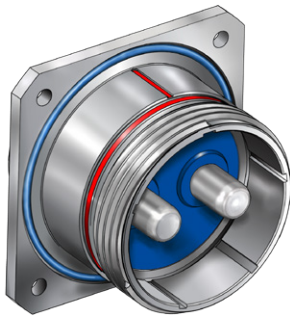


Square Flange Receptacles

970-013 Low Profile Square Flange Receptacle with O-Ring



970-013 square flange receptacle has O-ring and shortened rear length for use in limited clearance applications. The rear grommet is replaced with a thin wire separator (not immersion rated). Coupling threads are triple-start ACME quick-disconnect. 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 →		970-013	NF	24-2	S1	T	-1
Basic Part Number	970-013 Square Flange Receptacle with O-ring						
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
Altitude immersion: not rated
Ingress protection: not rated
Water pressure: not rated

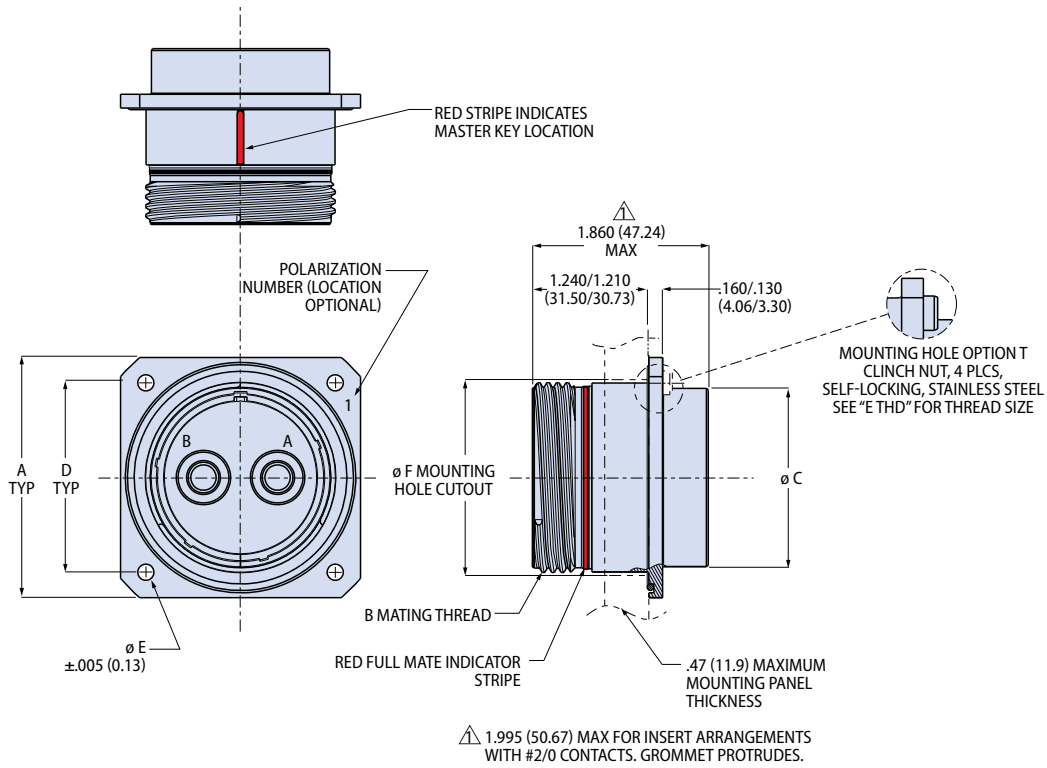
CONSTRUCTION
Contacts: size #8 and larger: high conductivity copper alloy, gold or silver plated. Size #12, #16: copper alloy, gold plated
Shell: Aluminum or stainless steel, see How to Order
Insulator: Glass-filled thermoset epoxy
Wire separator, face seal: Fluorosilicone/silicone blend
O-ring: Fluorosilicone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



Square Flange Receptacles

970-013 Low Profile Square Flange Receptacle with O-Ring

SQUARE FLANGE RECEPTACLES



DIMENSIONS												
Shell Size	A		B Mating Thread	C		D		Ø E		E Thd	Ø F	
	In.	mm.		In.	mm.	In.	mm.	In.	mm.		In.	mm.
18	1.591	40.41	1.125-.1P-.3L-TS-2A	.972	24.69	1.275	32.39	.146	3.71	6-32	1.187	30.15
20	1.779	45.19	1.250-.1P-.3L-TS-2A	1.116	28.35	1.408	35.76	.146	3.71	6-32	1.374	34.90
24	2.029	51.54	1.500-.1P-.3L-TS-2A	1.300	33.02	1.585	40.26	.146	3.71	6-32	1.562	39.67
28	2.404	61.06	1.750-.1P-.3L-TS-2A	1.604	40.74	1.905	48.39	.170	4.32	8-32	1.835	46.61
32	2.529	64.24	2.000-.1P-.3L-TS-2A	1.875	47.63	1.993	50.62	.170	4.32	8-32	2.093	53.16
36	2.654	67.41	2.250-.1P-.3L-TS-2A	2.093	53.16	2.081	52.86	.170	4.32	8-32	2.302	58.47
40	3.029	76.94	2.500-.1P-.3L-TS-2A	2.310	58.67	2.347	59.61	.170	4.32	8-32	2.562	65.07

KEY POSITIONS					
	Position	A°	B°	C°	D°
	1	80	142	196	293
	2	135	170	200	310
	3	49	169	200	244
	4	66	140	200	257
	5	62	145	180	280
	6	79	153	197	272