



SERIES 970 PowerTrip™

Reduced size and weight power connectors



Lightweight plug with ratcheting coupling nut and LouverBand contacts

Keyed receptacle with superior sealing and EMI shielding



- Fast, easy mating with triple-start ACME thread: 360° turn for full mating
- Reduced size and weight compared to 5015/VG95234 solutions
- LouverBand sockets for improved current ratings and longer life, up to 2000 mating cycles
- Splined backshell interface for improved backshell attachment and EMI shielding
- Ratcheting coupling nut for secure mating
- Operating temperature -65° C to +200° C
- Hermetic and filter options available

The Series 970 PowerTrip™ offers improved performance compared to standard 5015 type power connectors: higher density and lighter weight packaging, rapid mating and demating triple-start threaded coupling, and extremely rugged splined and threaded backshell attachment interface

SERIES 970 PowerTrip™

The power connector for extreme environments



SERIES 970 POWERTRIP™ CONNECTOR STYLES



Plug
970-001



Square Flange
Receptacles
970-003



Jam Nut Receptacles
970-004



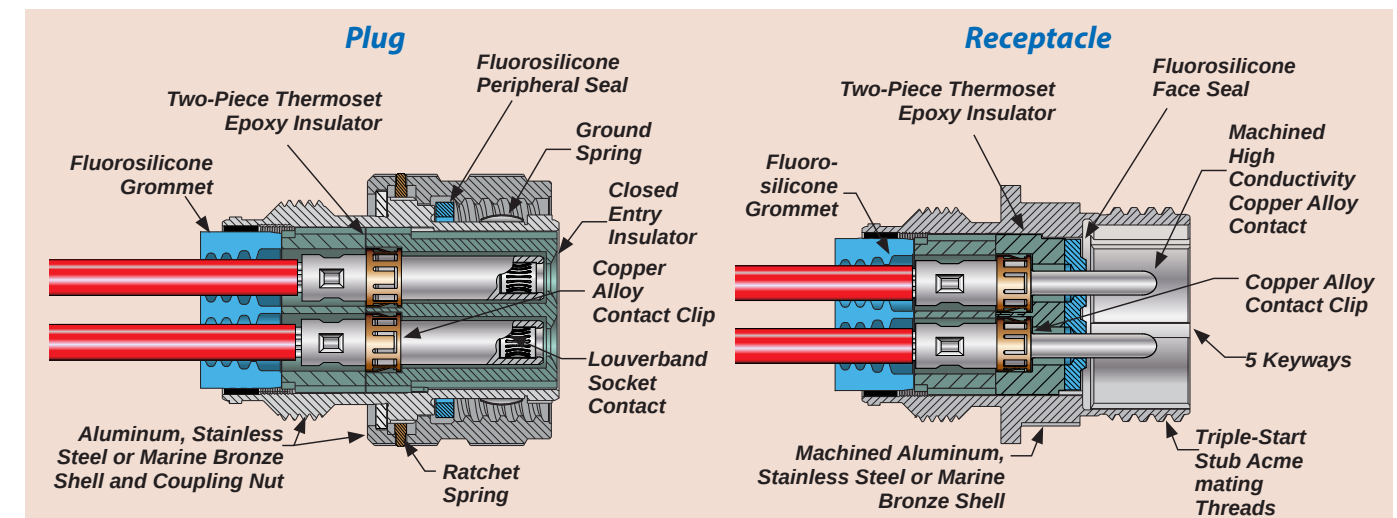
Cable Receptacles
970-005



Feed-Thru Bulkhead
970-006

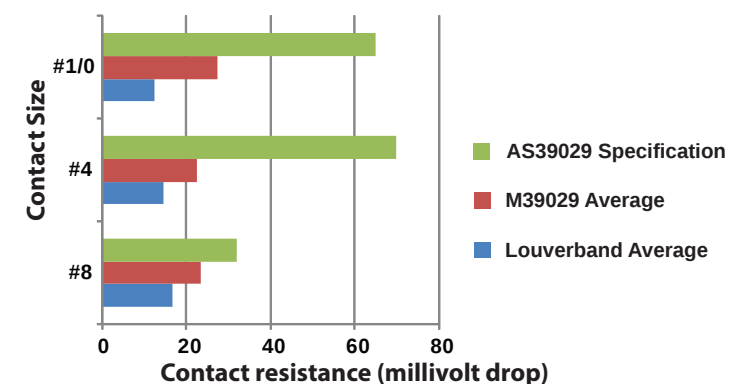


Hermetic Feed-Thru
Bulkhead
970-007



Series 970 PowerTrip™ Specifications	
Current Rating	Up to 225 A.
Dielectric Withstanding Voltage	2000 VAC
Insulation Resistance	5000 megohms minimum
Operating Temperature	-65° C. to +200° C.
Shock	300 g.
Vibration	37 g.
Shielding Effectiveness	65 dB minimum from 1GHz to 10GHz.
Durability	2000 mating cycles

CONTACT RESISTANCE AFTER 1000 MATING CYCLES



ABOUT THE POWERTRIP CONTACT SYSTEM

Series 970 contacts are precision-machined using high conductivity copper alloy. A stamped and formed spring ("LouverBand") is installed into the socket contact. The spring is made from 6 mil copper alloy. Testing has demonstrated that this contact system outperforms conventional aerospace-grade contact systems. The LouverBand spring provides many points of electrical contact with the mating pin, as opposed to a few "high spots" on a conventional four-finger contact as shown in the figure below. The size #8 Powertrip socket contact has a total of 18 louvers. The #4 has 27 louvers, and the #1/0 has 42 louvers. The LouverBand design offers lower voltage drop for reduced joule heating. In addition to its electrical advantages, the LouverBand also is mechanically superior to four-finger contacts. The LouverBand spring has consistent, stable normal force, even when subjected to thousands of mating cycles and temperature extremes.



Conventional contact on the left, LouverBand contact on the right

LouverBand socket contact cutaway