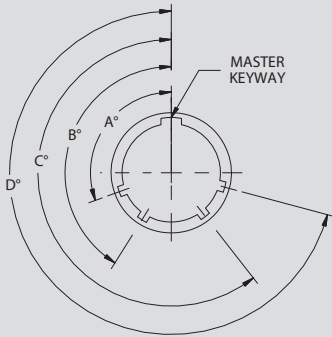


# SUPERNINE SERIES TYPE I, II, III, AND IV Signature Series Hermetic Connectors



## 2333-2010 Cryogenic Hermetic Feedthrough

Part Number Development						
Sample Part Number	2333-2010	-H7	Z1	19-35	S	N -01
Series / Basic Part No.	Series 23 SuperNine Cryogenic Hermetic Feed-thru					
Connector Style	H2 = Box Mount DH7 = Dual O-ring Jam-Nut Mount		H7 = Jam-Nut Mount H8 = Weld Mount			
Finish*	Z1 = 300 Series SST / Passivate ZL = 300 Series SST / Nickel Plate					
Shell Size-Insert Arrangement*	Per MIL-DTL-38999/MIL-STD-1560					
Contact Type	P = Pin on Jam-Nut Side PP = Pin-Pin (See note 1)		S = Socket on Jam-Nut Side SS = Socket-Socket (See note 1)			
Polarization*	A, B, C, D, E, N = Normal, U = Universal					
Panel Thickness	01, 02, 03; See panel thickness table per connector style.					



### NOTES

- Test requirements:
  - D.W.V. - Per DWV Voltage Levels table
  - I.R. - 5 Gighoms min. @ 500 Vdc
  - Hermeticity -  $< 1 \times 10^{-7}$  ccHe/sec at delta 1 atmosphere
- Modified major  $\varnothing 31.95/31.80$  mm, applies only to mounting types -H7 and DH7 for shell size 17.
- Glenair 2333-2010 receptacle connector is designed to mate with any QPL MFR'S MIL-DTL-38999 Series III plug having the same shell size, contact arrangement, polarization, & opposite contact gender, except for shielded contact arrangements consult factory for mating plug options.
- Glenair 2333-2010 operating temperature is -195° to 200° C (-319° to 392°F).

### Material / Finish

- Shell and jam-nut: CRES/passivate or CRES/nickel plate
- Contacts pin: nickel-iron alloy/gold plate
- Contacts sockets: copper alloy/gold plate
- Hoods, Sockets - CRES / Passivate
- Insulator hermetic: vitreous glass
- Insulator socket: rigid dielectric
- Seals: Duraelectric K

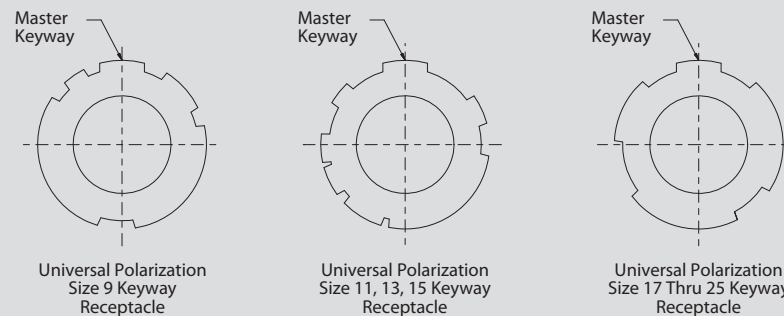
### DWV Voltage Levels At Sea Level

SERVICE RATING	VOLTAGE AC RMS 60HZ
M	1300 VAC
I	1800 VAC
II	2300 VAC
N	1000 VAC

### Minor Keyway Position

Shell Sizes	POS	A°	B°	C°	D°
9	N	105	140	215	265
	A	102	132	248	320
	B	80	118	230	312
	C	35	140	205	275
	D	64	155	234	304
11 13 15	E	91	131	197	240
	N	95	141	208	236
	A	113	156	182	292
	B	90	145	195	252
	C	53	156	220	255
17 19 21 23 25	D	119	146	176	298
	E	51	141	184	242
	N	80	142	196	293
	A	135	170	200	310
	B	49	169	200	244
	C	66	140	200	257
D	62	145	180	280	
E	79	153	197	272	

### UNIVERSAL POLARIZATION CONFIGURATION



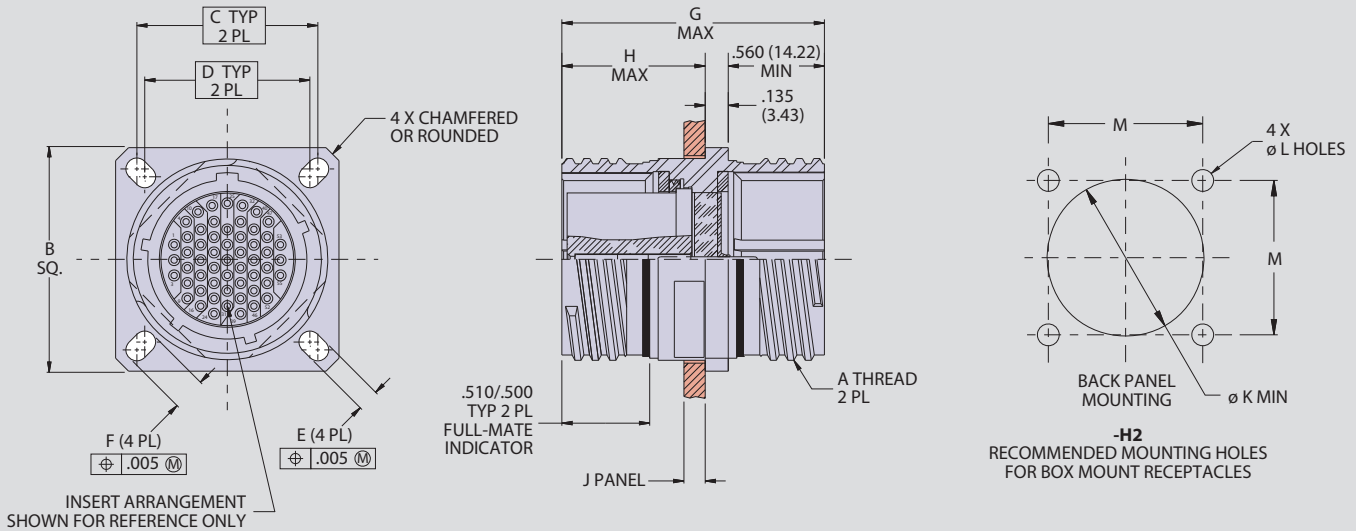
SUPERNINE 38999 SERIES III TYPE

# SUPERNINE SERIES TYPE I, II, III, AND IV Signature Series Hermetic Connectors



## 2333-2010 Cryogenic Hermetic Feedthrough

### 2333-2010-H2 BOX MOUNT FEEDTHROUGH



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

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

SUPERNINE 38999 SERIES III TYPE

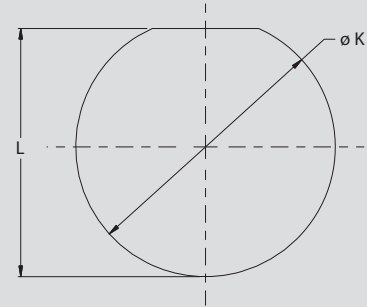
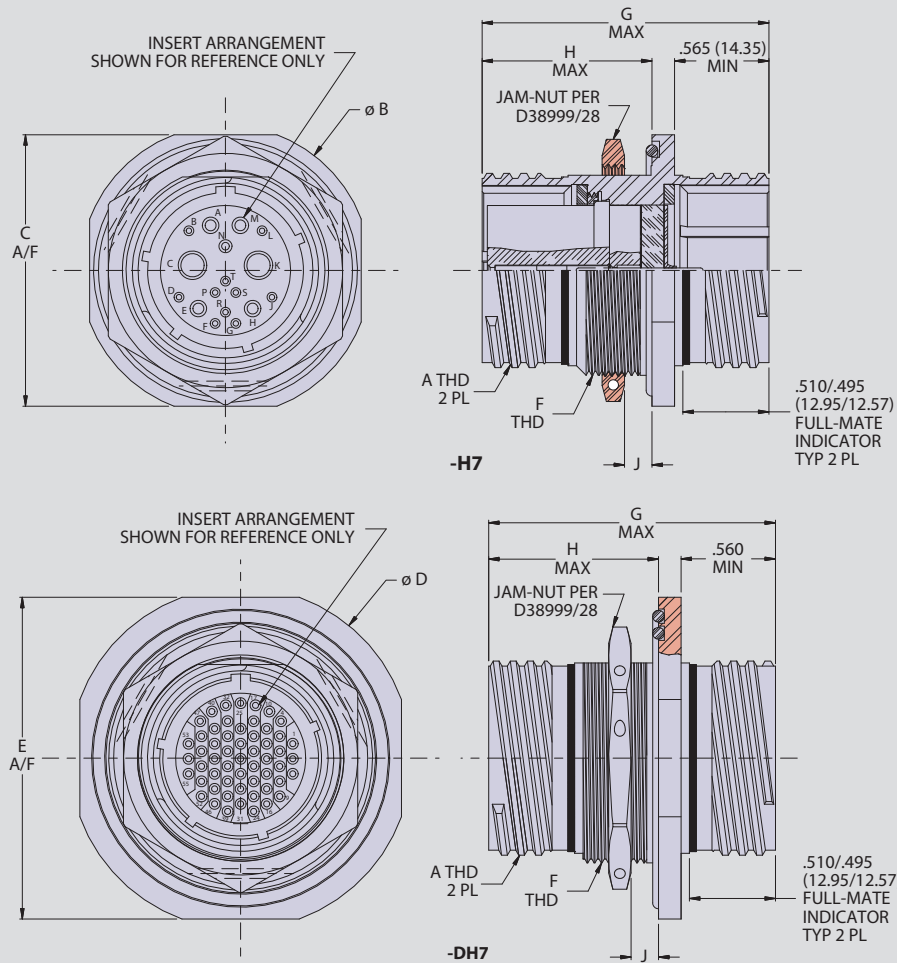
# SUPERNINE SERIES TYPE I, II, III, AND IV Signature Series Hermetic Connectors



## 2333-2010 Cryogenic Hermetic Feedthrough

### 2333-2010-H7 JAM-NUT MOUNT FEEDTHROUGH

### 2333-2010-DH7 JAM-NUT MOUNT DUAL O-RING FEEDTHROUGH



Recommended Panel Cut-Out for -H7 and DH7

SHELL SIZE	K DIA	L DIM
9	.703/.693 (17.86/17.60)	.661/.655 (16.79/16.64)
11	.835/.825 (21.21/20.96)	.771/.761 (19.58/19.33)
13	1.020/1.010 (25.91/25.65)	.955/.945 (24.26/24.00)
15	1.145/1.135 (29.08/28.83)	1.085/1.075 (27.56/27.30)
17	1.270/1.260 (32.26/32.00)	1.210/1.200 (30.73/30.48)
19	1.395/1.385 (35.43/35.18)	1.335/1.325 (33.91/33.65)
21	1.520/1.510 (38.61/38.35)	1.460/1.450 (37.08/36.83)
23	1.645/1.635 (41.78/41.53)	1.585/1.575 (40.26/40.00)
25	1.770/1.760 (44.96/44.70)	1.710/1.700 (43.43/43.18)

SUPERNINE SERIES III TYPE

Dimensions						
SHELL SIZE	A THREAD	Ø B	C	Ø D MAX	E MAX	F THREAD METRIC
9	.6250 0.1P-0.3L-TS-2A	1.189 (30.20)	1.063 (27.00)	1.500 (38.10)	1.375 (34.92)	M17 X 1.0-6G
11	.7500 0.1P-0.3L-TS-2A	1.375 (34.92)	1.252 (31.80)	1.625 (41.28)	1.500 (38.10)	M20 X 1.0-6G
13	.8750 0.1P-0.3L-TS-2A	1.500 (38.10)	1.374 (34.90)	1.752 (44.50)	1.626 (41.30)	M25 X 1.0-6G
15	1.0000 0.1P-0.3L-TS-2A	1.626 (41.30)	1.500 (38.10)	1.937 (49.20)	1.811 (46.00)	M28 X 1.0-6G
17	1.1875 0.1P-0.3L-TS-2A	1.752 (44.50)	1.626 (41.30)	2.063 (52.40)	1.937 (49.20)	M32 X 1.0-6G
19	1.2500 0.1P-0.3L-TS-2A	1.937 (49.20)	1.811 (46.00)	2.189 (55.60)	2.063 (52.40)	M35 X 1.0-6G
21	1.3750 0.1P-0.3L-TS-2A	2.063 (52.40)	1.937 (49.20)	2.311 (58.70)	2.189 (55.60)	M38 X 1.0-6G
23	1.5000 0.1P-0.3L-TS-2A	2.189 (55.60)	2.063 (52.40)	2.500 (63.50)	2.300 (58.42)	M41 X 1.0-6G
25	1.6250 0.1P-0.3L-TS-2A	2.311 (58.70)	2.189 (55.60)	2.625 (66.68)	2.400 (60.96)	M44 X 1.0-6G

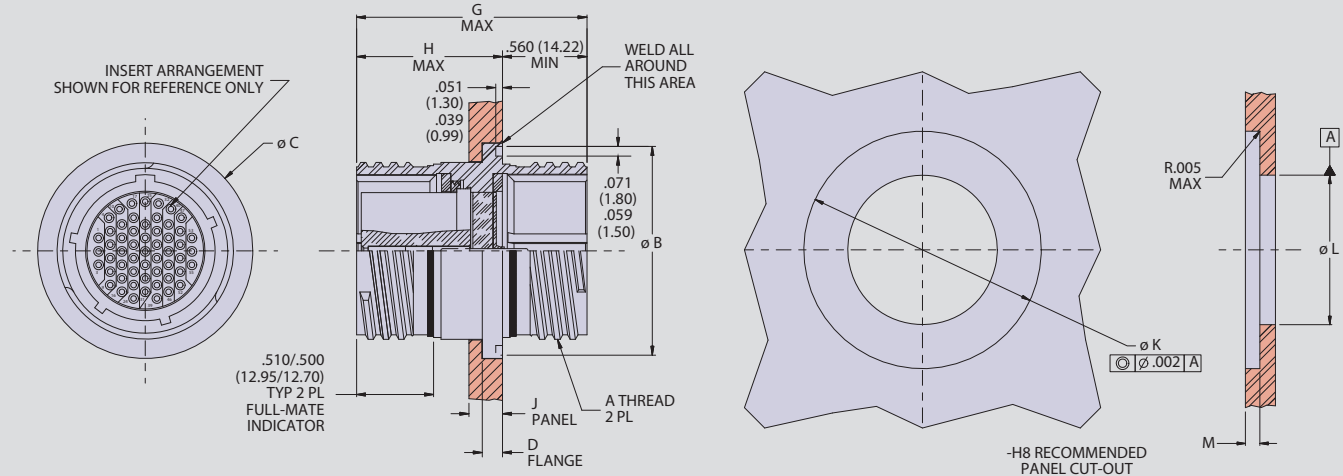
Jam-Nut Mount Panel Thickness			
DASH NO.	G DIM, OAL MAX	H DIM, MAX	J DIM, PANEL
-01	1.670 (42.42) Max	.980 (24.89)	.125/.062 (3.18/1.57)
-02	1.780 (45.21) Max	1.090 (27.69)	.250/.062 (6.35/1.57)
-03	2.030 (51.56) Max	1.340 (34.04)	.500/.062 (12.70/1.57)

# SUPERNINE SERIES TYPE I, II, III, AND IV Signature Series Hermetic Connectors



## 2333-2010 Cryogenic Hermetic Feedthrough

### 2333-2010-H8 WELD MOUNT FEEDTHROUGH



Dimensions				
Shell Size	A Thread	Ø B	Ø C	D
9	.6250-.1P-.3L-TS-2A	.941 (23.90) .929 (23.60)	.984 (24.99) .972 (24.69)	.134 (3.40) .118 (3.00)
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)
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)
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)
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)
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)
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)
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)
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 K	Ø L ±.005 (0.13)	Depth M ±.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)

SUPERNINE 38999 SERIES III TYPE