

MIL-DTL-38999 Series I Type 231-210 Wall-mount receptacle with standoffs

HOW TO ORDER							
Sample Part Number	231-210	-CM	NF	23	-99	P	N
Basic Part Number	231-210						
Connector Style	(See Table IV)						
Material/Finish	NF, MA, MT, ME, ZR, Z1, ZL, AB (See Table V)						
Connector Size	9, 11, 13, 15, 17, 19, 21, 23, 25						
Insert Arrangement	PER MIL-STD-1560						
Contact Style	P = Pin, PC Tail S = Socket, PC Tail						
Alternate Polarization	A, B, C, D, E, N = Normal						

"BETTER THAN QPL" FEATURES AND BENEFITS

- Improved, positive-lock, 3-point stainless-steel pin bayonet coupling with outstanding vibration and shock resistance
- Plug ground fingers for advanced EMC
- Glenair Signature tin zinc finish class is RoHS compliant and cadmium compatible
- Precision-machined key/keyway polarization for reliable mismatching protection
- Expanded receptacle styles include Clinch-nut and Helicoil mounting, and In-Line configurations
- Scoop-proof design prevents pin damage and short circuits
- Fully tooled for all MIL-STD-1560 insert arrangements
- Contact options include size #22D, #20, #16, and #12 (see High-Speed series for Size #8)
- 500+ mating cycles exceeds MIL-DTL-38999 specification

POWER SPECIFICATIONS

- Max operating temperature is 200°C finish dependent
- Meets Mil-Spec service rating, insert dependent

TABLE II - MOUNTING HOLES				
Shell Size Code	Shell Size	ØN Min	ØR Holes	V Bsc
A	9	0.656 (16.66)	.133 (3.38) .123 (3.12)	0.719 (18.26)
B	11	0.796 (20.22)		0.812 (20.62)
C	13	0.922 (23.42)		0.906 (23.01)
D	15	1.047 (26.59)		0.969 (24.61)
E	17	1.219 (30.96)		1.062 (26.97)
F	19	1.297 (32.94)		1.156 (29.36)
G	21	1.422 (36.12)		1.250 (31.75)
H	23	1.547 (39.29)	.159 (4.04) .149 (3.78)	1.375 (34.93)
J	25	1.672 (42.47)	.155 (3.94) .145 (3.68)	1.500 (38.10)

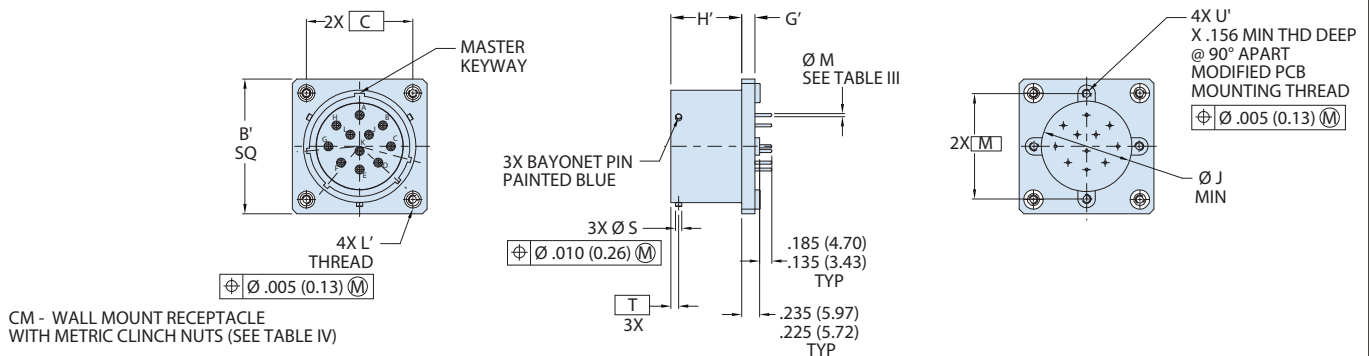
TABLE V - MATERIAL/FINISH		
Sym	Material	Finish
NF	Aluminum Alloy	Cad/O.D. Over Electroless Nickel
MA		Electroless Nickel, Matte
ME		Electroless Nickel
MN		Tri-Nickel Alloy
MT		Nickel-PTFE
TZ		Tin Zinc Over Electroless Nickel
ZR	Stainless Steel (SST)	Zinc Ni, Black (Tri-Valent CR)
Z1		Passivate
ZL	Marine Bronze (MB)	Electrodeposited Nickel
AB		None (Clean Only)

TABLE IV - CONNECTOR STYLE	
SYM	Description
CM	Receptacle, Wall-mount With Metric Clinch-nuts
CS	Receptacle, Wall-mount With Standard Clinch-nuts
D0	Receptacle, Wall-mount With Thru Holes
D1	Receptacle, Wall-mount With Thru Holes, Metric Stand-off thd.
HM	Receptacle, Wall-mount With Metric Helicoils
HS	Receptacle, Wall-mount With Standard Helicoils
T0	Receptacle, Wall-mount With Std Tapped Holes (MAT; SST & MB)
T1	Receptacle, Wall-mount With Mtc Tapped Holes (MAT; SST & MB)

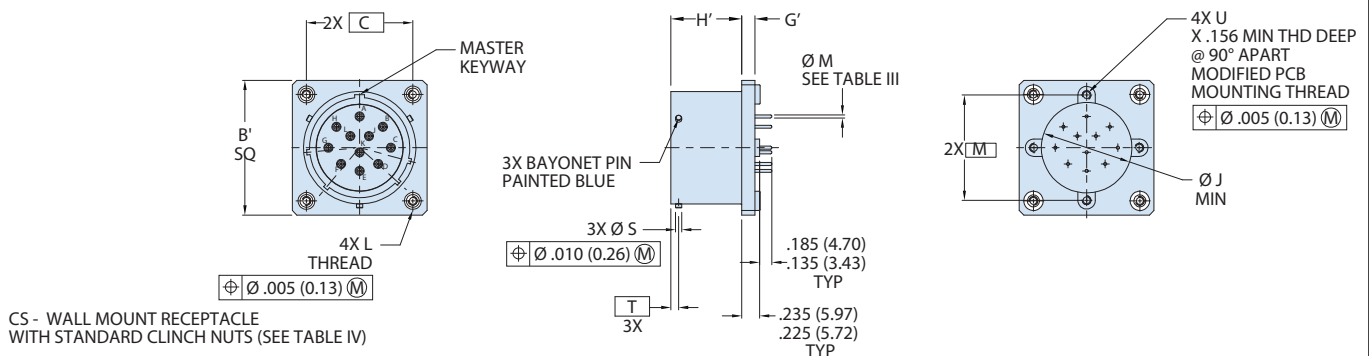
TABLE III	
Contact Size	PC Tail ØK
No 23	.020 (0.51) .018 (0.46)
No 22	.020 (0.51) .018 (0.46)
No 20	.030 (0.76) .028 (0.71)
No 16	.040 (1.02) .038 (0.97)
No 12	.072 (1.83) .070 (1.78)

MIL-DTL-38999 Series I Type 231-210 Wall-mount receptacle with standoffs

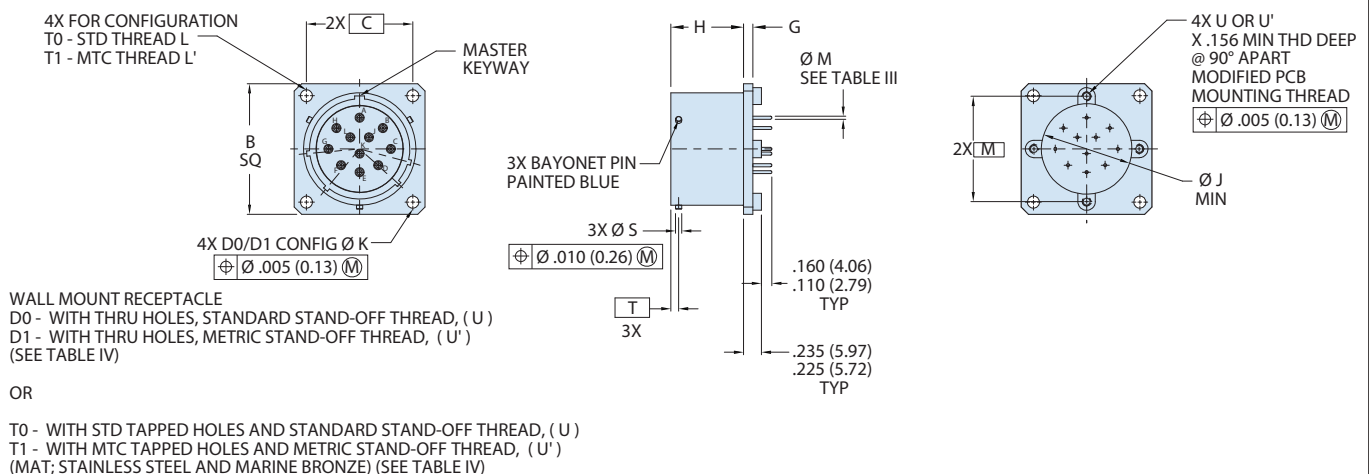
CM - WALL-MOUNT RECEPTACLE



CS - WALL-MOUNT RECEPTACLE

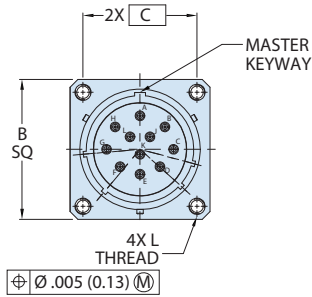


D0 - WALL-MOUNT RECEPTACLE

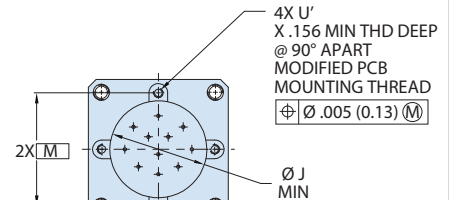
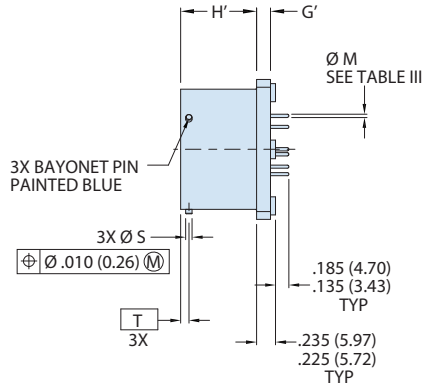


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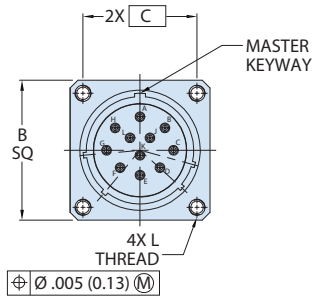
HM - WALL-MOUNT RECEPTACLE



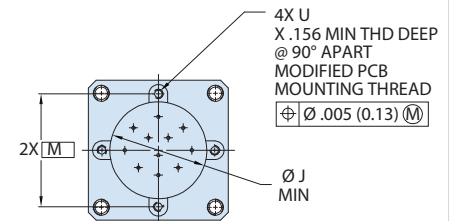
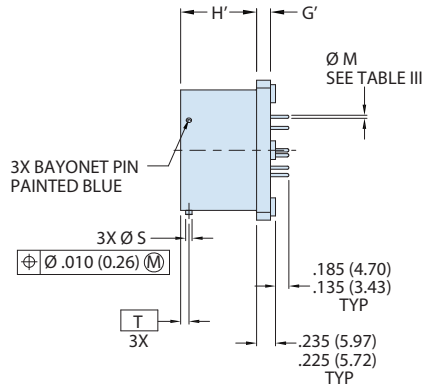
HM - WALL MOUNT RECEPTACLE
WITH METRIC HELICOILS (SEE TABLE IV)



HS - WALL-MOUNT RECEPTACLE



HS - WALL MOUNT RECEPTACLE
WITH STANDARD HELICOILS (SEE TABLE IV)



Shell Size Code	Shell Size	B Sq	B' Sq	C Bsc	G	G'	H	H'	ØJ Min	ØK	L Thread	L' Thread	M Bsc	ØS	T		Stand-Off Threads	
															BSC	U	U'	
A	9	.948 (24.08) .925 (23.50)	1.043 (26.49) 1.003 (25.48)	0.719 (18.26)	.103 (2.62) .077 (1.96)	.153 (3.89) .127 (3.23)	.952 (24.18) .928 (23.57)	.927 (23.55) .903 (22.94)	0.340 (8.64)	.136 (3.45) .120 (3.05)	.112-40 UNC	M3X0.5	0.594 (15.09)	.084 (2.13) .076 (1.93)	0.100 (2.54)	ACCEPTS .112-40 UNC-2A	ACCEPTS M3 X 0.5-6g	
B	11	1.043 (26.49) 1.019 (25.88)	1.136 (28.85) 1.096 (27.84)	0.812 (20.62)					0.468 (11.89)				0.719 (18.26)					
C	13	1.137 (28.88) 1.114 (28.30)	1.230 (31.24) 1.190 (30.23)	0.906 (23.01)					0.572 (14.53)				0.812 (20.62)					
D	15	1.232 (31.29) 1.208 (30.68)	1.293 (32.84) 1.253 (31.83)	0.969 (24.61)					0.705 (17.91)				0.906 (23.01)					
E	17	1.323 (33.60) 1.299 (32.99)	1.386 (35.20) 1.346 (34.19)	1.062 (26.97)					0.830 (21.08)				1.030 (26.16)					
F	19	1.449 (36.80) 1.425 (36.20)	1.480 (37.59) 1.440 (36.58)	1.156 (29.36)					0.934 (23.72)				1.150 (29.21)					
G	21	1.575 (40.01) 1.551 (39.40)	1.574 (39.98) 1.534 (38.96)	1.250 (31.75)	.133 (3.38) .107 (2.72)	.183 (4.65) .157 (3.99)			1.055 (26.80)	.162 (4.11) .146 (3.71)	.138-32 UNC	M4X0.7	1.221 (31.01)	.131 (3.33) .123 (3.12)	0.109 (2.77)			
H	23	1.701 (43.21) 1.677 (42.60)	1.759 (44.68) 1.719 (43.66)	1.375 (34.93)					1.160 (29.46)				1.360 (34.54)					
J	25	1.823 (46.30) 1.799 (45.69)	1.884 (47.85) 1.844 (46.84)	1.500 (38.10)					1.307 (33.20)				1.475 (37.47)					

MIL-DTL-38999 Series I Type 231-210-07 Jam-nut mount receptacle with standoffs



"BETTER THAN QPL" FEATURES AND BENEFITS

- Improved, positive-lock, 3-point stainless-steel pin bayonet coupling with outstanding vibration and shock resistance
- Plug ground fingers for advanced EMC
- Glenair Signature tin zinc finish class is RoHS compliant and cadmium compatible
- Precision-machined key/keyway polarization for reliable mismatching protection
- Expanded receptacle styles include Clinch-nut and Helicoil mounting, and In-Line configurations
- Scoop-proof design prevents pin damage and short circuits
- Fully tooled for all MIL-STD-1560 insert arrangements
- Contact options include size #22D, #20, #16, and #12 (see High-Speed series for Size #8)
- 500+ mating cycles exceeds MIL-DTL-38999 specification

HOW TO ORDER							
Sample Part Number	231-210	-07	NF	17	-8	P	N
Basic Part Number	231-210-07						
Connector Style	07 = Jam-nut, Standoff Standard Thread 17 = Jam-nut, Standoff Metric Thread						
Material/Finish	NF, MA, MT, ME, ZR, Z1, ZL, AB (See Table II)						
Connector Size	9, 11, 13, 15, 17, 19, 21, 23, 25						
Insert Arrangement	PER MIL-STD-1560						
Contact Style	P = Pin, PC Tail S = Socket, PC Tail						
Alternate Polarization	A, B, C, D, N = Normal						

TABLE III - PANEL-MOUNT

Size Code	Shell Size	ØAA	BB FLAT
A	9	.703 (17.86)	.661 (16.79)
		.693 (17.60)	.654 (16.61)
B	11	.835 (21.21)	.771 (19.58)
		.825 (20.96)	.761 (19.33)
C	13	1.020 (25.91)	.955 (24.26)
		1.010 (25.65)	.945 (24.00)
D	15	1.145 (29.08)	1.085 (27.56)
		1.135 (28.83)	1.075 (27.31)
E	17	1.270 (32.26)	1.210 (30.73)
		1.260 (32.00)	1.200 (30.48)
F	19	1.395 (35.43)	1.335 (33.91)
		1.385 (35.18)	1.325 (33.66)
G	21	1.520 (38.61)	1.460 (37.08)
		1.510 (38.35)	1.450 (36.83)
H	23	1.645 (41.78)	1.585 (40.26)
		1.635 (41.53)	1.575 (40.01)
J	25	1.770 (44.96)	1.710 (43.43)
		1.760 (44.70)	1.700 (43.18)

POWER SPECIFICATIONS

- Max operating temperature is 200°C finish dependent
- Meets Mil-Spec service rating, insert dependent

TABLE II - MATERIAL/FINISH

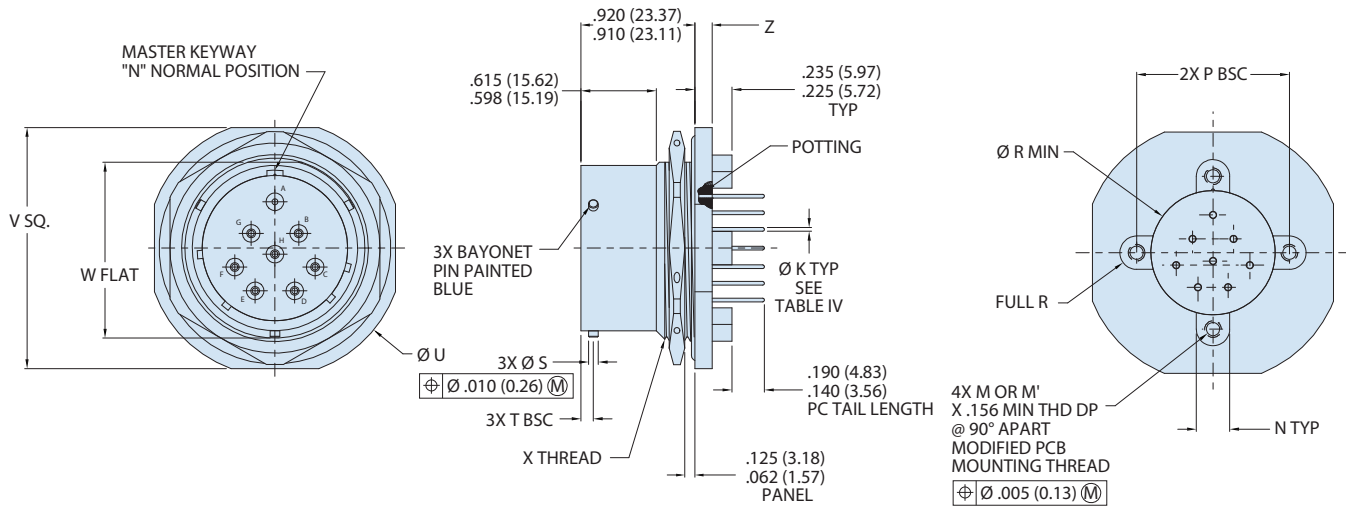
Sym	Material	Finish
NF	Aluminum Alloy	Cad/O.D. Over Electroless Nickel
MA		Electroless Nickel, Matte
ME		Electroless Nickel
MN		Tri-Nickel Alloy
MT		Nickel-PTFE
TZ	Stainless Steel (SST)	Tin Zinc Over Electroless Nickel
ZR		Zinc Ni, Black (Tri-Valent CR)
Z1	Marine Bronze (MB)	Passivate
ZL		Electrodeposited Nickel
AB		None (Clean Only)

TABLE V

Contact Size	PC Tail ØK
No 23	.020 (0.51) .018 (0.46)
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 (1.83) .070 (1.78)

MIL-DTL-38999 Series I Type
231-210-07 Jam-nut mount receptacle with standoffs

TABLE II - JAM-NUT MOUNT



											Threads		Width
Size Code	Shell Size	P Bsc	ØR Min	ØS	T Bsc	ØU	V Sq.	W Flat	X Thread	Z	M	M'	N
A	9	0.594 (15.09)	0.340 (8.64)	.084 (2.13) .076 (1.93)	0.100 (2.54)	1.204 (30.58) 1.172 (29.77)	1.078 (27.38) 1.046 (26.57)	.655 (16.64) .645 (16.38)	.6875-24 UNEF-2A	.120 (3.05) .099 (2.51)	#4-40 UNC-2B	M3 X 0.5	0.150 (3.81)
B	11	0.719 (18.26)	0.468 (11.89)			1.391 (35.33) 1.359 (34.52)	1.266 (32.16) 1.234 (31.34)	.755 (19.18) .745 (18.92)	.8125-20 UNEF-2A				0.175 (4.45)
C	13	0.812 (20.62)	0.572 (14.53)			1.516 (38.51) 1.484 (37.69)	1.391 (35.33) 1.359 (34.52)	.942 (23.93) .932 (23.67)	1.0000-20 UNEF-2A				0.200 (5.08)
D	15	0.906 (23.01)	0.705 (17.91)			1.641 (41.68) 1.609 (40.87)	1.516 (38.51) 1.484 (37.69)	1.066 (27.08) 1.056 (26.82)	1.1250-18 UNEF-2A				0.225 (5.72)
E	17	1.030 (26.16)	0.830 (21.08)			1.766 (44.86) 1.734 (44.04)	1.641 (41.68) 1.609 (40.87)	1.191 (30.25) 1.181 (30.00)	1.2500-18 UNEF-2A	.151 (3.84) .130 (3.30)			0.225 (5.72)
F	19	1.150 (29.21)	0.934 (23.72)			1.954 (49.63) 1.922 (48.82)	1.828 (46.43) 1.796 (45.62)	1.316 (33.43) 1.306 (33.17)	1.3750-18 UNEF-2A				
G	21	1.221 (31.01)	1.055 (26.80)			2.078 (52.78) 2.046 (51.97)	1.954 (49.63) 1.922 (48.82)	1.441 (36.60) 1.431 (36.35)	1.5000-18 UNEF-2A				
H	23	1.360 (34.54)	1.160 (29.46)			2.204 (55.98) 2.172 (55.17)	2.078 (52.78) 2.046 (51.97)	1.566 (39.78) 1.556 (39.52)	1.6250-18 UNEF-2A				
J	25	1.475 (37.47)	1.307 (33.20)	.131 (3.33) .123 (3.12)	0.109 (2.77)	2.328 (59.13) 2.296 (58.32)	2.204 (55.98) 2.172 (55.17)	1.691 (42.95) 1.681 (42.70)	1.7500-18 UNEF-2A				