

233-218 PC tail receptacle with shielded contacts

MIL-DTL-38999 Series III type, part number development

Part Number Development									
Sample Part Number	233-218	-00	M	17	E	-	02	S	N
Series / Basic Part No.	SuperNine® High-Speed PC tail wall mount receptacles with threaded strandoffs								
Connector Style	07 = Receptacle, Jam-Nut 00 = Receptacle, Wall-Mount with Slotted Holes CM = Receptacle, Wall Mount with Metric Clinch Nuts CS = Receptacle, Wall Mount with Standard Clinch Nuts HM = Receptacle, Wall Mount with Metric Helicoils HS = Receptacle, Wall Mount with Standard Helicoils								
Material/Finish	NF = Cadmium Olive Drab MT = Nickel PTFE ME = Electroless Nickel ZR = Black Zinc Nickel								
Shell Size	9, 11, 13, 15, 17, 19, 21, 23, 25								
Contact Type	C = Coax (per M39029/59 & /60) P = Power D = Differential Twinax Q = Quadrx (100 ohm) E = El Ochito ⁷ T = Triax/Concentric Twinax (per /90 and /91) Specifications and PCB footprints on pages C-46 thru C-48								
Ground Option	G = Common Ground - = None								
Insert Arrangement	Per MIL-STD-1560, see page C-5 and C-6								
Contact Style	P = Pin, PC Tail S = Socket, PC Tail								
Alternate Polarization*	A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III)								

*Refer to Section A for alternate key polarization options and recommended panel cutout dimensions

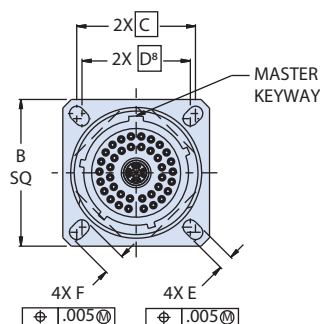
NOTES

- Coax contact mating interfaces shall be in accordance with the following:
 - size #16 per M39029/76 & /77
 - size #12 per M39029/102 & 103
 - size #8 per M39029/59 & 60
- Ground plane option only available for insert arrangements where all contacts are shielded type.
- See page C-4, figure 2 for reference orientation of the inner pins relative to connector main keyway.
- Insert arrangement is in accordance with MIL-STD-1560 and figure 1.
- Contact manufacturer for additional arrangement options
- Glenair 233-218 wall mount and jam-nut receptacle connectors should be mated to Glenair 233-217 or 233-224 plug with appropriate contacts to optimize performance.
- Glenair 233-218 receptacle connectors are designed to meet or exceed the applicable mechanical, dimensional, electrical, and environmental requirements of MIL-DTL-38999, D38999/20, D38999/24 and MIL-STD-1560 except as shown and/or noted. Receptacle mates with any QPL manufacturer's MIL-DTL-38999, Series III plug connector, D38999/26, having the same shell size, insert arrangement, polarization, and mating contact.
- El Ochito mating contact shall be in accordance with El Ochito contact configuration table on C-12.
- Front panel mount only.
- For optimal El Ochito performance, see Glenair application note AN0002.
- Material/finish:
 - Shell, lockring, jam-nut: see part number development
 - Contacts: copper alloy / gold plated
 - Insulators: high grade rigid dielectric / N.A.
 - Seals: fluorosilicone blend / N.A.
 - Potting: epoxy / N.A.
 - O-ring: silver plated aluminum in fluorosilicone (cho-seal 1298 or equivalent)

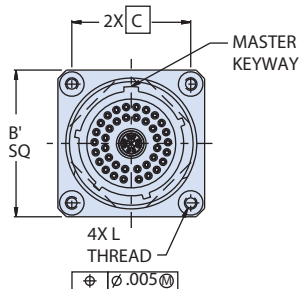
PC Tail Diameter	
Contact Size	PC Tail ØV
No. 22	.020 (0.51) .018 (0.46)
No. 20	.030 (0.76) .028 (0.71)
No. 16	.040 (1.02) .038 (0.97)
No. 12	.072 (1.78) .070 (1.78)
No. 8	.182 (4.62) .178 (4.52)

233-218 PC tail receptacle with shielded contacts MIL-DTL-38999 Series III type, wall-mount

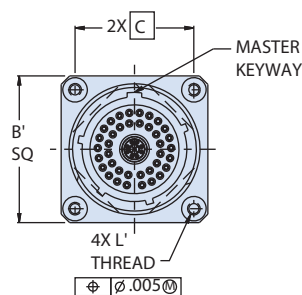
00, CM, CS, HM, HS - WALL MOUNT RECEPTACLES



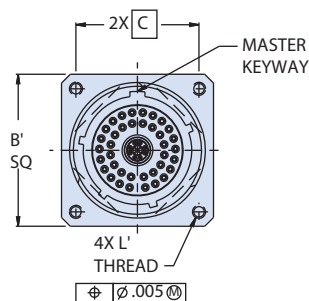
00 - WALL MOUNT RECEPTACLE
WITH SLOTTED HOLES



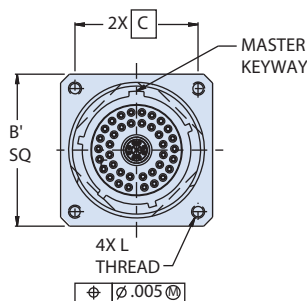
CS - WALL MOUNT RECEPTACLE
WITH STANDARD CLINCH NUTS



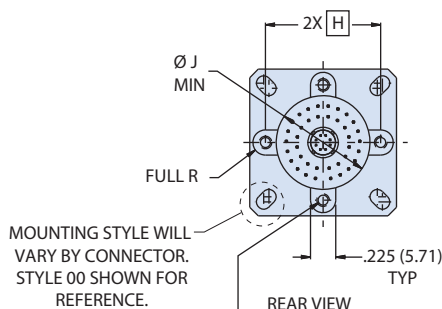
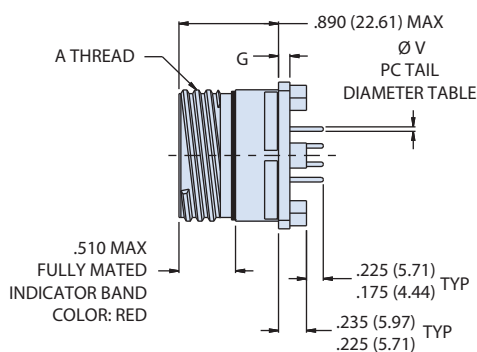
CM - WALL MOUNT RECEPTACLE
WITH METRIC CLINCH NUTS



HM - WALL MOUNT RECEPTACLE
WITH METRIC HELICOILS



HS - WALL MOUNT RECEPTACLE
WITH STANDARD HELICOIL



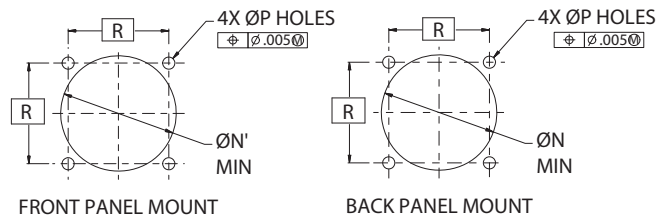
SHELL STYLE 00, CS & HS
4X #4-40 UNC-2B X .156
MIN THD DP
@ 90° APART

SHELL STYLE CM & HM
4X M3 X 0.5 X .156
MIN THD DP
@ 90° APART

233-218 PC tail receptacle with shielded contacts

MIL-DTL-38999 Series III type, wall-mount

Dimensions														
Shell Size Code	Shell Size	A Thd -0.1P-0.3L- TS-2A	B Sq	B' Sq	C Bsc ⁸	D Bsc	E	F	G	G'	H Bsc	Ø J Min	L Thd	L' Thd
A	9	.6250	.949 (24.10) .925 (23.50)	1.094 (27.79) 1.054 (26.77)	.719 (18.26)	.594 (15.09)	.136 (3.45) .120 (3.05)	.224 (5.69) .208 (5.28)	.122 (3.10) .083 (2.11)	.179 .140 (3.56)	.594 (15.09)	.340 (8.64)	.112-40 UNC	M3X0.5
B	11	.7500	1.043 (26.49) 1.019 (25.88)	1.187 (30.15) 1.147 (29.13)	.812 (20.62)	.719 (18.26)		.202 (5.13)			.719 (18.26)	.468 (11.89)		
C	13	.8750	1.138 (28.91) 1.114 (28.30)	1.281 (32.54) 1.241 (31.52)	.906 (23.01)	.812 (20.62)		.186 (4.72)			.812 (20.62)	.572 (14.53)		
D	15	1.0000	1.232 (31.29) 1.208 (30.68)	1.344 (34.14) 1.304 (33.12)	.969 (24.61)	.906 (23.01)		.181 (4.60) .165 (4.19)			.906 (23.01)	.705 (17.91)		
E	17	1.1875	1.323 (33.60) 1.299 (32.99)	1.437 (36.50) 1.397 (35.48)	1.062 (26.97)	.969 (24.61)		.202 (5.13) .186 (4.72)			1.030 (26.16)	.830 (21.08)		
F	19	1.2500	1.449 (36.80) 1.425 (36.20)	1.531 (38.89) 1.491 (37.87)	1.156 (29.36)	1.062 (26.97)					1.150 (29.21)	.934 (23.72)		
G	21	1.3750	1.575 (40.00) 1.551 (39.40)	1.625 (41.28) 1.585 (40.26)	1.250 (31.75)	1.156 (29.36)		.153 (3.89) .114 (2.90)			.190 (4.83) .170 (4.32)	1.221 (31.01)		
H	23	1.5000	1.701 (43.21) 1.677 (42.60)	1.750 (44.45) 1.710 (43.43)	1.375 (34.92)	1.250 (31.75)	.162 (4.11)		.250 (6.35)	1.360 (34.54)		1.160 (29.46)		
J	25	1.6250	1.823 (46.30) 1.799 (45.69)	1.875 (47.63) 1.835 (46.61)	1.500 (38.10)	1.375 (34.92)	.146 (3.71)		.234 (5.94)	1.475 (37.47)		1.307 (33.20)		



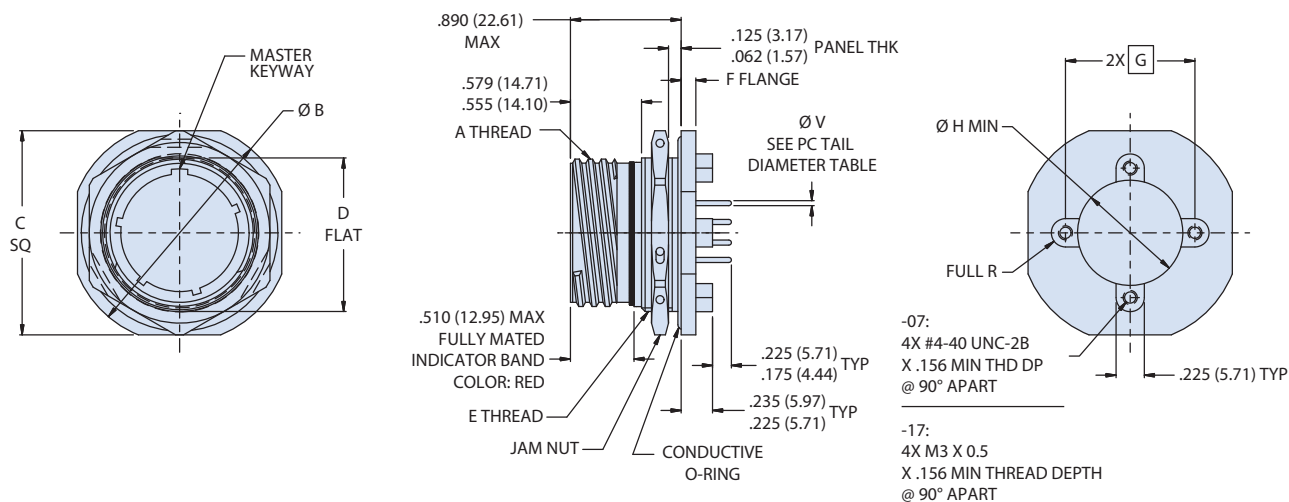
RECOMMENDED MOUNTING HOLES
FOR WALL MOUNT RECEPTACLES

Wall Mount Mounting Hole Dimensions					
Shell Size Code	Shell Size	ØN Min	ØN' Min ⁸	ØP Holes	R Bsc
A	9	.656 (16.66)	.516 (13.11)	.133 (3.38) .123 (3.12)	.719 (18.26)
B	11	.796 (20.22)	.625 (15.88)		.812 (20.62)
C	13	.922 (23.42)	.750 (19.05)		.906 (23.01)
D	15	1.047 (26.59)	.906 (23.01)		.969 (24.61)
E	17	1.219 (30.96)	1.016 (25.81)		1.062 (26.97)
F	19	1.297 (32.94)	1.141 (28.98)		1.156 (29.36)
G	21	1.422 (36.12)	1.266 (32.16)		1.250 (31.75)
H	23	1.547 (39.29)	1.375 (34.92)	.159 (4.04) .149 (3.78)	1.375 (34.92)
J	25	1.672 (42.47)	1.484 (37.69)	.155 (3.94) .145 (3.68)	1.500 (38.10)

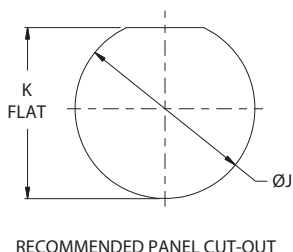
233-218 PC tail receptacle with shielded contacts

MIL-DTL-38999 Series III type, jam-nut

07 - JAM-NUT MOUNT RECEPTACLE



Dimensions									
Shell Size Code	Shell Size	A Thd -0.1P-0.3L-TS-2A	ØB	C Sq	D Flat	E Thd ISO Metric	F	G Bsc	Ø H
A	9	.6250	1.200 (30.48) 1.178 (29.92)	1.078 (27.38) 1.048 (26.62)	0.654 (16.61) 0.645 (16.38)	M17 X 1.0-6g	0.122 (3.10) 0.083 (2.11)	0.594 (15.09)	0.340 (8.64)
B	11	.7500	1.386 (35.20) 1.362 (34.59)	1.268 (32.21) 1.236 (31.39)	0.755 (19.18) 0.745 (18.92)	M20 X 1.0-6g		0.719 (18.26)	0.468 (11.89)
C	13	.8750	1.512 (38.40) 1.488 (37.80)	1.390 (35.31) 1.484 (37.69)	0.942 (23.93) 0.932 (23.67)	M25 X 1.0-6g		0.812 (20.62)	0.572 (14.53)
D	15	1.0000	1.638 (41.61) 1.614 (41.00)	1.516 (38.51) 1.484 (37.69)	1.066 (27.08) 1.056 (26.82)	M28 X 1.0-6g		0.906 (23.01)	0.705 (17.91)
E	17	1.1875	1.764 (44.81) 1.740 (44.20)	1.642 (41.71) 1.610 (40.89)	1.191 (30.25) 1.181 (30.00)	M32 X 1.0-6g		1.030 (26.16)	0.830 (21.08)
F	19	1.2500	1.949 (49.50) 1.925 (48.90)	1.827 (46.41) 1.795 (45.59)	1.316 (33.43) 1.306 (33.17)	M35 X 1.0-6g	0.153 (3.89) 0.114 (2.90)	1.150 (29.21)	0.934 (23.72)
G	21	1.3750	2.075 (52.71) 2.051 (52.10)	1.953 (49.61) 1.921 (48.79)	1.441 (36.60) 1.431 (36.35)	M38 X 1.0-6g		1.221 (31.01)	1.055 (26.80)
H	23	1.5000	2.201 (55.91) 2.177 (55.30)	2.079 (52.81) 2.047 (51.99)	1.566 (39.78) 1.556 (39.52)	M41 X 1.0-6g		1.360 (34.54)	1.160 (29.46)
J	25	1.6250	2.323 (59.00) 2.299 (58.39)	2.205 (56.01) 2.173 (55.19)	1.691 (42.95) 1.681 (42.70)	M44 X 1.0-6g		1.475 (37.47)	1.307 (33.20)



Jam-Nut Mount Mounting Hole Dimensions							
Shell Size Code	Shell Size	ØJ	ØK Flat	Shell Size Code	Shell Size	ØJ	ØK Flat
A	9	.703 (17.86) .693 (17.60)	.661 (16.79) .654 (16.61)	E	17	1.270 (32.26) 1.260 (32.00)	1.210 (30.73) 1.200 (30.48)
B	11	.835 (21.21) .825 (20.96)	.771 (19.58) .761 (19.33)	F	19	1.395 (35.43) 1.385 (35.18)	1.335 (33.91) 1.325 (33.65)
C	13	1.020 (25.91) 1.010 (25.65)	.955 (24.26) .945 (24.00)	G	21	1.520 (38.61) 1.510 (38.35)	1.460 (37.08) 1.450 (36.83)
D	15	1.145 (29.08) 1.135 (28.83)	1.085 (27.56) 1.075 (27.30)	H	23	1.645 (41.78) 1.635 (41.53)	1.585 (40.26) 1.575 (40.00)
				J	25	1.770 (44.96) 1.760 (44.70)	1.710 (43.43) 1.700 (43.18)