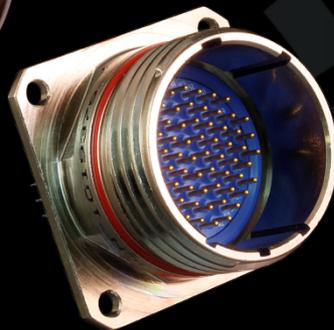


The widest range of  
mission-critical interconnect  
technologies in the world



**MIL-DTL-38999 Series III QPL**  
Made in America • Latest Technology

# Glenair: Your MIL-DTL-38999 QPL Source



**Glenair is the service, support, and availability leader for the interconnect industry**

- Short lead times including same-day inventory
- Support for odd contact arrangements and polarizations
- 100% made-in-America technology
- “No gap” product line
- Solution bundling: one-stop-shopping for connectors, backshells and accessories, boots, bands, and so on



# Superior Component Part Technology

## For QPL 38999 Series III and SuperNine® Connectors



### Exclusive Glenair design improvements

- ✓ Socket Insulator
- ✓ Ratchet Spring
- ✓ Ratchet Teeth
- ✓ Interfacial Seal
- ✓ Peripheral Seal
- ✓ Integrated EMI Band Platform
- ✓ Improved Bonding/Grounding
- ✓ Anti-corrosion/improved grip knurling



# MIL-DTL-38999 Qualified Connectors / Platings



- Connector Styles

  - D38999/20 (wall-mount receptacle)

  - D38999/24 (jam nut receptacle)

  - D38999/26 (plug)

- Plating classes

  - F (electroless nickel, 48 hr. salt spray)





  - G (space-grade electroless nickel, 48 hr. salt spray, RoHS compliant)





  - T (Nickel-PTFE, 500 hr. salt spray, RoHS compliant)





  - W (cad/O.D. over electroless nickel, 500 hr. salt spray, non-RoHS compliant)



# Commercial Equivalent Part Numbers

With plating options not available in QPL series

- Commercial equivalent part numbers
  - 233-105-20 (wall-mount receptacle)
  - 233-105-24 (jam nut receptacle)
  - 233-105-26 (plug)
- Non-qualified plating options
  - ZR (black zinc-nickel, 500 hr. salt spray, RoHS compliant)



# Application Note on Nickel-PTFE Plating

## Connector accessory standard vs. connector standard

- Glenair 1000 Hour Grey (MT) rated to 1000 hrs. salt spray for accessories (non-dynamic test)
- Glenair Nickel-PTFE (MT) and MIL-DTL-38999 Series III (T) rated to 500 hrs. salt spray for connectors (dynamic test)



## 1000 Hour Grey™

The Advanced Formula Ni-PTFE Plating Process for EMC Navy Applications

**New Cadmium Free RoHS Compliant Plating Process Breaks 1000 Hour Corrosion Protection Barrier!**

The MIL-PRF-28876 specification does not, as of yet, establish any next-generation cadmium-free conductive plating options. But the Glenair advanced Nickel-PTFE formula **1000 Hour Grey™** plating process (available in all of our M28876 commercial equivalent 180-040 series parts) meets all key performance requirements including shell-to-shell conductivity and long-term salt spray durability. **1000 Hour Grey™** delivers outstanding performance in a broad range of land, sea, and air interconnect applications. The non-reflective, non-magnetic, gun-metal gray surface finish is an ideal choice for naval applications with severe corrosion protection and EMI/EMC requirements.

**Advanced Durability, Conductivity, and Lubricity Plus Outstanding Corrosion Resistance!**

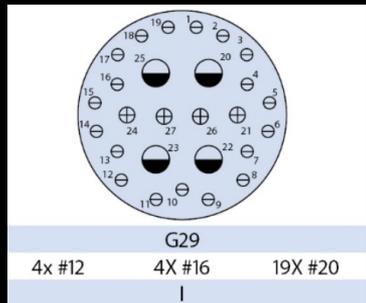
The mechanical, electrical and environmental performance of **1000 Hour Grey™** is truly outstanding, far surpassing that of other metal alloy/fluorocarbon polymer plating solutions:

■ 1000+ Hrs. Salt Spray	■ Potassium Formate Resistant
■ Low Shell-to-Shell Resistance	■ Max 2.5 Millivolt Drop Potential
■ -55°C to 125°C Temp. Rating	■ 500+ Mating Cycles
■ 336+ Hrs. Sulfur Dioxide Resistance	■ Low Outgassing
■ Non-Magnetic	■ Plating Code: MT
■ Cadmium Free	■ Available Now!
■ Low Coefficient of Friction	■ RoHS Compliant
■ Hexavalent Chromium Free	

Glenair, Inc.  
1211 Air Way • Glendale, CA 91201-2497 • Tel: 818-247-6000 • Fax: 818-500-9912 • E-Mail: sales@glenair.com

# Full MIL-STD-1560 Contact Arrangement Coverage

## Including high-density and combo contact arrangements



Glenair is a qualified supplier of the G29 (21-29) 1560 contact arrangement

Insert Arrangement	09-09	11-19	13-32	15-55	17-73
No. of Contacts	9	19	19	55	73
Contact Size	#23	#23	#23	#23	#23
Service Rating	N	N	N	N	N

Insert Arrangement	19-88	21-121	23-151	25-187
No. of Contacts	88	121	151	187
Contact Size	#23	#23	#23	#23
Service Rating	N	N	N	N



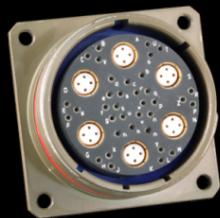
Also available:  **SuperNine<sup>®</sup>**



With special features not available in the QPL series



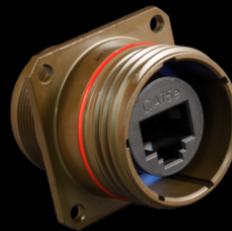
1500 Mating Cycle  
Environmental



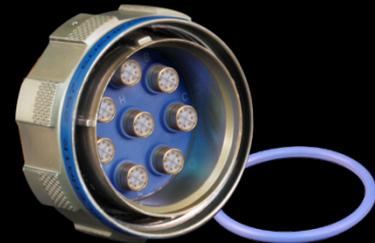
High-Speed  
Environmental



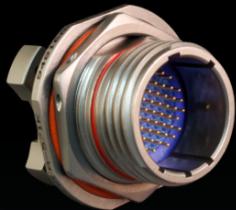
High-Pressure Pin and  
Socket Hermetic



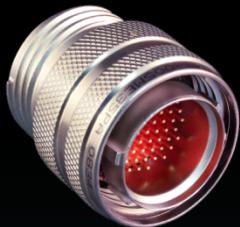
Ruggedized  
RJ45 and USB



Piston-Seal Transition  
Zone Submersible



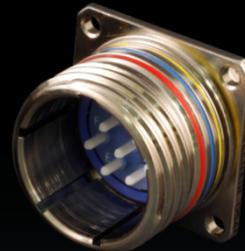
Special PCB  
Standoff Series



Connector Saver  
Go-Betweens



Hermetic and  
Environmental Feed-Thrus



Tight Tolerance  
Fiber Optic



EMI/RFI Filters and TVS  
Diode EMP Connectors

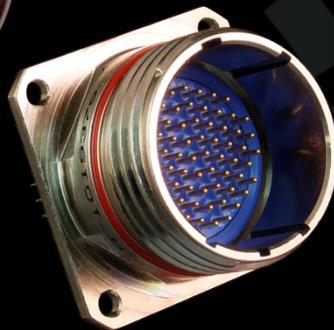


## Enhanced-performance D38999 type environmental connectors



- Extended durability contacts and coupling nut: 1500 mating cycles, low-corrosion knurling
- Integrated band porch
- Extensive PC tail offerings
- Ground spring equipped plug
- Standard 1560 arrangements plus HD and shielded contact inserts
- IP68 sealing standard

The widest range of  
mission-critical interconnect  
technologies in the world



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