

8534 Series

Scoop Proof Fire Wall Connector

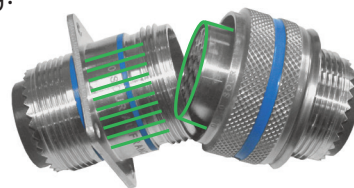


Scoop Proof Fire Wall Connector

Stainless steel screw coupling connector designed for use in hydraulic systems, landing gear and aviation engine harsh environments. Qualified to ESC11 standard.

Harsh environments ■ High vibration resistant.
High temperature resistant 260° C.
Fire proof 1100° C.

Secured scoop proof coupling ■ No risk of damaging contacts even when blind mating:



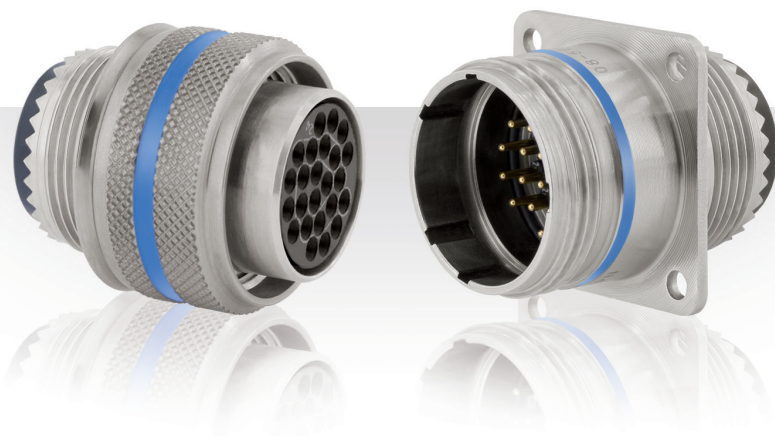
No shell with contacts interferences.

SOURIAU superior design ■ Fully RoHS compliant.
Fully interchangeable and intermateable with ESC16/8536 integrated backshell connectors.

Large array of crimp contacts ■ Same as for 8533 Series:
Standard size 12, 16 and 20 contacts.
Thermocouple size 12, 16 and 20 contacts.

Description

- Stainless steel screw coupling connector designed for use in aviation engine harsh environments:
 - . high vibration resistant
 - . high temperature resistant (260° C)
 - . fire proof (1100° C)
- Scoop proof design to enable blind mating.
- Qualified to ESC11 standard.
- Fully interchangeable and intermateable with ESC16 / 8536 connectors (integrated backshell version).
- Large array of crimp contact:
 - . standard size 16 and 20 contacts
 - . thermocouple size 16 and 20 contacts
- Fuel tank version available upon request.



Technical features

Mechanical

- **Shell:**
 - . Passivated stainless steel.
- **Grommet and seal:**
 - . Silicone elastomer.
- **Insulator:**
 - . Thermoplastic.
- **Contact body:**
 - . Copper alloy.
- **Contact plating:**
 - . Gold over nickel.
- **Contact retention:**
 - . Size 20: 90 N
 - . Size 16: 111 N
- **Mating cycles:**
 - . 500 mating / unmating operations.
- **Vibration & shock:**
 - . According to JES290-083: 41 grms (2 x 8 hours)

Electrical

- **Dielectric withstanding:**

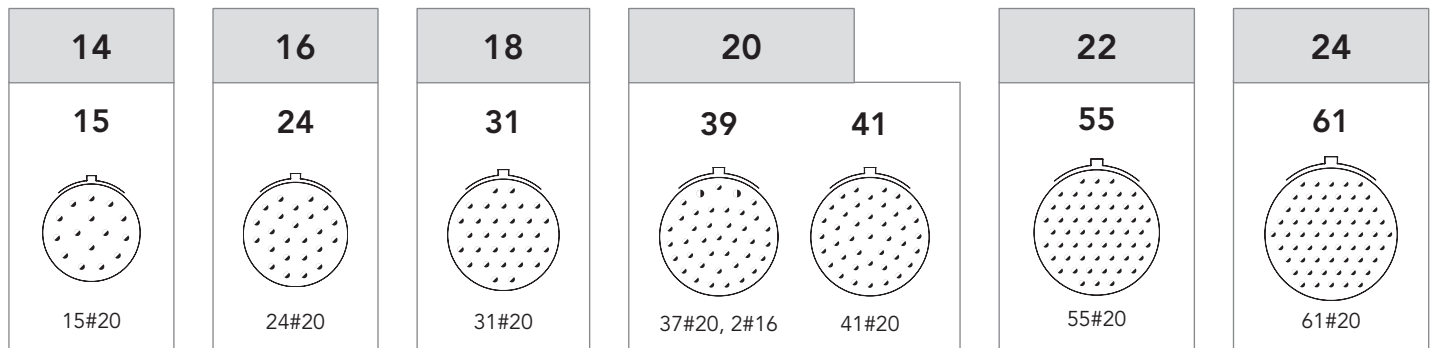
Altitude	Service I
Sea level	1500 Vrms
15 000 m	600 Vrms
21 000 m	400 Vrms
33 000 m	200 Vrms
- **Insulation Resistance:**
 - . 5000 MΩ under 500 Vdc.
- **Max current rating per contact:**

Contact size	20	16
Rating (A)	7.5	13
- **Contact resistance:** 1 mΩ.
- **Electrical continuity:**
 - . 5mΩ with RFI shielding (6SE class).
- **Shielding:**
 - . to 100 MHz at 1 GHz attenuation 65 dB.

Environmental

- **Temperature range:**
 - . - 65°C +260°C
- **Leakage:**
 - . as per 2591-312: Method B differential pressure: 100kPa
 - Maximum leakage flow: 16x10⁻⁶m³/h
- **Salt Spray:**
 - . 500 hours.
- **Fire resistance:**
 - . as per EN 2591-318: 6 min under a 1100°C flame without electrical perturbation, plus 14 min with no flame propagation (ES class).
- **Resistance to fluids:**
 - . MIL-H 5606 - SKYDROL 500 B4 - LD4 - JP5 - MIL-L 7870A - MIL-L 23699 - MIL- L 7808 - MIL-C 25769 - MIL-A 8243

Contact layouts



Connector type	Contact size
Classes 200°C & 260°C	● Contact #20
	● Contact #16

Orientation

Orientation																																																																																																												
<p style="text-align: center;">Front face view of plug</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #cccccc;"> <th>Shell size</th> <th>Angles</th> <th>N</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> </tr> </thead> <tbody> <tr> <td rowspan="4" style="text-align: center;">14</td> <td>A°</td> <td>95</td> <td>101</td> <td>18</td> <td>26</td> <td>120</td> </tr> <tr> <td>B°</td> <td>145</td> <td>168</td> <td>136</td> <td>156</td> <td>161</td> </tr> <tr> <td>C°</td> <td>220</td> <td>211</td> <td>208</td> <td>208</td> <td>225</td> </tr> <tr> <td>D°</td> <td>255</td> <td>342</td> <td>268</td> <td>276</td> <td>336</td> </tr> <tr> <td rowspan="4" style="text-align: center;">16</td> <td>A°</td> <td>95</td> <td>101</td> <td>18</td> <td></td> <td></td> </tr> <tr> <td>B°</td> <td>145</td> <td>168</td> <td>136</td> <td></td> <td></td> </tr> <tr> <td>C°</td> <td>220</td> <td>211</td> <td>208</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>D°</td> <td>255</td> <td>342</td> <td>268</td> <td></td> <td></td> </tr> <tr> <td rowspan="4" style="text-align: center;">18</td> <td>A°</td> <td>95</td> <td>101</td> <td></td> <td></td> <td></td> </tr> <tr> <td>B°</td> <td>145</td> <td>168</td> <td></td> <td></td> <td></td> </tr> <tr> <td>C°</td> <td>220</td> <td>211</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>D°</td> <td>255</td> <td>342</td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="4" style="text-align: center;">20, 22 & 24</td> <td>A°</td> <td>95</td> <td>101</td> <td>18</td> <td>26</td> <td></td> </tr> <tr> <td>B°</td> <td>145</td> <td>168</td> <td>136</td> <td>156</td> <td></td> </tr> <tr> <td>C°</td> <td>220</td> <td>211</td> <td>208</td> <td>208</td> <td></td> </tr> <tr> <td>D°</td> <td>255</td> <td>342</td> <td>268</td> <td>276</td> <td style="text-align: center;">-</td> </tr> </tbody> </table>	Shell size	Angles	N	6	7	8	9	14	A°	95	101	18	26	120	B°	145	168	136	156	161	C°	220	211	208	208	225	D°	255	342	268	276	336	16	A°	95	101	18			B°	145	168	136			C°	220	211	208	-	-	D°	255	342	268			18	A°	95	101				B°	145	168				C°	220	211	-	-	-	D°	255	342				20, 22 & 24	A°	95	101	18	26		B°	145	168	136	156		C°	220	211	208	208		D°	255	342	268	276	-
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Ordering information

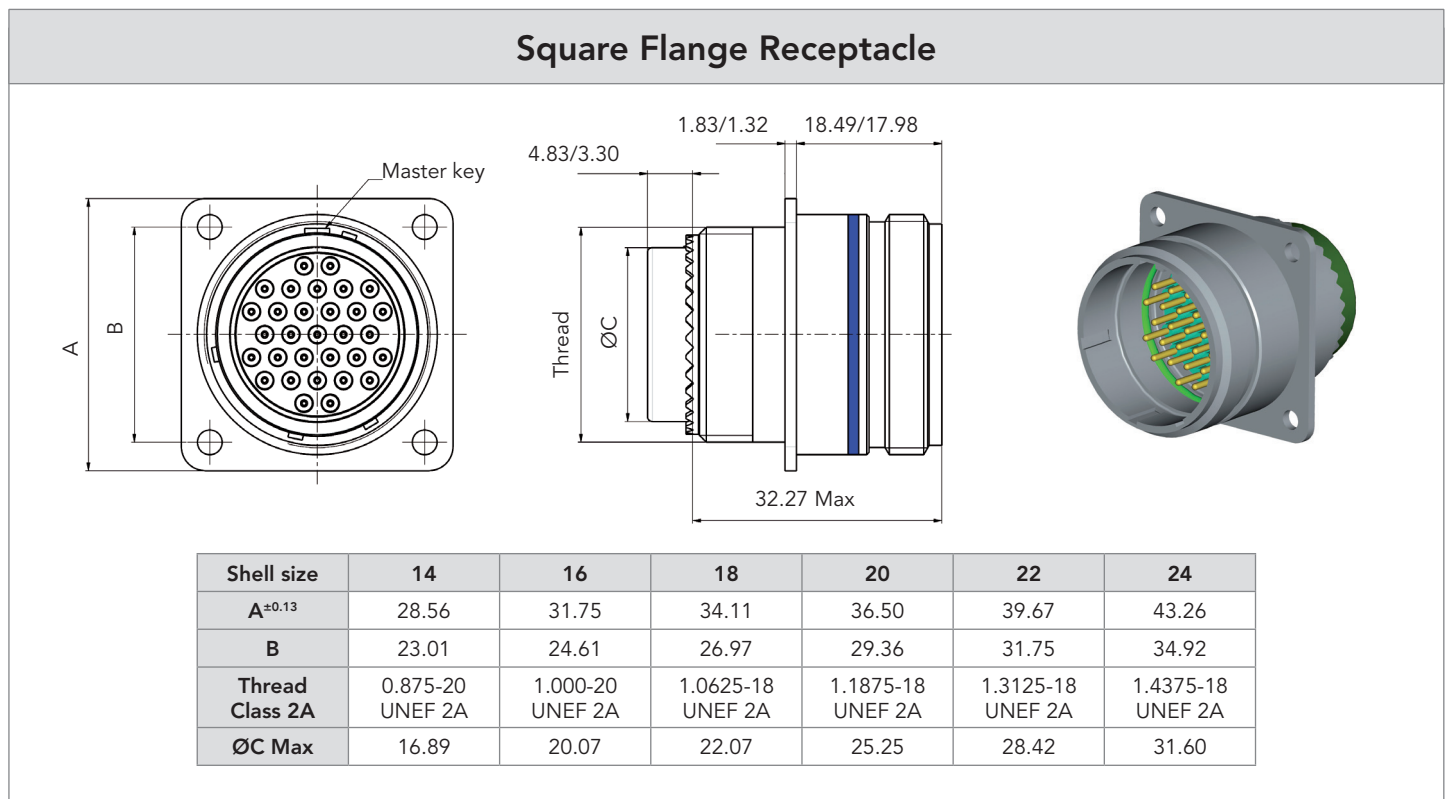
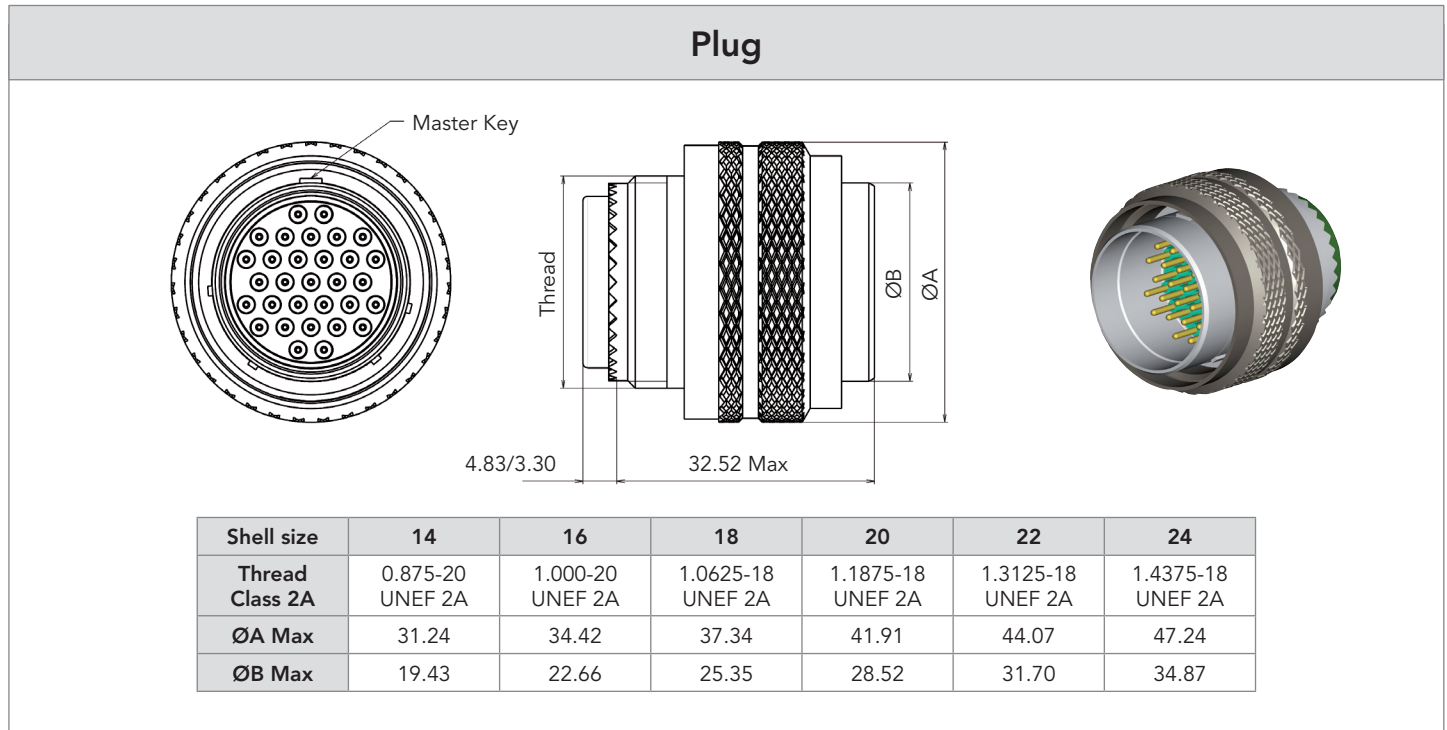
SOURIAU part numbers

Basic Series	8534	6SE	14	15	S	N
Shell type:						
0SE: Stainless steel square flange receptacle						
6SE: Stainless steel plug with RFI screening ring						
6KE: Stainless steel plug without RFI screening ring						
Shell size: 14, 16, 18, 20, 22, 24						
Contact layout: See above						
Contact type:						
P: Pin A: Connector supplied less pin contact						
S: Socket B: Connector supplied less socket contact						
Orientation: N, 6, 7, 8, 9 (see page 06)						

ESC11 Qualified products

Basic Series	ESC11	SE	6	14	15	P	N	0
Shell class:								
KE: 260°C stainless steel: standard receptacle; plug without RFI screening ring								
SE: 260°C stainless steel: standard receptacle; plug with RFI screening ring								
Shell type:								
0: Square flange receptacle								
6: Plug								
Shell size: 14, 16, 18, 20, 22, 24								
Contact layout: See above								
Contact type:								
P: Pin								
S: Socket								
Orientation: N, 6, 7, 8, 9 (see page 06)								
Variant identifier:								
0: Delivered without contact								

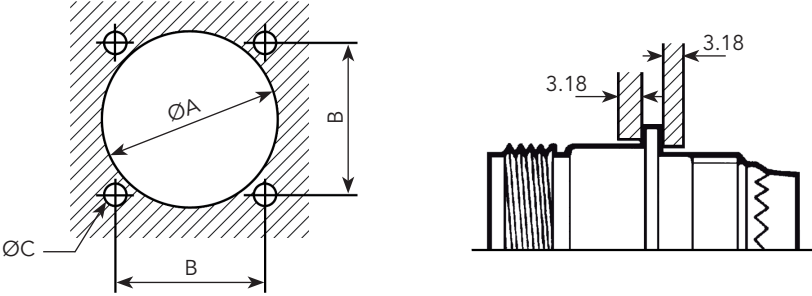
Dimensions



Note: All dimensions are in millimeters (mm)

8534 Series | Scoop Proof Fire Wall Connector

Panel Cut Out



Shell size	A min	B	C
14	24.90	23.01	3.20
16	28.30	24.61	
18	31.10	26.97	
20	34.50	39.36	
22	37.50	31.75	
24	40.60	34.92	3.80

Note: All dimensions are in millimeters (mm)

Connector weights

Mass max. (g) less contact			
Shell size	Plug with grounding spring	Plug without grounding spring	Receptacle Square flange
14	62	59	40
16	72	67	51
18	82	78	61
20	104	100	79
22	112	108	88
24	124	120	98

Mass of crimp contacts

Contact size	Mass (g)	
	Pin	Socket
20	0.24	0.29
16	0.53	0.59

For further information contact us at technical.emear@souriau.com (Europe - Asia - Africa)
technical.americas@souriau.com (North America)
 or visit our web site www.souriau.com