High Vibration Miniature Connectors
Qualified According MIL-DTL-38999
The micro38999 Series (8DA, 8BA and 8LTA ranges) is made to meet a new generation of applications where space and weight are limited (Tactical radio, UAV, on board equipment, infantry, C4ISR, instrumentation, small equipment for industry, …).

The micro38999 is the first complete platform on the market of integrated backshell products available with a 38999 design in order to be compliant with the harshest specification (high vibration, operating temperature, durability, corrosion resistance, EMI shielding, …)

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**micro38999 Series**
- 8DA Series Threaded coupling .......................... 14
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## Typical applications

<table>
<thead>
<tr>
<th>Application</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio / Network Systems</td>
<td><img src="image1.jpg" alt="Radio Network System" /></td>
</tr>
<tr>
<td>Infantry / Display</td>
<td><img src="image2.jpg" alt="Infantry Display" /></td>
</tr>
<tr>
<td>Control Unit / Solar</td>
<td><img src="image3.jpg" alt="Control Unit Solar" /></td>
</tr>
<tr>
<td>UAV / On Board Equipment</td>
<td><img src="image4.jpg" alt="UAV On Board Equipment" /></td>
</tr>
<tr>
<td>Aircraft Cabin / Cockpit</td>
<td><img src="image5.jpg" alt="Aircraft Cabin Cockpit" /></td>
</tr>
<tr>
<td>Industrial Equipment</td>
<td><img src="image6.jpg" alt="Industrial Equipment" /></td>
</tr>
</tbody>
</table>
Features & Benefits

HIGH VIB
D38999 Compliant
Connectors designed for harsh environment applications. High vibration and high temperature withstanding. Scoop proof.

SPACE SAVING
Compacity
Miniature shell sizes 3, 5 & 7. #26 high density layouts.

MULTI SOURCE
Secured Supply Chain
A reliable network of manufacturers and distributors. Less risks, more flexibility!

USER FRIENDLY
Integrated Backshell
No need of additional rear accessories. Cost & time saving. IP67 or IP68 with appropriate cable termination.

LARGE OFFER
A Wide and Reliable Range
3 coupling systems: threaded, break away, bayonet. 2 materials, 4 platings. Up to 1000 mating cycles.

Not QPL listed.
A wide product range of compact 38999

3 coupling systems

5 shell types

Threaded coupling
8DA Series, see p.14

Plug
In Line Receptacle
Jam Nut Receptacle
PC tail contacts available
Square Flange Receptacle
PC tail contacts available

Break away
8BA Series, see p.19

Plug
In Line Receptacle
Jam Nut Receptacle

Bayonet coupling
8LTA Series, see p.22

Plug
In Line Receptacle
Jam Nut Receptacle
Square Flange Receptacle
PC tail contacts available
Oval Flange Receptacle
PC tail contacts available
A wide product range of compact 38999

- **2 materials, 4 platings**
  - Aluminum
    - Black Zinc Nickel RoHS
    - Nickel RoHS
    - Cadmium
  - Stainless Steel
    - Passivated RoHS
- **2 removable contacts**
- **3 miniature shell sizes**
  - Shell size 3
    - Layouts 3-05; 3-35
  - Shell size 5
    - Layouts 5-06; 5-35
  - Shell size 7
    - Layouts 7-09; 7-35

Smaller and more compact than D38999

- **More Compact Shell**
  - 8DA Series, size 5 with Integrated Backshells
  - 8D Series, size 9 + Additional Backshells
- **Smaller Contact Size**
  - #26 Ø 0.5 mm
  - #22D Ø 0.76 mm
- **Shorter Contact Pitch**
  - 1.7 mm
  - 2.28 mm

Same number of contacts in a smaller connector!

- **50% SHORTER LENGTH**
- **33% SMALLER DIAMETER**
- **3 TIMES LIGHTER**
Although smaller, all the features and excellence of D38999

- High grade thermoplastic insert
- Silicone elastomer grommet and sealing -55° to +175°C as in D38999
- Ratcheting system Vibration: 44grms @125°C
- EMI shielding As in D38999
- Scoop proof Contacts protected like D38999
- Triple-start thread Contact design according to M39029
- EMI grounding Connection as in D38999

6 keyings Same as D38999

Always a solution to meet your application needs

<table>
<thead>
<tr>
<th>Tactical radio/Network systems</th>
<th>Infantry/Display</th>
<th>Autonomous robot/Solar</th>
<th>UAV/On board equipment</th>
<th>Cockpit/Aircraft cabin</th>
<th>Industrial equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switch, docking station, power supply, ...</td>
<td>Battery charger, helmet, radio, ...</td>
<td>Control unit, data transmission, ...</td>
<td>Missile, civil &amp; military aircraft, control unit, actuator, ...</td>
<td>Lighting, interconnect, ...</td>
<td>Instrumentation, small equipment for industry, ...</td>
</tr>
</tbody>
</table>

Threaded 8DA, see p.14

Break away 8BA, see p.19

Bayonet 8LTA, see p.22
**Worldwide Sales Network**

*SOURIAU-SUNBANK* is recognized as one of the top international manufacturers of connectors, backshells and accessories for harsh environment and is continuously strengthening its leading position through its solid structure as an international group.

Today the *SOURIAU-SUNBANK* group has a worldwide strong 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.

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**Multisourcing**

*SOURIAU-SUNBANK* have reached a partnership agreement in the manufacturing, qualification, and marketing of micro38999 connectors.

This partnership will provide customers with two independent sources of manufacture, guaranteed interchangeability and intermateability, with all critical features including interfacial and mounting dimensions, based on common controlled shared drawings.

Please contact us for more information.
8DA, 8BA & 8LTA Series

micro389999 Series

- 8DA Series, threaded coupling ................................................................. 14
- 8BA Series, break away ........................................................................ 19
- 8LTA Series, bayonet coupling ................................................................. 22
Description

- **A compact solution**
  - The smallest connector available on the market (shell size 3)
  - Miniaturization of MIL-DTL-38999 Series III
  - Threaded coupling (between 1/2 and 3/4 turn to mate) with ratcheting system (size 5 & 7)
  - Integrated backshell:
    - Easy to wire and handle
    - Compatible with heat shrink boot and braid retention band
    - Compliant with overmolding
  - Triple-start thread

- **A versatile solution**
  - 3 shell sizes (3, 5, 7), 4 shell types
  - 2 materials, 4 platings
  - Crimp & PC tails contacts
  - Removable contacts #22D & #26
  - 6 keyings

- **Harsh environment-resistant solution**
  - Scoop Proof
  - Cavity to cavity sealed with interfacial seal and grommet
  - EMI ring (for size 5 & 7)
  - Fluid resistant

Technical features

### Mechanical

- **Shell**:
  - Aluminum alloy
  - Passivated stainless steel (for size 5 & 7)

- **Shell plating**:
  - Zinc nickel (RoHS)
  - Nickel (RoHS)
  - Olive drab cadmium
  - Passivated stainless steel (RoHS)

- **Insulator**: Thermoplastic

- **Contact body**: Copper alloy

- **Contacts plating**: Gold over nickel plated

- **Shell endurance**:
  - Aluminum: 500 mating/unmating cycles
  - Passivated stainless steel: 1000 mating/unmating cycles

- **Vibration**:
  - 44 grms @125°C, 2 axes during 8 hours

- **Shock**:
  - 300g, 3 ms

### Electrical

- **Wire size**

<table>
<thead>
<tr>
<th>Layouts</th>
<th>Wire (AWG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>03-05; 05-06; 07-09</td>
<td>24-30</td>
</tr>
<tr>
<td>03-35; 05-35; 07-35</td>
<td>22-28</td>
</tr>
</tbody>
</table>

- **Test voltage (at sea level)**:
  - Size 22D: 1000 Vrms
  - Size 26: 400 Vrms

- **Contact resistance**:
  - Size 22D: <14.6 mΩ
  - Size 26: <16 mΩ

- **Contact rating**:
  - Size 22D: 5A
  - Size 26: 3A

- **Contact retention**:
  - Size 22D: 45N
  - Size 26: 30N

- **Shell to shell continuity (typical value)**

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Aluminum version</th>
<th>Stainless steel version</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>10 mΩ</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>60 mΩ</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **EMI**:
  - Aluminum: -70dB @ 1GHz
  - Passivated stainless steel: -55 dB @ 1Ghz

### Environmental

- **Temperature range**:
  - -55°C to +175°C

- **Water immersion**:
  - IP 67 on mated connector
  - 1 meter for 30 min minimum
  - > IP68 with appropriate cable termination

- **Salt spray**:
  - Zinc nickel: 500 hours
  - Nickel: 48 hours
  - Olive drab cadmium: 500 hours
  - Passivated stainless steel: 250 hours

### Resistance to fluids

- According to MIL-DTL-38999 standard
  - Gasoline: JP5 (OTAN F44)
  - Mineral hydraulic fluid: MIL-H-5606 (OTAN HS15)
  - Synthetic hydraulic fluid: Skydrol 500 B4

- Compatible with de-icing fluids containing potassium acetate
Shell types

- Plug
- Square flange receptacle (PC tail version available)
- Jam nut receptacle (PC tail version available)
- In line receptacle

For other configuration, please consult us.

Contact layouts

<table>
<thead>
<tr>
<th>Shell size</th>
<th>03</th>
<th>05</th>
<th>07</th>
</tr>
</thead>
<tbody>
<tr>
<td>03</td>
<td>05</td>
<td>35</td>
<td>06</td>
</tr>
<tr>
<td>05</td>
<td>35</td>
<td>06</td>
<td>09</td>
</tr>
<tr>
<td>07</td>
<td>09</td>
<td>35</td>
<td>09</td>
</tr>
</tbody>
</table>

Size 3: Marking on shell. Rear view of receptacle for male and female insulator. Opposite marking between plug and receptacle. Note: no marking on Jam Nut receptacle.

Sizes 5 and 7: Marking on insulator. Rear view of male insulator for plug and receptacle. Opposite marking between male and female insulator.

Ordering information

<table>
<thead>
<tr>
<th>Basic Series</th>
<th>8DA</th>
<th>0</th>
<th>03</th>
<th>05</th>
<th>P</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell type:</td>
<td></td>
<td>0</td>
<td>03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0: Square flange receptacle</td>
<td>8DA</td>
<td>0</td>
<td>03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1: In line receptacle</td>
<td></td>
<td>0</td>
<td>03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5: Plug with EMI ring (Size 5 &amp; size 7)</td>
<td>8DA</td>
<td>0</td>
<td>03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6: Plug without EMI ring (Size 3 only)</td>
<td></td>
<td>0</td>
<td>03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7: Jam nut receptacle</td>
<td></td>
<td>0</td>
<td>03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90: Square flange receptacle with PCB contacts</td>
<td>8DA</td>
<td>0</td>
<td>03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>97: Jam nut receptacle with PCB contacts</td>
<td></td>
<td>0</td>
<td>03</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Contact type:
- None: Standard crimp contacts
- C: Short PC tail
- L: Long PC tail (consult us)

Shell size: 03, 05, 07

Plating:
- Z: Black zinc nickel
- F: Nickel
- W: Olive drab cadmium
- K: Passivated stainless steel (only for sizes 05 & 07 with standard crimp contacts)

Contact layouts: See above

Contact type:
- P: Pin (Shell size 3 scoop proof only when pin contacts mounted in Type 6)
- S: Socket (Shell size 3 scoop proof only when socket contacts mounted in Types 0, 1 or 7) - not available for PCB version

Orientation: N, A - Consult us for B, C, D, E (see page 33)
Connector weights

Aluminum version - in gram ± 10 %

<table>
<thead>
<tr>
<th>Shell size &amp; layout</th>
<th>Plug</th>
<th>Square flange receptacle</th>
<th>Jam nut receptacle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without contacts</td>
<td>With crimp contacts</td>
<td>Without contacts</td>
</tr>
<tr>
<td>3-05</td>
<td>2.4</td>
<td>2.5</td>
<td>1.9</td>
</tr>
<tr>
<td>5-06</td>
<td>6</td>
<td>6.2</td>
<td>5.4</td>
</tr>
<tr>
<td>7-09</td>
<td>6.5</td>
<td>6.8</td>
<td>6</td>
</tr>
</tbody>
</table>

Dimensions

In line receptacle - Shell type 1

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Thread</th>
<th>A Max</th>
<th>B Max</th>
<th>C Max</th>
<th>ØD Max</th>
<th>E Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>M9</td>
<td>15.5</td>
<td>7</td>
<td>9.3</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>5/11&quot;-1P</td>
<td>23</td>
<td>8</td>
<td>-</td>
<td>13</td>
<td>6.1</td>
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<tr>
<td>7</td>
<td>1/2&quot;-1P</td>
<td>25</td>
<td>9.5</td>
<td>-</td>
<td>13.5</td>
<td>6.1</td>
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</tbody>
</table>

Note: All dimensions are in millimeters (mm)
Square flange receptacle - Shell type 0

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Thread</th>
<th>A Max</th>
<th>B Max</th>
<th>ØC Max</th>
<th>D Max</th>
<th>E Max</th>
<th>F Max</th>
<th>ØG Max</th>
<th>H Max</th>
<th>ØJ Max</th>
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<tr>
<td>3</td>
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<td>M9</td>
<td>15</td>
<td>5</td>
<td>6.8</td>
<td>2.5</td>
<td>15</td>
<td>10.5</td>
<td>10.5</td>
<td>9.5</td>
</tr>
<tr>
<td></td>
<td>3-35</td>
<td>M9</td>
<td>18</td>
<td>8</td>
<td>6.8</td>
<td>2.5</td>
<td>15</td>
<td>10.5</td>
<td>10.5</td>
<td>9.5</td>
</tr>
<tr>
<td>5</td>
<td>5/11&quot;-1P</td>
<td>23</td>
<td>10.5</td>
<td>8</td>
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<td>12.27</td>
<td>11.75</td>
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<td>10</td>
<td>6.8</td>
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<td>13.84</td>
<td>13.8</td>
<td>12.95</td>
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</tbody>
</table>

Square flange receptacle with PC tail contacts - Shell type 90

<table>
<thead>
<tr>
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<tbody>
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<td>03-05</td>
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<td>7.39</td>
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<td>05-06</td>
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<td>5.89</td>
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<tr>
<td>05-35</td>
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<td>-</td>
<td>5.87</td>
<td>6.9</td>
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<tr>
<td>07-09</td>
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<td>-</td>
<td>6.04</td>
<td>7</td>
</tr>
<tr>
<td>07-35</td>
<td>-</td>
<td>-</td>
<td>5.82</td>
<td>6.9</td>
</tr>
</tbody>
</table>

Shell design vary according to shell size.
For L contact (long PC tail) please consult us.
For coordinates information, please see p.33.

Note: All dimensions are in millimeters (mm)
### Jam nut receptacle - Shell type 7

**Shell size 3 and Shell size 5 & 7**

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Thread 1</th>
<th>Thread 2</th>
<th>A Max</th>
<th>B Max</th>
<th>C Max</th>
<th>ØD Max</th>
<th>E Max</th>
<th>ØF Max</th>
<th>G Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-05</td>
<td>M9</td>
<td>7/16&quot;28 UNEF 2A</td>
<td>18</td>
<td>4.5</td>
<td>3.2</td>
<td>18</td>
<td>14</td>
<td>11.3</td>
<td>10.6</td>
</tr>
<tr>
<td>3-35</td>
<td>M9</td>
<td>7/16&quot;28 UNEF 2A</td>
<td>20</td>
<td>6.5</td>
<td>3.2</td>
<td>18</td>
<td>14</td>
<td>11.3</td>
<td>10.6</td>
</tr>
<tr>
<td>5</td>
<td>5/11&quot;-1P</td>
<td>1/2&quot;28 UNEF 2A</td>
<td>27</td>
<td>11</td>
<td>3.2</td>
<td>19.5</td>
<td>16</td>
<td>12.8</td>
<td>12.3</td>
</tr>
<tr>
<td>7</td>
<td>1/2&quot;-1P</td>
<td>9/16&quot;24 UNEF 2A</td>
<td>27</td>
<td>11.5</td>
<td>3.2</td>
<td>21</td>
<td>17</td>
<td>14.5</td>
<td>13.8</td>
</tr>
</tbody>
</table>

**Panel cut out**

Note: All dimensions are in millimeters (mm)

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### Jam nut receptacle with PC tail contacts - Shell type 97

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>03-05</td>
<td>18.5</td>
<td>4.2</td>
<td>5.87</td>
<td>6.97</td>
</tr>
<tr>
<td>03-35</td>
<td>20.5</td>
<td>6.2</td>
<td>5.19</td>
<td>6.02</td>
</tr>
<tr>
<td>05-06</td>
<td>-</td>
<td>-</td>
<td>4.86</td>
<td>5.95</td>
</tr>
<tr>
<td>05-35</td>
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<td>4.82</td>
<td>5.85</td>
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<tr>
<td>07-09</td>
<td>-</td>
<td>-</td>
<td>4.99</td>
<td>5.95</td>
</tr>
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<td>07-35</td>
<td>-</td>
<td>-</td>
<td>4.77</td>
<td>5.85</td>
</tr>
</tbody>
</table>

Shell design vary according to shell size.
For L contact (long PC tail) please consult us.
For coordinates information, please see p. 33.
### Technical features

#### Mechanical
- **Shell:** Aluminum alloy
- **Shell plating:**
  - Aluminum:
  - Zinc nickel (RoHS)
  - Nickel (RoHS)
  - Olive drab cadmium
- **Insulator:** Thermoplastic
- **Contact body:** Copper alloy
- **Contacts plating:** Gold over nickel plated
- **Shell endurance:** Aluminum: 500 mating/unmating cycles
- **Vibration:** 30 grms ambient, 2 axes during 8 hours
- **Shock:** 300g, 3 ms

#### Electrical
- **Wire size**

<table>
<thead>
<tr>
<th>Layouts</th>
<th>Wire (AWG)</th>
<th>03-05; 05-06; 07-09</th>
<th>03-35; 05-35; 07-35</th>
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</thead>
<tbody>
<tr>
<td>03-05; 05-06; 07-09</td>
<td>24-30</td>
<td>22-28</td>
<td></td>
</tr>
</tbody>
</table>

- **Test voltage (at sea level):**
  - Size 22D: 1000 Vrms
  - Size 26: 400 Vrms

- **Contact resistance:**
  - Size 22D: <14.6 mΩ
  - Size 26: <16 mΩ

- **Contact rating:**
  - Size 22D: 5A
  - Size 26: 3A

- **Contact retention:**
  - Size 22D: 45N
  - Size 26: 30N

- **Shell to shell continuity (typical value):**

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Aluminum version</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>10 mΩ</td>
</tr>
</tbody>
</table>

- **EMI:**
  - Aluminum: -70dB @ 1GHz

#### Environmental
- **Temperature range:** -55°C to +175°C
- **Water immersion:**
  - IP 67 on mated connector
  - 1 meter for 30 min minimum
  - > IP68 with appropriate cable termination
- **Salt spray:**
  - Zinc nickel: 500 hours
  - Nickel: 48 hours
  - Olive drab cadmium: 500 hours

#### Resistance to fluids
- **According to MIL-DTL-38999 standard**
  - Gasoline: JP5 (OTAN F44)
  - Mineral hydraulic fluid: MIL-H-5606 (OTAN H515)
  - Synthetic hydraulic fluid: Skydrol 500 B4
- **Compatible with de-icing fluids containing potassium acetate**

---

### Description
- **A compact solution**
  - The smallest connector available on the market (shell size 3)
  - Break away: quick disconnect
  - Integrated backshell:
    - Easy to wire and handle
    - Compatible with heat shrink boot and braid retention band
    - Compliant with overmolding
- **A versatile solution**
  - 3 shells sizes: 3, 5, 7
  - Plug; In line and jam nut receptacle
  - Crimp & PC tails contacts (on request)
  - Removable contacts #22D & #26
  - 6 keyings
- **Harsh environment-resistant solution**
  - Scoop Proof (when sockets mounted into receptacle only)
  - Cavity to cavity sealed with interfacial seal and grommet
  - Fluid resistant

---

### SOURIAU
Shell types

For other configuration or PC tail version, please consult us.

Contact layouts

<table>
<thead>
<tr>
<th>Shell type</th>
<th>Contact Layouts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Plug In line receptacle</td>
</tr>
<tr>
<td>6</td>
<td>Plug</td>
</tr>
<tr>
<td>7</td>
<td>Jam nut receptacle</td>
</tr>
</tbody>
</table>

Shell size: 03, 05, 07

Plating:
- Z: Black zinc nickel
- F: Nickel
- W: Olive drab cadmium

Contact layouts: See above

Contact type:
- P: Pin
- S: Socket (Scoop proof only when socket contacts mounted in Type 1 & Type 7)

Orientation: N, A - Consult us for B, C, D, E (see page 33)

Ordering information

<table>
<thead>
<tr>
<th>Basic Series</th>
<th>Shell type</th>
<th>8BA</th>
<th>1</th>
<th>03</th>
<th>W</th>
<th>05</th>
<th>P</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>8BA Series</td>
<td>1: In line receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6: Plug</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7: Jam nut receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shell size &amp; layout</th>
<th>Plug</th>
<th>In line receptacle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without contacts</td>
<td>With crimp contacts</td>
</tr>
<tr>
<td>3-05</td>
<td>1.7</td>
<td>1.8</td>
</tr>
<tr>
<td>5-06</td>
<td>2.6</td>
<td>2.8</td>
</tr>
<tr>
<td>7-09</td>
<td>4.3</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Connector weights

Aluminum version - in gram ±10 %
Dimensions

**Plug - Shell type 6**

<table>
<thead>
<tr>
<th>Shell size</th>
<th>A</th>
<th>B Max</th>
<th>C Max</th>
<th>ØD Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>10.3</td>
<td>18.4</td>
<td>6.1</td>
<td>7.3</td>
</tr>
<tr>
<td>5</td>
<td>12.2</td>
<td>19.4</td>
<td>6.1</td>
<td>8.9</td>
</tr>
<tr>
<td>7</td>
<td>14.3</td>
<td>24</td>
<td>6.1</td>
<td>10</td>
</tr>
</tbody>
</table>

**In line receptacle - Shell type 1**

<table>
<thead>
<tr>
<th>Shell size</th>
<th>A</th>
<th>B Max</th>
<th>C Max</th>
<th>ØD Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>11</td>
<td>17.7</td>
<td>6.1</td>
<td>7.3</td>
</tr>
<tr>
<td>5</td>
<td>12.8</td>
<td>19.1</td>
<td>6.1</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>14.3</td>
<td>24</td>
<td>6.1</td>
<td>10</td>
</tr>
</tbody>
</table>

**Jam nut receptacle - Shell type 7**

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Thread</th>
<th>A Max</th>
<th>B Max</th>
<th>C Max</th>
<th>D</th>
<th>E Max</th>
<th>ØF Max</th>
<th>ØG Max</th>
<th>ØH</th>
<th>J</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>7/16&quot;28 UNEF 2A</td>
<td>10.55</td>
<td>17.7</td>
<td>3.2</td>
<td>1.75±0.3</td>
<td>6.1</td>
<td>7.3</td>
<td>17.5</td>
<td>11.3±0.1</td>
<td>10.6±0.05</td>
</tr>
<tr>
<td>5</td>
<td>1/2&quot;28 UNEF 2A</td>
<td>12.2</td>
<td>22.5</td>
<td>3.2</td>
<td>1.75±0.3</td>
<td>6.1</td>
<td>8.9</td>
<td>19.5</td>
<td>12.8±0.1</td>
<td>12.3±0.05</td>
</tr>
<tr>
<td>7</td>
<td>9/16&quot;24 UNEF 2A</td>
<td>13.6</td>
<td>24</td>
<td>3.2</td>
<td>1.75±0.3</td>
<td>6.1</td>
<td>10</td>
<td>21</td>
<td>14.5±0.1</td>
<td>13.8±0.05</td>
</tr>
</tbody>
</table>

Note: All dimensions are in millimeters (mm)
Description

• **A compact solution**
  - The smallest connector available on the market (shell size 3)
  - Miniaturization of MIL-DTL-38999 Series I
  - Quick bayonet locking
  - Integrated backshell:
    . Easy to wire and handle
    . Compatible with heat shrink boot and braid retention band
    . Compliant with overmolding

• **A versatile solution**
  - 3 shell sizes (3, 5, 7), 5 shell types
  - 2 materials, 4 platings
  - Crimp & PC tails contacts
  - Removable contacts #22D & #26
  - 6 keyings

• **Harsh environment-resistant solution**
  - Scoop Proof
  - Cavity to cavity sealed with interfacial seal and grommet
  - Fluid resistant

Technical features

**Mechanical**

- **Shell:**
  - Aluminum alloy
  - Passivated stainless steel (for size 5 & 7)

- **Shell plating:**
  - Aluminum:
    . Zinc nickel (RoHS)
    . Nickel (RoHS)
    . Olive drab cadmium
  - Passivated stainless steel (RoHS)

- **Insulator:** Thermoplastic

- **Contact body:** Copper alloy

- **Contacts plating:** Gold over nickel plated

- **Shell endurance:**
  - Aluminum: 250 mating/unmating cycles
  - Passivated stainless steel: 500 mating/unmating cycles

- **Vibration:**
  - 30 grms ambient, 2 axes during 8 hours

**Electrical**

- **Wire size**

<table>
<thead>
<tr>
<th>Layouts</th>
<th>Wire (AWG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>03-05; 05-06; 07-09</td>
<td>24-30</td>
</tr>
<tr>
<td>03-35; 05-35; 07-35</td>
<td>22-28</td>
</tr>
</tbody>
</table>

- **Test voltage (at sea level):**
  - Size 22D: 1000 Vrms
  - Size 26: 400 Vrms

- **Contact resistance:**
  - Size 22D: <14.6 mΩ
  - Size 26: <16 mΩ

- **Contact rating:**
  - Size 22D: 5A
  - Size 26: 3A

- **Contact retention:**
  - Size 22D: 45N
  - Size 26: 30N

- **Shell to shell continuity (typical value):**

<table>
<thead>
<tr>
<th>Shell size</th>
<th>All versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>250 mΩ</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

- **EMI:** -55dB @ 1GHz

**Environmental**

- **Temperature range:**
  - -55°C to +175°C

- **Water immersion:**
  - IP 67 on mated connector
  - 1 meter for 30 min minimum
  - > IP68 with appropriate cable termination

- **Salt spray:**
  - Zinc nickel: 500 hours
  - Nickel: 48 hours
  - Olive drab cadmium: 500 hours
  - Passivated stainless steel: 250 hours

**Resistance to fluids**

- **According to MIL-DTL-38999 standard**
  - Gasoline: JP5 (OTAN F44)
  - Mineral hydraulic fluid: MIL-H-5606 (OTAN H515)
  - Synthetic hydraulic fluid: Skydrol 500 B4

- **Compatible with de-icing fluids containing potassium acetate**
Shell types

<table>
<thead>
<tr>
<th>Plug</th>
<th>In line receptacle</th>
<th>Square flange receptacle (PC tail version available)</th>
<th>Oval flange receptacle (PC tail version available)</th>
<th>Jam nut receptacle (PC tail version available)</th>
</tr>
</thead>
</table>

For other configuration, please consult us.

Contact layouts

<table>
<thead>
<tr>
<th>03</th>
<th>05</th>
<th>07</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="03 layout" /></td>
<td><img src="image" alt="05 layout" /></td>
<td><img src="image" alt="07 layout" /></td>
</tr>
</tbody>
</table>

Ordering information

<table>
<thead>
<tr>
<th>Basic Series</th>
<th>8LTA</th>
<th>0</th>
<th>03</th>
<th>W</th>
<th>05</th>
<th>P</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell type:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0: Square flange receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1: In line receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2: Oval flange receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6: Plug without EMI ring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7: Jam nut receptacle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90: Square flange receptacle with PCB contacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>92: Oval flange receptacle with PCB contacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>97: Jam nut receptacle with PCB contacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Contact type:

- **None**: Standard crimp contacts
- **C**: Short PC tail
- **L**: Long PC tail (consult us)

Shell size: 03, 05, 07

Plating:

- **Z**: Black zinc nickel
- **F**: Nickel
- **W**: Olive drab cadmium
- **K**: Passivated stainless steel (only for sizes 05 & 07 with standard crimp contacts)

Contact layouts: See above

Contact type:

- **P**: Pin
- **S**: Socket - not available for PCB version

Orientation: **N, A** - Consult us for **B, C, D, E** (see page 33)
Connector weights

Aluminum version - in gram ±10 %

<table>
<thead>
<tr>
<th>Shell size &amp; layout</th>
<th>Plug</th>
<th>In line receptacle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without contacts</td>
<td>With crimp contacts</td>
</tr>
<tr>
<td>3-05</td>
<td>1.7</td>
<td>1.8</td>
</tr>
<tr>
<td>5-06</td>
<td>2.6</td>
<td>2.8</td>
</tr>
<tr>
<td>7-09</td>
<td>4.3</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Dimensions

Plug - Shell type 6

<table>
<thead>
<tr>
<th>Shell size</th>
<th>A Max</th>
<th>B Max</th>
<th>C Max</th>
<th>ØD Max</th>
<th>ØE Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-05</td>
<td>16.2</td>
<td>2.215</td>
<td>4.6</td>
<td>7.2</td>
<td>10.5</td>
</tr>
<tr>
<td>3-35</td>
<td>17.5</td>
<td>2.215</td>
<td>5.9</td>
<td>7.2</td>
<td>10.5</td>
</tr>
<tr>
<td>05</td>
<td>18.4</td>
<td>2.515</td>
<td>4.9</td>
<td>8.55</td>
<td>13.5</td>
</tr>
<tr>
<td>07</td>
<td>22.06</td>
<td>3.6515</td>
<td>6.35</td>
<td>10.3</td>
<td>15.06</td>
</tr>
</tbody>
</table>

In line receptacle - Shell type 1

<table>
<thead>
<tr>
<th>Shell size</th>
<th>A Max</th>
<th>B Max</th>
<th>C Max</th>
<th>ØD Max</th>
<th>ØE Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-05</td>
<td>16.2</td>
<td>2.215</td>
<td>4.6</td>
<td>7.2</td>
<td>8.3</td>
</tr>
<tr>
<td>3-35</td>
<td>17.5</td>
<td>2.215</td>
<td>5.9</td>
<td>7.2</td>
<td>8.3</td>
</tr>
<tr>
<td>5</td>
<td>18.2</td>
<td>2.515</td>
<td>4.9</td>
<td>8.55</td>
<td>10.15</td>
</tr>
<tr>
<td>7</td>
<td>23.6</td>
<td>41515</td>
<td>7.5</td>
<td>10.3</td>
<td>11.6</td>
</tr>
</tbody>
</table>

Note: All dimensions are in millimeters (mm)
**Square flange receptacle - Shell type 0**

<table>
<thead>
<tr>
<th>Shell size</th>
<th>ØA Max</th>
<th>B Max</th>
<th>C Max</th>
<th>ØD Max</th>
<th>E Max</th>
<th>F Max</th>
<th>G Max</th>
<th>ØH Max</th>
<th>ØJ Max</th>
<th>ØK Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-05</td>
<td>8.3</td>
<td>16.2</td>
<td>8.7</td>
<td>7.2</td>
<td>4.6</td>
<td>15.5</td>
<td>10.8</td>
<td>2.7±0.1</td>
<td>9.3±0.1</td>
<td>3.1±0.1</td>
</tr>
<tr>
<td>3-35</td>
<td>8.3</td>
<td>17.5</td>
<td>8.7</td>
<td>7.2</td>
<td>5.9</td>
<td>15.5</td>
<td>10.8</td>
<td>2.7±0.1</td>
<td>9.3±0.1</td>
<td>3.1±0.1</td>
</tr>
<tr>
<td>5</td>
<td>10.15</td>
<td>18.2</td>
<td>9.05</td>
<td>8.55</td>
<td>4.9</td>
<td>16</td>
<td>11.45</td>
<td>2.7±0.1</td>
<td>12±0.1</td>
<td>3.1±0.1</td>
</tr>
<tr>
<td>7</td>
<td>11.6</td>
<td>23.06</td>
<td>10.8</td>
<td>10.3</td>
<td>7.5</td>
<td>18</td>
<td>12.7</td>
<td>2.7±0.1</td>
<td>13±0.1</td>
<td>3.1±0.1</td>
</tr>
</tbody>
</table>

*Shell design vary according to shell size.*

*For L contact (long PC tail) please consult us.*

*For coordinates information, please see p.33.*

**Square flange receptacle with PC tail contacts - Shell type 90**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>03-05</td>
<td>16.4</td>
<td>6.35</td>
<td>8.75</td>
<td>9.49</td>
<td>1.65</td>
</tr>
<tr>
<td>03-35</td>
<td>17.7</td>
<td>7.75</td>
<td>7.40</td>
<td>8.19</td>
<td>1.65</td>
</tr>
<tr>
<td>05-06</td>
<td>9.25</td>
<td>7.85</td>
<td>6.54</td>
<td>7.34</td>
<td>1.80</td>
</tr>
<tr>
<td>05-35</td>
<td>9.25</td>
<td>7.85</td>
<td>6.47</td>
<td>7.19</td>
<td>1.80</td>
</tr>
<tr>
<td>07-09</td>
<td>13.05</td>
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<td>5.80</td>
<td>6.62</td>
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</tr>
<tr>
<td>07-35</td>
<td>13.05</td>
<td>7.35</td>
<td>5.53</td>
<td>6.52</td>
<td>2.35</td>
</tr>
</tbody>
</table>

*Shell design vary according to shell size.*

*For L contact (long PC tail) please consult us.*

*For coordinates information, please see p.33.*

**Note:** All dimensions are in millimeters (mm)
**Oval flange receptacle - Shell type 2**

<table>
<thead>
<tr>
<th>Shell size</th>
<th>ØA Max</th>
<th>B Max</th>
<th>C Max</th>
<th>ØD Max</th>
<th>E Max</th>
<th>F Max</th>
<th>G Max</th>
<th>ØH Max</th>
<th>ØJ Max</th>
<th>K Max</th>
<th>ØL Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-05</td>
<td>8.3</td>
<td>16.2</td>
<td>8.7</td>
<td>7.2</td>
<td>4.6</td>
<td>15.3±0.2</td>
<td>10.5±0.1</td>
<td>2.8</td>
<td>9.3±0.1</td>
<td>15.3±0.2</td>
<td>3.1±0.1</td>
</tr>
<tr>
<td>3-35</td>
<td>8.3</td>
<td>17.5</td>
<td>8.7</td>
<td>7.2</td>
<td>5.9</td>
<td>15.3±0.2</td>
<td>10.5±0.1</td>
<td>2.8</td>
<td>9.3±0.1</td>
<td>15.3±0.2</td>
<td>3.1±0.1</td>
</tr>
<tr>
<td>5</td>
<td>10.15</td>
<td>18.2</td>
<td>9.05</td>
<td>8.55</td>
<td>4.9</td>
<td>16.2±0.2</td>
<td>13±0.1</td>
<td>2.7</td>
<td>12±0.1</td>
<td>16.2±0.2</td>
<td>3.1±0.1</td>
</tr>
<tr>
<td>7</td>
<td>11.6</td>
<td>23.06</td>
<td>10.8</td>
<td>10.3</td>
<td>7.5</td>
<td>18±0.2</td>
<td>14.8±0.1</td>
<td>2.7</td>
<td>13±0.1</td>
<td>18±0.2</td>
<td>3.1±0.1</td>
</tr>
</tbody>
</table>

Shell design vary according to shell size.
For L contact (long PC tail) please consult us.
For coordinates information, please see p.33.

**Oval flange receptacle with PC tail contacts - Shell type 92**

<table>
<thead>
<tr>
<th>Layout</th>
<th>A Max</th>
<th>B Max</th>
<th>C Min</th>
<th>C Max</th>
<th>D Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>03-05</td>
<td>16.2</td>
<td>6.35</td>
<td>8.75</td>
<td>9.49</td>
<td>-</td>
</tr>
<tr>
<td>03-35</td>
<td>17.5</td>
<td>7.75</td>
<td>7.4</td>
<td>8.19</td>
<td>-</td>
</tr>
<tr>
<td>05-06</td>
<td>9.25</td>
<td>7.85</td>
<td>6.54</td>
<td>7.34</td>
<td>1.80</td>
</tr>
<tr>
<td>05-35</td>
<td>9.25</td>
<td>7.85</td>
<td>6.47</td>
<td>7.19</td>
<td>1.80</td>
</tr>
<tr>
<td>07-09</td>
<td>13.05</td>
<td>7.35</td>
<td>5.8</td>
<td>6.62</td>
<td>2.35</td>
</tr>
<tr>
<td>07-35</td>
<td>13.05</td>
<td>7.35</td>
<td>5.53</td>
<td>6.52</td>
<td>2.35</td>
</tr>
</tbody>
</table>

Shell design vary according to shell size.
For L contact (long PC tail) please consult us.
For coordinates information, please see p.33.

Note: All dimensions are in millimeters (mm)
### Jam nut receptacle - Shell type 7

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Thread</th>
<th>A Max</th>
<th>ØB Max</th>
<th>C Max</th>
<th>D Max</th>
<th>ØE Max</th>
<th>F Max</th>
<th>ØG Max</th>
<th>H Max</th>
<th>ØJ Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>7/16&quot;28 UNEF 2A</td>
<td>10.3</td>
<td>8.3</td>
<td>16.2</td>
<td>2.6</td>
<td>7.8</td>
<td>1 to 3.2</td>
<td>17.3</td>
<td>11.3&lt;sup&gt;±0.1&lt;/sup&gt;</td>
<td>12&lt;sup&gt;±0.1&lt;/sup&gt;</td>
</tr>
<tr>
<td>3-35</td>
<td>7/16&quot;28 UNEF 2A</td>
<td>10.3</td>
<td>8.3</td>
<td>17.5</td>
<td>2.6</td>
<td>7.8</td>
<td>1 to 3.2</td>
<td>17.3</td>
<td>11.3&lt;sup&gt;±0.1&lt;/sup&gt;</td>
<td>12&lt;sup&gt;±0.1&lt;/sup&gt;</td>
</tr>
<tr>
<td>5</td>
<td>1/2&quot;28 UNEF 2A</td>
<td>11.7</td>
<td>10.5</td>
<td>25.9</td>
<td>7.7</td>
<td>8.55</td>
<td>1 to 3.2</td>
<td>19.5</td>
<td>13&lt;sup&gt;±0.1&lt;/sup&gt;</td>
<td>13.5&lt;sup&gt;±0.1&lt;/sup&gt;</td>
</tr>
<tr>
<td>7</td>
<td>9/16&quot;24 UNEF 2A</td>
<td>13.4</td>
<td>11.6</td>
<td>33.55</td>
<td>10.4</td>
<td>10.3</td>
<td>1 to 3.2</td>
<td>20.8</td>
<td>14.4&lt;sup&gt;±0.1&lt;/sup&gt;</td>
<td>15.2&lt;sup&gt;±0.1&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

### Jam nut receptacle with PC tail contacts - Shell type 97

<table>
<thead>
<tr>
<th>Layout</th>
<th>A Max.</th>
<th>Short PC tail C</th>
<th>Long PC tail L</th>
</tr>
</thead>
<tbody>
<tr>
<td>03-05</td>
<td>14.4</td>
<td>6.15</td>
<td>7.04</td>
</tr>
<tr>
<td>03-35</td>
<td>15.7</td>
<td>4.8</td>
<td>5.7</td>
</tr>
<tr>
<td>05-06</td>
<td>16.4</td>
<td>3.54</td>
<td>4.52</td>
</tr>
<tr>
<td>05-35</td>
<td>16.4</td>
<td>3.42</td>
<td>4.33</td>
</tr>
<tr>
<td>07-09</td>
<td>21.3</td>
<td>4.05</td>
<td>5.07</td>
</tr>
<tr>
<td>07-35</td>
<td>21.3</td>
<td>3.79</td>
<td>4.93</td>
</tr>
</tbody>
</table>

Shell design vary according to shell size. For coordinates information, please see p.33.

---

Note: All dimensions are in millimeters (mm)
8DA, 8BA & 8LTA Series

Common Section

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- Gaskets ....................................................................... 31
- Aluminum caps .......................................................... 32
- Orientations ............................................................... 33
- Coordinates information .............................................. 33
Crimp contacts

<table>
<thead>
<tr>
<th>Contact size</th>
<th>Contact type</th>
<th>Part number</th>
<th>Contact Ø (mm)</th>
<th>Conductor section</th>
<th>External Ø over insulator (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>#26</td>
<td>Pin</td>
<td>-</td>
<td>8599-1001</td>
<td>0.50</td>
<td>30 24 0.095 0.24 0.60 0.83</td>
</tr>
<tr>
<td></td>
<td>Socket</td>
<td>-</td>
<td>8599-1002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#22D</td>
<td>Pin</td>
<td>M39029/58 360</td>
<td>8599-0702 JJ</td>
<td>0.76</td>
<td>28 22 0.095 0.38 0.71 1.37</td>
</tr>
<tr>
<td></td>
<td>Socket</td>
<td>M39029/57 354</td>
<td>8599-0710 900</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Crimping tools

<table>
<thead>
<tr>
<th>Contact size</th>
<th>Contact type</th>
<th>Plier M22520/2-01 (SOURIAU 8476-01)</th>
<th>Locator Part number</th>
<th>MIL Spec</th>
<th>SOURIAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>#26</td>
<td>Pin</td>
<td>-</td>
<td>640-088</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socket</td>
<td>-</td>
<td>640-089</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#22D</td>
<td>Pin</td>
<td>M22520/2-09</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socket</td>
<td>M22520/2-06</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Insertion & extraction tools

<table>
<thead>
<tr>
<th>Contact size</th>
<th>Material</th>
<th>Part number</th>
<th>Color</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Insertion</td>
<td>Extraction</td>
</tr>
<tr>
<td>#26</td>
<td>Plastic</td>
<td>85990444900</td>
<td>Red</td>
<td>Blue</td>
</tr>
<tr>
<td>#22D</td>
<td>Plastic</td>
<td>M81969/14-01</td>
<td>Green</td>
<td>White</td>
</tr>
</tbody>
</table>
Recommended accessories for wiring

Braid, straight heat shrink boot, elbow heat shrink boot, shield band, ...

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Shield band (recommended)</th>
<th>Hand banding tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>3, 5 &amp; 7</td>
<td>M85049/128-8 (individually coiled)</td>
<td>85930339A</td>
</tr>
<tr>
<td></td>
<td>M85049/128-7 (not individually coiled)</td>
<td></td>
</tr>
</tbody>
</table>

To order braid, boot (e.g. VG95343T type) or other accessories, please contact your SOURIAU distributor.

Shield band dimensions

<table>
<thead>
<tr>
<th>Shield band</th>
<th>M85049/128-7 or M85049/128-8 (Shell size 3, 5 &amp; 7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>206.2±1.5</td>
</tr>
<tr>
<td>B</td>
<td>2.92</td>
</tr>
<tr>
<td>C</td>
<td>0.38</td>
</tr>
</tbody>
</table>

Gaskets

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8DA square flange receptacle</td>
</tr>
<tr>
<td>3</td>
<td>8DA0G03</td>
</tr>
<tr>
<td>5</td>
<td>8DA0G05</td>
</tr>
<tr>
<td>7</td>
<td>8DA0G07</td>
</tr>
</tbody>
</table>

Note: All dimensions are in millimeters (mm)
Aluminum caps

Basic Series:
- 8DAC: Cap for 8DA Series
- 8LTAC: Cap for 8LTA Series

Cap type:
- 32: Cap for plug
- 33: Cap for receptacle

Plating:
- Z: Black zinc nickel
- F: Nickel
- W: Olive drab cadmium

Shell size:
- 03, 05, 07

Style:
- N: Ring
- R: Eyelet

Dimensions

<table>
<thead>
<tr>
<th>Shell size</th>
<th>A Plug</th>
<th>A Recep.</th>
<th>B</th>
<th>C Plug</th>
<th>C Recep.</th>
<th>D Plug</th>
<th>D Recep.</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>03</td>
<td>14</td>
<td>14.3</td>
<td>11.5</td>
<td>11</td>
<td>12.5</td>
<td>14.1</td>
<td>12.1</td>
<td>13.5</td>
<td>11.5</td>
<td>10.4</td>
</tr>
<tr>
<td>05</td>
<td>15.8</td>
<td>15.8</td>
<td>13.5</td>
<td>13</td>
<td>15</td>
<td>13.7</td>
<td>13.9</td>
<td>14.5</td>
<td>13</td>
<td>13.4</td>
</tr>
<tr>
<td>07</td>
<td>15.8</td>
<td>15.8</td>
<td>14.5</td>
<td>14</td>
<td>17</td>
<td>14</td>
<td>13.1</td>
<td>15.5</td>
<td>14.5</td>
<td>15.05</td>
</tr>
</tbody>
</table>

Note: for other lanyard length please consult us.

Note: All dimensions are in millimeters (mm)
### Orientations

Viewed from front face of plug

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Angles</th>
<th>N</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>X°</td>
<td>153</td>
<td>51</td>
<td>102</td>
<td>204</td>
<td>255</td>
<td>306</td>
</tr>
<tr>
<td>5 &amp; 7</td>
<td>Y°</td>
<td>145</td>
<td>75</td>
<td>120</td>
<td>120</td>
<td>155</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Z°</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>180</td>
</tr>
</tbody>
</table>

Consult us for orientations B, C, D, E.

### Coordinates information

8DA & 8LTA PCB hole drilling and position information.

<table>
<thead>
<tr>
<th>Size 3: Marking on shell. Rear view of receptacle for male and female insulator. Opposite marking between plug and receptacle. Note: no marking on Jam Nut receptacle. Sizes 5 and 7: Marking on insulator. Rear view of male insulator for plug and receptacle. Opposite marking between male and female insulator.</th>
<th>03</th>
<th>05</th>
<th>07</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td>5#26</td>
<td>06</td>
<td>6#26</td>
</tr>
<tr>
<td>Ctc</td>
<td>X</td>
<td>Y</td>
<td>Ctc</td>
</tr>
<tr>
<td>1</td>
<td>0.00</td>
<td>1.70</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1.38</td>
<td>0.45</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>0.85</td>
<td>-1.18</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>-0.85</td>
<td>-1.18</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>-1.38</td>
<td>0.45</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>1.47</td>
<td>0.85</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>2.05</td>
<td>0.85</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>0.85</td>
<td>2.05</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>0.00</td>
<td>0.00</td>
<td>9</td>
</tr>
</tbody>
</table>
Range Extension

- 8D integrated backshell ................................................................. 36
- micro38999 with ELIO® contact ....................................................... 36
- 8STA Series .................................................................................. 37
- microComp® Series ........................................................................ 37
- Push-pull connectors ..................................................................... 38
- Box mount interconnect solutions .................................................. 38
**8D Integrated Backshell**

Plug with integrated backshell: all the features and the benefits of 38999 Series III connectors now ready to use.

Embedded backshell:
- Space and time saving. Single piece backshell and connector.
- Better electrical continuity.
- Lighter than with standard backshell.
- Easier supply chain.

EMI backshell:
- Shield band compatible.
- Overmolding best solution.

Flexibility:
- All Series III layouts developed by SOURIAU available

Black zinc nickel:
- A robust QPL 500 hour finish (RoHS) backward compatible with cadmium receptacle.
- All other standard plating available (Ni, Cd).

---

**micro38999 with ELIO® Contact**

The SOURIAU fiber optic ELIO® is the favorite Airbus butt-joint solution and is recognized as a world-wide standard. SOURIAU commits to providing a full support to its customers to find a reliable and secured solution, from the design phase to the maintenance phase.

Rugged size 5 circular connector:
- Threaded coupling with anti decoupling device.
- Bayonet coupling.
- Vibration and shock proof.
- Harsh -55°C to +150°C.
- User friendly ELIO® contact.

Silica fiber:
- 9/125,50/125 or 62/125,100/140,200/230.

POF fiber:
- 1000/1500 MOSTPOF.

---

See «38999 Series III Integrated Backshell» Datasheet on www.souriau.com

See our fiber optic dedicated webpage: www.souriau.com
8STA Series circular connectors are derived from international military specifications MIL-DTL-38999 and JN1003. Dedicated to Motorsport markets, these connectors are designed to withstand high levels of shock and vibration in harsh environments.

The world smallest and most popular connector:
- 8STA Series Size 02.
- Miniature lightweight connector.
- Ideal for areas where space is a premium.

Versatility:
- Removable crimp contacts.
- Available with PCB contacts.

User friendly:
- Quick bayonet locking.
- Integrated backshell
- Visual color indication when mated.
- Up to 7 color coded keyway orientations.

microComp® Series

To respond to miniaturization and weight saving trends in aeronautical and defense applications SOURIAU has developed an innovative high density connector range.

Very light & high density:
- Shell in composite (or aluminum).
- Up to 66% lighter than HD D-Sub.
- Very high density up to 40% smaller than HD D-Sub.

Excellent features:
- With crimp removable contacts for wire AWG 24 to 28
- Temperature up to 175°C
- High vibration and shock withstanding
- Standard MIL-STD 83513 accessories
- Compatible with high speed data rates (Gigabit Ethernet...)

Quick connect version for harsh environment:
- 104 contacts push-push
**Push-Pull Connectors**

SOURIAU Push Pull connectors are suitable for high reliability and high quality applications where a simple yet fast method to connect/disconnect is required. Ideal for use in areas with limited space where endurance is the priority.

**JBX Series:**
- Push-pull connectors designed for use in tight spaces where ergonomics, durability, high density and aesthetics are required.

**JDX Series:**
- Breakaway connectors ideally suited for the most demanding environments and applications that require an emergency release coupler mechanism.

**JKX Series:**
- Environmentally sealed push pull connector for use in outdoor applications.

See our Push-Pull Connectors dedicated webpage: [www.souriau.com](http://www.souriau.com)

---

**Box Mount Interconnect Solutions**

**Box Interconnect Solutions: Inside/Outside. Anything you need - we can do!**

**PCB terminations:**
- with many lengths and different types of plating.

**Shape of connector can be adapted:**
- to meet the board application as double flange receptacles.

**Receptacles with short shell:**
- to minimize space inside the box.

**Any customized design:**
- to make box mount easier when space is a constraint.

**Blindmate/hermetic/thin panel assembly solutions...**

See «Box Mount Interconnect Solutions» catalog on [www.souriau.com](http://www.souriau.com)
Reliable People, Reliable Solutions