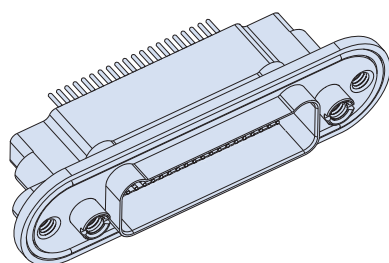


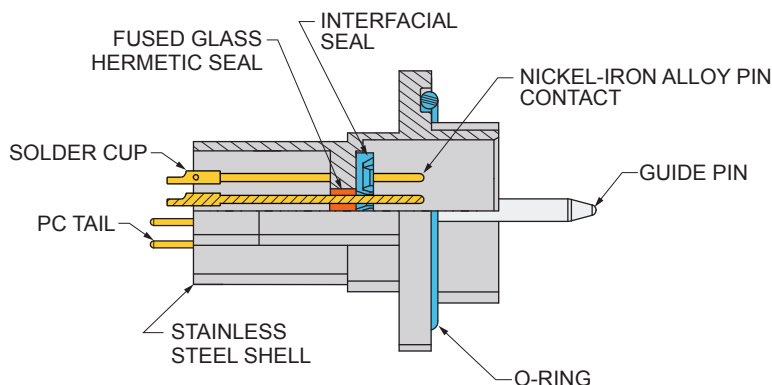
Hermetic Receptacle Connectors

791-044 Hermetic Receptacle Connectors with Solder Cup or PC Tail Contacts



791-044
Hermetic Receptacle

Glass-to-metal seal. Solder cup or PC tail. Blind Mate. Series 791 hermetic connectors are the next-generation higher density alternative to M24308 D Subminiature connectors. Dual lobe shell with recessed pin contacts to prevent scooping damage. 1×10^{-5} cc/sec helium leak rate. Stainless steel shell, fused vitreous dielectric insert, gold-plated nickel-iron alloy contacts, fluorosilicone interfacial seal.



RELIABLE DESIGN

- Glass-to-metal seal
- 100% scoop-proof
- Stainless steel shell

VERSATILE

- Wide range of configurations
- Signal, power
- Blind mate

HARSH ENVIRONMENT

- Humidity, water ingress
- Shock and vibration
- Temperature extremes
- Corrosion resistance
- High altitude

SIZE AND WEIGHT SAVING

- High density

How To Order

Sample Part Number	791-044	Z1	H-29P7	P	P
Product	791-044 Panel mount hermetic receptacle connector				
Shell Finish	Z1 = Passivated SST ZL = Nickel-plated SST				
Arrangement Number (Shell Size- Insert Arr.)	See Table 2				
Contact Type	C = Pin Contacts, PC tail P = Pin Contacts, Solder Cup				
Hardware Option (Table 1)	N = No hardware P = Jackpost G = Male guide pin S = Female guide bushing				

Specifications

- **Hermeticity:** 10^{-5} cm³/s helium leak rate at 1ATM pressure differential
- **Operating temperature:** -65 to +150°C
- **Dielectric withstanding voltage**
Size #23 contacts: 500 Vac rms
#12, #16, #8: 1800 Vac rms
- **Current rating:**
Size 23 contacts: 3A
Size 16 contacts: 10A
Size 12 contacts: 17A
- **Shock:** EIA-364-27 condition D
- **Vibration:** EIA-364-28 condition V, letter E
- See pages 8-10 for additional specifications

Construction

- **Shell:** 300 series stainless steel
- **Insulator:** vitreous glass
- **Contacts:** nickel-iron alloy, 50 microinches gold over nickel plating
- **Hardware:** stainless steel, passivated
- **O-ring:** fluorosilicone

Hermetic Receptacle Connectors

791-044 Hermetic Receptacle Connectors with Solder Cup or PC Tail Contacts

Table 1 Hardware Option

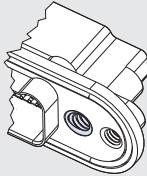
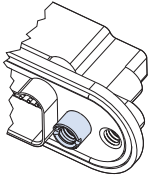
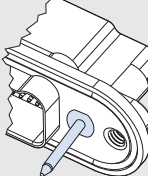
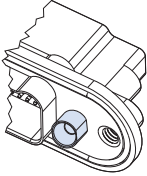
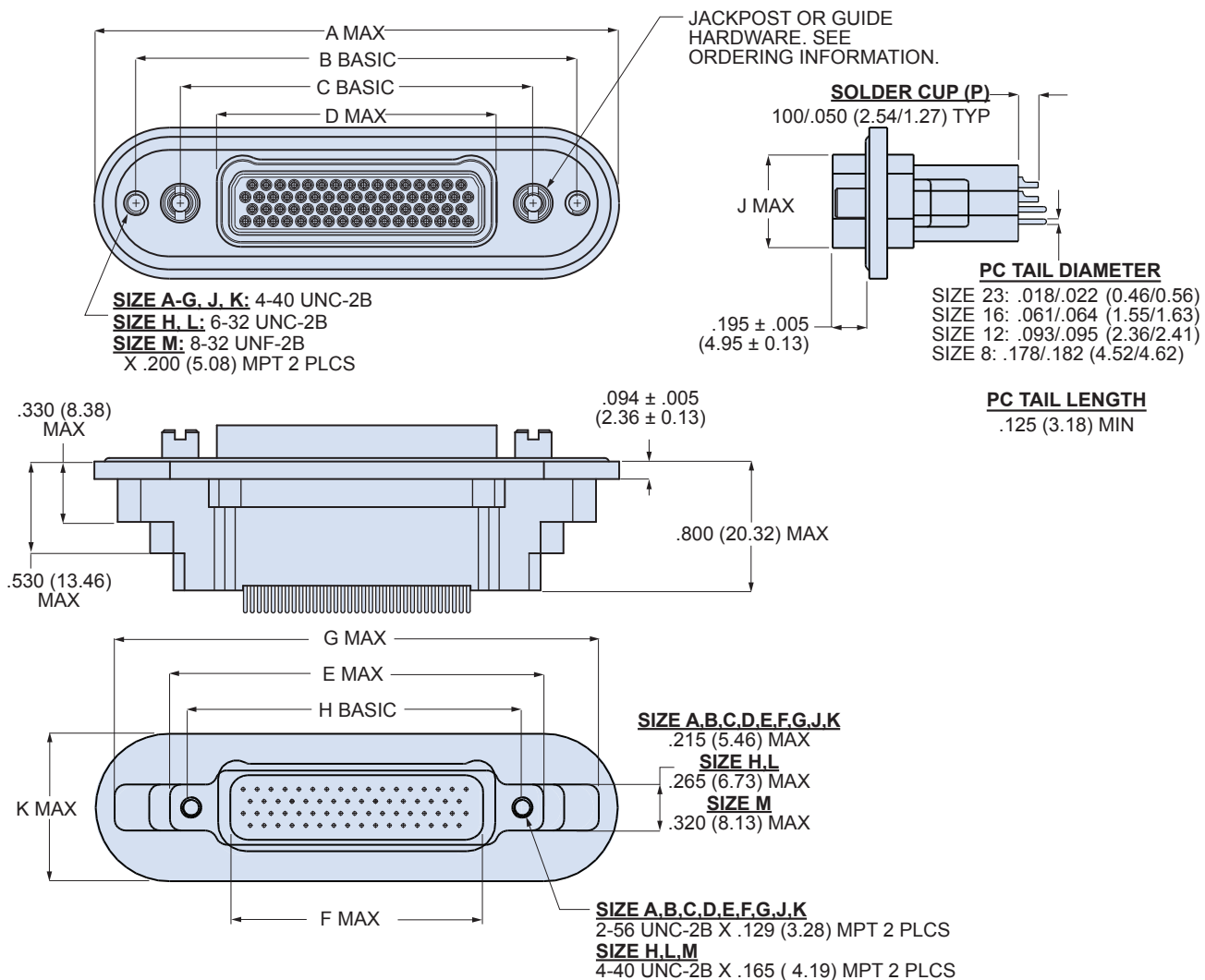
 N No Hardware Connector supplied with threaded holes, .150 (3.8) minimum depth. Shell sizes A-G, J, K have 6-32 UNC-2B thread, sizes H and L have 8-32 UNC-2B thread. Size M has 10-32 UNF-2B thread.	 P Jackposts Non-removable female jackpost. Shell sizes A-G, J, K have 4-40 UNC-2B thread, sizes H and L have 6-32 UNC-2B thread. Size M has 8-32 UNC-2B thread. 300 series stainless steel, passivated.	 G Guide Pins Non-removable, 300 series stainless steel guide pins for blind mating applications. Use with guide bushing on mating connector.	 S Guide Bushing Non-removable, 300 series stainless steel female guide bushings for blind mating applications. Use with guide pin on mating connector.
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Table 2 Arrangement Number

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

Hermetic Receptacle Connectors

791-044 Hermetic Receptacle Connectors with Solder Cup or PC Tail Contacts



791-044 Dimensions

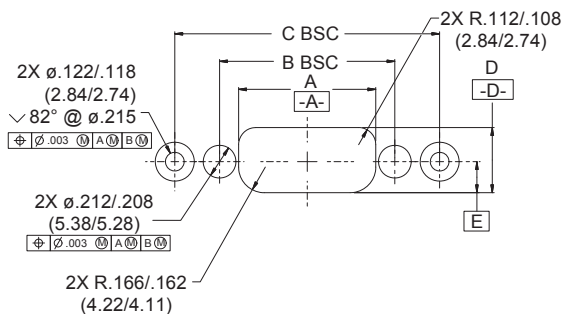
Shell Size	A Max		B Basic		C Basic		D Max		E Max		F Max		G Max		H Basic		J Max		K Max	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
A	1.750	44.45	1.300	33.02	.750	19.05	.490	12.45	.760	19.30	.350	8.89	1.500	38.10	.565	14.35	.410	10.41	.715	18.16
B	1.950	49.53	1.475	37.47	.900	22.86	.630	16.00	.910	23.11	.500	12.70	1.700	43.18	.715	18.16	.410	10.41	.715	18.16
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	.715	18.16
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	.715	18.16
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	.715	18.16
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	.715	18.16
G	2.500	63.50	2.000	50.80	1.388	35.26	1.117	28.37	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	1.507	38.28	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	.715	18.16
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	.715	18.16
L	3.250	82.55	2.700	68.58	2.136	54.25	1.743	44.27	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	1.804	45.82	2.485	63.12	1.690	42.93	3.200	81.28	2.200	55.88	.600	15.24	.950	24.13

Hermetic Receptacle Connectors

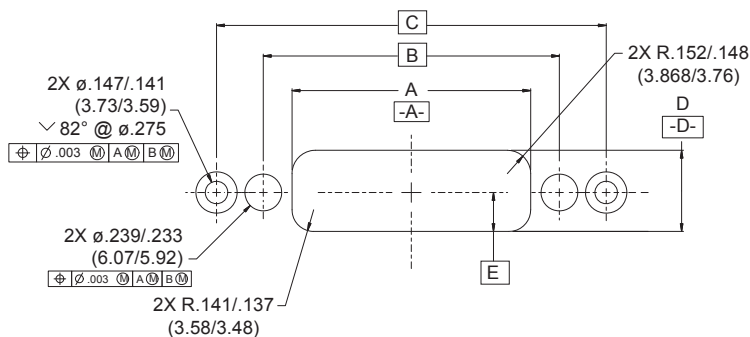
791-044 Hermetic Receptacle Connectors with Solder Cup or PC Tail Contacts

Recommended Panel Cutout for Hermetic Rear Panel Mount Receptacles

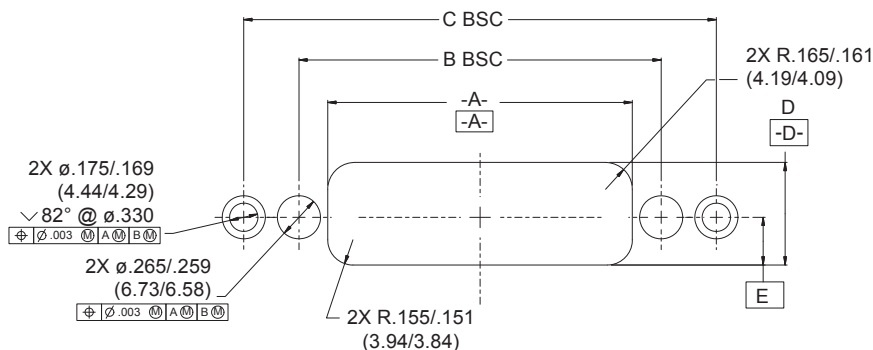
Panel Cutout for
Shell Sizes
**A, B, C, D, E, F, G,
J, K**



Panel Cutout for
Shell Sizes
H, L



Panel Cutout for
Shell Size
M



Shell Size	A ±.002(0.05)		B		C		D ±.002(0.05)		E	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
A	.505	12.83	.750	19.05	1.300	33.02	.418	10.62	.199	5.05
B	.655	16.64	.900	22.86	1.475	37.47	.418	10.62	.199	5.05
C	.805	20.45	1.050	26.67	1.600	40.64	.418	10.62	.199	5.05
D	.880	22.35	1.125	28.58	1.700	43.18	.418	10.62	.199	5.05
E	1.030	26.16	1.275	32.39	1.800	45.72	.418	10.62	.199	5.05
F	1.180	29.97	1.425	36.20	1.925	48.90	.418	10.62	.199	5.05
G	1.142	29.01	1.388	35.26	2.000	50.80	.506	12.85	.244	6.19
H	1.531	38.89	1.900	48.26	2.500	63.50	.521	13.23	.250	6.35
J	1.555	39.50	1.800	45.72	2.400	60.96	.418	10.62	.199	5.05
K	1.930	49.02	2.175	55.25	2.675	67.95	.418	10.62	.199	5.05
L	1.767	44.88	2.136	54.25	2.700	68.58	.521	13.23	.250	6.35
M	1.850	46.99	2.200	55.88	2.870	72.90	.623	15.82	.290	7.37