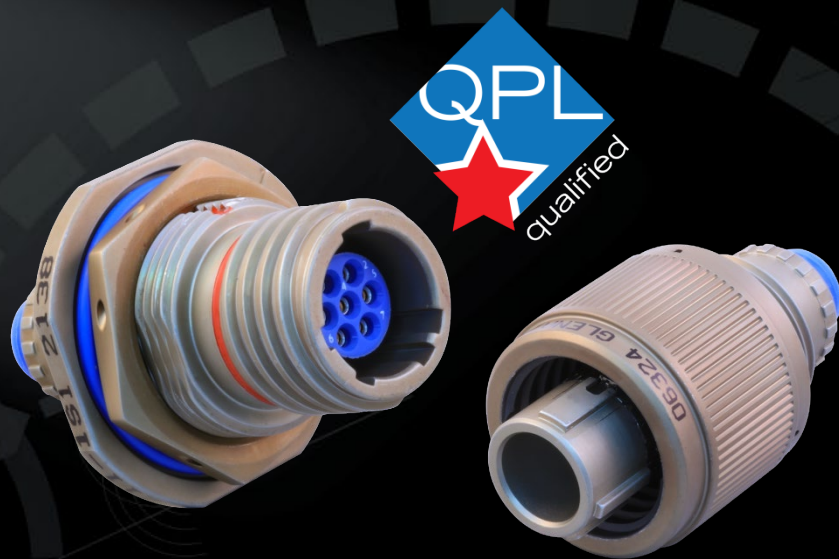


The widest range of  
mission-critical interconnect  
technologies in the world



## MIL-DTL-28840

Qualified Military Standard Connectors and  
Accessories for Shipboard Applications

# Qualified MIL-DTL-28840 Connectors and Accessories

## Standard shipboard electrical signal interconnect

- Medium-density, front-release crimp contacts - 3 sizes accepting 20-28 AWG wire
- Qualified plug as well as box, wall, jam-nut mount and in-line receptacles
- Scoop-proof, keyed, threaded-coupling
- Excellent environmental and EMI resistance
- For use with Navy MIL-C-915 shipboard cable and MIL-W-16878 wire
- Shell sizes 11 – 33 with 7 to 155 contacts
- Complete line of QPL backshell accessories



# Qualified MIL-DTL-28840 Product Family

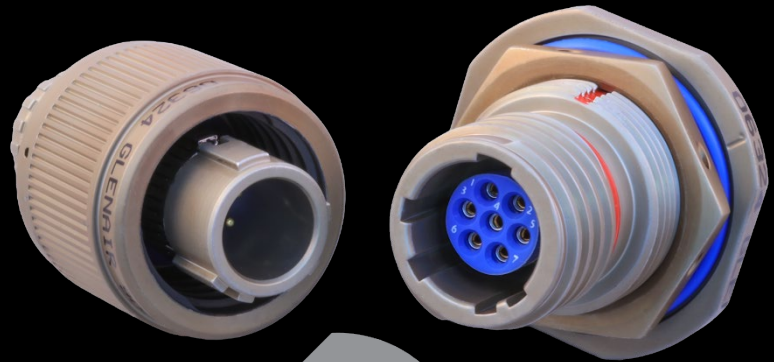


 <p><b>Contacts</b> M39029/83 pin and /84 socket</p>	 <p><b>Clamps</b> M28840/1 straight M28840/2 90° M28840/3 45°</p>	 <p><b>Conduit</b> M28840/4 Metal-Core</p>
 <p><b>Conduit Fittings</b> M28840/5 Backshell for Metal Core Conduit M28840/6 EMI/RFI Environmental Backshell M28840/25 90° EMI Conduit Adapter M28840/27 45° EMI Conduit Adapter M28840/30 Metal Conduit Coupler, Styles A and B M28840/22 Metal Conduit Bushing M28840/23 "E Nut"</p>	 <p><b>Backshells</b> M28840/8 90° EMI/RFI Environmental M28840/45° EMI/RFI Environmental Backshell</p>	 <p><b>Connectors</b> M28840/10 Wall Mount Receptacle Connector M28840/11 In-Line Receptacle Connector M28840/12 Box Mount Receptacle Connector M28840/14 Jam Nut Mount Receptacle Connector M28840/16 Plug Connector</p>
 <p><b>Connector / Backshell Assemblies</b> M28840/17 Plug Connector / Straight Strain Relief M28840/18 Plug Connector with 90° Strain Relief M28840/19 Plug Connector with 45° Strain Relief M28840/20 Recept., Straight EMI/RFI Backshell M28840/21 In-Line Recept., St. EMI/RFI Backshell M28840/26 Plug, with Straight EMI/RFI Backshell M28840/28 90° Adapter Assembly Plug M28840/29 Plug with 45° EMI/RFI Backshell</p>	 <p><b>Protective Covers</b> M28840/13 Protective Receptacle Cover M28840/15 Protective Plug Cover</p>	 <p><b>Tools and Accessories</b> M28840/7 Dummy Stowage Receptacle M28840/24 Mounting Gasket</p>

# Tin Zinc Plating

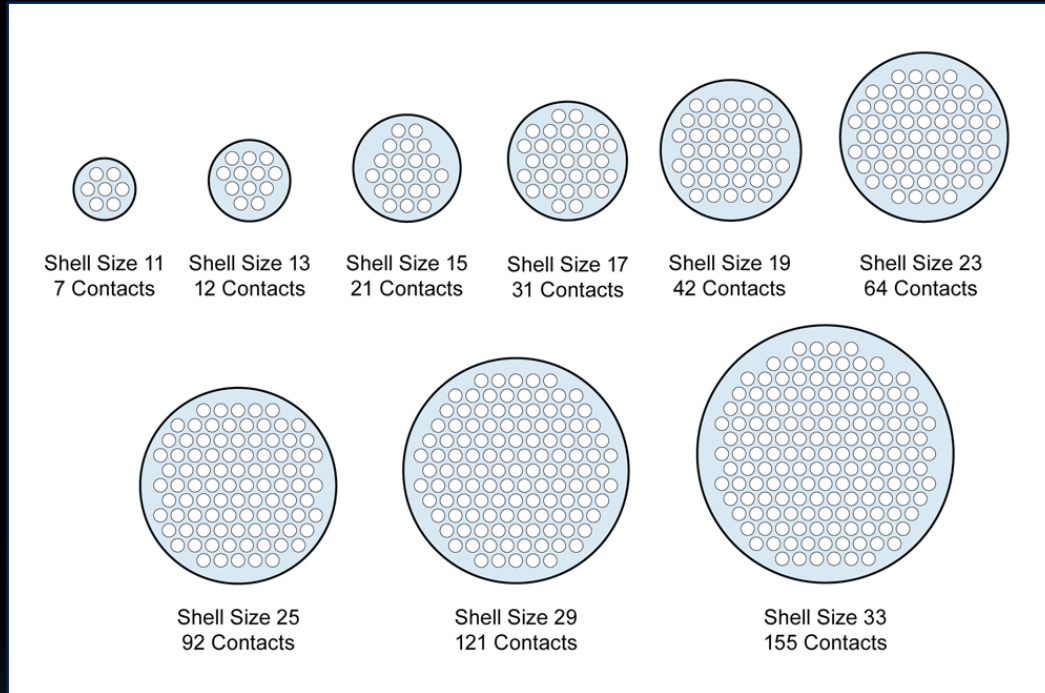
Qualified cadmium-free and compatible plating for Class Code L and M (Class T and TJ) Navy Land and Maritime applications

- New DLA-qualified replacement for Cadmium
- High conductivity and shielding performance in harsh maritime conditions
- High corrosion resistance
- Compatibility with legacy cadmium-plated connectors and environmental shrink boots
- RoHS-compliant material
- Test reports available upon request



# MIL-DTL-28840

## Standard Insert Arrangements



# Also Available: High Performance MIL-DTL-28840 Type RJ-45 and USB



- IP67 sealing in unmated condition
- Crimp and poke termination
- Superior grounding



# MIL-DTL-28840

## Complete Selection of Backshells

Every slash sheet tooled and in-stock

- Strain-reliefs
- Conduit adapters and couplings
- Environmental backshells
- EMI/RFI backshells
- Dummy stowage receptacles
- Protective covers
- E-nuts
- Gaskets



# MIL-DTL-28840

## Complete Selection of Tools

### Contact crimping, insertion and removal tools

- M22520/34-01 Qual. Basic Crimp Tool
- M22520/34-02 Positioner
- M22520/35 Gage
- M81969/33-01 Straight Insertion Tool
- M81969/33-02 Offset Insertion Tool
- M81969/34-01 Removal Tool





# MIL-DTL-28840

## 100% Conformance Tested

Per Mil-spec rev. C all connectors undergo the following conformance testing

- Visual and mechanical examination
- Insulation resistance at ambient temperature
- Dielectric withstanding voltage



# MIL-DTL-28840

## Performance Specifications



<b>Current Rating (Maximum)</b>	<b>Size #20 Contact: 20AWG 7.5A, 22AWG 5.0A, 28AWG 1.5A, 30AWG 1.0A</b>
<b>Test Voltage</b> (Dielectric Withstanding Voltage)	<b>1000 VAC RMS at sea level. Test per EIA-364-20</b>
<b>Insulation Resistance</b>	<b>5000 megaohms minimum (at ambient temperature) per EIA-364-21</b>
<b>Contact Resistance</b>	<b>Per SAE-AS39029</b>
<b>Operating temperature</b>	<b>-55° C to +200° C</b>
<b>Immersion</b>	<b>Per test method EIA-364-09</b>
<b>Shock</b>	<b>In accordance with MIL-S-901 Grade A</b>
<b>Vibration</b>	<b>Per EIA-364-28 test procedure</b>
<b>Magnetic Permeability</b>	<b>2.0 u (Aluminum)5.0u (Stainless Steel) maximum; ASTM-A342./A342M</b>



# MIL-DTL-28840

## Materials and Finishes

**Shells, Coupling Nuts, Jam Nuts – Aluminum alloy per ASTM B211, or stainless steel per AMS-QQ-S-763**

**Contacts – Copper alloy, 50u inch gold plated per ASTM B488 Type 3, Code C, Class 1,27 over nickel underplate per QQ-N-290 Class 2. Socket contact hood: stainless steel, passivated**

**Insulators – High grade engineering plastic per ASTM-D5948**

**Contact Retention Clip – Beryllium copper**

**Shells, Coupling Nuts, Jam Nut Plating Finish – Stainless Steel, Black Cadmium plated**

**Aluminum alloy, Cadmium O.D. over Nickel**

**Tin-Zinc over Nickel, non-reflective, Green-Gold color, RoHS-compliant material**

**Grommet, Seal – Blended elastomer, 30% silicone per ZZ-R-765, 70% fluorosilicone per MIL-R-245988**



# MIL-DTL-28840: Made In America

**Glendale California manufacturing and inventory management  
plus value added assembly at ICC**

- Hundreds of MIL-C-28840 part numbers in stock ready for immediate same-day shipment.
- Trusted value-added assembly distributor (ICC) offers Two Day Assembly and supports the entire product line
- Made in America for the best quality and availability



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