



## 970-045 Piston Sealed Straight Plug, Crimp, Rear Release

970-045 piston-seal waterproof plug 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	

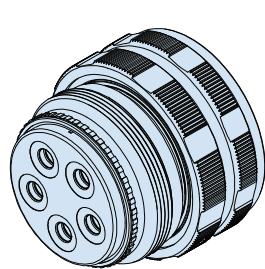
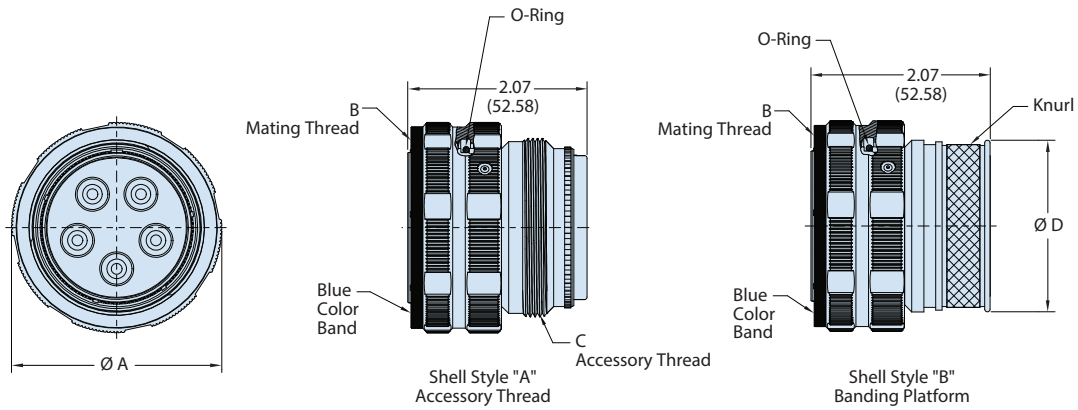
HOW TO ORDER									
Sample Part Number →		970-045	ME	32	-5	P	1	A	-1
<b>Basic Part Number</b>	970-045 Plug with Accessory Thread								
<b>Material/Finish</b>	ME = Aluminum / Electroless Nickel MT = Aluminum / Nickel PTFE NF = Aluminum / Olive Drab Cadmium ZR = Aluminum / Black Zinc-Nickel Z1 = Stainless Steel / Passivated ZMT = Stainless Steel / Nickel PTFE								
<b>Shell Size</b>	See Dimensions Table								
<b>Insert Arrangement</b>	See Insert Arrangements Table								
<b>Insert Designator</b>	P = Pin Contact S = Socket Contact A = Pin Insulator less Pin Contacts B = Socket Insulator less Socket Contacts								
<b>Contact Plating</b>	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.)								
<b>Shell Style</b>	A = Accessory Thread B = Banding Platform								
<b>Key Position</b>	-1, -2, -3, -4, -5, or -6								

RATINGS
<b>Voltage (DWV):</b> 2000 Volts AC
<b>Current:</b> 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
<b>Operating temperature:</b> Matl/Finish Code Z1: -65° to +230°C Codes ME, MT: -65° to +200°C Codes NF, TZ, ZR: -65° to +175 °C
<b>EMI shielding effectiveness:</b> 65 dB min. 100 MHz to 10 GHz
<b>Shock:</b> 50 g
<b>Vibration:</b> per MIL-DTL-38999 Series III
<b>MIL-S-901 high impact shock:</b> Grade A
<b>Blowing sand and dust:</b> MIL-STD-810, method 510.5
<b>Altitude immersion:</b> 75,000 feet
<b>Ingress protection:</b> IP67
<b>Water pressure:</b> 6 feet, 48 hours

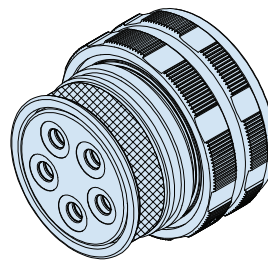
CONSTRUCTION
<b>Contacts:</b> size #8 and larger: high conductivity copper alloy, gold or silver plated. Size #12, #16: copper alloy, gold plated
<b>Shell:</b> Aluminum or stainless steel, see How to Order
<b>Coupling nut:</b> Aluminum or stainless steel, see How to Order. Anti-decoupling spring: SST, passivated
<b>Insulator:</b> Glass-filled thermoset epoxy
<b>Wire grommet, face seal, peripheral seal:</b> Fluorosilicone/silicone blend
<b>Contact Retention clip:</b> Beryllium copper
<b>Ground spring:</b> Beryllium copper, nickel plated
<b>Insert retainer ring:</b> High-temperature thermoplastic
<b>Coupling nut retainer ring:</b> Beryllium copper, nickel plated

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HERMETIC AND FILTER RECEPTACLES



Shell Style "A"  
Accessory Thread



Shell Style "B"  
Banding Platform

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

DIMENSIONS						
Shell Size	A		B Mating Thread	C Accessory Thread	D	
	In.	MM			In.	MM
18	1.485	37.72	1.125-0.1P-0.3L-TS-2B	1.125-18UNEF-2A	1.037	26.34
20	1.583	40.21	1.250-0.1P-0.3L-TS-2B	1.250-18UNEF-2A	1.163	29.54
24	1.857	47.17	1.500-0.1P-0.3L-TS-2B	1.4375-18UNEF-2A	1.350	34.29
28	2.186	55.52	1.750-0.1P-0.3L-TS-2B	1.8125-16UN-2A	1.670	42.42
32	2.420	61.47	2.000-0.1P-0.3L-TS-2B	2.0625-16UNS-2A	1.945	49.40
36	2.709	68.81	2.250-0.1P-0.3L-TS-2B	2.250-16UN-2A	2.176	55.27
40	2.980	75.69	2.500-0.1P-0.3L-TS-2B	2.500-16UN-2A	2.350	59.69