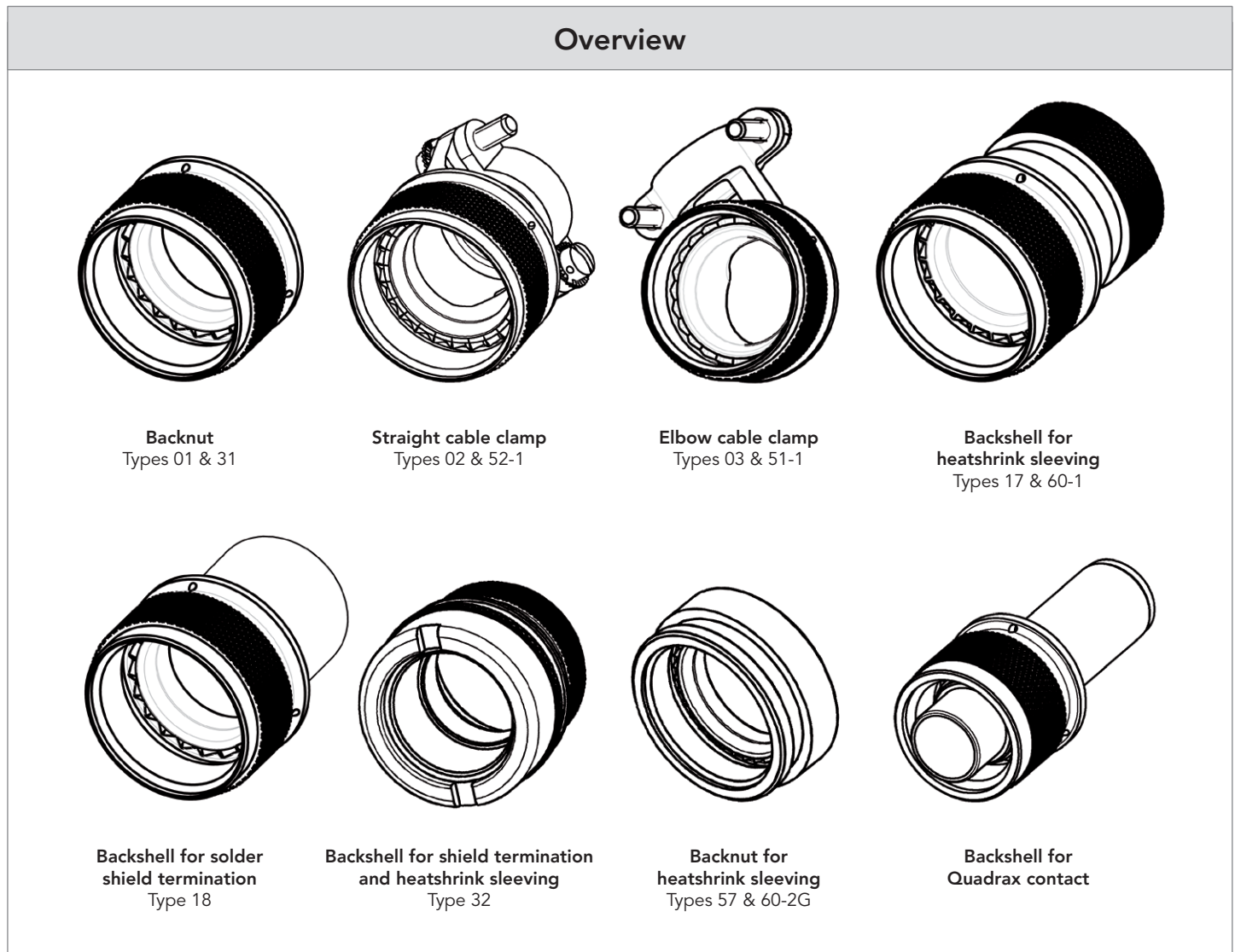
# 852 SERIES

852 Series

# Common Section

■ Backshells, Backshell bushings .....	40
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## Backshells



### SOURIAU aluminum backshells

Basic series	852	01	N	18
<b>Backshell type</b>				
01: Backnut				
02: Straight cable clamp				
03: Elbow cable clamp				
17: Backshell for heatshrink sleeving				
18: Backshell for solder shield termination				
32: Backshell for shield termination and heatshrink sleeving				
57: Backnut for heatshrink sleeving				
<b>Plating</b>				
A: Black anodized				
N: Nickel				
J: Yellow cadmium				
W: Olive drab cadmium				
Shell size: 08, 10, 12, 14, 16, 18, 20, 22, 24				



### SOURIAU stainless steel backshells

<b>Basic series</b>	8527	01	18
<b>Backshell type</b> 01: Backnut 02: Straight cable clamp			
<b>Shell size: 08, 10, 12, 14, 16, 18, 20, 22, 24</b>			
<b>Suffix</b> empty: Backnut (type 01) A: Straight cable clamp (type 02)			

### MIL-C 26482G Series 2 aluminum backshells

<b>Basic series</b>	M85049-	31-	8	A
<b>Backshell type</b> 31-: Backnut 52-1-: Straight cable clamp 51-1-: Elbow cable clamp 60-1-: Backshell for heatshrink sleeving 60-2G-: Backnut for heatshrink sleeving				
<b>Shell size: 8, 10, 12, 14, 16, 18, 20, 22, 24</b>				
<b>Plating</b> A: Black anodized W: Olive drab cadmium				

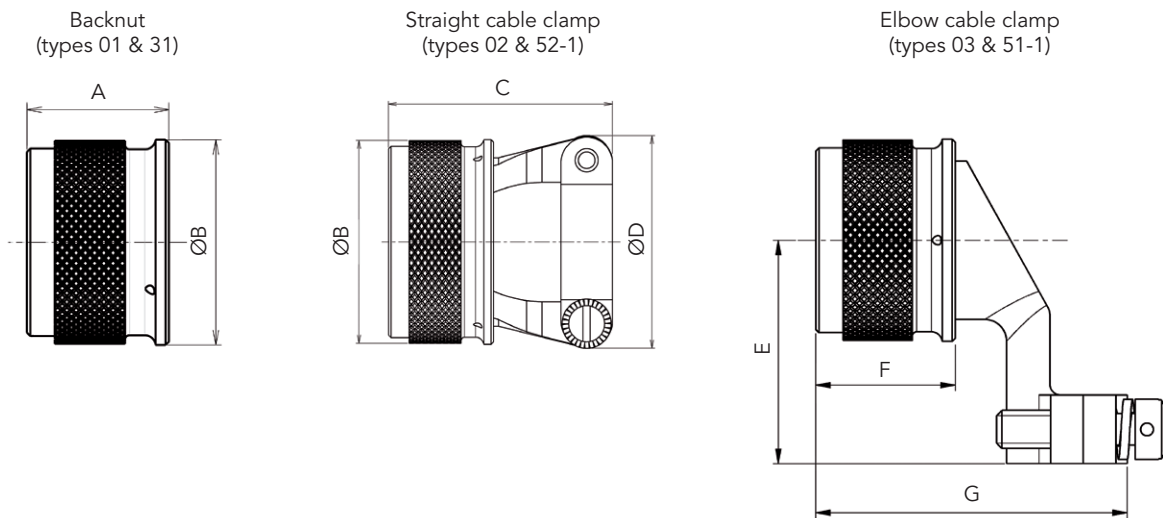
### SOURIAU quadrax backshells

<b>Basic series</b>	8525	9309A
<b>Material &amp; Plating</b> 9309A: Aluminum black anodized 9321A: Passivated stainless steel		

Quadrax technology available only for 8525 Series, layout 8B01.  
See page 24 for more information about Quadrax connector.

## Dimensions

### Backshells Types 01 & 31 / Types 02 & 52-1 / Types 03 & 51-1

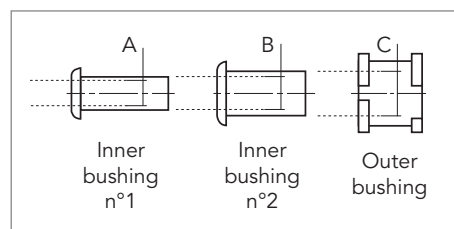


Shell size	A Max	ØB Max	C Max	ØD Max	E Max	F Max	G Max	Thread (all types)
8	12.85	15.67	22.61	19.25	20.50	13.71	28.00	0.5-20 UNF 2B
10		18.64	25.40	20.45	22.00		30.00	0.625-24 UNEF 2B
12		21.79	28.60	24.35	23.60		35.00	0.75-20 UNEF 2B
14		24.99	28.58	25.85	25.20		36.50	0.875-20 UNEF 2B
16		28.24	31.75	32.75	26.80		40.25	1-20 UNEF 2B
18		30.94	38.10	36.15	31.30		43.10	1.0625-18 UNEF 2B
20		34.16	41.28	38.75	32.90		46.30	1.1875-18 UNEF 2B
22		37.29	43.55	41.25	34.50		49.50	1.3125-18 UNEF 2B
24		40.46	47.62	44.35	36.10		52.70	1.4375-18 UNEF 2B

For more dimensions, please consult us.

### Backshell bushings To be used with cable clamp backshells.

Shell size	Inner bushing n°1		Inner bushing n°2		Outer bushing	
	Part number	A	Part number	B	Part number	C
08	-	-	-	-	8525 866 A	3.00
10	-	-	-	-	8525 867 A	4.00
12	-	-	8525 860 A	5.58	8525 868 A	7.92
14	-	-	8525 861 A	7.92	8525 869 A	11.09
16	-	-	8525 861 A	7.92	8525 870 A	11.09
18	8525 861 A	7.92	8525 862 A	11.09	8525 871 A	14.27
20	8525 862 A	11.09	8525 863 A	14.27	8525 872 A	15.87
22	8525 863 A	14.27	8525 864 A	15.87	8525 873 A	19.04
24	8525 864 A	15.87	8525 865 A	19.04	8525 874 A	23.79



Note: All dimensions are in millimeters (mm)

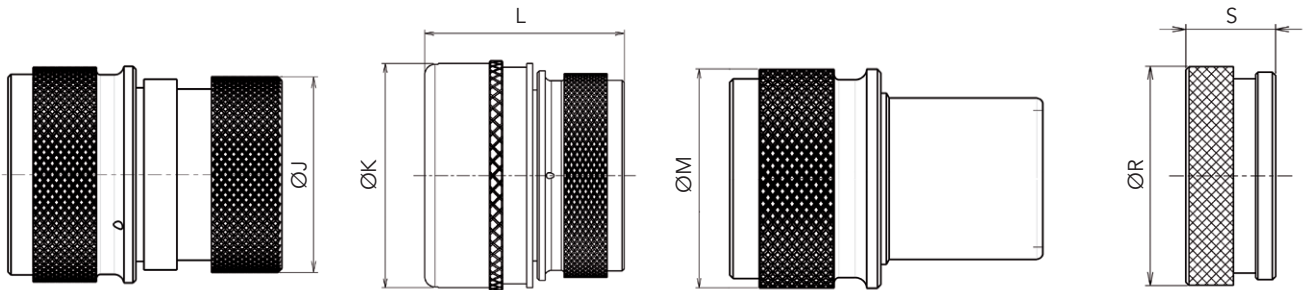
**Backshells Types 17 & 60-1 / Type 32 / Type 18 / Types 57 & 60-2G**

Backshell for heatshrink sleeving (types 17 & 60-1)

Backshell for shield termination and heatshrink sleeving (type 32)

Backshell for solder shield termination (type 18)

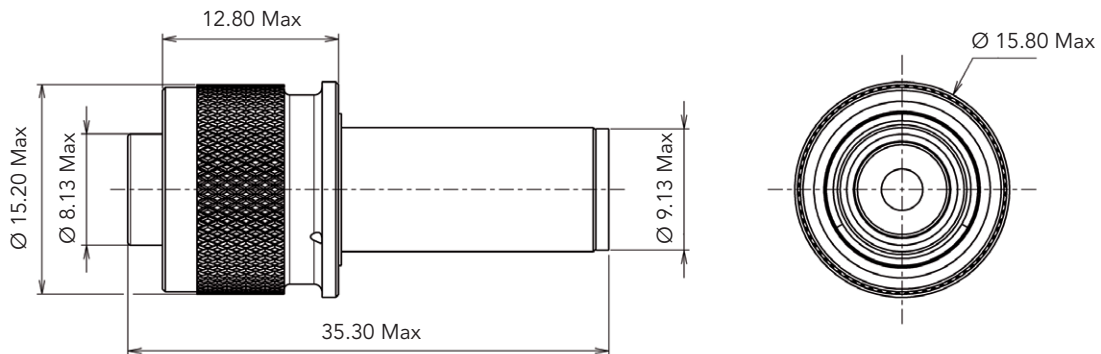
Backnut for heatshrink sleeving (types 57 & 60-2G)



Shell size	ØJ Max	ØK Max	L Max	ØM Max	ØR Max	S Max	Thread (all types)
8	13.54	18.20	30.00	15.67	17.48	13.72	0.5-20 UNF 2B
10	15.37	19.20		18.64	20.40		0.625-24 UNEF 2B
12	19.67	24.20		21.79	23.83		0.75-20 UNEF 2B
14	21.29	27.20		24.99	27.00		0.875-20 UNEF 2B
16	24.46	29.20		28.24	31.45		1-20 UNEF 2B
18	26.47	33.20		30.94	33.27		1.0625-18 UNEF 2B
20	30.91	36.20		34.16	36.47		1.1875-18 UNEF 2B
22	34.42	39.50		37.29	39.62		1.3125-18 UNEF 2B
24	36.65	42.60		40.46	42.82	17.83	1.4375-18 UNEF 2B

Please consult us for other dimensions.

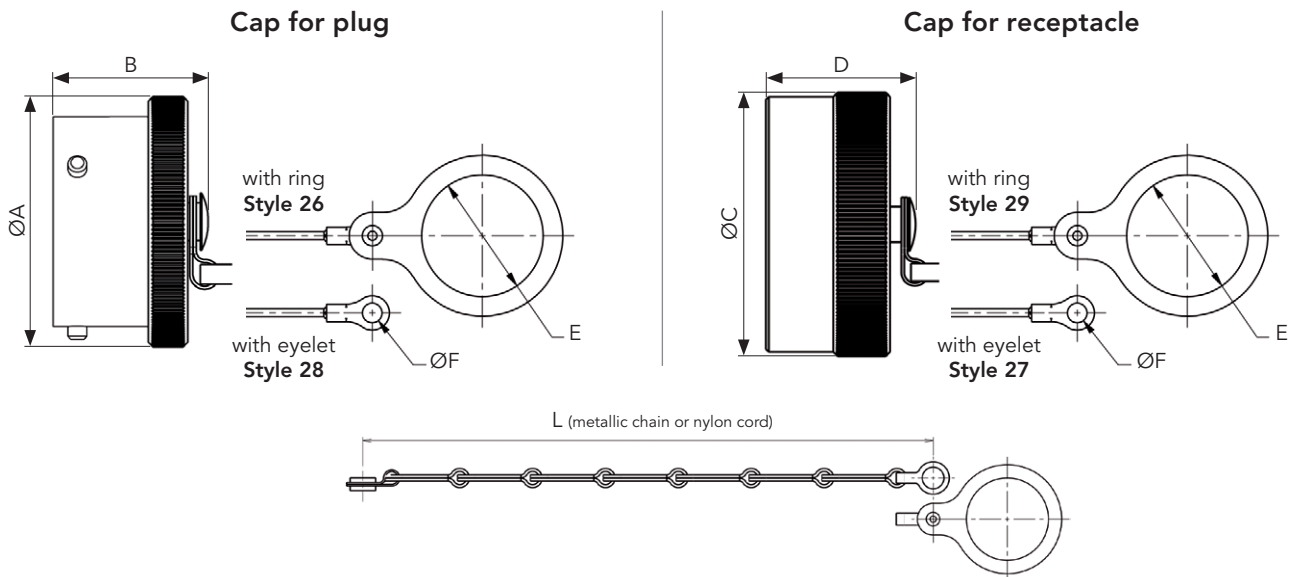
**Quadrax backshell**



Note: All dimensions are in millimeters (mm)

# Aluminum protective caps

## Dimensions



Shell size	Ø A Max	B Max	Ø C Max	D Max	E Max		Ø F Max		L Min	L (metallic chain)		L (nylon cord)	
					EN3646	SOURIAU	EN3646	SOURIAU		Style 26 & 29	Style 27 & 28	Style 26 & 29	Style 27 & 28
08	19.00	21.50	16.80	19.90	12.45	14.80	4.20	3.50	69.85	100.00	84.00	80.00	128.00
10	21.80		19.80		15.70	18.00				116.00	100.00	90.00	140.00
12	26.10		23.90		18.85	22.70				132.00	116.00	110.00	153.00
14	29.30		27.00		22.10	25.90							
16	32.50		30.20		25.50	29.00							
18	35.30		33.40		27.35	32.20							
20	38.80		36.50		30.40	35.40							
22	42.00	39.80	33.30	38.60									
24	45.10	22.30	42.90	22.30	36.80	41.70							

**EN3646 part number** Please consult us.

Basic series	EN3646	RS	3	C	10
<b>Temperature and plating</b>					
A: 200°C, black anodized plated					
RS: 200°C, nickel plated					
WS: 175°C, olive green cadmium plated					
<b>Cap style</b>					
3: Cap for receptacle					
4: Cap for plug					
<b>Fixing type</b>					
C: Eyelet with metallic chain					
D: Ring with metallic chain					
<b>Size: 08, 10, 12, 14, 16, 18, 20, 22, 24</b>					

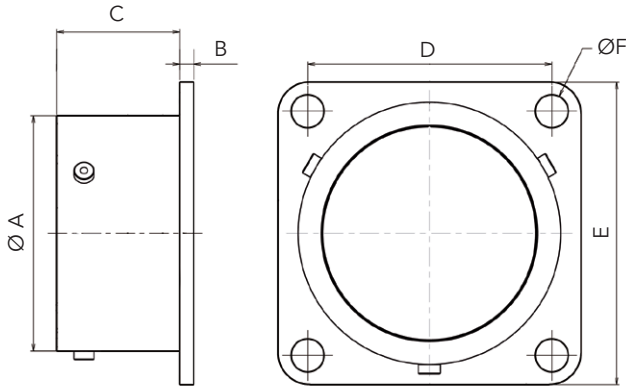
**SOURIAU part number**

Basic series	852	28	R	18
<b>Cap style</b>				
26: Cap for plug with ring				
27: Cap for receptacle with eyelet				
28: Cap for plug with eyelet				
29: Cap for receptacle with ring				
<b>Plating</b>				
R: Black anodized plated				
N: Nickel plated				
J: Yellow cadmium plated				
G: Olive green cadmium plated, 500H salt spray				
<b>Size: 08, 10, 12, 14, 16, 18, 20, 22, 24</b>				
<b>Specification</b>				
empty: Metallic chain				
26: Nylon cord				

Note: All dimensions are in millimeters (mm)

## Dummy receptacle

### Dimensions



Shell size	08	10	12	14	16	18	20	22	24
ØA Max	12.03	15.01	19.07	22.25	25.42	28.60	31.77	34.95	38.12
B	1.32						2.12		
C Max	11.60						14.25		
D	15.09	18.26	20.62	23.01	24.61	26.97	29.37	31.75	34.92
E Max	20.62	23.82	26.18	28.56	30.93	33.32	36.50	39.67	42.86
ØF	3.10								3.75

### SOURIAU part number

Basic Series	8526	07	14
07: Aluminum dummy receptacle			
empty: Olive green cadmium plated			
N: Nickel plated			
R: Black anodized plated			
Shell size: 08, 10, 12, 14, 16, 18, 20, 22, 24			

### EN3646 part number

Basic series	EN3646	WS5	10
Temperature and plating			
A5: 200°C, black anodized plated			
RS5: 200°C, nickel plated			
WS5: 175°C, olive green cadmium plated			
Size: 08, 10, 12, 14, 16, 18, 20, 22, 24			

Please consult us.

## Gaskets & O'rings

Shell size	Gasket for square flange receptacle	O'ring for jam nut receptacle	Specific O'ring for 8525 Hermetic type 02H suffix 002
08	85251431	AS3582-016	70617A
10	85251432	AS3582-018	70618A
12	85251433	AS3582-021	70619A
14	85251434	AS3582-023	70620A
16	85251435	AS3582-025	70621A
18	85251436	AS3582-027	70622A
20	85251437	AS3582-029	70609A
22	85251438	AS3582-030	70623A
24	85251439	AS3582-031	70624A

## Signal contacts

### Crimp contacts 175°C and 200°C

Contact type	SOURIAU Part numbers		Tensile strength	Current rating	Contact resistance	Code	Admissible wire section		External Ø over insulator		Mass g (±15%)		
	Pin	Socket				Color bands	AWG	mm²	Min.	Max.	Pin	Socket	
#20	Standard	8526-1348	8526-1344 900	90 N	7.5 A	≤ 1 mΩ	Red/red	24-20	0.25-0.60	0.85	2.10	0.24	0.29
	Small barrel	8525-7256 900	8525-7750 900				Red/green	22-26	0.15-0.40	0.85	2.10	0.24	0.29
	Large barrel	8522-2349 A	8520-292				Red/brown	24-18	0.25-1	0.85	2.10	0.24	0.29
#16	Standard	8526-1349	8526-1346A 900	115 N	13 A	≤ 0.55 mΩ	Blue/blue	20-16	0.60-1.20	1.20	2.70	0.53	0.59
	Small barrel	8526-4175	8526-4176				Blue/brown	24-18	0.25-1	1.20	2.70	0.53	0.59
	Large barrel	8522-6179 A	8522-6180B 900				Blue/white	18-14	1-2	1.20	2.70	0.53	0.59
#12	Standard	8526-1350	8526-1347A 900	136 N	23 A	≤ 0.35 mΩ	Yellow/yellow	16-12	1.20-3	1.90	4.01	1.15	1.28
	Small barrel	8526-5041	8526-5591A 900		10 A		Yellow/brown	24-18	0.25-1	1.90	4.01	1.15	1.28

Note: Reducing sleeve for #20 standard contact available. For wire 0.09 to 0.21 mm². PN 8522-2142PZ.

### MIL-DTL-26482H wire range accommodations

Wire barrel size	Wire size	External Ø over insulator Wire reference: SAE-AS22759	
		Min.	Max.
#20	24	1.02	2.11
	22		
	20		
#16	20	1.35	2.62
	18		
	16		
#12	14	2.46	4.01
	12		

### Minicoax contacts

Installed instead of size 16 contacts.

	Part numbers	
Male contacts	8522-2-001	8522-2-002
Female contacts	8522-1-001	8522-1-002
Admissible cables	RG 316 U KX 22 A RG 174 U KX 3 A RG 188 A/U RG 179 B/U	RG 178 B/U KX 21 A RG 196 A/U

Note: All dimensions are in millimeters (mm)

## Thermocouple contacts (-65°C to +200°C)

### Chromel - Pin contacts (non magnetic)

Contact size	Type	Part numbers	Code		Admissible wire section		External Ø over insulator	
			Color bands	Dot	AWG	mm <sup>2</sup>	Min.	Max.
#20	Standard	8522-875	Red/red	Yellow/white	22-20	0.40-0.60	0.85	2.10
		8522-875 A	Brown/orange/green					
	Large barrel	8522-3761		Yellow/yellow	22-18	0.38-0.93	0.85	2.10
#16	Standard	8522-881	Green/brown/violet	Yellow	20-16	0.60-1.34	1.20	2.70
		8522-402	Blue/blue	Yellow	20-16	0.60-1.34	1.20	2.70

### Chromel - Socket contacts (non magnetic)

Contact size	Type	Part numbers	Code		Admissible wire section		External Ø over insulator	
			Color bands	Dot	AWG	mm <sup>2</sup>	Min.	Max.
#20	Standard	8522-877 900	Red/red	Yellow/white	22-20	0.40-0.60	0.85	2.10
		8522-877 A900	Brown/yellow/brown	Yellow				
	Large barrel	8522-3770		Yellow/yellow	22-18	0.38-0.93	0.85	2.10
#16	Standard	8522-883 900	Green/red/red	Yellow	20-16	0.60-1.34	1.20	2.70
		8522-403 900	Blue/blue	Yellow				
	Small barrel	8526-5571 A900	Blue/red	Yellow	24-18	0.25-1	1.20	2.70

### Alumel - Pin contacts (magnetic)

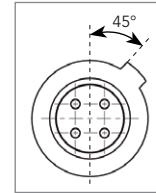
Contact size	Type	Part numbers	Code		Admissible wire section		External Ø over insulator	
			Color bands	Dot	AWG	mm <sup>2</sup>	Min.	Max.
#20	Standard	8522-876	Red/red	Black/white	22-20	0.40-0.60	0.85	2.10
		8522-876 A	Brown/orange/yellow					
	Large barrel	8522-3760		Black/black	22-18	0.38-0.93	0.85	2.10
#16	Standard	8522-882	Green/brown/blue	Black	20-16	0.60-1.34	1.20	2.70
		8522-401	Blue/blue	Black	20-16	0.60-1.34	1.20	2.70

### Alumel - Socket contacts (magnetic)

Contact size	Type	Part numbers	Code		Admissible wire section		External Ø over insulator	
			Color bands	Dot	AWG	mm <sup>2</sup>	Min.	Max.
#20	Standard	8522-878 900	Red/red	Black/white	22-20	0.40-0.60	0.85	2.10
		8522-878A 900	Brown/yellow/black					
	Large barrel	8522-3771		Black/black	22-18	0.38-0.93	0.85	2.10
#16	Standard	8522-884 900	Green/red/brown	Black	20-16	0.60-1.34	1.20	2.70
		8522-404 900	Blue/blue	Black				
	Small barrel	8526-5576A 900	Blue/red	Black	24-18	0.25-1	1.20	2.70

## #8 Quadrax contacts

Contact type		SOURIAU part number	ABS part number	Impedance	Release	T° Max
Crimp	Pin	ETH1-1100A	ABS0973 M08A	100Ω	Rear	125°C
	Socket	ETH1-1101A	ABS0974 F08A	100Ω	Rear	125°C



Crimp contacts are unsealed. Sealing boots are available. All contacts delivered without boot.

## EN3155 qualified contacts

Signal contacts		Part number		Color band	Dot
		Male contact	Female contact		
Standard contacts	#20	018M2020	019F2020	Red/Red	-
	#20 large barrel	018M2018	019F2018	Red/Brown	-
	#16	018M1616	019F1616	Blue/Blue	-
	#16 large barrel	018M1614	019F1614	Blue/White	-
	#12	018M1212	019F1212	Yellow/Yellow	-
	#12 small barrel	018M1218	019F1218	Brown/Yellow	-
Thermocouple contacts	#20 chromel	056M2020	057F2020	Red/Red	Yellow/White
	#20 alumel	054M2020	055F2020	Red/Red	Black/White



## PC tail contacts

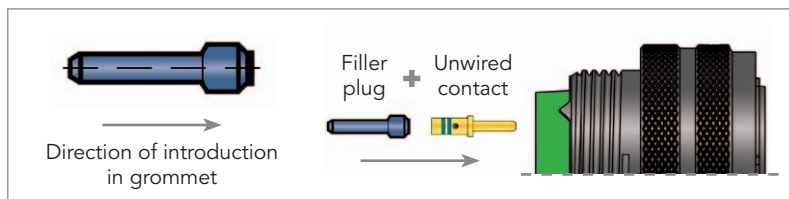
Contact size	Contact type	PC tail type	Length	Diameter	Mass g (±15%)	Part number	
#20	Pin	C	4.5 <sup>+0</sup> <sub>-0.2</sub>	0.6 <sup>±0.08</sup>	0.49	8525-7085A	
			5.0 <sup>±0.1</sup>		0.58	8522-3371	
			5.05 <sup>+0</sup> <sub>-0.2</sub>	0.72 <sup>+0.05</sup> <sub>0</sub>	0.22	8525-9440A	
					0.51	8526-5061	
			M	6.7 <sup>+0</sup> <sub>-0.2</sub>	0.6 <sup>±0.08</sup>	0.56	8526-9351A
				7.0 <sup>±0.05</sup>	0.635 <sup>±0.05</sup>	0.39	8526-8500
		7.3 <sup>+0</sup> <sub>-0.2</sub>		0.6 <sup>±0.08</sup>	0.52	8522-3052 JL	
					0.57	8526-4058	
			0.65		8526-4124		
		L	10.3 <sup>+0</sup> <sub>-0.2</sub>	0.6 <sup>±0.08</sup>	0.50	8526-5070	
			14.31 <sup>+0.2</sup> <sub>-0.1</sub>		0.50	8526-5081	
		Socket	M	7.3 <sup>+0</sup> <sub>-0.2</sub>	0.49	8526-5021	
0.55	8525-1909 900 8526-4060 900						
#20 Chromel	Pin	M	7.3 <sup>+0</sup> <sub>-0.2</sub>	0.6 <sup>±0.08</sup>	0.50	8525-7252	
#20 Alumel	Pin	M	7.3 <sup>+0</sup> <sub>-0.2</sub>	0.6 <sup>±0.08</sup>	0.50	8525-7253	
#16	Pin	C	4.5 <sup>+0</sup> <sub>-0.2</sub>	1.0 <sup>+0</sup> <sub>-0.08</sub>	0.90	8525-7088A	
			7.3 <sup>+0</sup> <sub>-0.2</sub>		0.96	8522-3556 JL	
					1.15	8526-5001	
		L	10.3 <sup>+0</sup> <sub>-0.2</sub>		0.92	8526-5091	
			14.81 <sup>+0.2</sup> <sub>-0.1</sub>		0.90	8526-5031	
		Socket	M		7.3 <sup>+0</sup> <sub>-0.2</sub>	1.13	8525-1967A 900

C: Short PC tail  
M: Medium PC tail  
L: Long PC tail

## Filler plugs

These filler plugs are installed at the rear of unwired contacts to maintain connector sealing.

Contact size	SOURIAU Part numbers	MS Part Number	Colors
#20	8522-389A	MS27488-20-2	red
#16	8522-390A	MS27488-16-2	green
#12	8522-391A	MS27488-12-2	yellow

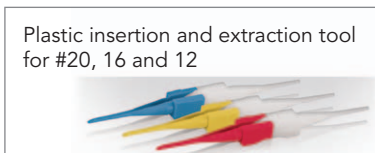


Note: All dimensions are in millimeters (mm)

## Insertion and extraction tools

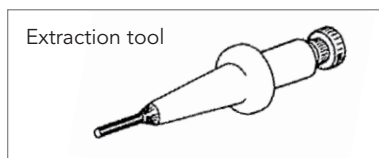
### Insertion and extraction of wired contacts

Contact size	Part numbers	Material	Color
#20	M81969/14-11	Plastic	white / red
#16	M81969/14-03	Plastic	white / blue
#12	M81969/14-04	Plastic	white / yellow



### Extraction of unwired contacts

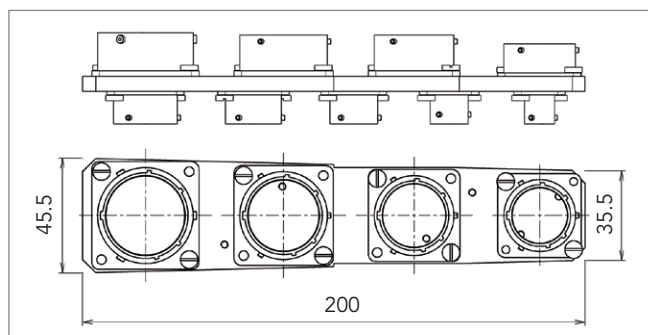
Contact size	Part numbers
#20	8522-56
#16	8522-57
#12	8522-58



## Crimping tools

Contact size	Wires		Part numbers	
	mm <sup>2</sup>	AWG	Crimping pliers	Locator
#20	1.00	18	8365 (M22520/1-01) or 8476-01 (M22520/2-01)	8365-02 (M22520/1-02) or 8476-02 (M22520/2-02)
	0.60	20		
	0.40	22		
	0.25	24		
#16	2.00	14	8365 (M22520/1-01)	8365-02 (M22520/1-02)
	1.20	16		
	1.00	18		
	0.60	20		
#12	3.00	12	8365 (M22520/1-01)	8365-02 (M22520/1-02)
	2.00	14		
#8 Quadrax	Inner contact		M22520/2-01	K709
	Outer contact		M22520/5-01	M22520/5-45

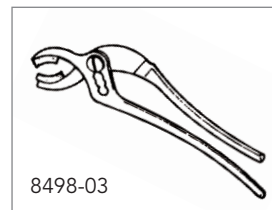
## Tightening support



Aluminum olive green cadmium  
Part number: 8500-30

Note: All dimensions are in millimeters (mm)

### Backshell tightening tool



Backshell tightening plier,  
part number: 8498-03

Square jaws (order 2 jaws),  
part number: 8500-1015

### Strap backshell tightening spanner



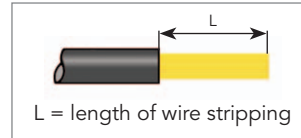
Strap backshell tightening spanner,  
part number: 8498-04

Square strap,  
part number: 8498-103

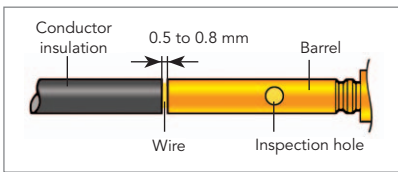
# Wiring instruction

## Cable preparation and wire stripping

Size	Contact	#20		#16			#12
	Barrel	#20	#18	#16	#14	#28	#12
Stripped length of cable mm <sup>±0.5</sup>		4.5		6.8			



## Insertion of wire in contact barrel

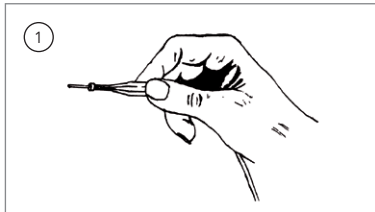


When inserting the stripped wire into the contact barrel check that no strands are left outside and that the wire is visible through the wire inspection hole in the barrel.

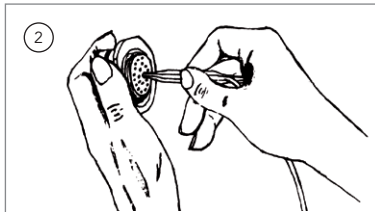
Important:  
 - Slide any accessories over wire strands before carrying out the following operations.  
 - Contacts are inserted and extracted from the rear of the connector.

## Insertion of the contacts

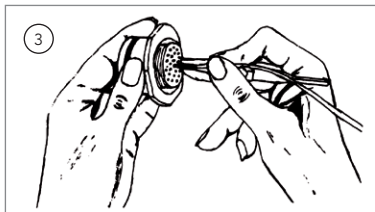
1 - Engage the crimp cable / contact assembly into the longitudinal slot of the plastic tool (colored tip). Slide the tool down the cable until the tip of the tool abuts the contact retention shoulder.



2 - Introduce the contact into the required contact cavity in the insulator, pushing tool axially, until the contact snaps into position in clip.

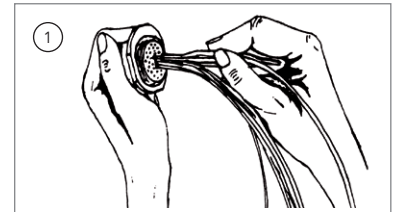


3 - Withdraw the tool from rear. Check that contact is firmly locked by pulling wire gently. When connector is fully loaded, check the position of contact tips. They should all be in the same plane.  
 Note: For larger sizes of cable which are stiff enough, manual insertion without tool is preferable.

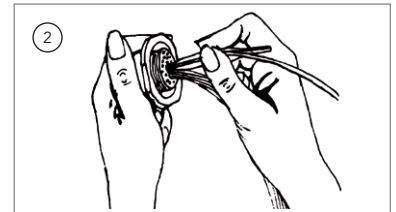


## Extraction of the contacts

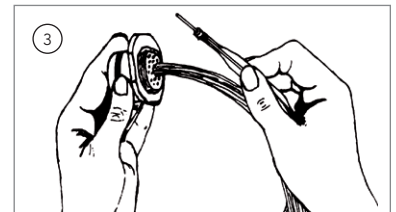
1 - Engage the appropriate cable into the longitudinal slot of the tool with the white tip towards connector.



2 - Slide the tool down towards the contact. Insert the tool in the insulator until it abuts the contact shoulder.



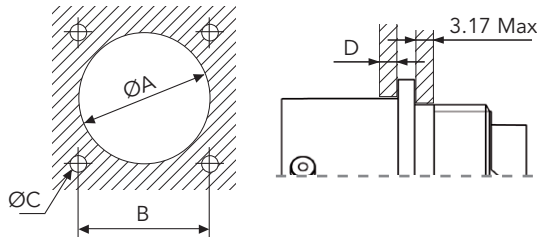
3 - Holding the tool-contact and cable assembly together, remove them simultaneously.



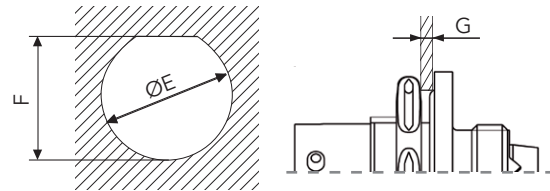
Note: All dimensions are in millimeters (mm)

**Panel cut-out**

Types 10 & 00  
Square flange receptacle

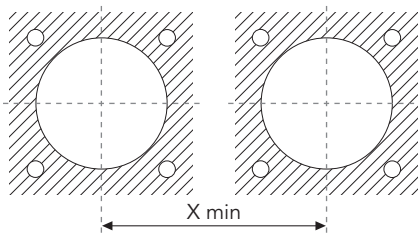


Types 17 & 07  
Jam nut receptacle



Shell size	8	10	12	14	16	18	20	22	24
<b>A min</b>	14.43	17.40	21.95	25.12	28.27	31.45	34.62	37.80	41.02
<b>B</b>	15.09	18.26	20.62	23.01	24.61	26.97	29.36	31.75	34.92
<b>C</b>	3.10								3.80
<b>D Max</b>	2.21						5.38		
<b>E ±0.1</b>	14.53	17.70	22.73	25.65	28.83	32.00	35.18	38.35	41.53
<b>F ±0.1</b>	13.61	16.79	20.93	24.08	27.23	30.40	33.58	36.75	39.93
<b>G Max</b>	4.75						6.35		5.55

**Minimum space between square flange or jam nut receptacles**



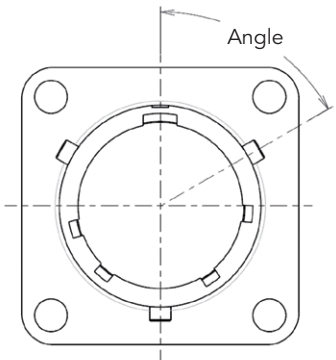
Shell size	8	10	12	14	16	18	20	22	24
<b>Y min (norm value)</b>	32	35	38	41	45	47	51	53	57

$X_{min} = Y/2 \text{ (connector one)} + Y/2 \text{ (connector two)}$

Example of minimum space between a connector size 8 and a connector size 14:  
 $X_{min} = 32/2 + 41/2 = 36.5 \text{ mm}$

Note: All dimensions are in millimeters (mm)

## Orientation

Polarization code							
 <p>Viewed from front face of male insulator. Insulator rotated inside metal body.</p>	<b>Shell size</b>	<b>Layout</b>	<b>N</b>	<b>W</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
	<b>08</b>	01	0	-	-	-	-
		3A/98	0	60	210	-	-
		33	0	90	-	-	-
	<b>10</b>	06	0	90	-	-	-
	<b>12</b>	03	0	140	220	180	-
		08	0	90	112	203	292
		10	0	60	155	270	295
	<b>14</b>	04	0	45	-	-	-
		05	0	40	92	184	273
12		0	43	90	-	-	
15		0	17	110	155	234	
19		0	30	165	315	-	
<b>16</b>	08	0	54	152	180	331	
	21	0	-	-	-	-	
	23	0	158	270	-	-	
	26	0	60	-	275	338	
<b>Shell size</b>	<b>Layout</b>	<b>N</b>	<b>W</b>	<b>X</b>	<b>Y</b>	<b>Z</b>	
<b>18</b>	08	0	180	-	-	-	
	11	0	62	119	241	340	
	32	0	85	138	222	265	
<b>20</b>	16	0	238	318	333	347	
	34	0	-	-	-	-	
	39	0	63	144	252	333	
	41	0	45	126	225	-	
<b>22</b>	12	0	-	-	-	6	
	21	0	16	135	175	349	
	41	0	39	135	264	-	
	55	0	30	142	226	314	
	<b>24</b>	19	0	30	165	315	-
31		0	90	225	255	-	
61		0	90	180	270	324	

# 852 SERIES

852 Series

# Range Extension

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## Product range extension

### Resin Sealed Connector

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

**Wide availability:**

- . 8525 version available.
- . Aluminum or stainless steel.
- . Black anodized, nickel or yellow cadmium plated.

**Temperature:**

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

Also available in 8LT, 8ST and 8D Series.

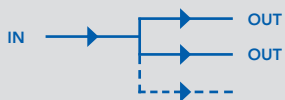


### Shunted Connector

**Airbus ABS1425 qualified EN3646 connectors integrating shunted contacts for information duplication. Excellent EMI protection.**

**Enables duplication or derivation of informations, for fast and secured transmission:**

- . Simultaneous information distribution to different locations.
- . Possibility of signal redundancy.



One "INPUT"  
More than two "OUTPUT"

**In case of a CAN Bus, the network will still work even if an equipment fails:**



**Plug and play solution:**

- . Replaces external shunt operations, space and cost savings.





## Product range extension

### Hermetic Connector with Removable Contacts

#### Extension of the fuel immersion range.

##### High hermeticity performance:

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

##### Removable crimp contacts:

- . A technology combining crimp contacts with glass beads
- . 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.

##### Wide Availability:

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



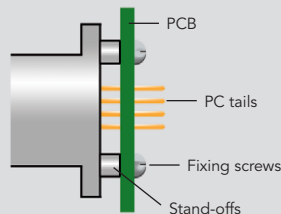
See «MIL-DTL-38999, EN3646, EN2997 Fuel Tank Connector» product news on [www.souriau.com](http://www.souriau.com)

### 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)

## Product range extension

### 851 Series

**Designed to ensure reliable and rapid electrical connections thanks to a bayonet locking system.**

**Lightweight compact size and general characteristics contribute to successful adoption in many environments:**

- . Shells made of aluminum, several finishes available.
- . Elastomeric soft neoprene insulators.
- . Crimp, solder cup and PC tail contacts available.

**Numerous applications:**

- . Civil and military aviation.
- . Ground army.
- . Professional and general electronics

**Conforms to many international standards:**

- . MIL-DTL-26482G Series 1.
- . NFC 93422.
- . HE 301B.
- . VG 95328.



See «851 Series, MIL-DTL-26482 Connectors» catalog on [www.souriau.com](http://www.souriau.com)

### 853 Series

**High temperature fire wall connector. Resist up to 260°C (500°F). Flame test per EN 2591.**

**Excellent corrosion performances:**

- . Up to 500 hours salt spray.

**Upgraded vibration performances:**

- . Self locking coupling mechanism to resist the highest vibration encountered.

**EMI & lightning resistance:**

- . EMI grounding ring.
- . Shell to shell bottoming.
- . 360° rear accessory teeth.

**Qualified Product:**

- . As per ASD Cert EN2997 and ESC Standards.
- . MIL-83723 Series III based design, including additional features to respond to today's aircraft's harshest needs.



See «853 Series, High Temperature Fire Wall Connectors» catalog on [www.souriau.com](http://www.souriau.com)



# Reliable People, Reliable Solutions



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