PowerTrip® Connectors and Accessories



Cable Connectors 970-033 Receptacle with Banding Platform



INSERT ARRANGEMENTS Contact Size and Quantity Insert Arr. #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 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 2 32-2 1 19 32-20 3 32-3 32-4 2 2 5 32-5 32-6 3 3 7 32-7 22 32-A22 36-16 3 13 36-2 2 4 36-4 36-9 14 14 2 1 8 36-A8 36-B8 4 4 40-10 16 9 4 40-21 21 40-5

970-033 cable mount receptacle has integral banding platform. 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 on mating plug. Aluminum or stainless steel shell has five polarizing keyways. 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

HOW TO ORDER								
Sample Part Number → 970-033 MT 18-2 P2								
Basic Part Number	Basic Part Number 970-033 Cable Receptacle with Banding Platform							
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							
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, 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.								
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

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

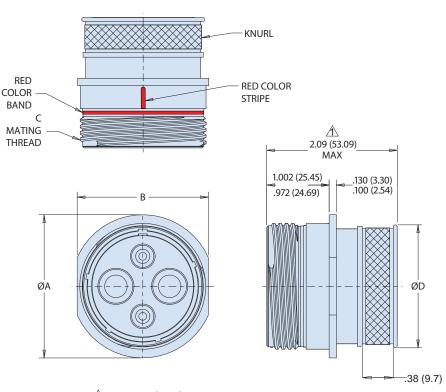
Insulator: Glass-filled thermoset epoxy
Wire grommet, face seal: Fluorosilicone/
silicone blend

Contact Retention clip: Beryllium copper Insert retainer ring: High-temperature thermoplastic

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

DIMENSIONS							
Shell	øA±.	Ø A ± .010 (0.3)		05 (0.1)	С	ø D	
Size	ln.	mm.	ln.	mm.	Mating Thread	ln.	mm.
18	1.328	33.73	1.138	28.91	1.125-0.1P-0.3L-TS-2A	1.037	26.34
20	1.515	38.48	1.325	33.66	1.250-0.1P-0.3L-TS-2A	1.163	29.54
24	1.703	43.26	1.513	38.43	1.500-0.1P-0.3L-TS-2A	1.350	34.29
28	2.078	52.02	1.888	47.96	1.750-0.1P-0.3L-TS-2A	1.670	42.42
32	2.265	57.53	2.075	52.71	2.000-0.1P-0.3L-TS-2A	1.945	49.40
36	2.515	63.89	2.325	55.06	2.250-0.1P-0.3L-TS-2A	2.176	55.27
40	2.765	70.23	2.575	65.41	2.500-0.1P-0.3L-TS-2A	2.390	60.71

SHRINK BOOT



Connector accommodates 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
ĺ	28	770-001S108	770-001S108W1
ĺ	32	770-001S108	770-001S108W1
Ì	36	770-001S109	770-001S109W1
	40	770-001S109	770-001S109W1

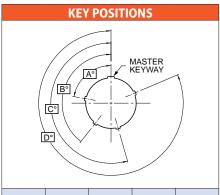
SHIELD BAND

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 Length			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



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