



Power Supply in Harsh Environments

Designed to be used in severe environments, and resistant to fluids, high shock and vibration.

- A wide range** ✓ From composite to steel, all shell materials and platings. Hermetic version available.
- Contact performance** ✓ High current: 20% more intensity compared to standard contacts.
Operating at high vibration & temperature levels.
- User friendly** ✓ Easy maintenance with removable contacts.
- A wide range available** ✓ Compatible with all Souriau standard 38999 shells, plating and inserts with #8 or #4 cavities. #4 (80 Amp), #8 (45 Amp) + mixed layouts. Same cavity for quadrax, coax, triax and ELIO® fiber optic.



8D Series Power Contacts



Description

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

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

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.

8D Series

Power Contacts



Connector part numbers

Aluminum, Composite, Stainless steel & Titanium connector

Basic Series	8D	0	-	11	W	80	P	N	251
Style:									
0: Square flange receptacle									
5: Plug with RFI shielding									
7: Jam nut receptacle									
Type: Crimp contact									
Shell size: 11 - 17 - 19 - 21 - 23 - 25									
Plating:									
Aluminum shell:									
W: Olive drab cadmium									
F: Nickel									
ZC: Green zinc cobalt									
Z: Black zinc nickel									
Composite shell:									
J: Olive green cadmium									
M: Nickel									
X: Without plating									
Stainless steel shell:									
K: Corrosion resistant									
S: Nickel									
Titanium shell:									
TT: Without plating									
TF: Nickel									
Contact layouts: See next page									
Contact style:									
P: Pin contact									
S: Socket contact									
A: Male connector supplied without contact									
B: Female connector supplied without contact									
Orientation: N - A - B - C - D - E									
Specification:									
251: To be added for some layouts to be supplied with power contacts (see next page)									

Bronze connector







Basic Series	JVS	16	A	11	80	P	N	251
Style:								
00: Square flange receptacle								
07: Jam nut receptacle								
16: Plug								
Material:								
A: Bronze shell material								
Shell size: 11 - 17 - 19 - 21 - 23 - 25								
Contact layouts: See next page								
Contact style:								
P: Pin contact								
S: Socket contact								
A: Male connector supplied without contact								
B: Female connector supplied without contact								
Orientation: N - A - B - C - D - E								
Specification:								
251: To be added for some layouts to be supplied with power contacts (see next page)								

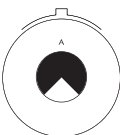
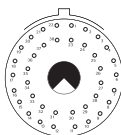
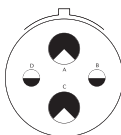
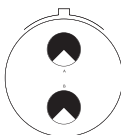


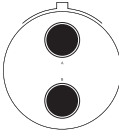
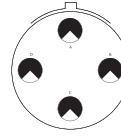
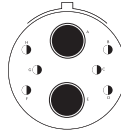
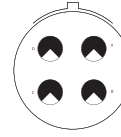
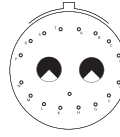

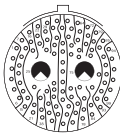
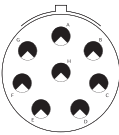
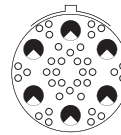
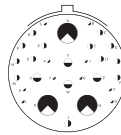
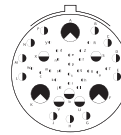
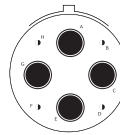
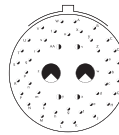
8D Series

Power Contacts



Contact layouts

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

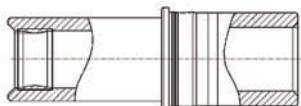
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8D Series Power Contacts

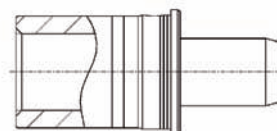


Contacts

Socket contact



Pin contact



Contact size	Contact type	Contact reference	Cable		Protection	Dimensions	
			Cable size	Cable material		L	D
#4	Male	8599-7534	#4-5 or 10-16mm ² **	Copper	Au	9.70	5.74
	Female	8599-7535				16.58	8.50
	Male	8599-7598 900 *	for cable 25mm ² (#3)	Copper	Au	9.70	5.74
	Female	8599-7599 900 *				16.58	8.50
#4 with reduced barrel	Male	8599-7528 900	#6 or 10mm ² **	Copper	Au	9.70	5.74
	Female	8599-7529 900				16.58	8.50
#8 JVS only	Male	8599-7544	#8 or 10 **	Copper	Au	9.60	3.64
	Female	8599-7541				16.00	7.30
#8	Male	8599-7580	#8 or 10 **	Copper	Au	9.60	3.64
	Female	8599-7581				16.00	7.30

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

** To be used with crimping bucket reducer.

Sealing boot and crimping bucket reducer



Contact size	Cable size	Cable material	Sealing boot reference
#4	16mm ²	Copper	8599-4594
	10mm ²		8599-4593
#8	#8	Copper	8599-4542
	#10		8599-4547

Contact size	Cable size	Reducing sleeve reference
#4	10mm ²	8400-2352A
#8	#10	8599-7545

8D Series Power Contacts



Power tools

Contact size	Contact type	Contact reference	Cable AWG	Crimping tool	Die set	Locator	Contact extraction tool (metallic)	Contact extraction tool (plastic)
#4	Male	8599-7534	#4-5 or 10-16mm ² *	M22520/23-01	M22520/23-04	M22520/23-11	8533-8175	M81969/14-07
	Female	8599-7535	#4-5 or 10-16mm ² *	M22520/23-01	M22520/23-04	M22520/23-11	8533-8175	M81969/14-07
#8 JVS only	Male	8599-7544	#8 or 10 *	M22520/23-01	M22520/23-02	8599-9601	8660-197	M81969/14-12
	Female	8599-7541	#8 or 10 *	M22520/23-01	M22520/23-02	8599-9601	8660-197	M81969/14-12
#8	Male	8599-7580	#8 or 10 *	M22520/23-01	M22520/23-02	8599-9601	8660-197	M81969/14-12
	Female	8599-7581	#8 or 10 *	M22520/23-01	M22520/23-02	8599-9601	8660-197	M81969/14-12

Manual hand tool also existing for power contacts #8.

* To be used with crimping bucket reductor.

Automatic tool for contacts #4 & #8



Crimping tool (M22520/23-01)



Die set (M22520/23-02)



Locator (M22520/23-11)

Manual hand tool for contacts #8



Crimping tool (M300 BT)



Locator (SP 593)

Metallic extraction tool



For #4: 8533-8175
For #8: 8660-197

For further information contact us at contactmilaero@souriau.com
or visit our web site www.souriau.com