

MICRO-CRIMP RECTANGULAR CONNECTORS

Series 791 Scoop-Proof

SERIES™
791
Scoop-Proof

791-001

Cable Receptacle with Backshell Groove

- ◆ Crimp, rear-release
- ◆ Pin contacts



791-001 cable receptacle has snap-in, rear-release M39029-type crimp contacts. High-density size 23 contacts are on .075 inch (1.9mm) centers and accept AWG 22-28 wire. Size 16 and size 12 cavities accept power contacts (supplied with connector) or coaxial RF contacts (ordered separately). Shell has groove for EMI backshell 799-015, ordered separately. Optional nickel-plated beryllium copper grounding spring. Rear grommet and interfacial seal provide environmental protection.

- Aerospace-grade ultraminiature connector with rugged scoop-proof duo-lobe shell
- Environmental
- 42 layouts with up to 153 contacts
- M39029-type crimp contacts

INSERT ARRANGEMENTS

FULL COMPLEMENT OF CONTACTS	#8, #12 OR #16 CONTACTS PURCHASED SEPARATELY	No. of Contacts			
		#23	#16	#12	#8
A-5		5			
B-2P2	B-2W2		2		
B-9		9			
C-13		13			
D-15		15			
D-3P3	D-3W3		3		
D-7P2	D-7W2	5	2		
E-11P2	E-11W2	9	2		
E-19		19			
E-7P3	E-7W3	4	3		
F-14P3	F-14W3	11	3		
F-15P2	F-15W2	13	2		
F-23		23			
F-5P5	F-5W5		5		
G-13P2	G-13W2	11		2	
G-21P1	G-21W1	20		1	
G-3P3	G-3W3			3	
G-33		33			
H-10P4	H-10W4	6		4	
H-29P7	H-29W7	22	7		
H-36P2	H-36W2	34		2	
H-51P1	H-51W1	50		1	
H-54P2	H-54W2	52	2		
H-5P5	H-5W5			5	
H-66		66			
J-17P4	J-17W4	13	4		
J-25P2	J-25W2	23	2		
J-33		33			
J-7P7	J-7W7		7		
K-27P4	K-27W4	23	4		
K-35P2	K-35W2	33	2		
K-43		43			
K-9P9	K-9W9		9		
L-22P4	L-22W4	18		4	
L-48P2	L-48W2	46		2	
L-6P6	L-6W6			6	
L-78		78			
M-17P17	M-17W17		17		
M-102		102			
M-4P4	M-4W4				4
N-13P13	N-13W13			13	
N-153		153			

HOW TO ORDER

Sample Part Number

791-001P H-66 M E S B

Basic Part Number	791-001P Cable Receptacle, Pin Contacts
Shell Size-Insert Arr.	See "Insert Arrangements" Table
Shell Finish	M Electroless Nickel MT Nickel / PTFE N Olive Drab Cadmium TZ Tin-Zinc ZR Black Zinc-Nickel
EMI Spring	E EMI Spring N No EMI Spring
Hardware Option Table 1	K Extended Jackscrews <i>Slot head male</i> L Jackscrews <i>Socket head male</i> N Thru-Hole <i>No Hardware</i> P Female Jackposts S Screwlocks <i>Socket head male</i> T Extended Screwlocks <i>Slot head male</i>
Polarization Key Option	Enter Letter Designator for Position A, B, C, D, E , or F per Mod Code 555 (see page B-8 for details) Omit for none

TABLE 1 HARDWARE OPTIONS

N No Hardware Thru Mounting Holes	K Extended Jackscrew Slot Head	L Jackscrew Socket Head	P Female Jackpost With Nut and Lockwasher	S Screwlock Socket Head	T Extended Screwlock Slot Head

Screwlocks allow connector to be plugged in before the screws are tightened. Jackscrews must be tightened in order to mate connector.

RATINGS

- Voltage (DWV): size 23 contacts 750 VAC, Size 8, 12 and 16: 1800 VAC
- Current: #23 5A, #16 13A, #12 23A, #8 46A
- Operating temperature: -65 to +150 °C
- Durability: 500 mating cycles
- Shock: 300 g
- Vibration: 20 g random
- Altitude immersion: 75,000 feet
- Ingress protection: IP67

CONSTRUCTION

- Contacts: Copper alloy, gold over nickel finish
- Shell: Aluminum
- Insulators: High performance thermoplastic
- Ground spring: BeCu, electroless nickel plated
- Wire grommet, face seal: Fluorosilicone/silicone blend
- Contact retaining clip: Beryllium copper, unplated
- Hardware: Stainless steel

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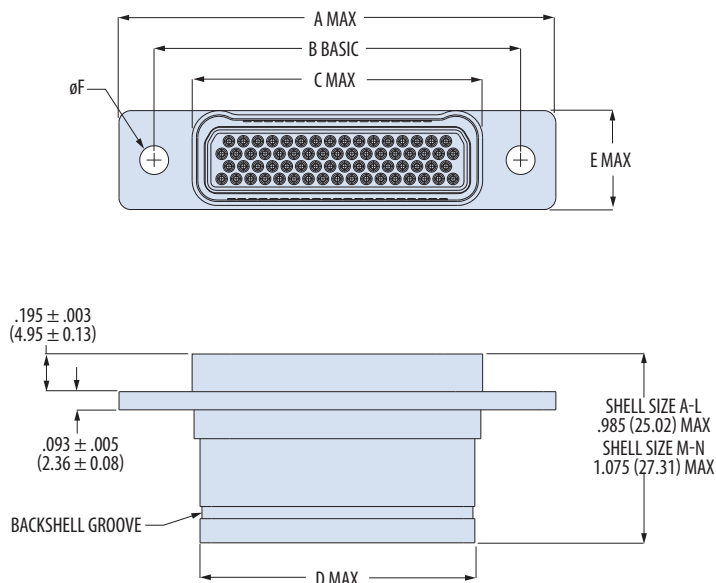
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Shell Size	A Max		B ± .005 (0.1)		C Max		D Max		E Max		Ø F ±.005 (0.1)	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
A	1.040	26.4	.750	19.1	.490	12.4	.390	9.9	.415	10.5	.150	3.8
B	1.190	30.2	.900	22.9	.640	16.3	.540	13.7	.415	10.5	.150	3.8
C	1.340	34.0	1.050	26.7	.790	20.1	.690	17.5	.415	10.5	.150	3.8
D	1.415	35.9	1.125	28.6	.865	22.0	.790	20.1	.415	10.5	.150	3.8
E	1.565	39.8	1.275	32.4	1.015	25.8	.940	23.9	.415	10.5	.150	3.8
F	1.715	43.6	1.425	36.2	1.165	29.6	1.090	27.7	.415	10.5	.150	3.8
G	1.678	42.6	1.388	35.3	1.127	28.6	1.055	26.8	.500	12.7	.150	3.8
H	2.275	57.8	1.900	48.3	1.516	38.5	1.440	36.6	.520	13.2	.173	4.4
J	2.090	53.1	1.800	45.7	1.540	39.1	1.450	36.8	.415	10.5	.150	3.8
K	2.465	62.6	2.175	55.2	1.915	48.6	1.840	46.7	.415	10.5	.150	3.8
L	2.511	63.8	2.136	54.3	1.752	44.5	1.675	42.5	.520	13.2	.173	4.4
M	2.580	65.5	2.200	55.9	1.815	46.1	1.740	44.2	.635	16.1	.198	5.0
N	3.040	77.2	2.600	66.0	2.210	56.1	2.115	53.7	.722	18.3	.248	6.3

CRIMP CONTACTS AND TOOLS

Contacts are bulk packed with connector. Spare contacts are not included with connector and are ordered separately. See "Contacts and Tools" section for additional information.

Contact Size	Pin Contact Part No.	AWG Wire Size	Installing and Removal Tool	Tool	Crimp Tools	Die Assembly
23	809-001	22 – 28	809-088	809-015 (M22520/2-01)	809-005 (K1461)	—
16	809-110	16 – 20	809-131 (M81969/14-03)	809-136 (M22520/1-01)	809-137 (M22520/1-04)	—
12	809-112	12 – 14	809-132 (M81969/14-04)	809-136 (M22520/1-01)	809-137 (M22520/1-04)	—
8	850-014F	8	859-049 (M81969/14-12)	859-025 (M22520/23-01)	859-046 (WA23-395L)	859-026 (M22520/23-02)

Application Note Panel Mounting

For panel mounting, specify connector with Hardware Option N (thru-holes). Use rear panel mount jackpost **799-117**. See page **F-18** for jackpost ordering information, page **F-19** for panel cutout dimensions.

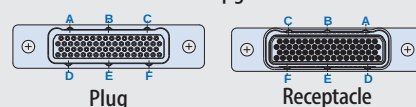
Application Note EMI Banding Backshell **799-015**

See page **F-26** for backshell ordering information.



Application Note Polarization Key Positions

See Mod Code 555 pg. B-8 for details



HARDWARE DIMENSIONS

Shell Size	Thread Size
A – G, J, K	#4-40
H, L	#6-32
M	#8-32
N	#10-32

