

MICRO-CRIMP RECTANGULAR CONNECTORS

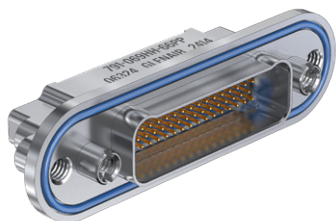
Series 791 Scoop-Proof

SERIES
791
Scoop-Proof

791-069

Panel Receptacle, Hermetic

- ◆ Hermetic
- ◆ Solder cup or PC tail
- ◆ Pin contacts



791-069 receptacle has glass-to-metal hermetic seal. Connector shell is nickel-plated Kovar alloy. Contacts are gold-plated Kovar alloy. Available with solder cup or PC tails. Interfacial seal provides environmental protection. Shell has threaded holes for attaching EMI banding backshell (799-016, sold separately).

- Aerospace-grade ultraminiature connector with rugged scoop-proof duo-lobe shell
- Glass-to-metal hermetic seal
- 40 layouts with M39029-type solder or PC tail contacts

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			
M-4P4				4

HOW TO ORDER

Sample Part Number		791-069	H	G-33	P	G	B
Basic Part Number	791-069	Panel Receptacle, Hermetic, Pin Contacts					
Finish	H	Nickel Plate					
Shell Size-Insert Arr.	See <i>“Insert Arrangements”</i> Table						
Contact Type	C	Pin / PC Tail					
	P	Pin / Solder Cup					
Hardware Option <i>Table 1</i>	G	Male Guide Pins <i>For blind mating</i>					
	N	No Hardware <i>Threaded holes</i>					
	P	Female Jackposts					
	S	Female Guide Sockets <i>For blind mating</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						

RATINGS

- Hermeticity: $<1 \times 10^{-7}$ ccHe/sec @ 1 ATM delta
- Voltage (DWV): size 23 contacts 500 VAC, size 12 and 16: 1200 VAC, size 8 1000 VAC
- Operating temperature: -65 to +150 °C
- Durability: 500 mating cycles
- Shock: 300 g
- Vibration: 20 g random

CONSTRUCTION

- Contacts: Kovar alloy, gold plated
- Shell: Kovar alloy, nickel plated
- Insulators: individual glass beads
- Interfacial seal: Fluorosilicone/silicone blend
- O-ring: Fluorosilicone
- Hardware: Stainless steel, passivated

Application Note

Polarization Key Positions

See Mod Code 555 pg. B-8 for details

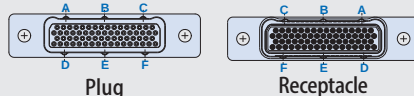
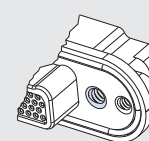
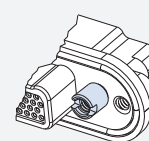


TABLE 1: HARDWARE OPTION



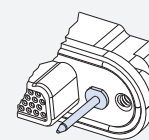
N No Hardware

Threaded holes.
Size A-G, J, K = 6-32 UNC-2B
H, L = 8-32 UNC-2B
M = 10-32 UNF-2B.
.400 (10.2) min. depth



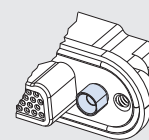
P Female Jackposts

Jackposts are non-removable.
Size A-G, J, K = 4-40 UNC-2B
H, L = 6-32 UNC-2B
M = 8-32 UNC-2B



G Guide Pins

Guide pins for blind mate applications. Non-removable. Requires guide bushing (S) on mating plug.



S Guide Sockets

Guide sockets for blind mate applications. Non-removable. Requires guide pins (G) on mating plug.

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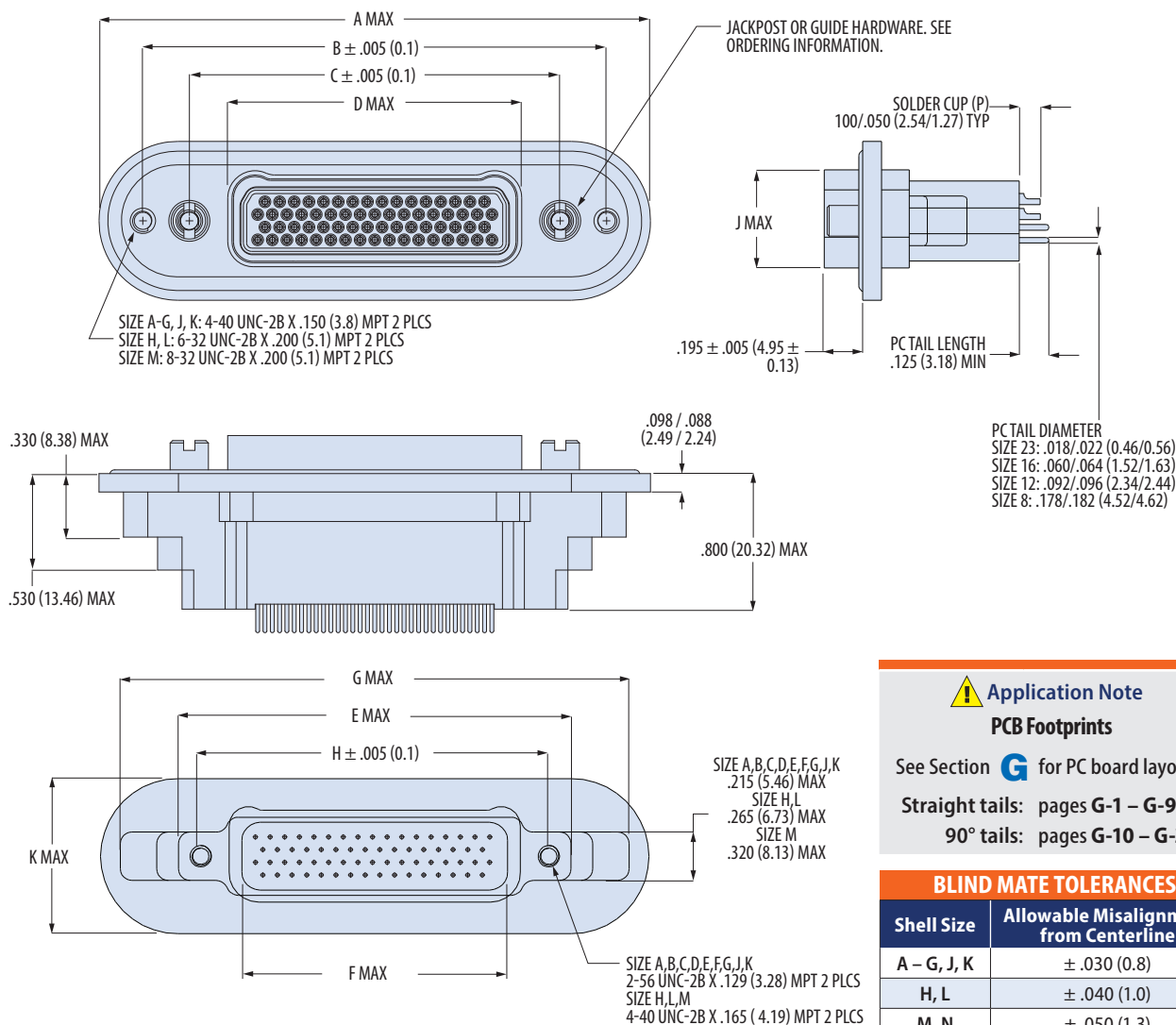
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Application Note

PCB Footprints

See Section **G** for PC board layouts.

Straight tails: pages **G-1 – G-9**

90° tails: pages **G-10 – G-20**

BLIND MATE TOLERANCES

Shell Size	Allowable Misalignment from Centerline
A – G, J, K	$\pm .030$ (0.8)
H, L	$\pm .040$ (1.0)
M, N	$\pm .050$ (1.3)

Shell Size	A Max		B $\pm .005$ (0.1)		C $\pm .005$ (0.1)		D Max		E Max		F Max		G Max		H $\pm .005$ (0.1)		J Max		K Max	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
A	1.750	44.45	1.300	33.02	.750	19.05	.490	12.45	.760	19.30	.350	8.89	1.500	38.10	.565	14.35	.410	10.41	.700	17.78
B	1.950	49.53	1.475	37.47	.900	22.86	.630	16.00	.910	23.11	.500	12.70	1.700	43.18	.715	18.16	.410	10.41	.700	17.78
C	2.025	51.44	1.600	40.64	1.050	26.67	.780	19.81	1.060	26.92	.650	16.51	1.800	45.72	.865	21.97	.410	10.41	.700	17.78
D	2.125	53.98	1.700	43.18	1.125	28.58	.860	21.84	1.160	29.46	.750	19.05	1.900	48.26	.965	24.51	.410	10.41	.700	17.78
E	2.325	59.06	1.800	45.72	1.275	32.39	1.010	25.65	1.310	33.27	.900	22.86	2.100	53.34	1.115	28.32	.410	10.41	.700	17.78
F	2.325	59.06	1.925	48.90	1.425	36.20	1.160	29.46	1.460	37.08	1.050	26.67	2.100	53.34	1.265	32.13	.410	10.41	.700	17.78
G	2.500	63.50	2.000	50.80	1.388	35.26	1.120	28.45	1.410	35.81	1.020	25.91	2.250	57.15	1.215	30.86	.490	12.45	.800	20.32
H	3.050	77.47	2.500	63.50	1.900	48.26	1.510	38.35	2.045	51.94	1.385	35.18	2.850	72.39	1.800	45.72	.510	12.95	.820	20.83
J	2.915	74.04	2.400	60.96	1.800	45.72	1.530	38.86	1.810	45.97	1.405	35.69	2.650	67.31	1.615	41.02	.410	10.41	.700	17.78
K	3.110	78.99	2.675	67.95	2.175	55.25	1.910	48.51	2.210	56.13	1.805	45.85	2.900	73.66	2.015	51.18	.410	10.41	.700	17.78
L	3.250	82.55	2.700	68.58	2.136	54.25	1.740	44.20	2.281	57.9	1.625	41.28	3.100	78.74	2.036	51.71	.510	12.95	.820	20.83
M	3.375	85.73	2.870	72.90	2.200	55.88	1.800	45.72	2.485	63.12	1.690	42.93	3.200	81.28	2.200	55.88	.600	15.24	.950	24.13

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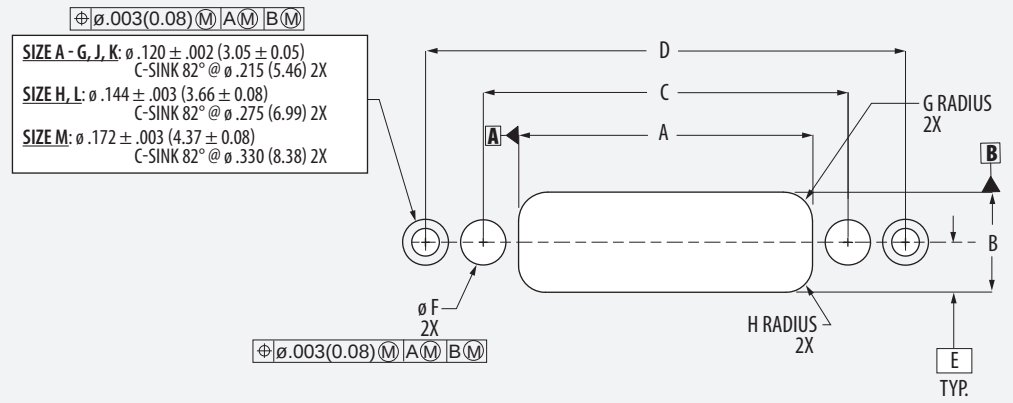
791-069

Panel Receptacle, Hermetic

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SERIES 791 SCOOP-PROOF

PANEL CUTOUT FOR 791-069 HERMETIC RECEPTACLE CONNECTORS



Shell Size	A $\pm .002$ (0.05)		B $\pm .002$ (0.05)		C Basic		D Basic		E Typ		ϕF $\pm .002$ (0.05)		G $\pm .002$ (0.05)		H $\pm .002$ (0.05)	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
A	.505	12.83	.418	10.62	.750	19.05	1.300	33.02	.199	5.05	.210	5.33	.110	2.79	.164	4.17
B	.655	16.64	.418	10.62	.900	22.86	1.475	37.47	.199	5.05	.210	5.33	.110	2.79	.164	4.17
C	.805	20.45	.418	10.62	1.050	26.67	1.600	40.64	.199	5.05	.210	5.33	.110	2.79	.164	4.17
D	.880	22.35	.418	10.62	1.125	28.58	1.700	43.18	.199	5.05	.210	5.33	.110	2.79	.164	4.17
E	1.030	26.16	.418	10.62	1.275	32.39	1.800	45.72	.199	5.05	.210	5.33	.110	2.79	.164	4.17
F	1.180	29.97	.418	10.62	1.425	36.20	1.925	48.90	.199	5.05	.210	5.33	.110	2.79	.164	4.17
G	1.142	29.01	.506	12.85	1.388	35.26	2.000	50.80	.244	6.20	.210	5.33	.110	2.79	.164	4.17
H	1.531	38.89	.521	13.23	1.900	48.26	2.500	63.50	.250	6.35	.236	5.99	.150	3.81	.139	3.53
J	1.555	39.50	.418	10.62	1.800	45.72	2.400	60.96	.199	5.05	.210	5.33	.110	2.79	.164	4.17
K	1.930	49.02	.418	10.62	2.175	55.25	2.675	67.95	.199	5.05	.210	5.33	.110	2.79	.164	4.17
L	1.767	44.88	.521	13.23	2.136	54.25	2.700	68.58	.250	6.35	.236	5.99	.150	3.81	.139	3.53
M	1.850	46.99	.623	15.82	2.200	55.88	2.870	72.90	.290	7.37	.262	6.65	.163	4.14	.153	3.89