

MICRO-CRIMP RECTANGULAR CONNECTORS

Series 790 High-Density

SERIES™
790
HD

240-790-070

Cable Plug, Filtered

- ◆ Solder cup termination
- ◆ Socket contacts



240-790-070 cable plug has ceramic filter array to attenuate unwanted signals. Solder cup contacts. Available with two filter types (C, Pi) and 11 filter classes ranging from 35 pF to 240K pF. Shell has groove for attaching EMI banding backshell (799-293, sold separately). Available with jackscrews or screwlocks.

- Aerospace-grade microminiature rectangular connector with ceramic filter
- 39 insert arrangements with up to 102 contacts
- Environmental

INSERT ARRANGEMENTS

Insert Arrangement	No. of Contacts			
	#23	#16	#12	#8
A-5	5			
B-2P2		2		
B-9	9			
C-13	13			
D-15	15			
D-3P3		3		
D-7P2	5	2		
E-11P2	9	2		
E-19	19			
E-7P3	4	3		
F-14P3	11	3		
F-15P2	13	2		
F-23	23			
F-5P5		5		
G-13P2	11		2	
G-21P1	20		1	
G-3P3			3	
G-33	33			
H-10P4	6		4	
H-29P7	22	7		
H-36P2	34		2	
H-51P1	50		1	
H-54P2	52	2		
H-5P5			5	
H-66	66			
J-17P4	13	4		
J-25P2	23	2		
J-33	33			
J-7P7		7		
K-27P4	23	4		
K-35P2	33	2		
K-43	43			
K-9P9		9		
L-22P4	18		4	
L-48P2	46		2	
L-6P6			6	
L-78	78			
M-17P17		17		
M-102	102			

HOW TO ORDER

Sample Part Number

240-790-070S F-23 ME E P C S

Basic Part Number	240-790-070S Cable Receptacle, Filtered, Socket Contacts
Shell Size-Insert Arr.	See "Insert Arrangements" Table
Shell Finish	ME Electroless Nickel MT Nickel / PTFE N Olive Drab Cadmium TZ Tin-Zinc ZR Black Zinc-Nickel
EMI Spring	E EMI Spring <i>Shell finishes ME and MT only</i> N No EMI Spring
Filter Type	C C Circuit P Pi Circuit
Filter Capacitance Class	See "Filter Capacitance Class" Table
Hardware Option Table 1	N Thru-Hole <i>No Hardware</i> K Extended Jackscrews <i>Slot head male</i> L Jackscrews <i>Socket head male</i> P Female Jackposts S Screwlocks <i>Socket head male</i> T Extended Screwlocks <i>Slot head male</i>

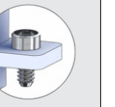
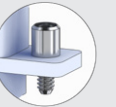
FILTER CAPACITANCE CLASS

Filter Class	Capacitance Range (pF)	
	Filter Type P	Filter Type C
X*†	160,000-240,000	80,000-120,000
Y*	80,000-120,000	40,000-60,000
Z*	60,000-90,000	30,000-45,000
A	38,000-56,000	19,000-28,000
B	32,000-45,000	16,000-22,500
C	18,000-33,000	9,000-16,500
D	8,000-12,000	4,000-6,000
E	3,300-5,000	1,650-2,500
F	800-1,300	400-650
G	400-600	200-300
J	70-120	35-60

* Filter classes X, Y and Z are 250 VDC. All others are 500 VDC.

† Class X filters not available for arrangements with 3 or more rows of contacts.

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

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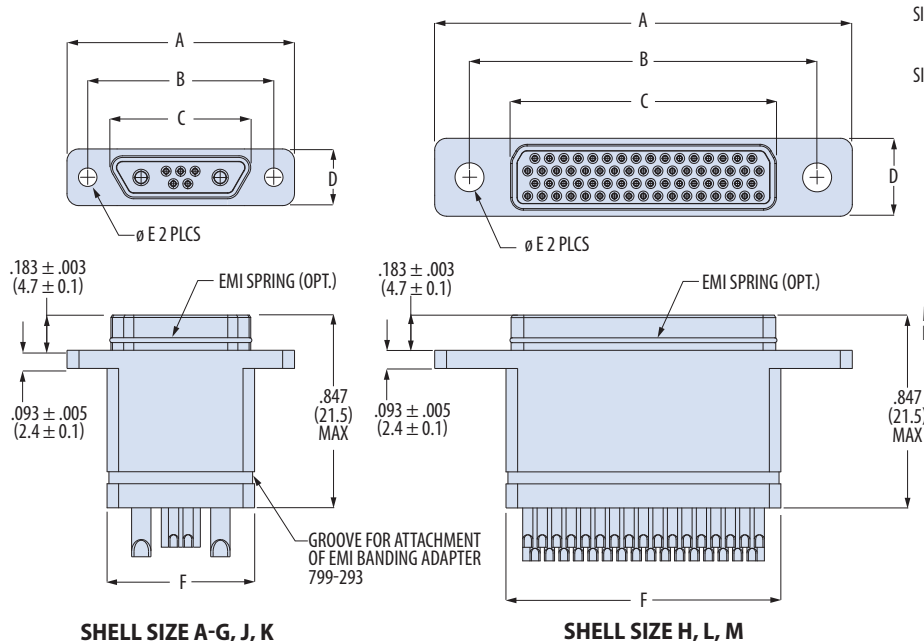


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Cable Plug, Filtered

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SERIES 790 HIGH-DENSITY



SIZE #23 ALL ARRANGEMENTS
.200 ± .060 (5.08 ± 1.52)

SIZE #16 AND SIZE #12 IN COMBO
ARRANGEMENTS
.250 ± .060 (6.35 ± 1.52)

SIZE #16 AND SIZE #12 IN POWER
ARRANGEMENTS
.340 ± .060 (8.64 ± 1.52)

SIZE #23 CENTER ROWS
.270 ± .060 (6.86 ± 1.52)
M-102 ARRANGEMENT CENTER
ROW .340 ± .060 (8.64 ± 1.52)



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.

Shell Size	A Max		B ± .005 (0.1)		C Max		D Max		ø E ± .004 (0.1)		F Max	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
A	.785	19.9	.565	14.4	.335	8.5	.308	7.8	.092	2.3	.390	9.9
B	.935	23.7	.715	18.2	.485	12.3	.308	7.8	.092	2.3	.540	13.7
C	1.085	27.6	.865	22.0	.635	16.1	.308	7.8	.092	2.3	.690	17.5
D	1.185	30.1	.965	24.5	.735	18.7	.308	7.8	.092	2.3	.790	20.1
E	1.335	33.9	1.115	28.3	.885	22.5	.308	7.8	.092	2.3	.940	23.9
F	1.485	37.7	1.265	32.1	1.035	26.3	.308	7.8	.092	2.3	1.090	27.7
G	1.435	36.4	1.215	30.9	1.010	25.7	.395	10.0	.092	2.3	1.055	26.8
H	2.175	55.2	1.800	45.7	1.385	35.2	.410	10.4	.149	3.8	1.440	36.6
J	1.845	46.9	1.615	41.0	1.390	35.3	.308	7.8	.092	2.3	1.450	36.8
K	2.240	56.9	2.015	51.2	1.795	45.6	.308	7.8	.092	2.3	1.840	46.7
L	2.420	61.5	2.036	51.7	1.623	41.2	.410	10.4	.149	3.8	1.675	42.5
M	2.575	65.4	2.200	55.9	1.675	42.5	.470	11.9	.172	4.4	1.740	44.2

RATINGS

- Voltage (DWV): 500 VDC. Class X, Y, Z: 250 VDC.
- Current rating for arrangements with all contacts the same size: #23 5A, #16 13A, #12 23A
- Current rating for arrangements with mixed contact sizes: #23 5A, #16 7.5A, #12 13A
- Operating temperature: -55 to +125 °C
- Durability: 500 mating cycles
- Shock: 300 g
- Vibration: 20 g random
- Insulation resistance: 5000 megohm @ 200 VDC. Class X, Y, Z: 1000 megohm @ 83 VDC

CONSTRUCTION

- Contacts: Copper alloy, gold over nickel finish
- Shell: Aluminum
- Insulators: High performance dielectric
- EMI spring: Stainless steel, gold plated
- Hardware: Stainless steel

HARDWARE DIMENSIONS

Shell Size	Thread Size
A - G, J, K	#2-56
H, L	#4-40
M	#6-32

