MIL-DTL-38999 Series I Type
250-101 Shorting connectors, plug and receptacle

"BETTER THAN QPL" FEATURES AND BENEFITS

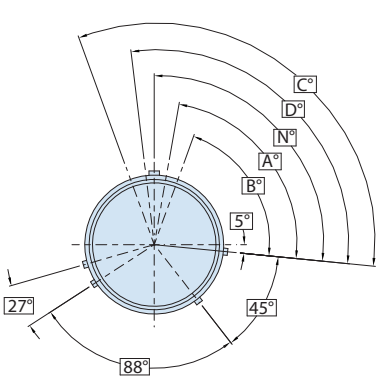
- Improved, positive-lock, 3-point stainless-steel pin bayonet coupling with outstanding vibration and shock resistance
- Plug ground fingers for advanced EMC
- Glenair Signature tin zinc finish class is RoHS compliant and cadmium compatible
- Precision-machined key/keyway polarization for reliable mismating 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	250-101	-G6	NF	17	-35	P	N

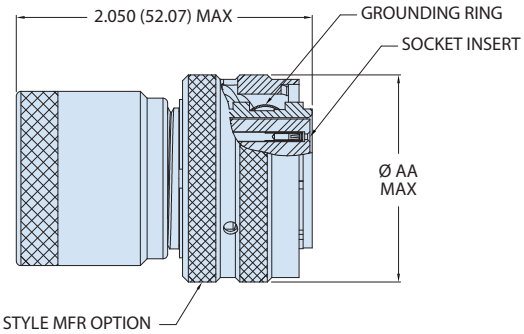
Basic Part Number	**250-101**
Connector Style	**G6** = Plug Connector **D0** = Wall-mount Thru Hole **07** = Receptacle, Jam-nut
Material/Finish	**NF**, **MA**, **MT**, **ME**, **ZR** (See Table I)
Shell Size	**9**, **11**, **13**, **15**, **17**, **19**, **21**, **23**, **25**
Insert Arrangement	PER MIL-STD-1560
Contact Style	**P** = Pin Contacts **S** = Socket Contacts
Alternate Polarization	**N** = Normal, **A**, **B**, **C**, **D**, **K**, **L**, **M**, **R** **U** = Universal

TABLE II - PLUG



MASTER KEY POSITION
PARTIAL FRONT VIEW SHOWN
(PLUG)

G6 - PLUG WITH EMI SPRING (REF: MS27467T)



Shell Size	ØAA Max	Alternate Keyway Positions				
		N°	A°	B°	C°	D°
9	0.859	95°	77°	-	-	113°
11	0.984	95°	81°	67°	123°	109°
13	1.156	95°	75°	63°	127°	115°
15	1.281	95°	74°	61°	129°	116°
17	1.406	95°	77°	65°	125°	113°
19	1.516	95°	77°	65°	125°	113°
21	1.641	95°	77°	65°	125°	113°
23	1.766	95°	80°	69°	121°	110°
25	1.891	95°	80°	69°	121°	110°

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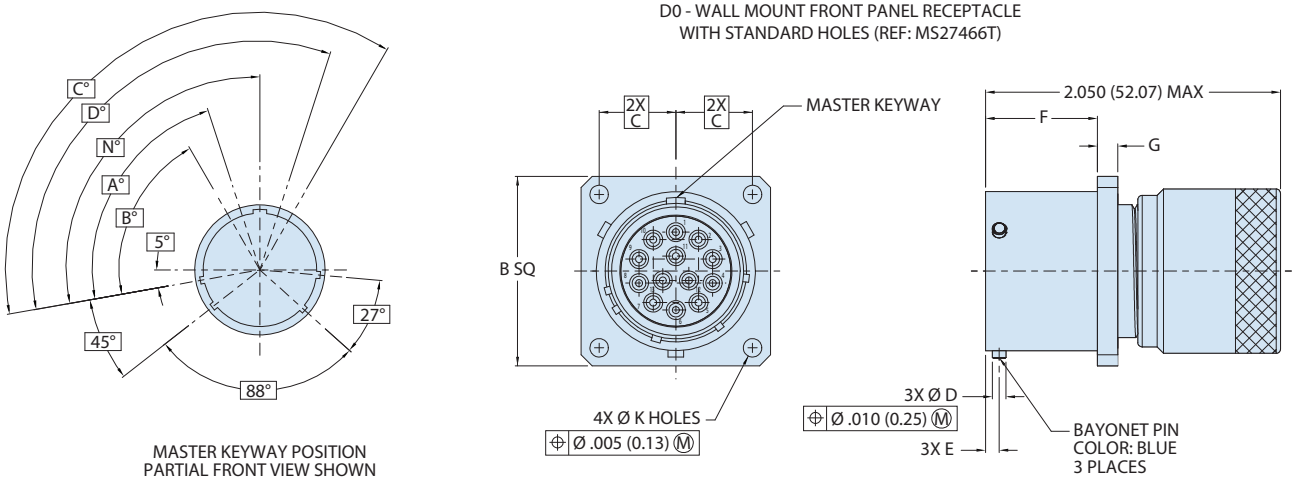
TABLE III - Wall-mount



Shell Size Code	Shell Size	B Sq	C Bsc	F	G	ØK Holes	ØD	E Bsc
A	9	0.958 (24.33) 0.918 (23.32)	0.360 (9.14)	.632 (16.05) .627 (15.93)	.100 (2.54) .085 (2.16)	.138 (3.51) .123 (3.12)	.084 (2.13) .076 (1.93)	0.100 (2.54)
B	11	1.051 (26.70) 1.011 (25.68)	0.406 (10.31)					
C	13	1.145 (29.08) 1.105 (28.07)	0.453 (11.51)					
D	15	1.239 (31.47) 1.199 (30.45)	0.485 (12.32)					
E	17	1.332 (33.83) 1.292 (32.82)	0.531 (13.49)					
F	19	1.458 (37.03) 1.418 (36.02)	0.578 (14.68)					
G	21	1.582 (40.18) 1.542 (39.17)	0.625 (15.88)	.602 (15.29) .597 (15.16)	.130 (3.30) .115 (2.92)	0.157 (3.99)		
H	23	1.708 (43.38) 1.668 (42.37)	0.688 (17.48)					
J	25	1.832 (46.53) 1.792 (45.52)	0.750 (19.05)			0.142 (3.61)	.131 (3.33) .123 (3.12)	0.109 (2.77)

TABLE I: 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		Zinc Ni, Black (Tri-Valent CR)

TABLE IV

SHELL SIZE	ALTERNATE KEYWAY POSITIONS				
	N°	A°	B°	C°	D°
9	95°	77°	-	-	113°
11	95°	81°	67°	123°	109°
13	95°	75°	63°	127°	115°
15	95°	74°	61°	129°	116°
17	95°	77°	65°	125°	113°
19	95°	77°	65°	125°	113°
21	95°	77°	65°	125°	113°
23	95°	80°	69°	121°	110°
25	95°	80°	69°	121°	110°

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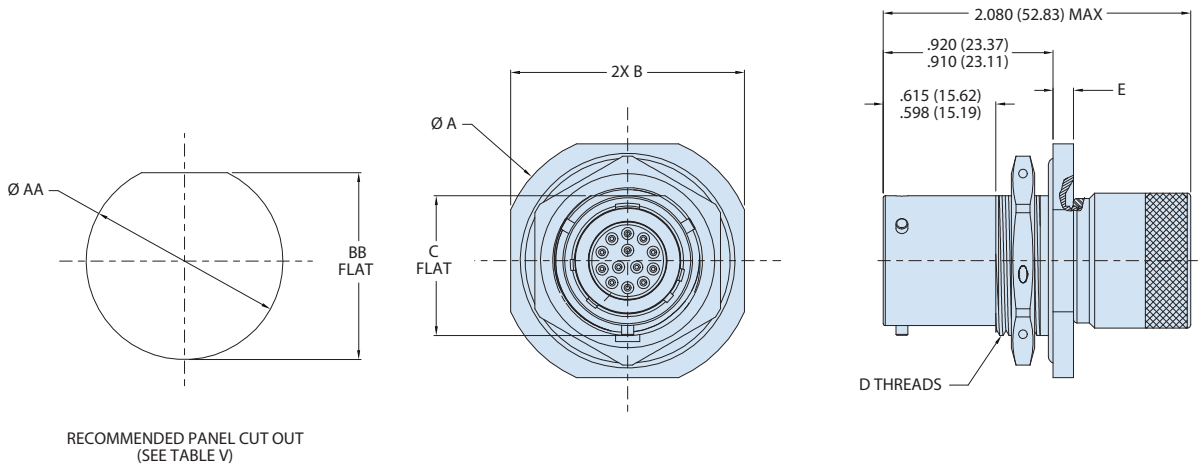
TABLE V - Jam-nut

07 - JAM NUT MOUNT RECEPTACLE (REF: MS27468T)



Shell Size Code	Shell Size	Ø A ±.016	B ±.016	C Flat	D Thread Class 2A UNEF	E	Ø AA	BB Flat
A	9	1.188 (30.18)	1.062 (26.97)	0.655 (16.64) 0.645 (16.38)	.6875-24	.120 (3.05) .099 (2.51)	0.703 (17.86) 0.693 (17.60)	0.661 (16.79) 0.654 (16.61)
B	11	1.375 (34.93)	1.250 (31.75)	0.755 (19.18) 0.745 (18.92)	.8125-20		0.835 (21.21) 0.825 (20.96)	0.771 (19.58) 0.761 (19.33)
C	13	1.500 (38.10)	1.375 (34.93)	0.942 (23.93) 0.932 (23.67)	1.0000-20		1.020 (25.91) 1.010 (25.65)	0.955 (24.26) 0.945 (24.00)
D	15	1.625 (41.28)	1.500 (38.10)	1.066 (27.08) 1.056 (26.82)	1.1250-18		1.145 (29.08) 1.135 (28.83)	1.085 (27.56) 1.075 (27.31)
E	17	1.750 (44.45)	1.625 (41.28)	1.191 (30.25) 1.181 (30.00)	1.2500-18		1.270 (32.26) 1.260 (32.00)	1.210 (30.73) 1.200 (30.48)
F	19	1.938 (49.23)	1.812 (46.02)	1.316 (33.43) 1.306 (33.17)	1.3750-18	.151 (3.84) .130 (3.30)	1.395 (35.43) 1.385 (35.18)	1.335 (33.91) 1.325 (33.66)
G	21	2.062 (52.37)	1.938 (49.23)	1.441 (36.60) 1.431 (36.35)	1.5000-18		1.520 (38.61) 1.510 (38.35)	1.460 (37.08) 1.450 (36.83)
H	23	2.188 (55.58)	2.062 (52.37)	1.566 1.556 (39.52)	1.6250-18		1.645 (41.78) 1.635 (41.53)	1.585 (40.26) 1.575 (40.01)
J	25	2.312 (58.72)	2.188 (55.58)	1.691 (42.95) 1.681 (42.70)	1.7500-18		1.770 (44.96) 1.760 (44.70)	1.710 (43.43) 1.700 (43.18)

NOTES

1. Material/finish:
   - Shell, barrel, coupling nut, cover, Jam-nut - Al alloy/see Table I
   - Wave washer - CRES/passivate
   - Insulator - high-grade rigid dielectric
   - Seals - silicone
   - Contacts, ground ring - copper alloy/gold
2. All contacts are shorted to each other and to the shell. The maximum resistance as measured from any contact to the shell shall be 10 milliohms.
3. Glenair's 250-101 connectors are designed to mate with any QPL manufacturer's MIL-DTL-38999, Series I connectors having the same shell size, insert arrangement, and polarization.
4. Insert arrangement is in accordance with MIL-STD-1560. Contact manufacturer for additional arrangement options.
5. Insert arrangement is shown for reference only. Pin interface shown.
6. Alternate polarization 'U' (universal) is a non-standard mil-spec option which allows for mating to any QPL manufacturer's MIL-DTL-38999, Series I connector having the same shell size, insert arrangement, and mating contact size. Universal connectors are intended for use in testing facilities only and should be highly evaluated before consideration in another environment.
7. Connector temperature range: -55°C to 175°C. Contact manufacturer for additional options.