

MIL-DTL-38999 Series III Type

233-254 Jam-nut mount with PC tail Quadrax contacts



MIL-DTL-38999 Series III Type SuperNine Lightweight Code Red Hermetic connectors withstand pressure differentials between internal and external environments without compromising their integrity. Hermetic sealing of 1×10^{-7} atm cc/s ensures protection against moisture and contaminants. Innovative encapsulant allows for use of light weight aluminum shells with higher carrying capacity gold-plated copper contacts. Ideally suited for aerospace applications. Connectors meet stringent military specifications, providing exceptional resistance to shock (up to 100g), vibration (up to 20g).

PERFORMANCE SPECIFICATIONS

- Hermeticity: $<1 \times 10^{-7}$ scchHe/sec @ one ATM differential. Not for use in liquid atmosphere.
 - Operating temperature: -65°C to $+200^{\circ}\text{C}$
- Quadrax electrical parameters:**
- » Differential impedance: 100 ohms nominal
 - » D.W.V.: 500 VRMS
 - » I.R.: 5000 megaohms min at 200 VDC

MATERIAL/FINISH:

- Shell & jam nuts: aluminum alloy 6061-T6/ nickel plate per D38999 Series III, Class F.
- O-ring: fluorosilicone / N.A.
- Contacts: copper alloy / gold plated.
- Insulator: high-grade rigid dielectric/N.A
- Sealing compound: silicone base polymer.

NOTES

1. Connectors meet dimensions, mechanical, electrical, environmental and sealing requirements of MIL-DTL-38999/23, PC tails.
2. Connectors tested and meet applicable requirements of MIL-DTL-38999/23, Class N & Y. See Glenair test report GT-16-233.
3. Use the following letters in "shell size" to designate the following type of contact
Q = Quadrax, PC Tail
4. Dimension shown comply with applicable MIL-DTL-38999/23

Part Number Development							
Sample Part Number	233-254	-07	ME	25Q	-8	P	N
Series / Basic Part No.	Series 23 SuperNine CODE RED hermetic connector						
Connector Style	07 = Receptacle, jam nut; standard standoff thread 17 = Receptacle, jam nut; metric standoff thread						
Material/Finish	ME = Aluminum alloy, nickel plate						
Connector Size	Q = Quadrax, PC tail; see Note 3						
Insert Arrangement*	Per MIL-STD-1560						
Contact Style	P = Pin, PC tail S = Socket, PC tail						
Polarization	A, B, C, D, E, N = Normal; see section A for key position details						

*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

Polarization Table														
Shell Sizes: 9				Shell Sizes: 11, 13, 15				Shell Sizes: 17, 19, 21, 23, 25						
Pos	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

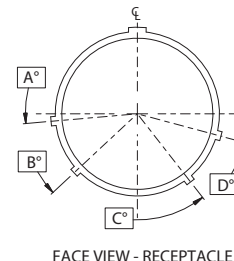


Table I: Insert Arrangements

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		

CODE RED LIGHT WEIGHT HERMETIC CONNECTORS

ADVANCED PERFORMANCE

SuperNine® Lightweight Hermetic

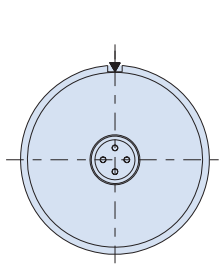
MIL-DTL-38999 Series III Type

233-254 Jam-nut mount with PC tail Quadrax Contacts

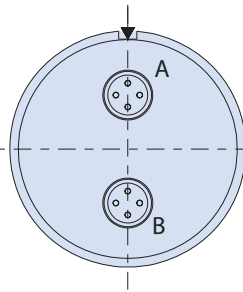


CODE RED LIGHT WEIGHT HERMETIC CONNECTORS

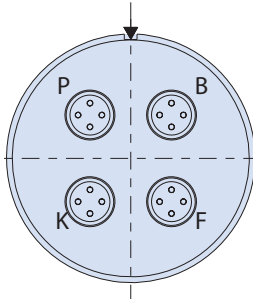
OPTIONAL HIGH-SPEED QUADRAX INSERT ARRANGEMENTS



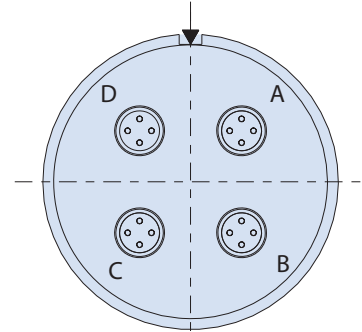
ARRANGEMENT 11Q-1
1X SIZE 8 QUADRAX



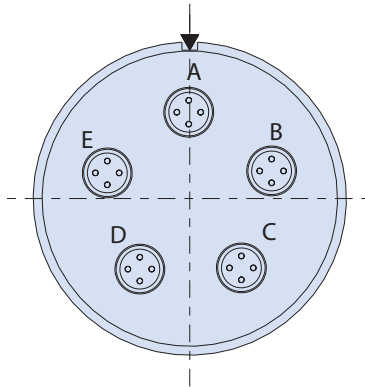
ARRANGEMENT 17Q-75
2X SIZE 8 QUADRAX



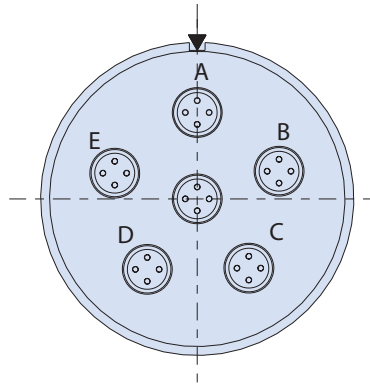
ARRANGEMENT 19Q-4
4X SIZE 8 QUADRAX



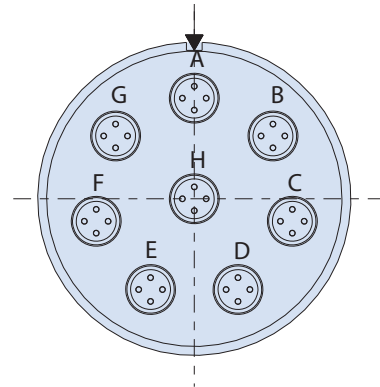
ARRANGEMENT 21Q-75
4X SIZE 8 QUADRAX



ARRANGEMENT 23Q-5
5X SIZE 8 QUADRAX



ARRANGEMENT 23Q-6
6X SIZE 8 QUADRAX



ARRANGEMENT 25Q-8
8X SIZE 8 QUADRAX

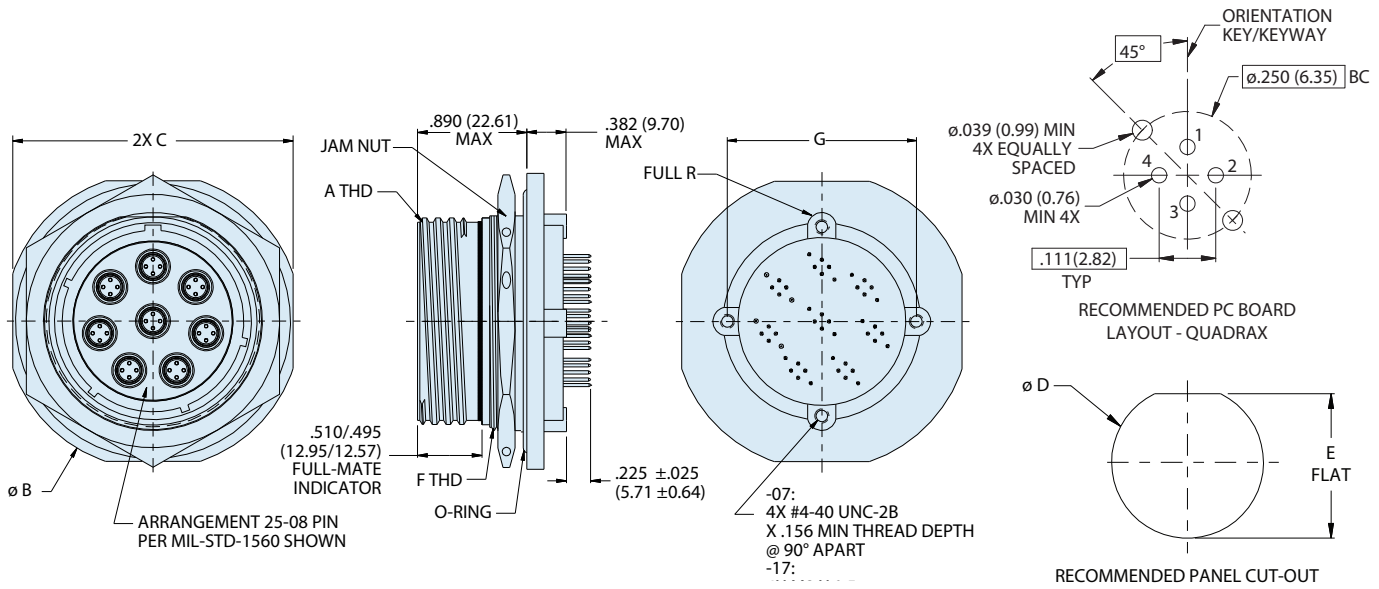
SuperNine® Lightweight Hermetic

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233-254-07 AND -17 JAM-NUT MOUNT RECEPTACLE, STANDARD AND METRIC THREAD



CODE RED LIGHT WEIGHT HERMETIC CONNECTORS

Dimensions							
Shell Size	A Thread 0.1P-0.3L-TS-2 (See Note 4)	B Dia (See Note 4)	C (See Note 4)	D Dia (See Note 4)	E Dim (See Note 4)	F Thread Metric (See Note 4)	G Bsc
9	0.6250	1.189 (30.20)	1.063 (27.00)	.703/.693 (17.86/17.60)	.661/.655 (16.79/16.64)	M17 X 1.0-6g	0.594 (15.09)
11	0.7500	1.375 (34.92)	1.252 (31.80)	.835/.825 (21.21/20.96)	.771/.761 (19.58/19.33)	M20 X 1.0-6g	0.719 (18.26)
13	0.8750	1.500 (38.10)	1.374 (34.90)	1.020/ 1.010 (25.91/25.65)	.955/.945 (24.26/24.00)	M25 X 1.0-6g	0.812 (20.62)
15	1.0000	1.626 (41.30)	1.500 (38.10)	1.145/ 1.135 (29.08/28.83)	1.085/ 1.075 (27.56/27.30)	M28 X 1.0-6g	0.906 (23.01)
17	1.1875	1.752 (44.50)	1.626 (41.30)	1.270/ 1.260 (32.26/32.00)	1.210/ 1.200 (30.73/30.48)	M32 X 1.0-6g	1.030 (26.16)
19	1.2500	1.937 (49.20)	1.811 (46.00)	1.395/ 1.385 (35.43/35.18)	1.335/ 1.325 (33.91/33.65)	M35 X 1.0-6g	1.150 (29.21)
21	1.3750	2.063 (52.40)	1.937 (49.20)	1.520/ 1.510 (38.61/38.35)	1.460/ 1.450 (37.08/36.83)	M38 X 1.0-6g	1.221 (31.01)
23	1.5000	2.189 (55.60)	2.063 (52.40)	1.645/ 1.635 (41.78/41.53)	1.585/ 1.575 (40.26/40.00)	M41 X 1.0-6g	1.360 (34.54)
25	1.6250	2.311 (58.70)	2.189 (55.60)	1.770/ 1.760 (44.96/44.70)	1.710/ 1.700 (43.43/43.18)	M44 X 1.0-6g	1.475 (37.47)