

MIL-DTL-38999 Series III Type

233-210 PCB wall-mount receptacles with threaded standoffs

ENVIRONMENTAL CONNECTORS

Part Number Development									
Sample Part Number	233-210				-00	NF	17-8	P	N
Series / Basic Part No.	233-210 = SuperNine PCB receptacle with threaded standoffs								
Connector Style*	00 = Wall Mount Receptacle with Slotted Holes, Standard Stand-off Thread 10 = Wall Mount Receptacle with Slotted Holes, Metric Stand-off Thread CM = Wall Mount Receptacle with Metric Clinch Nuts CS = Wall Mount Receptacle with Standard Clinch Nuts HM = Wall Mount Receptacle with Metric Helicoils HS = Wall Mount Receptacle with Standard Helicoils								
Finish	NF = Al alloy/cadmium olive drab ME = Al alloy/electroless nickel			MT = Al alloy/nickel PTFE ZR = Al alloy/black zinc nickel		Consult factory for additional finish options			
Shell Size-Insert Arrangement*	Per MIL-STD-1560								
Contact Type	P = Pin, Gold, 1500 cycles S = Socket, Gold, 1500 cycles H = Pin, Pd/Ni, 1500 cycles J = Socket, Pd/Ni, 1500 cycles								
Alternate Polarization*	A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III)								

*Refer to Section A for complete details

Dimensions																	
Shell Size code	Shell Size	A Thd -0.1P-0.3L- TS-2A	B Sq	B' Sq	C Bsc	D Bsc ³	E	F	G	G'	H Bsc	ØJ Min	L Thd	L' Thd			
A	9	.6250	.948 (24.08) .925 (23.50)	1.094 (27.79) 1.054 (26.77)	.719 (18.26)	.594 (15.09)	.136 (3.45) (3.05)	.224 (5.69) .208 (5.28)	.122 (3.10) .083 (2.11)	.179 (4.55) (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) .186 (4.72)			.719 (18.26) .812 (20.62)	.468 (11.89) .572 (14.53)					
C	13	.8750	1.137 (28.88) 1.114 (28.30)	1.281 (32.54) 1.241 (31.52)	.906 (23.01)	.812 (20.62)		.181 (4.60) .165 (4.19)			.140 (3.56)	.906 (23.01) .705 (17.91)			.830 (21.08) .934 (23.72)		
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)		.202 (5.13) .186 (4.72)			.153 (3.89) (2.90)	.190 (4.83) (4.32)			1.030 (26.16) .830 (21.08)	.705 (17.91) .830 (21.08)	
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)									1.150 (29.36) 1.156 (29.36)	1.221 (31.01) 1.055 (26.80)	.830 (21.08) .934 (23.72)
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)									.146 (3.71)	.170 (4.32)	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)		.162 (4.11) .250 (6.35)			.114 (2.90)	1.360 (34.54) 1.160 (29.46)					1.055 (26.80) 1.307 (33.20)
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)	.146 (3.71)	.234 (5.94)	.170 (4.32)	1.360 (34.54) 1.160 (29.46)	1.307 (33.20) 1.307 (33.20)	.138-32 UNC	M4X0.7				
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)							1.475 (37.47) 1.307 (33.20)				

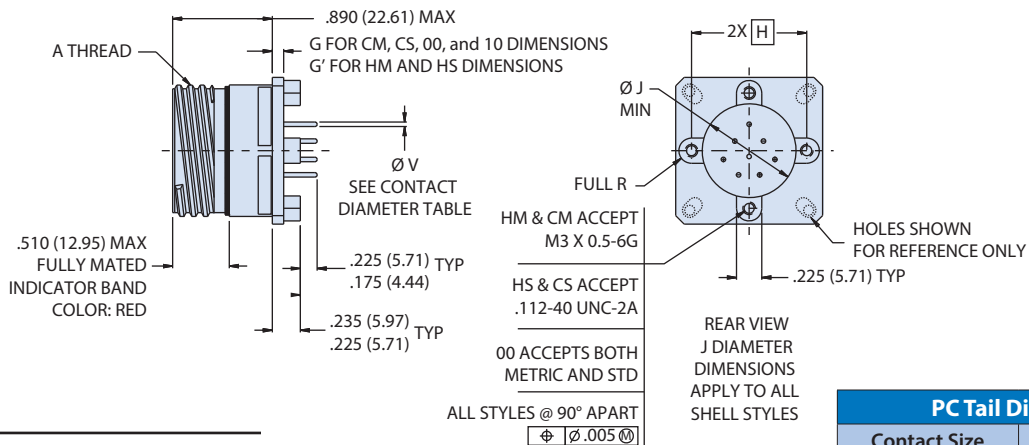
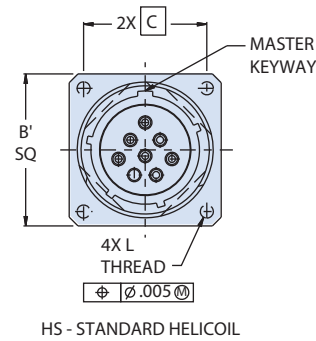
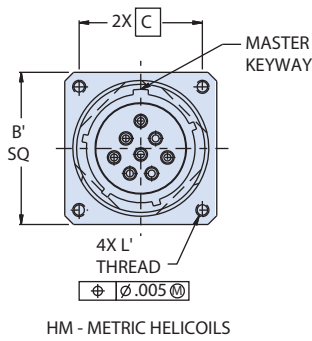
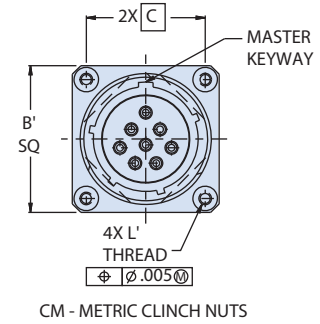
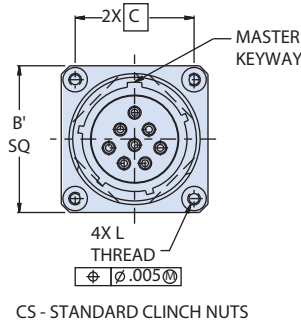
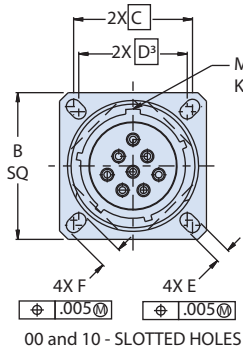
NOTES

- 233-210 receptacle connector is designed to meet or exceed the mechanical, dimensional, electrical, environmental requirements of D38999/20 and MIL-STD-1560 except as shown and/or noted. Receptacle mates with 233-205/206 or any QPL manufacturer's D38999/26 Series III plug having the same shell size, insert arrangement and polarization.
- Insert arrangements IAW MIL-STD-1560. Contact manufacturer for additional arrangement options
- Front panel mount only
- 233-210 receptacle connector is designed with fixed PC tail contacts. Connector potting process meets or exceeds ingress protection rating IP67 and is environmentally sealed with a leak rate of $< 1 \times 10^{-4}$ ccHe/sec in an unmated condition.
- 233-210 receptacle connector is designed to withstand a minimum of 1500 mating durability cycles when mated to a SuperNine® plug and appropriate contacts. Contact finish should be the same for both mating connectors to optimize performance.

MIL-DTL-38999 Series III Type

233-210 PCB wall-mount receptacles with threaded standoffs

00, 10, CM, CS, HM AND HS - WALL MOUNT RECEPTACLES



NOTES (CONTINUED)

6. Material/finish
 - Shell, jam-nut: see part number development, finish
 - Contacts: copper alloy/see part number development, finish
 - Insulators: high grade rigid dielectric/N.A.
 - Seals: fluorosilicone blend/N.A.
 - Potting: epoxy/N.A.

PC Tail Diameter	
Contact Size	ØV
23	.020 (.51) .018 (.46)
22	.020 (.51) .018 (.46)
20	.030 (.76) .028 (.71)
16	.040 (1.02) .038 (.97)
12	.072 (1.83) .070 (1.78)

SuperNine® Environmental Series



MIL-DTL-38999 Series III Type

233-210-07 PCB jam nut receptacles with threaded standoffs

ENVIRONMENTAL CONNECTORS

Part Number Development					
Sample Part Number	233-210	-07	NF	17-8	P N
Series / Basic Part No.	233-210 = SuperNine PCB receptacle with threaded standoffs				
Connector Style*	07 = Jam-Nut Mount Receptacle with Standard Stand-off Thread 17 = Jam-Nut Mount Receptacle with Metric Stand-off Thread				
Finish	NF = Al alloy/cadmium olive drab MT = Al alloy/nickel PTFE Consult factory for additional finish options ME = Al alloy/electroless nickel ZR = Al alloy/black zinc nickel				
Shell Size-Insert Arrangement*	Per MIL-STD-1560				
Contact Type	P = Pin, Gold, 1500 cycles S = Socket, Gold, 1500 cycles H = Pin, Pd/Ni, 1500 cycles J = Socket, Pd/Ni, 1500 cycles				
Alternate Polarization*	A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III)				

Dimensions											
Shell Size Code	Shell Size	A Thd -0.1P-0.3L- TS-2A	Ø B	C Sq	D Flat	E Thread ISO Metric	F	G Bsc	ØH Min	Threads	
										M	M'
A	9	.6250	1.200 (30.48) 1.178 (29.92)	1.078 (27.38) 1.048 (26.62)	.654 (16.61) .645 (16.38)	M17 X 1.0-6g	.122 (3.10) .083 (2.11)	.594 (15.09)	.340 (8.64)	.112-40 UNC	M3 x .05
B	11	.7500	1.386 (35.20) 1.362 (34.59)	1.268 (32.21) 1.236 (31.39)	.755 (19.18) .745 (18.92)	M20 X 1.0-6g		.719 (18.26)	.468 (11.89)		
C	13	.8750	1.512 (38.40) 1.488 (37.80)	1.390 (35.31) 1.358 (34.49)	.942 (23.93) .932 (23.67)	M25 X 1.0-6g		.812 (20.62)	.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	.906 (23.01)	.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)	.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	.153 (3.89) .114 (2.90)	1.150 (29.21)	.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)		

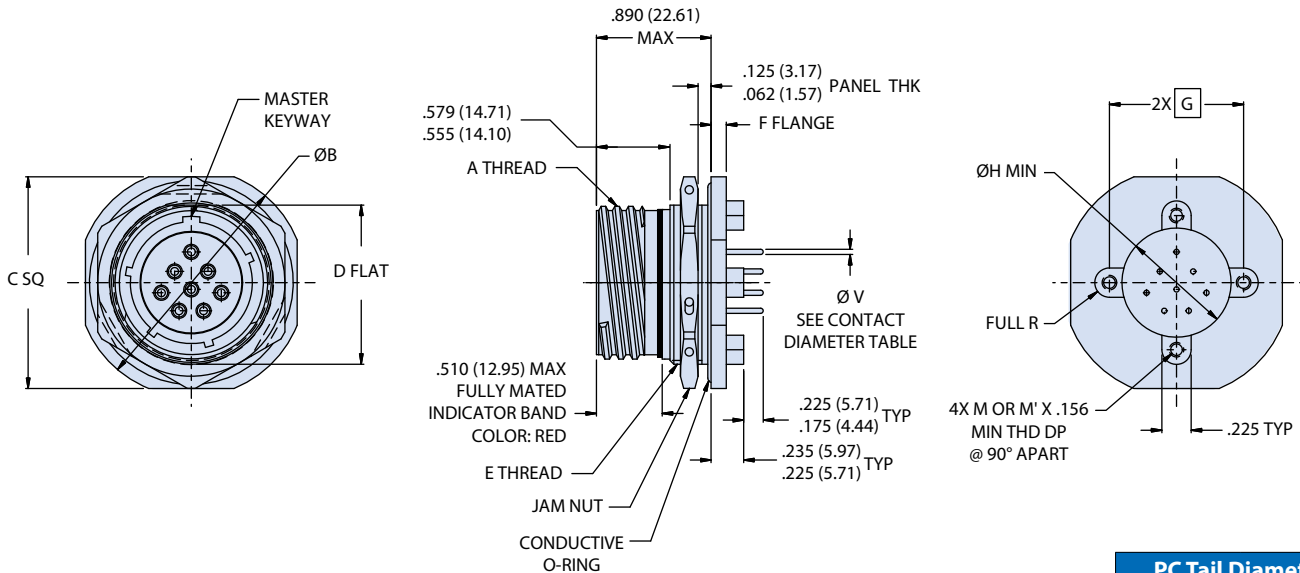
* Modified major diameter 31.95 - 31.80 (1.257 - 1.252).

MIL-DTL-38999 Series III Type

233-210-07 PCB jam nut receptacles with threaded standoff

ENVIRONMENTAL CONNECTORS

07 - JAM-NUT MOUNT RECEPTACLE



PC Tail Diameter	
Contact Size	ØK
23	.020 (.51) .018 (.46)
22	.020 (.51) .018 (.46)
20	.030 (.76) .028 (.71)
16	.040 (1.02) .038 (.97)
12	.072 (1.83) .070 (1.78)

NOTES

- 233-210-07 receptacle connector is designed to withstand a minimum of 1500 mating durability cycles when mated to a "SuperNine" plug and appropriate contacts. Contact finish should be the same for both mating connectors to optimize performance.
- 233-210-07 is designed to meet or exceed the mechanical, dimensional, electrical, environmental requirements of D38999/24 and MIL-STD-1560 except as shown and/or noted.
- Receptacle mates with 233-205/206 or any QPL manufacturer's D38999/26 Series III plug having the same shell size, insert arrangement and polarization.
- Insert arrangements IAW MIL-STD-1560.
- Supplied with fixed PC tail contacts. Potting meets or exceeds IP67 in unmated condition.
- Dimensions in Inches (millimeters) are subject to change without notice.
- Consult factory for additional information.
- Material/finish
 - Shell, lockring, jam-nut: see part number development, finish
 - Contacts: copper alloy/see part number development, contact type
 - 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)