MISSION-CRITICAL INTERCONNECT SOLUTIONS

Glenair®

Mission-Driven Interconnect Designs
For Ground, Sea, Air, and Space Applications

JANUARY 2022
TURNKEY OPTICAL AND ELECTRICAL INTERCONNECT CABLE ASSEMBLIES AND HARNESS

customer bespoke wire harnesses, overmolded assemblies, and wired conduit assemblies

TURNKEY FIBER OPTIC CABLE ASSEMBLIES

- Environmental overmolded fiber optic cable assembly
- Multi-way inside-the-box D38999-to-ST assembly
- GFOCA (AW M83526) environmental cable assembly

SPACE-GRADE WIRE HARNESS ASSEMBLIES

- EMI/RFI shielded multibranch Micro-D connector assembly with Glenair Series 23 SuperNine panel mount/D connector
- Multibranch Micro-D / Series 806 cable assembly with ArmorLife® lightweight EMI shield overbraiding

COMPLEX MULTIBRANCH AND OVERMOLDED CABLE ASSEMBLIES

- F/A-18 radar pantograph assembly
- Overmolded cable assembly
- AWACS radar assembly
- Hybrid fabric braid and overmolded environmental cable assembly
- “Golden Umbilical” life-support umbilical cable for first American spacewalk, 1965
- Soldier radio power and USB data overmolded cable assembly

TURNKEY FACTORY-TERMINATED CONDUIT ASSEMBLIES

- Complex multibranch fighter jet electrical wire conduit assembly
- Lightweight, halogen-free rail industry wire conduit assembly
- Crush-resistant commercial aerospace metal-core conduit assembly
IPC-6012/6013 class I, II, III types 1–4

**Flexible Polymer Substrate**

- Adhesive layer on substrates
- Routed and bonded to substrates

**Proper Bend Radius Design**

- Ensures long life and no impact

**Cross-section of a two-layer optical flex circuit with crossover fibers**

**Signature or M29504 F/O breakouts**

**Optical Flex Circuit Assemblies**

- Signature or M29504 F/O breakouts

**Fiber Bonding**

- High-speed, high data rate optical backplane connectors
- VITA 66 type backplane available

**Board Mount Assemblies and Breakouts**

- Board connectors and test
- Opto-electronic modules manufactured and fabricated by Glenair
- In-house design, ruggedized board-mount

**Rugged High-Density, High Data Rate Optical Flex Circuits for**

- Fiber-to-fiber spacing: 250 μm
- Industry-standard connector terminations
- High-density fiber-to-fiber spacing

**In-House Fabrication Minimizes Crossover Stress in Complex Routing Arrangements**

- Design, Prototyping, and Production
- and Rigid PCB Assemblies
- Integrated Flex, Rigid Flex, TURNKEY · CONNECTORIZED

**Raceway and Card-to-Card Applications**

- Shuttle circuits compatible
- Yamaha IM series circuit assembly
- Optimized by Glenair for turnkey integration

**Multibranch Flex and Rigid Flex Connectorized Assemblies**

- Choice of Micro-D subminiature multibranch flex assembly
- Both Glenair in the US and in the UK specialized in complex Micro and Nano flex assembly work.

**Special-Purpose Flex and Rigid-Flex Designs**

- Space-grade Micro-D flex assembly with NASA EEE-INST-002 screening
- Space-grade Series 28 HiPer-D to Series 80 Mighty Mouse I/O jumper
- High-shock matched-impedance Mighty Mouse assembly with flex circuit

**Point-to-Point Connectorized Flex and Rigid Flex Jumpers**

- 804 Mighty Mouse to Samtec surface mount jumper
- Series 23 SuperNine® to AlphaLink jumper
- Low-profile Micro-D jumper

**Connectorized Assemblies and Jumper Applications**

- Harsh-environmental Micro-D to AlphaLink jumper
- Micro-D to Micro-D jumper

**Connectorized Assemblies and Jumper Applications**

- Multibranch RJ45 / Ethernet / USB Flex assembly, Glenair is the only manufacturer of catalog PCB tail field RF and USB connectors.
- 26 layer EMI/RFI shielded rigid flex assembly

**Qwik Connect**

- Multibranch RJ45 / Ethernet / USB Flex assembly
- Multibranch RJ45 / Ethernet / USB Flex assembly

**Micro-D to Micro-D Jumper**

- Dual-gang series 20 SuperTwin™ I/O connector to AlphaLink SL PCB connector
- Stacked Micro-D I/O connectors with flex jumper to rigid PCB assembly

**Hybrid Flex/Rigid Flex Multibranch Micro-D Flex Assembly with Discrete RF Circuits**

- Space-grade Series 28 HiPer-D to Series 80 Mighty Mouse I/O jumper
- Space-grade Series 28 HiPer-D to Series 80 Mighty Mouse I/O jumper

- Mighty Mouse assembly with flex circuit

- Dual-gang series 20 SuperTwin™ I/O connector to AlphaLink SL PCB connector
- Stacked Micro-D I/O connectors with flex jumper to rigid PCB assembly

- Hybrid flex/rigid flex multibranch Micro-D flex assembly with discrete RF circuits
HIGH-PERFORMANCE WIRE AND CABLE

M22759 - Ethernet - USB - RF/coax - harsh-environment power and signal

Duralectric® high-temperature, halogen-free, chemically resistant jacketing

- Service temperature: -65°C to 225°C
- Duralectric K (Kelvin): -110° to 225°C
- Fire-resistant, Low Smoke-Zero Hal
- Mil-aero and industrial fluid-resistant
- Accelerated UV/sunlight resistant, 53 year equivalent exposure
- Ozone resistant IAW ASTM D1149
- Moldable and extrudable

SpeedLine™ Shielded Twisted Pair Cables

- Individual foil shielding around each data pair for reduced crosstalk and attenuation
- Up to 200°C high-temperature-rated cable
- Skydrol resistant, RoHS compliant versions
- High density, reduced weight cable designs
- Ethernet versions meet ANSI/TIA 568-C.2 Category 6A requirement up to 262 feet/80 meters
- Low-skew SuperSpeed USB data pairs have individual braided shields

Duralectric® Autoshrink™ employed in environmental boots and sleeves

Bulk jacketed Duralectric® cable for harsh-environment power applications

Duralectric® jacketing employed as conduit covering in topside naval applications

Aerospace overmolded cable assembly with rugged Duralectric® jacketing

Shipboard application with Duralectric® jacketing and overmolding

Duralectric® jacketing employed in environmental commercial application

Ultra flexible rope lay power cable construction

Available in a broad range of gages, from 16 AWG to 450 MCM

Rugged Duralectric® Jacketing

TurboFlex™ Ultra-Flexible / Rugged Power Cable with Duralectric® Jacketing

- Ultra flexible rope lay construction
- TurboFlex® power pylon cable assembly with Duralectric® jacketing
- TurboFlex® with Duralectric® jacketing ideally suited for equipment grounding

Today, Glenair supplies a wide range of high-speed shielded twisted pair cabling for use with El Ochito®, VersaLink™, SpeedMaster™, and other of our shielded high-speed connector and contact technologies. Glenair offers turnkey Cat6A Ethernet, SuperSpeed USB 3.0, HDMI, SATA, and other solutions for today's most mission-critical application platforms.

Glenair SpeedLine cables are optimized for datalink performance, weight savings, flexibility, and durability. In addition, these aerospace and space-grade cables have been optimized for ease of termination and across-the-board compatibility with our broad range of high speed datalink connectors. Best of all, every recommended cable-contact-connector assembly has been fully tested, and published test reports are available now.
RUGGEDIZED OPTO-ELECTRONIC INTERCONNECT SOLUTIONS

contacts · transceivers · SMPTE video media converters · Ethernet switches

EVALUATION BOARDS AND PERFORMANCE TESTING AVAILABLE FOR ALL SYSTEMS

SMALL FORM-FACTOR 10 GBPS HARSH-ENVIRONMENT PHOTONIC CONTACTS AND CONNECTORS

Patented size #8 opto-electronic transmitter and receiver contacts…

…for use in ARINC 600 avionics connectors
…and D38999 Series III type receptacles
Size #8 cavity adapter kit for 1.25mm ARINC 601 termini
Size #8 cavity adapter kit for ELIO® 2.5mm termini
2.5mm ELIO® Compatible D38999 Series III type

RUGGEDIZED 10 GBPS PCB-MOUNT PHOTONIC TRANSCIEVERS, TRANSMITTERS AND RECEIVERS

Shielded PCB-mount transceivers (radiation-tolerant versions available)
PCB-mount dual transceivers, quad transmitters and quad receivers
RF-over-fiber for SATCOM, IFE and other RF distribution systems
Parallel optical transceiver (40 Gbps available now; 120 Gbps version in development)

COPPER-TO-FIBER MEDIA CONVERTERS FOR ETHERNET AND VIDEO

Lightning-strike protected ARINC 801 F/O to D38999-type media converter
GFOCA fiber optic Ethernet media converter
DVI media converter

COPPER-TO-FIBER MEDIA CONVERTERS FOR SIGNAL AGGREGATION

Small form-factor low-speed signal aggregator
High-speed signal aggregator (cutaway view)
High-speed signal aggregator

SMALL FORM-FACTOR ETHERNET SWITCHES AND BREAKOUT CABLES

7-port Ethernet switch (shown with breakout test cable)
7-port Ethernet switch with heat-dissipation enclosure
Low-profile multiprot Ethernet switch

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HIGH-PERFORMANCE FIBER OPTIC INTERCONNECT SYSTEMS

connectors · termini · cables · tools

**EYE-BEAM® GMA AND EYE-BEAM® GLT EXPANDED-BEAM CONNECTION SYSTEMS**

- Eye-Beam® GMA (HMA type intermateable) IAW M83526/20 panel mount configuration
- Eye-Beam® GLT (HMA type intermateable) IAW M83526/21 hermaphroditic cable plug configuration

Available cable seals and field-deployment technologies including man-packable units.

Innovative EYE-BEAM® GLT grin-lens expanded-beam termini can be integrated into virtually any circular or rectangular connector package.

Rugged, high-power expanded-beam fiber optics for directed energy applications.

**GLENAIR BUTT-JOINT FIBER OPTIC CONNECTION SYSTEMS**

- MIL-DTL-38999 type fiber optic
- Glenair High Density (GHD) fiber optic
- Series 806 Mil-Aero micro miniature fiber optic

**ARINC 801 type fiber optic**

- Ruggedized, high-density MT ferrule fiber optics and MT optical flex aerospace-grade solutions

**NGCON MIL-PRF-64266 fiber optics**

- MIL-PRF-28876 Fiber Optic
- GFOCA M83526 Compliant Fiber Optic
- Glenair Front Release (GFR) fiber optic

**TOOL KITS AND TRAINING**

- Fiber Optic termination and maintenance kits
- Fiber optic test probes and adapters
- Micro miniature Series 806 high fiber count designs
- Field-servicable FiberCon backshell-equipped designs

**TURNKEY FIBER OPTIC CABLE AND CONDUIT ASSEMBLIES**

- Inside-the-box rugged I/O-to-transceiver designs
- Environmental overmolded point-to-point assembly
- Field-servicable FiberCon backshell-equipped designs

**FIBER OPTIC CONNECTOR BACKSHELLS**

- For user termination and fabrication of fiber optic cable and conduit assemblies
- Multibranch junction box assemblies with conduit fiber line protection
- Point-to-point fiber assembly with FiberCon conduit adapters

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PROVEN FLIGHT HERITAGE

SPACE-GRADE INTERconnects

NASA · ESA · JAXA · Commercial

Backshells and Shielding Accessories
For Micro-D and D-Subminiature rectangular connectors

SERIES 806 SPACE-GRADE MICRO MINIATURE CIRCULARS

High-speed, power, and databus Class G connectors and turnkey jumpers

D38999 SERIES I AND SERIES II BAYONET-LOCK CONNECTORS

D38999 Series I (scoop-proof), and Series II 
Class G (low-profile) bayonet-lock connectors in 
environmental, hermetic, filtered, and Class G 
connector configurations

SUPERNINE™ ASSISTED-RELEASE QUICK-DISCONNECT BLIND-MATE CONNECTORS

Glenair Series 253 connectors are designed to meet applicable environmental, electrical and mechanical performance characteristics of D38999 Series III. The technology is well suited for use in commercial blind-mate instrumentation panels, satellite deployment, scientific research and development payloads, as well as interstage, UAV, and munitions release applications.

SPACE-GRADE M24308, MICRO-D, NANOMINIATURE, AND MICRO-CRIMP CONNECTORS AND CABLES

ESA and NASA screened Micro-D and Nano connectors / backshells available as discrete components, wired pigtails, or turnkey harnesses

Certified laboratory test assemblies including SpaceWire and Micro-D Sav-Con connector savers

Qualified MIL-DTL-24308 Class X Space-Grade Hermetic, plus Hiper-D 
(high-performance) space-grade / high-speed environments

FAST-TURNAROUND MICRO-D SPACE-GRADE HARNESS FABRICATION (GSS - SALEM, GERMANY)


Hand assembly work performed by 
ESA/NASA IPC-certified assembly staff

Form, fit, and function of prototype harnesses using GSS-produced fixtures

Ample clean room harness termination 
and assembly facilities
AVIATION-GRADE

eVTOL AIR TAXI INTERCONNECT SOLUTIONS

for electric propulsion systems, avionic sensors, and EWIS cable management

LIGHTWEIGHT AVIONICS, FLIGHT DECK, ACTUATOR, AND SENSOR CONNECTORS

WIRE AND CABLE PROTECTION AND MANAGEMENT TECHNOLOGY

SHielding and Grounding Solutions for Electromagnetic Compatibility (EMC)
STAR-PAN™ SOLIDER USB HUB / POWER DISTRIBUTION SYSTEM
battle-tested C4ISR / DACAS networking

STAR-PAN™ may be used to both trickle charge radio power boosters as well as distribute available radio power to other devices.

STAR-PAN™ LIGHT • Dismounted Soldier
USB Power / Data Hub

STAR-PAN™ II • Tactical Squad and Special Forces USB Power / Data Hub

STAR-PAN™ IV • Mission Commander USB Power / Data Hub

STAR-PAN™ VI • JTAC (DACAS) USB Power / Data Hub

MISSION MANAGER Plug-and-Play EUD / USB Peripheral Data Exchange Device

STAR-PAN™ X • Roll-On, Roll-Off Vehicle Base Station

STAR-PAN™ Multiport USB / Power Distribution Hubs for Tactical Soldier Systems

STAR-PAN CONNECTOR AND CABLE NETWORK BUILT AROUND THE MIGHTY MOUSE 807 NATO-STANDARD, OPEN-SYSTEM INTERCONNECT INTERFACE FOR C4ISR-EQUIPPED WARRIORS

Cable Plug
Cobra Plug
Panel Plug
Cable Receptacle
Panel Receptacle
Hermetic Receptacle

STAR-PAN™ tactical soldier radio data/power setup with Mighty Mouse 807-equipped radio power booster

Juggernaut Case ruggedized EUD assembly with Mighty Mouse 807 dongle

STAR-PAN™ the worldwide JTAC open-system standard for power and data hubs with Mighty Mouse 807 QDC connectors

Ultralightweight wearable battery with Mighty Mouse 807 panel mount receptacle

Inventus Lithium Ion conformal battery with plug-and-play Mighty Mouse 807 power adapter

Turnkey, in-stock Mighty Mouse Series 807 cables for every application requirement

BB-2590/BA-5590 standard soldier battery with Mighty Mouse 807 power adapter

Kägwerks ruggedized EUD case with Mighty Mouse 807 dongle

TacROVER-E video downlink receiver with Mighty Mouse high-speed I/O connector and STAR-PAN interface cable

Juggernaut Case ruggedized EUD assembly with Mighty Mouse 807 dongle

Ultralightweight wearable battery with Mighty Mouse 807 panel mount receptacle

Inventus Lithium Ion conformal battery with plug-and-play Mighty Mouse 807 power adapter

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FAA-QUALIFIED
COMMERCIAL AEROSPACE EWIS TECHNOLOGIES
wire interconnect solutions for weight reduction and life-of-system durability

SERIES 806 MIL-AERO
Series 806 Mil-Aero micro miniature connectors for unpressurized zones

HARSH ENVIRONMENTAL AEROSPACE POWER AND SIGNAL CONNECTORS
SuperNine™ "better than QPL" D38999 Sr. III environmental and lightweight hermetic
PowerLoad power distribution connectors
GateLink Pro high-speed data uplink connector

ADVANCED-PERFORMANCE CONNECTOR ACCESSORIES AND WIRE MANAGEMENT SOLUTIONS
ProSeal spring-action protective covers
Swing-Arm and Swing-Arm FLEX strain reliefs
Auto shrink cold-action tubing and boots
TurboFlex ultra-flexible power cables
ArmorLite microfilament EMI/RFI shielding
Lightweight, flexible ground straps and HSTs
MasterWrap wraparound shielding now available in Nomex®
Problem-solving circular and rectangular connector accessories
Band-Master ATS® advanced shield termination system
Turnkey, lightweight polymer- and metal-core conduit wire protection systems

SUPERFLY Datalink nanominiature high-speed
Thermal HT high-temperature connector
SpliceSaver time- and labor-saving wire splice replacement
Dummy Contact Sealing Plugs (DCSP)

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COMMERCIAL AEROSPACE EWIS TECHNOLOGIES
wire interconnect solutions for weight reduction and life-of-system durability

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wire interconnect solutions for weight reduction and life-of-system durability

SERIES 806 MIL-AERO
Series 806 Mil-Aero micro miniature connectors for unpressurized zones

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SuperNine™ “better than QPL” D38999 Sr. III environmental and lightweight hermetic
PowerLoad power distribution connectors
GateLink Pro high-speed data uplink connector

ADVANCED-PERFORMANCE CONNECTOR ACCESSORIES AND WIRE MANAGEMENT SOLUTIONS
ProSeal spring-action protective covers
Swing-Arm and Swing-Arm FLEX strain reliefs
Auto shrink cold-action tubing and boots
TurboFlex ultra-flexible power cables
ArmorLite microfilament EMI/RFI shielding
Lightweight, flexible ground straps and HSTs
MasterWrap wraparound shielding now available in Nomex®
Problem-solving circular and rectangular connector accessories
Band-Master ATS® advanced shield termination system
Turnkey, lightweight polymer- and metal-core conduit wire protection systems

SUPERFLY Datalink nanominiature high-speed
Thermal HT high-temperature connector
SpliceSaver time- and labor-saving wire splice replacement
Dummy Contact Sealing Plugs (DCSP)

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10K PSI OPEN-FACE

OIL & GAS INDUSTRY
UNDERWATER CONNECTORS

deep water · downhole/HTHP · topside · shallow water · high-speed copper/fiber

SEAKING™: FLAGSHIP SERIES MECHANICAL AND ENVIRONMENTAL FEATURES

- Retractable engaging nut retention ring for easy O-ring inspection/replacement
- Engaging nut set screw (3 places)
- Optional overmolded delamination ring accessory
- Accessory thread and overmold features
- Wrench flats
- Multiple PBOF backshell indexing points
- Replaceable dual O-rings standard on all CCP, BCR, and FCRs
- Disengage flange to rotate body for multiple clocking positions
- PBOF assemblies, straight, 45° and 90° systems with fill ports and swivel fittings
- Replacing Flange Connector Receptacles feature a removable spoked body, indexable flange, and keyway-assisted mating and polarization
- Indexable flange
- Engaging nut set screw (3 places)
- Optional overmolded delamination ring accessory
- Accessory thread and overmold features
- Wrench flats
- Multiple PBOF backshell indexing points
- Replaceable dual O-rings standard on all CCP, BCR, and FCRs
- Disengage flange to rotate body for multiple clocking positions
- PBOF assemblies, straight, 45° and 90° systems with fill ports and swivel fittings

DEEP WATER HIGH-PRESSURE 10K PSI / 700 BAR / 7000M CONNECTORS

- SeaKing™ 700 10K PSI open-face high-density subsea connectors and cables
- SeaKing™ Fiber 10K PSI open-face underwater fiber optics
- SeaKing™ Power 1–6.6 kV connectors for primary power junctions
- SeaKing™ 700 PEEK cathodic delamination-free glass-filled composite

SEAKING HIGH-PRESSURE UNDERWATER PBOF AND CABLE ASSEMBLIES

- Ultra harsh environment overmolded assemblies with transparent test material
- Straight, 45° and 90° single-ended PBOF assemblies
- Turnkey point-to-point oil-filled assemblies with swivel fittings and oil fill ports
- Turnkey overmolded cable assemblies with polyurethane mold material
- 10K PSI open-face fiber optic I/O connector assembly

DOWNHOLE HIGH-TEMPERATURE / HIGH PRESSURE CONNECTORS

- Well-Master® high temperature Micro-D connectors
- Single- and multi-pin High Temperature/High Pressure (HTHP) Glass sealed penetrators and feedthroughs

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**QPL AND COMMERCIAL RECTANGULAR CONNECTORS**

**AlphaLink™** · **HD Stacker™** · **Nano (32139)** · **Micro-D (83513)** · **D-sub (24308)**

**VersaLink** · **Series 79/791/792** · **GMMD**
LIGHTWEIGHT
MICRO MINIATURE CIRCULAR CONNECTORS
save weight • save space • optimize power • enhance signal performance

SAVE SIGNIFICANT SIZE AND WEIGHT WITH SERIES 806 VERSUS D38999
RUGGEDIZED
HIGH-SPEED DATALINK CONNECTORS
contacts · connectors · cables · jumpers

RF / HIGH-SPEED DATALINK CONTACTS
Size #8 differential twinax contacts
Size #8 quadax contacts
Size #8 spring-loaded BME microwave contacts
Size #12 SMPM type spring-loaded coaxial
G-LinkRF SMA contact adapter

THE OCTAXIAL SIZE #8 CONTACT FOR GbE/10GbE ETHERNET, USB 3.0, HDMI, AND MORE
El Ochito®: The high-speed octaxial contact with patented data pair isolation
Discrete contacts for D38999 Series III, Series 806 Mil-Aero, SuperNine®, ARINC 600, and Series 79 for both #24 and #26 gauge cable
Turnkey jumpers with Cat 6a #24 or #26 gauge flexible aerospace cable
Series 79 high angle PCB connector with El Ochito white (Ethernet), black (USB 3.0), and #21 (100 Ohm HDMI, DVI, SATA, and PCI)

GLENAIR SIGNATURE HIGH-SPEED CONNECTOR SERIES
Octabyte ruggedized Ethernet Cat7A
VersaLink micro miniature differential twinax
High-Speed Micro-D TwistPin contact 10+Gb/sec (example insert with four high-speed signal pairs)
GMMD modular high-speed Micro-D RF / 10GbE connector
Speed Master™ modular 10G+ Ethernet (shown in SuperNine® packaging)
QPL AND COMMERCIAL

GLASS-SEAL AND ENCAPSULANT HERMETICS

heavy-duty and lightweight solutions

CODE RED™ LIGHTWEIGHT HERMETIC SEALING

Lightweight hermetic encapsulant sealing solution with better than 1X10⁻⁷ leak rate performance. Available now for D38999 and Series 806 Mighty Mouse.

MIL-DTL-38999 QPL AND COMMERCIAL PIN AND SOCKET HERMETICS

Series I scoop-proof bayonet coupling
Series II low-profile bayonet coupling
Series III scoop-proof triple-start coupling
Series IV breech lock

SERIES 806 MICRO MINIATURE HERMETICS

Glass-sealed and lightweight CODE RED power, signal, and high-speed

HARSH-ENVIRONMENT / MODIFIED PACKAGE HERMETICS

Geo-Marine™ double-start hermetic connector
Hermetic power connector
Single-way tool joint HTHP hermetic connector
Hermetic probe connector with modified flange
Long-length hermetic bulkhead penetrator with optional crimp piggy-back termination

HIGH-SPEED DATALINK HERMETICS

Triax hermetic
Hybrid coax/signal hermetic
QuadraX hermetic with special weld-mount flange

FIBER OPTIC HERMETICS

MT ribbon fiber optic hermetic
Hybrid coax/signal hermetic

RECTANGULAR PACKAGE HERMETICS

MIL-DTL-24308 QPL hermetic
Series 79 Micro-Crimp hermetic
MIL-DTL-83513 type Micro-D hermetics
Sealed panel-mount Micro-D hermetic

OTHER CIRCULAR GLASS-SEALED HERMETIC SERIES

MIL-DTL-26482
MIL-DTL-83723
MIL-DTL-38999 (QPL)
MIL-DTL-5015 Series 80 Mighty Mouse

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SERIES 240
EMI/EMP FILTER CONNECTORS

EMI ceramic planar array filter connectors • EMP TVS diode solutions

Glenair is the only mil-aero-grade filter connector supplier that offers same-day delivery of off-the-shelf, catalog filter connectors, for every MIL-DTL-38999 series.

MICRO MINIATURE EMI FILTER CONNECTORS

- Series 806 Mil-Aero Filtered Solder Cup or PC tail Jam-Nut Receptacle
- Series 806 Mil-Aero Filtered Solder Cup or PC tail Jam-Nut, Threaded Standoff
- Series 805 EMI filtered triple-start stub ACME Mighty Mouse Micro miniature
- Series 804 EMI filtered Mighty Mouse push-pull with custom flange

EMP TRANSIENT VOLTAGE SUPPRESSION DIODE-EQUIPPED CONNECTORS

- EMP diode-equipped connector with oversized shell
- MIL-DTL-38999 Series III type EMP connector
- Reduced-package-size EMI/EMP cylindrical
- MIL-DTL-38999 Series III type EMP with rectangular housing

EMI FILTER CONNECTORS WITH MIL-STANDARD CIRCULAR PACKAGING

- MIL-DTL-38999 Series III triple-start
- MIL-DTL-38999 Series IV breech-lock
- MIL-DTL-26482 Series I and II bayonet
- MIL-DTL-83723 Type T threaded
- MIL-DTL-5015 threaded

UNIQUE AND SPECIAL-PURPOSE EMI FILTER CONNECTORS

- Extended-shell PC-tail cylindrical with threaded standoff
- Special-purpose filter connector cable adapter
- Series 80 Mighty Mouse PC-tail filter receptacle
- MIL-STD-1760 filtered umbilical connector
- Filter plug with crimp contacts

- MIL-DTL-38999 type filter connector with sidecar ceramic array packaging
- MIL-DTL-38999 type filter connector with hybrid analog signal and HF contacts
- Series 970 PowerTrip™ high-density EMI filtered power connector
- MIL-DTL-38999 SuperNine filtered cable plug adapter
- SuperSeal™ RJ45 Ethernet connector with EMI filtering

EMI FILTER CONNECTORS WITH MIL-STANDARD / GLENAIR RECTANGULAR PACKAGING

- MIL-DTL-83513 type Micro D filter connector
- MIL-DTL-24308 type D-Sub filter connector
- Series 79 Micro-Crimp filter connector
- ARINC 600 rack-and-panel filter connector
QPL AND COMMERCIAL

CONNECTOR BACKSHELLS AND ACCESSORIES

environmental sealing · wire management · strain relief · EMC shield termination

SWING-ARM VERSATILITY: FROM CABLE STRAIN RELIEF TO EMI/RFI SHIELD TERMINATION

Fast and reliable termination of individual wire and overall EMI cable shielding with industry-standard Band-Master ATS® tools and straps. New slim profile bands eliminate sharp strap cutoff for improved safety.

THREE STYLES OF SWING-ARM STRAIN RELIEF CLAMPS

- Style A - standard mouth, rigid saddle bars
- Style B - wide mouth (for larger cable diameters), rigid saddle bars
- Style C Swing-Arm FLEX - no saddle bars, self-centering round cable strain relief
METALLIC AND NON-METALLIC
BRAIDED SHIELDING
EMI screening · weight reduction · abrasion protection · spot repair

The most innovative line of metallic, monofilament non-metallic, and microfilament composite and stainless steel braiding solutions for environmental, mechanical, and EMC shielding in the world. From high-temperature fiberglass tubular shielding for engine applications to ultra-lightweight EMI/RFI braided shielding for electrical wire interconnect grounding applications, Glenair offers the industry’s most versatile range of solutions including innovative ArmorLite CF corrosion-free metallic micro braid.

FLEXIBLE, LIGHTWEIGHT WRAPAROUND EMI / RFI SHIELDING AND ABRASION PROTECTION

MasterWrap™ (Nomex®) for mechanical abrasion protection of EWIS wire bundle harnessing

MasterWrap™ flexible, field-installable/repairable side-entry EMI/RFI shielding with ArmorLite™ technology

For spot EMI/RFI shielding coverage and reinforcement of cable interstices

ARMORLITE™ MESH TAPE

ARMORLITE™ LIGHTWEIGHT ARMORLITE™ (STAINLESS STEEL) AND AMBERSTRAND™ (COMPOSITE) SHIELDING

Tubular AmberStrand™ and ArmorLite™ lightweight metal-clad microfilament EMI/RFI braided shielding

Shield sock backshells with lightweight ArmorLite™ or AmberStrand™ microfilament EMI/RFI braid

ArmorLite™ CF with enhanced corrosion resistance and temperature tolerance

TURNKEY FACTORY OVERBRAIDING WITH LIGHTWEIGHT AND QQ-B-575B/A-A-59569 BRAID

Turnkey factory-overbraided multibranch cable assembly

Overbraided conduit assembly, ready for customer termination

Factory-overbraided pigtail assembly

ARMORLITE™ AND METALLIC BRAID GROUND STRAPS

Lightweight ArmorLite™ microfilament ground straps

Heavy-duty metallic braid ground straps

MIL-DTL-24749 Type IV Qualified navy ground straps

INDUSTRY-STANDARD TUBULAR FABRIC AND METAL BRAID

Tubular braid for mechanical and abrasion protection of electrical wire interconnect systems

Wide range of colored Nomex for abrasion protection and wire identification

QQ-B-575B/A-A-59569 metallic braid for EMI shielding

High-temperature fiberglass braid for engine applications
ENVIRONMENTAL

SHRINK BOOTS AND HEAT-SHRINK TERMINATIONS

abrasion protection • environmental sealing
splicing • space-grade wire protection

HEAT SHRINK TERMINATION SLEEVES / SPLICES

Three sizes of available shrink sleeves
Wired and unwired AS83519/1 and /2 Type heat shrink terminations for EMI shield-to-ground termination applications (note braided versions qualified for lightning strike)
Example rectangular interconnect assembly outfitted with heat shrink termination grounds

SPACE-GRAD M SHRINK BOOTS

Low-outgassing fluoropolymer alloy shrink boots

HOT AND COLD SHRINK BOOTS AND TUBING FOR RUGGED ENVIRONMENTAL APPLICATIONS

Standard lip or lipless boots
long tail and high ratio configurations
90° and 45° angle boots
SuperFly, Mighty Mouse, and D subminiature configurations

Convoluted accordion boots
Y, T, and multibranch transitions
M85049/140 TACOM Approved and Navy-Qualified S617649 Shrink Boots
AutoShrink cold-shrink tubing

SELECTED ENVIRONMENTAL SHRINK BOOT COLOR OPTIONS

Olive drab
Desert Tan
Right-angle adapter, purple
4-1 widetube transition, yellow
Green long-tail boot
High-ratio right-angle adapter, grey
Low-profile 3-1 adapter, white

SHRINK BOOT ADAPTERS SELECTION GUIDE

Series 310 Shrink Boot Adapters
Series 311 EMI/RPI Lamp-Base Thread/Boot Adapters
Series 319 Shield Sock/Boot Adapters
Series 440 Band/Boot Adapters
SAE-AS85049 QPL Shrink Boot Adapters
Composite Thermoplastic Band/Boot Adapters

PIGGYBACK SHRINK BOOT ADAPTERS

Environmental piggyback adapter with pre-installed boot, ready for heat shrink
Heat shrink recovery completed with significant time saved
Composite, aluminum, or stainless steel environmental feed thru with piggyback boot
Composite band-in-a-can piggyback boot adapter
METAL- AND POLYMER-CORE CONDUIT SYSTEMS

HARSH-ENVIRONMENT
high-temperature · crush-resistant · EMI/RFI shielded · land, sea, and air

LIGHTWEIGHT, SEALED/FLEXIBLE POLYMER-CORE ANNULAR CONDUIT WIRE PROTECTION SYSTEMS
- Kynar, PVDF, and G-Flex Siltem materials
- Braided shielding and jacketing options
- Easy-to-install Guardian wire protection system
- Sentry economical wire protection system
- Non-wired factory-terminated assemblies

HIGH-TEMPERATURE, HIGH-STRENGTH HELICAL POLYMER-CORE WIRE PROTECTION SYSTEMS
- High-temperature, high-strength helical conduit
- Easy-to-install Hat-Trick wire protection system
- Internal braid wire protection system
- AeroLine wire protection system
- Non-wired factory-terminated assemblies

HEAVY-DUTY METAL-CORE CONDUIT WIRE PROTECTION SYSTEMS
- Flexible, crush-proof EMI/RFI metal-core conduit
- Low-profile RP Plus wire protection system
- Heavy-duty metal and weight-saving composite systems
- Legacy Mil-C-24758 wire protection system
- Non-wired factory-terminated assemblies

MIL-PRF-24758 SHIPBOARD CONDUIT WIRE PROTECTION SYSTEMS
- Stainless steel and brass metal-core conduit with UV-resistant BlueJacket
- Complete range of qualified MIL-PRF-24758 fittings
- Master Seal self-vulcanizing BlueJacket (Duralectric) repair tape
- Non-wired factory-terminated assemblies

SPECIAL-PURPOSE CONDUIT MATERIALS AND CONFIGURATIONS
- Spring-reinforced polymer-core assemblies
- Halogen-free PEEK tubing
- Special composite fiber optic backshells
- Conduit and jacket color options including Desert Tan
- Special processing including drain holes, ovalization and split-entry
**INTERCONNECT ASSEMBLY TOOLS**

**banding • grounding • crimping • mounting • termination • testing**

**GROUNDCONTROL EARTH BOND**

- Hydraulic Earth Bond setting tools for aluminum and stainless steel plate
- Bi-laminar (copper core) earth bonds
- Available dynamometer
- Used for ground strap bonding and equipment rack installation

**FIBER OPTIC TERMINATION AND TEST TOOLKITS**

- Turnkey fiber optic termination and maintenance kits
- Inspection and test probes and adapters
- Dry wipes fiber optic cleaning tools
- Fiber optic polishing pucks
- Video scope inspection kits

**CRIMP TOOLS**

- M22520/01 and /02 Wire-to-contact crimp tools
- Locators and accessories
- Crimp contact insertion and removal tools

**BACKSHELL-TO-CONNECTOR MOUNTING TOOLS**

- TG70 Universal strap wrench
- Circular backshell assembly wrenches
- Connector holding tool kits and wrenches
- Soft jaw pliers
- Bench mount tools for volume production

**Band-Master ATS®**

**EMI/RFI CABLE SHIELD TERMINATION SYSTEM**

- Nano banding tool for use with ultraminiature connectors and banding backshells
- Micro banding tool for use with most subminiature connectors and banding backshells
- Standard and Slim Standard banding tools for use with large form-factor connectors and banding backshells
- Each tool accommodates a specific width of band (nano, micro, or standard)
- Bands are available precoiled for high-volume assembly operations
- Special high-volume pneumatic tool for bench use, available for all sizes
- The only banding tool with a built-in calibration counter
- Bands and tools optimized for size and weight reduction across the complete range of connector, backshell, and cable form factors

**Earth Bond / Ground Stud Installation System**

- Easy to use manual tools with built-in calibration counter
- High-volume pneumatic tool for bench use
- 3 lengths and 3 widths of EMI braid termination bands

**THE GROUNDCONTROL EARTH BOND SYSTEM**

- Professional appearance and aesthetic
- The GroundControl Earth Bond system is designed for easy attachment of weldless ground studs to metal plate.
- The complete system includes hydraulic hand tools, a range of available ground studs, and ground strap fastening hardware.
- Easy one-hand operation setting tools are available for both thick and thin plate.
- Studs are a conductive bilaminar (copper core) design with extremely low electrical resistance.
- The system supports both through hole and blind hole installation.
- No surface preparation of the plate is required, conductive ground path is via the internal drilled surface.
- Both UNC and metric thread studs are available.

- Fast installation equals cost savings
- Universal application: may be applied to any suitable chassis location
- Bond installed from one side
- No surface preparation of bonding area required
- Minimal operator training needed
- Professional appearance and aesthetic
Qualified Products: Glenair is a Mil-Aero connector supplier. Our product quality begins in engineering (the largest team in the high-performance interconnect business) and is realized in our “made in the USA” vertically-integrated manufacturing cells. One of the key ways we ensure both areas are functioning smoothly is to submit designs and manufactured specimens into the military QPL process administered by NAVSEA and the Defense Logistic Agency of the US government. These certification exercises are multi-year activities that test every aspect of an interconnect component’s performance.

Glenair’s Commitment to Quality

Glenair is proud of the quality and reliability we build into our broad range of mission-critical interconnect solutions—from discrete connectors to complex cable assemblies and embedded systems. Glenair is the biggest “made in the USA” interconnect supplier in the high-reliability industry, but we also operate factories in the UK, Italy, and Germany to serve the unique requirements of those markets. Glenair’s Worldwide Quality System is ISO 9001 and AS9100 certified and registered. We also hold many discrete product and operations certifications for specialty, high-performance markets including space, nuclear power, and rail. In addition to world-class quality, we are laser-focused on customer service and committed to being the easiest manufacturer in our industry to do business with. Here are just some of our key customer service principles:

- Lightning-fast turnarounds on quotes and special orders
- Worldwide sales and technical support in every major market
- Full-spectrum, “no gap” product lines
- No dollar or quantity minimums
- ISO 9001 and AS9100 certified
- Huge same-day shipment inventory
- Generous NRE, RMA, and sample request policies
- Abundant engineering and technical support
- No attitudinal constraints when it comes to customer convenience and service
Glenair Track Record of Interconnect Innovation