

# 8D Series Power Contacts



## Power Supply in Harsh Environments

Contacts designed to be used in severe environments. Resistant to fluids, high shock and vibration.

**A wide range** ■ All shell materials and platings: from composite to stainless steel.  
Hermetic version available.

**Contact performance** ■ High current: 20% more intensity compared to standard contacts.  
#4 contact: 80A typical, #8 contact: 45A typical.  
High vibration and temperature level.

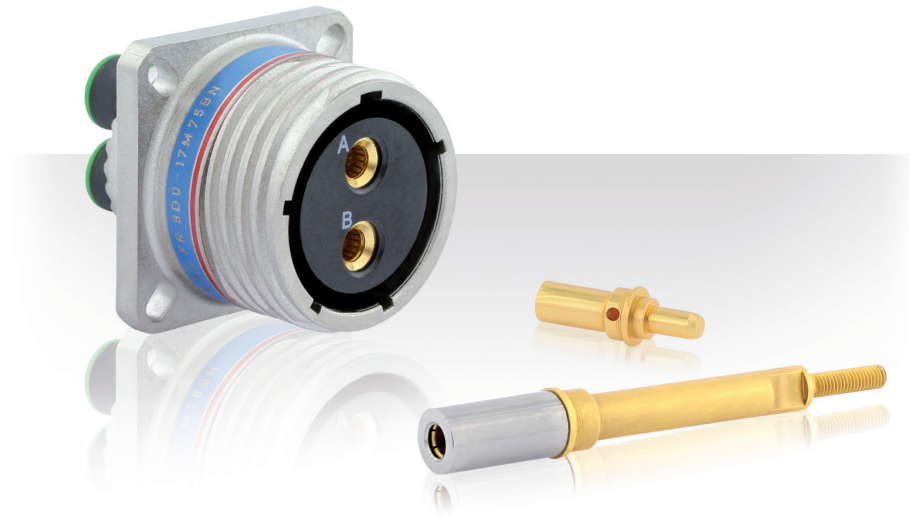
**Large choice of layouts** ■ 7 layouts with only #4 or only #8 contacts.  
12 mixed layouts available with power contacts.

**User friendly** ■ Easy maintenance with removable contacts.  
Bus bar termination available.



## Description

- Quick screw coupling connector with removable crimp contact
- Shell available in aluminum, composite, Stainless steel, Titanium & Bronze
- Six layouts with different current rating
- Consult us for power hermetic version
- High Power offer available on demand
- Derating curves available for #4 and #8.



## Technical features

### Mechanical

- **Shell:** Aluminum alloy, Composite, Bronze, Stainless steel, Titanium
- **Plating:**
  - . Olive green cadmium (W/J)
  - . Nickel (F/M/TF/S)
  - . Without plating (X for composite, TT for titanium and JVS for Bronze)
  - . Passivated (K)
- **Grommet and seal:** Silicon elastomer
- **Insulator:** Thermoset
- **Contact body:** Copper Alloy
- **Contact retention:**
  - . #4 = 200N
  - . #8 = 111N
- **Shock:** 300g during 3ms
- **Endurance:** 500 mating / unmating operations
- **Vibration:** As per MIL DTL 38999

### Electrical

- **Dielectric withstanding:** Test voltage rating (Vrms)

Service	Sea level	at 21 000 m
M	1 300	800
I	1 800	1 000

- **Insulation Resistance:** 5000 MΩ under 500 Vdc
- **Max current rating per contact:**
  - . #4 = 80A
  - . #8 = 45A
- **Contact resistance:**
  - . #4 = 2mΩ
  - . #8 = 3mΩ
- **Shielding:** As per MIL DTL 38999
- **Shell continuity:**
  - . W = 2.5 mΩ
  - . F = 1mΩ
  - . J, M = 3 mΩ
  - . JVS = 5 mΩ

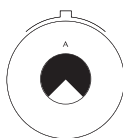
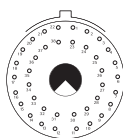
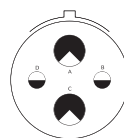
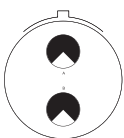
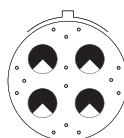

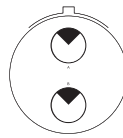
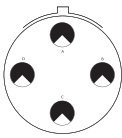

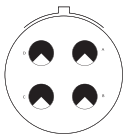
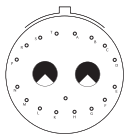
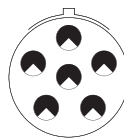
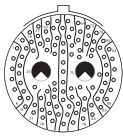
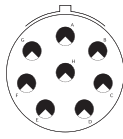
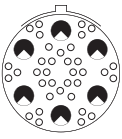
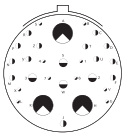
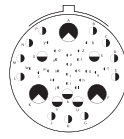
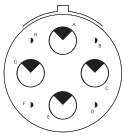

### Environmental

- **Temperature range:**
  - . W, J, X, JVS = - 65°C +175°C
  - . F, M, K, S, TT, TF = - 65°C +200°C
- **Sealing:** As per MIL DTL 38999
- **Damp Heat:** As per MIL DTL 38999
- **Salt Spray:**
  - . W, TT, TF, K, JVS = 500 hours
  - . F, S = 48 hours
  - . J, M, X = 2000 hours
- **Fire resistance:** As per EN 2591 - C 17 method A
- **Resistance to fluid:** As per MIL DTL 38999



### Contact layouts

-  Contact #22D
-  Contact #12
-  Contact #20
-  Contact #8 Power
-  Contact #16
-  Contact #4 Power

<b>11</b>				<b>17</b>				<b>19</b>	
<p><b>80</b> Spec 251</p>  <p>1#8</p>				<p><b>02</b> Spec 251</p>  <p>38#22D 1#8</p>	<p><b>22</b> Spec 251</p>  <p>2#12 2#8</p>	<p><b>75</b> Spec 251</p>  <p>2#8</p>			<p><b>18</b> Spec 251</p>  <p>14#22D 4#8</p>
<b>21</b>						<b>23</b>			
<p><b>20</b> Spec 251</p>  <p>18#20 2#8</p>	<p><b>42*</b></p>  <p>2#4</p>	<p><b>48*</b></p>  <p>4#8</p>	<p><b>72*</b></p>  <p>6#16 2#4</p>	<p><b>75</b> Spec 251</p>  <p>4#8</p>	<p><b>77</b> Spec 251</p>  <p>17#22D 2#8</p>	<p><b>06</b> Spec 251</p>  <p>6#8</p>			
<b>25</b>									
<p><b>07</b> Spec 251</p>  <p>97#22D 2#8</p>	<p><b>08</b> Spec 251</p>  <p>8#8</p>	<p><b>17</b> Spec 251</p>  <p>36 #22D 6 #8</p>	<p><b>20</b> Spec 251</p>  <p>10#20 13#16 4#12 3#8</p>	<p><b>41</b> Spec 251</p>  <p>22#22D, 3#20 11#16, 2#12 3#8</p>	<p><b>44*</b></p>  <p>4#16 4#4</p>	<p><b>46</b> Spec 251</p>  <p>40#20 4#16 2#8</p>			

\* Power contacts on standard, no spec. 251 needed.

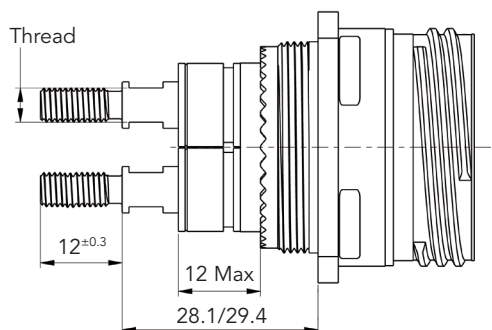
**Power contacts**

Contact size	Contact type	Part number	Reducer	Cable size max.		Boot
				AWG	mm <sup>2</sup>	
#4	Male	85997598900*	Without	N/A	25 mm <sup>2</sup>	N/A not sealed
	Female	85997599900*				
	Male	85997534		AWG 4	16 to 21 mm <sup>2</sup>	85994594 for cable 16mm <sup>2</sup>
	Female	85997535				
	Male	85997524		AWG8	9 mm <sup>2</sup>	N/A not sealed
	Female	85997525				
	Male	85997534	84002352A	AWG6	10 mm <sup>2</sup>	85994593
	Female	85997535				
	Male	85997528900	Without	AWG6	10 mm <sup>2</sup>	
	Female	85997529900				
#8	Male	85997580	Without	AWG8	9 mm <sup>2</sup>	85994542
	Female	85997581				
	Male	85997580	85997645	AWG10	6 mm <sup>2</sup>	85994547
	Female	85997581				
#8 according to EN 3155	Male	85996215900	Without	AWG8	9 mm <sup>2</sup>	85994542
	Female	85996217900				
	Male	85996216900		AWG10	6 mm <sup>2</sup>	85994547
	Female	85996218900				
#8 JVS only	Male	85997544	Without	AWG8	9 mm <sup>2</sup>	85994542
	Female	85997541				
	Male	85997544	85997645	AWG10	6 mm <sup>2</sup>	85994547
	Female	85997541				

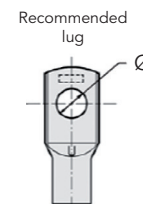
Cable section AWG	#22	#20	#16	#12	#10	#8	#4
mm <sup>2</sup> maxi	0.34	0.6	1.34	3.18	5.8	9	21
mm <sup>2</sup> mini	0.095	0.21	0.6	1.91	3.8	5.8	16

\* Not included in connector P/N.  
Must be ordered separately.

**Bus bar contact**



Contact size	Thread	Part number			Lug Ø
		Male	Female	Boots	
#4	M5x0.8	85930873A900	85930875A900	85994594	5.2
#8	M3x0.5	85930872A900	85930874A900	85994542	3.2



Contacts available separately only.  
Lug: tin over copper recommended. Dimensions for indication only.

Note: All dimensions are in millimeters (mm)

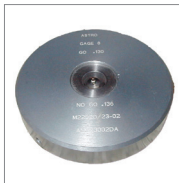
**Power tools**

Contact size	Contact type	Contact reference	Cable AWG	Crimping tool			Contact extraction tool (metallic)	Contact extraction tool (plastic)
				Automatic tool: M22520/23-01		Manual hand tool: M300 BT		
				Die set	Locator	Locator		
#4	Male	8599-7534	#4-5 or #10-16mm <sup>2</sup>	M22520/23-04	M22520/23-11	N/A	8533-8175	M81969/14-07
	Female	8599-7535						
#8 JVS only	Male	8599-7544	#8 or #10	M22520/23-02	8599-9601	SP 593	8660-197	M81969/14-12
	Female	8599-7541						
#8	Male	8599-7580						
	Female	8599-7581						

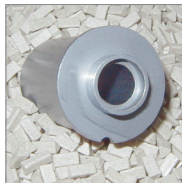
**Automatic tool for contacts #4 & #8**



Crimping tool M22520/23-01



Die set



Locator

**Manual hand tool for contacts #8**



Crimping tool M300 BT



Locator

**Extraction tool**



Metallic tool

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[technical.americas@souriau.com](mailto:technical.americas@souriau.com) (North America)  
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