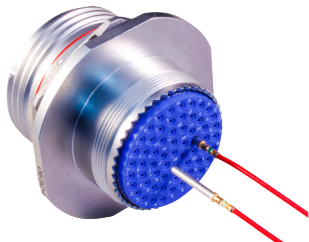


# SuperNine® Glass seal hermetic



## MIL-DTL-38999 Series III Type

### 233-265 Jam nut mount receptacles with removable crimp contacts



MIL-DTL-38999 Series III Type SuperNine single and dual O-ring hermetic receptacles withstand the pressure differentials between internal and external environments without compromising their integrity. Hermetic sealing of  $1 \times 10^{-7}$  atm cc/s ensures protection against moisture and contaminants, making them ideal for aerospace and defense applications to guarantee reliability in extreme environments, ensuring optimal performance in critical applications. Available with accessory threads or banding porch options and pin or socket shielded contacts. Rated for temperatures from  $-65^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$ , they meet stringent military specifications, providing exceptional resistance to shock (up to 100g), vibration (up to 20g), and corrosion (salt spray per ASTM B117).

#### PERFORMANCE SPECIFICATIONS

- Hermeticity:  $<1 \times 10^{-7}$  scHe/sec @ one ATM differential. Not for use in liquid atmosphere.
- I.R.: 5 gigaohms min @ 500 VDC
- See D.W.V. Voltage Rating Table

#### MATERIAL/FINISH:

- Shell receptacle, jam nut - 300 series cres/see part number development
- Pin contact - alloy 52/gold plated
- Socket contact - copper alloy/gold plated
- Insulator - fused vitreous glass
- Insulators - high grade rigid dielectric
- Seals - fluorosilicone

#### CRIMP CONTACTS:

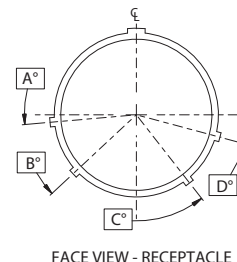
(supplied loose with connector)

- #12 850-003-12-359
- #16 850-003-16-358
- #20 850-003-20-357
- #22D 850-003-22-354

Part Number Development										
Sample Part Number	233-265			-H2	Z1	17-26	P	N	-02	
Series / Basic Part No.	Series 23 Hermetic Receptacles									
Connector Style (Jam Nut Mount)	-H7 = Accessory Threads -BH7 = Integral Banding Porch -DH7 = Dual O-ring w/ Accessory Threads -DBH7 = Dual O-ring w/ Banding Porch									
Finish*	Z1 = CRES, Passivated ZL = CRES, Nickel Finish									
Shell Size/Insert Arrangement*	Per MIL-DTL-38999/MIL-STD-1560 See page A-8 for Insert Arrangements									
Contact Style	P = Pin S = Socket									
Polarization*	A, B, C, D, E, N = Normal									
Panel Thickness	-01 = .200 inches max			-02 = .375 inches max						

Modification codes may be added directly to the end of any valid part number

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



FACE VIEW - RECEPTACLE

DWV Voltage Levels At Sea Level			
Service Rating	Voltage AC RMS 60hz	Service Rating	Voltage AC RMS 60hz
M	1300 VAC	II	2300 VAC
I	1800 VAC	N	1000 VAC

Table I: Insert Arrangements

Shell Size	Layout	No. of Pins			
		22D	20	16	12
8	-35	6			
8	-98	3			
10	-5	5			
10	-98	6			
10	-99	7			
10	-35	13			
10	-2		2		
12	-4		4		
12	-8		8		
12	-98		10		
12	-35	22			
14	-5		5		
14	-15		14	1	
14	-18		18		
14	-19		19		
14	-35	37			
14	-97		8	4	
16	-6			6	

Table I: Insert Arrangements

Shell Size	Layout	No. of Pins			
		22D	20	16	12
16	-8			8	
16	-26		26		
16	-35	55			
16	-99		21	2	
18	-11			11	
18	-28		26	2	
18	-30		29	1	
18	-32		32		
18	-35	66			
18	-45	67			
20	-11				11
20	-16			16	
20	-24		24		
20	-25		25		
20	-27		27		
20	-29		19	4	4
20	-35	79			
20	-39		37	2	

Table I: Insert Arrangements

Shell Size	Layout	No. of Pins			
		22D	20	16	12
20	-41		41		
22	-21			21	
22	-32		32		
22	-34		34		
22	-35	100			
22	-36		36		
22	-53		53		
22	-55		55		
22	-97			16	
22	-99			11	
24	-4		48	8	
24	-19				19
24	-24			12	12
24	-29			29	
24	-35	128			
24	-43		23	20	
24	-61		61		

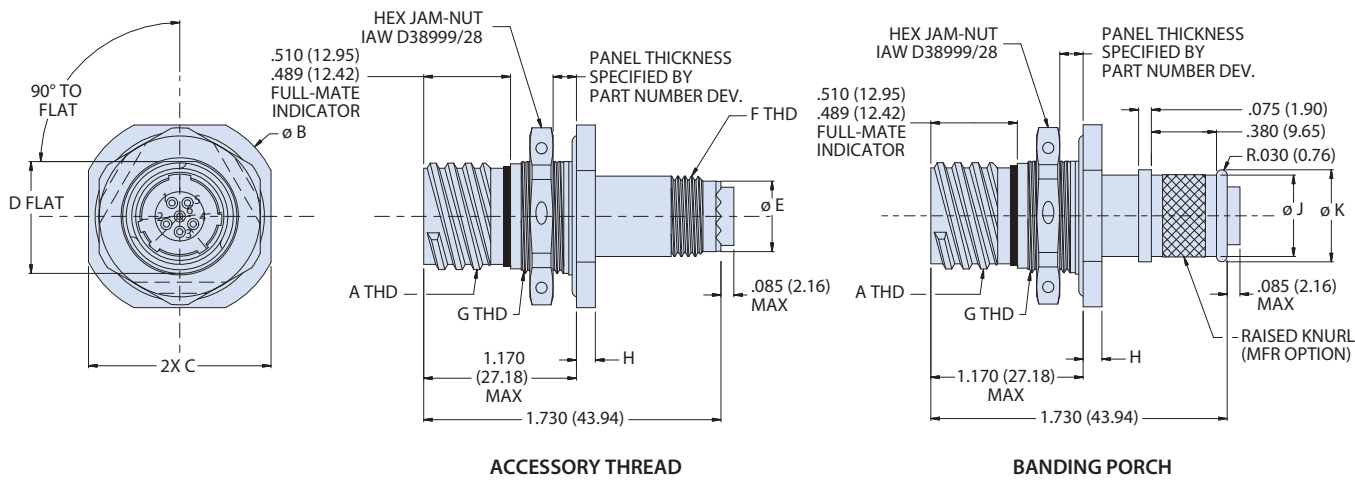
SUPERNINE GLASS-TO-METAL SEAL HERMETIC CONNECTORS

## MIL-DTL-38999 Series III Type

### 233-265 Jam nut mount receptacles with removable crimp contacts

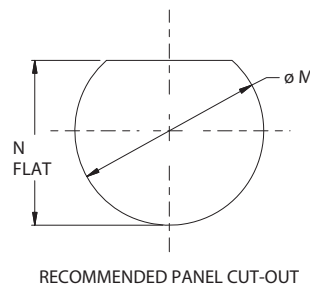
SUPERNINE GLASS-TO-METAL SEAL HERMETIC CONNECTORS

#### 233-265-H7 AND BH7 JAM NUT RECEPTACLE WITH ACCESSORY THREAD OR BANDING PORCH



Dimensions											
SHELL SIZE	SHELL SIZE CODE	A THREAD -0.1P-0.3I-TS	ØB	C A/F ±.015	D FLAT ±0.016	ØE +.003	G THREAD ISO METRIC	F THREAD ISO METRIC	H ±.008	ØJ	ØK
9	A	.625	1.500 (38.10)	1.375 (34.93)	1.062 (26.97)	.413 (10.49)	M17 X 1.0-6G	M12 X 1.0-6G	.106 (2.69)	.475 (12.07)	.538 (13.67)
11	B	.750	1.625 (41.28)	1.500 (38.10)	1.252 (31.80)	.531 (13.49)	M20 X 1.0-6G	M15 X 1.0-6G	.106 (2.69)	.600 (15.24)	.662 (16.81)
13	C	.875	1.752 (44.50)	1.626 (41.30)	1.374 (34.90)	.650 (16.51)	M25 X 1.0-6G	M18 X 1.0-6G	.106 (2.69)	.700 (17.78)	.762 (19.35)
15	D	1.000	1.937 (49.20)	1.811 (46.00)	1.500 (38.10)	.807 (20.50)	M28 X 1.0-6G	M22 X 1.0-6G	.106 (2.69)	.835 (21.21)	.898 (22.81)
17	E	1.1875	2.063 (52.40)	1.937 (49.20)	1.626 (41.30)	.925 (23.50)	M32 X 1.0-6G	M25 X 1.0-6G	.106 (2.69)	.960 (24.38)	1.022 (25.96)
19	F	1.250	2.189 (55.60)	2.063 (52.40)	1.811 (46.00)	1.043 (26.49)	M35 X 1.0-6G	M28 X 1.0-6G	.138 (3.51)	1.062 (26.97)	1.125 (28.58)
21	G	1.375	2.311 (58.70)	2.189 (55.60)	1.937 (49.20)	1.161 (29.49)	M38 X 1.0-6G	M31 X 1.0-6G	.138 (3.51)	1.188 (30.18)	1.250 (31.75)
23	H	1.500	2.500 (63.50)	2.300 (58.42)	2.063 (52.40)	1.279 (32.49)	M41 X 1.0-6G	M34 X 1.0-6G	.138 (3.51)	1.275 (32.39)	1.338 (33.99)
25	J	1.625	2.625 (66.68)	2.400 (60.96)	2.189 (55.60)	1.397 (35.48)	M44 X 1.0-6G	M37 X 1.0-6G	.138 (3.51)	1.475 (37.47)	1.538 (39.07)

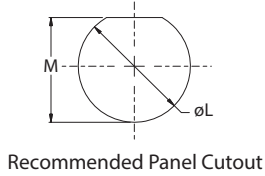
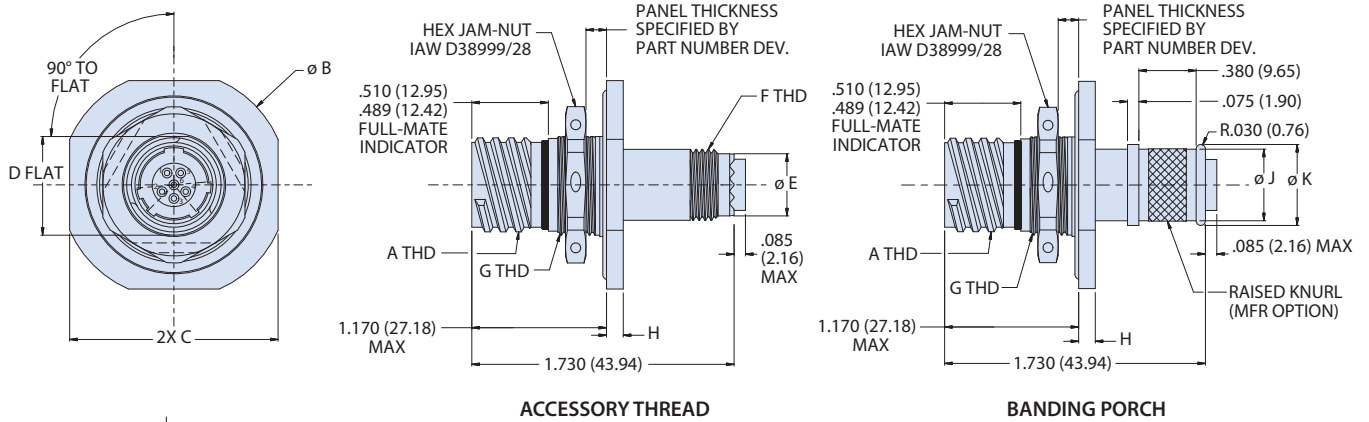
Panel Cut-out			
SHELL SIZE	SHELL SIZE CODE	ØM ±.005	N FLAT ±.005 EX SIZE 9
9	A	.703 (17.86)/.693 (17.60)	.661 (16.79)/.655 (16.64)
11	B	.835 (21.21)/.825 (20.96)	.771 (19.58)/.761 (19.33)
13	C	1.020 (25.91)/1.010 (25.65)	.955 (24.26)/.945 (24.00)
15	D	1.145 (29.08)/1.135 (28.83)	1.085 (27.56)/1.075 (27.30)
17	E	1.270 (32.26)/1.260 (32.00)	1.210 (30.73)/1.200 (30.48)
19	F	1.395 (35.43)/1.385 (35.18)	1.335 (33.91)/1.325 (33.65)
21	G	1.520 (38.61)/1.510 (38.35)	1.460 (37.08)/1.450 (36.83)
23	H	1.645 (41.78)/1.635 (41.53)	1.585 (40.26)/1.575 (40.00)
25	J	1.770 (44.96)/1.760 (44.70)	1.710 (43.43)/1.700 (43.18)



**MIL-DTL-38999 Series III Type**

**233-265 Jam nut mount receptacles with removable crimp contacts**

**233-265-DH7 AND DBH7 JAM-NUT MOUNT RECEPTACLE**



Panel Cutout Dimensions		
SHELL SIZE	ø L ±.005	M ±.005 EX SZ 9
9	0.698 (17.73)	.661/.656 (16.79/ 16.66)
11	0.830 (21.08)	0.766 (19.46)
13	1.015 (25.78)	0.950 (24.13)
15	1.140 (28.96)	1.080 (27.43)
17	1.265 (32.13)	1.205 (30.61)
19	1.390 (35.31)	1.330 (33.78)
21	1.515 (38.48)	1.455 (36.96)
23	1.640 (41.66)	1.580 (40.13)
25	1.765 (44.83)	1.705 (43.31)

Dimensions										
SHELL SIZE	A THREAD -0.1P-0.3L-TS	ø B	C A/F ±.015	D FLAT ±.005	ø E ±.003	F THREAD ISO METRIC	G THREAD ISO METRIC	H ±.008	ø J	ø K
9	0.625 (15.88)	1.500 (38.10)	1.375 (34.93)	0.650 (16.51)	.413 (10.49)	M12 X 1.0-6G	M17 X 1.0-6g	0.106 (2.69)	0.475 (12.07)	0.538 (13.67)
11	0.750 (19.05)	1.625 (41.28)	1.500 (38.10)	0.750 (19.05)	.513 (13.03)	M15 X 1.0-6G	M20 X 1.0-6g	0.106 (2.69)	0.600 (15.24)	0.662 (16.81)
13	0.875 (22.23)	1.752 (44.50)	1.626 (41.30)	0.937 (23.80)	.650 (16.51)	M18 X 1.0-6G	M25 X 1.0-6g	0.106 (2.69)	0.700 (17.78)	0.762 (19.35)
15	1.000 (25.40)	1.937 (49.20)	1.811 (46.00)	1.061 (26.95)	.807 (20.50)	M22 X 1.0-6G	M28 X 1.0-6g	0.106 (2.69)	0.835 (21.21)	0.898 (22.81)
17	1.187 (30.15)	2.063 (52.40)	1.937 (49.20)	1.186 (30.12)	.925 (23.50)	M25 X 1.0-6G	M32 X 1.0-6g	0.106 (2.69)	0.960 (24.38)	1.022 (25.96)
19	1.250 (31.75)	2.189 (55.60)	2.063 (52.40)	1.311 (33.30)	1.043 (26.49)	M28 X 1.0-6G	M35 X 1.0-6g	0.138 (3.51)	1.062 (26.97)	1.125 (28.58)
21	1.375 (34.92)	2.311 (58.70)	2.189 (55.60)	1.436 (36.47)	1.161 (29.49)	M31 X 1.0-6G	M38 X 1.0-6g	0.138 (3.51)	1.188 (30.18)	1.250 (31.75)
23	1.500 (38.10)	2.500 (63.50)	2.300 (58.42)	1.561 (39.65)	1.279 (32.49)	M34 X 1.0-6G	M41 X 1.0-6g	0.138 (3.51)	1.275 (32.39)	1.338 (33.99)
25	1.625 (41.28)	2.625 (66.68)	2.400 (60.96)	1.686 (42.82)	1.397 (35.48)	M37 X 1.0-6G	M44 X 1.0-6g	0.138 (3.51)	1.475 (37.47)	1.538 (39.07)

SUPERNINE GLASS-TO-METAL SEAL HERMETIC CONNECTORS