

SERIES 23 SUPERNINE Better-than-QPL SuperNine D38999 Connectors with SpeedMaster™ 10G high-speed contacts



233-219 Environmental High-Speed Connectors

SpeedMaster™ Connector Part Number Development								
Sample Part Number	233-219	-G6	ME	25	-7	P	N	-1
Series / Basic Part No.	SuperNine Environmental High-Speed connector							
SpeedMaster™ Connector Style	G6 = Plug 38999/26 05 = Receptacle, in-line 07 = Receptacle, jam-nut 38999/24 00 = Receptacle, wall mount 38999/20 CM = Receptacle, wall mount, metric clinch nuts CS = Receptacle, wall mount, standard clinch nuts DO = Receptacle, wall mount, thru holes HM = Receptacle, wall mount, metric helicoils HS = Receptacle, wall mount, standard helicoils TO = Receptacle, wall mount, tapped holes							
Material/Finish	NF = Cadmium Olive Drab ME = Electroless Nickel MT = Nickel PTFE ZR = Black Zinc Nickel Z1 = Passivated ZL = Electrodeposited Nickel							
Shell Size	11, 17, 19, 21, 25							
Insert Arrangement	See Insert Arrangements Table							
Contact Gender	P = Pin S = Socket A = Pin, less contacts; see Note 1 B = Socket, less contacts; see Note 1							
Alternate Polarization	A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III); See alternate positions table.							
Cable Size	0, 1, 2, 3, 4, 5, 6, 7 ; See cable size table for details Omit for pre-terminated contact modules; See note 1							

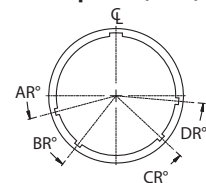


NOTES

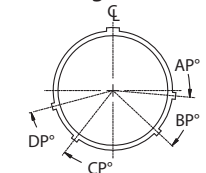
1. Spare SpeedMaster contacts (858-100-X, 858-101-X) may be ordered separately. Retention ferrule tool (607-011) supplied with each connector. Select the "less contacts (A)" option when ordering pre-terminated cable to SpeedMaster contacts listed on page 6. Omit cable size from part number development when selecting the "less contact" option.
2. See assembly instructions AI85082 for SpeedMaster assembly. See assembly instructions AI85086 for SpeedMaster installation.
3. Unless otherwise specified, all dimensions are per MIL-DTL-38999/20, /24 and /26
4. For cables in between sizes, select the smaller size
5. See 858-100 or 858-101 SpeedMaster contact drawing for inner contact pinout.
6. Glenair 233-219 connectors only accommodate Glenair SpeedMaster contacts.
7. SpeedMaster insert arrangements are exclusive to SpeedMaster and are unrelated to other insert patterns of the same size and arrangement

Alternate Positions						
Shell Size	Position Code	AR° AP°	BR° BP°	CR° CP°	DR° DP°	
11	N	95	141	208	236	
	A	113	156	182	292	
	B	90	145	195	252	
	C	53	156	220	255	
	D	119	146	176	298	
	E	51	141	184	242	
17	N	80	142	196	293	
	A	135	170	200	310	
	B	49	169	200	244	
	C	66	140	200	257	
	D	62	145	180	280	
25	E	79	153	197	272	

Receptacle (Face)



Plug (Face)



SpeedMaster™ High-Speed Cable						
Cable P/N	Cable Cat.	Cable Const.	Wire Gage	Cable Dia.	Cable Size	Assembly Instruction
963-066-24	Cat 6A	SF/FTP	24	.260 (6.60)	2	AI85082
963-066-26	Cat 6A	SF/FTP	26	.238 (6.05)	5	
963-075-24	Cat 6A	SF/UTP	24	.265 (6.73)	2	

Cable Size			
Cable Size	Cable Ø	Cable Size	Cable Ø
0*	.305 (7.47) Max	4	.250 (6.35)
1	.280 (7.11)	5	.240 (6.10)
2	.270 (6.86)	6	.230 (5.84)
3	.260 (6.60)	7	.220 (5.59)

*Cable size 0 does not have environmental sealing.

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233-219-07 Environmental High-Speed Connectors

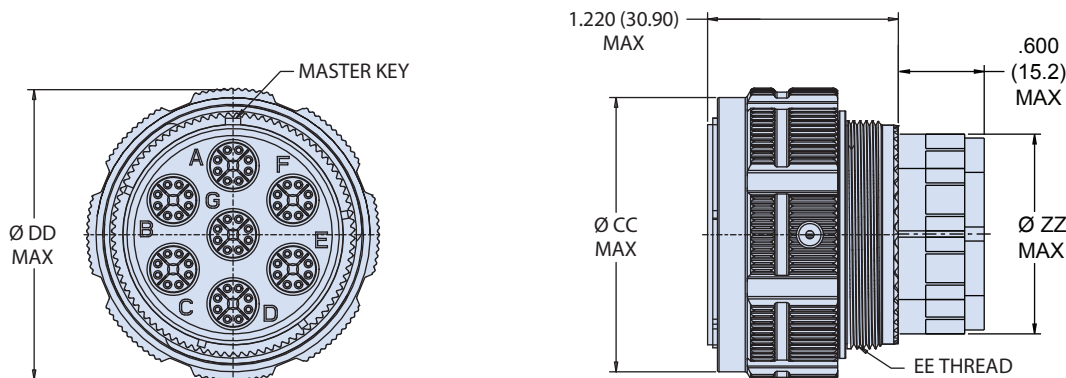
Insert Arrangements			
11-1 1X SpeedMaster	19-3 3X SpeedMaster	21-4 4X SpeedMaster	25-7 7X SpeedMaster
17-23 1X SpeedMaster 22X Size 22	25-6A23 6X SpeedMaster 9X Size 23	25-6A35 6X SpeedMaster 6X Size 22D	25-6A98 6X SpeedMaster 3X Size 20
25-6AG5 6X SpeedMaster 1X Size 8	25-4C14 4X SpeedMaster 14X Size 23 1X Size 8	25-4C23 4X SpeedMaster 32X Size 23	25-4C35 4X SpeedMaster 22X Size 22D
25-4C4 4X SpeedMaster 4X Size 16	25-4C8 4X SpeedMaster 8X Size 20	25-4C98 4X SpeedMaster 10X Size 20	

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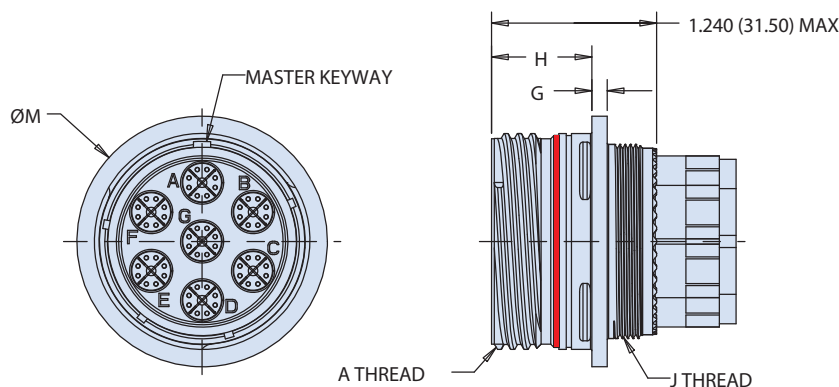
233-219-G6 Plug

PLUG (G6) D38999/26 TYPE



G6 Plug Per MIL-DTL-38999/26				
Shell Size	Ø CC Max	Ø DD Max	EE Thread	Ø ZZ Max
11	.929 (23.60)	.984 (24.99)	M15x1.0-6g 0.100R	.405 (10.29)
17	1.358 (34.49)	1.406 (35.71)	M25x1.0-6g 0.100R	N/A
19	1.469 (37.31)	1.516 (38.51)	M28x1.0-6g 0.100R	.885 (22.48)
21	1.594 (40.49)	1.642 (41.71)	M31x1.0-6g 0.100R	.845 (21.46)
25	1.843 (46.81)	1.890 (48.01)	M37x1.0-6g 0.100R	1.285 (32.64)

IN-LINE (05) RECEPTACLE



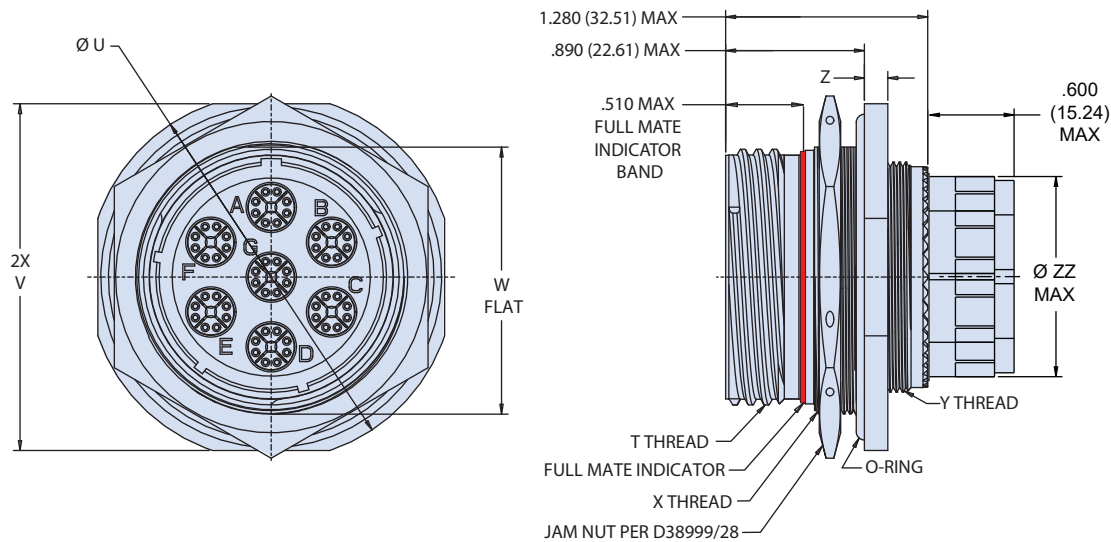
05 In-Line Receptacle					
Shell Size	A Thread	G	H	J THREAD	ØM
11	.7500-.1P-.3L-TS-2A	.098 (2.49) .083 (2.11)	.820 (20.83) .771 (19.58)	M15x1.0-6g 0.100R	.984 (24.99)
17	1.1875-.1P-.3L-TS-2A			M25x1.0-6g 0.100R	1.406 (35.71)
19	1.2500-.1P-.3L-TS-2A			M28x1.0-6g 0.100R	1.516 (38.51)
21	1.3750-.1P-.3L-TS-2A	.126 (3.20) .083 (2.11)	.790 (20.07) .741 (18.82)	M31x1.0-6g 0.100R	1.642 (41.71)
25	1.6250-.1P-.3L-TS-2A			M37x1.0-6g 0.100R	1.890 (48.01)

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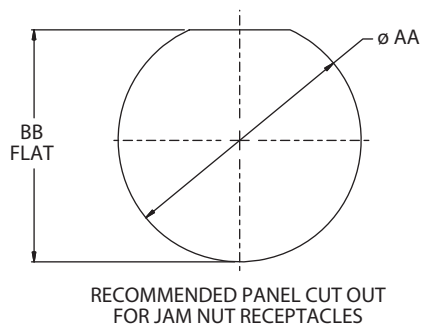


233-219-07 Jam Nut Receptacle

JAM-NUT (07) MOUNT RECEPTACLE, D38999/24 TYPE



07 Jam Nut Per MIL-DTL-38999/24								
Shell Size	T Thread	U	V	W Flat	X Thread	Y Thread	Z	ZZ Max
11	.7500-1P-.3L-TS-2A	1.385 (35.18) 1.363 (34.62)	1.267 (32.18) 1.237 (31.42)	0.756 (19.20) 0.746 (18.95)	M20x1.0-6g 0.100R	M15x1.0-6g 0.100R	.122 (3.10) .083 (2.11)	.405 (10.29)
17	1.1875-1P-.3L-TS-2A	1.764 (44.81) 1.740 (44.20)	1.642 (41.71) 1.610 (40.89)	1.191 (30.25) 1.181 (30.00)	M32x1.0-6g 0.100R	M25x1.0-6g 0.100R	.153 (3.89) .114 (2.90)	N/A
19	1.2500-1P-.3L-TS-2A	1.949 (49.50) 1.925 (48.89)	1.827 (46.41) 1.795 (45.59)	1.316 (33.43) 1.306 (33.17)	M35x1.0-6g 0.100R	M28x1.0-6g 0.100R		.885 (22.48)
21	1.3750-1P-.3L-TS-2A	2.075 (52.70) 2.051 (52.10)	1.953 (49.61) 1.921 (48.79)	1.441 (36.60) 1.431 (36.35)	M38x1.0-6g 0.100R	M31x1.0-6g 0.100R		.845 (21.46)
25	1.6250-1P-.3L-TS-2A	2.323 (59.00) 2.299 (58.39)	2.205 (56.01) 2.173 (55.19)	1.691 (42.95) 1.681 (42.70)	M44x1.0-6g 0.100R	M37x1.0-6g 0.100R		1.285 (32.64)



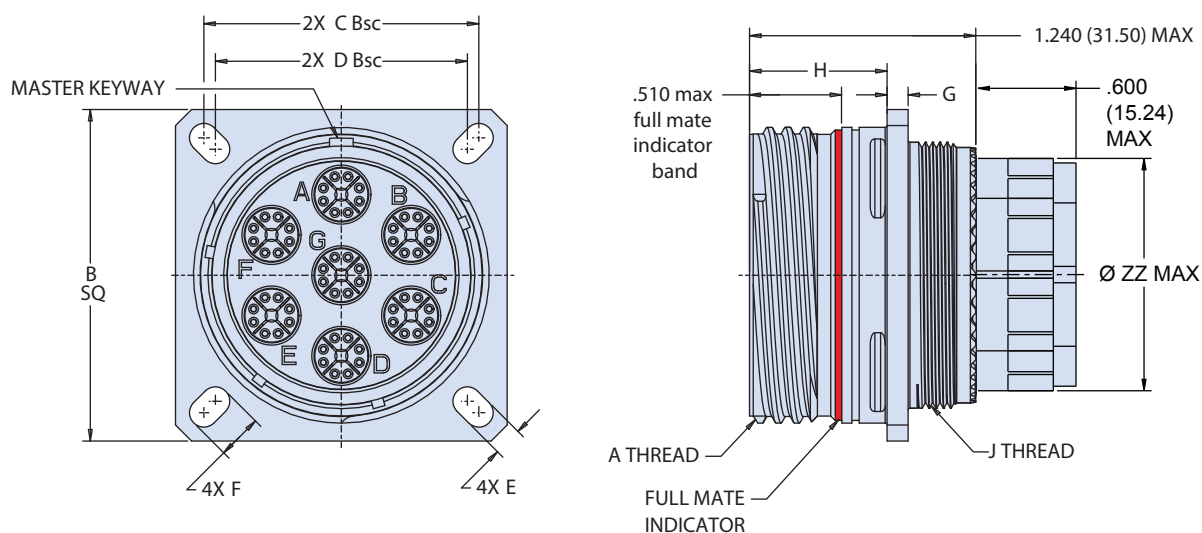
Mounting Holes Per MIL-DTL-38999		
Shell Size	$\varnothing AA$	BB Flat
11	0.835 (21.21) 0.825 (20.95)	0.771 (19.58) 0.761 (19.33)
17	1.270 (32.26) 1.260 (32.00)	1.210 (30.73) 1.200 (30.48)
19	1.395 (35.43) 1.385 (35.18)	1.335 (33.91) 1.325 (33.65)
21	1.520 (38.61) 1.510 (38.35)	1.460 (37.08) 1.450 (36.83)
25	1.770 (44.96) 1.760 (44.70)	1.710 (43.43) 1.700 (43.18)

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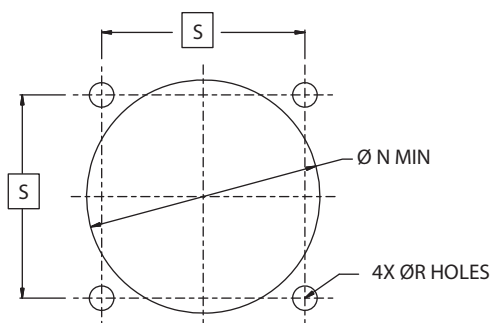


233-219-00 Wall Mount Receptacle

SLOTTED HOLE (00), D38999/20 TYPE



00 Wall Mount Per MIL-DTL-38999/20										
Shell Size	A Thread	B	C BSC	D BSC	E	F	G	H	J THREAD	ZZ Max
11	.7500-1P-.3L-TS-2A	1.040 (26.42) 1.016 (25.81)	.812 (20.62)	.719 (18.26)	.136 (3.45) .120 (3.05)	.202 (5.13) .186 (4.72)	.098 (2.49)	.820 (20.83) .771 (19.58)	M15x1.0-6g 0.100R	.405 (10.29)
17	1.1875-1P-.3L-TS-2A	1.323 (33.60) 1.299 (32.99)	1.062 (26.97)	.969 (24.61)			.083 (2.11)		M25x1.0-6g 0.100R	N/A
19	1.2500-1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.156 (29.36)	1.062 (26.97)			.126 (3.20) .083 (2.11)	.790 (20.07) .741 (18.82)	M28x1.0-6g 0.100R	.885 (22.48)
21	1.3750-1P-.3L-TS-2A	1.575 (40.00) 1.551 (39.40)	1.250 (31.75)	1.156 (29.36)					M31x1.0-6g 0.100R	.845 (21.46)
25	1.6250-1P-.3L-TS-2A	1.823 (46.30) 1.799 (45.69)	1.500 (38.10)	1.375 (34.92)	.162 (4.11) .142 (3.61)	.250 (6.35) .234 (5.94)	.083 (2.11)	.741 (18.82)	M37x1.0-6g 0.100R	1.285 (32.64)



Mounting Holes Per MIL-DTL-38999			
Shell Size	Ø N Min	Ø R Holes	S BSC
11	.796 (20.22)	.133 (3.38) .123 (3.12)	.812 (20.62)
17	1.219 (30.96)		1.062 (26.97)
19	1.297 (32.94)		1.156 (29.36)
21	1.422 (36.12)		1.250 (31.75)
25	1.672 (42.47)	.155 (3.94) .145 (3.68)	1.500 (38.10)

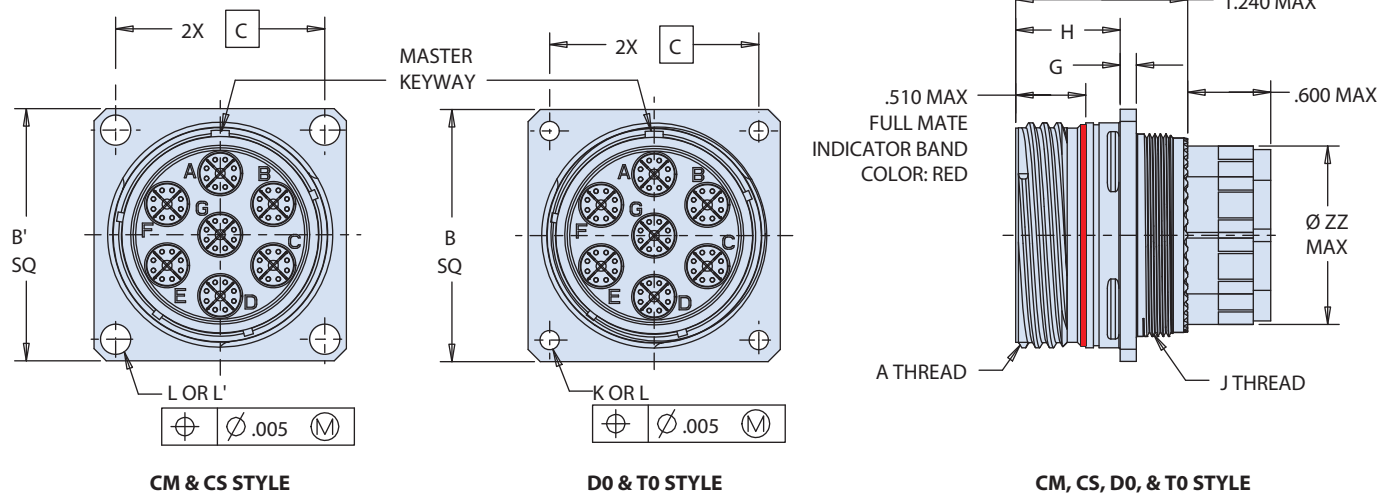
RECOMMENDED MOUNTING HOLES FOR WALL MOUNT (00) RECEPTACLES PER MIL-DTL-38999.

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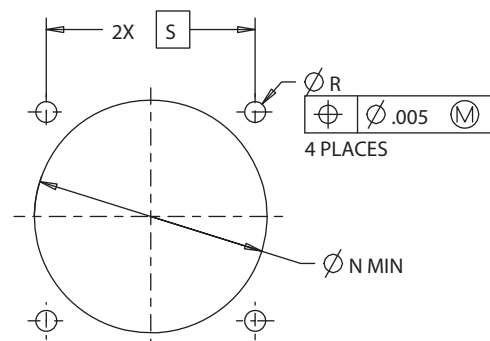


233-219 Wall Mount Receptacle

CLINCH NUT STANDARD (CS) AND METRIC (CM), THRU HOLES (DO) AND TAPPED HOLES (TO)



CM, CS, DO and TO Wall Mount											
Shell Size	A Thread	B SQ	B' SQ	C BSC	G	H	J Thread	ØK	L Standard	L' Metric	ZZ Max
11	.7500-.1P-.3L-TS-2A	1.043 (26.49) 1.019 (25.88)	1.187 (30.15) 1.147 (29.13)	.812 (20.62)	.098 (2.49) .083 (2.11)	.820 (20.83) .771 (19.58)	M15x1.0-6g 0.100R	.136 (3.45) .120 (3.05)	.112-40 UNC-2B	M3 x 0.5	.405 (10.29)
17	1.1875-.1P-.3L-TS-2A	1.323 (33.60) 1.299 (32.74)	1.437 (36.46) 1.397 (35.48)	1.062 (27.00)			M25x1.0-6g 0.100R				N/A
19	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.531 (38.89) 1.491 (37.87)	1.156 (29.36)			M28x1.0-6g 0.100R				.885 (22.48)
21	1.3750-.1P-.3L-TS-2A	1.575 (40.00) 1.551 (39.40)	1.625 (41.28) 1.585 (40.26)	1.250 (31.75)	.126 (3.20) .083 (2.11)	.790 (20.07) .741 (18.82)	M31x1.0-6g 0.100R	.162 (4.11) .146 (3.71)	.138-32 UNC-2B	M4 x 0.7	.845 (21.46)
25	1.6250-.1P-.3L-TS-2A	1.823 (46.30) 1.799 (45.69)	1.875 (47.63) 1.835 (46.61)	1.500 (38.10)			M37x1.0-6g 0.100R				1.285 (32.64)



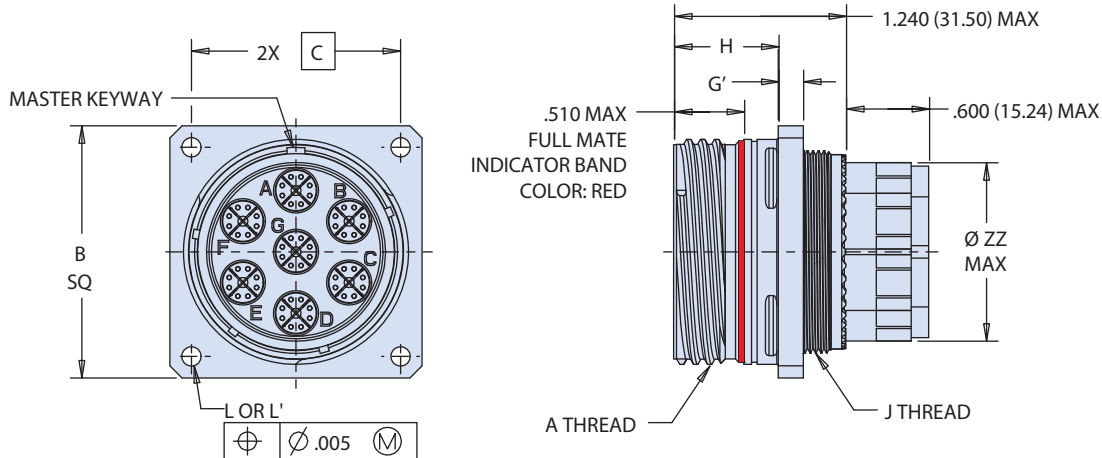
Mounting Holes			
Shell Size	Ø N Min	Ø R Holes	S BSC
11	.796 (20.22)	.133 (3.38) .123 (3.12)	.812 (20.62)
17	1.219 (30.96)		1.062 (26.97)
19	1.297 (32.94)		1.156 (29.36)
21	1.422 (36.12)	.155 (3.94) .145 (3.68)	1.250 (31.75)
25	1.672 (42.47)		1.500 (38.10)

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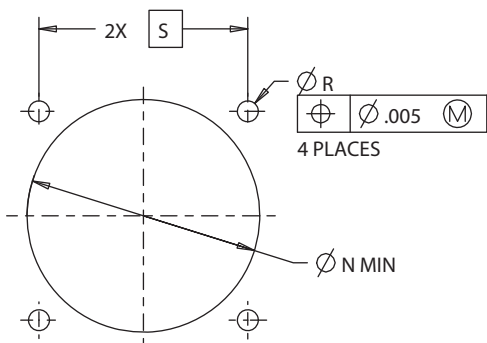
233-219 Wall Mount Receptacle

HELICOILS STANDARD (HS) AND METRIC (HM)



HM & HS STYLE

HM and HS Wall Mount									
Shell Size	A Thread	B SQ	C BSC	G'	H	J Thread	L Thread (Standard)	L' Thread (Metric)	ZZ Max
11	.7500-.1P-.3L-TS-2A	1.043 (26.49) 1.019 (25.88)	.812 (20.62)	.179 (4.55) .140 (3.56)	.820 (20.83) .771 (19.58)	M15x1.0-6g 0.100R	.112-40 UNC-2B	M3 x 0.5	.405 (10.29)
17	1.1875-.1P-.3L-TS-2A	1.437 (36.50) 1.397 (35.48)	1.062 (26.97)			M25x1.0-6g 0.100R			N/A
19	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.156 (29.36)			M28x1.0-6g 0.100R			.885 (22.48)
21	1.3750-.1P-.3L-TS-2A	1.575 (40.00) 1.551 (39.40)	1.250 (31.75)		.790 (20.07) .741 (18.82)	M31x1.0-6g 0.100R			.845 (21.46)
25	1.6250-.1P-.3L-TS-2A	1.823 (46.30) 1.799 (45.69)	1.500 (38.10)	.190 (4.83) .170 (4.32)		M37x1.0-6g 0.100R	.138-32 UNC-2B	M4 x 0.7	1.285 (32.64)



Mounting Holes			
Shell Size	Ø N Min	Ø R Holes	S BSC
11	.796 (20.22)	.133 (3.38) .123 (3.12)	.812 (20.62)
17	1.219 (30.96)		1.062 (26.97)
19	1.297 (32.94)		1.156 (29.36)
21	1.422 (36.12)		1.250 (31.75)
25	1.672 (42.47)	.155 (3.94) .145 (3.68)	1.500 (38.10)