



Square Flange Receptacles

970-003 Square Flange Receptacle with Accessory Thread



970-003 square flange receptacle has accessory thread for attaching cable clamp, backshell or adapter. Coupling threads are triple-start ACME quick-disconnect. EMI protected with ground spring on plug. Aluminum or stainless steel shell has five polarizing keyways. Optional self-locking clinch nuts for easier installation. Crimp rear-release contacts are packaged with connector. PowerTrip connectors feature low resistance LouverBand contacts and are designed to withstand extreme environments.

- Quick-disconnect, high shock, high vibration, self-locking connector
- 2000 VAC (DWV)
- -65° to +200 °C
- Plug has EMI ground spring
- Crimp, rear-release contacts
- Advanced IP68+ sealing

SQUARE FLANGE RECEPTACLES

INSERT ARRANGEMENTS						
Insert Arr.	Contact Size and Quantity					
	#16	#12	#8	#4	#1/0	#2/0
18-2			2			
18-4		2	2			
20-3			3			
20-4			4			
20-5		2	3			
20-7	4		3			
24-1					1	
24-2				2		
24-3				3		
24-5			5			
24-6		4		2		
24-A1						1
24-A6		3		3		
28-12	6		6			
28-15	15					
28-4				4		
28-8		1	7			
28-9	5			4		
32-12	2		10			
32-2					2	
32-20	1	19				
32-3				3		
32-4				2	2	
32-5				5		
32-6		3			3	
32-7				7		
32-A22		22				
36-16	3		13			
36-2						2
36-4					4	
36-9	14	14	2	1		
36-A8				8		
36-B8	4				4	
40-10	16		9	4		
40-21			21			
40-5					5	

HOW TO ORDER							
Sample Part Number →		970-003	MT	18-2	P2	N	-1
Basic Part Number	970-003 Square Flange Receptacle with Accessory Thread						
Material/Finish	ME = Aluminum / Electroless Nickel MT = Aluminum / Nickel PTFE NF = Aluminum / Olive Drab Cadmium TZ = Aluminum / Tin-Zinc ZR = Aluminum / Black Zinc-Nickel Z1 = Stainless Steel / Passivated						
Shell Size-Insert Arr.	See "Insert Arrangements" Table						
Contact Gender and Plating	A = Pin Connector, without Contacts B = Socket Connector, without Contacts P1 = Pin Contacts, Silver Plating* P2 = Pin Contacts, Gold Plating S1 = Socket Contacts, Silver Plating* S2 = Socket Contacts, Gold Plating * Size 12 and 16 contacts are gold-plated. Size 8, 4, 1/0 and 2/0 are silver plated.						
Mounting Hole Option	N = Thru-Hole T = Clinch Nuts Installed in Mounting Holes for Back Panel Mounting						
Keyway Position	-1, -2, -3, -4, -5, or -6						

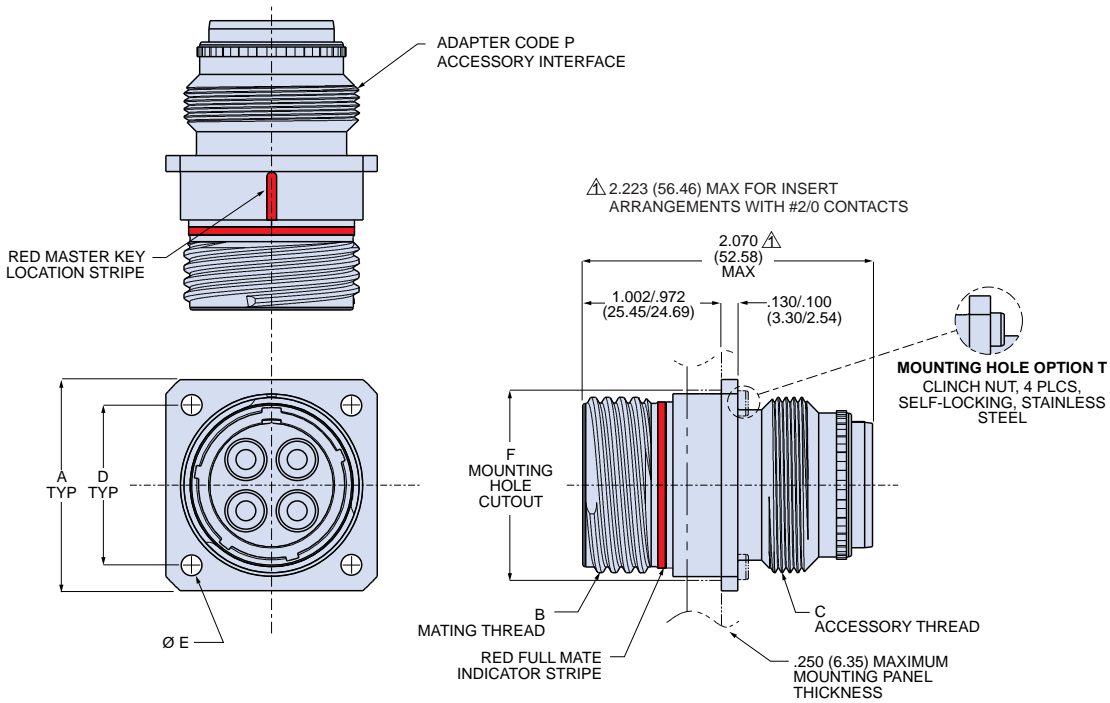
RATINGS
Voltage (DWV): 2000 Volts AC
Current: Size 16 contact 13 amps Size 12 contact 23 amps Size 8 contact 60 amps Size 4 contact 100 amps Size 1/0 contact 175 amps Size 2/0 contact 205 amps
Operating temperature: Matl/Finish Codes ME, Z1: -65° to +200°C Codes MT,NF, TZ, ZR: -65 to +175 °C
Durability: 500 mating cycles
EMI shielding effectiveness: 65 dB min. 100 MHz to 10 GHz
Shock: 50 g
Vibration: per MIL-DTL-38999 Series III
MIL-S-901 high impact shock: Grade A
Ingress protection: IP67
Water pressure: 6 feet, 48 hours

CONSTRUCTION
Contacts: size #8 and larger: high conductivity copper alloy, gold or silver plated. Size #12, #16: copper alloy, gold plated
Shell: Aluminum or stainless steel, see How to Order
Insulator: Glass-filled thermoset epoxy
Wire grommet, face seal: Fluorosilicone/silicone blend
Contact Retention clip: Beryllium copper
Insert retainer ring: High-temperature thermoplastic
Clinch nuts: Stainless steel, passivated



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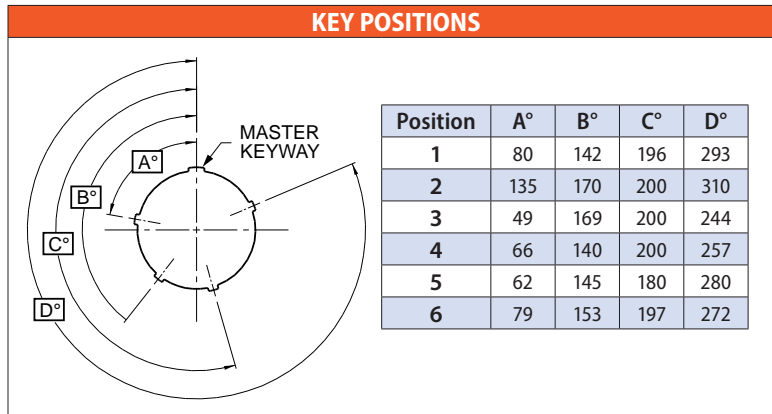
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DIMENSIONS

Shell Size	A		B Mating Thread	C Accessory Thd	D		Ø E ±.005 (0.1)		E Clinch Nut Thd	Ø F	
	In.	mm.			In.	mm.	In.	mm.		In.	mm.
18	1.383	35.13	1.125-.1P-.3L-TS-2A	1.125-18 UNEF-2A	1.015	25.78	.146	3.71	6-32	1.187	30.15
20	1.508	38.30	1.250-.1P-.3L-TS-2A	1.250-18 UNEF-2A	1.140	28.96	.146	3.71	6-32	1.374	34.90
24	1.718	43.64	1.500-.1P-.3L-TS-2A	1.4375-18 UNEF-2A	1.281	32.54	.146	3.71	6-32	1.562	39.67
28	2.138	54.31	1.750-.1P-.3L-TS-2A	1.8125-16 UN-2A	1.568	39.83	.170	4.32	8-32	1.835	46.61
32	2.328	59.13	2.000-.1P-.3L-TS-2A	2.0625-16 UNS-2A	1.734	44.04	.170	4.32	8-32	2.093	53.16
36	2.578	65.48	2.250-.1P-.3L-TS-2A	2.250-16 UN-2A	1.984	50.39	.170	4.32	8-32	2.302	58.47
40	2.828	71.83	2.500-.1P-.3L-TS-2A	2.500-16 UN-2A	2.234	56.74	.170	4.32	8-32	2.562	65.07

KEY POSITIONS



SQUARE FLANGE RECEPTACLES