# PowerTrip® Connectors and Accessories



# **Cable Connectors** 970-011 Plug with Banding Platform



970-011 plug has integral banding platform and groove for shrink boot. Terminate cable shield directly to connector with Band-Master ATS banding strap, sold separately. Coupling threads are triple-start ACME quick-disconnect. EMI protected with ground spring. Self-locking coupling nut resists loosening under vibration. 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

							-							
INSERT ARRANGEMENTS							HOW TO ORDER							
Insert Arr.	#16	ontac	t Size	and C	uantit	ty   #2/0		Sample Part Numbe	er →	970-011	МТ	18-2	P2	
18-2	πιο	πιΖ	2	π-τ	π 1/0	πΖ/Ο	Basic Part Number	<b>970-011</b> = Cable Plug with	h Band	ing Platform				
18-4		2	2					ME = Aluminum / Electro	nless N	ickel	J			
20-3			3					MT = Aluminum / Nickel		ickei				
20-4			4				Material/Finish  NF = Aluminum / Olive Dra			ndmium				
20-5		2	3					TZ = Aluminum / Tin-Zinc  ZR = Aluminum / Black Zinc-Nickel  Z1 = Stainless Steel / Passivated						
20-7	4		3											
24-1					1		Shell Size-Insert Arr. See "Insert Arrangements" Table				-			
24-2				2			Sileli Size-ilisert Aff.	See insert Arrangements	s lable	:				
24-3				3				A = Pin Connector, withou	out Coi	ntacts				
24-5			5					B = Socket Connector, without Contacts						
24-6		4		2			Contact Gender and	P1 = Pin Contacts, Silver						
24-A1						1	Plating	der and P2 = Pin Contacts, Gold Plating S1 = Socket Contacts, Silver Plating*						
24-A6		3		3			· iutiliy	<b>S2</b> = Socket Contacts, Gold Plating * Size 12 and 16 contacts are gold-plated. Size 8, 4, 1/0 and 2/0						l
28-12	6		6											
28-15	15							are silver plated.						
28-4				4			Key Position -1, -2, -3, -4, -5, or -6							
28-8		1	7				•							-
28-9	5			4			RATI	NGS		CON	ISTRU	ICTIO	V	
32-12	2		10						Cont	acts:		æ IIV		
32-2					2		J ' '	Voltage (DWV): 2000 Volts AC Current: Size 16 contact 13 amps		e #8 and larg	er: hig	h cond	uctivity	
32-20	1	19					Size 12 contact 23 amps copper alloy, go		old or s	ilver pl	ated.			
32-3					3		Size 8 contac		Siz	ze #12, #16: c	opper	alloy, g	old plat	e

Insert	Contact Size and Quantity						
Arr.	#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		

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

Blowing sand and dust: MIL-STD-810,

method 510.5

Altitude immersion: 75,000 feet **Ingress protection:** IP67

Water pressure: 6 feet, 48 hours

Shell: Aluminum or stainless steel, see How

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

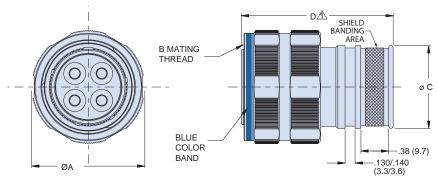
**Insert retainer ring:** High-temperature thermoplastic

Coupling nut retainer ring: Beryllium copper, nickel plated

# **PowerTrip® Connectors and Accessories**



# Cable Connectors 970-011 Plug with Banding Platform



⚠ D DIM. OAL IS 2.223 (56.46) FOR INSERT ARRANGEMENTS WITH #2/0 CONTACTS. GROMMET PROTRUDES BEYOND SHELL.

DIMENSIONS									
Shell	Ø	Α					D		
Size	In. mm		B Mating Thread	Ø	C	ln.	mm.		
18	1.485	37.72	1.125-0.1P-0.3L-TS-2B	1.037	26.34	2.063	52.4		
20	1.583	40.21	1.250-0.1P-0.3L-TS-2B	1.163	29.54	2.063	52.4		
24	1.857	47.17	1.500-0.1P-0.3L-TS-2B	1.350	34.29	2.063	52.4		
28	2.186	55.52	1.750-0.1P-0.3L-TS-2B	1.670	42.42	2.063	52.4		
32	2.420	61.47	2.000-0.1P-0.3L-TS-2B	1.945	49.40	2.063	52.4		
36	2.709	68.81	2.250-0.1P-0.3L-TS-2B	2.176	55.27	2.063	52.4		
40	2.980	75.69	2.500-0.1P-0.3L-TS-2B	2.350	59.69	2.063	52.4		

# MASTER KEY A° D°

Position	A°	В°	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		

## **SHRINK BOOT**

Connector has boot groove for lipped shrink boot. Boot is ordered separately. Boot provides cable strain relief and environmental protection. Type 1 high-performance semi-rigid elastomer resists fuels and oils and withstands temperature extremes. Available with W1 hot melt adhesive pre-coat. Operating temperature range -75 to +150 °C (no adhesive), -55 to +125 °C (with W1 adhesive).

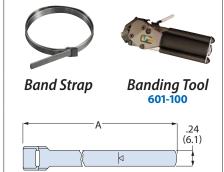


Shell Size	Shrink Boot P/N	Adhesive Lined Shrink Boot P/N
18	770-001S106	770-001S106W1
20	770-001S106	770-001S106W1
24	770-001S107	770-001S107W1
28	770-001S108	770-001S108W1
32	770-001S108	770-001S108W1
36	770-001S109	770-001S109W1
40	770-001S109	770-001S109W1

#### **SHIELD BAND**

## Shield band is not included with connector. Order separately.

Use banding strap to terminate cable braid directly to connector. Stainless steel band strap provides fast, cost-effective and highly reliable termination of braided metallic shielding. The Band-Master ATS® Advanced Cable Shield Termination System is the overwhelming favorite throughout the military aerospace and defense industries, providing excellent static loading and corrosion resistance in electrical wire interconnect systems.



	A gth		up to ia.	Band Strap (pre-coiled)
in	mm	in	mm	Part Number
14	355	1.80	45.7	601-041
18	457	2.50	63.5	601-050