

MIL-DTL-38999 Series I Type 231-208 Wall-mount receptacle, stepped contacts

"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

HOW TO ORDER							
Sample Part Number	231-208	-CM	NF	23	-99	P	N
Basic Part Number	231-208						
Connector Style	(See Table IV)						
Material/Finish	NF, MA, MT, ME, ZR, Z1, ZL, AB (See Table III)						
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						

TABLE II - MOUNTING HOLES

BACK PANEL RECOMMENDED MOUNTING HOLES				
Shell Size Code	Shell Size	ØN Min	ØR Holes	V Bsc
A	9	0.656 (16.66)		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)	.133 (3.38)	0.969 (24.61)
E	17	1.219 (30.96)	.123 (3.12)	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 III - 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		Electrodeposited Nickel
AB	Marine Bronze (MB)	None (Clean Only)

TABLE IV - CONNECTOR STYLE

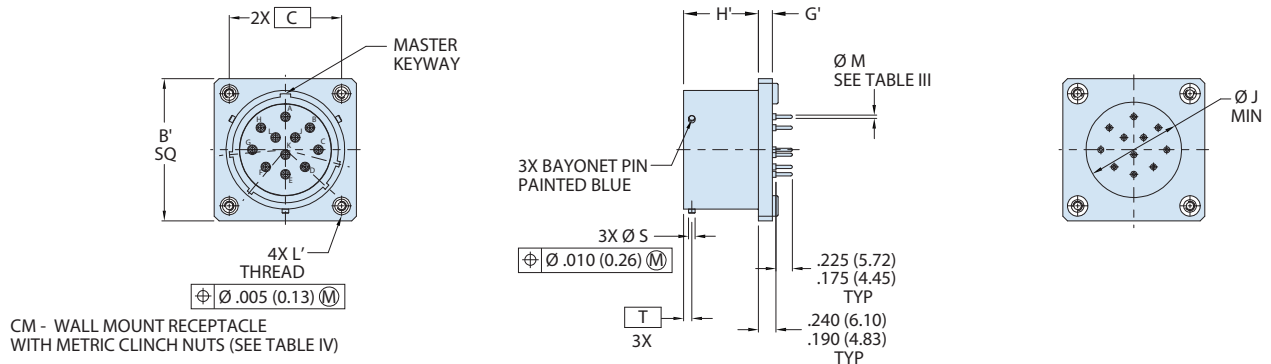
SYM	Description
CM	Receptacle, Wall-mount With Metric Clinch-nuts
CS	Receptacle, Wall-mount With Standard Clinch-nuts
DO	Receptacle, Wall-mount With Thru Holes
HM	Receptacle, Wall-mount With Metric Helicoils
HS	Receptacle, Wall-mount With Standard Helicoils
TO	Receptacle, Wall-mount With Std Tapped Holes (MAT; SST & MB)
T1	Receptacle, Wall-mount With Mtc Tapped Holes (MAT; SST & MB)

TABLE V

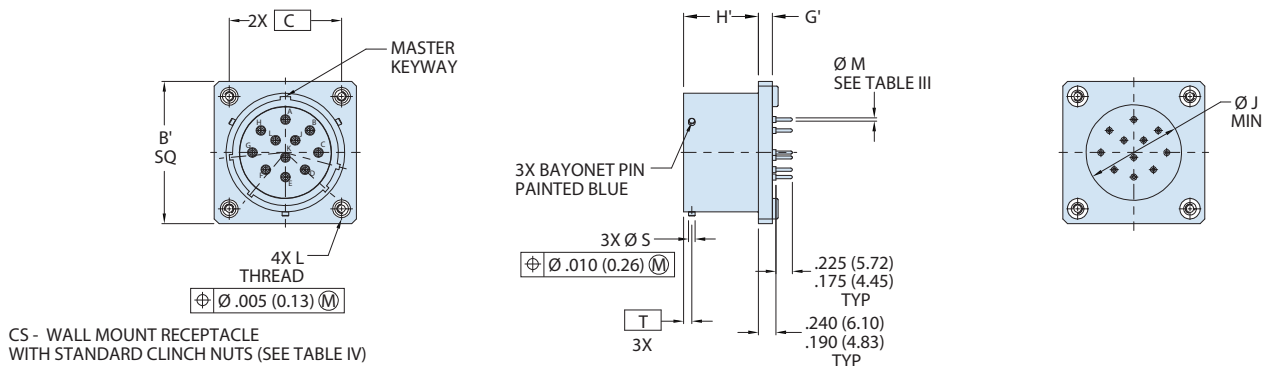
Contact Size	PC Tail ØK
No 23	.020 (0.51) .018 (0.46)
No 22	.020 (0.51) .018 (0.46)
No 20	.030 (0.76) .028 (0.71)
No 16	.040 (1.02) .038 (0.97)
No 12	.072 (1.83) .070 (1.78)

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CM - WALL-MOUNT RECEPTACLE



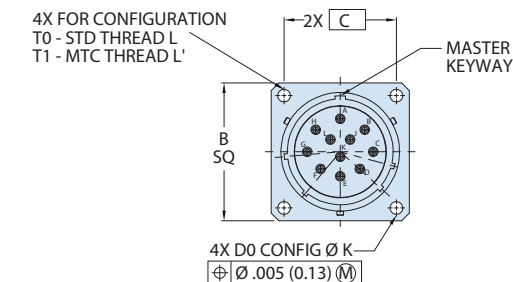
CS - WALL-MOUNT RECEPTACLE



Shell Size Code	Shell Size	B Sq	B' Sq	C Bsc	G	G'	H	H'	Ø J Min	Ø K	L Thread	L' Thread	Ø S	T Bsc
A	9	0.948 (24.08) 0.925 (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	.084 (2.13) .076 (1.93)	0.100 (2.54)
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)					
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)					
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)					
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)					
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)					
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	.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)					
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)					

MIL-DTL-38999 Series I Type
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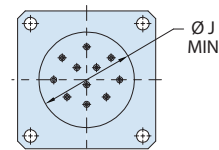
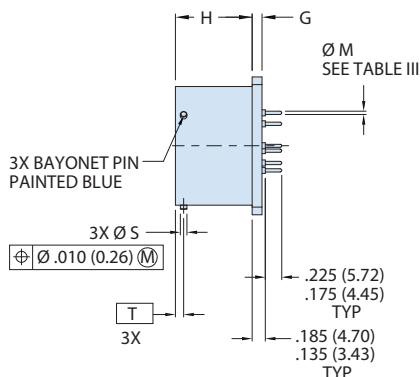
D0 - WALL-MOUNT RECEPTACLE



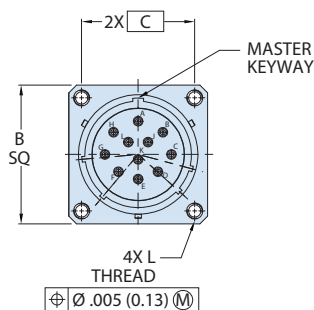
D0 - WALL MOUNT RECEPTACLE
WITH THRU HOLES (SEE TABLE IV)

OR

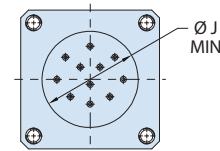
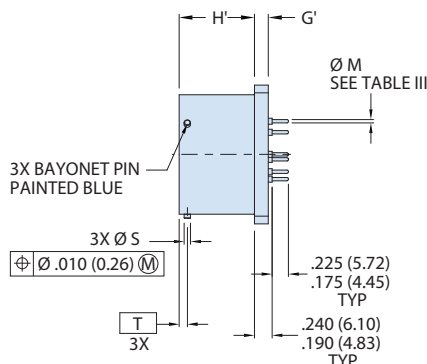
T0 - WALL MOUNT RECEPTACLE WITH STD TAPPED HOLES
T1 - WALL MOUNT RECEPTACLE WITH MTC TAPPED HOLES
(MAT; STAINLESS STEEL AND MARINE BRONZE)
(SEE TABLE IV)



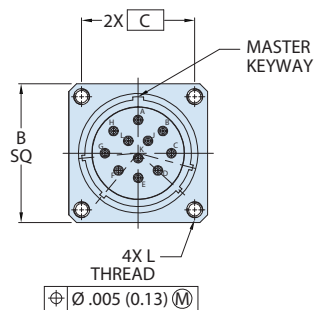
HM - WALL-MOUNT RECEPTACLE



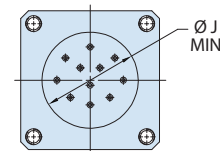
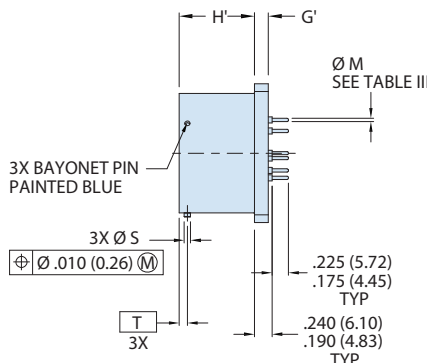
HM - WALL MOUNT RECEPTACLE
WITH METRIC HELICOILS (SEE TABLE IV)



HS - WALL-MOUNT RECEPTACLE



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



MIL-DTL-38999 Series I Type
231-208-07 Jam-nut mount receptacle, stepped contacts

HOW TO ORDER							
Sample Part Number	231-208	-07	NF	17	-8	P	N
Basic Part Number	231-208-07						
Connector Style	07 = Jam-nut, Standoff STD 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						

**“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 III - PANEL-MOUNT

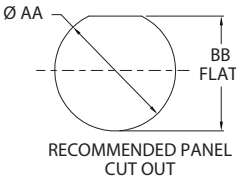
			
Size Code	Shell Size	ØAA Flat	BB
A	9	.703 (17.86)	.661 (16.79)
		.693 (17.60)	.654 (16.61)
B	11	.835 (21.21)	.771 (19.58)
		.825 (20.96)	.761 (19.33)
C	13	1.020 (25.91)	.955 (24.26)
		1.010 (25.65)	.945 (24.00)
D	15	1.145 (29.08)	1.085 (27.56)
		1.135 (28.83)	1.075 (27.31)
E	17	1.270 (32.26)	1.210 (30.73)
		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)

TABLE II - MATERIAL/FINISH

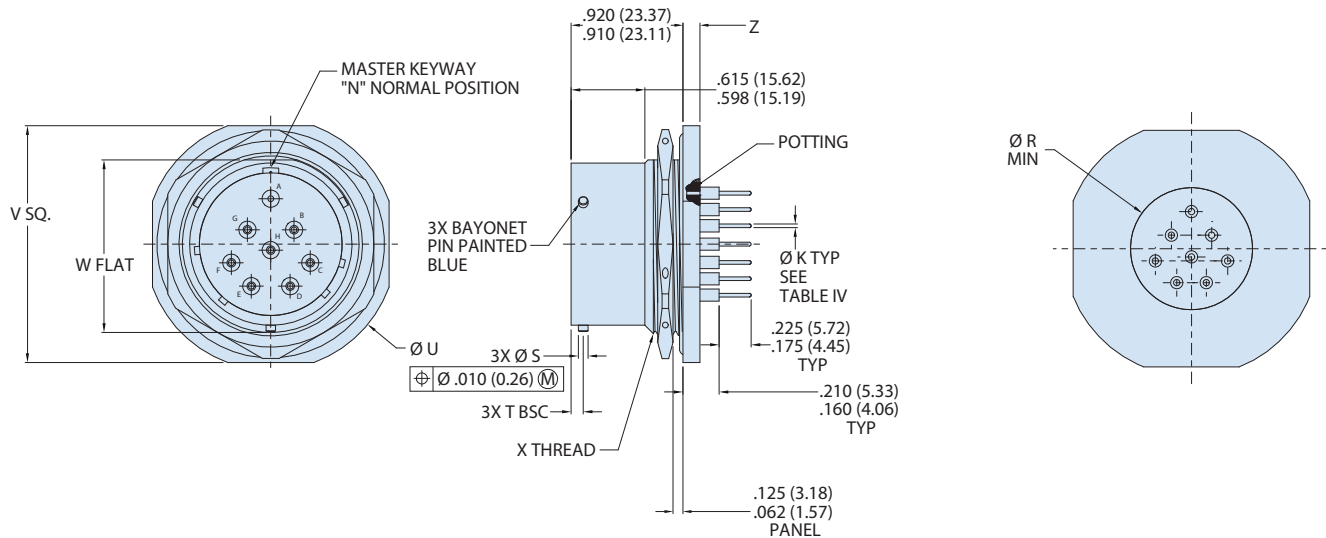
Sym	Material	Finish
NF	Aluminum Alloy	Cad/O.D. Over Electroless Nickel
MA		Electroless Nickel, Matte
ME		Electroless Nickel
MN		Tri-Nickel Alloy
MT		Nickel-PTFE
TZ		Tin Zinc Over Electroless Nickel
ZR	Stainless Steel (SST)	Zinc Ni, Black (Tri-Valent CR)
Z1		Passivate
ZL		Electrodeposited Nickel
AB	Marine Bronze (MB)	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
231-208-07 Jam-nut mount receptacle, stepped contacts

TABLE II - JAM-NUT MOUNT



Size Code	Shell Size	Ø R Min	Ø S	T BSC	Ø U	V Sq.	W Flat	X Thread	Z
A	9	.340 (8.64)	.084 (2.13) .076 (1.93)	.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)
B	11	.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	
C	13	.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	
D	15	.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	
E	17	.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)
F	19	.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	1.055 (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	1.160 (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	1.307 (33.20)	.131 (3.33) .123 (3.12)	.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	