



970-046 Piston Sealed Jam Nut Receptacle, Crimp Removable

970-046 piston-seal waterproof receptacle has accessory thread for attaching strain relief clamps, backshells or adapters. Coupling threads are triple-start ACME quick disconnect. EMI protected with ground spring. Self-locking coupling nut resists loosening under vibration. Aluminum or stainless steel plug has five polarizing keys. Crimp rear-release contacts are packaged with connector. PowerTrip connectors feature low resistance LouverBand contacts and are sealed to withstand extreme environments.

- Piston-seal provides waterproof protection
- Overmolded assemblies tested to 1K psi
- Quick-disconnect self-locking aerospace-grade power connector
- 2000 VAC (DWV)
- -65° to +230°C
- EMI ground spring
- Crimp, rear-release contacts
- High shock, high vibration

HERMETIC AND FILTER 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	

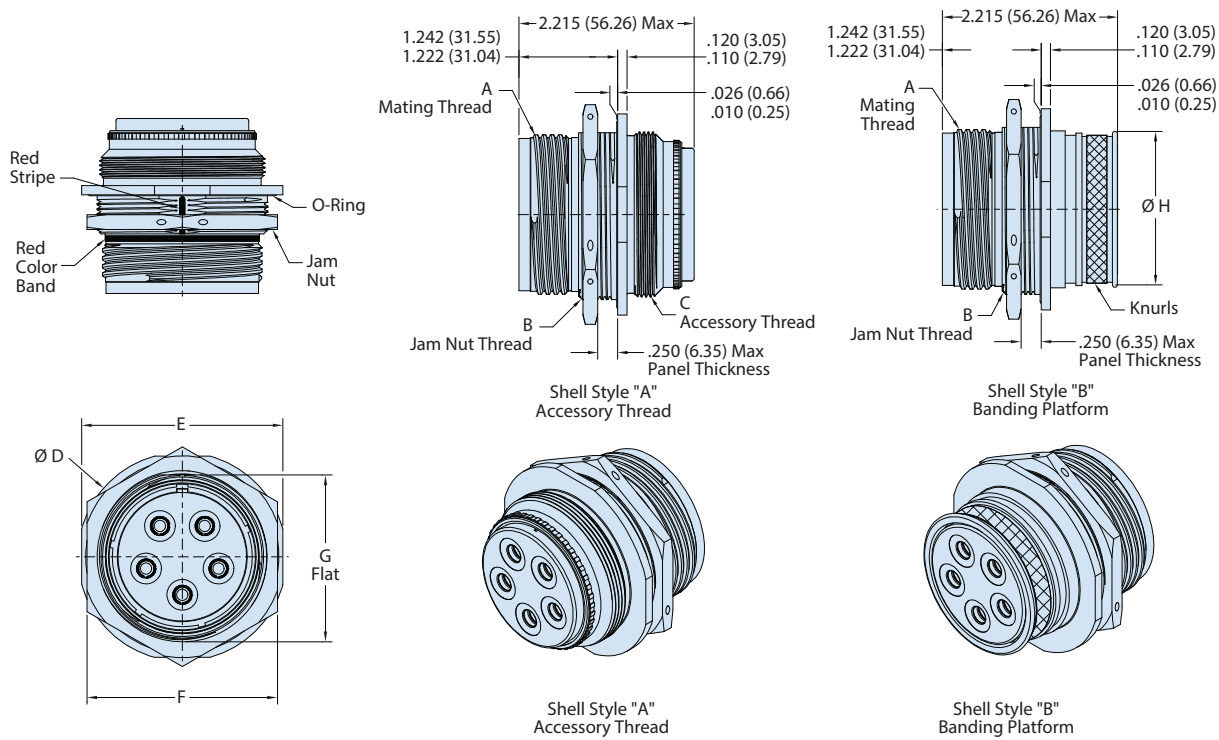
HOW TO ORDER	
Sample Part Number →	970-046 ME 32 -5 S 1 A -1
Basic Part Number	970-046 Jam nut receptacle
Material/Finish	ME = Aluminum / Electroless Nickel MT = Aluminum / Nickel PTFE NF = Aluminum / Olive Drab Cadmium ZR = Aluminum / Black Zinc-Nickel Z1 = Stainless Steel / Passivated
Shell Size	See Dimensions Table
Insert Arrangement	See Insert Arrangements Table
Insert Designator	P = Pin Contact S = Socket Contact A = Pin Insulator less Pin Contacts B = Socket Insulator less Socket Contacts
Contact Plating	1 = Silver (Sizes 8, 4, 0, 2/0 only) 2 = Gold (Applies to "P" and "S" Insert Designators only. Omit for "A" and "B" Designators.)
Shell Style	A = Accessory Thread B = Banding Platform
Key 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 Code Z1: -65° to +230°C Codes ME, MT: -65° to +200°C Codes NF, TZ, ZR: -65° to +175 °C
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
Blowing sand and dust: MIL-STD-810, method 510.5
Altitude immersion: 75,000 feet
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
Coupling nut: Aluminum or stainless steel, see How to Order. Anti-decoupling spring: SST, passivated
Insulator: Glass-filled thermoset epoxy
Wire grommet, face seal, peripheral seal: Fluorosilicone/silicone blend
Contact Retention clip: Beryllium copper
Ground spring: Beryllium copper, nickel plated
Insert retainer ring: High-temperature thermoplastic
Coupling nut retainer ring: Beryllium copper, nickel plated

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HERMETIC AND FILTER RECEPTACLES



DIMENSIONS

Shell Size	A Mating Thread	B Jam Nut Thread	C Accessory Thread	Ø D		E		F		G		Ø H		Ø J Mtg. Hole		K Hole Flat	
														0.010	0.025	0.010	0.025
														0.000	0.000	0.000	0.000
In.	MM	In.	MM	In.	MM	In.	MM	In.	MM	In.	MM	In.	MM	In.	MM		
18	1.125-0.1P-0.3L-TS-2A	1.250-18UNEF-2A	1.125-18UNEF-2A	1.733	44.02	1.639	41.63	1.438	36.53	1.212	30.78	1.037	26.34	1.265	32.13	1.217	30.91
20	1.250-0.1P-0.3L-TS-2A	1.4375-18UNEF-2A	1.250-18UNEF-2A	1.921	48.79	1.827	46.41	1.625	41.28	1.399	35.53	1.163	29.54	1.452	36.88	1.409	35.79
24	1.500-0.1P-0.3L-TS-2A	1.625-18UNEF-2A	1.4375-18UNEF-2A	2.108	53.54	2.014	51.16	1.822	46.28	1.587	40.31	1.350	34.29	1.640	41.66	1.596	40.54
28	1.750-0.1P-0.3L-TS-2A	1.9375-16UN-2A	1.8125-16UN-2A	2.425	61.60	2.327	59.11	2.188	55.58	1.899	48.23	1.670	42.42	1.952	49.58	1.910	48.51
32	2.000-0.1P-0.3L-TS-2A	2.125-16UN-2A	2.0625-16UNS-2A	2.607	66.22	2.513	63.83	2.375	60.33	2.084	52.93	1.945	49.40	2.140	54.36	2.092	53.14
36	2.250-0.1P-0.3L-TS-2A	2.375-16UN-2A	2.250-16UN-2A	2.857	72.57	2.763	70.18	2.625	66.68	2.323	59.00	2.176	55.27	2.390	60.71	2.342	59.49
40	2.500-0.1P-0.3L-TS-2A	2.625-16UN-2A	2.500-16UN-2A	3.107	78.92	3.013	76.53	2.875	73.03	2.548	64.72	2.350	59.69	2.640	67.06	2.557	64.95

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

PANEL CUTOUT

