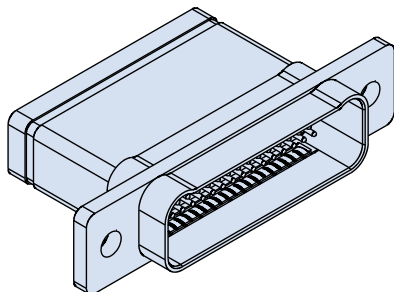


Filter Connectors

240-791-001 Filter Receptacle with Solder Cup Pin Contacts



240-791-001 Filter Connector

- Scoop-proof dual lobe shell
- Flight-grade shock and vibration
- C or Pi filters
- -55 to +125°C
- #23, #16, and #12 contacts in 36 arrangements

Table 3 Capacitance Class

Code	Capacitance Range (pF)	
	Pi-Section	C-Section
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

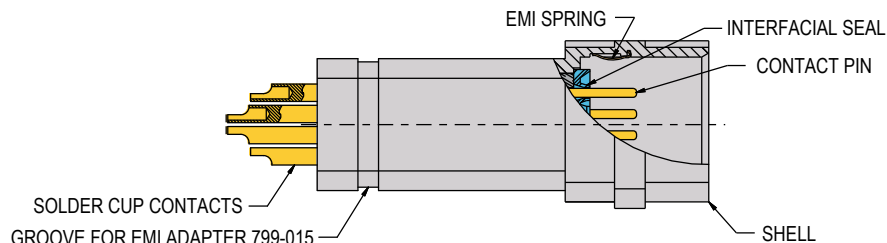
* Filter classes X, Y and Z are 250 VDC. All others are 500 VDC.

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

Construction

- **Shell:** aluminum alloy
- **Insulators:** High grade rigid dielectric
- **Contacts:** copper alloy, 50 microinches gold over nickel plating
- **Hardware:** 300 series stainless steel, passivated

C or Pi filters. Multi-layer planar capacitor array. Series 791 filter connectors are the next-generation higher density alternative to M24308 D Subminiature connectors. Available in 36 arrangements, 791 filter connectors feature aluminum shells, gold-plated non-removable solder cup contacts, and a shell groove for attachment of EMI shielding adapters.



How To Order

Sample Part Number →	240-791-001P	J-33	ME	P	A	K
Product	240-791-001P Filter Plug with Pin Solder Cup Contacts					
Arrangement Number (Shell Size - Insert Arr.)	See Table 2					
Shell Finish	ME = Electroless Nickel MT = Nickel-PTFE ZR = Black Zinc-Nickel					
Filter Type	P = Pi circuit C = C circuit					
Capacitance Class	See Table 3					
Hardware Option (Table 1)	N = Thru-Hole (no hardware) S = Low Profile Screwlock, Hex Head T = Extended Screwlock, Slot Head L = Low Profile Jackscrew, Hex Head K = Extended Jackscrew, Slot Head P = Jackpost					

Specifications

- **Operating temperature:** -55 to +125°C
- **Dielectric withstanding voltage**
Filter classes A-J: 500 Vdc
Filter classes X, Y, Z: 250 Vdc
- **Insulation Resistance:** 5000 megohms minimum at 200 Vdc
- **Current rating:**
Size 23 contacts: 5A max.
Size 16 contacts: 7.5A max. for combo arrangements, 13A max. for arrangements with size 16 contacts only
Size 12 contacts: 13A max. for combo layouts, 23A max. for arrangements with size 12 contacts only
- **Shock:** EIA-364-27 condition D
- **Vibration:** EIA-364-28 condition V, letter E

Notes

1. This connector is designed to meet the requirements of MIL-STD-2120 and Glenair Series 79 Product Specification 799-008.
2. All contacts have identical filter values. Other filter styles (C-L, L-C, unbalanced Pi, multi-stage, multi-value) are available. Please consult factory for other options.

Filter Connectors

240-791-001 Filter Receptacle with Solder Cup Pin Contacts

Table 1 Hardware Option

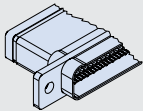
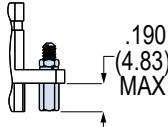
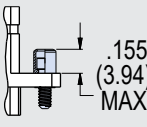
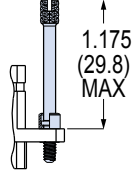
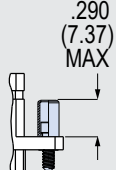
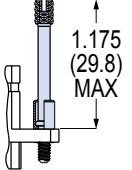
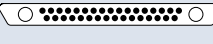
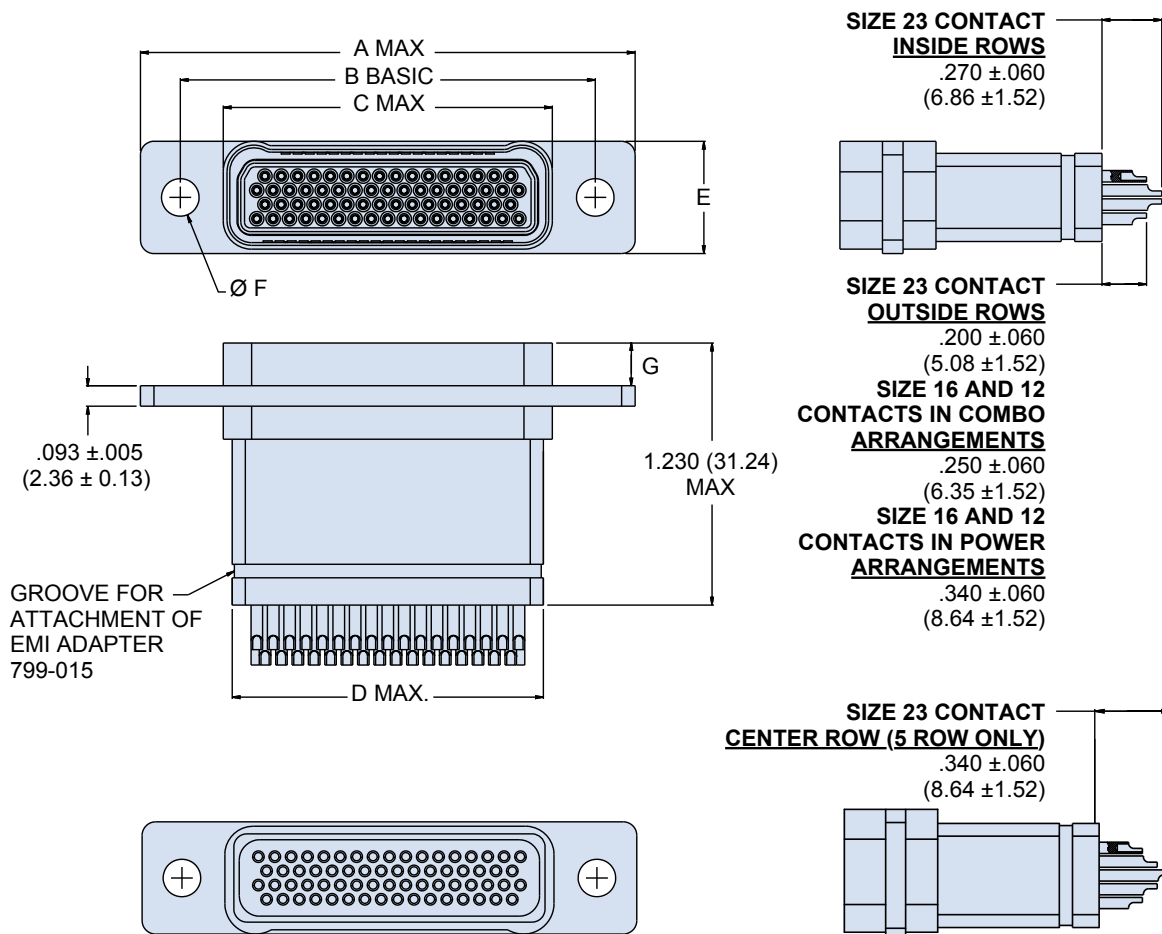
Thread Sizes					
Hardware thread sizes vary by shell size. Shell sizes A, B, C, D, E, F, G, J, K have #4-40 UNC-2 thread, shell sizes H and L have #6-32 UNC-2 thread, shell size M has #8-32 UNC-2 thread.					
					
N No Hardware Mounting flange has thru-holes.	P Jackpost Supplied loosely assembled with nut and split washer. Stainless steel.	L Low Profile Jackscrew Non-removable, hex head. Stainless steel.	K Extended Jackscrew Slot head, stainless steel, non-removable.	S Low Profile Screwlock Hex head, stainless steel, non-removable. Screwlocks allow the connector to be mated before the screws are fastened.	T Extended Screwlocks Slot head, stainless steel, non-removable. Screwlocks allow the connector to be mated before the screws are fastened.

Table 2 Arrangement Number

Arrangements with Size #23 Contacts	Arrangements with Size #16 Contacts	Arrangements with Size #12 Contacts
 A-5 5 #23  B-9 9 #23  C-13 13 #23  D-15 15 #23  E-19 19 #23  F-23 23 #23  G-33 33 #23  H-66 66 #23  J-33 33 #23  K-43 43 #23  L-78 78 #23  M-102 102 #23	 B-2P2 2 #16  D-3P3 3 #16  D-7P2 5 #23, 2 #16  E-11P2 9 #23, 2 #16  E-7P3 4 #23, 3 #16  F-14P3 11 #23, 3 #16  F-15P2 13 #23, 2 #16  F-5P5 5 #16  H-29P7 22 #23, 7 #16  H-54P2 52 #23, 2 #16  J-17P4 13 #23, 4 #16  J-25P2 23 #23, 2 #16  J-7P7 7 #16  K-27P4 23 #23, 4 #16  K-35P2 33 #23, 2 #16  K-9P9 9 #16  M-17P17 17 #16	 G-13P2 11 #23, 2 #12  G-3P3 3 #12  G-21P1 20 #23, 1 #12  H-10P4 6 #23, 4 #12  H-36P2 34 #23, 2 #12  H-5P5 5 #12  L-6P6 6 #12

Filter Connectors

240-791-001 Filter Receptacle with Solder Cup Pin Contacts



240-791-001P Dimensions

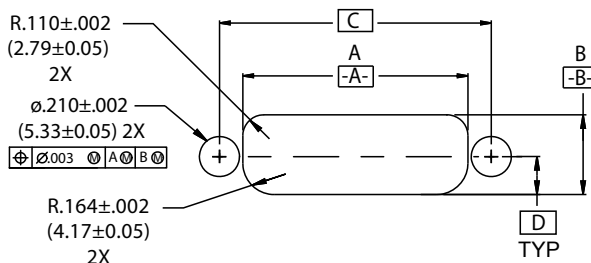
Shell Size	A Max		B Basic		C Max		D Max		E Max		F Dia ±.004 (0.10)		G ±.003 (0.08)	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
A	1.040	26.42	.750	19.05	.490	12.45	.390	9.91	.415	10.54	.149	3.78	.195	4.95
B	1.190	30.23	.900	22.86	.640	16.26	.540	13.72	.415	10.54	.149	3.78	.195	4.95
C	1.340	34.04	1.050	26.67	.790	20.07	.690	17.53	.415	10.54	.149	3.78	.195	4.95
D	1.415	35.94	1.125	28.58	.865	21.97	.790	20.07	.415	10.54	.149	3.78	.195	4.95
E	1.565	39.75	1.275	32.39	1.015	25.78	.940	23.88	.415	10.54	.149	3.78	.195	4.95
F	1.715	43.56	1.425	36.20	1.165	29.59	1.090	27.69	.415	10.54	.149	3.78	.195	4.95
G	1.678	42.62	1.388	35.26	1.122	28.50	1.090	27.69	.500	12.70	.149	3.78	.195	4.95
H	2.275	57.79	1.900	48.26	1.516	38.51	1.440	36.58	.520	13.21	.172	4.37	.195	4.95
J	2.090	53.09	1.800	45.72	1.540	39.12	1.450	36.83	.415	10.54	.149	3.78	.195	4.95
K	2.465	62.61	2.175	55.25	1.915	48.64	1.840	46.74	.415	10.54	.149	3.78	.195	4.95
L	2.511	63.78	2.136	54.26	1.755	44.58	1.675	42.55	.520	13.21	.172	4.37	.195	4.95
M	2.580	65.53	2.200	55.88	1.815	46.10	1.740	44.20	.635	16.13	.200	5.08	.195	4.95

Filter Connectors

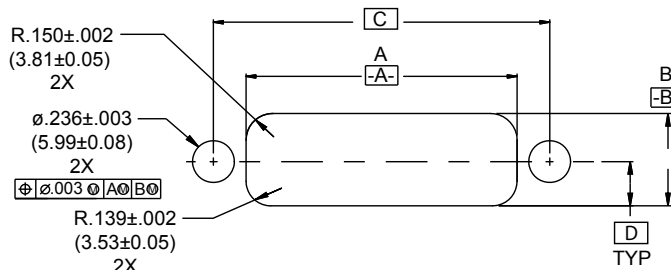
240-791-001 Filter Receptacle with Solder Cup Pin Contacts

Recommended Panel Cutout for Filter Rear Panel Mount Receptacles

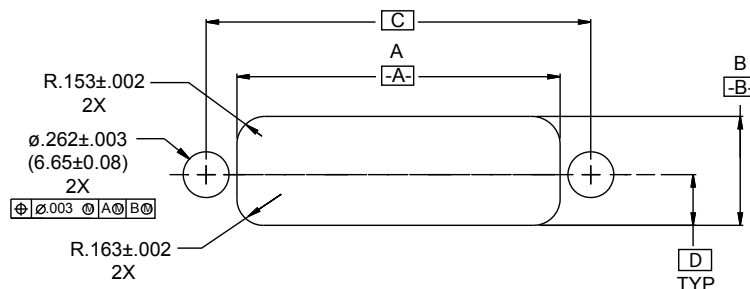
Panel Cutout for
Shell Sizes
**A, B, C, D, E, F, G,
J, K**



Panel Cutout for
Shell Sizes
H, L



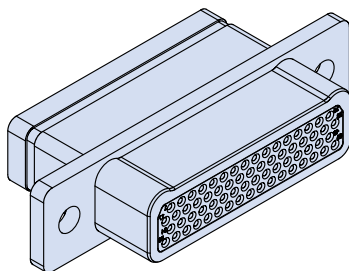
Panel Cutout for
Shell Size
M



Shell Size	A ±.002(0.05)		B ±.002(0.05)		C		D	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.
A	0.505	12.83	0.418	10.62	0.750	19.05	0.199	5.05
B	0.655	16.64	0.418	10.62	0.900	22.86	0.199	5.05
C	0.805	20.45	0.418	10.62	1.050	26.67	0.199	5.05
D	0.880	22.35	0.418	10.62	1.125	28.58	0.199	5.05
E	1.030	26.16	0.418	10.62	1.275	32.39	0.199	5.05
F	1.180	29.97	0.418	10.62	1.425	36.20	0.199	5.05
G	1.142	29.01	0.506	12.85	1.388	35.26	0.244	6.20
H	1.531	38.89	0.521	13.23	1.900	48.26	0.250	6.35
J	1.555	39.50	0.418	10.62	1.800	45.72	0.199	5.05
K	1.930	49.02	0.418	10.62	2.175	55.25	0.199	5.05
L	1.531	38.89	0.521	13.23	1.900	48.26	0.250	6.35
M	1.767	44.88	0.623	15.82	2.200	55.88	0.290	7.37

Filter Connectors

240-791-003 Filter Plugs with Solder Cup Socket Contacts



240-791-003 Filter Connector

- Scoop-proof dual lobe shell
- Flight-grade shock and vibration
- C or Pi filters
- -55 to +125°C
- #23, #16, and #12 contacts in 36 arrangements

Table 3 Capacitance Class

Code	Capacitance Range (pF)	
	Pi-Section	C-Section
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

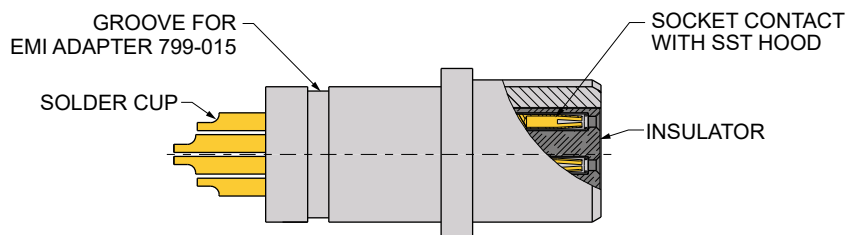
* Filter classes X, Y and Z are 250 VDC. All others are 500 VDC.

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

Construction

- **Shell:** aluminum alloy
- **Insulators:** High grade rigid dielectric
- **Contacts:** copper alloy, 50 microinches gold over nickel plating
- **Socket contact hood:** stainless steel, passivated
- **Hardware:** 300 series stainless steel, passivated

C or Pi filters. Multi-layer planar capacitor array. Series 791 filter connectors are the next-generation higher density alternative to M24308 D Subminiature connectors. Available in 36 arrangements, 791 filter connectors feature aluminum shells, gold-plated non-removable solder cup contacts, and a shell groove for attachment of EMI shielding adapters.



How To Order

Sample Part Number →	240-791-003S	J-33	ME	P	A	K
Product	240-791-003S Filter Plug with Socket Solder Cup Contacts					
Arrangement Number (Shell Size - Insert Arr.)	See Table 2					
Shell Finish	ME = Electroless Nickel MT = Nickel-PTFE ZR = Black Zinc-Nickel					
Filter Type	P = Pi circuit C = C circuit					
Capacitance Class	See Table 3					
Hardware Option (Table 1)	N = Thru-Hole (no hardware) S = Low Profile Screwlock, Hex Head T = Extended Screwlock, Slot Head L = Low Profile Jackscrew, Hex Head K = Extended Jackscrew, Slot Head P = Jackpost					

Specifications

- **Operating temperature:** -55 to +125°C
- **Dielectric withstanding voltage**
Filter classes A-J: 500 Vdc
Filter classes X, Y, Z: 250 Vdc
- **Insulation Resistance:** 5000 megohms minimum at 200 Vdc
- **Current rating:**
Size 23 contacts: 5A max.
Size 16 contacts: 7.5A max. for combo arrangements, 13A max. for arrangements with size 16 contacts only
Size 12 contacts: 13A max. for combo layouts, 23A max. for arrangements with size 12 contacts only
- **Shock:** EIA-364-27 condition D
- **Vibration:** EIA-364-28 condition V, letter E

Notes

1. This connector is designed to meet the requirements of MIL-STD-2120 and Glenair Series 79 Product Specification 799-008.
2. All contacts have identical filter values. Other filter styles (C-L, L-C, unbalanced Pi, multi-stage, multi-value) are available. Please consult factory for other options.

Filter Connectors

240-791-003 Filter Plugs with Solder Cup Socket Contacts

Table 1 Hardware Option

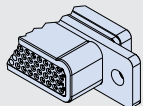
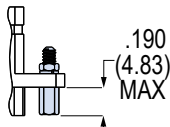
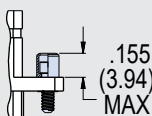
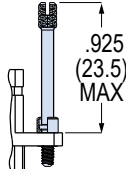
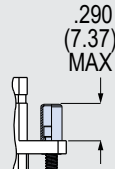
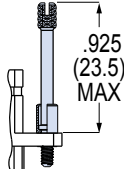
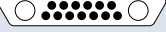
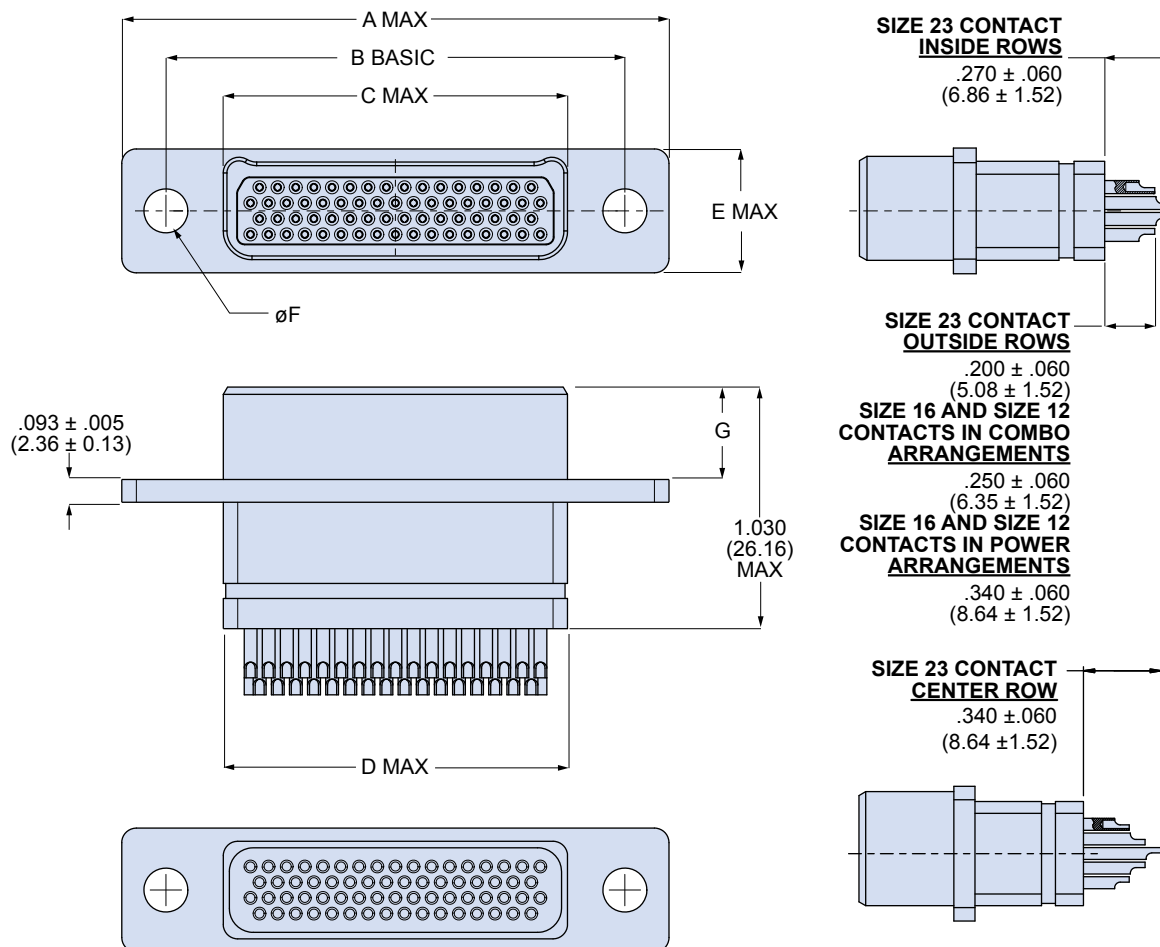
Thread Sizes					
Hardware thread sizes vary by shell size. Shell sizes A, B, C, D, E, F, G, J, K have #4-40 UNC-2 thread, shell sizes H and L have #6-32 UNC-2 thread, shell size M has #8-32 UNC-2 thread.					
					
N No Hardware Mounting flange has thru-holes.	P Jackpost Supplied loosely assembled with nut and split washer. Stainless steel.	L Low Profile Jackscrew Non-removable, hex head. Stainless steel.	K Extended Jackscrew Slot head, stainless steel, non-removable.	S Low Profile Screwlock Hex head, stainless steel, non-removable. Screwlocks allow the connector to be mated before the screws are fastened.	T Extended Screwlocks Slot head, stainless steel, non-removable. Screwlocks allow the connector to be mated before the screws are fastened.

Table 2 Arrangement Number

Arrangements with Size #23 Contacts	Arrangements with Size #16 Contacts	Arrangements with Size #12 Contacts
 A-5 5 #23  B-9 9 #23  C-13 13 #23  D-15 15 #23  E-19 19 #23  F-23 23 #23  G-33 33 #23  H-66 66 #23  J-33 33 #23  K-43 43 #23  L-78 78 #23  M-102 102 #23	 B-2P2 2 #16  D-3P3 3 #16  D-7P2 5 #23, 2 #16  E-11P2 9 #23, 2 #16  E-7P3 4 #23, 3 #16  F-14P3 11 #23, 3 #16  F-15P2 13 #23, 2 #16  F-5P5 5 #16  H-29P7 22 #23, 7 #16  H-54P2 52 #23, 2 #16  J-17P4 13 #23, 4 #16  J-25P2 23 #23, 2 #16  J-7P7 7 #16  K-27P4 23 #23, 4 #16  K-35P2 33 #23, 2 #16  K-9P9 9 #16  M-17P17 17 #16	 G-13P2 11 #23, 2 #12  G-3P3 3 #12  G-21P1 20 #23, 1 #12  H-10P4 6 #23, 4 #12  H-36P2 34 #23, 2 #12  H-5P5 5 #12  L-6P6 6 #12

Filter Connectors

240-791-003 Filter Plugs with Solder Cup Socket Contacts



240-791-003S Dimensions

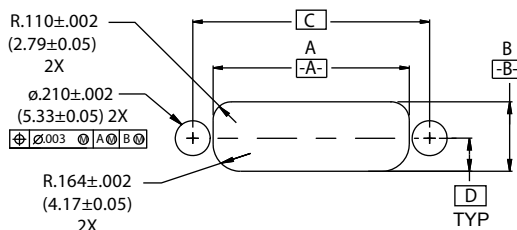
Shell Size	A Max		B Basic		C Max		D Max		E Max		F Dia ±.004 (0.10)		G ±.003 (0.08)	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
A	1.040	26.42	.750	19.05	.410	10.41	.390	9.91	.415	10.54	.149	3.78	.383	9.73
B	1.190	30.23	.900	22.86	.560	14.22	.540	13.72	.415	10.54	.149	3.78	.383	9.73
C	1.340	34.04	1.050	26.67	.710	18.03	.690	17.53	.415	10.54	.149	3.78	.383	9.73
D	1.415	35.94	1.125	28.58	.785	19.94	.790	20.07	.415	10.54	.149	3.78	.383	9.73
E	1.565	39.75	1.275	32.39	.935	23.75	.940	23.88	.415	10.54	.149	3.78	.383	9.73
F	1.715	43.56	1.425	36.20	1.085	27.56	1.090	27.69	.415	10.54	.149	3.78	.383	9.73
G	1.673	40.84	1.388	35.25	1.047	26.59	1.090	27.69	.500	12.70	.149	3.78	.383	9.73
H	2.275	57.79	1.900	48.26	1.437	36.50	1.440	36.58	.520	13.21	.172	4.37	.383	9.73
J	2.090	53.09	1.800	45.72	1.460	37.08	1.450	36.83	.415	10.54	.149	3.78	.383	9.73
K	2.465	62.61	2.175	55.25	1.835	46.61	1.840	46.74	.415	10.54	.149	3.78	.383	9.73
L	2.511	63.78	2.136	54.26	1.673	42.49	1.675	42.55	.520	13.21	.172	4.37	.383	9.73
M	2.580	65.53	2.200	55.88	1.734	44.04	1.740	44.20	.635	16.13	.200	5.08	.423	10.74

Filter Connectors

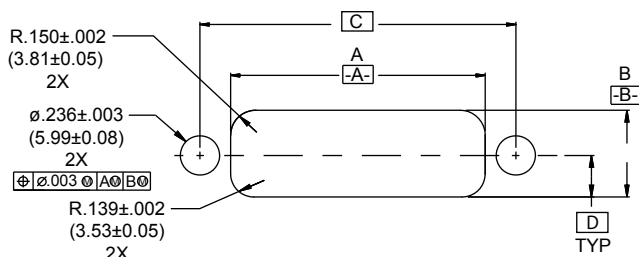
240-791-003 Filter Plugs with Solder Cup Socket Contacts

Recommended Panel Cutout for Filter Rear Panel Mount Plug

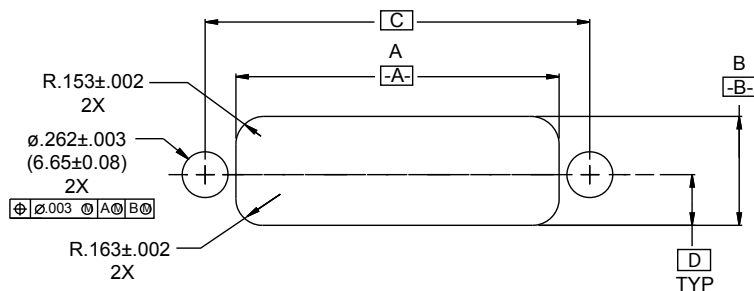
Panel Cutout for
Shell Sizes
**A, B, C, D, E, F, G,
J, K**



Panel Cutout for
Shell Sizes
H, L



Panel Cutout for
Shell Size
M



Shell Size	A $\pm .002(0.05)$		B $\pm .002(0.05)$		C Basic		D Basic	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.
A	0.505	12.83	0.418	10.62	0.750	19.05	0.199	5.05
B	0.655	16.64	0.418	10.62	0.900	22.86	0.199	5.05
C	0.805	20.45	0.418	10.62	1.050	26.67	0.199	5.05
D	0.880	22.35	0.418	10.62	1.125	28.58	0.199	5.05
E	1.030	26.16	0.418	10.62	1.275	32.39	0.199	5.05
F	1.180	29.97	0.418	10.62	1.425	36.20	0.199	5.05
G	1.142	29.01	0.506	12.85	1.388	35.26	0.244	6.20
H	1.531	38.89	0.521	13.23	1.900	48.26	0.250	6.35
J	1.555	39.50	0.418	10.62	1.800	45.72	0.199	5.05
K	1.930	49.02	0.418	10.62	2.175	55.25	0.199	5.05
L	1.531	38.89	0.521	13.23	1.900	48.26	0.250	6.35
M	1.767	44.88	0.623	15.82	2.200	55.88	0.290	7.37