



SERIES 23

38999 type connectors with SpeedMaster™ 10G high-speed contacts



233-219 Connectors - How To Order

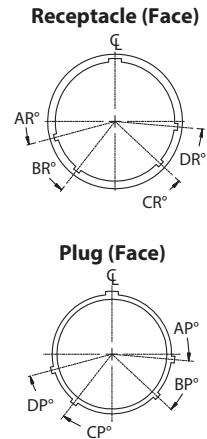
SpeedMaster™ Connector Part Number Development	
Sample Part Number	233-219 -G6 ME 25 -7 P N -1
Series / Basic Part No.	SuperNine Environmental High-Speed connector
SpeedMaster™ Connector Style*	G6 = Plug 38999/26 05 = Receptacle, in-line 07 = Receptacle, jam-nut 38999/24 00 = Receptacle, wall mount 38999/20 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 ZR = Black Zinc Nickel MT = Nickel PTFE ME = Electroless Nickel
Shell Size	11, 19, 21, 25
Insert Arrangement	See Insert Arrangement Table
Module Type	P = Pin S = Socket A = 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	See Cable Size Table for details; omit for pre-terminated contact modules

Insert Arrangements			
11-1	19-3	21-4	25-7

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 6. 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

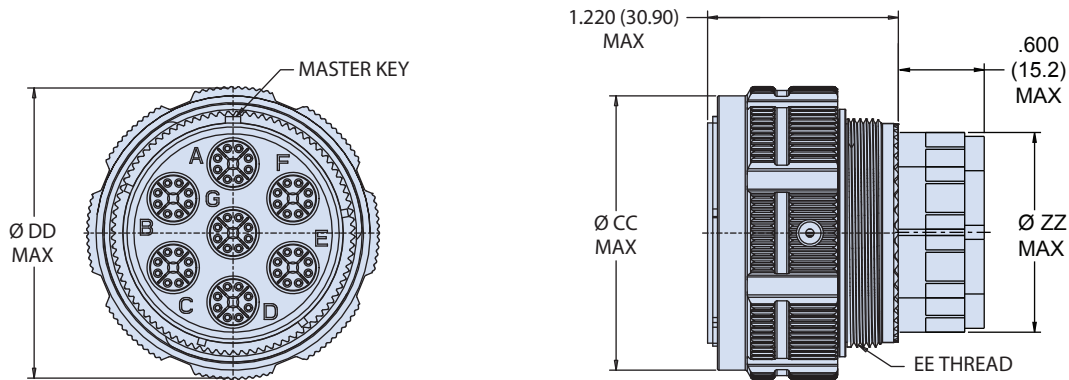
Alternate Positions						
Shell Size Code	Shell Size	Position Code	AR° AP°	BR° BP°	CR° CP°	DR° DP°
B	11	N	95	141	208	236
		A	113	156	182	292
		B	90	145	195	252
		C	53	156	220	255
		D	119	146	176	298
F G J	19 21 25	N	80	142	196	293
		A	135	170	200	310
		B	49	169	200	244
		C	66	140	200	257
		D	62	145	180	280
		E	79	153	197	272



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	

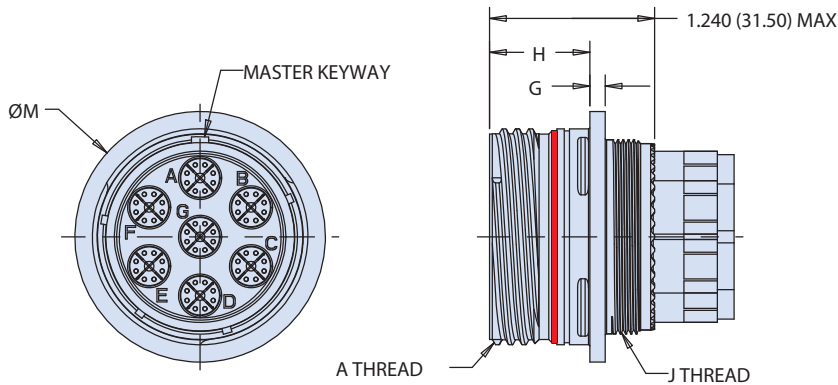
PLUG (G6) D38999/26 TYPE



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)

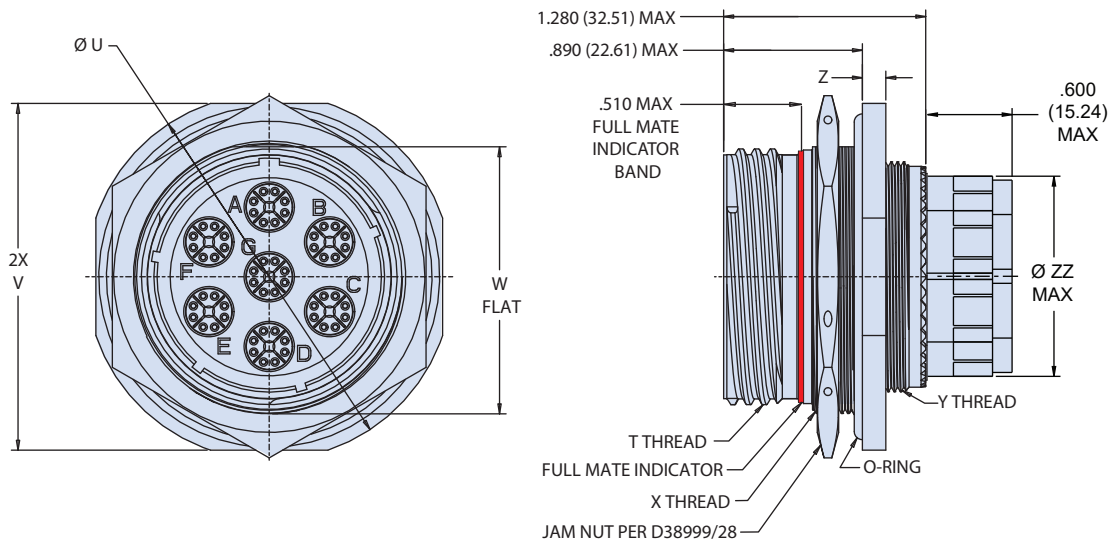
IN-LINE (05) RECEPTACLE



05 In-Line Receptacle

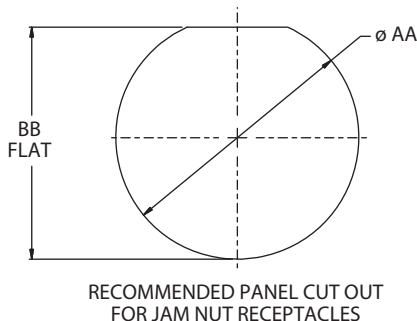
Shell Size Code	Shell Size	A Thread	G	H	J THREAD	ØM
B	11	.7500-.1P-.3L-TS-2A	.098 (2.49)	.820 (20.83)	M15x1.0-6g 0.100R	.984 (24.99)
F	19	1.2500-.1P-.3L-TS-2A	.083 (2.11)	.771 (19.58)	M28x1.0-6g 0.100R	1.516 (38.51)
G	21	1.3750-.1P-.3L-TS-2A	.126 (3.20)	.790 (20.07)	M31x1.0-6g 0.100R	1.642 (41.71)
J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

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



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)

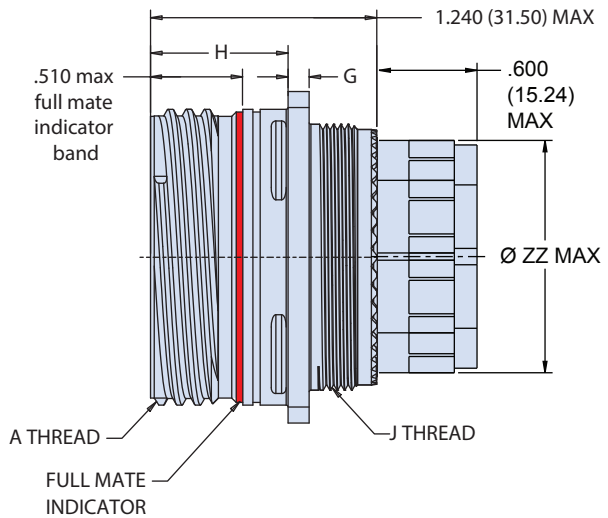
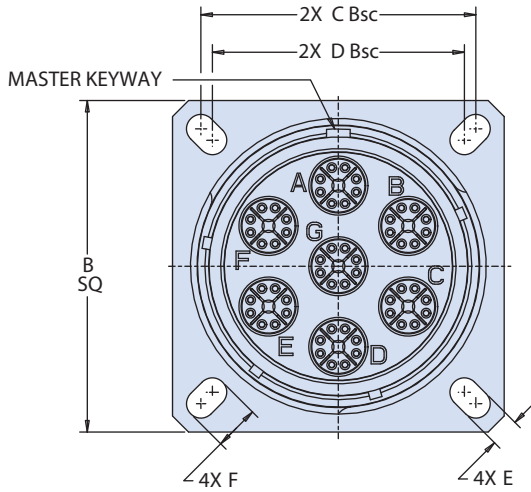


RECOMMENDED PANEL CUT OUT FOR JAM NUT RECEPTACLES

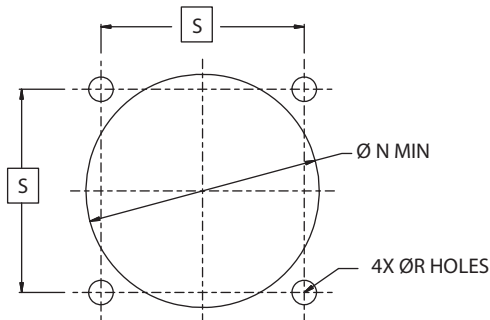
Mounting Holes Per MIL-DTL-38999

Shell Size 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)

SLOTTED HOLE (00), D38999/20 TYPE



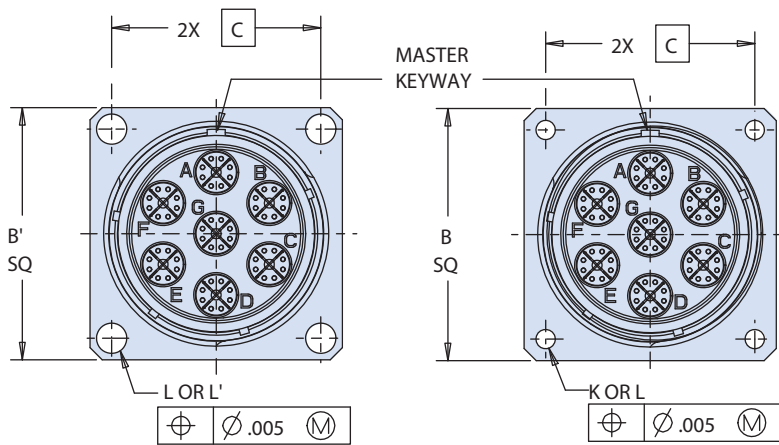
00 Wall Mount Per MIL-DTL-38999/20											
Shell Size Code	Shell Size	A Thread	B	C BSC	D BSC	E	F	G	H	J THREAD	ZZ Max
B	11	.7500-.1P-.3L-TS-2A	1.040 (26.42) 1.016 (25.81)	.812 (20.62)	.719 (18.26)	.136 (3.45) .120 (3.05)	.198 (5.03) .190 (4.83)	.098 (2.49) .083 (2.11)	.820 (20.83) .771 (19.58)	M15x1.0-6g 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)	.186 (4.72)	.126 (3.20) .083 (2.11)	.790 (20.07) .741 (18.82)	M28x1.0-6g 0.100R
G	21	1.3750-.1P-.3L-TS-2A	1.575 (40.00) 1.551 (39.40)	1.250 (31.75)	1.156 (29.36)	.162 (4.11) .142 (3.61)	.250 (6.35) .234 (5.94)	.126 (3.20) .083 (2.11)			.790 (20.07) .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)		.142 (3.61) .145 (3.68)		.155 (3.94) .145 (3.68)	.126 (3.20) .083 (2.11)	



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)	.155 (3.94) .145 (3.68)	1.250 (31.75)
J	25	1.672 (42.47)		1.500 (38.10)

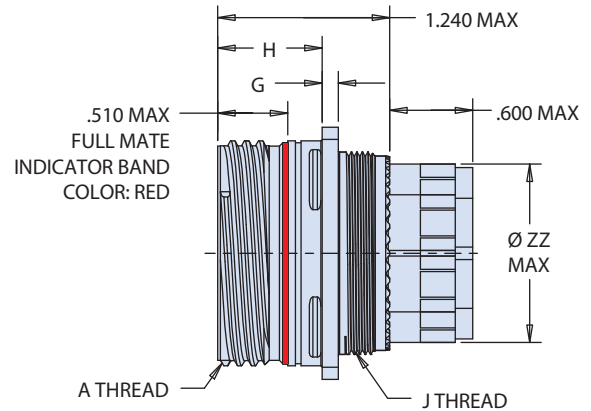
RECOMMENDED MOUNTING HOLES FOR WALL MOUNT (00) RECEPTACLES PER MIL-DTL-38999.

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



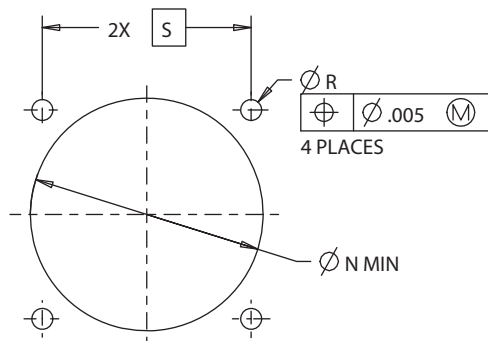
CM & CS STYLE

DO & TO STYLE



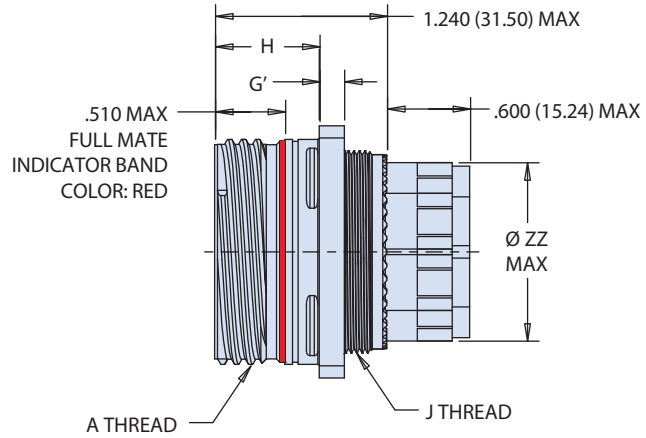
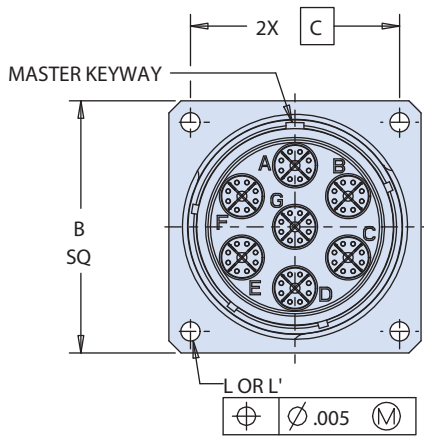
CM, CS, DO, & TO STYLE

CM, CS, DO and TO 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)			M28x1.0-6g 0.100R						.885 (22.48)
G	21	1.3750-.1P-.3L-TS-2A	1.575 (40.00) 1.551 (39.40)	1.625 (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						
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	.162 (4.11) .146 (3.71)	.138-32 UNC-2B	M4 x 0.7	1.285 (32.64)		



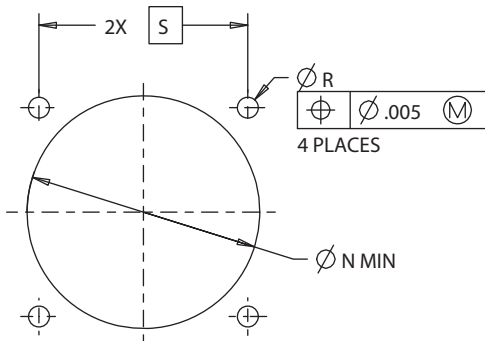
Mounting Holes				
Shell Size	Shell Size	Ø N Min	Ø R Holes	S BSC
B	11	.796 (20.22)	.133 (3.38) .123 (3.12)	.812 (20.62)
F	19	1.297 (32.94)		1.156 (29.36)
G	21	1.422 (36.12)		1.250 (31.75)
J	25	1.672 (42.47)	.155 (3.94) .145 (3.68)	1.500 (38.10)

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)	.155 (3.94) .145 (3.68)	1.250 (31.75)
J	25	1.672 (42.47)		1.500 (38.10)