

# 8LT, 8D, 8DA, 8BA & 8LTA Series High Density



## High Density Solution

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

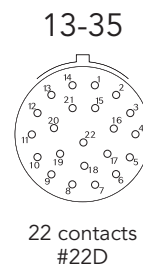
**7 shell sizes available** ■ Provides flexibility according to your application. From shell size 03 to 15.

**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:



## 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



## Technical features

### Mechanical

- **Shell:**
  - . 8LT, 8DA, 8BA & 8LTA: Aluminium
  - . 8D: Aluminium, Composite, Stainless steel
- **Shell plating:**
  - . 8LT, 8DA, 8BA & 8LTA Aluminium:
    - Nickel (F)
    - Black zinc nickel (Z)
    - Cadmium olive drab: (B: 8LT)
    - (W: 8DA, 8BA, 8LTA)
  - . 8D Aluminium:
    - 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

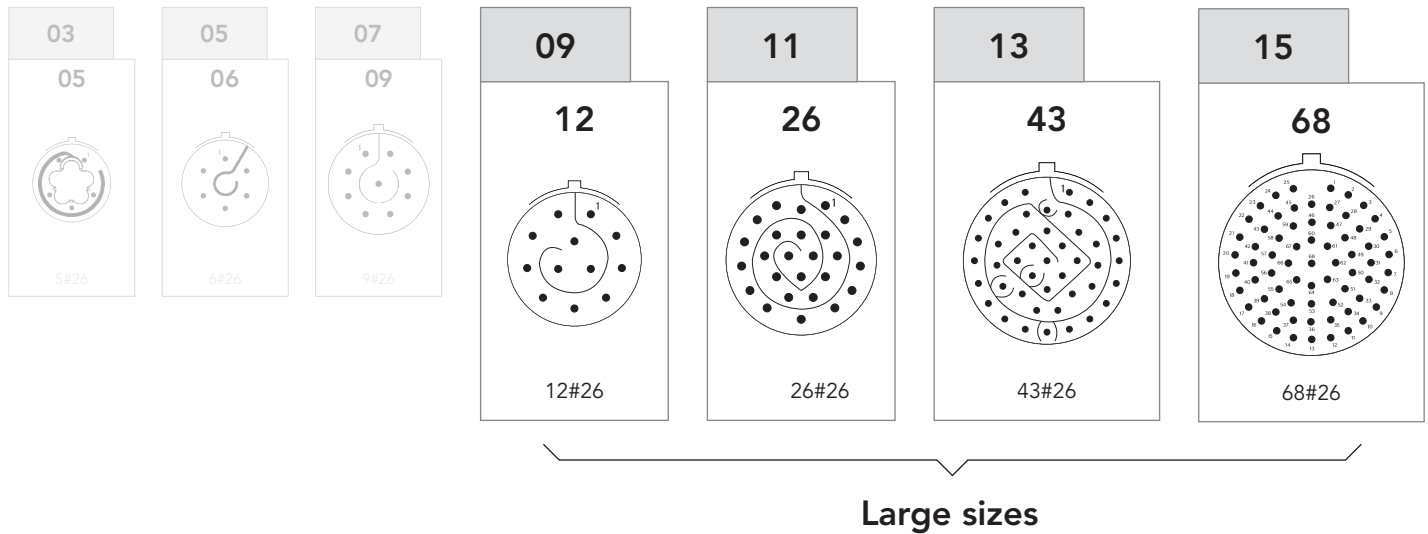
### Electrical

- **Contact resistance:**
    - Size 26: 16 mΩ
  - **Insulation resistance:**
    - ≥5000mΩ (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

### 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



## Ordering information

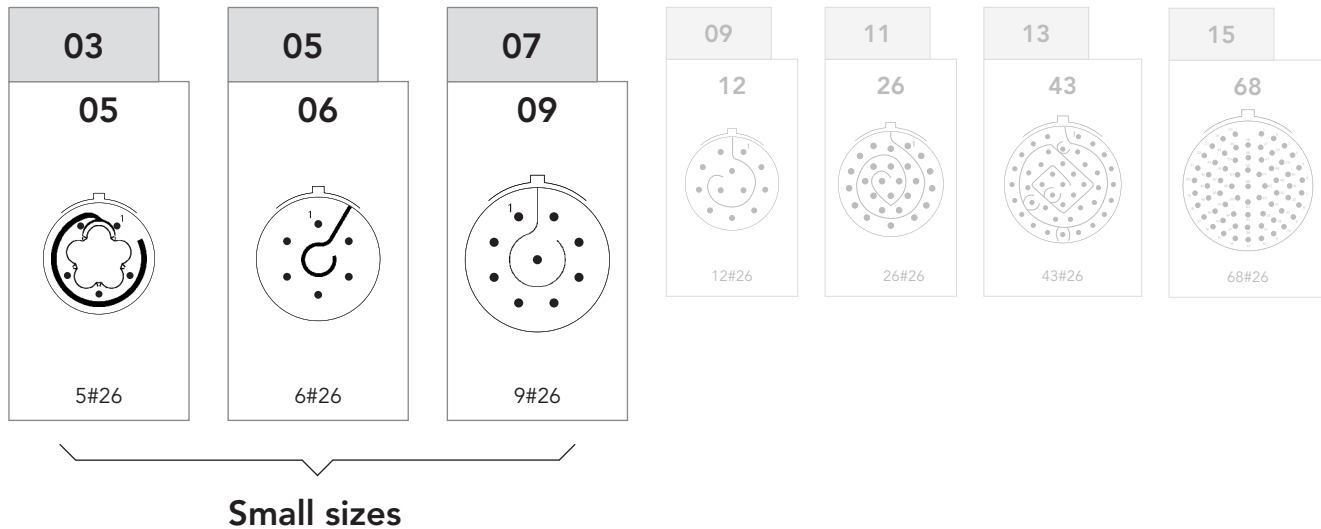
### 8LT Series

Basic series	8LT	0	-	13	B	35	P	N
<b>Shell type:</b>								
0: Square flange receptacle								
1: In line receptacle								
2: Short square flange receptacle, not accepting backshell								
3: Square flange receptacle (rear mounting)								
5: Plug with RFI shielding								
7: Jam nut receptacle								
15: Plug with RFI shielding, not accepting backshell								
<b>Type:</b>								
-: Connector with standard crimp contacts								
L: Connector with PC tail								
<b>Shell size:</b>								
09, 11, 13, 15								
<b>Plating:</b>								
Z: Black zinc nickel								
F: Nickel								
B: Olive green cadmium								
<b>Contact layout:</b>								
See above								
<b>Contact type:</b>								
P: Male								
S: Female								
<b>Orientation:</b>								
N, A, B, C, D								
<b>Specifications:</b>								
None: Supplied with contact								
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								

**8D Series**

<b>Basic Series</b>	<b>8D</b>	<b>0</b>	<b>-</b>	<b>11</b>	<b>W</b>	<b>35</b>	<b>P</b>	<b>N</b>
<b>Shell style:</b>								
<ul style="list-style-type: none"> <li><b>0:</b> Square flange receptacle</li> <li><b>1:</b> In line receptacle (Aluminum only)</li> <li><b>7:</b> Jam nut receptacle (Aluminum, Stainless steel &amp; Titanium only)</li> <li><b>5:</b> Plug with RFI shielding</li> </ul>								
<b>Type:</b>								
<ul style="list-style-type: none"> <li><b>-:</b> Connectors with standard crimp contacts</li> <li><b>L:</b> Receptacle with PC tail (available with Pin contact only)</li> </ul>								
<b>Shell size:</b>								
<b>09, 11, 13, 15</b>								
<b>Plating:</b>								
<ul style="list-style-type: none"> <li><b>W:</b> Olive drab cadmium (Aluminum only)</li> <li><b>F:</b> Nickel (Aluminum only)</li> <li><b>Z:</b> Black zinc nickel (Aluminum only)</li> <li><b>J:</b> Olive drab cadmium (Composite only)</li> <li><b>M:</b> Nickel (Composite only)</li> </ul>								
<b>Contact layout:</b>								
See previous page								
<b>Contact type:</b>								
<ul style="list-style-type: none"> <li><b>P:</b> Pin</li> <li><b>S:</b> Socket</li> </ul>								
<b>Orientation:</b>								
<b>N, A, B, C, D, E</b>								
<b>Specifications:</b>								
<ul style="list-style-type: none"> <li><b>L:</b> Delivered without contact</li> <li><b>900</b> (mandatory for PC tail version): PC tail contacts without shoulder</li> <li><b>901</b> (mandatory for PC tail version): Tin plated PC tail contacts without shoulder</li> </ul>								

## Contact layouts



## Ordering information

### 8DA, 8BA & 8LTA Series

<b>Basic Series:</b> 8DA: Threaded coupling 8BA: Break away 8LTA: Bayonet coupling	<b>8DA</b>	<b>0</b>		<b>03</b>	<b>W</b>	<b>05</b>	<b>P</b>	<b>N</b>
<b>Shell type:</b> 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)								
<b>Contact type:</b> None: Standard crimp contacts C: Short PC tail (8DA & 8LTA only) L: Long PC tail ((8DA & 8LTA only - consult us)								
<b>Shell size:</b> 03, 05, 07								
<b>Plating :</b> Z: Black zinc nickel F: Nickel W: Olive drab cadmium								
<b>Contact layouts:</b> See above								
<b>Contact type:</b> 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)								
<b>Orientation:</b> N, A, B, C, D, E								

## Contacts

### Crimp contacts

Shell size	Contact type	Contact Ø max.	Part numbers	Admissible wire section				External Ø over insulation (mm)	
				mm <sup>2</sup>		AWG			
				Min.	Max.	Min.	Max.	Min.	Max.
03, 05 & 07	Male	0.50	8599-1001 JL	0.095	0.24	30	24	0.60	0.83
	Female		8599-1002 900						
09, 11, 13 & 15	Male		8599-0297	0.055	0.215				
	Female		8599-0298						

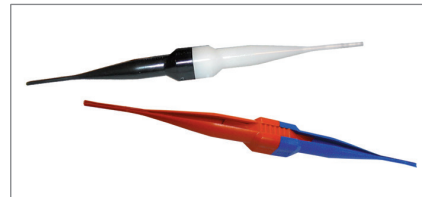
## Tooling

### Crimping tools

Shell size	Contact type	Locator part number	Plier part number	
			Spec.	SOURIAU
03, 05 & 07	Male	640 088	M22520/2-01	8476-01
	Female	640 089		
09, 11, 13 & 15	Male	8599-0397	M22520/2-01	8476-01
	Female	8599-0398		

### Insertion & extraction tools

Shell size	Material	Part number	Colour	
			Insertion	Extraction
03, 05 & 07	Plastic	8599-0444 900	Blue	Red
09, 11, 13 & 15	Plastic	8599-0394 900	Black	White



### Other accessories

Please see SOURIAU catalogs

## Recommended cable

Standard military cable as M22759 or EN2267 and derived.

## PCB hole drilling and position information

See micro38999 Series and 8D Series catalogs.

For further information contact us at [technical.emear@souriau.com](mailto:technical.emear@souriau.com) (Europe - Asia - Africa)  
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 or visit our web site [www.souriau.com](http://www.souriau.com)