

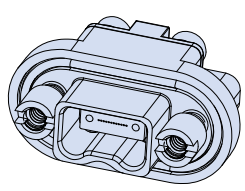


SERIES 79 MINIATURE Mission-Critical Ruggedized MT Fiber Optic Solution

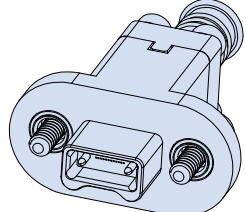
Single-ferrule high-density MT datalinks optimize SWaP

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 are equipped with 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) compared to commercial solutions. Connectors are supplied in single (consult factory for dual and quad) MT configurations with retaining plate and optional banding porch on plugs, and ultra low-profile retaining plate on receptacles.

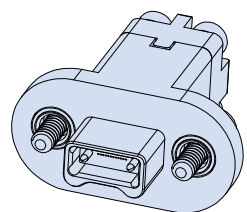
- Small form-factor, high-density fiber optic solution for rugged mil-aero applications
- Temperature tolerance from -40°C to +85°C
- Optimized for use with parallel optic transceivers in ribbon or round cable applications
- Designed for optimal low insertion loss performance in high vibration and shock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



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



Plug with male MT ferrule with retaining plate and banding porch



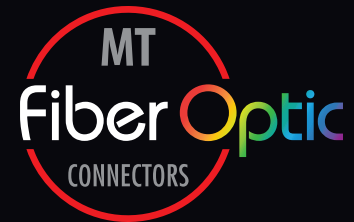
Plug with male MT ferrule and retaining plate



Compatible with ribbon cable or round cable MT ferrule kits

SERIES 79 MINIATURE MT Fiber Optic Connectors

High-density single MT ferrule configuration



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 μm fiber @ 850 nm: ≤0.15 dB average; 0.31 dB typical 50/125 μm fiber @ 1300 nm: ≤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
Extended Mating Durability	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 ≤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 ≤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 ≤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

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 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 male 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 Option	-1 = 12 or 24 channel without banding port -2 = 12 or 24 channel with banding port for EMI shield termination/strain relief

MATERIAL/FINISH

Mounting hardware: stainless steel / passivated
EMI gasket: conductive silicone

NOTES

Connector supplied without MT ferrule kit. Order Glenair MT ferrule kit P/N 181-133 separately. Dust Cap P/N 189-160 also ordered separately. Additional materials, finishes, connector configurations (dual and quad layouts), and hardware options are available, consult factory

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

MATERIAL/FINISH

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

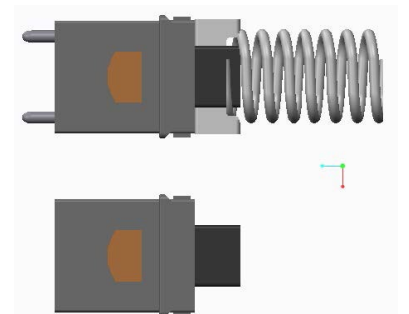


Table I						
Dash No.	Fiber Type	End Face	Fiber Size Core/Cladding	No. of Fibers	Ferrule ID	Pin Clamp ID (Male Kit only)
-126	MM	PC	50/125	12	M-ME12	1 Through Hole
			62.5/125	24	M-ME24	
-126S	SM	PC	9/125	12	M-ME12	2 Through Holes
-1253A	SM	APC	9/125	12	E-E12	2 Through Holes