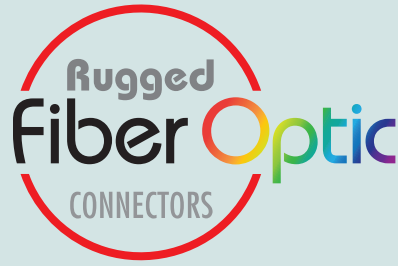


GLENAIR
SIGNATURE
FIBER OPTIC
CONNECTION
SYSTEMS



Rugged High-Density
MT Ferrule Fiber Optic
Connection System—
With Mil-Grade Miniature
Series 79 Packaging



Single-ferrule high-density
MT datalinks in Glenair
Signature Series
79 rectangular
packaging
optimize SWaP in
mission-critical
mil-aero
applications



Connector series supports
both ribbon and round
cable, as well as standard
and expanded-beam
MT ferrules

- Small form-factor, high-density fiber optic solution for rugged mil-aero applications
- Temperature tolerance from -40°C to +85°C
- Optimized for use with parallel optic transceivers in ribbon or round cable applications
- Designed for optimal low insertion loss performance in high vibration and shock environments

ULTRA HIGH-DENSITY Rugged MT Fiber Optic Connectors



Signature fiber optic connection system: miniature Series 79 packaging



-06 plug, with retaining plate for EMI shield termination and strain relief of ribbon or round fiber cable



-S7 receptacle with standard retaining plate



-S7 receptacle with conductive EMI gasket

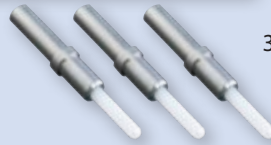
ABOUT SERIES 79 MT FIBER OPTIC CONNECTORS

Designed in accordance with rugged mil-aero industry specifications, the Glenair Series 79 MT fiber optic connector is the world's smallest ruggedized MT connector solution. High-density MT ferrules are packaged in precision-machined rectangular aluminum shells with electroless nickel finish, or passivated stainless steel shells for higher temperature applications. Receptacles may be equipped with optional EMI gaskets, and mate bottom-to-bottom with plug assemblies for robust resistance to vibration and shock. Designed for harsh-environment, inside-the-box use in parallel optics, fiber optic backplanes, missile systems, spacecraft and satellites, heads-up displays, and other ribbonized or flex-circuit fiber optic datalinks, the Series 79 MT delivers superior low insertion-loss performance (up to 500 mating cycles). Connectors are supplied in single (consult factory for dual and quad) MT configurations with banding platform or ultra low-profile retaining plate options.

The MT Ferrule High-Density Advantage



24 fibers



3 fibers

Up to 24 fibers in a single compact, lightweight ferrule (7mm x 3mm / .276" x .118")—same real estate as three size #16 termini side by side

PARALLEL OPTICAL TRANSCEIVERS



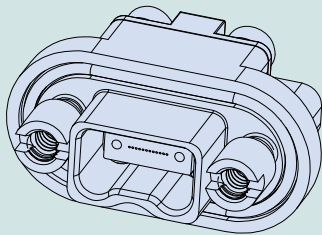
Glenair's rugged, small form-factor parallel optical transceivers are the ideal solution for board-level optical-to-electrical conversion utilizing MT fiber optic ferrules.

Series 79 MT Ferrule Fiber Optic Connector Performance Specifications per QTP-773 and Test Report GT-19-111

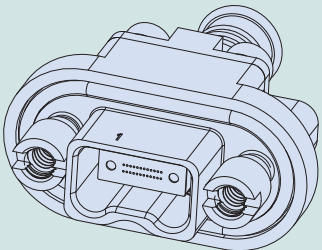
Test Description	Test Results
Optical Insertion Loss, multimode (consult factory for singlemode)	50/125 μ m fiber @ 850 nm: \leq 0.15 dB average; 0.31 dB typical 50/125 μ m fiber @ 1300 nm: \leq 0.21 dB average; 0.38 dB typical
Temperature Cycling: per TIA/EIA-455-3, Test Condition C-2	-40°C to +85°C, 5 Cycles, 56 hours Max. CIT = .25 dB; Max. IL post-test = .30 dB
Mating Durability	First 100 cycles with CIT measured every 10 cycles Max. CIT = 0.12 dB; Max. IL post-test = 0.20 dB
Mating Durability, Extended	From 101st cycle to 500th cycle with CIT measured every 25 cycles Max. CIT = 0.21 dB; Max. IL post-test = 0.30 dB
Physical Shock 1: 50g Peak, 11 ms duration, per TIA/EIA-455-14, Test Condition E	Max. CIT = 0.14 dB; Max. IL post-test = 0.42 dB; discontinuity \leq 0.5 dB @ <1 us.
Physical Shock 2: 160g Peak, 4 ms duration, per MIL-STD-202, Method 213	Max. CIT = 0.04 dB; Max. IL post-test = 0.40 dB; discontinuity \leq 0.5 dB @ <1 us.
Additional Physical Shock: 300g Peak, 0.5 ms duration, per MIL-STD-883E, Method 2002.4 (30 shocks total)	Max. CIT = .15 dB; Max. IL post-test = 0.20 dB; discontinuity \leq 0.5 dB @ <1 us.
Vibration 1: 5-15 Hz, .12" double amplitude, 2 hours/axis (6 hours total) per MIL-STD-202, test condition 201, Sinusoidal	Max. CIT = 0.06 dB; Max. IL post-test = 0.37 dB
Vibration 2 : 20g Peak, 10-2,000 Hz, 4 hours/axis (12 hours total) per TIA-455-11, Test Condition IV, Sinusoidal	Max. CIT = 0.08 dB; Max. IL post-test = 0.43 dB
Weight	Plug with Ferrule kit 5.5 grams · Receptacle with Ferrule kit 7.5 grams

SERIES 79 MINIATURE MT Fiber Optic Connectors

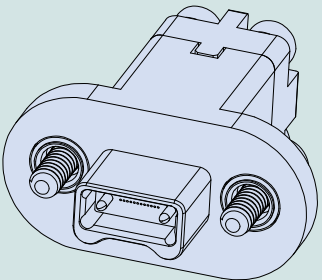
How To Order Series 791 MT Ferrule Fiber Optic connectors



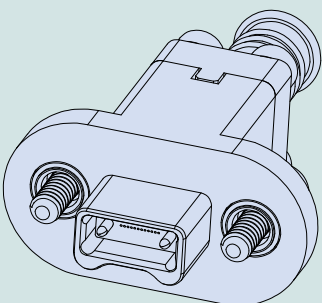
Receptacle with female MT ferrule,
available with or without EMI gasket



Receptacle with female MT ferrule,
retaining plate, and banding
platform

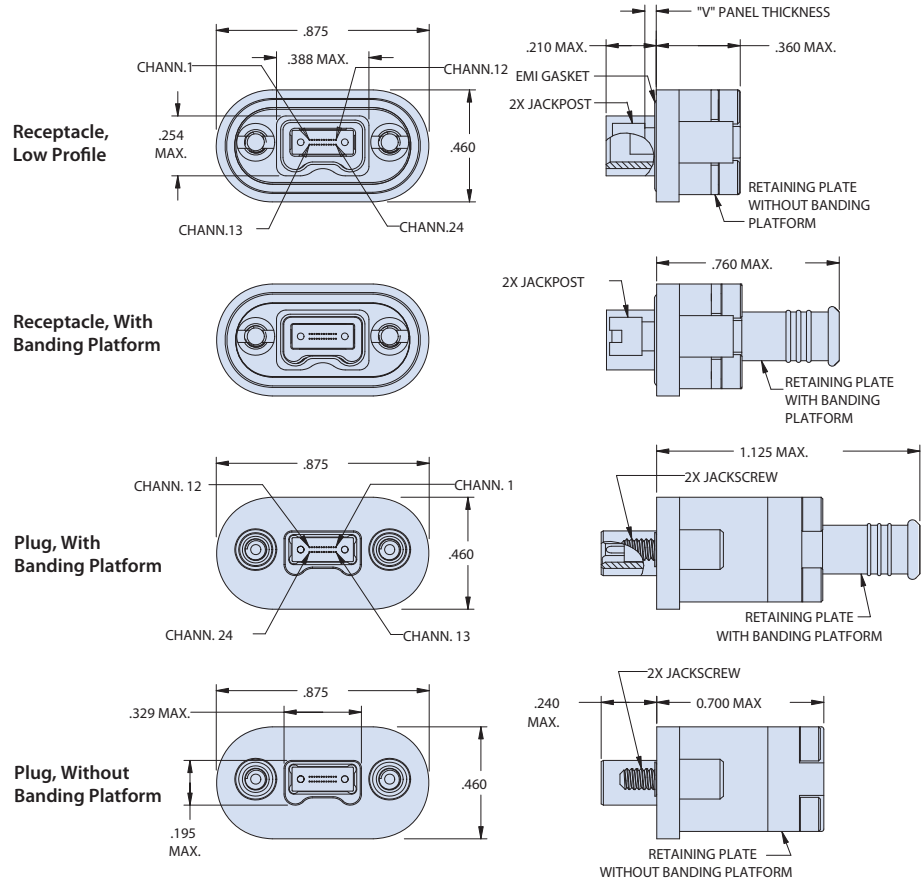


Plug with male MT ferrule and
retaining plate



Plug with male MT ferrule with
retaining plate and banding
platform

How To Order Glenair 183-003 Series 79 MT Fiber Optic Connectors				
Sample Part Number	183-003	ME	-06	-L -1
Basic Number	Series 79 Single MT Fiber Optic Connector			
Material / Finish	ME = Al Alloy / Electroless Nickel ZR = Al Alloy / Zinc Nickel, Black NF = Al Alloy / Cadmium, O.D. Z1 = Stainless Steel / Passivate			
Connector Type	-06 = Plug (used with male MT ferrule) -07 = Receptacle (used with female MT ferrule) -S7 = Receptacle with EMI gasket (used with female MT ferrule)			
Mounting Hardware	Hardware for PLUGS -L = Hex Head Jackscrew, non-removable -B = Thru-Hole	Rear Panel Mount Jackposts for RECEPTACLES: -X = for .031" panel thickness -W = for .047" panel thickness -V = for .062" panel thickness -T = for .094" panel thickness		
Retaining Plate / Banding Platform	-1 = 12 or 24 channel without banding platform -2 = 12 or 24 channel with banding platform for EMI shield termination and strain relief			



MATERIAL/FINISH/NOTES

Mounting hardware: stainless steel / passivated

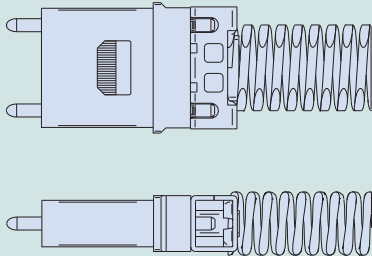
EMI gasket (optional): conductive silicone

Additional materials, finishes, connector configurations (dual and quad layouts), and hardware options are available, consult factory

SERIES 79 MINIATURE MT Fiber Optic Connectors



How To Order MT Ferrule Kits and Series 79 MT to MT Ferrule Cable Assembly



MATERIAL/FINISH

- Ferrule: Polyphenylene Sulfide Resin
- Pin Clamp, Spring: Stainless Steel
- Boot: TPE

How To Order MT Ferrule Kits					
Sample Part Number		181-133	-126	-12	P
Basic Part Number	MT Ferrule kit				
Fiber type	-126, -1253, -1253A (See Table I)				
Number of Fibers	-12, -24 (See Table I)				
Ferrule Style	P = Male (use with Plug) S = Female (use with Receptacle)				

Table I						
Dash No.	Fiber Type	End Face	Fiber Size Core/Cladding	No. of Fibers	Ferrule Identification	Pin Clamp Identification (Male Kit only)
-126	MM	PC	50/125	12	M-ME12	1 Through Hole
			62.5/125	24	M-ME24	
-1253	SM	PC	9/125	12	E-E12	2 Through Holes
-1253A	SM	APC	9/125	12	E-E12	2 Through Holes

How To Order Series 79 MT Ferrule Fiber Optic Cable Assemblies												
Sample Part Number	FA07364	-06	-17	ME	-B4	-50	-L		-1		-036	L
Basic Number	Series 79 MT Ferrule Fiber Optic Cable Assembly											
A Connector Type	-06 = Sr. 79 Plug (used with male MT ferrule) -07 = Sr. 79 Receptacle (used with female MT ferrule) -S7 = Sr. 79 Receptacle with EMI gasket (used with female MT ferrule)											
B Connector Type	-06 = Sr. 79 Plug (used with male MT ferrule) -07 = Sr. 79 Receptacle (used with female MT ferrule) -S7 = Sr. 79 Receptacle with EMI gasket (used with female MT ferrule) -12 = ST Connector -13 = FC Connector -14 = SC Connector -15 = GC Connector -16 = LC Connector -17 = MT Connector (male) -18 = MT Connector (female) -19 = MTP Connector (male) -20 = MTP Connector (female)											
Material / Finish (-06, -07, -S7)	ME = Al Alloy, Electroless Nickel NF = Al Alloy, Cad/Olive Drab ZR = Al Alloy, Zinc-Nickel, Black Z1 = Stainless Steel, Passivate											
Fiber Qty. / Type	-B2 = 12 bare ribbon fibers -B4 = 24 bare ribbon fibers (Multimode only) -R2 = 12 round ribbon fibers -R4 = 24 round ribbon fibers (Multimode only)											
Fiber Size	-09 = 9.3/125 Singlemode -50 = 50/125 Multimode -62 = 62.5/125 Multimode											
Mounting Hardware (A Connector)	Plug -L = Hex head jackscrew, non-removable -B = Thru-hole						Receptacle -X = Rear-panel jackpost, .031" thickness -W = Rear-panel jackpost, .041" thickness -V = Rear-panel jackpost, .062" thickness -T = Rear-panel jackpost, .094" thickness					
Mounting Hardware (B Connector, applies to Sr. 79 only)	Series 79 Plug -L = Hex head jackscrew, non-removable -B = Thru-hole Omit = if not Sr. 79 connector						Series 79 Receptacle -X = Rear-panel jackpost, .031" thickness -W = Rear-panel jackpost, .041" thickness -V = Rear-panel jackpost, .062" thickness -T = Rear-panel jackpost, .094" thickness					
Banding Platform (A Connector)	-1 = without banding platform -2 = with banding platform											
Banding Platform (B Connector, applies to Sr. 79 only)	-1 = without banding platform -2 = with banding platform Omit if not Sr. 79 connector											
Length	In inches (e.g. -0036 = 36 inches)											
Protective Cover	L = supplied less covers Omit = supplied with covers											

Optical performance note: Insertion loss to be less than 1.5 dB when measured at 1310 nm wavelength for singlemode, or when measured at 850 nm for multimode

