





For Land, Sea, Air, and Space Applications



Military / Defense Interconnect Solutions



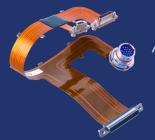
VITA 67.3 SMPM and SMPS RF connectors, contacts, and accessories

For Land, Sea, Air, and Space Applications

TURNKEY INTERCONNECT ASSEMBLIES FOR MILITARY DEFENSE APPLICATIONS



Complex Cable and Wire **Protection Conduit Assemblies**



Integrated Flex / Rigid Flex Circuit Assemblies



Interconnect Assemblies

Aerospace-Grade Fiber Optic Turnkey High-Frequency RF Coax Interconnect Assemblies

GROUND SOLDIER / TACTICAL CONNECTORS AND CABLES



Series 807 Mighty Mouse Nett Warrior Connectors and STAR-PAN™ Data Hubs



Nanominiature SuperFly® Tactical Interconnects



HiPer 55116™ "Better Than QPL" Field Audio Connectors



SealTac™ and Mighty Mouse Tactical Soldier Connectors

MILITARY VEHICLE CONNECTORS AND HARSH-ENVIRONMENT WIRE PROTECTION



SuperSeal™ Ruggedized Field RJ45 and USB Solutions

PowerTrip™ Connectors for Extreme Environments

TurboFlex® Ultra-Flexible **Rugged Power Cable**

Heat and AutoShrink Boots and Molded Shapes

AEROSPACE AND MISSILE SYSTEM APPLICATIONS



El Ochito® and other Signature **High-Speed Interconnects**



SuperNine® "Better Than QPL" MIL-DTL-38999 Series III



Series 806 Mil-Aero with **Optimized SWaP**



SuperFly® Datalink Nano High-Speed



Series 28 HiPer-D® **High-Performance M24308**



Series 791™ / 792™ Crimp-Contact High-Density Rectangular



HD Stacker™ High-Density Board-to-Board



MIL-DTL-83513 Micro-D QPL and COTS Derivatives



MIL-DTL-32139 Nano **QPL and COTS Rectangulars**



High-Speed, High-Datarate Fiber Optics



Special-Purpose Circulars: EMI/RFI Filters and Hermetics



Glenair Signature Backshells and Accessories

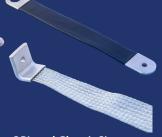
NAVY / SHIPBOARD APPLICATIONS



MIL-DTL-28840 QPL Navy Shipboard Interconnects



MIL-PRF-28876 QPL Navy **Fiber Optic Interconnects**



QPL and Glenair Signature **Lightweight Ground Straps**



MIL-PRF-24758A US Navy Qualified Conduit System

MILITARY DEFENSE SYSTEMS SIGNATURE CABLE AND CONDUIT ASSEMBLIES



Glenair Turnkey Cable and Conduit Assemblies for Military Defense Applications



Glenair's Complex Cable Group is laser-focused on producing turnkey assemblies built principally from Glenair Signature interconnect components including small formfactor connectors, lightweight EMI/RFI shielding, and Glenair Signature wire and cable.





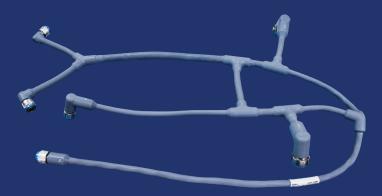
Environmental backshell- and

boot-equipped assembly

MADE IN USA

Turnkey Military Defense Power and Signal Cable and Conduit Assemblies

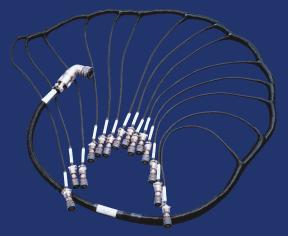
Built with Glenair Signature interconnect components



TurboFlex power distribution / sensor assembly with Duralectric™ overmolding and Mighty Mouse connectors



Non-environmental aircraft cable with integrated circuit breakout box and Mighty Mouse 807 Nett Warrior connectors



Complex multibranch assembly equipped with split-shell backshells for easy field repairability



Fabric overbraided assembly with discrete overmolded interconnect standoffs



Lightweight microfilament ArmorLite™ EMI/RFI shielded assembly with TurboFlex cable



Complex multibranch overmolded cable assembly for a military fighter jet application

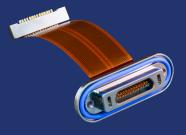
MILITARY DEFENSE TURNKEY FLEX CIRCUIT INTERCONNECT ASSEMBLIES



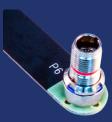
Flex, Rigid Flex, and Rigid PCB assemblies with signature interconnect technology for aircraft LRU applications



GLENAIR SIGNATURE PC-TAIL CONNECTOR TYPES AVAILABLE IN TURNKEY FLEX ASSEMBLIES



Series MWD Micro-D and spring-contact AlphaLink



Series 88 SuperFly



Series 79 Micro-Crimp



SuperNine MIL-DTL-38999 type flexi with board connector

TURNKEY

Flex, Rigid Flex, and Rigid PCB Assemblies with Glenair Signature PC tail connectors

for reliable, repeatable performance



MILITARY DEFENSE FIBER OPTIC INTERCONNECT ASSEMBLIES



Fiber Optic Cables and Harnesses: turnkey environmental and inside-the-box assemblies

Glenair manufactures every popular mission-critical fiber optic interconnect system including MIL-DTL-38999 type, MIL-DTL-64266 NGCON, MIL-PRF-28876, ARINC 801, and more. Our fiber optic cable assembly team can integrate these ruggedized, military grade fiber optic technologies into turnkey cable and harness assemblies—terminated, tested, and ready for immediate use.











High-density Next-Generation (NGCON) fiber optic harness assembly



Cable reels and field-deployment technologies for both Glenair GFOCA and Eye-Beam GMA fiber optic systems





Inside-the-box MIL-DTL-38999 type I/O connector to board cable harness

TURNKEY

Fiber Optic Cables and Harnesses

for rugged mission-critical applications



MILITARY DEFENSE HIGH-FREQUENCY RF INTERCONNECT ASSEMBLIES



Flight-Grade RF, Microwave, and mmWave Connector Assemblies and Discrete RF Contacts and Connectors



GLENAIR SIGNATURE MULTI-PIN CONNECTORS FOR RF / MICROWAVE APPLICATIONS





Series 23 SuperNine "better-than-QPL" MIL-DTL-38999 Series III type connector





Series 80 Mighty Mouse reduced size and weight aerospace-grade connector





Series 806 Mil-Aero micro miniature circular with performance IAW D38999





Series 795 RF precision-machined aerospace-grade coax connector

FLIGHT-GRADE

RF and Microwave Turnkey Cable Assemblies with Glenair Signature Connectors, Contacts, and Cables

for mission-critical RF applications

50 AND 75 OHM COAX CONTACTS FOR USE IN MULTIPIN AEROSPACE-GRADE CONNECTORS



Size #16 coaxial contacts

_UMARK



Size #12 coaxial contacts



Size #8 coaxial and concentric twinax contacts



26.5 GHz G-Link RF contacts with integral female SMA adapter for easy cable attachment

50 OHM LOW-LOSS COAX CABLES



Size 047 26.5 GHz hand-formable tin-soaked braid

Size 086 40 GHz FEP or

Size 160 with FEP or ETFE jacket ETFE jacket, Low Phase Change

18 and 40 GHz,

Size 200

Size 235 18 GHz, 26.5 GHz FEP or ETFE jacket FEP or ETFE jacket triple shield triple shield



Size 300 18 GHz, **FEP** jacket triple shield

Size 450 10 GHz, **FEP** jacket triple shield

50 OHM COAX JUMPER ASSEMBLIES WITH LOW-LOSS CABLE AND PRECISION-GRADE CONNECTORS



RF CONNECTOR ADAPTERS AND PROTECTIVE COVERS, PRECISION-GRADE



TNC-SMA adapters



N-SMA adapters



SMA-SMA adapters



SMP-SMA adapters



2.92-SMA adapters



Protective covers for RF connectors

GROUND SOLDIER INTERCONNECT TECHNOLOGY



Series 807 Mighty Mouse NW micro miniature connectors for dismounted soldier battery charging, radio, and PAN applications, NSN stock-listed.



PUSH-PULL QDC

Nett Warrior Qualified Power and Data Connectors

Today's warfighters demand quick battery charging and reliable radio operation. Glenair pioneered the original 6-pin Nett Warrior connector, as well as a second-generation 7-pin series with USB-C power integration and delivery. Now Glenair is introducing a signature 10 Amp Crown Ring contact-equipped version for higher-current applications that easily integrates into US / NATO, Nett Warrior, and STAR-PAN hub and cable systems.

Glenair STAR-PAN NG hubs and cables—now equipped with 10 Amp Crown Ring contact receptacles—are smart devices capable of managing next-generation high-power equipment as well as lower-power legacy devices.



SERIES 807 MIGHTY MOUSE NW CONNECTOR LINE

All designs backward-compatible with current and legacy Nett Warrior hardware

- Original 6-pin Nett Warrior plugs and receptacles
- Backward-compatible 7-pin series with USB-C power integration and delivery
- New 10 Amp receptacles for higher-current soldier battery, radio, and PAN C4ISR equipment
- Glenair Signature Mighty Mouse 807 NW connectors are available in pigtail and point-to-point cables for all US/NATO soldier C4ISR devices

US ARMY AND NATO QUALIFIED

Nett Warrior Connectors



For STAR-PAN hub systems, Nett Warrior C4ISR hardware, next-gen and legacy radios and batteries



QUALIFIED FOR USE WITH ALL STAR-PAN AND STAR-PAN NG POWER / DATA HUBS



MATERIALS / FINISH

- Shell: Al alloy / ZNU plated
- Contacts: Cu alloy / Au plated
- Insulators: Rigid dielectric
- O-rings: Fluorosilicone

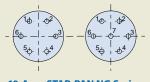
Series 807 NW Nett Warrior Connector Insert Arrangements



Original NSN-Listed 6-Pin (Nett Warrior Program / NATO STANAG 4695 Approved)



Backward-Compatible 7-Pin USB-C Power Series



10-Amp STAR-PAN NG Series 6-6 and 6-7 Arrangements

SERIES 807 MIGHTY MOUSE NW CONNECTOR LINE: HOW-TO-ORDER







lle e Panelmount receptacle

Series 807 NW Plugs (6 pin)	Crimp	PC Tail	Solder Cup	In-Line	Rear Mount Jam Nut	Front Mount Jam Nut
8070-1676-06ZNU6-6PY NSN 5935-01-659-5575	Х			Х		
807-871-06ZNU6-6PY	X			Χ		
807-309-06ZNU6-6PY			Х	Х		
8070-1153-07ZNU6-6EC			Х		Х	
8070-1153-07ZNU6-6PC		Х			Х	
8070-1153-00ZNU6-6EC			Х			Х
8070-1153-00ZNU6-6PC		Х				Х
Series 807 NW Receptacles (6 socket)	Crimp	PC Tail	Solder Cup	In-Line	Rear Mount Jam Nut	Front Mount Jam Nut
8070-1675-01ZNU6-6SY NSN 5935-01-659-4090	Х			X		
8070-1675-07ZNU6-6SY	X				X	
8070-1675-00ZNU6-6SY	X					X
807-874-01ZNU6-6SY	X			X		
807-874-00ZNU6-6SY	X					X
807-874-07ZNU6-6SY	X				X	
807-348-01ZNU6-6SY			X	X		
807-216-07ZNU6-6SY			X		X	
807-216-01ZNU6-6SY			X	X		
807-216-00ZNU6-6SY			X			X
807-216-07ZNU6-6DY		Χ			X	
807-216-01ZNU6-6DY		X		X		
807-216-00ZNU6-6DY		X				X
Series 807 NW Plugs (7 pin)	Crimp	PC Tail	Solder Cup	In-Line	Rear Mount Jam Nut	Front Mount Jam Nut
8070-1676-06ZNU6-7PY	X			X		
807-871-06ZNU6-7PY	X			X		
Series 807 NW Receptacles (7 socket)	Crimp	PC Tail	Solder Cup	In-Line	Rear Mount Jam Nut	Front Mount Jam Nut
8070-1675-01ZNU6-7SY	X			X		
8070-1675-07ZNU6-7SY	X				Х	
8070-1675-00ZNU6-7SY	X					X
807-874-01ZNU6-7SY	X			X		
807-874-00ZNU6-7SY	X					X
807-874-07ZNU6-7SY	X				X	
8070-1299-ZNU6-7DY		X				Х
Series 807 NW Receptacles (10 Amp)	Pigtail Assembly	PC Tail	Solder Cup	In-Line	Rear Mount Jam Nut	Front Mount Jam Nut
8071-6924	X			X		
8070-3151-07ZNU6-6SY		X			Х	

GROUND
SOLDIER
INTERCONNECT
TECHNOLOGY



Multiport USB hubs, cables, and peripheral device manager for soldier-worn power / data network applications



Powering soldier connectivity and C4ISR mission success

The Glenair STAR-PAN™ data hub and power distribution system enables soldiers—particularly in Joint Terminal Attack Controller (JTAC) roles—to make the most of C4ISR devices, improving situational awareness, surveillance, intelligence and reconnaissance while optimizing power monitoring, conditioning, and distribution performance. Importantly, all STAR-PAN™ technologies—from the high-

density, NATO standard Mighty Mouse quick-

disconnect connectors and cables to the low-profile hub enclosure itself—are designed for optimal size, weight,

power, and ruggedized mil-spec performance with battle-tested environmental and EMC sealing and shielding.

- Versatile 2, 4, and 6-port high-speed hub configurations
- Compatible with USB 1.1, USB 2.0, and SMBus
- Embedded power charging/conditioning electronics in all designs
- Smart power monitoring for longer mission life
- Robust circuit protection
- Sealed IAW the MIL-STD-810 harshenvironment standard
- New MISSION MANAGER for on-the-fly device integration to soldier C4ISR networks

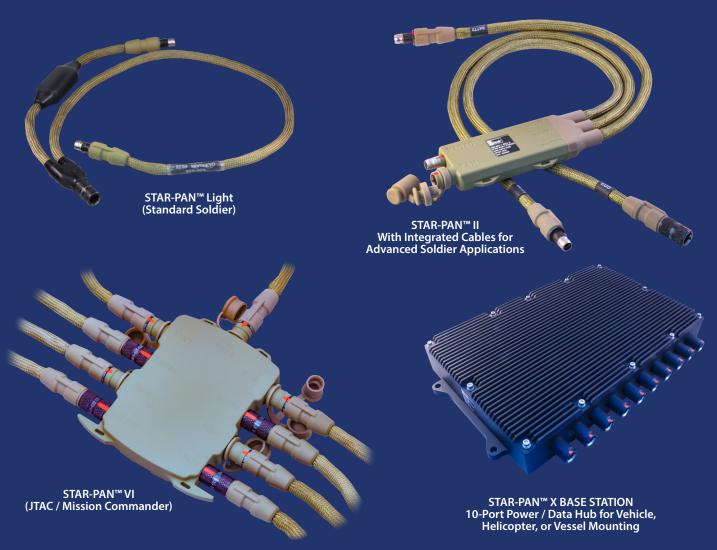
Glenair's Tactical Interconnect Solutions team is backed by six decades of proven, made-in-America interconnect industry performance in service of US and NATO armed forces.

STAR-PAN[™] Scalable Soldier Networks



Powering soldier connectivity and C4ISR mission success

STAR-PAN™ SCALABLE SOLDIER NETWORKING HUBS AND DEVICE MANAGERS



OPEN-SYSTEM NETWORK SUPPORT FOR THE COMPLETE RANGE OF C4ISR DEVICES



GROUND SOLDIER INTERCONNECT **TECHNOLOGY**



nano miniature tactical connector



Mighty Mouse not small enough? Meet the toughest, smallest, and highest-speed connector we've got—ideal for soldier-wearable C4ISR equipment

- Push-pull version with high / low force release option
- Threaded version for secure mating
- **Hybrid contact system**
- First mate / last break power contacts
- Layouts and contact spacing optimized for high-speed

PRINTED CIRCUIT BOARD PLUG AND RECEPTACLES

Quick-Disconnect Threaded Right Angle, Vertical, Rear Right Angle, Vertical, Rear Vertical Plug, Right Angle, **Rear Panel** Vertical, Rear Panel Mount, Vertical, Rear **Rear Panel** Panel Mount, **Rear Panel Rear Panel** Mount, PCB **Panel Mount PCB Mounting Panel Mount Ground Pins** Mount Mount Mount Holes **Mounting Holes**

SuperFly® Nano miniature Soldier System Connectors and Cordsets



Tactical nano miniature connectors and cables

NANO MINIATURE SUPERFLY® CORDSETS AND PIGTAILS







Threaded pigtail plug and receptacle



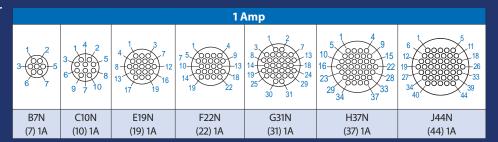


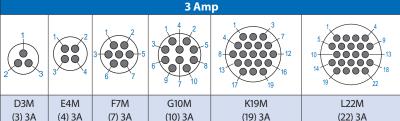
Quick-disconnect pigtail plug and jam nut receptacle

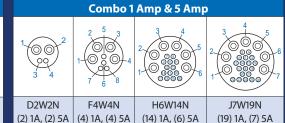
- IP67 immersion rated
- High-reliability contacts: 5 Amp,3 Amp, and 1 Amp
- High shock and vibration
- Robust EMI shielding
- Designed for high speed data applications
- Pre-wired, epoxy-sealed cordsets
- Straight and 90° PC tail receptacles
- 27 Contact arrangements
- Front or rear panel mounting
- Aluminum or stainless steel
- Accepts #22 to #32 AWG wire

CONTACT ARRANGEMENTS

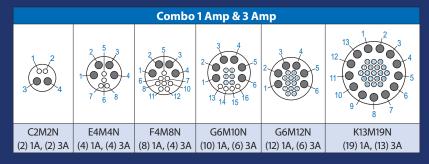
Series 88 SuperFly connectors are available in 27 contact arrangements with 1 Amp, 3 Amp, 5 Amp contacts, and mixed-contact hybrid arrangements







5 Amp Contacts			
		3-000-5	3 0 0 5 6 0 0 8 9 7 10
E3W (3) 5A	F4W (4) 5A	G7W (7) 5A	H10W (10) 5A



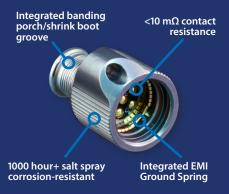
GROUND SOLDIER INTERCONNECT TECHNOLOGY

HiPer 55116

QPL and high-performance MCOTS 55116 Audio / Radio Connector Technology



Series 152 HiPer 55116 connectors offer significant performance advantages for modern soldier communication systems



Fully intermateable and interoperable with MIL-DTL-55116 connectors

- Intermateable and interoperable with standard MIL-DTL-55116 connectors
- Low contact resistance: Less than 10 milliohms
- Integrated EMI ground spring provides improved 2.5 milliohm shell-to-shell conductivity performance
- IP68 rated sealing in mated and unmated condition, prevents water ingress into radio equipment
- 1,000 hour+ salt spray corrosion resistance
- Integrated cable shield termination band porch
- Superior 100 pound cable pull test rating

GLENAIR DLA QUALIFIED SERIES 151 STANDARD MIL-DTL-55116 AUDIO CONNECTORS



151-001 MIL-DTL-55116 QPL audio plug with wire strain relief



151-002 MIL-DTL-55116 QPL audio plug/overmold adapter



151-003 MIL-DTL-55116 QPL radio-mount jam nut receptacle



151-004 MIL-DTL-55116 QPL in-line receptacle, strain relief

SERIES 152 INTERMATEABLE

HiPer 55116

Radio Connectors and Cables

Glenair.

Superior environmental, EMC, and durability performance

SERIES 152 HIPER 55116 CONNECTOR SELECTION GUIDE



Audio plug, field serviceable, with wire strain relief and rigid contacts, crimp and solder cup



Overmolded audio plug cordset with wire strain relief



Audio plug with shield termination porch, overmolding adapter and rigid contacts, crimp and solder cup



Overmolded audio plug cordset



In-line receptacle with shield termination porch, overmolding adapter, and non-rigid spring contacts, crimp and solder cup



Overmolded in-line audio receptacle cordset



Radio-mount jam nut audio receptacle with non-rigid spring contacts or PC tails and optional ground pins



Filtered radio-mount jam nut audio receptacle with non-rigid spring contacts, solder cup or PC tails



Special adapter configurations and protective covers

GROUND SOLDIER INTERCONNECT TECHNOLOGY



Mighty Mouse SealTac™ Push-Pull Connectors and Cable Jumpers



The Mighty Mouse Series 86 SealTac is a durable, environmentally-sealed push-pull connector with outstanding user ergonomics. Receptacle target-contact designs are fully sealed, easy to maintain and clean, and immersible to 30 PSI / IP68 in the unmated condition. Spring pin contacts (plug side) are rated to 2 Amps and can withstand virtually unlimited mating cycles.



- High-durability unlimited life-cycle performance
- 30 PSI open-face / IP68level sealing (box side)
- Ergonomic keyed pushpull mating
- High-density micro miniature form factor
- Maintenance-free spring contact inserts
- Integrated EMI/RFI ground spring and shield termination band porch
- High vibration and shock resistant
- Full qualification testing complete and available

SealTac Tactical Push-Pull Connectors



Spring-pin equipped Mighty Mouse harsh-environmental

SERIES 86 SEALTAC APPLICATIONS



CAISR soldier devices



Rugged computers and hand-helds



Power and data hubs



Tactical Communications Gear



Helmet quick-disconnects

CONNECTOR SELECTION GUIDE

IN-LINE RECEPTACLES



860-051-01

Series 86 spring contact push-pull in-line receptacle for cable applications

IN-LINE PLUG



860-050-06

Series 86 target contact push-pull in-line cable plug

JAM-NUT PLUG



860-050-07

Series 86 target contact push-pull jam-nut mount plug

CABLE JUMPER Receptacle-toreceptacle



861-001

Series 86 spring contact push-pull receptacleto-receptacle overmolded cable jumper

CABLE JUMPER

Plug-to-plug



861-002

Series 86 target contact push-pull plug-toplug overmolded cable jumper

CABLE JUMPER

High-speed HDMI



861-003

Series 86 target contact push-pull plug or spring contact push-pull receptacle-to-HDMI overmolded cable jumper

CABLE JUMPER

High-speed USB 3.0



861-004

Series 86 target contact push-pull plug or spring contact push-pull receptacle-to-USB 3.0 overmolded cable jumper

Series 86 SealTac™ Performance Summary			
	Performance	Specification	
DWV	500 Vac	EIA 364-20	
IR	5 GΩ, 200 Vdc	EIA 364-21	
Temperature Range	-55°C / +125°C		
Contact Ω	40 mΩ	EIA-364-23 (26 AWG wire included)	
Durability	2500 cycles min	EIA-364-09	
Mating Force	8 lbs (size 06) 12 lbs (size 08)	EIA-364-13	
Random Vibration		MIL-STD-810H, method 514.8, Annex E, figure 514.8E-1. One hour each axis, longitudinal and perpendicular axes	
Shock		Mil-Std-810, method 516, Procedure I (40 G's, 11ms). 3 shocks X 3 axes X 2 directions = 18 shocks	
Water Immersion	30 psi, 30 minutes, 100 MΩ min	EIA 364-21, mated and unmated (open face)	



Mighty Mouse micro miniature connector series for optimized SWaP



Mighty Mouse Connectors: Reducing the Size and Weight of Tactical Interconnect Systems for Over 25 Years

- 8 coupling styles and 67 contact arrangements from 1 – 130 contacts
- MIL-DTL-38999 caliber performance
- Size #23, #22, #20, #20HD, #16, #12, #8 signal, power, RF, and high-speed contacts
- Discrete connectors and turnkey cable assemblies

FULL RANGE OF SUPPORTED CONTACTS, 67 CONTACT ARRANGEMENTS

Power



High-Speed





67 arrangements, from 1–130 contacts

Signal

SERIES 80 MICRO MINIATURE

Mighty Mouse Connectors and Cables



Awesome performance, itty-bitty package

CHOOSE FROM 8 DIFFERENT COUPLING DESIGNS















Series 800 **UN thread**

Series 801 double-start ACME thread

Series 802 AquaMouse UNEF thread

Series 803 bayonet coupling



Series 804 quick-disconnect



Series 824 locking quick-disconnect



Series 805 triple-start thread, size #23 contact layouts



Series 806 modified triple-start, size #22HD

and #20HD layouts

AVAILABLE MIGHTY MOUSE CONNECTOR CLASSES



IP67 environmental



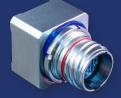
Glass-to-metal seal hermetic



CODE RED Lightweight hermetic



EMI/RFI **Filter**



EMP Transient Voltage Suppression



Bulkhead feed-thrus and penetrators



Sav-Con® connector savers



High-frequency RF / Microwave



High-speed Ethernet



Single- and multimode fiber optic

AVAILABLE COTS SPECIAL-PURPOSE DESIGNS AND PACKAGING



Low-profile COBRA



Mouse Bud



Double-standoff PC tail



COTS flex jumpers



Special feed-thrus

MILITARY VEHICLE INTERCONNECT TECHNOLOGY



SuperSeal RJ45 and USB field connectors. Now available for USB SuperSpeed 3.0



Military-grade, ruggedized field connectors that deliver improved environmental sealing, EMI/RFI grounding, and a broader range of wire termination options for RJ45 and USB—now for SuperSpeed 3.0

Available ruggedized memory stick 32GB, 64GB, and 128GB versions

- New SuperSpeed USB 3.0 protocol support
- Superior sealing—IP67 unmated—for complete system protection against water, sand and dust
- Highly durable SuperSeal™ insert design, provides enhanced operating temperature, increased life-cycle, and rugged vibration and shock performance
- Crimp, solder-cup, PC tail and cable assemblies

SuperSpeed USB 3.0 Ruggedized connectors and cables MIL-DTL-38999 Series III USB / RJ45 field connectors





TURNKEY SUPERSPEED USB 3.0 CABLE ASSEMBLIES AND JUMPERS



Glenair SuperNine USB 3.0 cable jumpers, SuperSeal to standard USB Type A and Micro-B connectors

SuperSeal USB 3.0 connectors are available as turnkey cable jumpers. Rugged field connector styles—including plug, wall mount and jam-nut receptacles—may be cabled with commercial 3.0 connector types including male Type A, female Type A, and male Micro B. Assemblies may be ordered with straight or right angle cable exit. In addition, the USB 3.0 insert may be ordered in horizontal or vertical orientation to provide protection against mis-mating. Maximum overall length is 15 feet.



SUPPORTED USB 3.0 CONNECTOR TYPES



Type A

USB 3.0 female Type A



USB 3.0 male Micro B

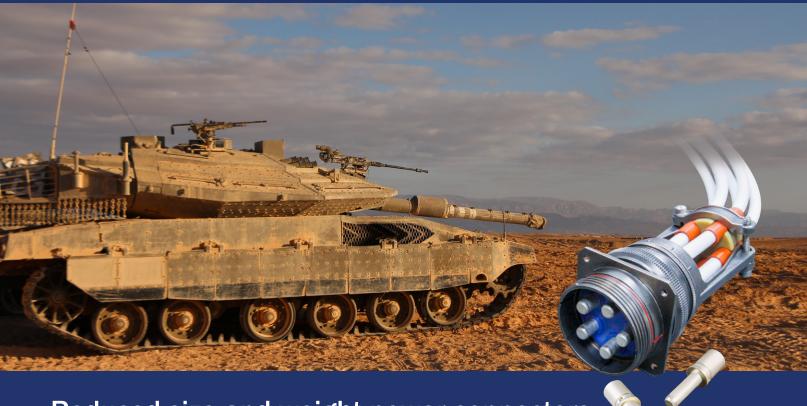




MILITARY VEHICLE INTERCONNECT TECHNOLOGY



Series 970 PowerTrip™ reduced size and weight power connectors for extreme environments



Reduced size and weight power connectors

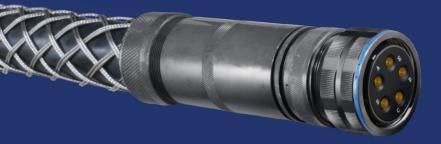


Lightweight plug with ratcheting coupling nut and LouverBand contacts



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

PowerTrip[™] Connectors and Cables



The power connector for extreme environments

SERIES 970 POWERTRIP™ CONNECTOR STYLES







Square Flange Receptacles 970-003



Jam Nut Receptacles 970-004



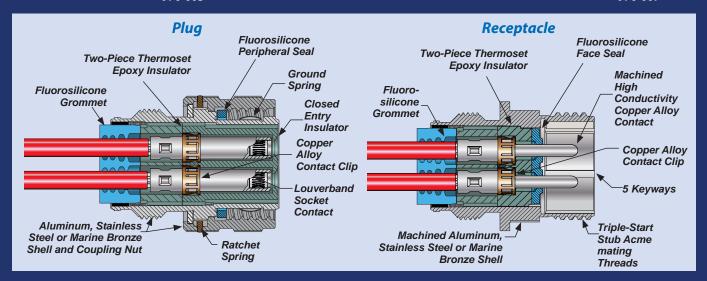
Cable Receptacles 970-005



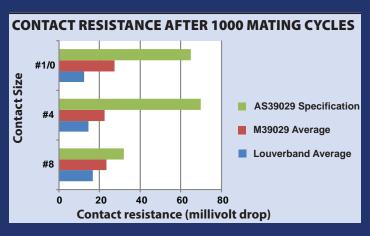
Feed-Thru Bulkhead 970-006



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		



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 aerospacegrade 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

MILITARY VEHICLE INTERCONNECT TECHNOLOGY





The ultra flexible and rugged power cable solution—ideal for rotating turret applications and weight reduction in SWaP-sensitive vehicle applications. TurboFlex cable is jacketed with Duralectric™ to provide outstanding flexibility and resistance to environmental and chemical

exposure.







Many sizes In-stock and available for immediate, same-day shipment. No minimums!

TurboFlex ultra-flexible power distribution cable with rugged Duralectric[™] jacketing



TURBOFLEX CABLE APPLICATION EXAMPLE



This multibranch TurboFlex power and data interconnect assembly for a ruggedized defense application demonstrates the remarkable flexibility and minimal bend radius of large form-factor (up to 450 MCM) TurboFlex cable. Example shown features UV- and chemical-resistant Duralectric jacketing in FED-STD 595C Safety Orange.

ABOUT TURBOFLEX WITH DURALECTRIC™ D JACKETING

Duralectric™ D is a Glenair Signature elastomeric material used in wire insulation, cable and conduit jacketing, overmolding, and shrink boots. Glenair TurboFlex high-flexibility power distribution cables are supplied with Duralectric jacketing in different wall thicknesses, as well as "tell-tale" dual-layering.

TurboFlex core conductors are available in three aerospacegrade material and temperature configurations:

- $-T = Tin/Copper (-60^{\circ} 150^{\circ}C),$
- $-S = Silver/Copper (-60^{\circ} 200^{\circ}C)$
- $-N = Nickel/Copper (-60^{\circ} 260^{\circ}C)$

A signature configuration of TurboFlex is available with high-temperature shielding and lightweight aluminum conductors.







DURALECTRIC™ D PHYSICAL PROPERTIES			
Property	Typical Result	Test Method	
Hardness, Shore A	60	ASTM D2240	
Tensile Strength, psi	1100	ASTM D412	
Elongation, %	500	ASTM D412	
Tear Strength, Die B, ppi	150	ASTM D624	
Low Temperature Impact at -65°C	Pass/No Cracks	ASTM D2137	
Accelerated UV/Sunlight Resistance, 53 yr. Equiv. Exposure	Pass/Excellent	IEC 60068-2-5	
Ozone Resistance	Pass/No Cracks	ASTM D1149	
Zero Halogen	Pass	IEC 754-1	

DURALECTRIC™ D ELECTRICAL PROPERTIES			
Property	Typical Result	Test Method	
Dielectric Strength, kV/mm	19	ASTM D419	
Comparative Tracking Index, VAC	> 600	ASTM D3638	

GENERAL DURALECTRIC D PERFORMANCE SUMMARY

- Service Temperature Range: -65°C to 260°C
- Fire Resistant and Low Smoke-Zero Halogen (LSZH)
- RoHS materials
- Resistant to common aerospace, military and industrial fluids
- UV resistant

DURALECTRIC™ D FIRE RESISTANO	CE PROPERTIES
Property	Typical Result
Flammability	
Oxygen Index, %	45
FAR 25.853, 12 Second Vertical	Pass
FAR 25.853, 60 Degree	Pass
FAR 27.1365 b,c	Pass
BSS7230 Method F2	Pass
IEC60614-1	Pass
EN60695-2-12, 850°C Glow-Wire	Pass
UL1685 FT4/IEEE1202	Pass
Smoke Density	
BSS7238	Pass
NES 711	Pass
EN 60695-2-11	Pass
UL1685 FT4/IEEE1202	Pass
Combustion Toxicity	
BSS7239	Pass
NES 713	Pass
SMP800 C	Pass

MILITARY VEHICLE INTERCONNECT TECHNOLOGY



DLA, Navy, and TACOM-Qualified environmental heatshrink boots and molded shapes



For advanced abrasion protection, environmental sealing, splicing, and wire protection





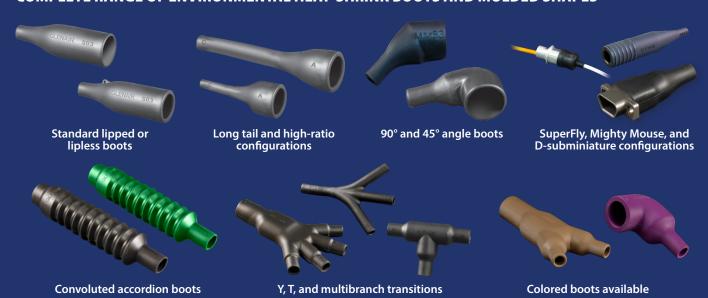
Autoshrink D UV-Resistant / LSZH Autoshrink F Advanced Fluid Resistant Autoshrink S Subsea Autoshrink T High-Temperature-Tolerant

Heat-Shrink and Autoshrink™ **Boots and Molded Shapes**



abrasion protection · environmental sealing · splicing

COMPLETE RANGE OF ENVIRONMENTAL HEAT-SHRINK BOOTS AND MOLDED SHAPES



		Gierian Seri	C3// I dill	TCISOII IAC	201
Description	Military Part Number	Glenair Part Number	Raychem Part Number	Hellermann Part Number	0
	12273148-1**	770-009Y*05	381A301-**	492H412-*	
	12273148-2**	770-009Y*06	381A302-**	492H413-*	1
Heat Shrinkable Low Profile	12273148-3**	770-009Y*07-01	381A303-*01	492H414-*01	1
3-Entry	12273148-4**	770-009Y*08-01	381A304-*01	492H415-*01	l
"Y" Transition	12273148-5**	770-009Y*07	381A303-**	_	Hea Stra
Heat Shrinkable	12273162-1**	770-012T*01	301A511-**	412H622-*	2-E
Low Profile	12273162-2**	770-012T*02	301A512-**	412H623-*	Lon
3-Entry	12273162-3**	770-012T*03	301A513-**	412H624-*	
"T" Transition	12273162-4**	770-012T*04	301A514-**	412H625-*	
Heat Shrinkable	12273163-1**	770-014*09	462A421-**	573H532-*	
Low Profile	12273163-2**	770-014*10	462A422-**	573H533-*	ا ا
4-Entry	12273163-3**	770-014*11	462A423-**	573H534-*	Hea 90°
3:1 Transition	12273163-4**	770-014*12	462A424-**	573H535-*	2-E
	12273164-1**	770-019SB*01	202E334-**	313E445-*	Lon
Heat Shrinkable	12273164-2**	770-019SB*02	202E344-**	313E455-*	
Adapter	12273164-3**	770-019SB*03	202E336-**	313E447-*	
Shim Boot	12273164-4**	770-019SB*04	202E346-**	313E457-*	·
	12273242-1**	770-022C*01	202C611-**	313C722-9	
	12273242-2**	770-022C*02	202C621-**	313C732-9	
	12273242-3**	770-022C*03	202C632-**	313C743-9	
	12273242-4**	770-022C*04	202C642-**	313C753-9	
	12273242-5**	770-022C*05	202C653-**	313C764-9	
Heat Shrinkable	12273242-6**		202G621-**	_	
Convoluted	12273242-7**	_	202G632-**	_	
	I	1		1	





M85049/140 (straight), /141 (right-angle), and /142 (transitions)

12273242-8**

12273242-9**

202C642-**

202C653-**

Strain Relief 2-Entry Boot AEROSPACE/ MISSILE SYSTEMS INTERCONNECT TECHNOLOGY



VersaLink[™], SpeedMaster[™], El Ochito[®], and other Signature high-speed datalink connectors



Glenair Signature high-speed interconnects are optimized for all popular datalink protocol standards











RF/HIGH-SPEED DATALINK CONTACTS



Size #8 differential twinax contacts



quadrax contacts

Size #8 spring-loaded BMB microwave contacts



Size #12 SMPM type spring-loaded coaxial



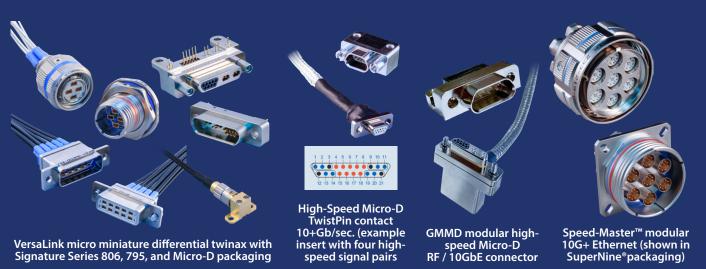
G-LinkRF SMA contact adapter

High-Speed Datalink Interconnect Solutions up to 28 Gbps





GLENAIR SIGNATURE HIGH-SPEED CONNECTOR SERIES



AEROSPACE/ MISSILE SYSTEMS INTERCONNECT TECHNOLOGY



The advanced-performance MIL-DTL-38999 Series III type connector



SuperNine® is a "Better-than-QPL" MIL-DTL-38999 series connector with outstanding durability, sealing, ease of shield termination, broad range of PC tail configurations, environmental and hermetic bulkhead feed-throughs, connector savers, as well as off-the-shelf EMI/EMP filter connectors and more—all with Glenair's legendary service, support, and product availability





Designed for use in rugged vibration and shock applications, Glenair SuperNine is the only D38999-type series connector to pass the Bell Helicopter 299-100-B29 vibration testing

SuperNine® MIL-DTL-38999 Series III Type

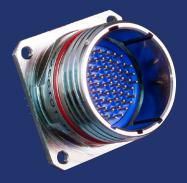
flenair.

Advanced performance aerospace / defense connectors

RUGGED, HIGH VIBRATION AND SHOCK COUPLING AND MATING TECHNOLOGY



Anti-decoupling, high vibration ratcheting coupling nut for ultimate safety and reliability



Triple-start stub ACME mating thread profile for fast mate and demate during maintenance cycles



Special-purpose high-voltage in MIL-DTL-38999 Series III packaging

BROAD RANGE OF PC TAIL STANDOFF DESIGNS FOR I/O-TO-BOARD APPLICATIONS



Dual standoff design for superior resistance to vibration and shock

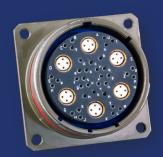


EMI / RFI planar-array filter connector for critical avionic systems



Ultra low-profile flat configuration for reduced package size applications

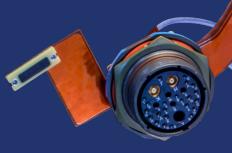
HIGH-SPEED AND RF DESIGNS FOR SENSORS AND SATELLITE UPLINK DATA COMMS



Industry-standard Quadrax-equipped layouts for signal and high-speed data



Ultra-light weight Octaxial contacts for 10Gb data transfer per contact



High-frequency RF designs for satcom communications

AEROSPACE/ MISSILE SYSTEMS INTERCONNECT TECHNOLOGY



Series 806 Mil-Aero: Advanced performance, reduced size and weight



Innovative design meets key performance benchmarks for harsh vibration, shock, and environmental settings—as well as high-altitude, unpressurized aircraft zones with aggressive voltage ratings and altitude immersion standards.

SIZE AND WEIGHT SAVING SOLUTIONS: CATALOG OR CUSTOM



- Next-generation small form factor aerospacegrade circular connector
- Designed for harsh application environments including SWAMP-zone sensors, flight navigation electronics, and flight deck avionics
- Integrated antidecoupling technology
- High density 20HD, 22HD, RF, power, and high-speed contact arrangements
- Hermetic and filter versions
- +200°C temperature rating

Series 806 Mil-Aero **Ultraminiature Circular Connectors**



for harsh mil-aero applications IAW MIL-DTL-38999

SERIES 806 MIL-AERO: FEATURES / SPECIFICATIONS

- **Supported wire sizes:** #20HD contacts 20-24 AWG **#22HD contacts** 22-28AWG
- Dielectric withstanding voltage #20HD layouts: 1800 VAC #22HD layouts: 1300



- "Triple ripple" wire sealing grommet (75,000 ft. rated)
- **Integral Nano-Band shield termination** platform
- EMI shielding effectiveness per D38999M para. 4.5.28 (65 dB min. leakage attenuation @ 10GHz)
- 10,000 amp indirect lightning strike
- MIL-S-901 Grade A high impact shock

AVAILABLE LIGHTWEIGHT ALUMINUM "CODE RED" HERMETICS

CODE RED is a lightweight encapsulant sealing and assembly process with 50% package-weight savings compared to glass-to-metal seal Kovar/stainless steel solutions. Non-outgassing

CODE RED (IAW NASA/ ESA) provides durable hermetic sealing with 1X10⁻⁷ leak rate performance. Gold-plated copper contacts deliver outstanding lowresistance current

carrying capacity.









SMALLER AND LIGHTER WITH EQUAL D38999 PERFORMANCE?

High-Density Lavouts

in a smaller package

"Top Hat" *Insulator*

Twice as many contacts High voltage rating, foolproof alignment

Triple Ripple Wire Seal Reliable 75,000 ft.

altitude immersion









The Nano miniature Shielded Octaxial Interconnect for High-Speed Datalink Protocols



High speed, harsh environment SuperFly® Datalink connectors—shielded for 10Gb Ethernet, SuperSpeed USB, HDMI, SATA, and DisplayPort protocols—deliver outstanding signal integrity and save significant size and weight compared to Quadrax solutions.

PANEL MOUNT CONNECTOR



Panel mount SuperFly Datalink receptacles feature straight or right angle printed circuit board terminals. SuperFly Datalink board mount jacks are epoxy-sealed and are compatible with conformal coatings.



Threaded Coupling





Straight PC Tails

Right Angle PC Tails

SuperFly® Datalink



The high-speed nano miniature connector for harsh environment defense applications

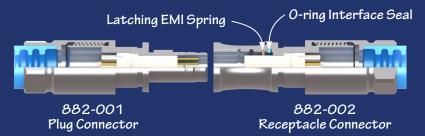


The High-Speed Ultraminiature Connector for Harsh Environments



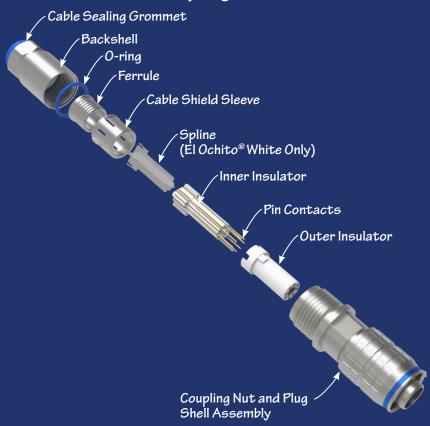
- Ultra-small size
- Shielded Octaxial contacts
- Combo arrangement for HDMI 2.0 and DisplayPort 1.2
- 40Gb Ethernet, SATA and SuperSpeed USB
- Up to 10 Gbps per pair
- PCB or cable termination
- Threaded or Quick-disconnect
- Environmentally protected
- Aerospace-grade performance
- Panel-mount connectors fully-sealed for compatibility with conformal coatings used in board assembly

Push-Pull Quick-Disconnect



Push-pull SuperFly Datalink receptacle connectors feature a canted coil spring for secure mating and excellent EMI protection. A fluorosilicone O-ring provides watertight sealing when mated.

Threaded Coupling Cable Connector



Cable connectors feature gold-plated crimp contacts, precision insulators, integral backshell, sealing grommet and machined shells. Cable connectors are available as unassembled kits or ready-to-use factory-terminated cordsets.



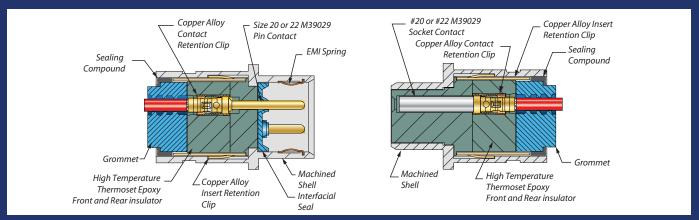
Advanced-Performance HiPer-D Connectors—Aerospace-Grade M24308 Intermateable



HiPer-D: the advanced-performance M24308 intermateable with one-piece precision-machined shells and enhanced shielding, sealing, and high temperature and vibration tolerance

- Advanced temperature, vibration and EMC/ electrical performance
- 11 standard and 20 combo insert arrangements
- High temperature epoxy insulators
- Watertight sealing
- Rugged machined onepiece shell

STANDARD AND HIGH DENSITY HiPer-D® - CUTAWAY



HiPer-D Aerospace-Grade M24308 Connectors



Precision-machined · shielded · sealed

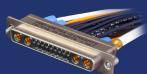
Glenair HiPer-D M24308 D-sub connectors are ideally suited for both high-altitude and exoatmospheric applications including jet aircraft avionic systems and military defense on-board satellite computers. Connectors are supplied with auxiliary grounding fingers, fully-sealed inserts, accommodation for precision-machined backshells, and are fabricated with materials and production processes designed to eliminate the broad range of electrical, mechanical, and environmental failure modes endemic in stamped-and-formed connector packaging.

HiPer-D High-Performance D-Sub vs. MIL-STD-24308			
Specification / Feature	M24308	HiPer-D	
Temperature	-55°C to +125°C	-65°C to +200°C	
Insulator	Thermoplastic	Thermoset Epoxy	
Shell	Steel (Brass)	Aluminum (SST)	
Voltage	1000 VAC	1000 VAC	
Grounding	Dimples in shell (not in Mil-Spec)	Nickel-plated Copper Alloy EMI spring	
Environmental	No	Yes	
Vibration, sine	20 g	60 g	
Vibration, random	N/A	43 g	
Shock	50 g	300 g	
Bolt-on backshells	No	Yes	

HIPER-D M24308 COMBO-DS FOR POWER, SIGNAL, AND RF APPLICATIONS

- Size #8 power and 50 ohm or 75 ohm RF contacts
- Mixed layouts with #8's and #20's
- 200°C continuous operating temperature
- 20 tooled layouts
- Crimp and PC tail terminations





HIGH-SPEED HIPER-D HIGH-PERFORMANCE M24308

Crimp contact non-environmental connectors with #8 contacts for high-speed data transmission

- One-piece rugged machined aluminum shell
- Two to five size 8 Coax, Twinax, or Quadrax contacts
- Common ground plane (no insulators)
- Available in straight and right angle PCB versions
- Non scoop-proof solution. For scoop-proof rectangular connector requirements, see Series 792

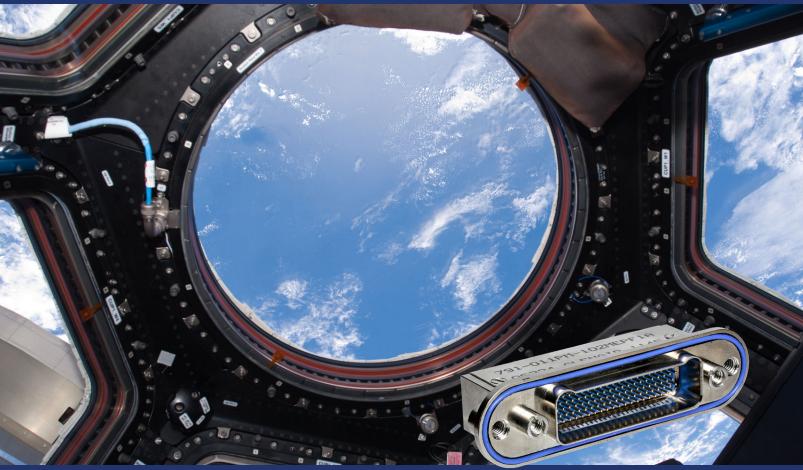




NEXT-GENERATION MICRO MINIATURE CONNECTORS



High-density, crimp-contact, power and signal connectors with precision-machined micro miniature packaging



Originally designed for NASA's Orion project, the 791's small size and blind mate capability make it a perfect choice for 2U and 3U electronics modules. Applications include radars, satcom,

exoatmospheric vehicles, flight avionics, power distribution units, and satellite instrumentation. Polarized / keyed shells prevent mis-mating and allow designers to specify identical layouts side-byside without risk of circuit damage

- Next-generation small form factor aerospacegrade rectangular connector
- Scoop-proof recessed pin contacts
- 37 arrangements, 12 shell sizes for the ultimate in versatility
- Rugged aluminum alloy dual-lobe shell
- Environmental
- EMI shielded
- Blind mating



High-speed El Ochito® variants of Glenair Signature micro miniature crimp-contact rectangular connectors





The Series 792 connector brings high-speed

to the Glenair Series
79 rectangular family.
Size 8 cavities accept
standard Quadrax or El
Ochito® shielded octaxial

contacts making it a perfect choice for radars, weapons systems, mission computers and displays, communications gear, and more.

- High-speed Ethernet, USB 3.0, HDMI
- Printed circuit board and cable connectors
- Scoop-proof interface
- 12 arrangements, 6 shell sizes for the ultimate in versatility
- Rugged aluminum alloy dual-lobe polarized shells
- Environmentally sealed
- Integrated EMI shielding and grounding
- Blind mating



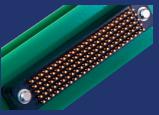
High-density, solder-free, compliant pin board-to-board stackable connectors



HD Stacker: the innovative missioncritical board-to-board connector with fail-safe signal integrity and rugged, reliable harsh-environment performance



Solder-free press-fit (compliant pin) board mounting



.0625" pitch contact spacing: highest available density



Polarized shells and keyed guide pin hardware prevent mis-mating

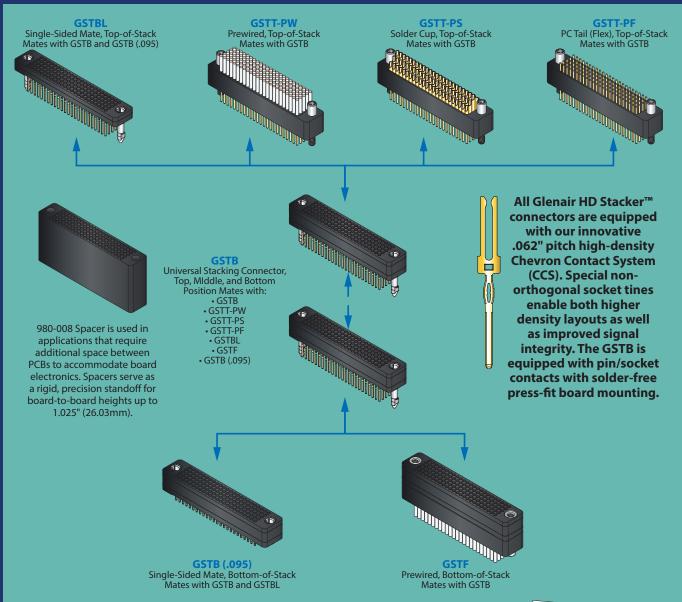
- High-density .0625" pitch Chevron Contact System: 55% more contacts per connector size
- PCIe 3.0 capable
- Performance up to 10.5 Gbps
- Polarized insulator and hardware options
- Solder free "eye of the needle" compliant tail for press fit installation
- High-temp PPS insulator meets NASA outgassing requirements
- Available wired / flex iumpers
- Available between-board spacers up to 1 inch

HD Stacker[™]



High-density, rugged, solder-free compliant pin board-to-board stackable connectors

HD STACKER™ POSITION AND MATING COMPATIBILITY GUIDE



QUALIFICATION TESTING / HIGH-SPEED PERFORMANCE

Stacker connectors were qualified in accordance with MIL-DTL-55302G testing for:

- Contact engagement/separation
- Contact retention
- DWV

- Electrical resistance
- Mechanical vibration and shock
- Insulation resistance
- Thermal shock
- Contact resistance
- Humidity

High-frequency electrical performance tests were performed for: Insertion loss, return loss, crosstalk, and time domain performance metrics including impedance and eye pattern. Complete test reports are available at www.glenair.com/test-reports-and-technical-information





MIL-DTL-83513 and Glenair Signature Micro-D Connectors and Splice-Free Cable Assemblies



TwistPin equipped MIL-DTL-83513 Micro-D connectors and cables offer outstanding mating performance, durability, low contact resistance, and same-day availability

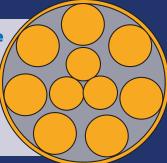


cable assemblies

- High density TwistPin contacts on .050" centers
- Turnkey multibranch and complex cable assemblies
- 9 to 130 contact arrangements
- Single row, multi-row, low profile and high density insert arrangements
- QPL and commercial versions

The Micro TwistPin Advantage

Seven strands of TwistPin BeCu wire make direct contact with the machined socket, assuring low resistance, plenty of contact wipe, and superior shock and vibration performance.



MIL-DTL-83513 AND COMMERCIAL

Micro-D Connectors



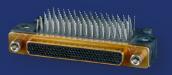
Mission-critical mating performance industry-leading selection and availability

MATERIAL CLASSES AND QUALIFICATIONS









Environmental Hermetic

EMI / RFI Filter

Space-Grade

TERMINATION STYLES









Flex

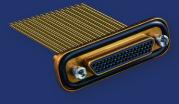
PCB

Pigtail

Solder

WIRED / CABLED CONFIGURATIONS









Shielded

Uninsulated

Insulated

Back-to-Back

PCB DESIGNS









Vertical

Horizontal

Surface-Mount

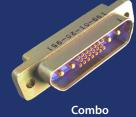
Shrouded

SPECIAL-PURPOSE DESIGNS









High-Temperature

Sav-Con®

Latching MicroStrip



MIL-DTL-32139 QPL and Glenair Signature Nano miniature connector designs



The M32139 Nano is the smallest and lightest mil-spec connector in the business.

1 Amp contacts are set on .025" centers and terminated to 30 AWG wire or PCB tails.

Glenair supplies both standard QPL designs as well as a broader range of signature offerings.

- Single and double row
- Metal shell, aluminum, titanium or stainless steel
- TwistPin contact system
- Gold alloy contact, unplated
- Thru-hole and surfacemount PCB versions



Nano miniature Connectors



Nano high density - single- and dual-row - cable and PCB

Series 89 Nano miniature		
Connector	Performance	
Contact Spacing	.025" (0.64mm) Contact Centers	
Wire Accommodation	#30-#32 AWG	
Current Rating	1 AMP Max	
DWV	250 VAC RMS Sea Level	
Insulation Resistance	5000 Megohms Minimum	
Operating Temperature	-55° C. to +125° C.	
Contact Resistance	71 Millivolt Drop Maximum	
Shock, Vibration	100g's, 20 g's	
Durability	200 Mating Cycles	
Corrosion Resistance	48 Hours Salt Spray	
Mating Force	5 Ounce Max, 0.4 Ounce Min	

How Small Are They?



D-Subminiature Connector

25 Contacts on 0.109 Inch Spacing



Micro-D Connector

25 Contacts on 0.050 Inch Spacing



Nano Connector

25 Contacts on 0.025 Inch Spacing



Nano circulars

Nano Circular Connectors and Accessories



Nano Rectangular Single-Row Connectors and Accessories





Nano Rectangular Dual-Row Connectors and Accessories



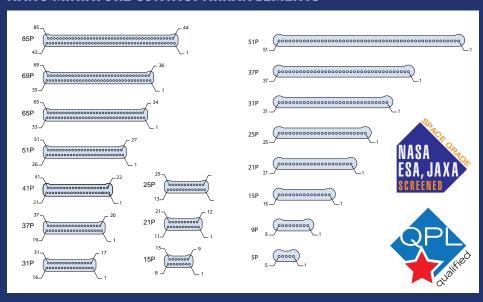


MIL-DTL-32139
Qualified
Connectors
and Accessories





NANO MINIATURE CONTACT ARRANGEMENTS





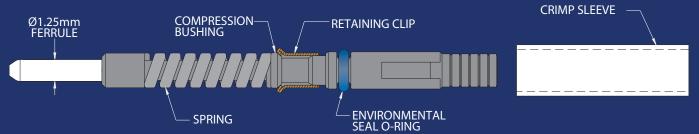
Glenair High Density (GHD) and other Aerospace-Grade Fiber Optic Connection Systems



Our extensive portfolio of high-speed, high-datarate fiber optic connection systems for military defense applications includes QPL'd MIL-T-29504 termini for Mil-standard 38999 fiber optic connectors, ARINC 801 fiber optic connectors and qualified termini, NAVSEA-qualified 28876 fiber optic connectors and qualified termini, and Glenair Signature High-Density (GHD).

DESIGNED FOR

- Low mass
- Dynamic vibration and shock resistance
- Extreme temperature resistance
- Environmentally sealed
- flammability, toxicity, lowsmoke
- Indirect lightning strike
- ease-of-maintenance
- uncompromised reliability



GHD's high-density cavity spacing is achieved with an innovative front-release terminus design that incorporates a high-force spring and compression bushing that enables low-loss performance even in high-vibration / high-shock applications.

Fiber Optic Interconnect Systems



lightweight ferrule (7mm x 3mm)

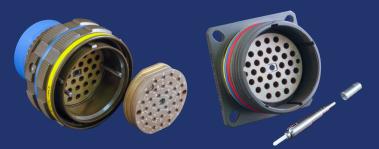
Ruggedized, harsh-environment solutions

ALSO-AVAILABLE MIL-STANDARD TECHNOLOGY: MT FERRULE FIBER OPTICS Rugged, High-Density Lens ferrule Up to 24 fibers in a single compact,

ALSO-AVAILABLE MIL-STANDARD TECHNOLOGY: MIL-PRF-28876 AND NGCON FIBER OPTICS



ALSO-AVAILABLE MIL-STANDARD TECHNOLOGY: ULTRA-LOW dB LOSS ARINC 801 FIBER OPTICS



- Genderless terminus design eliminates pin and socket complexity
- Rear-release size #16 termini
- Singlemode and multimode
- Mechanical and environmental performance IAW ARINC 801 standards
- Sav-Con Connector Savers available

ALSO-AVAILABLE MIL-STANDARD TECHNOLOGY: TIGHT-TOLERANCE MIL-DTL-38999 SERIES III TYPE



- Composite, aluminum and stainless steel shells available
- QPL size #16 MIL-PRF-29504 /4 and /5 precision ceramic termini
- Singlemode and multimode fiber, from 9/125 to 1000 microns
- Ultra-low insertion loss, <.50dB typical
- From 2 to 37 Termini
- Patented MIL-DTL-38999 fiber optic test probes and adapters



EMI/RFI Filter Connectors and EMP Suppression: Planar Array Power, Signal,



Planar filter array and TVS diode connectors diodes in standard catalog as well as build-to-order configurations

Table I: Capacitor Array Code / Capacitance Range		
Class	Pi - Circuit (pF)	C - Circuit (pF)
Х	160,000 - 240,000	80,000 - 120,000
Υ	80,000 - 120,000	40,000 - 60,000
Z	60,000 - 90,000	30,000 - 45,000
Α	38,000 - 56,000	19,000 - 28,000
В	32,000 - 45,000	16,000 - 22,500
С	18,000 - 33,000	9,000 - 16,500
D	8,000 - 12,000	4,000 - 6,000
Е	3,300 - 5,000	1,650 - 2,500
F	800 - 1,300	400 - 650
G	400 - 600	200 - 300
J	70-120	35-60



Planar filter arrays and TVS diodes may also be incorporated into rectangular connector packaging such as the Micro-D and Series 79 Micro-Crimp devices shown here.

- Planar, multilayer ceramic capacitive filters, with and without transient voltage suppression diodes
- Space-grade plating and outgassing processing
- C and Pi electrical configurations
- PC tail, crimp or solder cup termination
- 35 240,000 pF capacitance
- Fast and reliable diode burn-in and test services
- **Turnkey in-house** manufacturing of all filter connector elements and processes

EMI/EMP Filter connectors

Glenair.

Innovative designs - total vertical integration



Extended-shell PC-tail cylindrical filter with threaded standoff



Special-purpose filter connector cable adapter (Sav-Con®)



Custom reduced-length sidecar filter connector design



Series 80 Mighty Mouse PC-tail filter receptacle



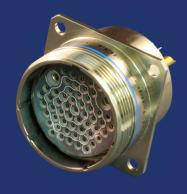
Series 80 Mighty Mouse solder-cup filter receptacle with integrated banding porch



MIL-DTL-38999 type crimp-contact termination filter receptacle



MIL-DTL-38999 Series III type EMP TVS diodeequipped filter connector



MIL-DTL-83723 type filter connector, gold-plated for atomic oxygen corrosion resistance



Quick-disconnect circular with solder-free contact filter array





Resolve gas, moisture and particle ingress problems with conventional glass-sealed hermetic or advanced CODE RED lightweight encapsulant-sealed designs

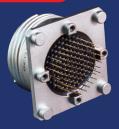
ALL SOLUTIONS DELIVER

- Superior pressure resistance to 32.000+ PSI
- Higher resistance to extreme operating temperatures to 260°+ C
- Superior mechanical strength
- No material breakdown or aging over time
- Helium leak rate <1X10⁻⁷ cc/sec to 1X10⁻¹⁰

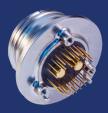
CODE RED

LIGHTWEIGHT HERMETIC SEALING

Lightweight hermetic encapsulant sealing solution with 1X10⁻⁷ leak rate performance. Available today in Mighty Mouse 806 Mil-Aero, M24308/9 D-Sub and D38999/23







Aluminum shell
CODE RED hermetic
connectors and
copper contacts
reduce weight and
improve electrical
performance
compared to
heavier-duty
glass-to-metal seal
hermetic solutions

Glass-Sealed Hermetic Connectors



Thousands of same-day-availability part numbers

UNIQUE HERMETIC OFFERINGS AND CATALOG (COTS) SOLUTIONS



Coax, Triax, Quadrax and hybrid-contact layouts



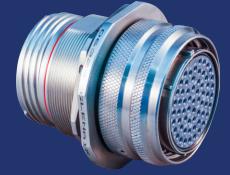
Rectangular hermetics including Series 28 HiPer-D and Series 79



El Ochito high-speed octaxial contacts in a lightweight CODE-RED sealed bulkhead feed-thru



Triax hermetic



Hermetic Sav-Con Feed-thrus and Gender Changers



Dual-flange PC tail hermetic



Hermetic with crimpremovable contacts



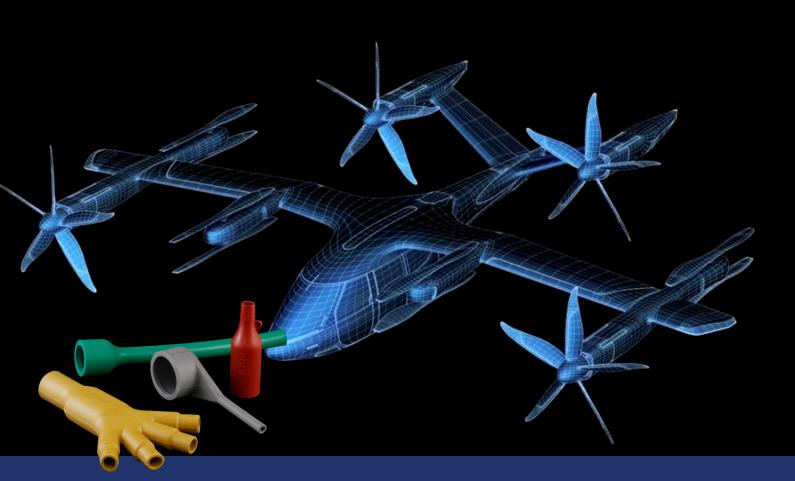
Hermetic bulkhead penetrators



Hermetic receptacles with integrated band porch



Aerospace backshell and accessory designs for weight reduction and life-of-aircraft durability



Innovative solutions to EWIS
environmental sealing, wire management,
strain relief, and EMC shield termination
Glenair is the go-to design partner for
innovative solutions to electrical

wire interconnect system (EWIS) problems in airframe applications.

Composite thermoplastic backshells and strain reliefs reduce weight and improve durability

GLENAIR: MASTERS OF THE BACKSHELL UNIVERSE

- High-performance circular connector accessories for every environmental, mechanical and electromagnetic shielding requirements
- Tens of thousands of innovative part numbers in inventory ready for sameday shipment
- Fast turnaround on made-to-order accessories, typically only two to three weeks
- Constant, relentless backshell innovation

NEW INNOVATIONS IN

Connector Backshells and Accessories



Unique, problem-solving backshells and connector accessories for aerospace applications

HIGH-TEMP, LIGHTWEIGHT COMPOSITE THERMOPLASTIC ACCESSORIES



Split-shell and snap-lock banding backshells



Dummy stowage shorting plugs and receptacles



Piggyback boot Band-in-a-Can



Drop-in EMI/RFI shield termination configurations

DROP-IN FOLLOWER FOR DIRECT TERMINATION OF OVERALL OR INDIVIDUAL WIRE SHIELDING



Two drop-in-follower designs, solid and slotted are available for all Swing-Arm styles (A, B, and C).



SWING-ARM AND SWING-ARM FLEX WITH OPTIONAL INTEGRATED SHIELD SOCK



For fast and reliable EMI/ RFI shield termination of individual wire and overall cable shielding



INNOVATIVE NEW EWIS TECHNOLOGIES



Self-locking protective covers



Split-shell snap-lock rectangular composite backshells



Leonardo's ProSeal spring-loaded protective covers



Lightweight SpliceSaver single- and multi-wire series



Heat shrink boot / wire routing clamp assembly



NAVY / SHIPBOARD INTERCONNECT TECHNOLOGY



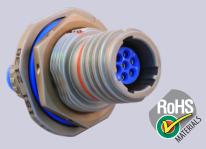
Qualified MIL-DTL-28840 Connectors and Accessories: Every Slash Sheet, No Gaps



- High density, scoop proof contact arrangements
- Flange mount, box mount, jam-nut and in-line receptacles
- Straight, 45° and 90° strain reliefs and backshell assemblies
- Sav-Con® connector savers and bulkhead feedthrus
- Contact and connector assembly tools

MIL-DTL-28840 qualified connectors and accessories. Splined connector-to-backshell interface is ideally suited for heavy backshells and cables

QUALIFIED CADMIUM-FREE AND COMPATIBLE TIN-ZINC (TZ) PLATING FOR CLASS CODE L AND M (CLASS T AND TJ) NAVY LAND AND MARITIME APPLICATIONS.



L - Class T: Aluminum, Tin-Zinc Plate over Electroless Nickel, Non-Reflective

- 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

Connectors and Accessories

with in-stock same-day availability



MIL-DTL-28840 • FULLY-QUALIFIED • EVERY SLASH SHEET • NO GAPS • IN-STOCK AVAILABILITY



Contacts

M39029/83 pin and /84 socket



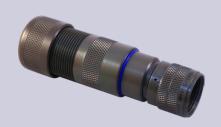
Clamps

M28840/1 straight M28840/2 90° M28840/3 45°



Conduit

M28840/4 Metal-Core



Conduit Fittings

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"



Backshells

M28840/8 90° EMI/RFI Environmental M28840/ 45° EMI/RFI Environmental Backshell



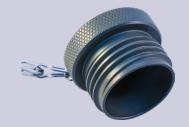
Connectors

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



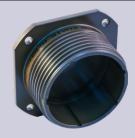
Connector / Backshell Assemblies

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 Recpt., 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



Protective Covers

M28840/13 Protective Receptacle Cover M28840/15 Protective Plug Cover



Tools and Accessories

M28840/7 Dummy Stowage Receptacle M28840/24 Mounting Gasket NAVY / SHIPBOARD INTERCONNECT TECHNOLOGY



QPL and Glenair **Signature** MIL-PRF-28876 **Fiber Optic Connection System**



Qualified MIL-PRF-28876 fiber optic connectors and MIL-PRF-29504 termini-Navy approved, in stock, and ready for immediate shipment



plug with backshell receptacle

M28876/2 receptacle with backshell

- **Connectors qualified** to the complete requirements of MIL-PRF-28876: plugs, wall-mount receptacles, jam-nut receptacles, and in-line receptacles
- Multiple shell sizes and insert arrangements, including 2, 4, 6, 8, 18 and 31 channel layouts
- Backshells in straight, 45° and 90° configurations
- Corrosion-resistant and environmentally sealed
- **Qualified** MIL-PRF-29504/14 and /15 pin and socket termini and /03 dummy terminus
- Same-day availability

MIL-PRF-28876



NAVSEA-qualified fiber optic connection system

Connector/Backshell Types			
Connector Type	Backshell Type	MIL-Spec	Commercial Connector Type Code
	None	M28876/1	03
Wall Mount	Straight	M28876/2	13
Receptacle	45°	M28876/3	23
	90°	M28876/4	33
In-Line Receptacle	Straight	M28876/5	15
Plug	None	M28876/6	06
	Straight	M28876/7	16
	45°	M28876/8	26
	90°	M28876/9	36
	None	M28876/11	04
Jam Nut	Straight	M28876/12	14
Receptacle	45°	M28876/13	24
MATERIAL	90°	M28876/14	34

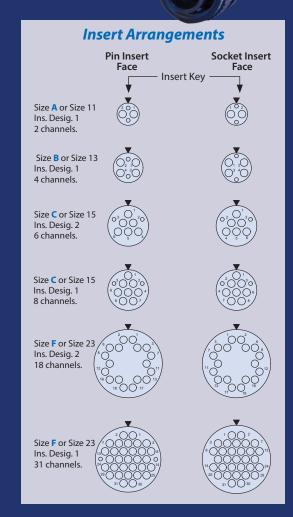
Qualified Fiber Optic Termini			
Туре	Military Part Number	A Dia (Microns)	Typical Fiber Type
Pin Termini	M29504/14-4131C	126.0	Multi Mode
	M29504/14-4132C	127.0	Multi Mode
	M29504/14-4135C	142.0	Multi Mode
Socket Termini	M29504/15-4171C	126.0	Multi Mode
	M29504/15-4172C	127.0	Multi Mode
	M29504/15-4175C	142.0	Multi Mode
Dummy Terminus	M29504/03-4038		
Crimp sleeve is supplied with terminus assembly and may be ordered			

Crimp sleeve is supplied with terminus assembly and may be ordered separately (see Table II). For terminus less crimp sleeve, omit **C** from end of part number. Consult factory for additional sizes.

Terminated and tested MIL-PRF-28876 fiber optic cable assembly



Test Description	Performance Requirements/ Specifications
Optical Insertion Loss, Multimode	-0.3 dB Typical (62.5/125)
Optical Insertion Loss, Singlemode	-0.3 dB Typical (9/125)
Optical Back Reflection, Singlemode	Better than -40 dB - PC Polish • Better than -50 dB - Enhanced PC Polish
Operating Temperature	-28°C to +65°C (MIL-Spec Epoxy and Cable) -55°C to +125°C (alternative Epoxy and Cable)
Temperature (Thermal) Shock	-40°C to +70°C, 5 Cycles
Temperature Cycling	-28°C to +65°C, 5 Cycles
Temperature/Humidity Cycling	-10°C to +65°C, 10 Cycles, 240 hours, 98% RH
Temperature Life Aging	+110°C, 240 hours, Dry Air
Mating Durability	500 cycles
Vibration - Sinusoidal	10 g Peak, 5-500 Hz sin./ 10.2 g RMS, 50-2000 Hz random
Impact	8 Drops from 8 feet
Crush Resistance	281 lbs, 7 Cycles
Cable Pull Out Force - Termini	Termini: 22 lbs min for 1 minute Connector: 162 lbs min for 10 minutes
Fluid Immersion	Turbine Fuel, Isopropyl Alcohol, Hydraulic Fluid, Lubricating Oil, Coolant, Tap- and seawater, 24 hrs
Water Pressure	32 feet for 48 hours at +10°C to +35°C
Mechanical Shock (High Impact)	MIL-S-901, Grade A, Type B, Class I
Corrosion Resistance (Salt Spray)	500 hours
Sand and Dust	12 hours
Flammability	0.75 inch flame for 10 sec. mated, 1.50 inch flame for 60 sec. unmated
*Performance Specifications/Requirements based on the use of MIL-PRF-24792 Epoxy and MIL-PRF-85045 Simplex and Breakout Shipboard Optical Fiber.	



NAVY / SHIPBOARD INTERCONNECT TECHNOLOGY

Braided Ground Straps: Glenair Signature and QPL Solutions for ESD, Lightning Strike, and Electrical Power Applications



Weight-Saving ArmorLite[™] Microfilament Solutions for shipboard and submarine equipment grounding and bus bar applications ground strap technologies exactingly designed with appropriate conductive and dissipative materials for each application.

require

- Durable conductive braided straps for equipment grounding
- Highly flexible and conductive for bus bar power connections
- Exotic metal-clad microfilament braided solutions
- Heavy-duty variants for electrical potential grounding from engines, starters, and power units
- Fast turnaround on requests for unusual and build-to-print requirements

US Navy-qualified MIL-DTL-24749 Type IV ground strap

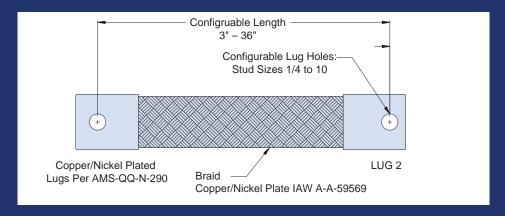
Braided Ground Straps



Mil-spec and Glenair Signature lightweight designs

107-086 GROUND STRAPS FOR SUBMARINE APPLICATIONS

- Materials and design in accordance with Commercial Item Description A-A-59569 for grounding bonds
- Low-profile nickelplated copper lugs with configurable mounting hole size options
- Nickel-plated copper braid material conforms to ASTM B355



M24749 TYPE IV MIL-SPEC AND GLENAIR SIGNATURE "BETTER THAN QPL" CONFIGURATIONS



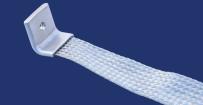
- Meets the rigorous specifications of MIL-DTL-24749 Rev. C with width, length, and lug configuration options beyond standard mil-spec straps
- Tested to survive 1000 hours salt spray
- Unique Stainless Steel/Nickel hybrid braid
- Lightweight, durable, configurable crimp lugs: square, radiused, straight, single- and double-right-angle versions

VARIABLE LUG / HOLE / STRAP CONFIGURATION OPTIONS AVAILABLE ON ALL STYLES





Available black or clear sleeving over strap. Square or radiused lugs and variable hole sizes



Straight, single right-angle, and dual right-angle configurable lugs

GROUND CONTROL EARTH BOND SYSTEM



The Ground Control Earth Bonding system is an efficient, easy-to-use method to create an electrical bond between structures and equipment for the secure passage of high intensity current in case of electrical short circuit.

How To Order	
600-120	Hydraulic Setting Tool for 1/4" Earth Bonds
600-123	Hydraulic Setting Tool for 3/8" Earth Bonds
600-124	Hydraulic Setting Tool for M6 Earth Bonds
600-125	Hydraulic Setting Tool for M10 Earth Bonds

The tools feature one hand operation and ram retract mechanism actuated by release trigger. Consult factory for control gauges and earth bond part numbers for each material type and size.

NAVY / SHIPBOARD INTERCONNECT TECHNOLOGY



US Navy Qualified Helical Metal-Core Conduit for Aboveand Below-Deck Shipboard Wire Routing Applications



Improved sealing and shielding: the ultimate in highly flexible, crush-proof EMI/EMP wire protection

- Hermetically sealed, flexible metal-core conduit for shipboard wire interconnect applications
- UV-resistant "BlueJacket" jacketing over Brass, Stainless Steel, or Nickel Iron Alloy conduit
- Turnkey, factory-terminated assemblies for fastturnaround dockside maintenance cycles
- All materials deliver superior EMC performance as well as crush resistance and environmental sealing compared to legacy systems



Part Number 750-098

Select for superior crush resistance and corrosion protection

Highly flexible crush-proof metal conduit in stainless steel with Viton, Neoprene, or Bluejacket protective covering

Part Number 750-192

Select for low-frequency EMC protection in and around motors and control equipment

Nickel-iron conduit material plus shielding and jacketing

MIL-PRF-24758A NAVSEA-APPROVED

Metal-Core Conduit Wire Protection Systems

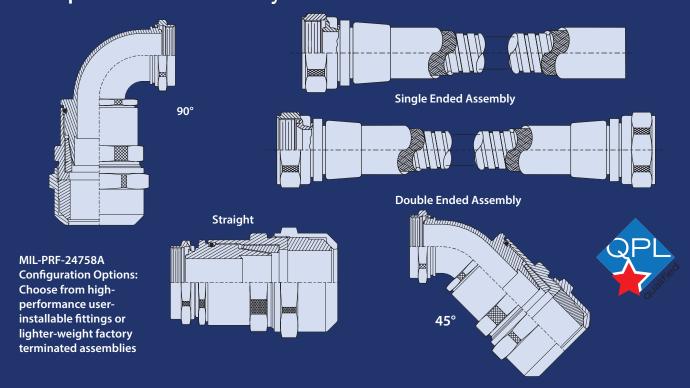


US Navy Qualified Brass, CRES, and Nickel-Iron, with Glenair Signature "BlueJacket" jacketing



- Qualified to MIL-PRF-24758A(SH)
- User-installable and factory terminated configurations
- Innovative fitting design with advanced environmental sealing, EMI shield termination and rotatable coupling nut
- Adapters for all shipboard interfaces—fully compatible with legacy MIL-C-24758 conduit system components

Do it once, do it right with Glenair Signature MIL-PRF-24758A wire protection conduit systems



FITTINGS AND ADAPTERS FOR USER-INSTALLED APPLICATIONS



Composite conduit splice fitting



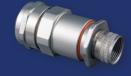
Stainless steel conduit feed-thru



Low-Profile RP Plus System



Heavy-duty environmental conduit-to-panel fitting



Heavy-duty environmental conduit-to-connector fitting

Glenair Mil-Spec Interconnect Technologies



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.





MIL-DTL-55116 Radio / Audio Connectors



807 NW Nett Warrior Qualified Tactical Connectors



STAR-PAN Power / Data Hubs and Tactical Cordsets



M85049 (AS85049) Backshells and Connector Accessories



MIL-DTL-83723 Backshells and Connector Accessories



M81511 (AS81511) Protective Covers and Connector Accessories



M85049/140 TACOM-Approved and Navy-Qualified 5617649 Shrink Boots



MIL-PRF-24758 NAVSEA-Qualified Conduit and Fittings



M85049 Composite Backshells and Covers for MIL-DTL-38999

hide Quality

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 GLENDALE:

Complete vertical integration of manufacturing resources—at home in Southern California since 1956



Glenair operates the largest high-reliability interconnect manufacturing operation in the United States, allowing us to fully support our broad range of military, defense, and security customers.









SAME-DAY SHIPMENT STOCKING

Immediate availability for highdemand connectors and tooling.



HARNESS ASSEMBLIES

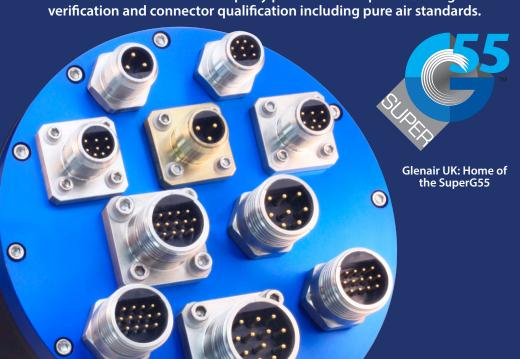
for Micro-D, Nanominiature, and fiber optic connectors and cable assemblies.



IN-HOUSE TESTING CAPABILITIES

68

Glenair UK operates an independently accredited BS9000:CECC:IECQ test lab for internal and third-party product development / design











HIGH-CAPACITY CNC MACHINING CENTERS allow Glenair BLQ to provide lightning-fast turnaround on small and custom orders as well as large production runs, all with superior surface finishes and better part quality.



ADVANCED PLATING LINE

Capabilities include VG95328-qualified Marine Bronze and "Code J" Tin-Zinc plating—VG95211 and VG95212 qualified cadmium alternative for corrosion-resistant interconnects.





TOTAL VERTICAL INTEGRATION includes In-house rubber and thermoplastic injection molding.



IN-HOUSE TEST LAB

with capabilities for both high-voltage as well as high-speed signal product qualification. Credentials include ISO 17025 and others.





Facility includes a 600 m² production floor, 300 m² ISO 8 and ISO 6 clean rooms, an ISO 5 flow chamber (certified to ESD Standard 61340-5-1), with ample accommodation for large mock-up and integration projects.







SPACE-GRADE HARNESS FABRICATION AND INTEGRATION In-house or at customer facility.





INTERCONNECT SOLUTIONS

Glenair, Inc.

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Glenair Microway SystemsTelephone:7000 North Lawndale Avenue847-679-8833Lincolnwood, ILFacsimile:60712847-679-8849

Glenair GmbHTelephone:Schaberweg 2806172 / 68 16 061348 Bad HomburgFacsimile:Germany06172 / 68 16 90info@glenair.de

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