

MICRO-CRIMP RECTANGULAR CONNECTORS

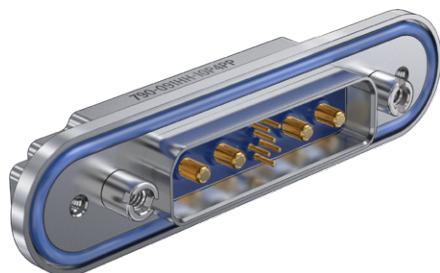
Series 790 High-Density

SERIES™
790
HD

790-091

Panel Receptacle, Hermetic

- ◆ Hermetic
- ◆ O-ring panel seal
- ◆ Pin contacts



790-091 panel 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 hermetic microminiature connector
- Glass-to-metal hermetic seal
- 40 layouts with #23, #16, #12 and #8 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

How to Order

Sample Part Number		790-091	H	G-33	P	G
Basic Part Number	790-091	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>				

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

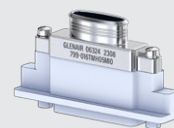
TABLE 1 HARDWARE OPTIONS

N No Hardware		P Female Jackpost	
G Guide Pin		S Guide Socket	

Application Note

EMI Banding Backshell 799-016

See page F-32 for backshell ordering information.



Application Note

Panel Cutout

See page A-60 for panel cutout dimensions.

MICRO-CRIMP RECTANGULAR CONNECTORS

Series 790 High-Density

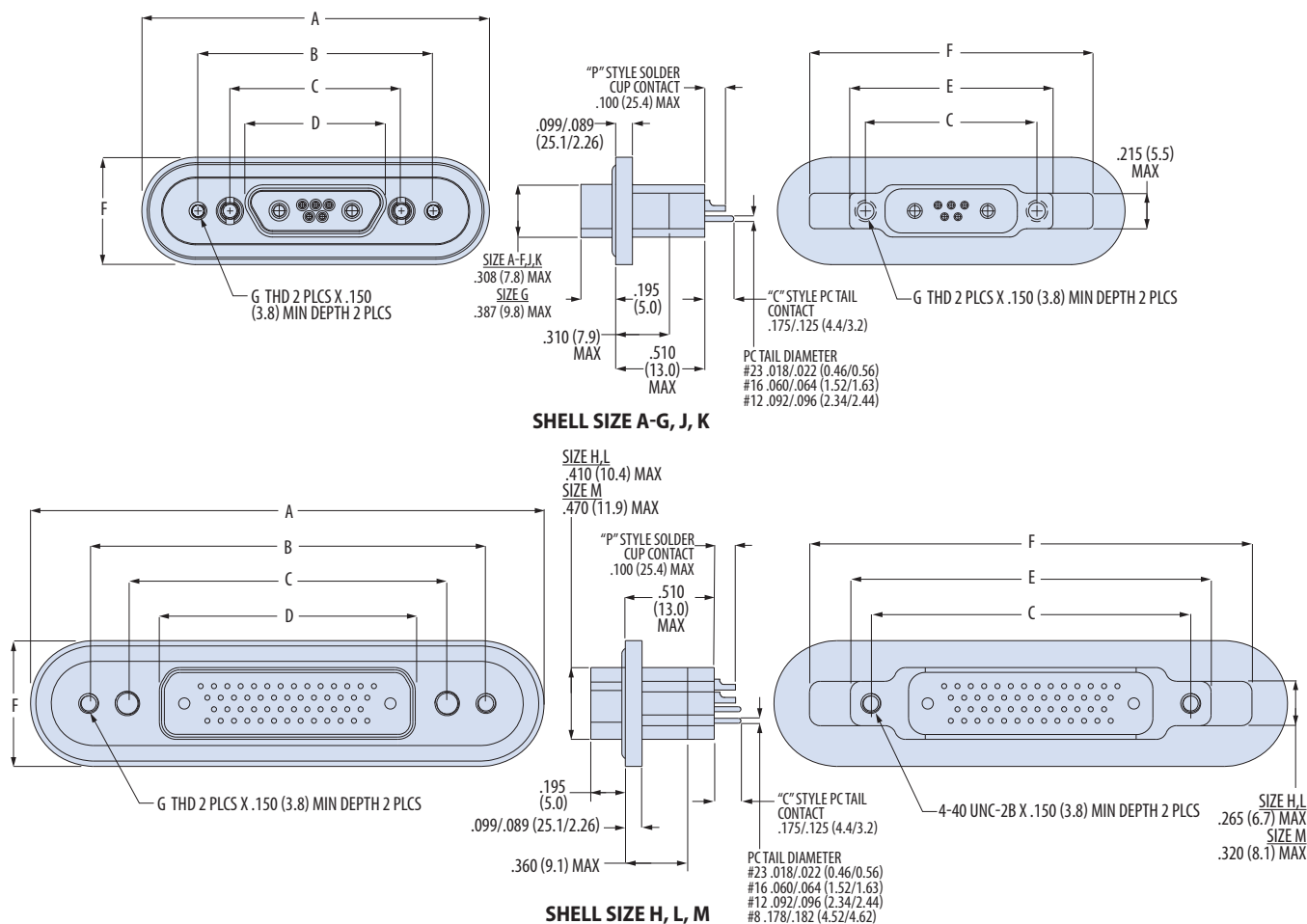


790-091

Panel Receptacle, Hermetic

- ◆ Hermetic
- ◆ O-ring panel seal
- ◆ Pin contacts

SERIES 790 HIGH-DENSITY

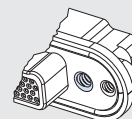


Shell Size	A Max		B ± .005 (0.1)		C ± .005 (0.1)		D Max		E Max		F Max		G THD UNC-2B
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
A	1.490	37.8	.925	23.5	.565	14.4	.401	10.2	.760	19.3	1.215	30.9	2-56
B	1.680	42.7	1.075	27.3	.715	18.2	.551	14.0	.910	23.1	1.365	34.7	2-56
C	1.785	45.3	1.225	31.1	.865	22.0	.701	17.8	1.060	26.9	1.515	38.5	2-56
D	1.975	50.2	1.325	33.7	.965	24.5	.801	20.3	1.160	29.5	1.615	41.0	2-56
E	2.075	52.7	1.475	37.5	1.115	28.3	.951	24.2	1.310	33.3	1.765	44.8	2-56
F	2.175	55.2	1.625	41.3	1.265	32.1	1.101	28.0	1.460	37.1	1.915	48.6	2-56
G	2.130	54.1	1.575	40.0	1.215	30.9	1.079	27.4	1.410	35.8	1.861	47.3	2-56
H	2.900	73.7	2.236	56.8	1.800	45.7	1.450	36.8	2.045	51.9	2.500	63.5	4-40
J	2.665	67.7	1.975	50.2	1.615	41.0	1.460	37.1	1.810	46.0	2.265	57.5	2-56
K	2.960	75.2	2.375	60.3	2.015	51.2	1.860	47.2	2.210	56.1	2.665	67.7	2-56
L	3.100	78.7	2.472	62.8	2.036	51.7	1.686	42.8	2.281	57.9	2.736	69.5	4-40
M	3.475	88.3	2.770	70.4	2.200	55.9	1.745	44.3	2.485	63.1	3.085	78.4	6-32

BLIND MATE TOLERANCES

Shell Size	Allowable Misalignment from Centerline
A - G, J, K	± .030 (0.8)
H, L	± .040 (1.0)
M	± .050 (1.3)

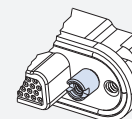
HARDWARE DETAILS



N

No Hardware

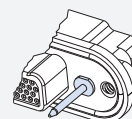
Tapped holes. Size A-G, J, K = 4-40, H, L = 6-32, M = 8-32. .150 (3.8) min. depth



P

Female Jackposts

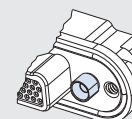
Jackposts are non-removable. Size A-G, J, K = 2-56, H, L = 4-40, M = 6-32.



G

Guide Pins

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



S

Guide Sockets

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