SOURIAU offers now robust and reliable High Density connectors as extension of 38999 Series I & Series III.

- **7 shell sizes available**
  
  Provides flexibility according to your application. From shell size 03 to 15.

- **A reliable and robust solution**

  Testing according to 38999 MIL specification.

- **RoHS**

  Environmental friendly black zinc nickel version.

- **PCB pin and socket contacts**

  Space and weight saving for box design. High Density = 100% more contacts!

  **Example:**

  - 13-35
  - 22 contacts #22D
  - 13-43
  - 43 contacts #26
### Technical features

#### Mechanical
- **Shell:**
  - 8LT, 8DA, 8BA & 8LTA: Aluminium
  - 8D: Aluminium, Composite, Stainless steel
- **Shell palting:**
  - 8LT, 8DA, 8BA & 8LTA Aluminium:
    - Nickel (F)
    - Black zinc nickel (Z)
    - Cadmium olive drab: (B: 8LT)
      - (W: 8DA, 8BA, 8LTA)
  - 8D Aluminum:
    - Cadmium olive drab (W)
    - Nickel (F)
    - Black zinc nickel (Z)
  - 8D Composite:
    - Cadmium olive drab (J)
    - Nickel (M)
- **Insulator:** Thermoplastic
- **Seal:** Liquid Silicone rubber
- **Contact:** Copper alloy
- **Contact plating:** Gold
- **Endurance:** 500 matings/unmatings
- **Shock & Vibration:** According to 38999 specification

#### Electrical
- **Contact resistance:**
  - Size 26: 16 mΩ
- **Insulation resistance:**
  - ≥5000 mΩ (at 500Vdc)
- **Contact rating:**
  - Size 26: 3Amp
- **Shell continuity:**
  - Please see SOURIAU catalogs

#### Environmental
- **Temperature range:**
  - -55°C to +175°C
  - -55°C to +200°C (Nickel version)
- **Sealing mated connectors:**
  - IP 67 (1 metre for 30 min minimum)
- **Salt spray:** Please see Souriau catalogs

### Description
- **Derived from standards:**
  - MIL-DTL-38999 Series I & III (8LT & 8D)
- **100% scoop proof**
- **Available in 7 shell sizes**
- **Contacts #26 for cable AWG 26 to 30** (24 to 30 under request)
- **Double flange & clinch nut version available**

### 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
  - LD4 (SAE AS 1241)
    - Mineral lubricating: MIL-L-7870A (OTAN 0142)
    - Synthetic lubricating: MIL-L-23699 (OTAN 0156), MIL-L-7808
    - Cleaning fluid: MIL-C-87936 diluted
    - De-icing fluid: MIL-A-8243
    - Extinguishing fluid: Chlorobrométhane
    - Cooling fluid: Coolanol
Contact layouts

![Contact layouts diagram]

Ordering information

8LT Series

<table>
<thead>
<tr>
<th>Basic series</th>
<th>8LT</th>
<th>0</th>
<th>-</th>
<th>13</th>
<th>B</th>
<th>35</th>
<th>P</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell type:</td>
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<tr>
<td>0: Square flange receptacle</td>
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<tr>
<td>1: In line receptacle</td>
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<tr>
<td>2: Short square flange receptacle, not accepting backshell</td>
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<tr>
<td>3: Square flange receptacle (rear mounting)</td>
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<tr>
<td>5: Plug with RFI shielding</td>
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<tr>
<td>7: Jam nut receptacle</td>
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<tr>
<td>15: Plug with RFI shielding, not accepting backshell</td>
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<td>Type:</td>
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<tr>
<td>-: Connector with standard crimp contacts</td>
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<tr>
<td>L: Connector with PC tail</td>
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<tr>
<td>09, 11, 13, 15</td>
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<tr>
<td>Plating:</td>
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<tr>
<td>Z: Black zinc nickel</td>
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<td>F: Nickel</td>
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<td>B: Olive green cadmium</td>
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<tr>
<td>Contact layout:</td>
<td>See above</td>
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<tr>
<td>Contact type:</td>
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<td>P: Male</td>
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<td>S: Female</td>
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<td>Orientation:</td>
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<tr>
<td>N, A, B, C, D</td>
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<tr>
<td>Specifications:</td>
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<tr>
<td>None: Supplied with contact</td>
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<tr>
<td>L: Delivered without contact</td>
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<tr>
<td>900 (mandatory for PC tail version): PC tail contacts without shoulder</td>
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<td></td>
</tr>
<tr>
<td>901 (mandatory for PC tail version): Tin plated PC tail contacts without shoulder</td>
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</tr>
</tbody>
</table>
## 8D Series

### Basic Series

<table>
<thead>
<tr>
<th>Shell style:</th>
<th>0: Square flange receptacle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1: In line receptacle (Aluminum only)</td>
</tr>
<tr>
<td></td>
<td>7: Jam nut receptacle (Aluminum, Stainless steel &amp; Titanium only)</td>
</tr>
<tr>
<td></td>
<td>5: Plug with RFI shielding</td>
</tr>
</tbody>
</table>

### Type:

- : Connectors with standard crimp contacts  
  L: Receptacle with PC tail (available with Pin contact only)

### Shell size:

- 09, 11, 13, 15

### Plating:

- W: Olive drab cadmium (Aluminum only)  
- F: Nickel (Aluminum only)  
- Z: Black zinc nickel (Aluminum only)  
- J: Olive drab cadmium (Composite only)  
- M: Nickel (Composite only)

### Contact layout:

- See previous page

### Contact type:

- P: Pin  
- S: Socket

### Orientation:

- N, A, B, C, D, E

### Specifications:

- L: Delivered without contact  
  900 (mandatory for PC tail version): PC tail contacts without shoulder  
  901 (mandatory for PC tail version): Tin plated PC tail contacts without shoulder
### Contact layouts

<table>
<thead>
<tr>
<th>03</th>
<th>05</th>
<th>07</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
</tbody>
</table>

*Small sizes*

### Ordering information

**8DA, 8BA & 8LTA Series**

<table>
<thead>
<tr>
<th>Basic Series:</th>
<th>8DA</th>
<th>8BA</th>
<th>8LTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>8DA: Threaded coupling</td>
<td>0</td>
<td>03</td>
<td>W</td>
</tr>
<tr>
<td>8BA: Break away</td>
<td>0</td>
<td>05</td>
<td>P</td>
</tr>
<tr>
<td>8LTA: Bayonet coupling</td>
<td>0</td>
<td>07</td>
<td>N</td>
</tr>
</tbody>
</table>

#### Shell type:
- 0: Square flange receptacle (8DA & 8LTA only)
- 1: In line receptacle
- 2: Oval flange receptacle (8LTA only)
- 5: Plug with EMI ring (8DA sizes 5 & 7 only)
- 6: Plug without EMI ring (8DA size 3 only, 8BA & 8LTA)
- 7: Jam nut receptacle
- 90: Square flange receptacle with PCB contacts (8DA & 8LTA only)
- 92: Oval flange receptacle (8LTA only)
- 97: Jam nut receptacle with PCB contacts (8DA & 8LTA only)

#### Contact type:
- None: Standard crimp contacts
- C: Short PC tail (8DA & 8LTA only)
- L: Long PC tail (8BA & 8LTA only - consult us)

#### Shell size:
- 03, 05, 07

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

#### Contact layouts:
- See above

#### Contact type:
- P: Pin (8DA shell size 3 scoop proof only when pin contacts mounted in Type 6)
- S: Socket (8DA shell size 3 scoop proof only when socket contacts mounted in Type 1 & Type 7 - not available for PCB version, 8BA scoop proof only when socket contacts mounted in Type 1 & Type 7, 8LTA not available for PCB version)

#### Orientation:
- N, A, B, C, D, E
Contacts

Crimping contacts

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Contact type</th>
<th>Contact Ø max.</th>
<th>Part numbers</th>
<th>Admissible wire section</th>
<th>External Ø over insulation (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>03, 05 &amp; 07</td>
<td>Male</td>
<td>0.50</td>
<td>8599-1001 JL 8599-1002 900</td>
<td>0.095 0.24</td>
<td>30 24 0.60 0.83</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
<td>8599-0297 8599-0298</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09, 11, 13 &amp; 15</td>
<td>Male</td>
<td></td>
<td>8599-0297 8599-0298</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td></td>
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</tr>
</tbody>
</table>

Tooling

Crimping tools

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Contact type</th>
<th>Locator part number</th>
<th>Plier part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>03, 05 &amp; 07</td>
<td>Male</td>
<td>640 088</td>
<td>M22520/2-01 8476-01</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>640 089</td>
<td></td>
</tr>
<tr>
<td>09, 11, 13 &amp; 15</td>
<td>Male</td>
<td>8599-0397</td>
<td>M22520/2-01 8476-01</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>8599-0398</td>
<td></td>
</tr>
</tbody>
</table>

Insertion & extraction tools

<table>
<thead>
<tr>
<th>Shell size</th>
<th>Material</th>
<th>Part number</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plastic</td>
<td>8599-0444 900</td>
<td>Blue</td>
</tr>
<tr>
<td></td>
<td>Plastic</td>
<td>8599-0394 900</td>
<td>Black</td>
</tr>
</tbody>
</table>

Other accessories

Please see SOURIAU catalogs

Recommended cable

Standard military cable as M22759 or EN2267 and derivated.

PCB hole drilling and position information

See micro38999 Series and 8D Series catalogs.

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