

Glenair®

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HOW TO ORDER							
Sample Part No.	253-020	-	09	ME	19-7	P	N
Basic Part Number	AS81703 Series 3 type connector						
Rear Option	- = Accessory threads B = Band porch (consult factory)						
Connector Style	07 = Jam nut receptacle AS34461 type (MS3446)						
Material / Finish	C = Al Alloy/Black Anodize ME = Al Alloy/Electroless Nickel MT = Al Alloy/Nickel-PTFE NF = Al Alloy/Cad O.D. Over Electroless Nickel ZR = Al Alloy/Zinc-Nickel Black						
Shell Size-Insert Arrangement	See Table II						
Contact Styles	P = Pin insert S = Socket insert A = Pin insert less contacts B = Socket insert less contacts						
Insert Clocking Positions	N, W, X, Y, B, C (See Table III pg. 2)						

Technical drawings of the 10-pin connector. The left drawing is a top view showing the circular arrangement of 10 pins, with dimensions for mounting flat thickness (R), key height (.061 Max.), and overall dimensions (K, L, N). The right drawing is a side view showing the connector's profile, including the insulator protrusion (.030 Max.), key height (.051 (1.30)), and various thread and grommet dimensions.

Shell Size	Ø A	Ø D Max.	Ø F Max.	G Thd.	H Thd.	K	L	R	N Mounting Nut
3	.441 (11.20) .431 (10.95)	.351 (8.92)	.509 (12.93)	⅝-24 UNEF-2A	⅝-24 UNEF-2A	.765 (19.43) .735 (18.67)	.765 (19.43) .735 (18.67)	.523 (13.28)	.625 (15.88)
7	.576 (14.63) .566 (14.38)	.531 (13.49)	.687 (17.45)	¾-20 UNEF-2A	1⅛-24 UNEF-2A	.890 (22.61) .860 (21.84)	.890 (22.61) .860 (21.84)	.655 (16.64)	.812 (20.62)
12	.710 (18.03) .700 (17.78)	.665 (16.89)	.812 (20.62)	⅞-20 UNEF-2A	1⅜-20 UNEF-2A	1.077 (27.36) 1.047 (26.59)	1.077 (27.36) 1.047 (26.59)	.778 (19.76)	.937 (23.80)
19	.849 (21.56) .839 (21.31)	.790 (20.07)	.937 (23.80)	1-20 UNEF-2A	1-20 UNEF-2A	1.171 (29.74) 1.141 (28.98)	1.202 (30.53) 1.172 (29.77)	.963 (24.46)	1.062 (26.97)
27	1.004 (25.50) .994 (25.25)	.869 (22.07)	.992 (25.20)	1 ⅙-18 UNEF-2A	1 ⅙-18 UNEF-2A	1.327 (33.71) 1.297 (32.94)	1.327 (33.71) 1.297 (32.94)	1.089 (27.66)	1.250 (31.75)
37	1.126 (28.60) 1.116 (28.35)	.994 (25.25)	1.117 (28.37)	1 ⅙-18 UNEF-2A	1 ¼-18 UNEF-2A	1.450 (36.83) 1.445 (36.70)	1.515 (38.48) 1.485 (37.72)	1.214 (30.84)	1.375 (34.92)
61	1.414 (35.92) 1.404 (35.66)	1.280 (32.51)	1.427 (36.25)	1 ½-18 UNEF-2A	1 ½-18 UNEF-2A	1.864 (47.35) 1.834 (46.58)	1.890 (48.01) 1.860 (47.24)	1.463 (37.16)	1.688 ±.015

 PANEL CUTOUT	Shell Size	U	V	Shell Size	U	V	Shell Size	U	V
		3	.538 (13.67) .534 (13.56)	.577 (14.66) .567 (14.40)	19	.973 (24.71) .969 (24.61)	1.013 (25.73) 1.003 (25.48)	61	1.471 (37.36) 1.467 (37.26)
	7	.665 (16.89) .661 (16.79)	.701 (17.81) .961 (24.41)	27	1.099 (27.91) 1.095 (27.81)	1.138 (28.91) 1.128 (28.65)			
	12	.788 (20.02) .784 (19.91)	.826 (20.98) .816 (20.73)	37	1.224 (31.09) 1.220 (30.99)	1.263 (32.08) 1.253 (31.83)			

SERIES 253-020

AS81703 Series 3 Type Connectors



253-020-07 Jam-nut receptacle Standard-density contact arrangements

TABLE I - MATERIAL AND FINISH			
Code	Mil Class	Material	Finish
TZ	-	Aluminum Alloy	Tin-Zinc over Nickel
MN	AA		MegaNickel
C	-		Black Anodize
ME	E		Electroless Nickel
NF	L		Cad O.D. over Electroless Nickel
MT	-		Nickel-PTFE
ZR	-		Zinc-Nickel/Black (Tri-Valent CR)

TABLE II: CONTACT ARRANGEMENTS			
Contact Arrangement	Contact Size & Quantity		
	#20	#16	#12
3-50	3		
7-50	7		
12-6	6		
12-50	12		
19-4			12
19-7			7
19-12		12	
19-50	19		
27-2		14	
27-3	14	2	
27-5		19	
27-8		6	4
27-11	12		
27-50	27		
37-2		24	
37-3			12
37-50	37		
61-42	29	4	8
61-50	61		

INSERT ROTATION AND INSERT CLOCKING ROTATION	
Master Keyway Pin insert rotated clockwise, Socket insert rotated counter-clockwise, relative to master key / keyway.	AS81703 Series 3 type connectors feature locksmith key/keyways. Plug connector keyways and receptacle connector keys are fixed for all sizes and contact arrangements. Alternate Insert Clocking is specified in the part number. Pin inserts are rotated clockwise, Socket inserts rotated counter-clockwise relative to the master key/keyway, to the positions indicated in the table below.

TABLE III: CLOCKING POSITIONS						
Contact Arrangement	Alternate Insert Clocking Positions					
	N	W	X	Y	B	C
3-50	0°			75°		
7-50	0°				150°	
12-6	0°	25°	45°	80°	150°	220°
12-50	0°	15°	50°	75°	150°	225°
19-4	0°			22° 30'	135°	247° 30'
19-7	0°			75°	150°	225°
19-12	0°	25°	50°	75°	150°	225°
19-50	0°			75°	150°	225°
27-2	0°	25°	50°	75°	150°	225°
27-3	0°	25°	50°	75°	150°	225°
27-5	0°			75°	150°	225°
27-8	0°	25°	50°	75°	150°	225°
27-11	0°	25°	50°	75°	150°	225°
27-50	0°	25°	50°	75°	150°	225°
37-2	0°	25°	145°	227° 30'		
37-3	0°	20°	70°			
37-50	0°	25°	50°	75°	150°	225°
61-42	0°		67° 30'			
61-50	0°			75°	150°	225°