

MICRO-CRIMP RECTANGULAR CONNECTORS

Series 791 Scoop-Proof

SERIES
791
Scoop-Proof

791-003

Cable Plug with Backshell Groove

- ◆ Crimp, rear-release
- ◆ Socket contacts



791-003 cable plug 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). Rear grommet provides environmental protection. Shell has groove for attaching EMI banding backshell (799-015, sold separately).

- 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

791-003S

M-102

MT

L

B

Basic Part Number

791-003S Cable Plug, Socket 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

Hardware Option

K Extended Jackscrews *Slot head male*
L Jackscrews *Socket head male*
N Thru-Hole *No Hardware*
P Female Jackposts
S Screwlocks *Socket head male*
T Extended Screwlocks *Slot head male*

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	K	L	P	S	T
No Hardware Thru Mounting Holes	Extended Jackscrew Slot Head	Jackscrew Socket Head	Female Jackpost With Nut and Lockwasher	Screwlock Socket Head	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
- Wire grommet, face seal: Fluorosilicone/silicone blend
- Contact retaining clip: Beryllium copper, unplated
- Hardware: Stainless steel

MICRO-CRIMP RECTANGULAR CONNECTORS

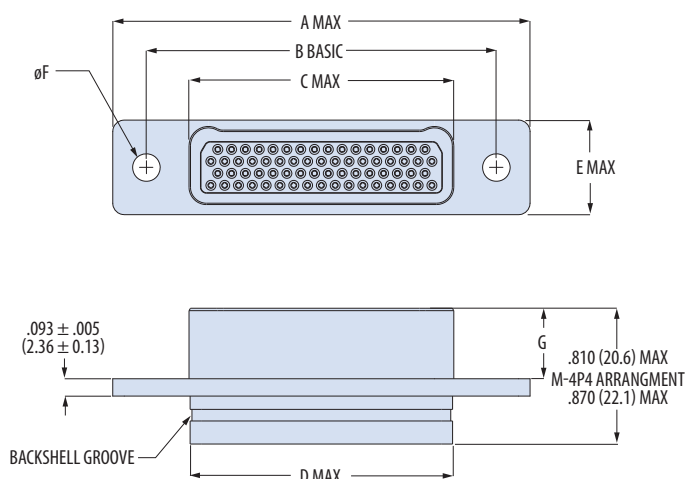
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Shell Size	A Max		B ± .005 (0.1)		C Max		D Max		E Max		ø F ± .005 (0.1)		G ± .003 (0.1)	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
A	1.035	26.3	.750	19.1	.415	10.5	.390	9.9	.415	10.5	.150	3.8	.383	9.7
B	1.185	30.1	.900	22.9	.565	14.4	.540	13.7	.415	10.5	.150	3.8	.383	9.7
C	1.335	33.9	1.050	26.7	.715	18.2	.690	17.5	.415	10.5	.150	3.8	.383	9.7
D	1.410	35.8	1.125	28.6	.790	20.1	.790	20.1	.415	10.5	.150	3.8	.383	9.7
E	1.560	39.6	1.275	32.4	.940	23.9	.940	23.9	.415	10.5	.150	3.8	.383	9.7
F	1.710	43.4	1.425	36.2	1.090	27.7	1.090	27.7	.415	10.5	.150	3.8	.383	9.7
G	1.673	42.5	1.388	35.3	1.052	26.7	1.055	26.8	.500	12.7	.150	3.8	.383	9.7
H	2.275	57.8	1.900	48.3	1.442	36.6	1.440	36.6	.520	13.2	.173	4.4	.383	9.7
J	2.085	53.0	1.800	45.7	1.465	37.2	1.450	36.8	.415	10.5	.150	3.8	.383	9.7
K	2.460	62.5	2.175	55.2	1.840	46.7	1.840	46.7	.415	10.5	.150	3.8	.383	9.7
L	2.511	63.8	2.136	54.3	1.678	42.6	1.675	42.5	.520	13.2	.173	4.4	.383	9.7
M	2.580	65.5	2.200	55.9	1.745	44.3	1.735	44.1	.635	16.1	.198	5.0	.423	10.7
N	3.050	77.5	2.600	66.0	2.115	53.7	2.110	53.6	.722	18.3	.248	6.3	.423	10.7

CRIMP CONTACTS AND TOOLS

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

Contact Size	Socket Contact Part No.	AWG Wire Size	Installing and Removal Tool	Tool	Crimp Tools	Die Assembly
23	809-002	22 – 28	809-088	809-015 (M22520/2-01)	809-005 (K1461)	—
16	857-448-16	16 – 20	809-131 (M81969/14-03)	809-136 (M22520/1-01)	809-137 (M22520/1-04)	—
12	857-448-12	12 – 14	809-132 (M81969/14-04)	809-136 (M22520/1-01)	809-137 (M22520/1-04)	—
8	850-138F	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.

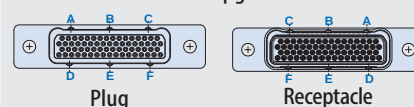
Application Note EMI Banding Backshell 799-015

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

