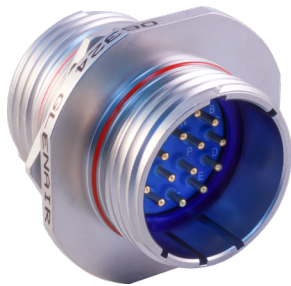


MIL-DTL-38999 Series III Type 233-103 Bulkhead feed-thrus

HERMETIC CONNECTORS

Part Number Development												
Sample Part Number	233-103						-H2	Z1	17-35	S	N	-02
Series / Basic Part No.	Series 23 SuperNine Hermetic Bulkhead Feed-thru											
Connector Style	H2 = Box Mount DH7 = Dual O-ring Jam-Nut Mount			H7 = Jam-Nut Mount H8 = Weld Mount								
Finish*	Z1 = CRES, Passivated ZL = CRES, Nickel Finish											
Shell Size-Insert Arrangement*	Per MIL-DTL-38999/MIL-STD-1560											
Contact Type	P = Pin on panel side PP = Pin-Pin (See note 1)			S = Socket on panel side SS = Socket-Socket (See note 1)								
Polarization*	A, B, C, D, E, N = Normal											
Panel Thickness	01, 02, 03; See panel thickness table per connector style											

*Refer to Section A for complete details, consult factory for additional options
Modification codes may be added directly to the end of any valid part number



Hermetic Leak Rate Mod Codes	
Designator	Required Leak Rate
-585A	1 x 10 ⁻¹⁰ cc Helium per second
-585B	1 x 10 ⁻⁹ cc Helium per second
-585C	1 x 10 ⁻⁸ cc Helium per second

NOTES

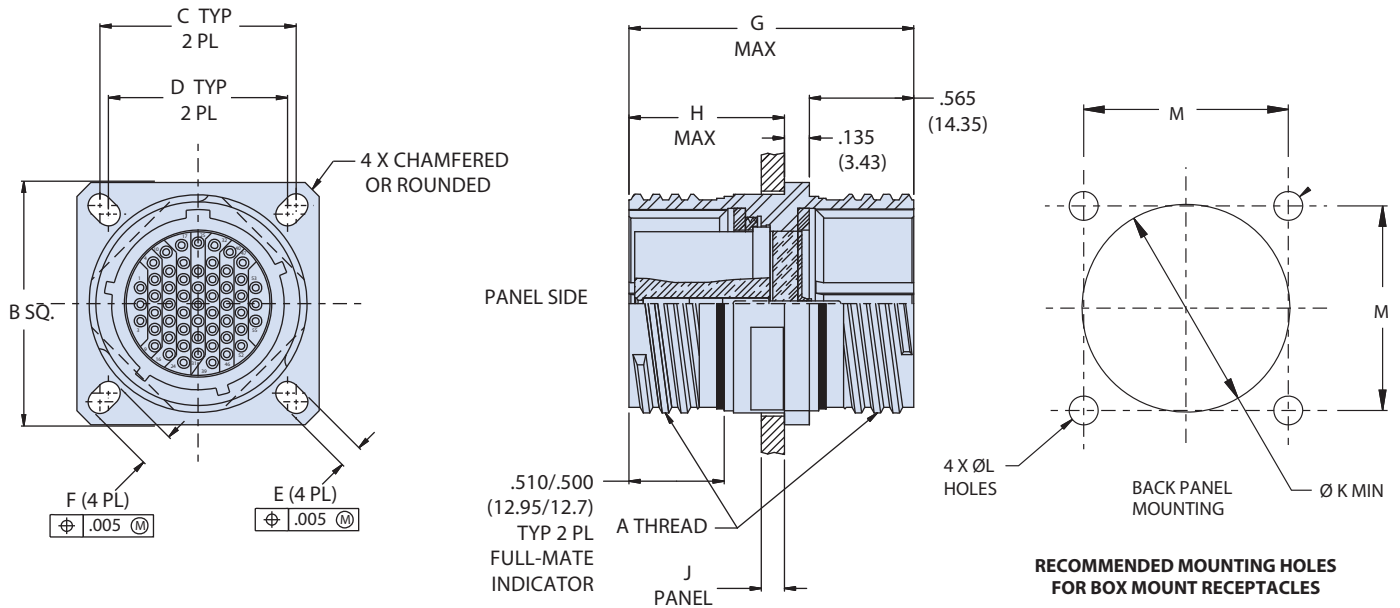
- For PP or SS style, only symmetrical layouts may be selected. Power to a given contact on one end will result in power to contact directly opposite, regardless of identification letter.
- Glenair 233-103 will mate with any QPL manufacturer's 38999 Series III plug of same shell size, polarization and opposite contact gender.
- Hermeticity: less than 1 x 10⁻⁷ ccHe/sec at 1 atmosphere differential.
- For weld mount (H8) connector style, "SS" style, -01 dimensions "E" and "F" increase by .150"
- Electrical safety limits must be established by user. Peak voltage, switching surge, transient, etc should be used to determine safe application

Material / Finish

- Shell and jam-nut (H7): CRES/passivate or CRES/nickel plate
- Contacts pin: nickel/iron alloy/gold plate
- Contacts sockets: copper alloy/gold plate insulator
- Insulator hermetic: vitreous glass/N.A
- Insulator socket: rigid dielectric/N.A
- Seals: fluorosilicone blend/N.A.

MIL-DTL-38999 Series III Type 233-103 Bulkhead feed-thrus

233-103-H2 BOX MOUNT RECEPTACLE



Dimensions						
SHELL SIZE	A THREAD	B SQ.	C BSC.	D BSC.	E	F
9	.6250	0.949 (24.10)	0.719	0.594	0.136 (3.45)	0.224 (5.69)
	.1 P-.3L-TS-2A	0.925 (23.50)	(18.26)	(15.09)	0.120 (3.05)	0.208 (5.28)
11	.7500	1.043 (26.49)	0.812	0.719	0.136 (3.45)	0.202 (5.13)
	.1 P-.3L-TS-2A	1.019 (25.88)	(20.62)	(18.26)	0.120 (3.05)	0.186 (4.72)
13	.8750	1.138 (28.91)	0.906	0.812	0.136 (3.45)	0.202 (5.13)
	.1 P-.3L-TS-2A	1.114 (28.30)	(23.01)	(20.62)	0.120 (3.05)	0.186 (4.72)
15	1.0000	1.232 (31.29)	0.969	0.906	0.136 (3.45)	0.181 (4.60)
	.1 P-.3L-TS-2A	1.208 (30.68)	(24.61)	(23.01)	0.120 (3.05)	0.165 (4.19)
17	1.1875	1.323 (33.60)	1.062	0.969	0.136 (3.45)	0.202 (5.13)
	.1 P-.3L-TS-2A	1.299 (32.99)	(26.97)	(24.61)	0.120 (3.05)	0.186 (4.72)
19	1.2500	1.449 (36.80)	1.156	1.062	0.136 (3.45)	0.202 (5.13)
	.1 P-.3L-TS-2A	1.425 (36.20)	(29.36)	(26.97)	0.120 (3.05)	0.186 (4.72)
21	1.3750	1.575 (40.00)	1.250	1.156	0.136 (3.45)	0.202 (5.13)
	.1 P-.3L-TS-2A	1.551 (39.40)	(31.75)	(29.36)	0.120 (3.05)	0.186 (4.72)
23	1.5000	1.701 (43.21)	1.375	1.25	0.162 (4.11)	0.250 (6.35)
	.1 P-.3L-TS-2A	1.677 (42.60)	(34.92)	(31.75)	0.146 (3.71)	0.234 (5.94)
25	1.6250	1.823 (46.30)	1.500	1.375	0.162 (4.11)	0.250 (6.35)
	.1 P-.3L-TS-2A	1.799 (45.69)	(38.10)	(34.92)	0.146 (3.71)	0.234 (5.94)

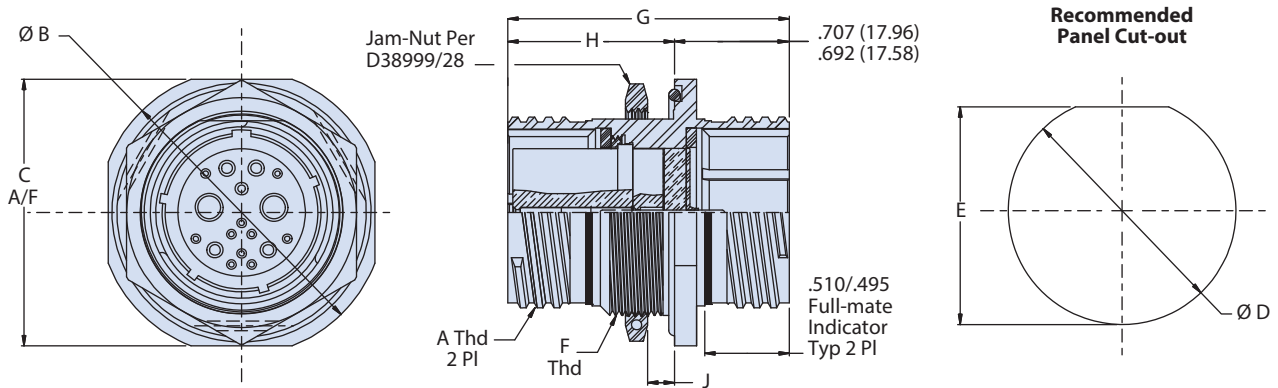
Recommended Mounting Holes			
SHELL SIZE	Ø K MIN	Ø L HOLES	M
9	0.656 (16.66)	0.133 (3.38)	0.724 (18.39)
		0.123 (3.12)	0.714 (18.14)
11	0.781 (19.84)	0.133 (3.38)	0.817 (20.75)
		0.123 (3.12)	0.807 (20.50)
13	0.921 (23.39)	0.133 (3.38)	0.911 (23.14)
		0.123 (3.12)	0.901 (22.89)
15	1.047 (26.59)	0.133 (3.38)	0.973 (24.71)
		0.123 (3.12)	0.963 (24.46)
17	1.218 (30.94)	0.133 (3.38)	1.067 (27.10)
		0.123 (3.12)	1.057 (26.85)
19	1.296 (32.92)	0.133 (3.38)	1.161 (29.49)
		0.123 (3.12)	1.151 (29.24)
21	1.421 (36.09)	0.133 (3.38)	1.255 (31.88)
		0.123 (3.12)	1.245 (31.62)
23	1.546 (39.27)	0.159 (4.04)	1.380 (35.05)
		0.149 (3.78)	1.370 (34.80)
25	1.672 (42.47)	0.159 (4.04)	1.505 (38.23)
		0.149 (3.78)	1.495 (37.97)

Box Mount (H2) Panel Thickness			
DASH NO.	G DIM, OAL MAX	H DIM, MAX	J DIM, PANEL
-01	1.600 (40.64)	.843 (21.41)	.125 (3.18) .062 (1.57)
-02	1.730 (43.94)	1.040 (26.42)	.250 (6.35) .062 (1.57)
-03	2.000 (50.80)	1.290 (32.77)	.500 (12.70) .062 (1.57)

**MIL-DTL-38999 Series III Type
233-103 Bulkhead feed-thrus**

HERMETIC CONNECTORS

**233-103-H7 JAM-NUT MOUNT AND
233-103-DH7 DUAL O-RING JAM-NUT RECEPTACLE**

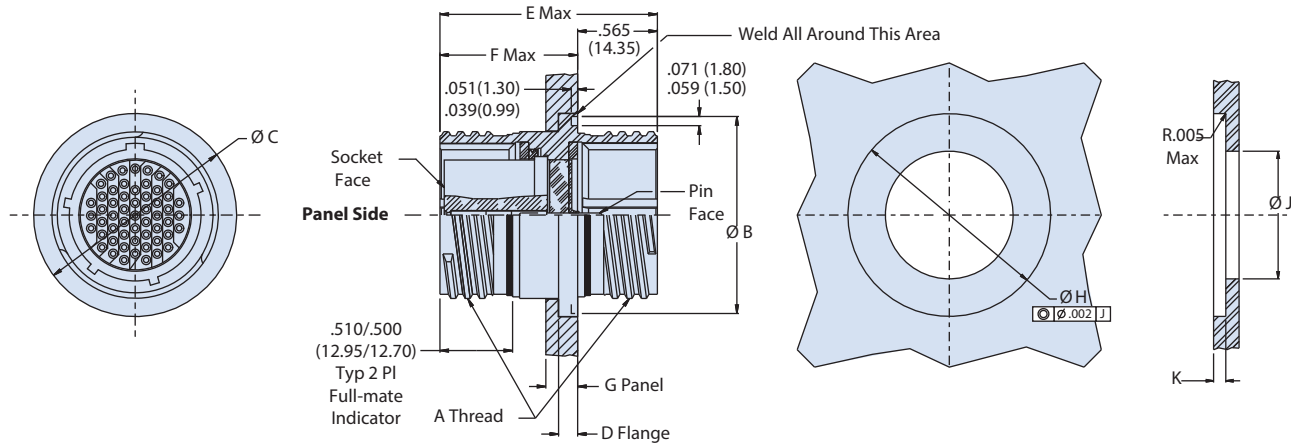


Dimensions								
SHELL SIZE	A THREAD 0.1 P-0.3L- TS-2	H7 Jam-Nut		DH7 Dual O-Ring Jam-Nut		D DIA	E DIM	F THREAD METRIC X 1.0-6G
		B DIA	C	B DIA	C			
9	.6250	1.189 (30.20)	1.063 (27.00)	1.500 (38.10)	1.375 (34.92)	.703 (17.86) .693 (17.60)	.661 (16.79) .655 (16.64)	M17
11	.7500	1.375 (34.92)	1.252 (31.80)	1.625 (41.28)	1.500 (38.10)	.835 (21.21) .825 (20.96)	.771 (19.58) .761 (19.33)	M20
13	.8750	1.500 (38.10)	1.374 (34.90)	1.752 (44.50)	1.626 (41.30)	1.020 (25.91) 1.010 (25.65)	.955 (24.26) .945 (24.00)	M25
15	1.0000	1.626 (41.30)	1.500 (38.10)	1.937 (49.20)	1.811 (46.00)	1.145 (29.08) 1.135 (28.83)	1.085 (27.56) 1.075 (27.30)	M28
17	1.1875	1.752 (44.50)	1.626 (41.30)	2.063 (52.40)	1.937 (49.20)	1.270 (32.26) 1.260 (32.00)	1.210 (30.73) 1.200 (30.48)	M32
19	1.2500	1.937 (49.20)	1.811 (46.00)	2.189 (55.60)	2.063 (52.40)	1.395 (35.43) 1.385 (35.18)	1.335 (33.91) 1.325 (33.65)	M35
21	1.3750	2.063 (52.40)	1.937 (49.20)	2.311 (58.70)	2.189 (55.60)	1.520 (38.61) 1.510 (38.35)	1.460 (37.08) 1.450 (36.83)	M38
23	1.5000	2.189 (55.60)	2.063 (52.40)	2.500 (63.50)	2.300 (58.42)	1.645 (41.78) 1.635 (41.53)	1.585 (40.26) 1.575 (40.00)	M41
25	1.6250	2.311 (58.70)	2.189 (55.60)	2.625 (66.68)	2.400 (60.96)	1.770 (44.96) 1.760 (44.70)	1.710 (43.43) 1.700 (43.18)	M44

Jam-Nut Mount (H7) Panel Thickness			
DASH NO.	G DIM, OAL MAX	H DIM, MAX	J DIM, PANEL
-01	1.670 (42.42)	.890 (22.61)	.125 (3.18) .062 (1.57)
-02	1.780 (45.21)	1.090 (27.69)	.250 (6.35) .062 (1.57)
-03	2.030 (51.56)	1.340 (34.04)	.500 (12.70) .062 (1.57)

**MIL-DTL-38999 Series III Type
233-103 Bulkhead feed-thrus**

233-103-H8 WELD MOUNT RECEPTACLE



Dimensions					
Shell Size Code	Shell Size	A Thread	Ø B	Ø C	D
A	9	.6250-.1P-.3L-TS-2A	.941 (23.90) .929 (23.60)	.984 (24.99) .972 (24.69)	.134 (3.40) .118 (3.00)
B	11	.7500-.1P-.3L-TS-2A	1.063 (27.00) 1.051 (26.70)	1.106 (28.09) 1.094 (27.79)	.134 (3.40) .118 (3.00)
C	13	.8750-.1P-.3L-TS-2A	1.189 (30.20) 1.177 (29.90)	1.232 (31.29) 1.220 (30.99)	.134 (3.40) .118 (3.00)
D	15	1.0000-.1P-.3L-TS-2A	1.315 (33.40) 1.303 (33.10)	1.358 (34.49) 1.346 (34.19)	.134 (3.40) .118 (3.00)
E	17	1.1875-.1P-.3L-TS-2A	1.402 (35.61) 1.390 (35.31)	1.445 (36.70) 1.433 (36.40)	.134 (3.40) .118 (3.00)
F	19	1.2500-.1P-.3L-TS-2A	1.547 (39.29) 1.535 (38.99)	1.591 (40.41) 1.579 (40.11)	.134 (3.40) .118 (3.00)
G	21	1.3750-.1P-.3L-TS-2A	1.689 (42.90) 1.677 (42.60)	1.732 (43.99) 1.720 (43.69)	.134 (3.40) .118 (3.00)
H	23	1.5000-.1P-.3L-TS-2A	1.854 (47.09) 1.842 (46.79)	1.898 (48.21) 1.886 (47.90)	.165 (4.19) .149 (3.78)
J	25	1.6250-.1P-.3L-TS-2A	1.941 (49.30) 1.929 (49.00)	1.984 (50.39) 1.972 (50.09)	.165 (4.19) .149 (3.78)

Recommended Panel Cutout			
Shell Size	Ø H	Ø J ±.005 (0.13)	Depth K ±.005 (0.13)
9	.990/.985 (25.15/ 25.02)	.635 (16.13)	.126 (3.20)
11	1.112/1.107 (28.24/ 28.12)	.760 (19.30)	.126 (3.20)
13	1.238/1.233 (31.45/ 31.32)	.885 (22.48)	.126 (3.20)
15	1.364/1.359 (34.65/34.52)	1.010 (25.65)	.126 (3.20)
17	1.451/1.446 (36.86/ 36.73)	1.195 (3.35)	.126 (3.20)
19	1.597/1.592 (40.56/ 40.44)	1.260 (32.00)	.126 (3.20)
21	1.738/1.733 (44.15/ 44.02)	1.385 (35.18)	.126 (3.20)
23	1.894/1.899 (48.11/ 48.23)	1.510 (38.35)	.157 (3.99)
25	1.990/1.985 (50.55/ 50.42)	1.635 (41.53)	.157 (3.99)

Weld Mount (H8) Panel Thickness			
Dash no	E Dim, OAL Max	F Dim, Max	G Dim, Panel
-01	1.630 (41.40)	1.060 (26.92)	.250 (6.35) .175 (4.44)
-02	1.750 (44.45)	1.180 (29.97)	4.25 (107.95) .175 (4.44)
-03	1.920 (48.77)	1.350 (34.29)	.600 (15.24) .175 (4.44)