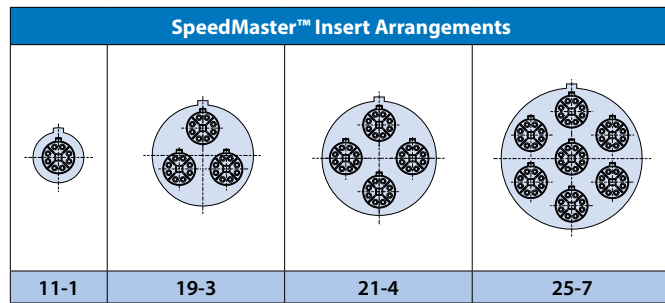


## MIL-DTL-38999 Series III Type Environmental Connectors 233-219 SpeedMaster™ plug and receptacle connectors

HIGH-SPEED CONNECTORS

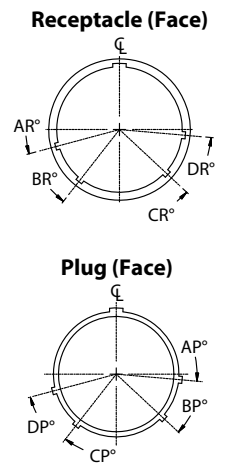
SpeedMaster™ Connector Part Number Development	
<b>Sample Part Number</b>	233-219 -G6 ME 25 -7 P N -1
<b>Series / Basic Part No.</b>	SuperNine Environmental High-Speed connector
<b>SpeedMaster™ Connector Style*</b>	<b>G6</b> = Plug 38999/26 <b>05</b> = Receptacle, in-line <b>07</b> = Receptacle, jam-nut 38999/24 <b>00</b> = Receptacle, wall mount 38999/20 <b>CM</b> = Receptacle, wall mount, metric clinch nuts <b>CS</b> = Receptacle, wall mount, standard clinch nuts <b>D0</b> = Receptacle, wall mount, thru holes <b>T0</b> = Receptacle, wall mount, tapped holes <b>HM</b> = Receptacle, wall mount, metric helicoils <b>HS</b> = Receptacle, wall mount, standard helicoils
<b>Material/Finish</b>	<b>NF</b> = Cadmium Olive Drab <b>ZR</b> = Black Zinc Nickel <b>MT</b> = Nickel PTFE <b>ME</b> = Electroless Nickel
<b>Shell Size</b>	11, 19, 21, 25
<b>Insert Arrangement</b>	See Insert Arrangement Table
<b>Module Type</b>	P = Pin    S = Socket    A = Less contacts; see note 1
<b>Alternate Polarization</b>	A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III); See alternate positions table.
<b>Cable Size</b>	See Cable Size Table for details; omit for pre-terminated contact modules



**NOTES**

1. Spare High-Speed modules (858-100, 858-101) may be ordered separately. Module wrench tool (607-011) supplied with each connector. Select the "less contacts (A)" option when ordering pre-terminated cable to SpeedMaster contacts listed on page C-52. Omit cable size from part number development when selecting the "less contact" option from the module type of the part number development.
2. See assembly instructions A185082 for high-speed module assembly. See assembly instructions A185086 for module 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 page 8 for SpeedMaster module 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	Shell Code	Position Code	AR° AP°	BR° BP°	CR° CP°	DR° DP°
B	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
F	19	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
G	21	E	79	153	197	272
J	25					



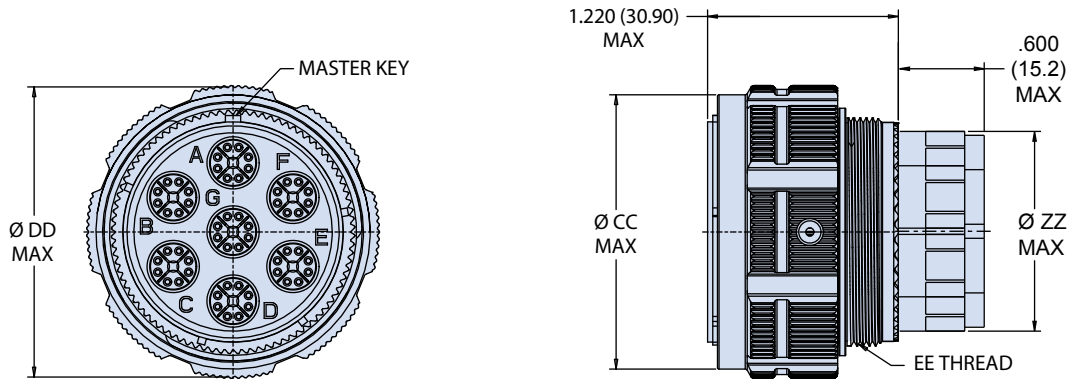
Cable Size			
Cable Size	Cable Ø	Cable Size	Cable Ø
1	.280 (7.11)	5	.240 (6.10)
2	.270 (6.86)	6	.230 (5.84)
3	.260 (6.60)	7	.220 (5.59)
4	.250 (6.35)		

SpeedMaster™ High-Speed Cable					
Cable P/N	Cabel Category	Cable Construction	Wire Gage	Cable Dia.	Assembly Instruction
963-003-24	Cat 6A	SF/UTP	24	.280	A185082
963-003-26	Cat 6A	SF/UTP	26	.220	
963-037	Cat 6A	SF/UTP	24	.260	
963-033-24	CAT 6A	S/FTP	24	.260	
933-033-26	CAT 6A	S/FTP	26	.220	

**MIL-DTL-38999 Series III Type Environmental Connectors**  
**233-219 SpeedMaster™ plug and receptacle connectors**

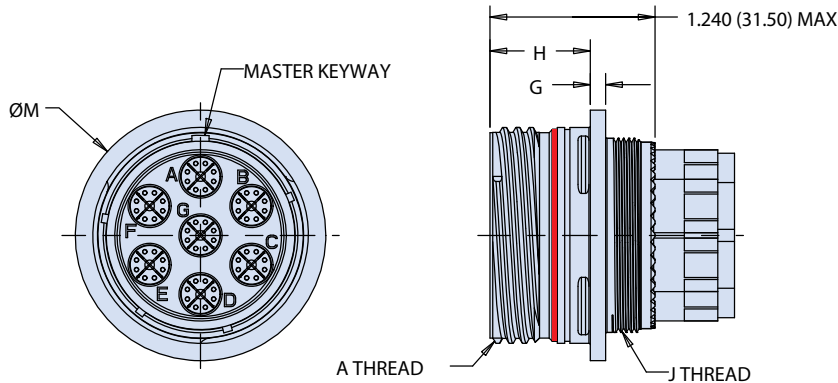
HIGH-SPEED CONNECTORS

**233-219-G6 PLUG D38999/26 TYPE**



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

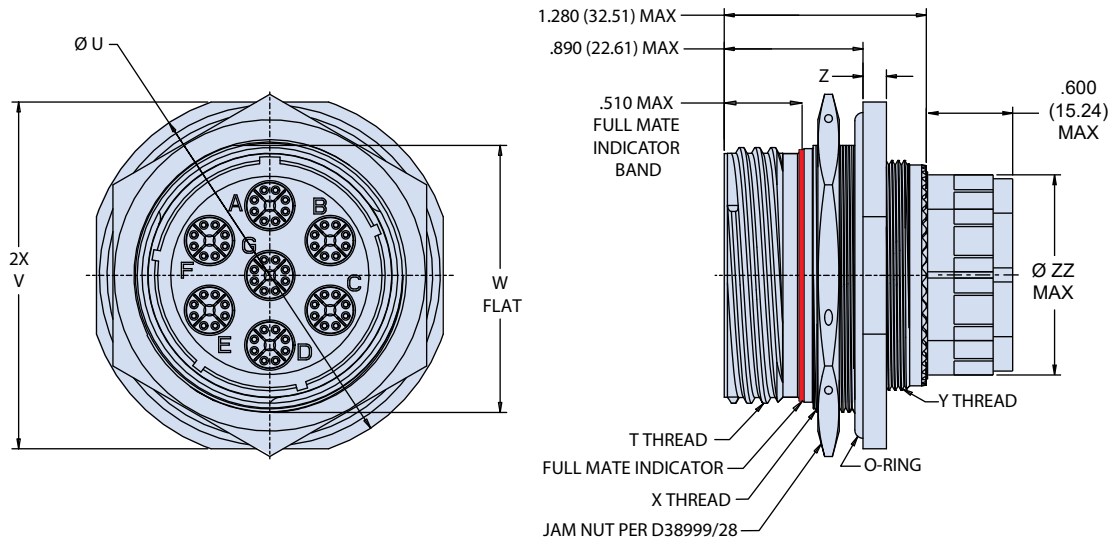
**233-219-05 IN-LINE RECEPTACLE**



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

MIL-DTL-38999 Series III Type Environmental Connectors  
233-219 SpeedMaster™ plug and receptacle connectors

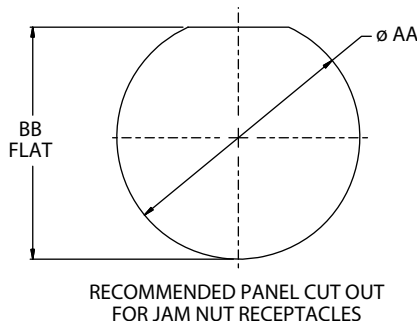
233-219-07 JAM-NUT MOUNT RECEPTACLE, D38999/24 TYPE



HIGH-SPEED CONNECTORS

07 Jam-Nut Per MIL-DTL-38999/24

Shell Size Code	Shell Size	T Thread	U	V	W Flat	X Thread	Y Thread	Z	ZZ Max
B	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)
F	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	.153 (3.89) .114 (2.90)	.885 (22.48)
G	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)
J	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)



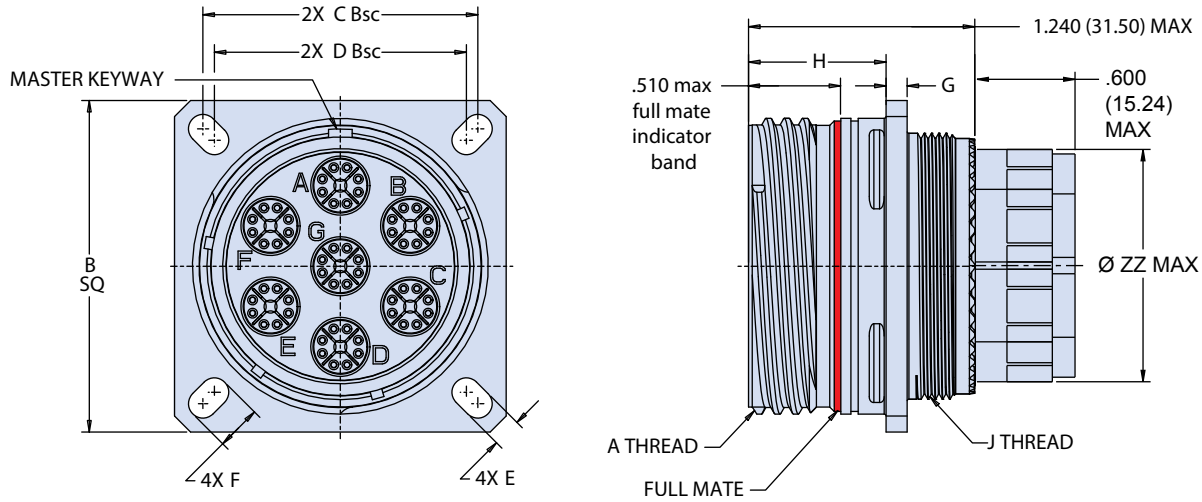
Mounting Holes Per MIL-DTL-38999

Shell Size	Shell Size	$\varnothing AA$	BB Flat
B	11	0.835 (21.21) 0.825 (20.95)	0.771 (19.58) 0.761 (19.33)
F	19	1.395 (35.43) 1.385 (35.18)	1.335 (33.91) 1.325 (33.65)
G	21	1.520 (38.61) 1.510 (38.35)	1.460 (37.08) 1.450 (36.83)
J	25	1.770 (44.96) 1.760 (44.70)	1.710 (43.43) 1.700 (43.18)

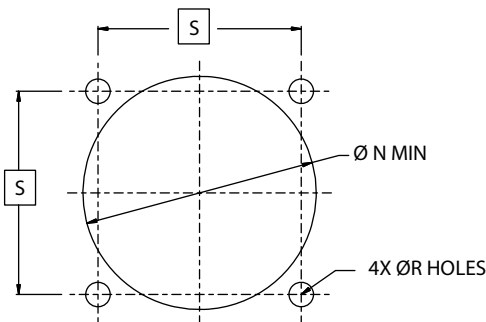
## MIL-DTL-38999 Series III Type Environmental Connectors 233-219 SpeedMaster™ plug and receptacle connectors

HIGH-SPEED CONNECTORS

### 233-219-00 SLOTTED HOLE, D38999/20 TYPE



00 Wall Mount Per MIL-DTL-38999/20											
Shell Size Code	Shell Size	A Thread	B SQ	C BSC	D BSC	E	F	G	H	J THREAD	ZZ Max
B	11	.7500-.1P-.3L-TS-2A	1.043 (26.49) 1.019 (25.88)	.812 (20.62)	.719 (18.26)	.136 (3.45) .120 (3.05)	.198 (5.03) .190 (4.83)	.098 (2.49) .083 (2.11)	.820 (20.83) .771 (19.58)	M15x1.0-6g 0.100R	.405 (10.29)
F	19	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.156 (29.36)	1.062 (26.97)		.202 (5.13)			.126 (3.20) .083 (2.11)	.790 (20.07) .741 (18.82)
G	21	1.3750-.1P-.3L-TS-2A	1.575 (40.00) 1.551 (39.40)	1.250 (31.75)	1.156 (29.36)		.186 (4.72)	.155 (3.94) .145 (3.68)	.741 (18.82)		
J	25	1.6250-.1P-.3L-TS-2A	1.823 (46.30) 1.799 (45.69)	1.500 (38.10)	1.375 (34.92)		.250 (6.35) .234 (5.94)			M37x1.0-6g 0.100R	1.285 (32.64)



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

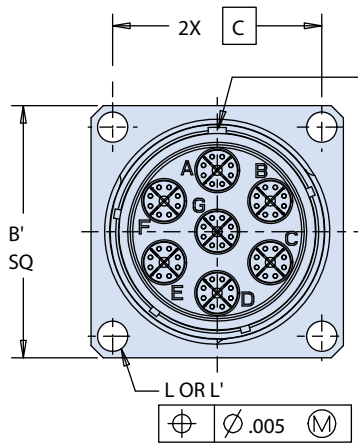
RECOMMENDED MOUNTING HOLES FOR WALL MOUNT (00) RECEPTACLES PER MIL-DTL-38999.

# MIL-DTL-38999 Series III Type Environmental Connectors

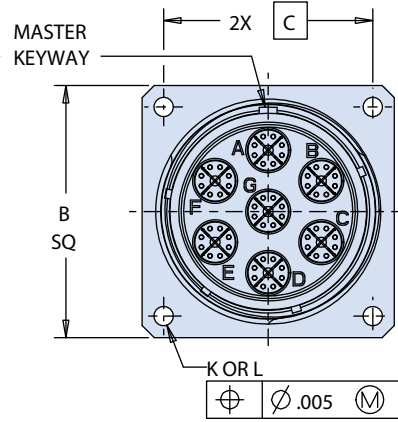
## 233-219 SpeedMaster™ plug and receptacle connectors

HIGH-SPEED CONNECTORS

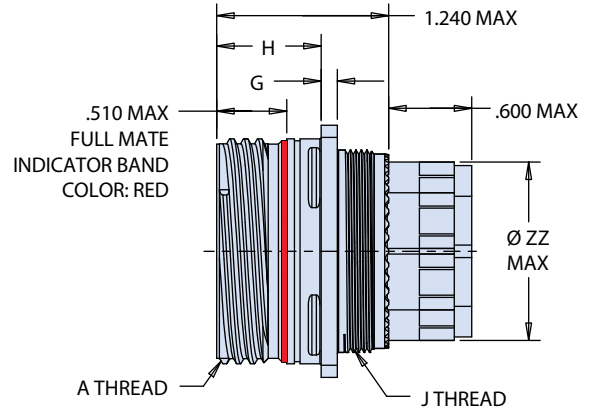
**233-219-CS CLINCH NUT STANDARD OR 233-219-CM CLINCH NUT METRIC AND 233-219-DO DRILLED HOLES AND 233-219-T0 TAPPED HOLES**



CM & CS STYLE

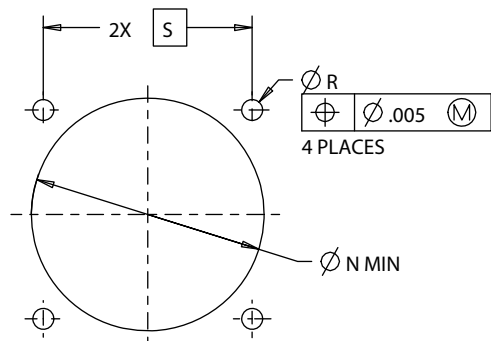


DO & T0 STYLE



CM, CS, DO, & T0 STYLE

CM, CS, DO and T0 Wall Mount															
Shell Size Code	Shell Size	A Thread	B SQ	B' SQ	C BSC	G	H	J THREAD	ØK	L Standard	L' Metric	ZZ Max			
B	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)			
F	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)	.126 (3.20) .083 (2.11)	.790 (20.07) .741 (18.82)	M28x1.0-6g 0.100R				.162 (4.11) .146 (3.71)	.138-32 UNC-2B	M4 x 0.7	.885 (22.48)
G	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)			M31x1.0-6g 0.100R							.845 (21.46)
J	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)			

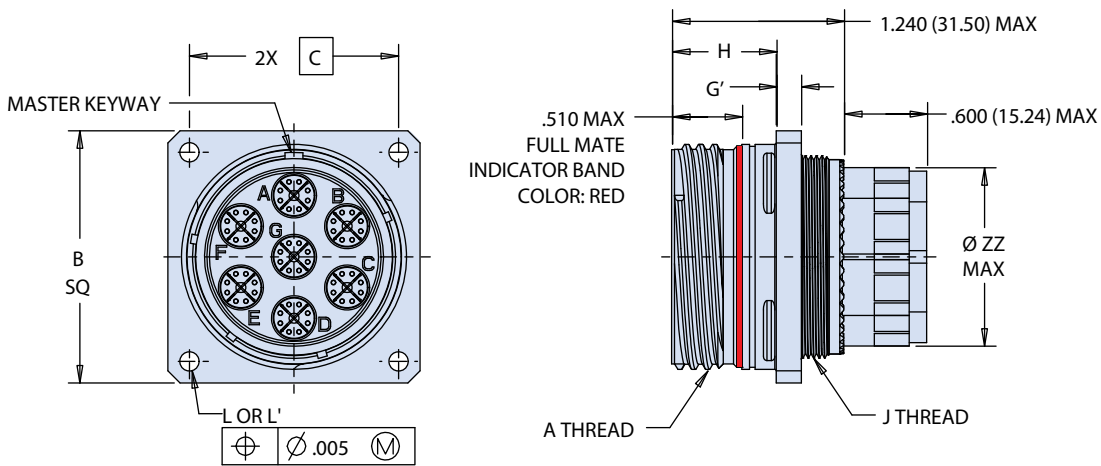


Mounting Holes				
Shell Size Size	Shell Size	Ø N Min	Ø R Holes	S BSC
B	11	.796 (20.22)	.133 (3.38) .123 (3.12)	.812 (20.62)
F	19	1.297 (32.94)		1.156 (29.36)
G	21	1.422 (36.12)		1.250 (31.75)
J	25	1.672 (42.47)	.155 (3.94) .145 (3.68)	1.500 (38.10)

**MIL-DTL-38999 Series III Type Environmental Connectors**  
**233-219 SpeedMaster™ plug and receptacle connectors**

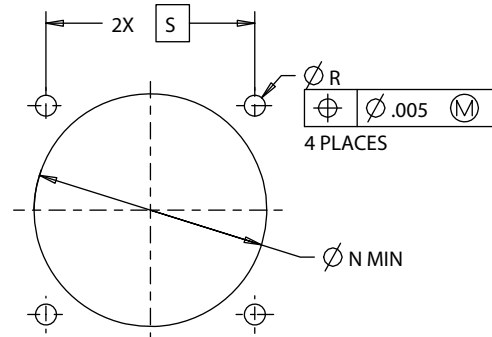
HIGH-SPEED SPACE-GRADE CONNECTORS

**HELICOILS STANDARD (HS) AND METRIC (HM)**



**HM & HS STYLE**

HM and HS Wall Mount										
Shell Size Code	Shell Size	A Thread	B SQ	C BSC	G'	H	J THREAD	L Thread (Standard)	L' Thread (Metric)	ZZ Max
B	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)	M15x1.0-6g 0.100R	.112-40 UNC-2B	M3 x 0.5	.405 (10.29)
F	19	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.156 (29.36)		.771 (19.58)	M28x1.0-6g 0.100R			.885 (22.48)
G	21	1.3750-.1P-.3L-TS-2A	1.575 (40.00) 1.551 (39.40)	1.250 (31.75)		.790 (20.07)	M31x1.0-6g 0.100R			.845 (21.46)
J	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)	.741 (18.82)	M37x1.0-6g 0.100R	.138-32 UNC-2B	M4 x 0.7	1.285 (32.64)



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