



POWER High-Power Aircraft LOAD™ Electrical Connectors

With high current carrying capacity Crown Ring contacts and flexible TurboFlex® cabling



The aircraft industry's most advanced power distribution interconnect

Electrical power generation technology in aircraft has evolved to meet modern requirements for higher power and lighter weight systems. Growing electrical power needs on commercial aircraft—and emerging eVTOL platforms—have caused major changes in power system architectures to accommodate peak-load stress factors in electrical wire interconnect (EWIS) cabling.

- **PowerLoad™**, the high-vibration, high-temperature interconnect optimized for higher-voltage, higher-altitude, and higher-frequency
- **TurboFlex®**, the Glenair signature high-flexibility power cable solution
- **Crown Ring** crimp, bus bar, and lug style contacts, optimized for high current carrying, high temperature performance.

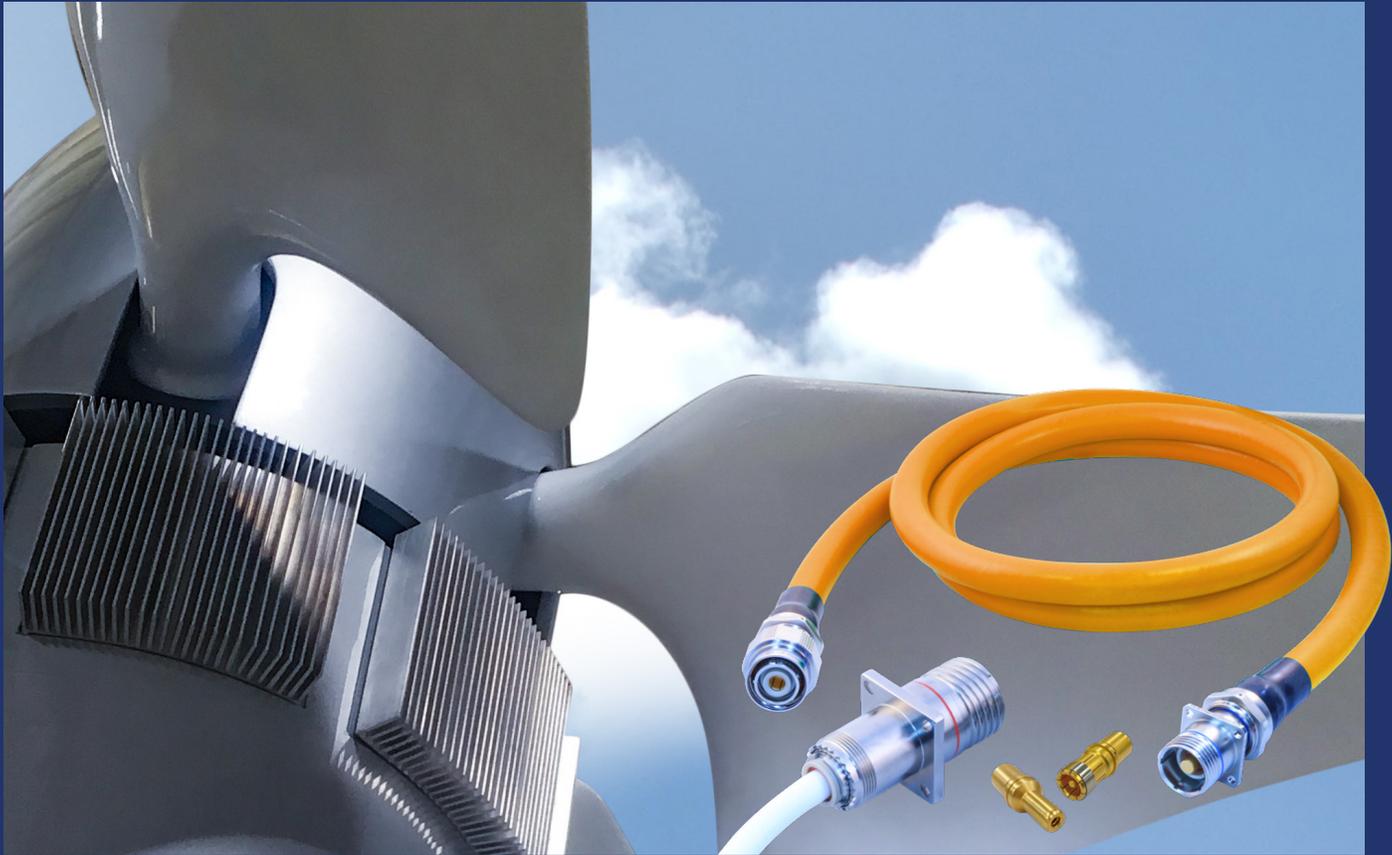
A GLENAIR SIGNATURE SOLUTION: CONNECTORS, CONTACTS, CABLES, ACCESSORIES, AND ASSEMBLIES

- For applications up to 2000 VAC / 1500 Hz, and from 150 – 800 Amps.
- 230°C maximum operating temperature connectors (stainless steel bodies and shells)
- TurboFlex® rope lay power cables optimized for PowerLoad™ connectors, from 8 AWG to 4/0
- Ultra-flexible cable configurations with ruggedized Duraelectric or FEP jacketing:
 - Single-wall hookup wire
 - Dual-wall jacketed interconnect cabling
- High-temperature Crown Ring contact technology
- Patented wire sealing grommet
- Heavy-duty accessory interface

ELECTRICAL POWER
PROPULSION SYSTEM
CONNECTORS,
CABLES, AND
ACCESSORIES

PowerPlay™

SuperNine “Better than QPL” MIL-DTL-38999
high-power connector series



SuperNine PowerPlay is a high-ampacity multi-pole connector series that combines the proven performance of MIL-DTL-38999 Series III connector packaging with contact and dielectric insert technology capable of 2000VAC working voltage. SuperNine PowerPlay utilizes Glenair Crown Ring contact technology, a crimp-removable, low insertion force contact series optimized for higher current carrying capabilities, lower contact resistance, and superior vibration resistance compared to LouverBand, hyperboloid, and other designs.

- 2000 VAC working voltage
- High current, low resistance, superior vibration resistance
- Safe-touch finger proofing
- Integrated band platform shield termination
- Compatible with TurboFlex high-flexibility cable
- Support for busbar and other wire terminations
- Multi-Pin arrangements for size 8 and 4 AWG contacts. Single-Pole arrangements for 2, 1/0, 2/0, and 4/0 contacts. Options for 20 AWG interlock contacts on all sizes

SERIES 973

PowerPlay AAM Propulsion System Power Connectors



BATTERY PLANT-TO-INVERTER-TO-ELECTRIC MOTOR CONNECTORS AND CABLES FOR eVTOL POWER DISTRIBUTION AND PROPULSION APPLICATIONS

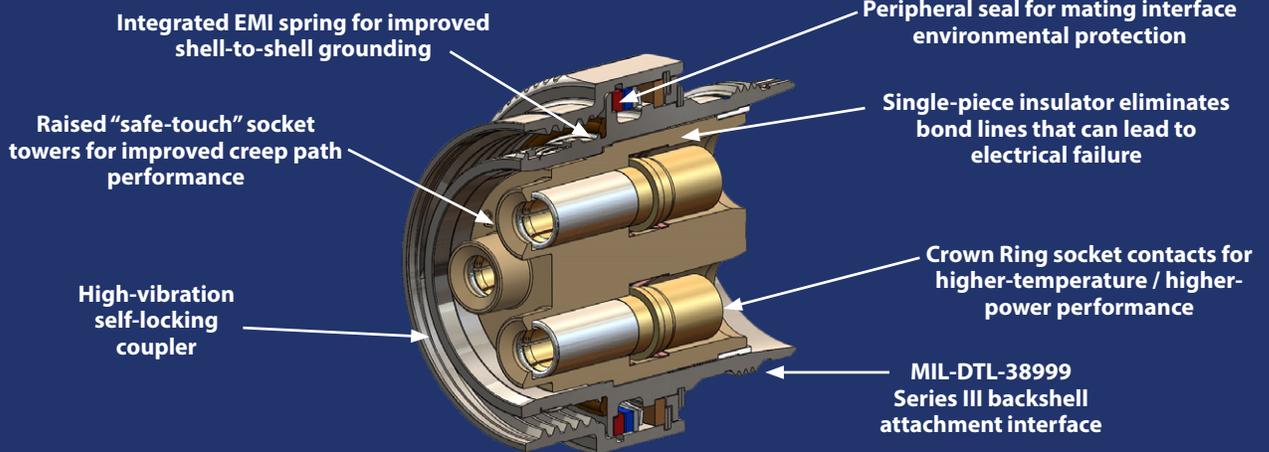


Range of insert arrangements for size 20, 8, 4, 2, 1/0, 2/0, and 4/0 AWG contacts with full support for Glenair TurboFlex cabling

Connector shell configurations IAW MIL-DTL-38999 Series III with safe-touch contact finger proofing

Range of wire termination options including crimp contact, threaded contact, bus bar, and factory-terminated cables and jumpers

PowerPlay™: KEY CONNECTOR AND CONTACT DESIGN FEATURES, PLUG CUTAWAY VIEW



HIGH-TEMPERATURE TOLERANT CROWN RING CONTACTS



Glenair Signature Crown Ring contact series

provides reduced contact resistance, superior conductivity, and higher temperature-tolerance than conventional AS39029 contacts and specialized high-power contacts from other manufacturers

- Maximum operating temperature 260°C
- Superior conductivity performance compared to beryllium copper contacts, across full temperature range
- Up to 60% lower contact resistance than equivalent AS39029 contacts (normalized, less wire)
- Contact bodies made from high conductivity copper alloy (approximately 95% IACS)
- Stainless steel Crown Ring
 - Provides socket forces without stress relaxation at high temperatures
 - Moves socket spring function from socket body to ring, allowing use of high-conductivity copper
- Gold over nickel plating
 - Thicker plating than industry standards for reduced contact fretting and higher temperature endurance
 - Gold over nickel is "gold standard" for high-reliability aerospace contacts
- Crimp versions use standard industry tooling, including crimp die/locator and insertion/extraction tools (2AWG Crown Ring contacts require custom tooling)