



MISSION-CRITICAL
INTERCONNECT
SOLUTIONS



Glenair
SIGNATURE SERIES

High-Speed Mil-Aero Interconnect Solutions

Electrical · Optical · RF / Microwave

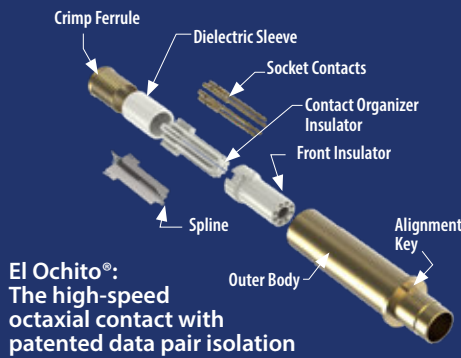
JANUARY 2025

High-Speed Mil-Aero Interconnect Solutions

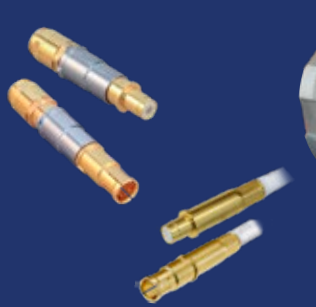
Electrical, Optical, and RF Interconnect assemblies for Ethernet Networking and High Data Rate Display Protocols

GLENAIR SIGNATURE HIGH-SPEED ELECTRICAL PROTOCOL CONTACTS, CONNECTORS, AND CABLES

El Ochito



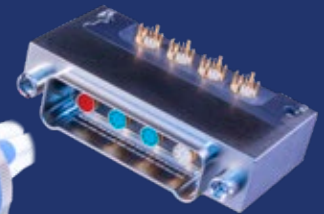
El Ochito®:
The high-speed octaxial contact with patented data pair isolation



Discrete contacts and cables for D38999 Series III, Series 806 Mil-Aero, SuperNine®, ARINC 600, and Series 79



SuperNine and Series 806 circular high-speed El Ochito solutions



Series 79 right-angle PCB connector with El Ochito white (Ethernet), blue (USB 3.0), and red (100 Ohm HDMI, DVI, SATA, and PCI)

VersaLink



VersaLink Series 806 Mil-Aero advanced performance micro miniature



VersaLink Micro-D intermountable high-density rectangular



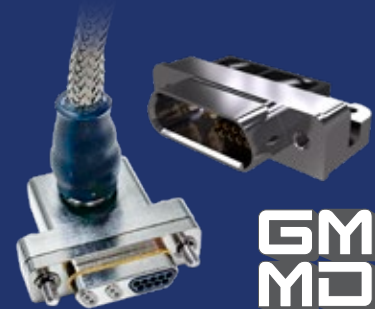
Series 795 scoop-proof rectangular ideal for blind-mate aerospace applications



SpeedMaster™ 10G high-speed Ethernet contacts in SuperNine® packaging



High-Speed Micro-D high-density SWaP solution



GMMD modular Micro-D differential twinax or RF coax high-speed solution

WHAT IS A HIGH-SPEED DATALINK?



All the interconnect ecosystems presented in this catalog are true high-speed, high data rate solutions suitable for use with digital datalink protocols such as Gigabit Ethernet, HDMI, DisplayPort, SATA, and others. Glenair is unique in the industry in providing fully-integrated, turnkey solutions—electrical, optical, and coaxial (RF)—built 100% from component parts produced in-house. From aerospace-grade electrical connectors and contacts, to low-loss harsh-environment fiber optic cables, and high-frequency RF solutions, Glenair delivers one-stop shopping with fast turnaround, no MOQs, and outstanding product quality.

GLENAIR SIGNATURE HIGH-SPEED, HIGH-DATARATE OPTICAL INTERCONNECT SYSTEMS



SuperNine MIL-DTL-38999 Series III type: the go-to military/aerospace fiber optic interconnect solution



ARINC 801 genderless size #16 rear-release termini with Glenair signature SuperNine packaging



Glenair High Density (GHD) size #18 genderless termini system for reduced size and weight



Series 806 Mil-Aero: the ultimate harsh-environment micro-miniature butt-joint fiber optic interconnect system



Rugged MT fiber optics: the highest-reliability, highest-density fiber optic connection system



NAVSEA and Underwater / Oil & Gas: M28876 US Navy-qualified, SeaKing high-pressure open-face, Pierside, and NGCON



Glenair Front Release (GFR): the Glenair signature solution for rapid integration of fiber optics into virtually any connector package



Rugged Field and Expanded Beam fiber optics: Eye-Beam Power, Eye-Beam GMA, Eye-Beam GLT, and GFOCA

GLENAIR SIGNATURE RF / MICROWAVE CABLES, CONNECTORS, AND MULTI-PORT HOUSINGS



SuperNine RF advanced-performance "better-than-QPL" D38999 series with drop-in high-frequency RF contacts



Series 806 RF Mil-Aero rugged, shielded, micro-miniature multi-port connectors with high shock-and-vibe performance



Series 79 RF advanced-performance, precision-machined multi-port rectangular connectors



GMMD modular Micro-D RF: highest-density multi-coax prewired pigtail plug/receptacle assemblies and inside-the-box jumpers

SpeedLine™

High-Speed Protocol Cables

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. High flexibility and high-density reduced-weight cable designs are a specialty. Glenair offers turnkey Cat 8 Ethernet, SuperSpeed USB 3.0, HDMI, SATA, and other solutions for today's most mission-critical application platforms.

Glenair SpeedLine cables are optimized for signal integrity, 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 contact modules and connectors.



SpeedLine™ high-speed cable assemblies such as this VersaLink cordset for DisplayPort 2.0 and USB 4 are supplied as turnkey tested solutions, ready for immediate use

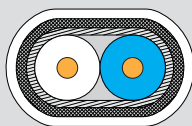
- Cat 8 Ethernet, SuperSpeed USB 3.0, HDMI, SATA, and other solutions for mission-critical applications
- Individual foil shielding around each data pair for reduced crosstalk and attenuation
- Up to 200°C high-temperature-rated cable
- Skydrol resistant, RoHS compliant versions
- Ethernet versions meet ANSI/TIA 568-C.2 Category 6A requirement up to 262 feet/80 meters
- Low-skew SuperSpeed USB data pairs have individual braided shields
- LSZH jacketing options including Duraelectric Light and polyurethane



SpeedLine™ high-speed protocol cables: shielded differential data-pair cables for high-datarate Ethernet, USB, SATA, PCIe, DisplayPort, and HDMI protocols

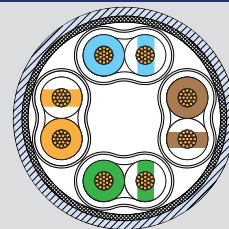
963-069-26

- 100 Ohm #26 AWG flat pair shielded cable for use with VersaLink™ connectors
- Performance up to 18 GHz
- -65 to +200 °C rated operating temperature
- FEP jacket, FEP insulation
- Dual shields: Aluminized Kapton tape and #44 AWG silver-plated copper



963-066-24

- 100 Ohm #24 AWG 4-pair shielded cable for use with El Ochito contacts
- Performance up to 10 Gigabit Ethernet
- -65 to +200 °C rated operating temperature
- FEP jacket, FEP insulation with PTFE tape wrap
- Outer shield: #40 AWG silver-plated copper



Glenair signature SpeedLine high-speed protocol cables are designed for direct application and use with VersaLink™, SpeedMaster™, El Ochito®, and other of our lightweight, small form-factor high-speed protocol connectors.

Glenair Signature SpeedLine™ Cables, Shielded Contacts, and Connectors: a complete ecosystem of interconnect technologies for high-speed protocol applications in rugged aerospace-grade systems

Glenair supplies a complete ecosystem of military/aerospace-grade interconnect technology in support of every popular high-speed protocol. Downselect typically begins with protocol identification in accordance with application data rate requirements and standards. For each high-speed protocol, Glenair can supply an exactly-designed, tested, and qualified SpeedLine™ differential data cable, shielded high-speed contact insert, and a signature range of ruggedized, environmentally-sealed connector housings.

SPEEDLINE HIGH-SPEED PROTOCOL CABLE ASSEMBLIES



Glenair SpeedLine high-speed cable assemblies for VersaLink™ include factory-terminated pigtails and double-ended jumpers as well as turnkey Series 806 Mil-Aero and Series 794 Micro-Crimp high-density solutions



Glenair SpeedLine high-speed cable assemblies for El Ochito® include single- and double-ended jumpers, commercial protocol connector jumpers, and integrated Series 806 Mil-Aero, SuperNine®, and Series 792 Micro-Crimp

SPEEDLINE-COMPATIBLE HIGH-SPEED DIFFERENTIAL-PAIR SHIELDED CONTACTS



Size #8 differential twinax contacts

Size #8 quadrax contacts

Size #8 El Ochito octaxial

Size #8 SpeedMaster octaxial

VersaLink differential twinax

SPEEDLINE COMPATIBLE GLENAIR SIGNATURE HIGH-SPEED CONNECTORS



Series 806 Mil-Aero high-speed El Ochito micro miniature

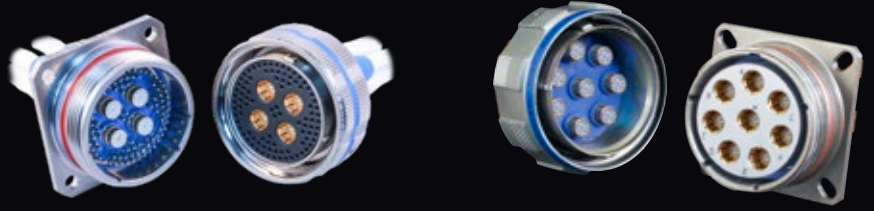
SuperNine MIL-DTL-38999 "Better than QPL" high-speed El Ochito

Speed-Master™ modular 10G+ Ethernet (shown in SuperNine® packaging)

Series 792 Micro-Crimp precision-machined high-speed El Ochito


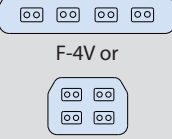






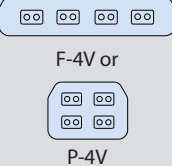





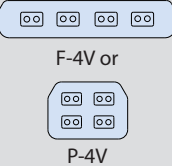











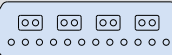
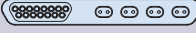
SpeedLine™

High-Speed Protocol Cables



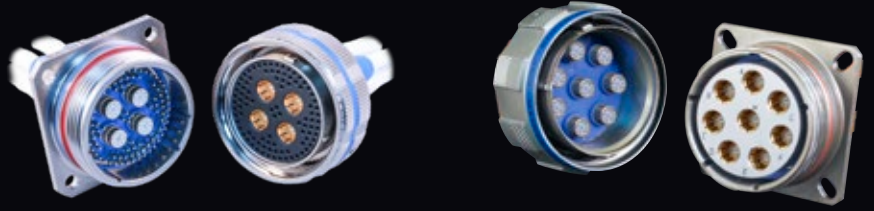
Signature Connector Series	Series 806 Mil-Aero / Mighty Mouse				SuperNine® D38999 Type	
Protocol	816 El Ochito	806 El Ochito	806 VersaLink	824 SpeedMaster	233 El Ochito	233 SpeedMaster
Ethernet up to 10GBase-T Cat 6A	 10-1 - El Ochito White	 10-1 - El Ochito White	 11-4V	 824-010	 9G5 - El Ochito White	 11-1
SpeedLine Cables	963-066-26 963-066-24	963-066-26 963-066-24	963-068-26 twisted 963-069-26 flat	963-066-26 963-066-24	963-066-26 963-066-24	963-066-26 963-066-24
Ethernet up to 40GBase-T Cat 8	 10-1 - El Ochito White	 10-1 - El Ochito White	 11-4V	N/A	 9G5 - El Ochito White	N/A
SpeedLine Cables	963-066-26 963-066-24	963-066-26 963-066-24	963-068-26 twisted 963-069-26 flat		963-066-26 963-066-24	
SpaceWire	 10-1 - El Ochito White	 10-1 - El Ochito White	 11-4V	 824-010	 9G5 - El Ochito White	 11-1
SpeedLine Cables	963-089-26 963-089-24	963-089-26 963-089-24	963-068-26 twisted 963-069-26 flat	963-089-26 963-089-24	963-089-26 963-089-24	963-089-26 963-089-24
USB 3.2 Gen 1x1 * USB 3.2 Gen 2x1 Type A, B, uB	 10-1-El Ochito Blue	 10-1-El Ochito Blue	 11-2V9*	N/A	 9G5-El Ochito Blue	N/A
SpeedLine Cables	963-077-26	963-077-26	963-068-26 twisted 963-069-26 flat		963-077-26	
USB 3.2 Gen 2x1 USB 3.2 Gen 2x1 USB 3.2 Gen 2x2 USB4 Gen 2x2 USB4 Gen 3x2 Type C	N/A	N/A	 14-4V15	N/A	N/A	N/A
SpeedLine Cables			963-068-26 twisted 963-069-26 flat			



Series 79™ Micro-Crimp			Micro-D			SuperFly® Datalink
792 El Ochito	794 VersaLink	7925 SpeedMaster™	GHSM Micro-D	GHS4-M VersaLink	GMMD	882 SuperFly DataLink
 <p>A-1W1 - El Ochito White</p>	 <p>F-4V or P-4V</p>		 <p>15E</p>	 <p>4-0 (Shell Size 25)</p>	 <p>4T (Shell Size 15)</p>	 <p>882-001/002 White</p>
<p>963-066-26 963-066-24</p>	<p>963-068-26 twisted 963-069-26 flat</p>	<p>963-066-26 963-066-24</p>	<p>963-057-28</p>	<p>963-068-26 twisted 963-069-26 flat</p>	<p>963-065-30</p>	<p>963-066-26 963-066-24</p>
 <p>A-1W1 - El Ochito White</p>	 <p>F-4V or P-4V</p>		 <p>15E</p>	 <p>4-0 (Shell Size 25)</p>	 <p>4T (Shell Size 15)</p>	 <p>882-001/002 White</p>
<p>963-066-26 963-066-24</p>	<p>963-068-26 twisted 963-069-26 flat</p>		<p>963-057-28</p>	<p>963-068-26 twisted 963-069-26 flat</p>	<p>963-065-30</p>	<p>963-066-26 963-066-24</p>
 <p>A-1W1 - El Ochito White</p>	 <p>F-4V or P-4V</p>		 <p>9</p>	 <p>4-0 (Shell Size 25)</p>	 <p>4T (Shell Size 15)</p>	 <p>882-001/002 White</p>
<p>963-089-26 963-089-24</p>	<p>963-068-26 twisted 963-069-26 flat</p>	<p>963-089-26 963-089-24</p>	<p>963-057-28</p>	<p>963-068-26 twisted 963-069-26 flat</p>	<p>963-065-30</p>	<p>963-089-26 963-089-24</p>
 <p>A-1W1 - El Ochito Blue</p>	 <p>D-2V4*</p>		 <p>15U*</p>	 <p>2-9* (Shell Size 25)</p>	 <p>2T9* (Shell Size 21)</p>	 <p>882-009/010 Blue</p>
<p>963-077-26</p>	<p>963-068-26 twisted 963-069-26 flat</p>		<p>963-057-28</p>	<p>963-068-26 twisted 963-069-26 flat</p>	<p>963-065-30</p>	<p>963-077-26</p>
<p>N/A</p>	 <p>G-4V12</p>		<p>N/A</p>	 <p>4-15 (Shell Size 51-2)</p>	<p>N/A</p>	<p>N/A</p>
	<p>963-068-26 twisted 963-069-26 flat</p>			<p>963-068-26 twisted 963-069-26 flat</p>		


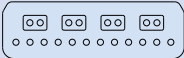


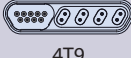


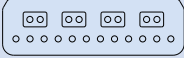


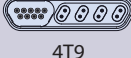


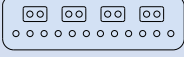

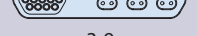


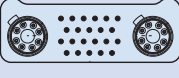
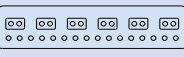









SpeedLine™

High-Speed Protocol Cables



Signature Connector Series	Series 806 Mil-Aero / Mighty Mouse				SuperNine® D38999 Type	
Protocol	816 El Ochito	806 El Ochito	806 VersaLink	824 SpeedMaster	233 El Ochito	233 SpeedMaster
HDMI up to 2.0 * up to HDMI 2.1	 14-20A - El Ochito Red	 14-20A - El Ochito Red	 14-4V15*	N/A	 13-14 - El Ochito Red	N/A
SpeedLine Cables	963-127-3	963-127-3	963-068-26 twisted 963-069-26 flat		963-127-3	
DisplayPort up to 1.4 * up to DisplayPort 2.0	 14-20A - El Ochito Red	 14-20A - El Ochito Red	 14-4V15*	N/A	 13-14 - El Ochito Red	N/A
SpeedLine Cables	963-127-3	963-127-3	963-068-26 twisted 963-069-26 flat		963-127-3	
DVI Single	 14-20A - El Ochito Red	 14-20A - El Ochito Red	 14-4V15	N/A	 13-14 - El Ochito Red	N/A
SpeedLine Cables	963-127-3	963-127-3	963-068-26 twisted 963-069-26 flat		963-127-3	
DVI Dual	 16-22 - El Ochito Red (2)	 16-22 - El Ochito Red (2)	 18-8V31	N/A	 19-17 - El Ochito Red (2)	N/A
SpeedLine Cables	963-127-3	963-127-3	963-068-26 twisted 963-069-26 flat		963-127-3	
eSATA SATA 3.0	 10-1 - El Ochito Red	 10-1 - El Ochito Red	 9-2V	N/A	 9G5 - El Ochito Red	N/A
SpeedLine Cables	963-072-24	963-072-24	963-068-26 twisted 963-069-26 flat		963-072-24	



Series 79™ Micro-Crimp			Micro-D			SuperFly® Datalink
792 El Ochito	794 VersaLink	7925 SpeedMaster	GHSM Micro-D	GHS4-M VersaLink	GMMD	882 SuperFly DataLink
 B-23W1 - El Ochito Red	 G-4V12*	N/A	 21*	 4-15* (Shell Size 51-2)	 4T9 (Shell Size 31)	 882-019/020 Red
963-127-3	963-068-26 twisted 963-069-26 flat		963-057-28	963-068-26 twisted 963-069-26 flat	963-065-30	963-127-3
 B-23W1 - El Ochito Red	 G-4V12*	N/A	 21	 4-15* (Shell Size 51-2)	 4T9 (Shell Size 31)	 882-019/020 Red
963-127-3	963-068-26 twisted 963-069-26 flat		963-057-28	963-068-26 twisted 963-069-26 flat	963-065-30	963-066-26 963-066-24
 B-23W1 - El Ochito Red	 G-4V12	N/A	 21	 3-9 (Shell Size 37)	 4T9 (Shell Size 31)	 882-019/020 Red
963-127-3	963-068-26 twisted 963-069-26 flat		963-057-28	963-068-26 twisted 963-069-26 flat	963-065-30	963-066-26 963-066-24
 C-24W2 - El Ochito Red (2)	 H-6V16	N/A	 25	 8-9 (Shell Size 67)	 8T15 (Shell Size 51-2)	N/A
963-127-3	963-068-26 twisted 963-069-26 flat		963-057-28	963-068-26 twisted 963-069-26 flat	963-065-30	
 A-1W1 - El Ochito Red	 B-2V	N/A	 9	 2-0 (Shell Size 15)	 2T (Shell Size 9)	 882-023/024 Red
963-072-24	963-068-26 twisted 963-069-26 flat		963-057-28	963-068-26 twisted 963-069-26 flat	963-065-30	963-072-24

COMPATIBLE WITH

SpeedLine
High-Speed Protocol Cables

El Ochito®

High-speed octaxial contacts for Ethernet, SuperSpeed USB and multi-gigabit datalinks

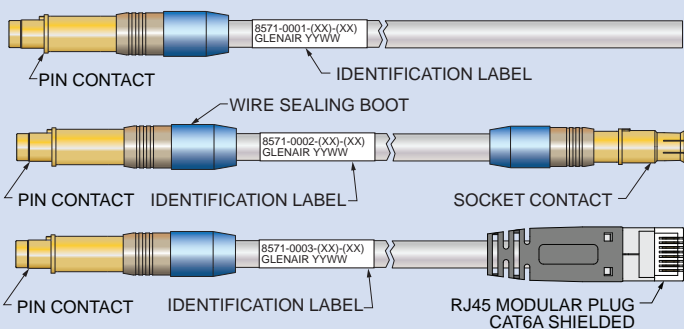


Series 792 with El Ochito octaxial contacts

High speed, harsh environment El Ochito® octaxial contacts save size and weight in avionics, weapons systems, satellites, radars, and communications equipment.

- CAT8 40GBASE-T Ethernet, SuperSpeed USB, and multi-gigabit shielded pairs
- Universal drop-in for keyed size #8 connector cavities
- Data-pair isolation for optimal signal integrity
- Crimp or threaded shield termination contact types
- Snap-in, rear release
- Environmentally sealed
- Aerospace-grade cable assemblies
- 50% cable / contact reduction compared to Quadrax

TURNKEY FACTORY JUMPERS AND PIGTAIL ASSEMBLIES



Glenair signature high-speed Octaxial El Ochito contact series may be specified as factory-wired jumpers and pigtails, including El Ochito-to-commercial RJ45 and USB connectors.

HIGH-SPEED OCTAXIAL El Ochito® Contacts



Protocols, exploded views of Type I and Type II contacts

El Ochito® White



1000BASE-T, 10GBase-T, 40GBase-T
El Ochito® White octaxial contacts provide 40GbE (when used with Cat 8 cable) in a single size #8 contact cavity (compared to two Quadrax) for 100BASE-T solutions.

El Ochito® Blue



SuperSpeed USB
Low-dielectric material. 90 ohms. El Ochito® Blue octaxial contacts provide an aerospace-grade solution for SuperSpeed USB 3.0

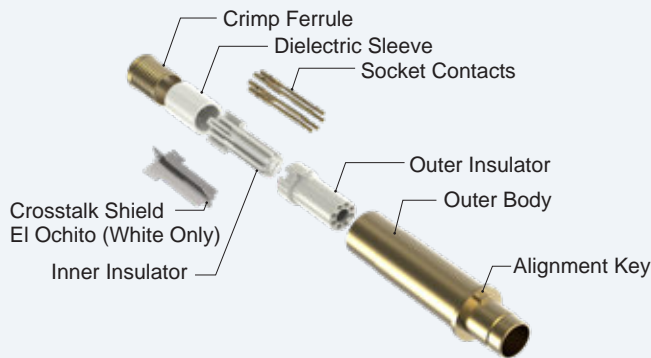
El Ochito® Red



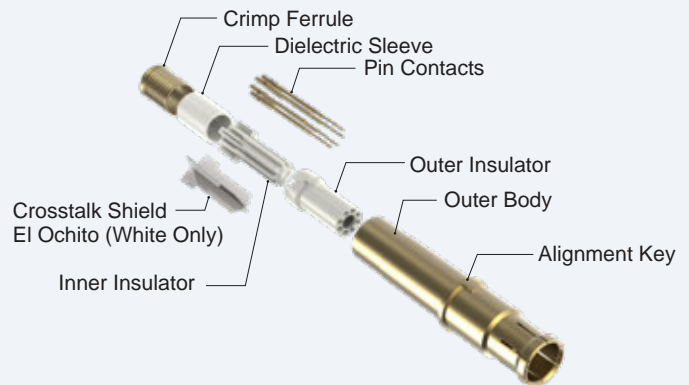
HDMI, DisplayPort 1.4, SATA
Low-dielectric material. Up to 10 Gbps per pair. 100 ohms. El Ochito® Red octaxial contacts provide an aerospace-grade solution for multi-gigabit data rates.

El Ochito® White Type I Contacts, Non-Serviceable

26 AWG, Crimp Wire Shield Termination



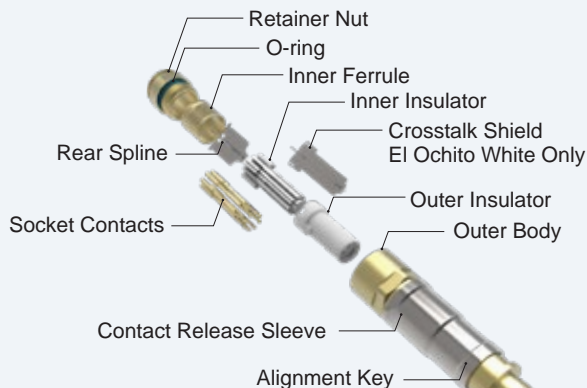
Type I Pin Contact



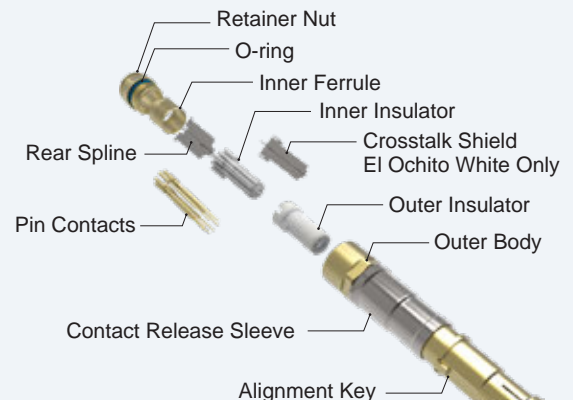
Type I Socket Contact

El Ochito® Type II Contacts, Serviceable

24-26 AWG, Threaded Wire Shield Termination, Integral Contact Release Sleeve



Type II Pin Contact



Type II Socket Contact

COMPATIBLE WITH

SpeedLine
High-Speed Protocol Cables

SUPERFLY DATALINK



The Nano Miniature 10G Ethernet, USB 3.0, and DisplayPort connector with El Ochito[®] octaxial contact technology



High speed, harsh environment SuperFly[®] Datalink connectors—with shielded El Ochito[®] octaxial contacts for 10Gb Ethernet, SuperSpeed USB, and high datarate video display protocols—deliver outstanding signal integrity and save significant size and weight compared to Quadrax.



**SuperFly Datalink
White**

Up to 40G Ethernet



**SuperFly Datalink
Blue**

SuperSpeed USB



**SuperFly Datalink
Red**

HDMI, DisplayPort 1.4,
and SATA

- Ultra-small size
- Shielded Octaxial contacts
- Up to 5 Gbps
- 10Gb Ethernet and SuperSpeed USB
- New Red insert for high-speed video, consult factory for layouts
- Environmentally protected
- Factory-terminated cables or discrete contacts and cables for customer assembly

The high-speed nano miniature connector for harsh environments

CONNECTOR CONFIGURATIONS

Quick-disconnect “push-pull” versions are ideal for tactical gear. Threaded-coupling versions are intended for aircraft and space-grade applications where secure mating is a requirement.



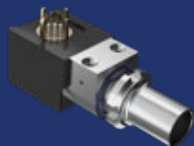
Quick Disconnect



Threaded Coupling



Straight PC Tails

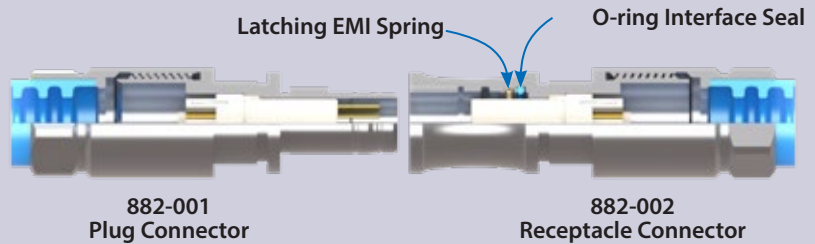


Right Angle PC Tails



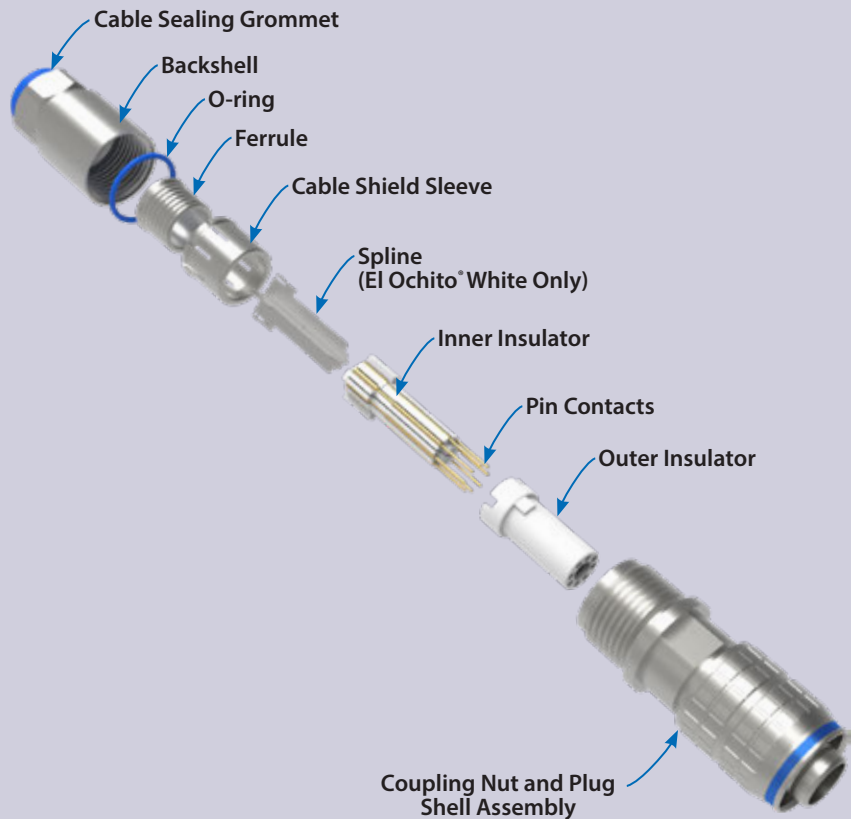
Conformal-coating-compliant panel mount connectors

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.

COMPATIBLE WITH

SpeedLine
High-Speed Protocol Cables

SERIES
792
SEVEN
NINETY-TWO

The next-generation micro miniature rectangular connector with El Ochito contacts for high-speed aerospace applications



The robotics workstation inside the ISS cupola

The Series 792 connector brings high-speed data-rate performance 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.



El Ochito®

- High-speed Ethernet, USB 3.0, HDMI, and DisplayPort
- Industry-leading SpeedLine high-speed data link cable assemblies
- PCB-mount and cable
- Scoop-proof interface
- 12 arrangements, 6 shell sizes, from 1 to 9 way
- Precision-machined dual-lobe polarized shells
- Integrated EMI shielding and grounding
- Blind mate environmental

HIGH-SPEED Series 792



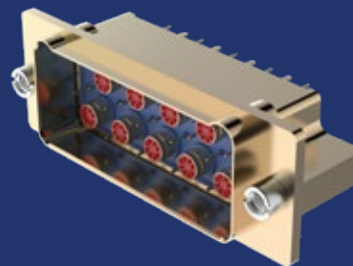
The next-generation micro miniature rectangular for high-speed aerospace applications

DESCRIPTION	REQUIREMENT	PROCEDURE / NOTES
Operating temperature	-65° to +175°C	EIA-364-32 Test Condition IV
Current rating	1.5 Amps (datalink contacts) 5 Amps (Size #23 contacts)	Datalink contacts tested: El Ochito® White
DWV (sea level)	750 VAC (Size #23 contacts) 1000 VAC (datalink contacts)	EIA-364-20
Insulation resistance	5000 MΩ minimum	EIA-364-21
Contact resistance, 25°C	55 millivolt maximum	EIA-364-06, 1.0 A test current, #24 AWG wire

DESCRIPTION	REQUIREMENT	PROCEDURE / NOTES	
Shell-to-shell resistance	2.5 millivolt maximum	EIA-364-83	
Shielding effectiveness	Frequency	Attenuation dB	EIA-364-66
	100	75	
	1000	50	
	3000	44	
	6000	38	
10000	35		
Ingress protection	IP67 rating	IEC-60529	



Twinax, Quadrax and El Ochito®
Connectors are available in three configurations: twinax for a single high-speed wire pair, quadrax for two data pairs, and El Ochito® for four.



Up to 9 data ports

The Series 792 Size F with nine ports is the largest connector in the series and is the only two row version. Sizes A – E, with one to five ports, are single row.



PCB Connectors

Series 792 PCB connectors have straight or right angle PC tails. Contacts are non-removable and are epoxy sealed.



Panel Mount

Panel mount connectors have O-ring and threaded mounting holes for easy installation and are available with guide pins and float mounts.



Cable Connectors

High-speed shielded contacts snap into Series 792 cable connectors and are easily removed with a standard plastic tool.



El Ochito® Contacts and Jumpers

El Ochito® octaxial contacts and jumpers supplied for Ethernet, SuperSpeed USB, HDMI, DisplayPort, SATA and other multi-gigabit protocols.

El Ochito® octaxial contacts are intended for harsh environment military and aerospace data networks, and provide up to 50% total weight savings and 20 times faster data rates compared to legacy quadrax-based solutions.



El Ochito®
White
GbE
10GbE



El Ochito®
Blue
USB 3.0



El Ochito®
Red
HDMI, SATA,
DisplayPort

- Snap-in, rear release octaxial contact for use with aerospace-grade high-speed cable
- Environmentally protected
- Support for all major high-speed datalink protocols
- Significant size and weight savings compared to quadrax

COMPATIBLE WITH

SpeedLine
High-Speed Protocol Cables

SERIES
806
MIL-AERO

Advanced performance,
reduced size and
weight connector series
IAW MIL-DTL-38999



Series 806 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.



Series 806 with four 10GbE El Ochito channels

El Ochito[®]

- Next-generation micro miniature aerospace-grade circular connector
- Upgraded environmental, electrical and mechanical performance IAW MIL-DTL-38999 Series III
- Integrated anti-decoupling technology
- High-Speed El Ochito[®] and hybrid #22HD contact arrangements

SERIES 806 MIL-AERO CONNECTORS WITH EL OCHITO[®] CONTACTS



White
GbE
10GbE



Blue
USB 3.0



Red
HDMI, SATA,
DisplayPort

- 10GbE, SuperSpeed USB 3.0, HDMI and DisplayPort
- Crimp shield termination and threaded contact types
- Snap-in, rear release
- Environmentally protected

HIGH-SPEED Series 806 Mil-Aero Micro Miniature Circular Connectors



With El Ochito® octaxial contacts

Series 806 with El Ochito® contact arrangements

<p>Contact Key</p>				
Insert Arrangement	10-1	14-20A	16-2	16-22
No. of Contacts	1x #8	1x #8 19x #22HD	2x #8	2x #8 20x #22HD
<p>Contact Key</p>				
Insert Arrangement	18-3	18-21	20-4	20-28
No. of Contacts	3x #8	3x #8 18x #22HD	4x #8	4x #8 24x #22HD
<p>Contact Key</p>				
Insert Arrangement	22-5	22-44	24-8	24-97
No. of Contacts	5x #8	4x #8 40x #22HD	8x #8	4x #8 93x #22HD

Polarizing Positions				
Position	A°	B°	C°	D°
A	105	140	215	265
B	102	170	248	305
C	80	150	230	295
D	68	140	205	275
E	64	155	234	304
F	72	120	200	298

RECOMMENDED BACKSHELLS



320V*030 • 440V*233 • 620VS090
440VS232 • 443V*042

FEATURES

- Triple-start stub ACME mating thread
- El Ochito® Octaxial and hybrid high density #22HD arrangements for reduced size / weight and high-speed performance
- Aerospace-grade materials, construction, and performance

CONNECTOR CONSTRUCTION

- Shell and coupling nut: aluminum or stainless steel
- Contacts: copper alloy, gold plating
- Wire grommet: fluorosilicone
- Dielectric inserts: high grade rigid dielectric
- Peripheral seal: fluorosilicone
- Ground spring: copper alloy, nickel plating
- Contact retention clips: copper alloy
- Ratchet springs: stainless steel, passivated
- Retainer rings: stainless steel, passivated
- Clinch nuts: stainless steel, passivated



COMPATIBLE WITH

SpeedLine
High-Speed Protocol Cables

SuperNine[®]

**"Better than QPL" MIL-DTL-38999
high-speed solution**



**SuperNine[®] high-speed connectors
with special inserts to accommodate
El Ochito[®] octaxial contacts**

- **Tooled and ready-to-ship high-speed and hybrid insert arrangement connectors for size #8 El Ochito shielded contacts. Arrangements for #8, #12, and #16 Coax, Twinax, and Quadrax also available.**
- **Supported applications: 10/100/1G/10G BASE-T Ethernet, HDMI, DisplayPort, SATA, USB 3.0 , 1553 databus and general RF or differential data transmission**

El Ochito[®]

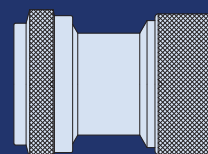


Crimp contact
and PC tail
configurations

EL OCHITO CONTACT REFERENCE GUIDE

Contact Type	White, Type I	White, Type II	Blue, Type I	Red, Type I
Pin	858-003	858-005	858-028	858-030-01
Socket	858-004	858-006	858-029	858-031

RECOMMENDED BACKSHELL



377HS121

Series 37 Aluminum Backshell for SuperNine plug and receptacle connectors. Straight, 45°, and 90° configurations available.

"BETTER THAN QPL" High-Speed SuperNine® MIL-DTL-38999



With El Ochito® octaxial contacts and industry-standard coax, differential twinax, and quadrax contacts



Square-flange receptacle with hybrid signal / El Ochito arrangement



Plug with 500 mating-cycle ratcheted coupling technology



Square-Flange Receptacle with metric clinch nut mounting



Jam-Nut Receptacle with PC tail termination and threaded standoffs

Size #8 Shielded Contact Quick Reference Guide

Contact Type	Glenair P/N		AWG	Cable Type	Application Notes
Coax	Pin: 852-007 Socket: 852-006	Coax 50 ohm (M39029/59 & /60)	22 - 28	M17/95-RG180	Analog radio frequency or microwave applications
	Pin: 852-056-01 & -02 Socket: 852-057-01 & 02	75 ohm	26	-01: V73263, V75268, V76261, -02: M17/94-RG179	
Differential Twinax	Pin: 853-014-05 Socket: 853-013-05		24	M17/176-00002	1553 Databus/ Differential Signal
El Ochito® Octaxial	Pin: 858-003, Type I • Socket: 858-004, Type I	El Ochito® White	26 - 28	963-033-26	1G/40G BaseT Ethernet
	Pin: 858-005, Type II • Socket: 858-006, Type II	El Ochito® White	24 - 26	963-033-24	
	Pin: 858-028, Type I • Socket: 858-029, Type I	El Ochito® Blue	26 - 28	963-110	USB 3.0
	Pin: 858-030-01, Type I • Socket: 858-031, Type I	El Ochito® Red	26 - 28	Varies	SATA, HDMI, Display Port
Quadrax	Pin: 854-001 Socket: 854-002		22 - 26	Varies	10/BASE-T Ethernet
Triax/ Concentric Twinax	Pin: 853-003 Socket: 853-004		22 - 28	M17/176-00002	1553 Databus

Size 8 High-Speed Insert Arrangements

Shell Size	#8	Shell Size - Insert Arr.
9	1	9G5
11	1	11-1
17	2	17-75
19	4	19-4
21	4	21-75
23	5	23-5
23	6	23-6
25	8	25-8

Combo High-Speed Insert Arrangements*

Shell Size	Number of Contacts						Shell Size - Insert Arr.
	#23	#22D	#20	#16	#12	#8	
13	14					1	13-14
17		38		2		1	17-2
17					2	2	17-22
17		8				2	17-60
19		10	1	4		2	19-17
19		14				4	19-18
25		97				2	25-7
25		36				6	25-17
25			10	13	4	3	25-20
25			16		5	4	25-26
25		22	3	11	2	3	25-41
25			40	4		2	25-46

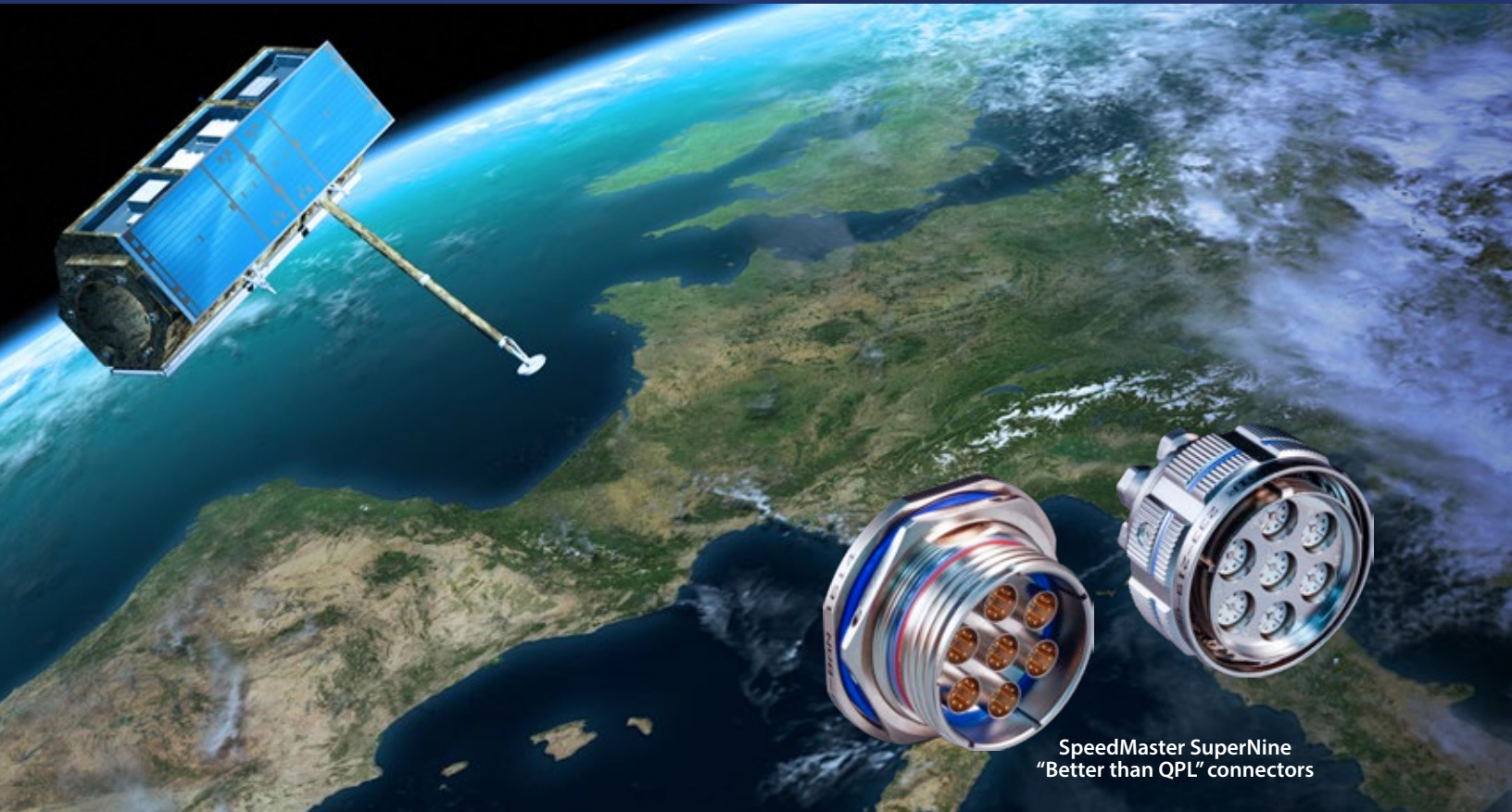
COMPATIBLE WITH

SpeedLine
High-Speed Protocol Cables



SPEEDMASTER™

High-speed 10G Ethernet connection system for Glenair SuperNine, Mighty Mouse, and Series 79 connectors



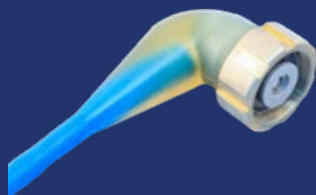
SpeedMaster SuperNine
"Better than QPL" connectors

SpeedMaster™ is a dedicated size #22D crimp-contact module and insert package for SuperNine®, Mighty Mouse, and Series 79 connectors. Optimized for high-speed Cat 6A Ethernet, the SpeedMaster™ 10G system offers industry-leading NEXT, return loss, and insertion loss performance

- Utilizes aerospace industry standard #22D contacts, tools, and widely available Ethernet flight cable
- Significant weight reduction compared to Quadrax solutions (reduces cable requirement by half)



SpeedMaster Mighty Mouse Locking Push/Pull Connectors



Pressure-rated overmolded subsea cable assembly



Series 7925 advanced-performance rectangular



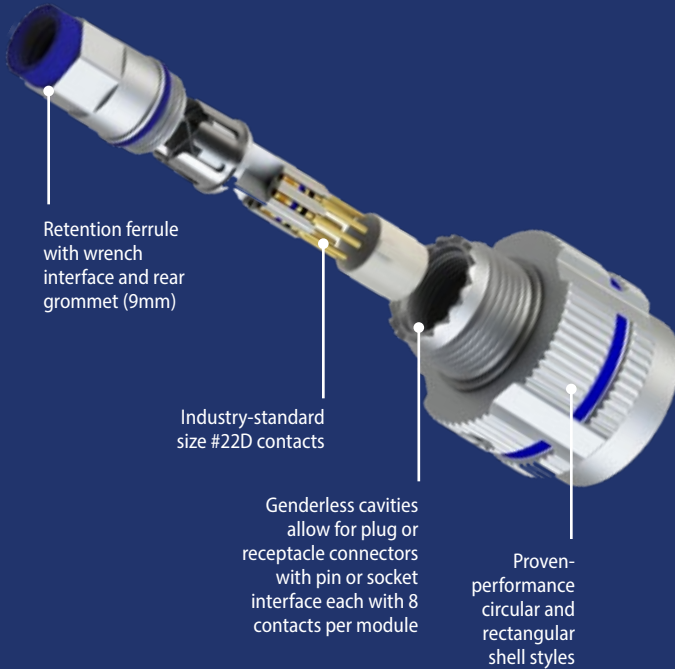
SuperNine SpeedMaster with hybrid contact arrangement

SpeedMaster™ High-Speed 10G Connection System



For Glenair SuperNine, Mighty Mouse, and Series 79 connectors

SPEEDMASTER 10G NEXT-GENERATION HIGH-SPEED CONNECTION SYSTEM



Retention ferrule with wrench interface and rear grommet (9mm)

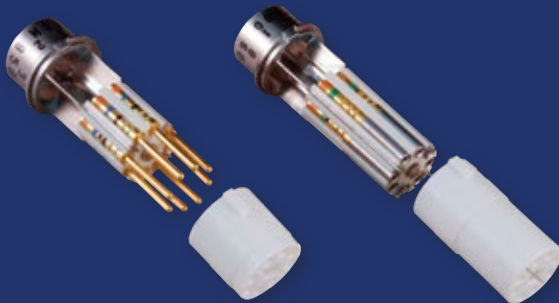
Industry-standard size #22D contacts

Genderless cavities allow for plug or receptacle connectors with pin or socket interface each with 8 contacts per module

Proven-performance circular and rectangular shell styles

The SpeedMaster Difference

Each SpeedMaster module consists of 4 pairs of pins or sockets incorporating industry-standard size #22D contacts. Each module is individually shielded within the shell and retained in place with a threaded ferrule. Module cavities are genderless, allowing pin or socket interface for plugs or receptacles. SpeedMaster contacts are available as a drop-in high-speed 10G Ethernet solution in 3 connector packages: Small form-factor Mighty Mouse Series 824 locking push/pull, Series 7925 advanced-performance rectangular, and "Better than QPL" SuperNine D38999 Series III type connectors. SpeedMaster modules are easily removable and repairable to reduce network downtime.



SpeedMaster 10G modular inserts are available for Series 23 SuperNine – 38999, Series 80 Mighty Mouse – Locking Push / Pull and Series 7925 high-performance scoop-proof rectangular connectors.



The SpeedMaster 10G is optimized for high-speed Ethernet performance and incorporates standard M39029 #22D contacts isolated for superior NEXT, return loss and insertion loss performance.



SpeedMaster Glass-Sealed Hermetic: Fully qualified to MIL-DTL-38999 Series III environmental and mechanical specifications. 10^{-7} Helium leak rate. Outstanding high-speed performance. Bulkhead feed-thru shown.

SpeedLine™ Compatible High-Speed Cable

Cable P/N	Cable Cat.	Cable Const.	Wire Gage	Cable Dia.	Cable Size	Assembly Instruction
963-066-24	Cat 6A	S/FTP	24	.260 (6.60)	3	A185082
963-066-26	Cat 6A	S/FTP	26	.238 (6.05)	6	
963-075-24	Cat 6A	SF/UTP	24	.265 (6.73)	3	

SpeedLine™
High-Speed Protocol Cables



Manufactured and tested in-house for optimal high-speed performance

COMPATIBLE WITH

SpeedLine™
High-Speed Protocol Cables



The faster ruggedized
4/8 pole interconnect
system for industrial
Ethernet applications



Glenair series ITH connectors with Ethernet-ready Octobyte™ contacts are available for harsh-environment mass transit applications that depend on sealed environmental (IP67) connector performance. Octobyte contacts, packaged in ruggedized ITH reverse-bayonet connectors, deliver both dedicated Ethernet datalink as well as mixed serial databus and power for high-speed data applications. Octobyte contacts are vibration resistant and designed to work with Ethernet cables from CAT 5 to CAT 7A, MVB-WTB, and RG58 Coax. Reverse-bayonet ITH series connectors with Octobyte™ contacts are easy and fast to assemble and deliver reliable locking performance in severe vibration and shock applications.

- For harsh-environment transit, industrial, or marine/subsea applications
- RF Coax applications (RG58 and RG59U cables)
- High-speed interconnect solution for audio, video, and digital displays
- Qualified for use in safety systems, sensors, detection devices, and control panels
- Tested in accordance with:
ISO F0 STP: CAT 7A
EN50173-1 F600-STP: CAT 7
EN50173-1 D STP: CAT 5E



Tested for compliance IAW EN50173-1 standards for CAT5E and CAT7.
Proven performance in numerous rail applications (consult factory for references).

OCTOBYTE™

The faster ruggedized Ethernet interconnect solution



For industrial and rail Ethernet applications

OCTOBYTE CONTACTS FOR ETHERNET CAT 5 · CAT 6 · CAT 7 · COAX · MVB-WBT



CAT 5 · CAT 5E · CAT 6 · CAT 6A



RG58



CAT 6A · CAT 7 · CAT 7A



MVB - WTB

SERIES ITH CONNECTORS FOR OCTOBYTE CONTACTS

Reverse bayonet-lock connectors with rugged environmental performance – the perfect OctoByte packaging solution



Dozens of contact arrangements available including hybrid OctoByte, power, and signal.

- Rugged MIL-DTL-5015 type design with fast reverse bayonet coupling
- Rigid dielectric inserts with contact retention clips
- Positive lock technology provides reliable vibration and shock resistance
- Proven performance in even the most rugged applications
- Conforms to the European VG 95234 standard, French (NFF 61030) and British (BS 6853) electrical standards and EEC compliance directives
- Threaded coupling version available, contact factory for ordering information



Available flop-lid protective cover

RadGrip rubber-covered coupling nuts available in a wide range of colors including safety red.

Ethernet-ready OctoByte solutions for rail and transit applications are available as discrete contacts, packaged in rugged reverse-bayonet ITH series connectors, or as turnkey inside-the-box or environmental cable assemblies, tested and ready for immediate use.

COMPATIBLE WITH

SpeedLine
High-Speed Protocol Cables



SuperSeal™ RJ45, USB, HDMI, and DisplayPort field connectors, cables, and accessories



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

- 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
- Factory-terminated, solder-cup, PC tail and cable assemblies



All Glenair Signature ruggedized SuperSeal high-speed field connectors are available as turnkey cable jumpers and point-to-point cordsets.

SuperSeal High-Speed Ruggedized connectors and cables

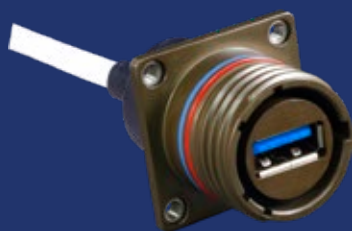


RJ45 · USB · HDMI · DisplayPort

SUPERSPEED USB 3.0 CONNECTOR STYLES



Cable plug



Wall mount receptacle with metric clinch nuts



Wall mount receptacle with slotted holes



Jam nut mount Receptacle

SUPERSEAL TERMINATION OPTIONS



Solder Cup



PC tail



Crimp Contact



Jack-to-Jack



EMI Filtered



Quadrax



MIL-STD-1560 Arrangements



Turnkey Cordsets

High-Speed Protocols and Characteristics

	Data Rate	Sealing	Distance (max.)	Operating Temperature*
USB 3.0 (Type A)	5 Gbps	IP67 unmated, IP68 mated.	10 ft	-40°C to +85°C
USB 3.2 Gen 2 (Type C)	10 Gbps		9 ft	-40°C to +85°C
DisplayPort 1.4	32.4 Gbps		6 ft *	-40°C to +85°C
HDMI 2.0	18 Gbps		20 ft*	-40°C to +85°C
RJ45 Cat 6A	10Gbps		328 ft	-40°C to +120°C

Consult Glenair for longer length or higher-temperature requirements.

SUPERSEAL DRIVE-THRU



- Converts commercially-available cabled USB, RJ45, and HDMI connectors into sealed D38999 type connectors
- Fast and easy assembly saves time and labor
- IP67 unmated / IP68 mated sealing

COMPATIBLE WITH

SpeedLine
High-Speed Protocol Cables


VersaLink™

High-speed twinax "zero crosstalk" contact, cable, and connector technology



VersaLink Micro-D
turnkey prewired
assemblies

Innovative differential twinax crimp contacts with highest available bandwidth—up to 28Gbps each—in rugged mil-aero circular and rectangular connector packaging. Hybrid insert arrangements support both standard signal as well as high-speed differential data.

- Shielded differential data-pair solution for Ethernet, USB, SATA, PCIe, DisplayPort, and HDMI protocols
- Higher speed and density than standard mil-spec style twinax designs—up to 28 Gbps
- Aggressively shielded pairs result in virtually zero crosstalk
- Hybrid contact layouts with standard signal pins
- Optimized for use with Glenair SpeedLine™ 100 Ohm flat pair shielded cable



VersaLink pin and socket crimp contacts sold separately. Save assembly time and labor with pre-wired, 100% tested VersaLink single-ended pigtails and cable assemblies, supplied with cable grommet follower if applicable.

HIGH-SPEED VersaLink™ Interconnect System



Contact, cable, and connector packaging guide



VersaLink Contact Technology

VersaLink Twinax contact technology supports high-speed serial data protocols including USB 3.1 Gen2, USB-C, SATA, PCIe, DisplayPort, and HDMI. Crimp-contact twinax modules are sold separately for ready packaging in Glenair signature circular and rectangular connectors.



Series 806 VersaLink Connectors

Glenair Signature Series 806 Mil-Aero connectors with VersaLink contacts feature advanced electrical, mechanical and environmental performance plus reduced size and weight compared to D38999. Rapid-advance ratcheted coupling optimizes fast and reliable mating and demating.



Series 794 VersaLink Connectors

The 794 rectangular series is designed for avionics and other high-datarate aerospace applications that require optimal contact and connector density. Dual-lobe scoop-proof shells prevent mating damage and optional polarizing keys prevent mis-mating issues. Rugged environmental design with robust EMC performance, ideal for blind-mate applications.



Micro-D VersaLink Connectors

Ultra miniature Micro-D connectors with High-Speed VersaLink contacts offer the industry's highest speed and density compared to conventional mil-spec style twinax solutions. Hybrid arrangements with VersaLink contact modules and standard Micro-D contacts available for signal and power applications. Series is intermountable with standard Micro-D panel cutout dimensions.



VersaLink Bridge Board Level Connectors

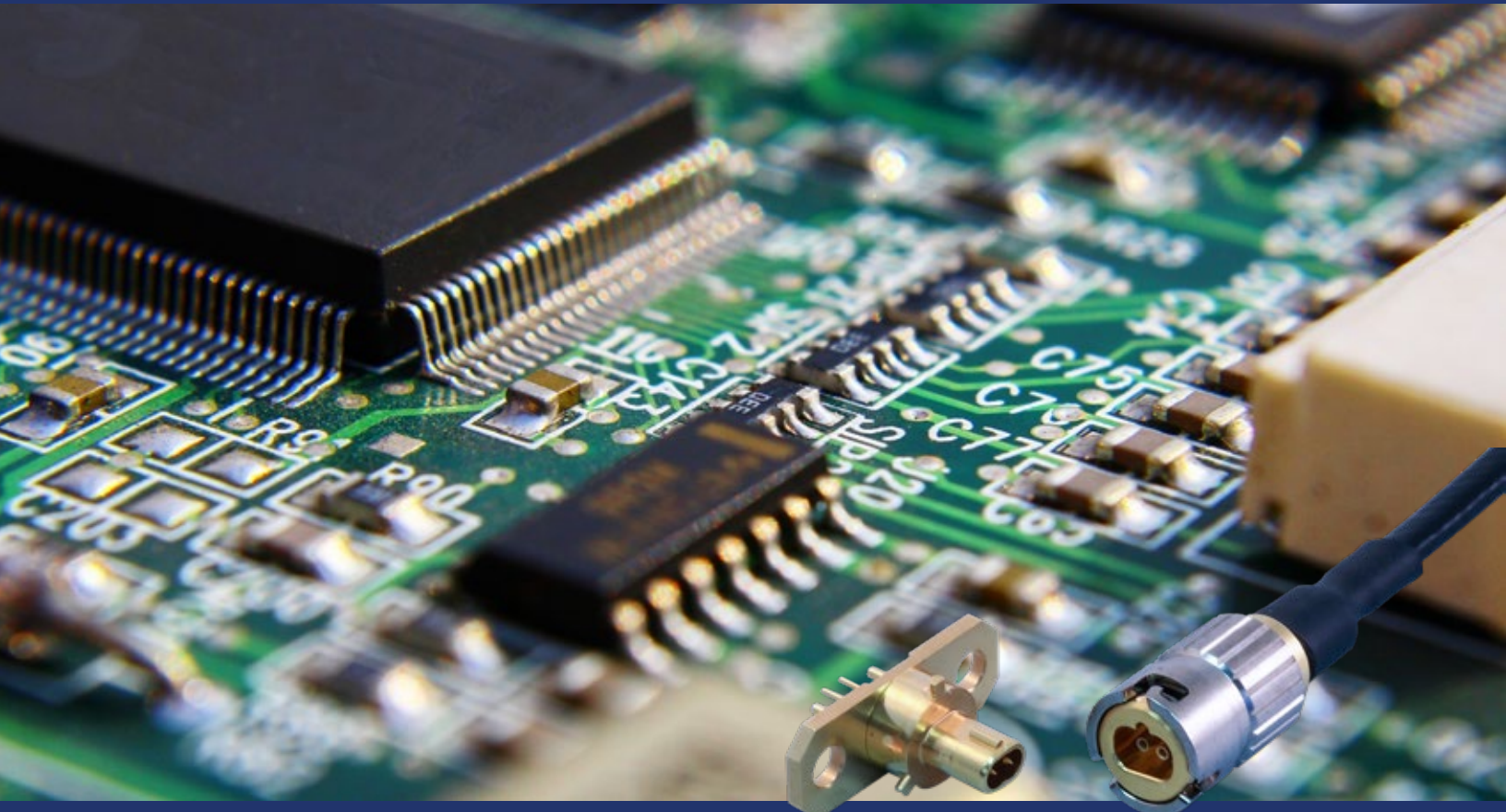
The Glenair VersaLink Bridge is a high-density, micro-form factor twinax connector / jumper assembly used to bridge the gap between point A and point B on the board with better signal integrity than native board traces. VersaLink Bridge is equally capable at reducing insertion loss and signal latencies for data traffic between an ASIC and the I/O.

COMPATIBLE WITH

SpeedLine
High-Speed Protocol Cables



VersaLink Bridge: 100 Ohm connectors and jumpers for high-speed board applications



VersaLink Bridge: bypass high-loss board traces with a low insertion-loss and low signal-latency point-to-point Twinax jumper

High-speed data transmission from one PCB to another, from one side of a backplane to another, or even from one side of a complex embedded system to another, is frequently accomplished by routing high-speed traces on a dedicated high-speed signal layer. This is a complex assignment—fraught with potential for impedance discontinuities and unacceptable insertion loss—as traces must navigate difficult and/or long routing paths around via columns and other board irregularities. The Glenair VersaLink Bridge is a high-density, micro-form factor twinax connector / jumper assembly used to bridge the gap between point A and point B on the board (such as between two SML integrated circuit chips) with better signal integrity than native board traces can ever deliver. VersaLink Bridge is equally capable of dramatically reducing insertion loss and signal latencies for data traffic between an ASIC and the I/O.

Right-angle bayonet-lock version for high shock and vibrate applications

VERSALINK BRIDGE FEATURES

- Small footprint, high-density solution
- Versatile solder-mount or screw-mount board termination
- 100 Ohm differential Twinax
- Push-pull mating or bayonet-lock for high vibration and shock applications
- Keyed polarization prevents mis-mating
- Low insertion loss and low signal latencies for high data rate board transmissions

HIGH-SPEED VersaLink™ Bridge



Differential Twinax "bypass" connector and jumper assemblies

AVAILABLE CONFIGURATIONS: QUICK-DISCONNECT

Quick-disconnect plug	QDC Jack board pin straight screw mount	QDC Jack board pin straight solder mount	QDC Jack board pin right-angle screw mount	QDC Jack board pin right-angle solder mount

AVAILABLE CONFIGURATIONS: BAYONET-LOCK

Bayonet-lock plug	Bayonet-lock Jack board pin straight screw mount	Bayonet-lock Jack board pin straight screw mount

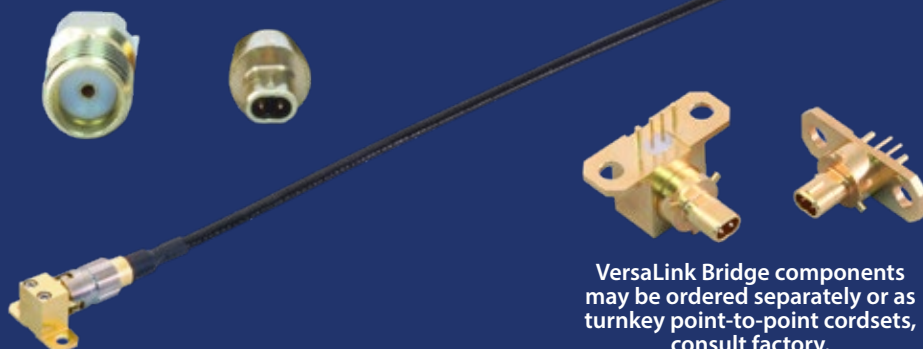
Recommended Cable for Plug Connectors

Cable P/N	Cable Construction	Wire Gauge	Impedance	Max. Overall Size
963-043-26	Twinax In-Line	26	100 Ω	.121" X .076"

MATERIALS AND FINISHES

Contacts: Copper alloy / gold
 Insulators: Superior rigid dielectric
 Body: Copper alloy / gold
 Ferrules (plugs): Copper alloy / electroless nickel
 Spring (plugs): Music wire

Reduced size and weight: A side-by-side comparison of a standard SMA coax connector (left) and VersaLink.



VersaLink Bridge components may be ordered separately or as turnkey point-to-point cordsets, consult factory.

ELECTRICAL PARAMETERS

(for Board Connectors)

Impedance: 100 Ohms
 DWV: 500 RMS
 IR: 5000 Megaohms min. at 200 VDC

COMPATIBLE WITH

SpeedLine
High-Speed Protocol Cables



The smallest and lightest aerospace-grade, high-speed Micro-D connector Solution



Prewired cordset with overbraiding for abrasion protection

The High-Speed Micro-D uses an impedance optimized open pin field for high-density signal routing flexibility. 1 Amp pre-wired cable and PCB solutions deliver up to 15 Gbps performance per differential pair. Auxiliary EMC ground springs on plugs ensure data integrity and low attenuation performance.

High-Speed Micro-D connectors and cables are optimized for multi-gigabit digital datalink protocols including USB 3.0, 10GbE, Camera Link, and PCIe 3.0. The high-performance, aerospace-grade connector series features machined-shell packaging, low-attenuation contact spacing, low- κ PPS dielectric insulators, and Glenair shock- and vibrate-resistant Nano TwistPin contacts.



- Pre-wired factory pigtailed, cordsets, and PCB connectors
- Unique contact isolation and spacing for optimal high-speed performance up to 15 Gbps
- Supports maximum #28 AWG wire
- Low- κ dielectric insulator combined with optimized contact size and spacing
- Precision-machined shells with gold or nickel plating
- 1 Amp TwistPin contacts for optimal performance in harsh vibration, shock, and high-temperature environments









SERIES GHSM High-Speed Micro-D



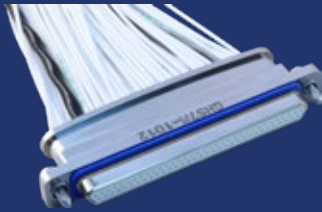
The miniature high-speed connector with mil-spec pedigree connector and contact packaging

SUPPORTED HIGH-SPEED PROTOCOLS

Shell sizes and contact arrangements optimized for today's popular high-speed protocols

 21 Display Port 1.2	 21 HDMI 2.0	 25 DVI-D Dual	 21 DVI-D Single
 15 SATA Gen 1, 2, and 3	 15 USB 3.0 SuperSpeed	 15 Up to: Cat 6A (10GBASE-T Ethernet)	 31 Camera Link

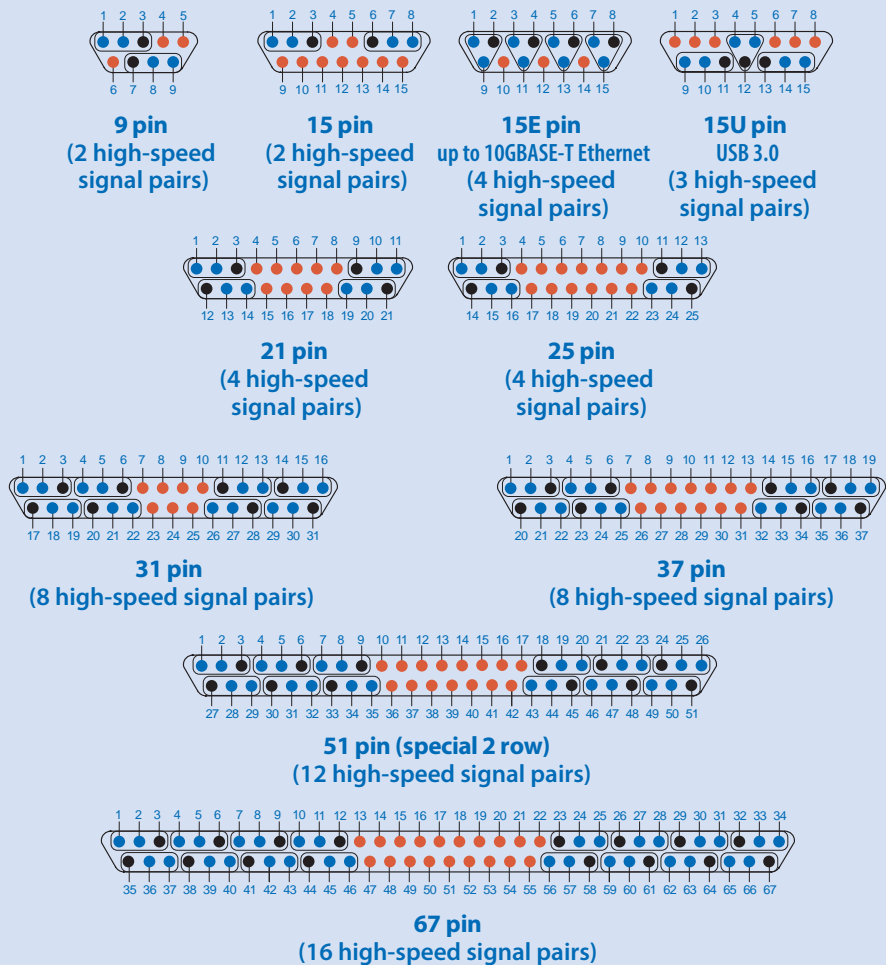
PREWIRED PIGTAIL AND BACK-TO-BACK CABLES



Turnkey, prewired plug and receptacle cable connectors are available as single-ended pigtailed or back-to-back cable assemblies with pin or socket contacts per customer requirements. Shielded twisted pair (STP) wiring for differential data pairs is supplied in either 100 or 90 Ohms with a selection of jacketing and color. Discrete hookup wires may be specified in #28 or #30 gauge. Variable lengths of the assembly may be specified in 1 inch increments.

High-Speed Micro-D contact arrangements face view pin connector

- high-speed signal pair
- signal-pair drain wire
- low-speed signal or power contacts



COMPATIBLE WITH

SpeedLine
High-Speed Protocol Cables

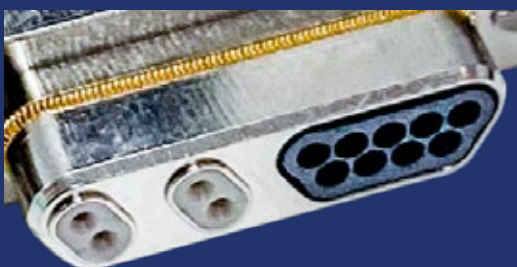
**GM
MD**

The modular Micro-D
differential twinax / RF
coax high-speed solution



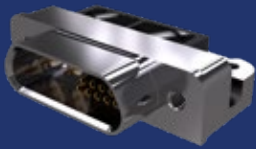
GMMD: an innovative modular Micro-D connector for RF coax and high-speed differential datalink applications. The unique micro miniature design of the GMMD also accommodates standard analog signal and power contacts, making it the most versatile Micro-D rectangular in the industry. GMMD leverages Glenair Signature Micro and Nano TwistPin contact inserts, as well as ultra small form-factor differential twinax modules delivering 18 Gb/second per pair and RF to 20 GHz. GMMD is supplied as factory-terminated pigtailed, point-to-point jumpers, and SMT receptacles for easy PCB mounting.

- Low crosstalk, high bandwidth twinax modules for 18Gb/s per pair and RF up to 20GHz
- Cable and 90° PCB configurations for matched 100 Ohm differential impedance performance from I/O to board
- SMT receptacles for easy PCB mounting
- Combo layouts include twinax, 50 and 75Ω coax, mixed signal and power
- TwistPin contacts for low resistance and high shock and vibe performance
- Standard Micro-D shell sizes and hardware

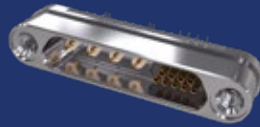


Glenair Signature Twinax contact modules (left) are fully shielded for outstanding cross-talk isolation and signal integrity. Standard Micro-D TwistPin contact modules deliver reliable performance IAW MIL-PRF-83513.

GMMD DISCRETE CONNECTORS AND PIGTAIL / JUMPER ASSEMBLIES



Horizontal PCB-mount twinax and combo twinax receptacles



Vertical PCB-mount twinax and combo twinax plug and receptacles



Twinax and combo twinax jumpers and pigtails



Horizontal PCB-mount coax and combo coax receptacles



Coax and combo coax jumpers and pigtails

GMMD TWINAX AND COMBO TWINAX CONTACT ARRANGEMENTS (additional arrangements are available, consult factory)

Contact Arrangement	2T	4T	2T9	2T15	4T9	
Shell Size	9	15	21	25	31	
No. / type of contacts	2 Twinax	4 Twinax	2 Twinax, 9 #24	2 Twinax, 15 #24	4 Twinax, 9#24	
Example applications	SpFi	10GbE, 2xSATA, SpW, 2xSpFi	USB 3.1, SATA + power		HDMI, DP, DVI, 10GbE + power	
Contact Arrangement	5T9	8T	4T15	8T15	4T31	12T
Shell Size	31	31	37	51-2	51-2	51-2
No. / type of contacts	5 Twinax, 9 #24	8 Twinax	4 Twinax, 15 #24	8 Twinax, 15 #24	4 Twinax, 31 #24	12 Twinax
Example applications	DP incl. Aux channels	2x10GbE		DP or HDMI + USB 3.1, dual DVI		
Contact Arrangement	12T15	6T37	8T31	16T		
Shell Size	67	67	67	67		
No. / type of contacts	12 Twinax, 15 #24	6 Twinax, 37 #24	8 Twinax, 31 #24	16 Twinax		
Example applications				4x10GbE		

GMMD COAX AND COMBO COAX CONTACT ARRANGEMENTS (additional arrangements are available, consult factory)

Contact Arrangement	2C	4C	6C	
Shell Size	9	21	25	
No. / type of contacts	2 X 50Ω Coax	4X 50Ω Coax	6X 50Ω Coax	
Contact Arrangement	8C	16C		
Shell Size	37	67		
No. / type of contacts	8 X 50Ω Coax	16X 50Ω Coax		
Contact Arrangement	2C9	1V9	2V9	4V
Shell Size	21	21	31	21
No. / type of contacts	2X 50Ω Coax, 9 X #24	1 X 75Ω Coax, 9 X #24	2 X 75Ω Coax, 9 X #24	4 X 75Ω Coax

FIBER KING

FIBER OPTIC CABLES

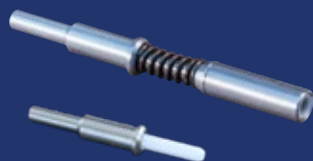
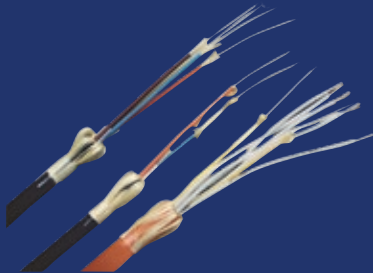


Glenair is the worldwide leader in military, aerospace, and harsh-environment fiber optic interconnect assemblies. We manufacture every element in-house, from low-loss simplex, duplex, and multi-line fiber optic cables, to precision termini, military and aerospace-grade connectors, backshells, and tools. Glenair FiberKing fiber optic cables are optimized for reliable, durable performance in military and commercial aviation, space, harsh-environment oil and gas, and multi-termination (MT ribbon) assemblies.

FIBERKING FIBER OPTIC CABLES

- Lightweight, tight bend-radius fiber optic cable for 10Gb+ avionic networks
- Vibration, radiation, and temperature-resistant space-grade F/O designs
- Ultra harsh-environment (high-pressure, high-temp, water-blocking) oil & gas industry fiber optic cable assemblies
- Ruggedized fiber optic ribbon cable for multi-fiber termination (MT) applications

Flight-Grade Mil-Aero (MA) Simplex Fiber Optic Cables for Glenair SuperNine and GFR Connectors, Termini, and Accessories



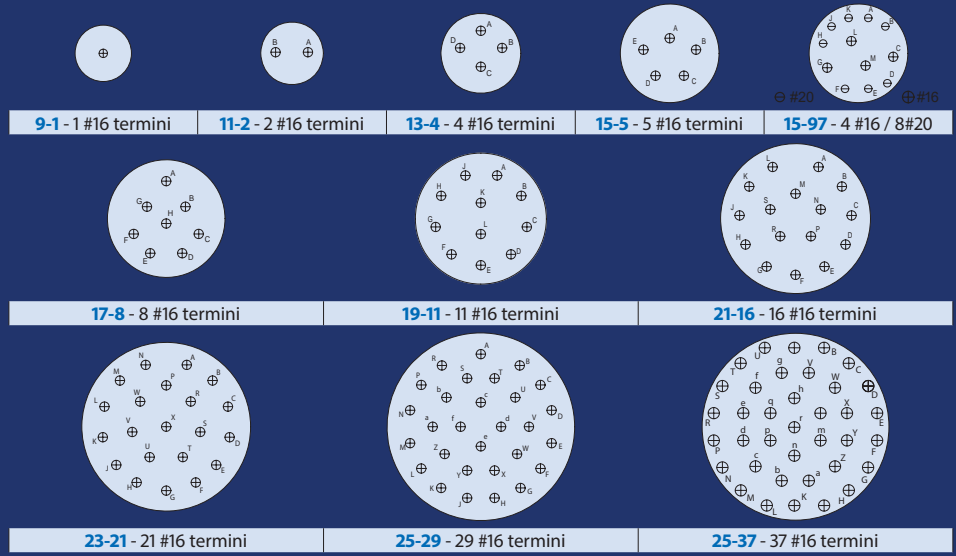
THE FIBERKING MIL-AERO (MA) ECOSYSTEM

The FiberKing Mil-Aero (MA) Ecosystem is a complete flight-grade fiber optic interconnect solution for demanding military and commercial aerospace applications. This complete 10Gb+ low-loss fiber optic solution includes single- and multimode stepped and graded-index cables in simplex, duplex, and multi-line configurations. Glenair SuperNine and Glenair Front Release (GFR) fiber optic connectors are Glenair's signature offerings for high-speed, high data rate avionic networks. Cables and connectors are qualified to strict aviation industry standards for vibration, shock, moisture, and LSZH, and are rated to maximum optical loss (dB / km) at 850 nm \leq 5.0 and at 1300 nm \leq 3.0. Multimode cables are OM4 graded-index. Singlemode cables are OS1 stepped-index.

ABOUT MIL-DTL-38999 SERIES III TYPE FIBER OPTICS

Glenair's complete line of multi-channel MIL-DTL-38999 Series III Type fiber optic products includes qualified size 16 MIL-PRF-29504 /4 and /5 precision ceramic termini, and commercial large-core and jewel size 16 termini, as well as high-density size 20 termini. The tight-tolerance design provides repeatable, reliable optical performance. Connectors, backshells, and accessories IAW MIL-DTL-38999 Series III (Glenair SuperNine[®]) are available in metal and composite versions.

FIBERKING SIMPLEX, DUPLEX, AND MULTI-LINE CABLE LAYOUTS FOR GLENAIR SUPERNINE[®]



ABOUT GLENAIR FRONT RELEASE (GFR) FIBER OPTICS

Glenair Front Release (GFR) fiber optic connectors and termini perform at insertion loss levels equivalent to MIL-PRF-29504 termini. GFR termini feature integrated O-ring sealing and retention clips for easy termination, insertion, and removal into precision-machined connector shells. GFR for flight-grade applications is supplied in Micro-D and D-Subminiature form-factors, and is optimized for plug-and-play use with Glenair FiberKing Mil-Aero (MA) low-loss fiber optic cables. Micro-D configurations are available in 1–8 channel configurations, D-Subminiature form-factor GFRs are available in 4–12 channel designs. Both series meet aviation industry standards for vibration, shock, and temperature, and combined with FiberKing MA OM4 multimode cable deliver reliable, low-loss performance up to 40 Gb/s at 850 nm.

TURNKEY
FIBER KING
CABLE
ASSEMBLIES

FIBER KING

FIBER OPTIC CABLES

Glenair manufactures every popular mission-critical fiber optic interconnect system including MIL-DTL-38999 type, MIL-DTL-64266 NGCON, MIL-PRF-28876, and ARINC 801. 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. And because Glenair manufactures its own military/aerospace grade fiber optic cable in-house, customers are assured both optimal quality and fastest time to market.



Hybrid environmental overmolded fiber optic / electrical cable assembly, MIL-DTL-38999 type with 29504/4 and /5 QPL termini



Hybrid optical / electrical assembly for weight reduction in a high-speed datalink application



Harsh environment overmolded MIL-DTL-38999 Series III type composite



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



Specialized MT ribbon fiber low-profile molded breakout capabilities



GFOCA I/O-to-board assembly with overbraiding for mechanical protection



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

WHY CHOOSE GLENAIR FIBER OPTICS? Turnkey Fiber Optic Cables and Harnesses

Built in-house in Glenair's total vertical integration fiber optic division with Glenair high-performance FiberKing fiber optic cables



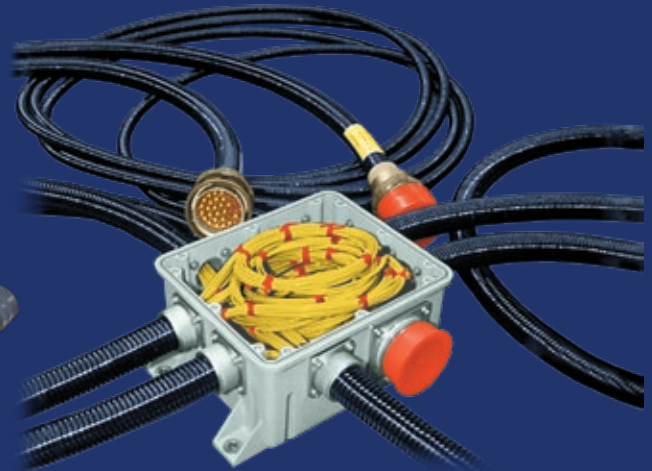
Hybrid MIL-DTL-38999 Series III type fiber optic / electrical cable junction box



Harsh environment repairable MIL-DTL-38999 Series III type with FiberCon backshell to prevent fiber media damage



Field-deployable hermaphroditic GFOCA fiber optic cable assembly



Fiber optic multibranch assembly with flexible conduit wire protection and integrated cable storage bay



Point-to-point fiber optic cable with integrated strain relief



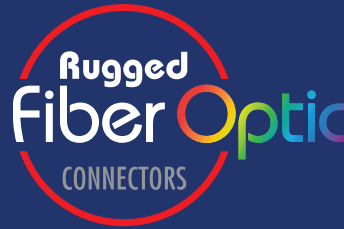
High-speed video fiber optic switch and cable junction box assembly



Turnkey Optical Flex circuit assembly with rugged MT ferrule terminations

COMPATIBLE WITH

FIBER KING
FIBER OPTIC CABLES



SuperNine® tight-tolerance MIL-DTL-38999 Sr. III fiber optic connection System



The high-performance MIL-DTL-38999 type fiber optic interconnect system with qualified MIL-PRF-29504/4 and /5 termini, successfully deployed in hundreds of commercial and military aerospace and other rugged applications—from F-16 upgrade systems to the revolutionary F-35 Joint Strike Fighter.



Terminated and tested point-to-point and multibranch D38999 type fiber optic cable assemblies

- Composite, aluminum and stainless steel shells available
- Qualified 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
- Plug and In-Line, Jam Nut and Square Flange Receptacles
- Patented MIL-DTL-38999 fiber optic test probes and adapters

SUPERNINE TIGHT-TOLERANCE D38999 Sr. III Fiber Optic Connection System



ABOUT MIL-DTL-38999 SERIES III TYPE FIBER OPTICS

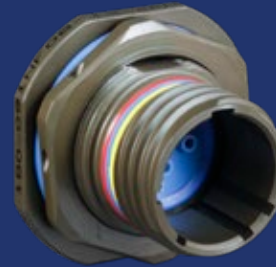
Glenair's complete line of multi-channel MIL-DTL-38999 Series III Type fiber optic products includes qualified size 16 MIL-PRF-29504 /4 and /5 precision ceramic termini, and commercial large-core and jewel size 16 termini, as well as high-density size 20 termini. Tight-tolerance fiber optic connectors, backshells, and accessories IAW MIL-DTL-38999 Series III (Glenair SuperNine®) are available in metal and composite versions.



Plug



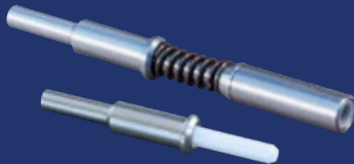
In-Line Receptacle



Jam-Nut Receptacle



Panel-Mount Receptacle



Glenair M29504/04 and /05 QPL termini are in stock and ready for immediate, same-day shipment



Large-core and jewel size #16 termini

- Glenair SuperNine 180-091 series IAW MIL-DTL-38999 Series III connectors, designed and optimized for use with optical termini
- Ultra-tight tolerance shell and cavity dimensions for precise axial alignment
- Wider master key dimension on plug connector for improved cavity alignment
- Ultra-lightweight composite thermoplastic connector solutions plus lightweight aluminum, rugged stainless steel and marine bronze
- Qualified size #16 MIL-PRF-29504 pin-socket precision ceramic termini
- Insert arrangements from 2 to 37 ways
- Advanced RoHS-compliant finish solutions
- IP68 in mated condition (10 meters, two hours)

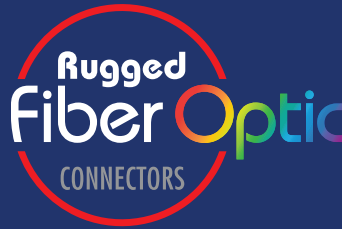
MATERIAL AND FINISH		
Code	Material	Finish Description
MA	Aluminum	Electroless Nickel, Matte
ME		Electroless Nickel
MT		Nickel-PTFE, Gray
NF		Cadmium, Olive Drab
TZ		Tin-Zinc, Green-Gold
ZN		Zinc-Nickel, Olive Drab
ZNU		Zinc-Nickel, Black
ZR		Zinc-Nickel, Black (RoHS)
XM	Composite	Electroless Nickel
XMT		Nickel - PTFE, Grey
XW		Cadmium, Olive Drab
XZN		Zinc-Nickel, Black
MS	Stainless Steel	Electroless Nickel
ZL		Electro-Deposited Nickel
ZI		Passivate
AB	Marine Bronze	No Plating

MIL-PRF-29504/04 AND /05 FIBER OPTIC TERMINI PERFORMANCE SPECIFICATIONS	
Test Type	Performance Requirement
Optical Insertion Loss, Multimode (MM) *	0.35 dB Typical (50/125 and 62.5/125), restricted launch
Optical Insertion Loss, Singlemode (SM) *	0.30 dB Typical (9/125)
Optical Return Loss	Better than -40 dB - PC Polish Better than -50 dB - Enhanced PC Polish
Discontinuity, Vibration	MM: 0.5 dB or more for 50 μs or more SM: 0.5 dB or more for 50 μs or more
Discontinuity, Shock	MM: 0.5 dB or more for 50 μs or more SM: 0.5 dB or more for 100 ms or more
Operating Temperature	-55°C to +165°C (dependent on epoxy and cable)
Temperature (Thermal) Shock	-55°C to +165°C, 5 Cycles
Temperature Life	+165°C, 1000 hours
Mating Durability	500 cycles (cleaning after 100 matings)
Vibration - Sinusoidal	60.0 Grms at ambient temperature. Monitored for Discontinuity.
Vibration - Random at Temperature	41.7 Grms at 125°C. Monitored for Discontinuity.
Vibration - Random at Ambient	49.5 Grms at ambient temperature. Monitored for Discontinuity.
Mechanical Shock (High Impact)	Per MIL-DTL-901, grade A, type B, class I. Monitored for Discontinuity.
Mechanical Shock (Half-Sine Pulse)	300 G Peak over 3ms duration. Monitored for Discontinuity.

* Optical Insertion Loss values when tested in Tight Toleranced Connectors

COMPATIBLE WITH

FIBER KING
FIBER OPTIC CABLES



**Ultra-Low dB Loss
ARINC 801 fiber optic
termini with SuperNine
connector packaging**

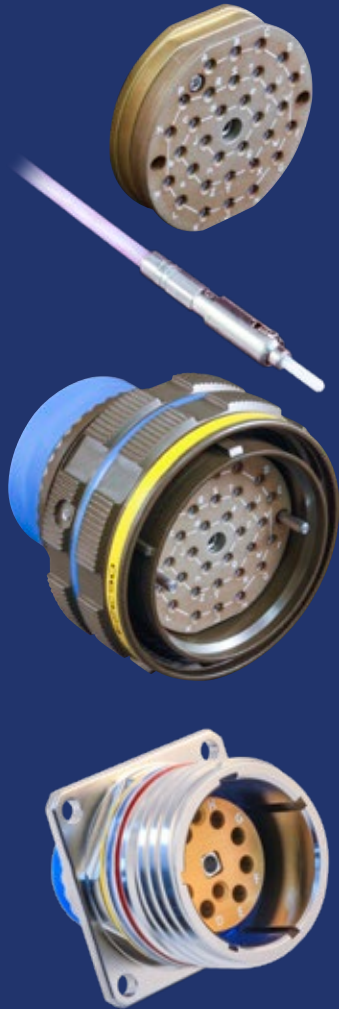


ARINC 801 is a keyed genderless fiber optic terminus used in a broad range of aerospace connector packages including ARINC 801, ARINC 600, and other circular and rectangular series. The Glenair solution includes features from our "Better than QPL" SuperNine[®] connector with improved axial alignment, vibration and shock resistance, and low dB loss performance. Loose structure and tight structure cable types are supported.



- **Keyed, genderless terminus design eliminates pin and socket complexity and supports both PC and APC applications**
- **Rear-release size #16 termini (1.25mm ferrule)**
- **Singlemode (1310 and 1550 nm) as well as multimode (850 and 1300 nm)**
- **Mechanical and environmental performance in accordance with ARINC 801**

ULTRA-LOW dB LOSS ARINC 801 Fiber Optic



ABOUT ARINC 801

ARINC 801 is an industry-standard terminus design for use in various form-factor aerospace connectors. Terminus features include Ø1.25mm precision zirconia ceramic ferrules and alignment sleeves, as well as a keyed body for angle polished (APC) end face termination. Connector features include removable alignment sleeve retainer and guide pins. Glenair offers singlemode (UPC and APC) as well as multimode (PC) options with familiar LC ferrule type termination. Terminus configurations available for use with loose and tight structure cable. A complete range of insert arrangements from 2 to 32 channels are available in accordance with ARINC 801. Glenair can provide connector packaging in virtually any supported format from ARINC 600 to EN4644. Our catalog solution incorporates "Better-than-QPL" MIL-DTL-38999 Series III type SuperNine® connector features (i.e. anti-decoupling and key polarization options).

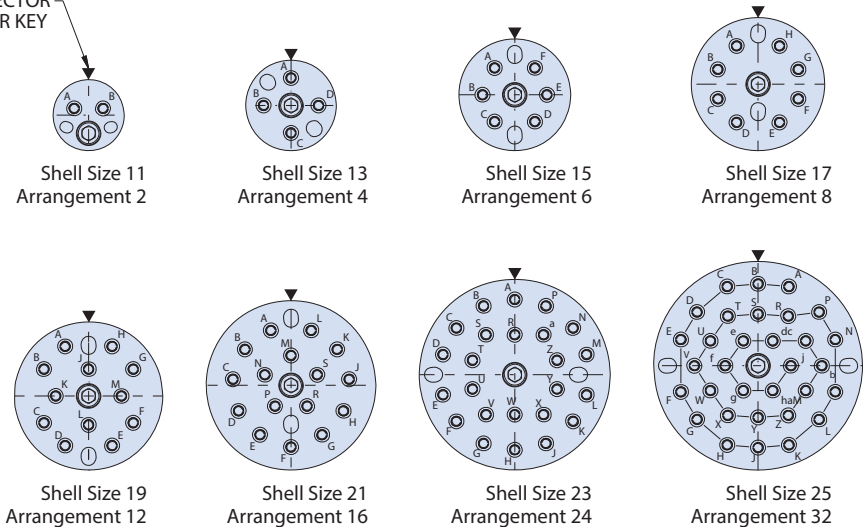
Series 180-159 ARINC 801 Performance Specifications

Test Description	Performance Requirements/Specifications
Insertion Loss	Multimode (PC): 0.30 dB typical at 850/1300nm
	Singlemode (UPC): 0.30 dB typical at 1310/1550nm
Return Loss	Multimode (PC): Better than 20 dB
	Singlemode (UPC): Better than 40 dB
	Singlemode (APC): Better than 65 dB
Operating Temperature	-55°C to +165°C (cable/epoxy dependent)
Storage Temperature	-40°C to +85°C (cable/epoxy dependent)
Mating Durability	500 cycles, per TIA/EIA-455-21
Vibration	23.1g RMS, 8 hrs/axis, per TIA/EIA-455-11, Test Condition VI-G
Mechanical Shock (half-sine pulse)	300g Peak for 3ms, 3 shocks/axis in each direction, per TIA/EIA-455-14, Test Condition D
Thermal Cycling	-55°C to +125°C, 50 cycles, per TIA/EIA-455-3, Test Condition C-4 (cable/epoxy dependent)
Temperature Life	+125°C for 1000 hrs, per TIA/EIA-455-4 (cable/epoxy dependent)
Humidity, Steady State	+40°C for 240 hrs, 90% RH, per TIA/EIA-455-5, Method A, Test Condition B
Humidity, Temperature Cycling	-25°C to +65°C, 10 cycles for 24 hrs, 90% RH, per TIA/EIA-455-5, Method B7a (cable/epoxy dependent)

ARINC 801 INSERT ARRANGEMENTS

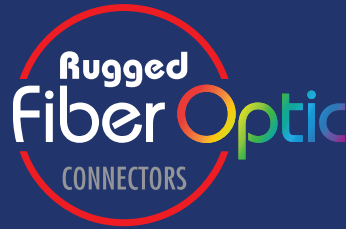
MATERIAL AND FINISH		
Code	Material	Finish Description
ME	Aluminum Alloy	Electroless Nickel
MT		Nickel-PTFE, Gray
NF		Cadmium, Olive Drab
TZ		Tin-Zinc, Green-Gold
ZN		Zinc-Nickel, Olive Drab
ZR		Zinc-Nickel, Black (RoHS)
XM	Composite	Electroless Nickel
XMT		Nickel - PTFE, Grey
XW		Cadmium, Olive Drab
XZN		Zinc-Nickel, Black
MS	Stainless Steel	Electroless Nickel
ZL		Electro-Deposited Nickel
ZI		Passivate
AB	Marine Bronze	No Plating

CONNECTOR MASTER KEY



COMPATIBLE WITH

FIBER KING
FIBER OPTIC CABLES



Glenair High Density (GHD): Double the Density of Standard Mil-Spec Fiber Optic Designs



The system of choice for military and commercial air and space applications with aggressive size and weight requirements. Outstanding optical and environmental performance with nearly double the density of standard mil-spec, butt-joint solutions. Glenair High Density (GHD) is a complete fiber optic system with termini, connectors, cable and conduit assemblies, test probe adapters, tools, and more.

- Innovative #18 (1.25mm ferrule) front-release genderless termini accommodate 900 μ to 2.0mm jacketed fiber
- M85045/16 cable accommodation
- Composite, aluminum, or stainless steel shells with MIL-DTL-38999 mating and accessory threads
- Single key termini for APC polish available
- Better optical performance than D38999 with nearly double the density
- Precision alignment sleeve retainer with integrated guide pins



GHD plug connector with alignment sleeve retainer, and square flange receptacle. Termini available in keyed and non-keyed styles.

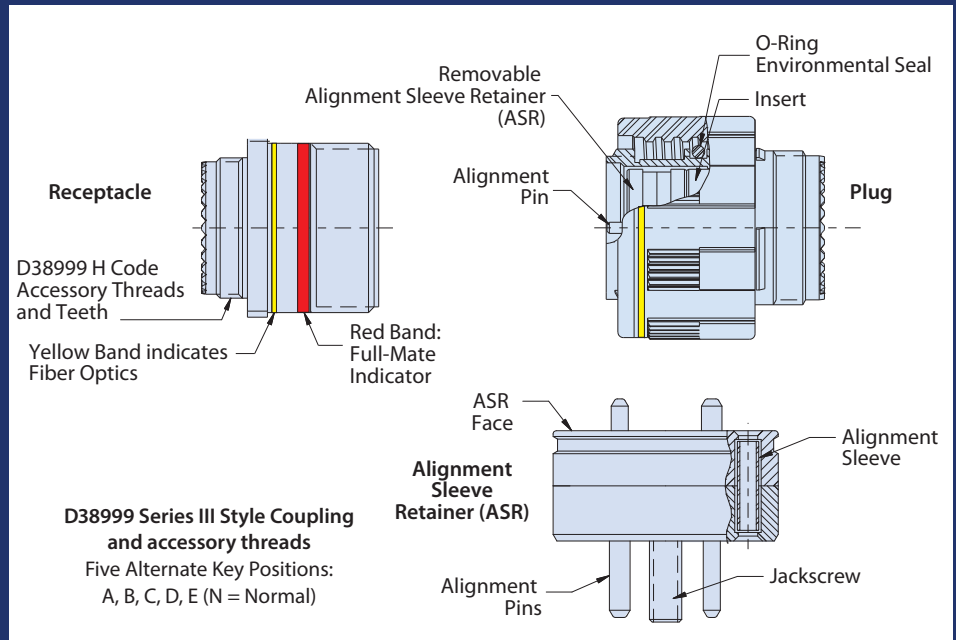
DOUBLE-DENSITY Glenair High-Density (GHD)



ABOUT GLENAIR HIGH DENSITY (GHD)

The GHD fiber optic connection system is a D38999 workalike designed for applications that require higher-density fiber optic insert arrangements with the same outstanding optical and environmental performance as MIL-DTL-38999. The GHD system accommodates a broad range of singlemode and multimode fiber media and offers insertion loss values less than 0.5dB (typical loss for Glenair termini is 0.3 dB). Dense cavity spacing is achieved with an innovative Size 18 genderless front-release terminus design that provides nearly double the density as the standard M28876 and D38999 fiber optic connector series. The GHD system is also available with APC Angle Polish to reduce unwanted back reflection. A removable Alignment Sleeve Retainer (ASR) makes for easy fiber optic cleaning and maintenance in plug connectors. GHD is a complete system that includes keyed and unkeyed termini, a complete range of connector configurations, backshells, accessories, test probe adapters, tools, and more.

GLENAIR HIGH DENSITY (GHD) FEATURES



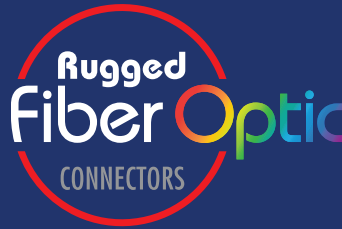
MATERIAL AND FINISH		
Code	Material	Finish Description
M	Aluminum Alloy	Electroless Nickel
MA		Electroless Nickel, Matte
MT		Nickel-PTFE, Gray
NF		Cadmium, Olive Drab
TZ		Tin-Zinc, Green-Gold
ZNU		Zinc-Nickel, Black
ZR		Zinc-Nickel, Black (RoHS)
XM	Composite	Electroless Nickel
XMT		Nickel - PTFE, Grey
XW		Cadmium, Olive Drab
XZN		Zinc-Nickel, Black
ZL	Stainless Steel	Electro-Deposited Nickel
ZI		Passivate
AB	Marine Bronze	No Plating

COMPATIBLE D38999 SERIES III FIBER OPTIC BACKSHELLS AND ACCESSORIES



COMPATIBLE WITH

FIBER KING
FIBER OPTIC CABLES



**Series 806 Mil-Aero:
Micro D38999 Type
Packaging, High-Density
Size #20HD PC Termini**



Innovative fiber optic / electrical connector design meets key performance benchmarks for harsh vibration, shock, and environmental settings in rigid conformance with MIL-DTL-38999 Series III—but at nearly half the size and weight.

SAVE SIZE AND WEIGHT WITH SERIES 806 CONNECTORS

Series 806 Mil-Aero
smallest shell (size 8)
.500 in. mating threads
3 Size #20HD electrical or
optical contacts / termini



MIL-DTL-38999
smallest shell (size 11)
.750 in. mating threads
2 Size #16 electrical or
optical contacts / termini

- Next-generation small form factor aerospace-grade circular connector
- High density 20HD fiber termini arrangements
- Designed for harsh application environments such as military and commercial aircraft
- Outstanding environmental, electrical, optical, and mechanical performance
- Integrated anti-decoupling technology
- High performance ceramic ferrule rear-release termini design

MICRO D38999-TYPE Series 806 Mil-Aero Fiber Optic



ABOUT SERIES 806 MIL-AERO FIBER OPTIC

Glenair manufactures and supplies mil-qualified termini for use in MIL-DTL-38999 Series III type connectors including Glenair SuperNine, ARINC 801, and Glenair High Density (GHD). The Series 806 Mil-Aero is our highest density connector series built IAW D38999 Series III specifications—including vibration, shock, and high-altitude immersion. In fact, the Series 806 conforms to every MIL-DTL-38999 Series III standard requirement, but does so in a micro miniature reduced size and weight format, which now includes fiber optic configurations with size 20HD pin and socket termini. These ultra high density fiber optic termini are snap-in, rear release designs featuring precision ceramic ferrules and alignment sleeves for accurate fiber alignment. Typical insertion loss 0.5 dB. Fits 50/125 and 62.5/125 multimode and 9/125 singlemode fiber. Connectors are available with accessory thread or band shield termination porch for easy termination of optical media Kevlar strength member or EMI shielding (hybrid applications).

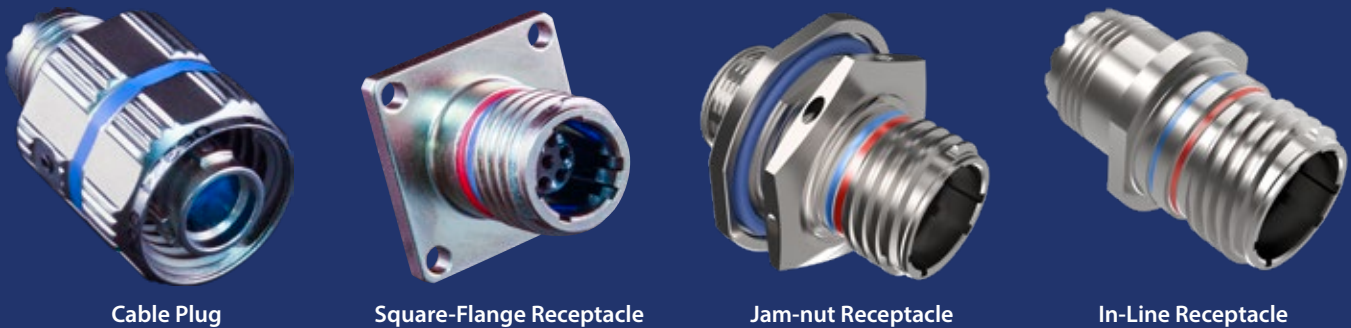
SERIES 806 ARRANGEMENTS COMPATIBLE WITH #20HD FIBER OPTIC TERMINI

Mating face of pin connector. Socket numbering is reversed.

Symbol ▼ indicates master key location.

Arrangement No.	8-3	9-5	10-8	11-10	12-15	14-20	16-31
No. of Termini	3	5	8	10	15	20	31

PLUG AND RECEPTACLES AVAILABLE WITH ACCESSORY THREADS OR SHIELD TERMINATION PORCH



20HD FIBER OPTIC TERMINI FOR SERIES 806 MIL-AERO CONNECTORS



Single or multimode. Ceramic ferrule. 0.5 dB loss. Size 20HD fiber optic termini are compatible with Series 806 connectors with size 20HD contact arrangements. These snap-in, rear release termini feature precision ceramic ferrules and alignment sleeves for accurate fiber alignment. Typical insertion loss 0.5 dB. Fits 50/125 and 62.5/125 multimode and 9/125 singlemode fiber.

MATERIAL/FINISH

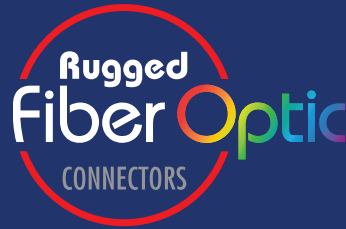
- Ferrule, alignment sleeve: zirconia ceramic
- Body, shroud: copper/nickel/zinc alloy
- Spring (socket, not shown): SST/passivated
- Protective cover (socket): BeCu alloy/nickel plated

HOW-TO-ORDER 20HD FIBER OPTIC TERMINI FOR SERIES 806 CONNECTORS

Termini Type	Optical Fiber Type	Part Number	ØA Ferrule Hole	Fiber Size Core/Cladding
Pin	Singlemode	181-134-1255	125.5 microns	9/125
Pin	Multimode	181-134-126	126.0 microns	50/125, 62.5/125
Socket	Singlemode	181-135-1255	125.5 microns	9/125
Socket	Multimode	181-135-126	126.0 microns	50/125, 62.5/125

COMPATIBLE WITH

FIBER KING
FIBER OPTIC CABLES



**Rugged High-Density
PRIZM[®] MT Expanded
Beam and MT Elite PC
Fiber Optic Systems**



**Easy-to-use, harsh environment,
super high-density PRIZM[®] MT
expanded-beam fiber optic assemblies
in Glenair ruggedized I/O and
backplane connector packaging**

- Glenair is qualified by US Conec to terminate one- and two-row PRIZM[®] MT ferrules for both ribbon and round fiber optic cable
- Available as turnkey, factory-terminated PRIZM[®] MT expanded beam assemblies—fully ruggedized for harsh air and space applications
- Highest-density fiber optic solution with reliable, repeatable optical performance
- Outstanding stability under shock and vibration conditions
- PRIZM[®] MT provides outstanding tolerance to debris contamination

ALSO AVAILABLE: MT ELITE[®] PHYSICAL CONTACT SINGLEMODE AND MULTIMODE CONNECTOR AND CABLE SOLUTIONS



RUGGED HIGH-DENSITY MT Ferrule Expanded Beam



ABOUT MT FERRULE FIBER OPTICS

PRIZM® MT is a monolithic optical fiber ferrule that integrates microlenses and mechanical alignment features into a single component. The design provides low insertion loss and return loss for up to 32 fibers and is optimally resistant to debris contamination. Glenair supplies the PRIZM MT ferrule in factory-terminated cable assemblies for both inside-the-box as well as environmental point-to-point applications. Ruggedized aerospace-grade I/O and backplane connectors are also available for use with standard MT Elite® physical contact (PC) ferrules. MT Elite compatible connectors and ferrule kits are ordered separately for complete convenience in the implementation of both singlemode and multimode fiber optic datalinks.

SUPERNINE MT CONNECTOR CONFIGURATIONS



Cable Plug



In-Line Receptacle



Jam-Nut Receptacle



Panel-Mount Receptacles

SERIES 79 MT CONNECTOR CONFIGURATIONS



Plugs and receptacles with integrated banding porch, retaining plates, or EMI gasket for ribbon or round fiber media supporting both MT Elite® and PRIZM® MT ferrules.

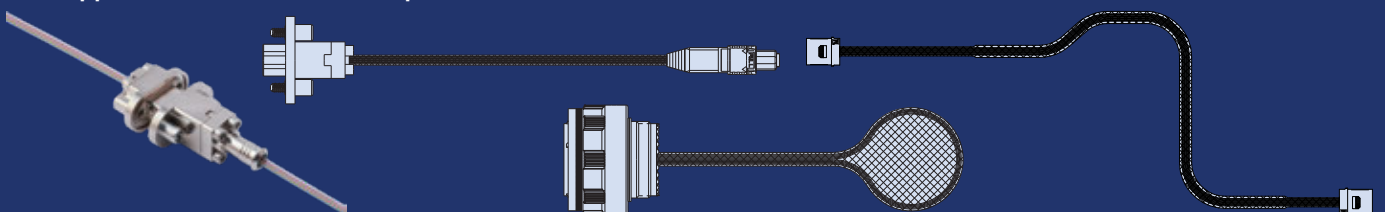
VITA 66 STYLE MT CONNECTORS



VITA 66.1 and 66.4 format. Discrete backplane connectors and MT ferrule assemblies.

CATALOG FAST-TURNAROUND "ASAP" MT OPTICAL FLEX JUMPERS AND CABLE ASSEMBLIES

Glenair supplies—as a commercial off-the-shelf product—point-to-point optical flex jumpers with MT Elite and PRIZM MT optical ferrules. Available configurations include simple MT-to-MTP jumpers in straight or curved profiles, circular and rectangular I/O connectors with MT optical fiber pigtails, as well as special optical loop assemblies. A complete range of multimode and singlemode fiber in popular sizes, plus radiation-hardened fiber for earth orbit applications. Series 79- and SuperNine-to-MT ribbon fiber breakout cable assemblies are also available.



COMPATIBLE WITH

FIBER KING
FIBER OPTIC CABLES



NAVSEA and Underwater Oil & Gas Industry Fiber Optic Interconnect Systems



NAVSEA and commercial oil & gas industry qualified topside and subsea connectors. MIL-PRF-28876 and MIL-PRF-29504 /14 and /15 Navy F/O systems. Glenair signature SeaKing high-pressure, open-face subsea fiber optics. NGCON next-generation fiber optic system.

- M28876 connectors qualified to the complete requirements of MIL-PRF-28876
- All shell sizes and insert arrangements, including 2, 4, 6, 8, 18 and 31 channel layouts
- Qualified MIL-PRF-29504/14 and /15 pin and socket termini and /03 dummy terminus
- Glenair signature SeaKing underwater fiber optic connectors for oil and gas applications
- MIL-PRF-64266 (NGCON) next-generation shipboard / aerospace fiber optics





ABOUT GLENAIR NAVSEA AND UNDERWATER / OIL & GAS FIBER OPTIC INTERCONNECT SYSTEMS

Qualified MIL-PRF-29504/14 and /15 termini and MIL-PRF-28876 connectors and backshells are ready for deployment in shipboard and submarine applications. NGCON MIL-PRF-62466 is a new rear-release fiber optic system designed for naval and airframe applications. SeaKing is a harsh-environment underwater 10K PSI open-face fiber optic system.

QUALIFIED AND GLENAIR COMMERCIAL MIL-PRF-28876 FIBER OPTIC CONNECTORS AND MIL-PRF-29504 TERMINI—NAVY APPROVED, IN STOCK, AND READY FOR IMMEDIATE SHIPMENT



Qualified QPL-29504 pin, socket, and dummy termini

Qualified M28876 environmental fiber optic connectors

Qualified M28876 backshells and accessories

Turnkey environmental and inside-the-box assemblies

NGCON MIL-PRF-64266 NEXT-GENERATION FIBER OPTIC INTERCONNECT SYSTEM AND PIERSIDE FIBER OPTIC CONNECTORS IAW NAVSEA 737971 / 737972



Rear-release genderless termini IAW M29504

High-density receptacles and plugs with removable Alignment Sleeve Retainers for easy cleaning

Turnkey environmental and inside-the-box assemblies

SEAKING™ FIBER OPTIC 10K PSI OPEN-FACE PRESSURE RATED FIBER OPTIC CONNECTORS, CABLES AND JUMPERS



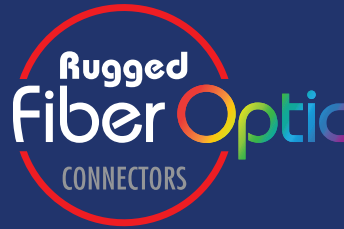
Environmental overmolded fiber optic jumpers

Pressure-balanced oil-filled (PBOF) high-pressure fiber optic assemblies

BCR or FCR F/O pigtail assemblies for I/O-to-board module applications

COMPATIBLE WITH

FIBER KING
FIBER OPTIC CABLES



Glenair Front Release Fiber Optic Connection System: the Fast Road to F/O Integration



The Glenair Front Release (GFR) system allows for rapid connector integration of optical media by placing retention and environmental sealing components directly on the termini. GFR enables fast design and development of unique fiber optic connector shell packages without costly tooling and engineering.

- Precision size 16 pin-socket front release termini with integrated retention clip
- Singlemode and multimode for all popular fiber sizes
- Typical insertion loss less than 0.5 dB
- Supports cylindrical and rectangular connectors
- Connector shells available in aluminum and stainless steel



GFR fiber optic termini integration in micro miniature rectangular and circular connector packaging

GLENAIR FRONT-RELEASE (GFR) Fiber Optic Integration System

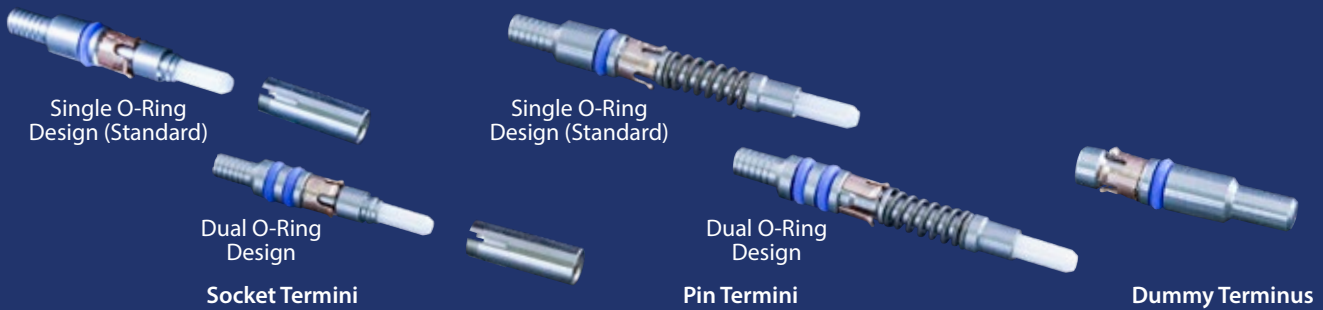


MATERIAL/FINISH		
Code	Material	Finish
C	Aluminum Alloy	Anodize, Black
M		Electroless Nickel
NF		Cadmium, Olive Drab over Electroless Nickel
ZN		Zinc-Nickel, Olive Drab, Over Electroless Nickel
Z1	Stainless Steel	Passivate

ABOUT GLENAIR FRONT RELEASE (GFR)

Glenair Front Release (GFR) fiber optic termini perform at insertion loss levels equivalent to the MIL-PRF-29504 termini designed for use in high-performance fiber optic systems such as MIL-DTL-38999 and MIL-PRF-28876. The GFR termini, however, feature integrated O-ring sealing and retention clips, making them suitable for easy integration into machined connector cavities in virtually any form-factor connector. This approach has enabled Glenair to integrate optical media—with ruggedized, low dB loss performance—in Micro-D, D-Subminiature, and any number of custom connector shells, both rectangular and cylindrical. Contact the factory for availability and application engineering assistance for both standard and custom GFR fiber optic applications.

GFR FRONT-RELEASE TERMINI WITH INTEGRATED O-RING SEALING AND RETENTION CLIPS



MICRO-D FORM-FACTOR GFR CONNECTORS



Support from one to eight GFR termini with insertion loss performance comparable to industry-standard MIL-PRF-29504. Precision-machined with integral alignment pins for optimum optical fiber alignment and low dB data loss performance. Available in aluminum and stainless steel. Termini sold separately. Support for single- and dual-O-ring termini. Panel cutouts IAW MIL-DTL-83513.

D-SUBMINIATURE FORM-FACTOR GFR CONNECTORS



Support from four to twelve GFR termini with insertion loss performance comparable to industry-standard MIL-PRF-29504. Precision-machined with integral alignment pins for optimum optical fiber alignment and low dB data loss performance. Available in aluminum and stainless steel with standard jackpost hardware included. Termini sold separately. Support for single- and dual-O-ring termini. Panel cutouts IAW MIL-DTL-24308.

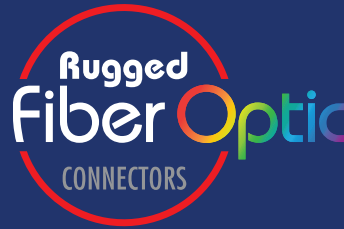
MICRO-MINIATURE CIRCULAR GFR CONNECTORS



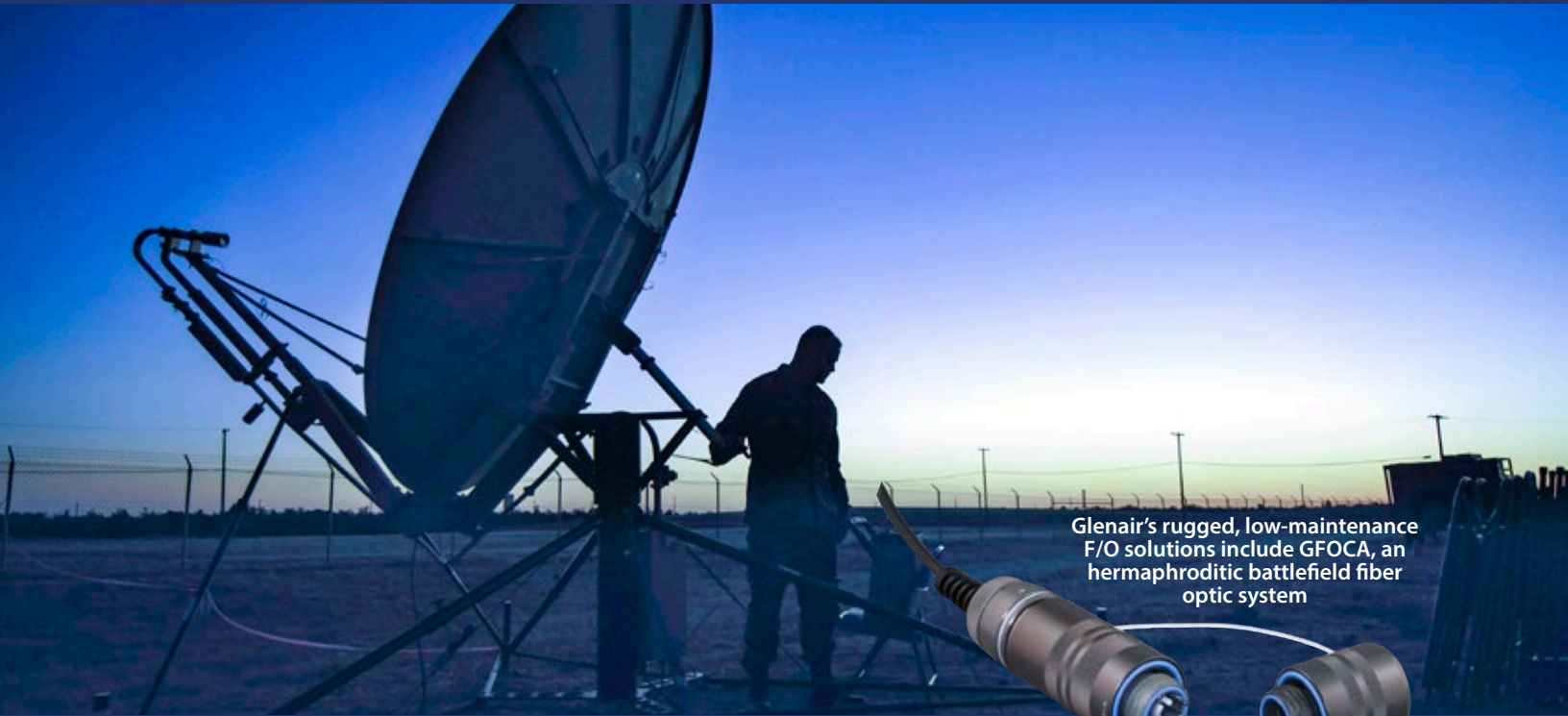
Support from two to twelve GFR pin or socket termini with insertion loss performance comparable to industry-standard MIL-PRF-29504. Precision-machined with O-ring environmental seal. Back-end threads and teeth accept Glenair Mighty Mouse accessories. Available in aluminum and stainless steel. Termini sold separately. Support for single- and dual-O-ring termini.

COMPATIBLE WITH

FIBER KING
FIBER OPTIC CABLES



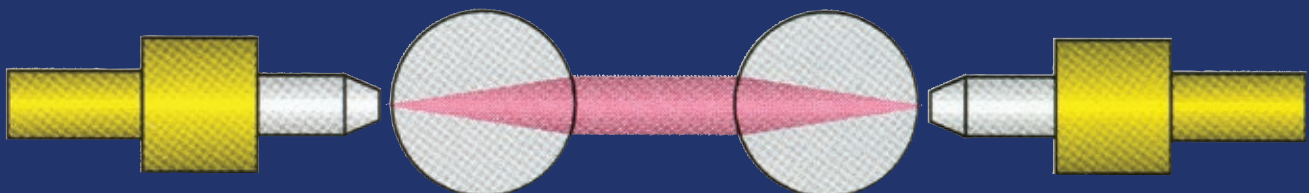
Eye-Beam GLT, Eye-Beam GMA, and Eye-Beam Power, Plus Rugged Field (PC) GFOCA D83526



Glenair's rugged, low-maintenance F/O solutions include GFOCA, an hermaphroditic battlefield fiber optic system

Commonly used in harsh environmental applications such as directed energy weapons, long-run battlefield communications, and Free Space Optical applications, Glenair Expanded Beam fiber optics virtually eliminate field maintenance and cleaning difficulties, with low dB-loss mating system performance rated to 1000-2000 cycles depending on fiber media selection.

EXPANDED BEAM TECHNOLOGY



Expanded Beam connectors utilize a sealed lens to expand the emitting beam of light from the fiber media making connections less sensitive to alignment and contaminants. The expanded beam enters an air gap between connectors and is then refocused back into the fiber of the mating half. Sealed expanded beam assemblies are ideally suited for environmental applications where optical connectors are subject to repeated mating and unmating cycles. Easy to clean, terminate, and insensitive to contamination.

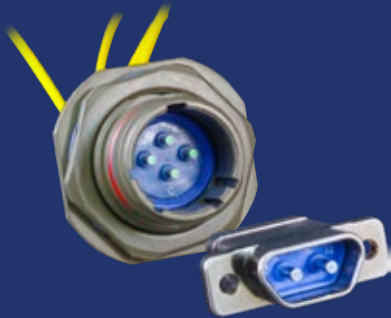
EXPANDED-BEAM AND RUGGED FIELD Eye-Beam and GFOCA Fiber Optics



ABOUT GLENAIR RUGGED FIELD AND EXPANDED-BEAM FIBER OPTICS

Eye-Beam GLT, Eye-Beam GMA, and Eye-Beam Power are optimized for reliable, low-maintenance performance in ground and air applications. Eye-Beam GLT is a grin-lens terminus solution, Eye-Beam GMA is a workalike for the popular HMA hermaphroditic connector system, and Eye-Beam Power is a ruggedized, optical power terminus design for directed energy and Free Space Optical applications. GFOCA hermaphroditic F/O interconnects are built IAW MIL-DTL-83526 and equipped with MIL-PRF-29504/16 type termini. GFOCA is Glenair's most ruggedized field-deployable fiber optic platforms.

INNOVATIVE EYE-BEAM GLT EXPANDED BEAM TERMINI DELIVER OPTIMAL PERFORMANCE IN HARSH ENVIRONMENTS



- All the benefits of an expanded beam connection system built into a versatile fiber optic terminus
- Factory-terminated Eye-Beam® GLT termini easily integrated into any connector package
- Innovative expanded beam lens terminus expands signal 27X from a standard 9.3 micron fiber core
- Revolutionary design delivers low dB loss performance (1.5 dB multimode, 2.0 dB singlemode untuned) while reducing maintenance, inspection and test costs
- Ultra-high precision ceramic sleeves and custom designed terminus bodies ensure axial alignment

MIL-DTL-83526 HMA TYPE EYE-BEAM GMA BALL-LENS EXPANDED-BEAM FIBER OPTICS



- Field-deployable system for both indoor and outdoor applications
- Beam expansion dramatically reduces loss due to contamination
- Large ball lens facilitates easy cleaning
- Fully intermateable with all MIL-DTL-83526 /20 and /21 compliant connectors
- 2 and 4-channel insert arrangements
- Singlemode and multimode versions, plus broad support for a wide range of standard and tactical military cables

EYE-BEAM POWER RUGGED, HIGH-POWER FIBER OPTICS FOR DIRECTED ENERGY AND FSO APPLICATIONS



- Size #8 drop-in expanded-beam optical contact
- Powerful 20W and higher optical contact ideally suited for directed energy applications
- Compatible with 1064nm polarization-maintaining fiber with a 0.5 dB typical insertion loss
- Low temperature rise at peak power
- Signature assembly process optimizes optical alignment for mission-critical reliability

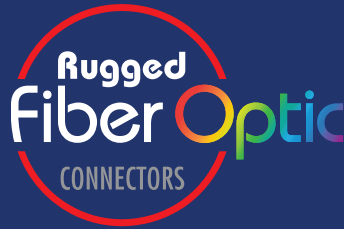
HARSH-ENVIRONMENT, FIELD-DEPLOYABLE GFOCA FIBER OPTIC CONNECTION SYSTEM



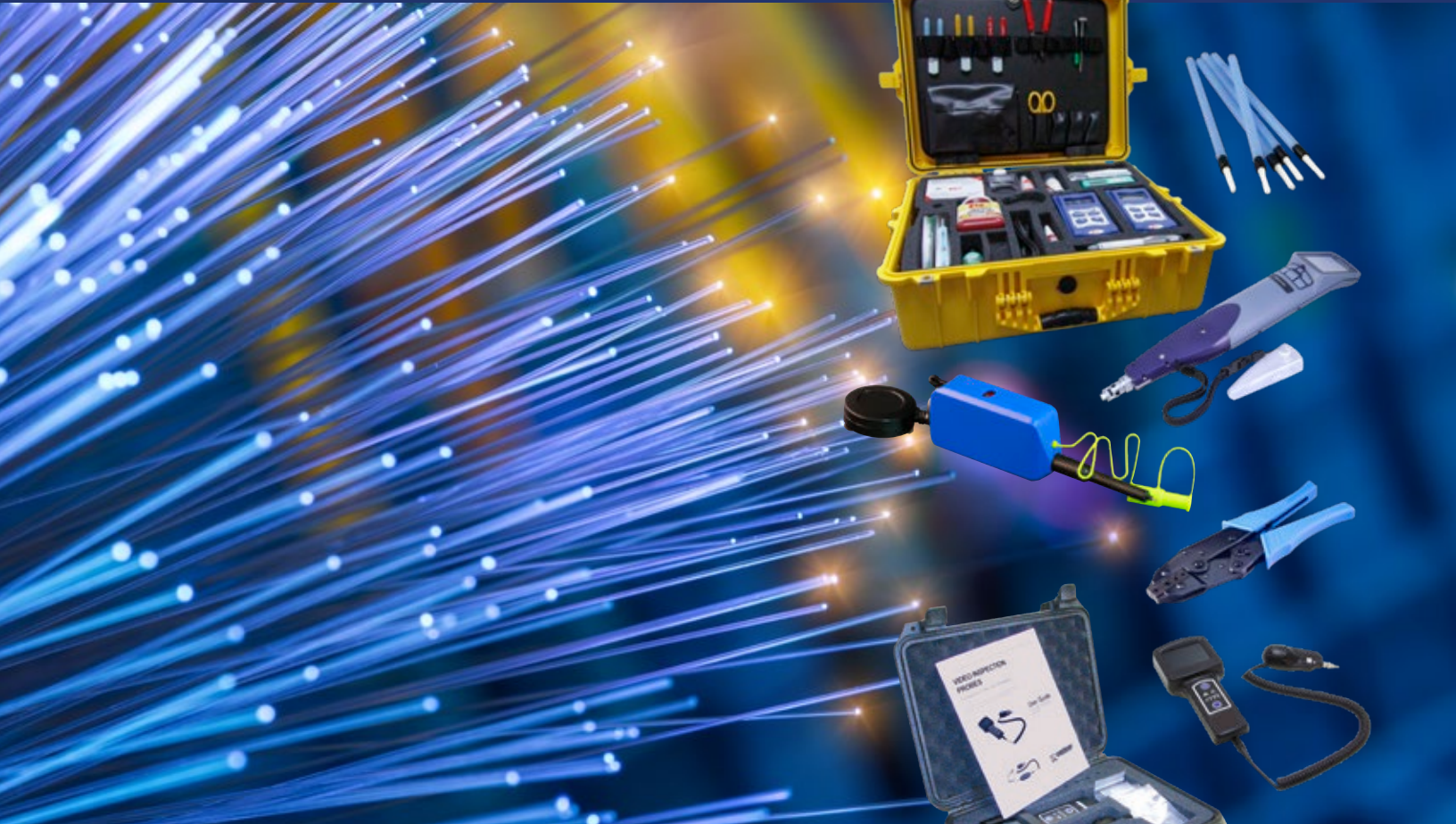
- Low insertion loss genderless termini
- 2.5 mm dia ceramic ferrules and alignment sleeves
- 4 channel singlemode and multimode configurations
- Designed to meet the requirements of MIL-PRF-29504/16 and MIL-DTL-83526 military specifications
- Discrete components or complete cable-on-reel solutions available

COMPATIBLE WITH

FIBER KING
FIBER OPTIC CABLES



Fiber Optic Termination, Inspection, Cleaning, and Troubleshooting Tools and Custom Kits



Our fiber optic termination, inspection, and cleaning kits—available in custom configurations from both our US and UK F/O operations—allow lab and field technicians to perform reliable assembly, inspection, and cleaning of fiber optic systems. Glenair termination kits are equipped with all the necessary tools—polishing pucks, jacket strippers, shears, scribes, dry-action cleaning tools, test probes and adapters, and more—everything required for ongoing termination and test of fiber optic systems.

- Comprehensive tooling for all Glenair fiber optic interconnect systems
- Discrete tools and bespoke kits. Everything from pin and socket polishing tools to jacket strippers, shears, scribes, inspection probes, and cleaning apparatus
- Inspection and testing instructions offer solutions to optical test and measurement

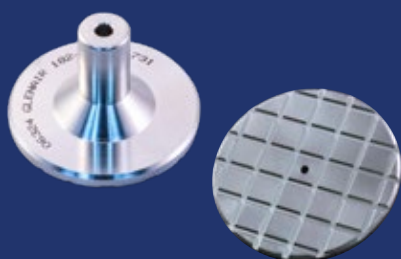
TOOLS AND CUSTOM KITS

Termination, Inspection, and Troubleshooting

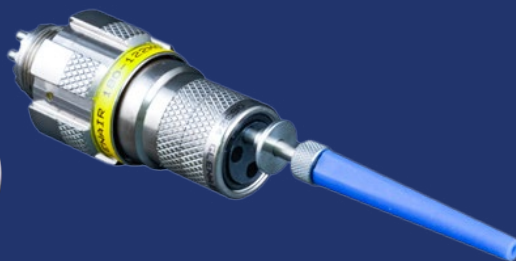


THE RIGHT FIBER OPTIC TOOL FOR THE JOB

Fiber optic connectors are designed to be connected and disconnected many times without affecting the optical performance of the fiber circuit. Optimal performance can be achieved by following the correct process for termination of the fiber line—a task which requires the use of highly-specialized tooling. Glenair's extensive experience in building fiber optic interconnect cables enables us to select the right tools for each step in the termination and assembly process, as well as optimal tooling for inspection, test, and cleaning. Our Fiber Optic Termination and Test Probe Kits allow field technicians the convenience of completing final termination of precision termini on site for easy and efficient cable routing and installation. Polishing tools are also sold separately for factory use or as replacement parts in field termination kits. Other specialty tools such as hand-held inspection monitors, dry- and wet-action cleaning tools are also available.



Polishing pucks



Test probes and adapters



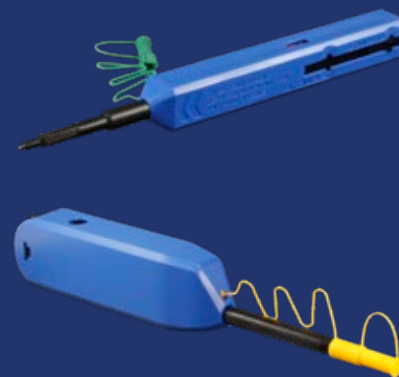
Fiber optic test probe and adapter kits



Video bore scope inspection kits



Hand-held inspection monitor



Dry-action cleaning tools



GLENAIR FIBER OPTIC INSPECTION AND TESTING VIDEO INSTRUCTION

For more information on Glenair's patented Fiber Optic Test Probe and Connector Adapter System and complete video instruction, visit www.glenair.com or our YouTube channel at www.youtube.com/@Glenair. Other Glenair fiber optic video instruction covering such topics as fiber optic cleaning and testing, termini insertion and removal, cable preparation and assembly are also available on the site.

BLUMARK RF COAX CABLES



**COMING SOON:
VITA 67.3 RF ASSEMBLIES**

Fully-customizable SMPM and SMPs assemblies: connectors, shells, cables, and accessories

Glenair is one of just a few interconnect manufacturers that can supply turnkey RF transmission line assemblies—fully connectorized and ready for immediate use—built 100% in-house with Glenair component parts. Glenair high-frequency RF assemblies are typically used in line-replaceable units and chassis that are part of an RF data transmission chain. The rugged, environmental construction of Glenair multi-port RF connector shells and contacts, combined with our high-reliability BluMark RF coax cables, makes these turnkey transmission line solutions ideal for mission-critical air, sea, land, and space applications with exacting size, weight, and frequency requirements.

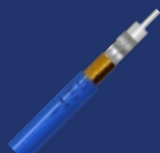
BLUMARK RF GLENAIR TURNKEY RF ASSEMBLIES ARE BUILT WITH AEROSPACE-GRADE COAX CABLES 50 OHM LOW-LOSS COAX CABLES



Size 047
40 GHz



Size 086
40 GHz



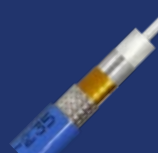
Size 130
40 GHz



Size 160
40 GHz



Size 200
26.5 GHz



Size 235
26.5 GHz



Size 300
18 GHz

Double-Shielded • Low phase-change Fluoropolymer Dielectric • FEP Jacket

Triple-Shielded • Low-Loss PTFE Tape Wrapped Dielectric • FEP Jacket

TURNKEY RF and Microwave Transmission Assemblies



With Glenair signature multi-port connectors, low-loss cables, and high-frequency contacts

BLUMARK RF™ COAX CABLES

BluMark RF 50 Ohm Coax Cables are available in seven size categories. These high-frequency, low-loss, flexible cables are suitable for radar and other aerospace applications as well as laboratory test equipment. Jacket options include FEP and radiation-resistant space-grade ETFE. Triple-shielded high-performance cables have expanded PTFE dielectric core for low loss up to 40 GHz. Application selection is based on compatibility with a particular RF / microwave connector type and size, as well as flexibility, EMI screening, weight considerations, temperature tolerance, and altitude.

962-032-200



50 ohm size 200 (.204" diameter, .051" conductor)
26.5 GHz max. frequency low-attenuation cable
-55 to +200 °C rated operating temperature
FEP jacket, expanded PTFE dielectric, solid SPC center conductor
Triple-shielded: Tape/foil/braid shield layers with >90 dB shield effectiveness

962-032-160



50 ohm size 160 (.161" diameter, .036" conductor)
40 GHz max. frequency low-attenuation cable
-55 to +200 °C rated operating temperature
FEP jacket, expanded PTFE dielectric, solid SPC center conductor
Triple-shielded: Tape/foil/braid shield layers with >95 dB shield effectiveness

962-032-130



50 ohm size 130 (.131" diameter, .029" conductor)
40 GHz max. frequency low-attenuation cable
-55 to +200 °C rated operating temperature
FEP jacket, expanded PTFE dielectric, solid SPC center conductor
Triple-shielded: Tape/foil/braid shield layers with >90 dB shield effectiveness

962-025-086



50 ohm size 086 (.104" diameter, .020" conductor)
40 GHz max. frequency low-attenuation cable
-65 to +165 °C rated operating temperature
FEP jacket, LPCF dielectric, solid SPC center conductor
Double-shielded: Tape/braid shield layers

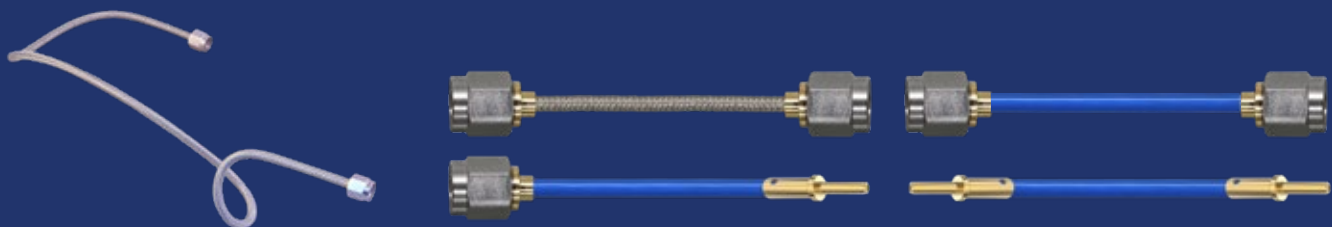
962-025-047



50 ohm size 047 (.056" diameter, .011" conductor)
70 GHz max. frequency low-attenuation cable
-65 to +165 °C rated operating temperature
FEP jacket, LPCF dielectric, solid SPC center conductor
Double-shielded: Tape/braid shield layers

50 OHM COAX RF JUMPERS

Series GRF02 50 Ohm Coax Cable "Jumpers" are COTS, cut-to-length cable assemblies with pre-installed connectors at both ends. Turnkey RF jumpers offer excellent flexibility with a bend radius of 6mm or 1/4 in.

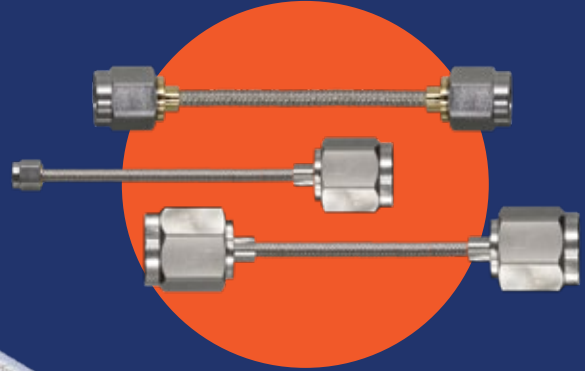


AEROSPACE-GRADE
RUGGEDIZED RF,
MICROWAVE, AND
mmWAVE COAXIAL
CABLE ASSEMBLIES

BLUMARK RF

COAX CABLES

50 Ohm Flexible
RF Cable Jumpers



SMA 086, SMA 141,
SMA-N 141, N-N 141

Multi-Port C
RF Assemblies: Ha
Rugged Enviro

RF Connector
Accessories



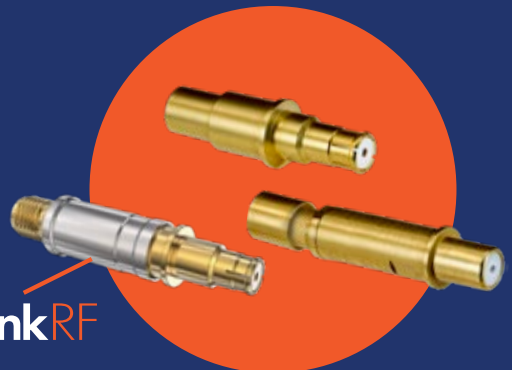
Dummy Receptacles
and Protective Covers

Precision-Grade
RF Connector Adapters



TNC-SMA, N-SMA, SMA-SMA,
SMP-SMA, 2.92-SMA,
BNC-SMA

Single-Channel RF Connectors for
Multi-Port Shell Configurations
sizes #8, #12, #16



G-LinkRF

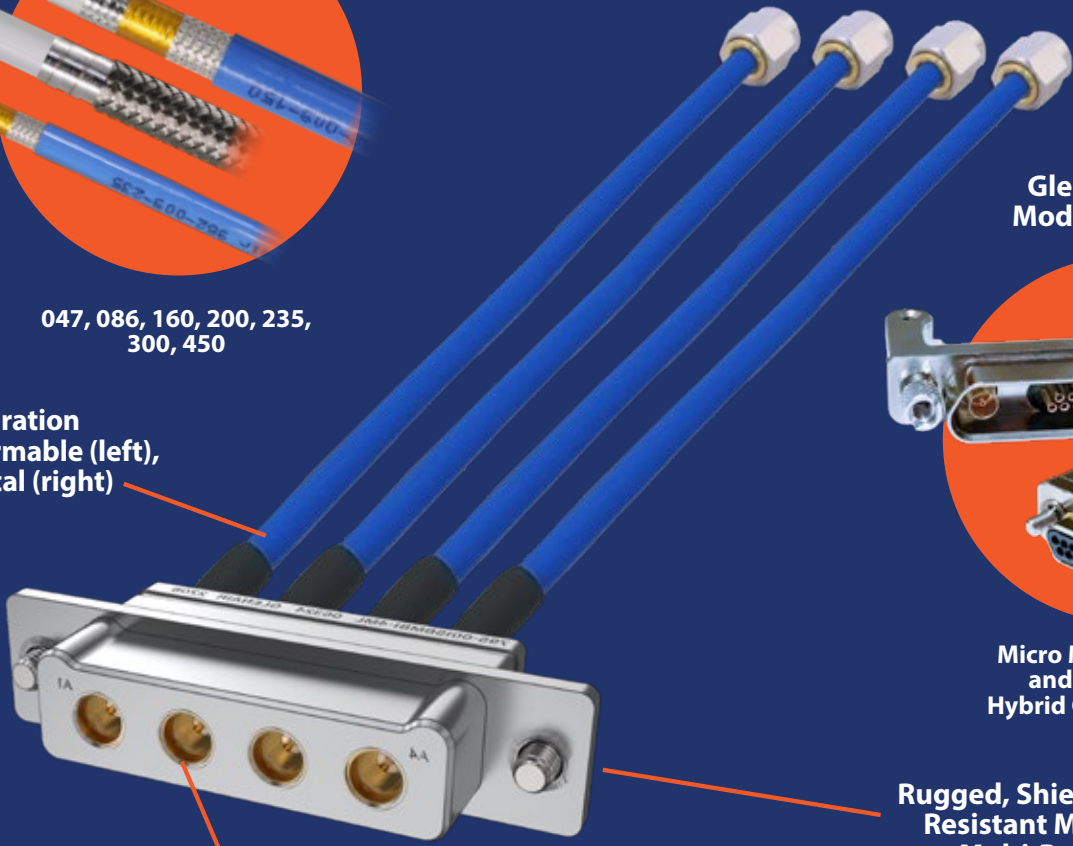
G-LinkRF: 18 GHz RF
BMB-to-SMA contact adapters

BLUMARK RF
COAX CABLES
Mil/Aero-Grade
Flexible RF Cables



047, 086, 160, 200, 235,
300, 450

Configuration
and-Formable (left),
omnamental (right)



**Glenair GMMD
Modular Micro-D**



**Micro Miniature Board
and I/O-to-Board
Hybrid Coax Connectors**

**Rugged, Shielded, Vibration-
Resistant Mil-Aero Grade
Multi-Port RF Shells**

**Single-Channel RF Connectors for
Multi-Port Shell Configurations
sizes #8, #12, #16**



**G-LinkRF: 18 GHz RF
BMB-to-SMA contact adapters**

G-LinkRF



**SuperNine, Mighty Mouse,
Series 806 RF, and Series 795 RF
Multi-Port RF Connector Shells**

COMPATIBLE WITH

BLUMARK
COAX CABLES **RF**

RF

SuperNine aerospace-grade
multiport Coax connector for
RF, Microwave, and mmWave
applications



Glenair Series 23 SuperNine connectors support one to twenty-nine high-frequency RF contacts. The "Better than QPL" series features precision-machined aluminum or stainless steel shells and fluorosilicone grommets for excellent mating and environmental performance. Fifteen contact layouts, eight shell sizes, and support for #8 BMB, #12 SMPM, or #16 SMPS contacts. Glenair signature G-LinkRF contacts with fast RF cable termination reduce assembly time and skilled labor requirements. Series supports RF frequencies from DC-65 GHz.



Save time and improve reliability. Series 23 SuperNine RF connectors are optimized for use with 26.5 GHz G-Link RF contacts with integral female SMA adapter for attaching SMA plug directly to the contact.

- Fifteen MIL-STD-1560 layouts for size #8, #12, or #16 RF contacts (sold separately)
- Rugged aluminum or stainless steel shells
- Environmentally-sealed and shielded for mission-critical application performance
- Scoop-proof mating interface
- EMI spring on plugs for low connector-to-connector resistance
- Snap-in, rear-release contacts
- Available extended-length backshells improve routing and protect coaxial cables

AEROSPACE-GRADE SuperNine RF multiport connectors



SUPERNINE RF CONNECTOR SELECTION GUIDE



233-290-G6
Plug, EMI Spring
(Socket Contacts)



233-290-00
Wall-Mount Receptacle
(Pin Contacts)



233-290-05
In-Line Receptacle
(Pin Contacts)



233-290-07
Jam Nut Receptacle
(Pin Contacts)



233-290-CS
Wall Mount Receptacle,
Standard Clinch Nuts
(Pin Contacts)



233-290-CM
Wall Mount Receptacle,
Metric Clinch Nuts (Pin
Contacts)



233-290-HS
Wall Mount Receptacle,
Standard Helicoils (Pin
Contacts)



233-290-HM
Wall Mount Receptacle,
Metric Helicoils (Pin
Contacts)

SHELL SIZE / CONTACT LAYOUT



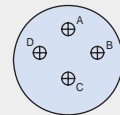
11RF1

Shell Sz. 11 • 1 #8 contact



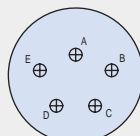
11RF2

Shell Sz. 11 • 2 #16 contacts



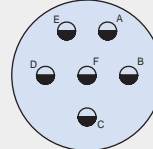
13RF4

Shell Sz. 13 • 4 #16 contacts



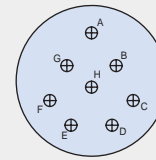
15RF5

Shell Sz. 15 • 5 #16 contacts



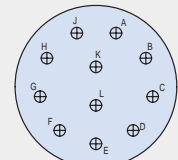
17RF6

Shell Sz. 17 • 6 #12 contacts



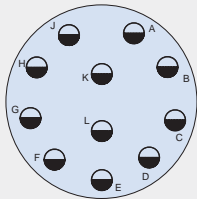
17RF8

Shell Sz. 17 • 8 #16 contacts



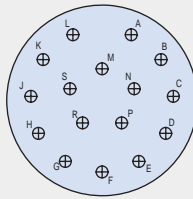
19RF11

Shell Sz. 19 • 11 #16 contacts



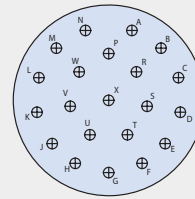
21RF11

Shell Size 21 • 11 #12 contacts



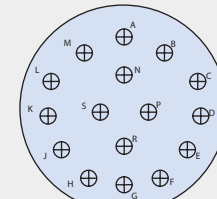
21RF16

Shell Size 21 • 16 #16 contacts



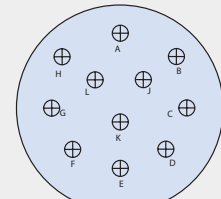
23RF21

Shell Size 21 • 21 #16 contacts



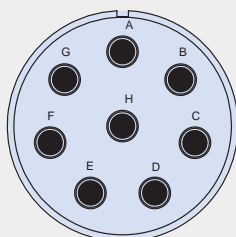
23RF97

Shell Size 23 • 16 #16 contacts



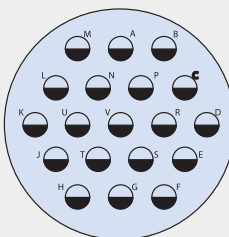
23RF99

Shell Size 23 • 11 #16 contacts



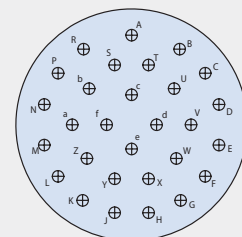
25RF8

Shell Size 25 • 8 #8 contacts



25RF19

Shell Size 25 • 19 #12 contacts



25RF29

Shell Size 25 • 29 #16 contacts

COMPATIBLE WITH

BLUMARK
COAX CABLES **RF**

RF

Series 806 RF Mil-Aero multiport micro circular for RF, Microwave, and mmWave applications



Series 806 RF connectors are micro miniature circulars with true MIL-DTL-38999 Series III-level performance including high altitude immersion, DWV, and shock and vibrate resistance. Precision-machined aluminum or stainless steel shells, fluorosilicone grommets, and auxiliary shielding delivers space-grade environmental, mechanical, and electrical performance. Eighteen contact layouts, eleven shell sizes, with support for #8 BMB, #12 SMPM, or #16 SMPS contacts. RF frequency from DC-65 GHz. G-LinkRF contacts save time and reduce labor.

- Mil-spec performance, micro miniature package
- Space-grade TRL of 9
- Eighteen layouts for size #8, #12, or #16 RF contacts (sold separately)
- Rugged aluminum or stainless steel shells
- Environmentally-sealed
- Scoop-proof mating interface
- EMI spring on plugs for low shell-to-shell resistance
- Snap-in, rear-release contacts
- Hermetic versions and extended backshells available



Save time and improve reliability. Series 806 RF connectors are optimized for use with 26.5 GHz G-Link RF contacts with integral female SMA adapter for attaching SMA plug directly to the contact.

G-LinkRF

MICRO CIRCULAR Series 806 RF Mil-Aero connectors



SERIES 806 RF CONNECTOR SELECTION GUIDE



806-072
Cable Plug
(Socket Contacts)



806-073
Wall-Mount Receptacle
(Pin Contacts)



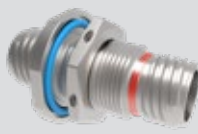
806-079
In-Line Receptacle
(Pin Contacts)



806-080
Jam Nut Receptacle
(Pin Contacts)



806-083-02
Hermetic Bulkhead Feedthru,
Panel Mount



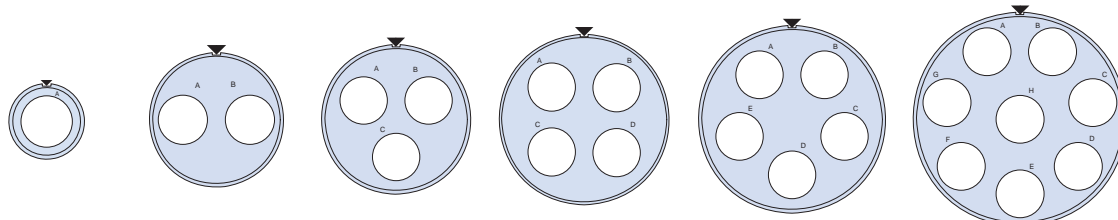
806-083-07
Hermetic Bulkhead Feedthru,
Jam Nut Mount



806-083-13
Hermetic Bulkhead Feedthru,
Weld Mount

SERIES 806 SIZE 8 RF CONTACT ARRANGEMENTS

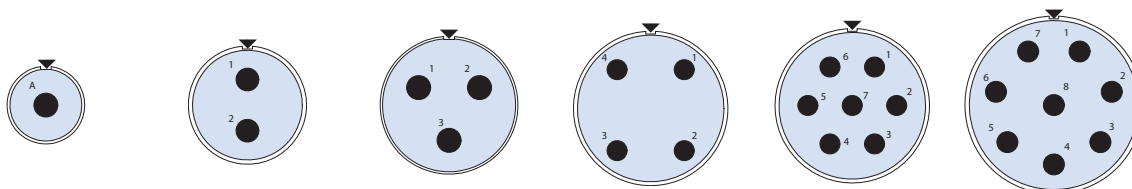
Mating face of pin connector. Socket numbering is reversed.
Symbol ▼ indicates master key location.



Arrangement No. **10R1** **16R2** **18R3** **20R4** **22R5** **24R8**

SERIES 806 SIZE 12 RF CONTACT ARRANGEMENTS

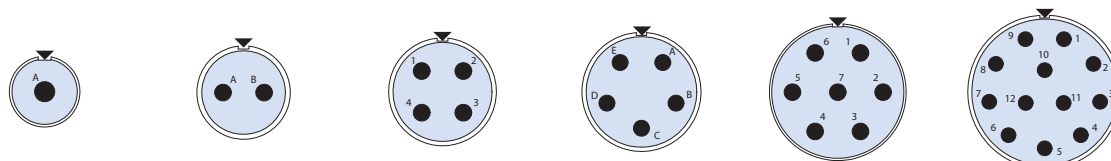
Mating face of pin connector. Socket numbering is reversed.
Symbol ▼ indicates master key location.



Arrangement No. **9R1** **12R2** **14R3** **16R4** **16R7** **18R8**

SERIES 806 SIZE 16 RF CONTACT ARRANGEMENTS

Mating face of pin connector. Socket numbering is reversed.
Symbol ▼ indicates master key location.



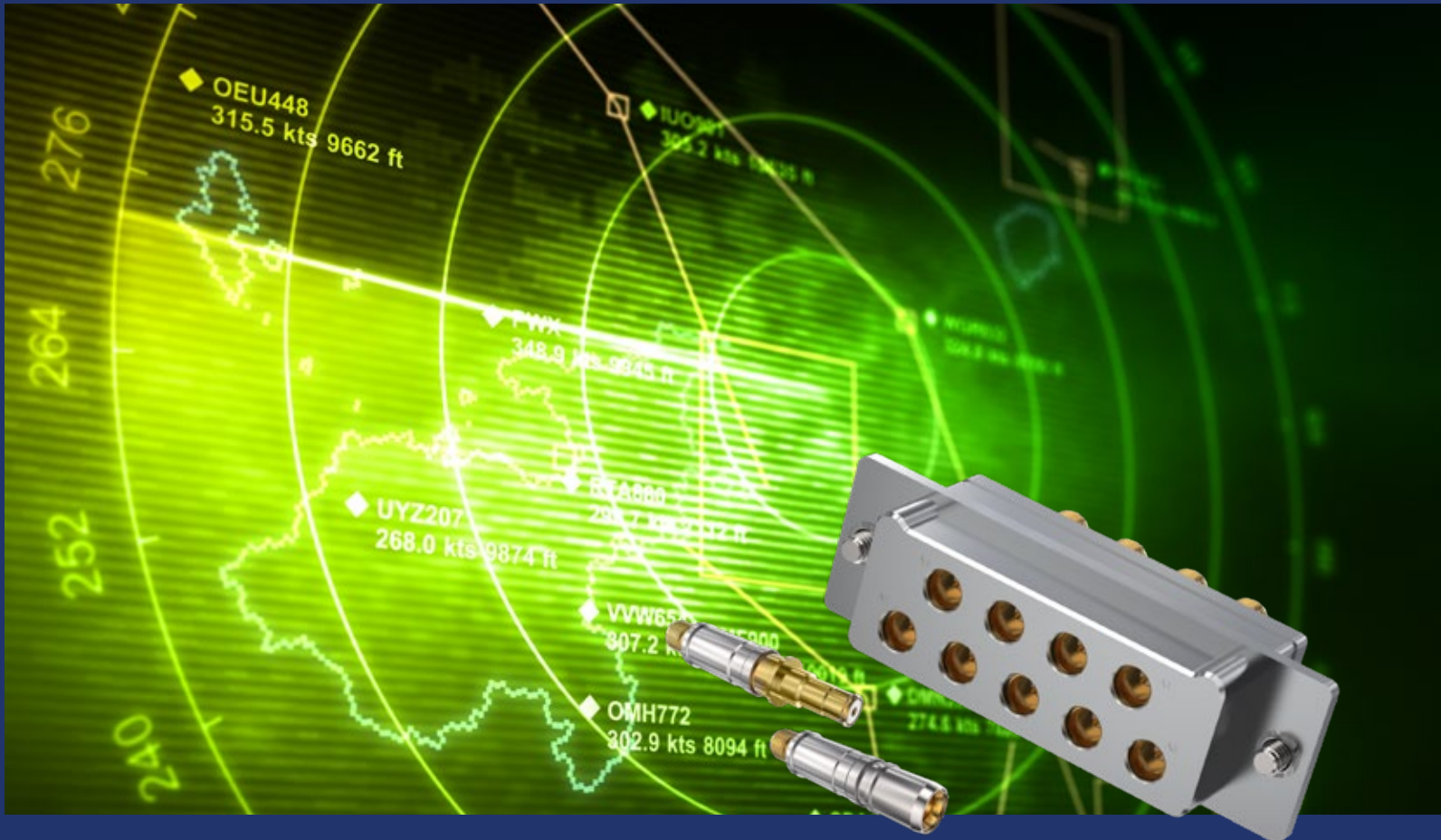
Arrangement No. **8R1** **10R2** **11R4** **12R5** **14R7** **16R12**

COMPATIBLE WITH

BLUMARK
COAX CABLES **RF**

RF

Series 795 aerospace-grade
multiport rectangular Coax
connector for RF, Microwave,
and mmWave applications



The Glenair Series 795 is a multiport aerospace-grade coax connector designed for use with snap-in and removable size #8, #12, and #16 coax contacts from DC to 65 GHz frequency. Environmentally protected and EMI shielded for harsh application environments. Series 795 high-density multiport connectors are designed for use with Glenair BMB-style and other high-frequency coax contacts. These contacts accept high performance low-loss flexible cable, also supplied by Glenair.

- Size #8, #12, and #16 coax contact arrangements
- Single and double row high-density configurations
- Scoop-proof design with dual-lobe polarization for reliable mate and demate
- Precision-machined aluminum alloy shell with common ground plane
- Environmentally-protected with fluorosilicone face seal and rear grommet
- Shielded for EMI protection
- Available extended-length backshells




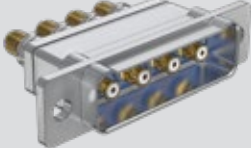



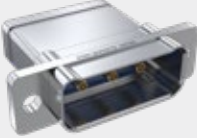





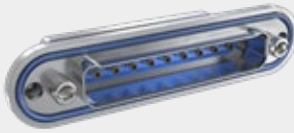
Series 795 connectors are optimized for use with 26.5 GHz G-Link RF contacts with integral female SMA adapter for attaching SMA plug directly to the contact.

G-LinkRF

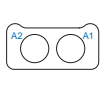
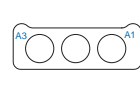
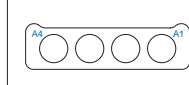
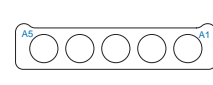
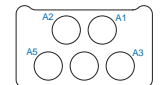
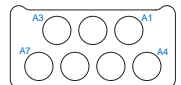
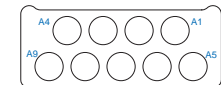
AEROSPACE-GRADE Series 795 RF rectangular connectors






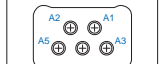

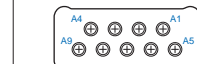

SERIES 795 RF CONNECTOR SELECTION GUIDE

Cable Plugs, Socket Contacts	Cable Receptacles, Pin Contacts	Panel Mount Plugs, Socket Contacts	Panel Mount Receptacles, Pin Contacts
 795-001S (#8 BMB Contacts)	 795-002P (#8 BMB Contacts)	 795-003S (#8 BMB Contacts)	 795-004P (#8 BMB Contacts)
 795-005S (#12 SMPM Contacts)	 795-006P (#12 SMPM Contacts)	 795-007S (#12 SMPM Contacts)	 795-008P (#12 SMPM Contacts)
 795-009S (#16 SMPS Contacts)	 795-010P (#16 SMPS Contacts)	 795-011S (#16 SMPS Contacts)	 795-012P (#16 SMPS Contacts)



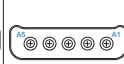
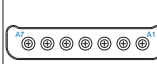
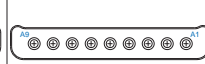




INSERT ARRANGEMENTS FOR SIZE #8 BMB TYPE RF CONTACTS

						
1-2	1-3	1-4	1-5	2-5	2-7	2-9
1 row, 2 contacts	1 row, 3 contacts	1 row, 4 contacts	1 row, 5 contacts	2 row, 5 contacts	2 row, 7 contacts	2 row, 9 contacts

INSERT ARRANGEMENTS FOR SIZE #12 SMPM TYPE RF CONTACTS

						
1-3	1-5	1-6	2-5	2-7	2-9	2-11
1 row, 3 contacts	1 row, 5 contacts	1 row, 6 contacts	2 row, 5 contacts	2 row, 7 contacts	2 row, 8 contacts	2 row, 11 contacts

INSERT ARRANGEMENTS FOR SIZE #16 SMPS TYPE RF CONTACTS

								
1-2	1-3	1-5	1-7	1-9	2-5	2-9	2-13	2-17
1 row, 2 contacts	1 row, 3 contacts	1 row, 5 contacts	1 row, 7 contacts	1 row, 9 contacts	2 row, 5 contacts	2 row, 9 contacts	2 row, 13 contacts	2 row, 17 contacts

COMPATIBLE WITH

BLUMARK
COAX CABLES **RF**

RF

**GMMD Modular Micro-D
differential twinax / RF coax
solution**



The Series GMMD is an innovative modular Micro-D connector for RF coax and high-speed differential datalink applications. It is one of the smallest ruggedized multiport RF coax connectors available on the market today. The unique micro miniature design of the GMMD also accommodates standard analog signal and power contacts, making it extremely versatile. Coax versions are supplied in prewired pigtail plug and receptacle assemblies. Coax insert arrangements support up to 16 discrete lines of 50 Ohm coax.

Edge-mount PCB versions support launching up to 20 GHz frequency signals from the board, and are compatible with RG-178 Coax, flexible and semi rigid 047, RG-179 and semi rigid 75Ω cables



- Modular mixed signal RF / low speed solutions
- Micro miniature form-factor for optimized SWaP
- Shell packaging and contact technology IAW MIL-DTL-83513
- Pigtails, back-to-back cables, and surface-mount SMT PCB versions
- 50Ω on 3.18mm pitch for combo arrangements
- 50Ω on 2.54 pitch for coax-only arrangements
- Shield isolated from connector shell
- PCB edge-launched for optimized 20GHz high-bandwidth performance

MODULAR MICRO-D GMMD RF coax connectors



HORIZONTAL PCB-MOUNT COAX AND COMBO COAX RECEPTACLES



- HRE Horizontal edge-launched receptacle
- HRPE Horizontal panel-sealed edge launched receptacle

PCB edge-launched versions of Series GMMD connectors are optimized for 20 GHz high-bandwidth performance. The micro miniature form-factor interconnects are supplied in 50 Ohm versions on 3.18mm pitch for combo arrangements, and 2.54mm pitch for coax-only arrangements. Shielded element is isolated from connector shell. Mating interface Compatible with RG-178, semi-rigid and flexible 047 cables for 50Ω / RG-179 and semi-rigid cables for 75Ω

COAX AND COMBO COAX JUMPERS AND PIGTAILS



- FP Cable plug connectors
- FPE Cable plug environmental connectors
- FR Cable receptacle connectors
- FRP Rear panel-mount cable receptacle connectors

Factory-terminated back-to-back and single-ended GMMD Coax cable assemblies provide a turnkey solution for easy on-site installation. Assemblies are supplied with GMMD plug or receptacle as required with a choice of any coax or combo contact arrangement. Environmental seal options are available for plug connectors. 50Ω and 75Ω Coax cable may be ordered in flexible or semi-rigid configurations as follows:

- -C = 50Ω RG178
- -D = 50Ω 047 Semi-Rigid
- -E = 50Ω 047 Flexible
- -V = 75Ω RG179
- -W = 75Ω Semi-Rigid

Integral backshells, hardware, and wire exit direction all supplied as standard catalog configurations.

COAX AND COMBO COAX CABLE ASSEMBLY CONNECTOR SELECTION GUIDE

GMMD-FP Cable Plug	GMMD-FPE Cable Plug, Environmental	GMMD-FR Cable Receptacle	GMMD-FRP Rear Panel Mount Cable Receptacle

GMMD COAX AND COMBO COAX CONTACT ARRANGEMENTS (additional arrangements are available, consult factory)

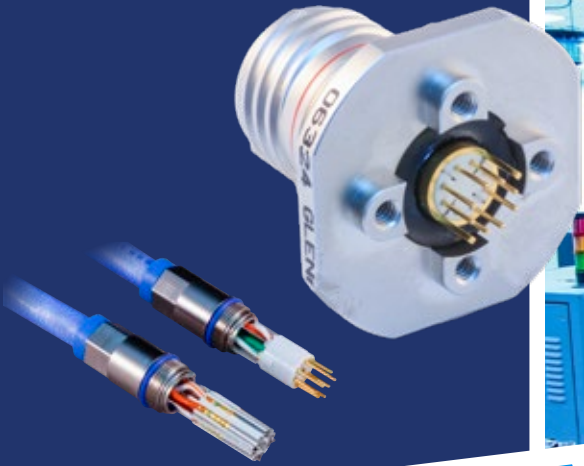
Contact Arrangement	2C	4C	6C	
Shell Size	9	21	25	
No. / type of contacts	2 X 50Ω Coax	4X 50Ω Coax	6X 50Ω Coax	
Contact Arrangement	8C		16C	
Shell Size	37		67	
No. / type of contacts	8 X 50Ω Coax		16X 50Ω Coax	
Contact Arrangement	2C9	1V9	2V9	4V
Shell Size	21	21	31	21
No. / type of contacts	2X 50Ω Coax, 9 X #24	1 X 75Ω Coax, 9 X #24	2 X 75Ω Coax, 9 X #24	4 X 75Ω Coax

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 land, sea, air, and space customers.





Glenair SoCal's most important asset: highly technical staff, fully empowered with all the right facilities and operation resources.





SAME-DAY SHIPMENT STOCKING

Immediate availability for high-demand connectors and tooling.



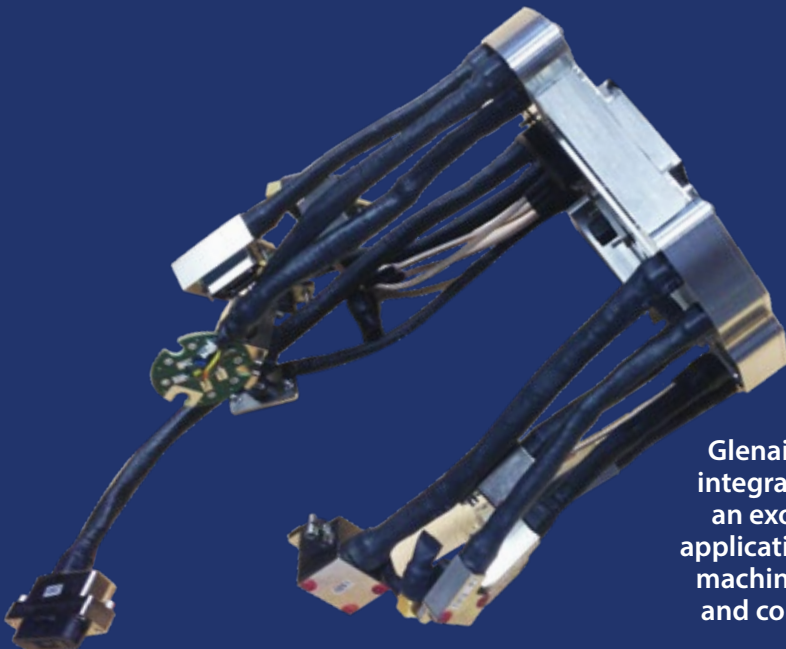
HARNESS ASSEMBLIES

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



IN-HOUSE TESTING CAPABILITIES

Glenair UK operates an independently accredited BS9000:CECC:IECQ test lab for internal and third-party product development / design verification and connector qualification including pure air standards.



Glenair UK complex integrated system for an exoatmospheric application with custom machined connectors and complex cabling





GLENAIR UK:

Mission-critical connectors and assemblies for UK and European markets with a special focus on micro and Nanominiature flexi assemblies

GLENAIR ITALIA:

Manufacturing harsh-environment military, nuclear, and aerospace interconnect technologies for power, high-speed Ethernet, and hermetic seal applications.



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 HERMETIC SEAL AND CONNECTOR PLATING CAPABILITIES

Space-compliant gold and nickel plating performed in-house. Hermetic seal connector fabrication with performance levels to 1×10^{-7} helium leak rates.



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.



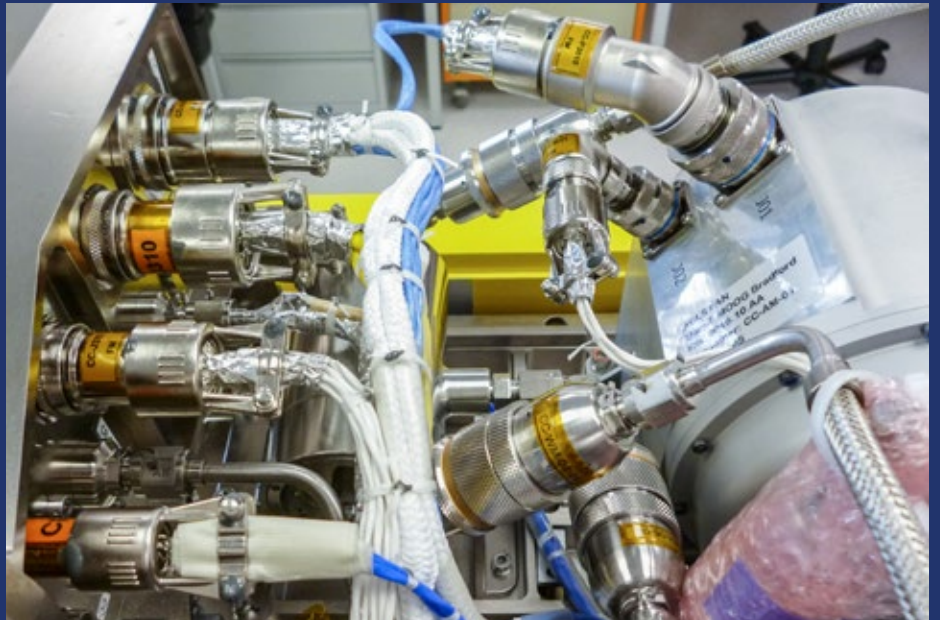
GLENAIR SALEM:

Our space systems business unit in Salem, Germany, includes ample production space for precision machining and assembly, 300 m² ISO 8 and ISO 6 clean rooms, an ISO 5 flow chamber (certified to ESD Standard 61340-5-1), with accommodation for large mock-up and integration projects.



CLEAN ROOM ASSEMBLY

With both environmental filtering and electrostatic discharge protection.



SPACE-GRADE HARNESS FABRICATION AND INTEGRATION

In-house or at customer facility.



ELECTRO-MECHANICAL

Fabrication of space-grade interconnect technologies including HDRM (release nut) mechanisms.



MISSION-CRITICAL INTERCONNECT SOLUTIONS

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