MTP/MPO and LC Data Center Cable Solutions

With high-density MTP/MPO and LC connectors, multiple cable configurations and integrated specialty components, Molex Data Center Cable Solutions support the integration of high-performance networks while reducing overall system cost and maintenance

Features and Benefits

MTP/MPO Cable Assemblies

Low-loss options available

Meets tight system insertion-loss budgets

Low-smoke, zero-halogen (LSZH)/Plenum/Riser rated

Fulfills flammability specifications for data center applications

Industry-standard

12- and 24-fiber options available

Supports high-density data center applications. Reduces the number of cable assemblies required for system installation

Cable assemblies 100% quality tested prior to shipping

Ensures high performance. Reduces customer cost and time associated with testing

molex

Features and Benefits

MTP/MPO Connector

Precision-molded NTTcompatible ferrule

Connects 4 to 24 fibers using ribbon cable



connector housing

Provides quick and reliable connections

Multiple ribbons stacked inside round jacket

Provides low-profile solution for highdensity applications

Shuttered die cast adapters

Shields and isolates EMI emissions

Loopback adapters available

Enables testing and network diagnostics



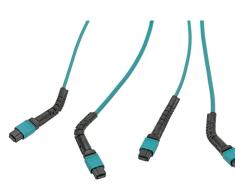
Adapters, accessories

connector housing

installed cables

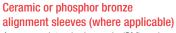
Simplifies implementation.

Compatible with other pre-



FlexiBend Boots available for additional fiber routing capabilities

Alleviate cable congestion. Offers bendable strain relief to secure any configuration. Ensures cable performance over multiple bends in various directions



Accommodate single-mode (SM) and multi-mode (MM) performance



EMI gaskets included

Provide electromagnetic interference (EMI) seal between the adapter and mounting surface



Multi-port EMI adapter options

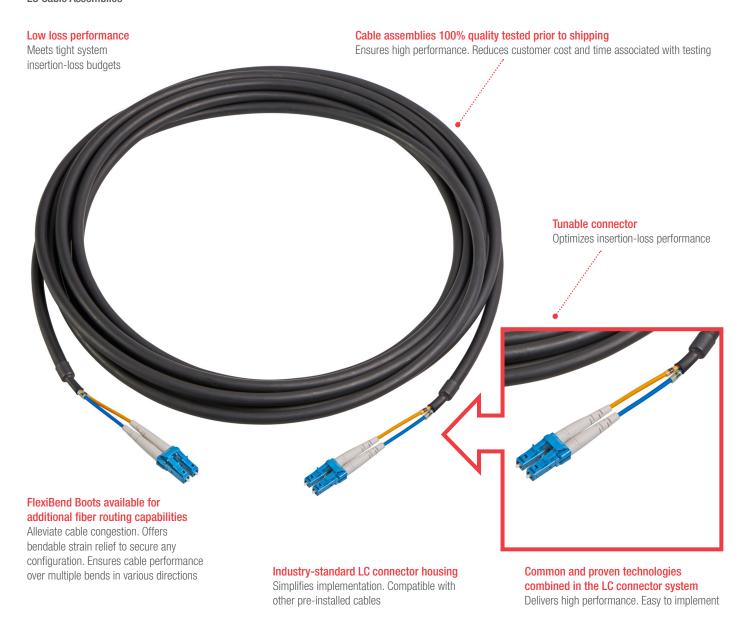
Ease space constraints on panel and increase ports within an envelope

MTP/MPO and LC Data Center Cable Solutions



Features and Advantages

LC Cable Assemblies



Applications

Telecommunications/Networking

Optical electrical modules
Optical switches and routers

PC cards and patch panels

Data Centers

Servers



Data Center Servers

MTP/MPO and LC Data Center Cable Solutions



Specifications

MTP/MPO Cable Assemblies

REFERENCE INFORMATION

Packaging: Individually bagged

Mates With: Molex MPO Adapters/QSFP Transceivers Use With: Molex MPO Adapters/QSFP Transceivers

Designed In: Meters

RoHS: Yes

Halogen Free: TBD

LC Cable Assemblies

REFERENCE INFORMATION

Packaging: Individually bagged Mates With: Molex LC Adapters Use With: Molex LC Adapters

Designed In: Meters RoHS: Yes Halogen Free: Yes

FIBER:

Multimode:

- 50/125 μm OM3 Bend-Insensitive
- 50/125 µm OM4 Bend-Insensitive

Single Mode:

- OS2 ITU-T G.657.A1 Bend-Insensitive

CONNECTOR:

Connector Type:

- MPO Female, Aqua for Multi-mode
- MPO Female, Green for Single-mode

MECHANICAL PROPERTIES:

Mating Force: 8.9N

Durability (min.): 250 mating cycles

MECHANICAL

Fiber Count: 12 and 24 Fiber Options Cable Diameter: 12F = 4.5/3.0mm

24F = 5.4/3.8mm

Tensile Load: 12F = 660 N

24F = 660 N

Min Bend Radius: 12F = 68mm

24F = 89mm

24F and Low-Loss Options: 20N MTP Spring

PHYSICAL

Connector Ferrule: Zirconia Ceramic

Housing: Plastic and Zinc

Alignment Sleeve: Phosphor Bronze or Zirconia

Ceramic

Operating Temperature: -40 to 85°C

Ordering Information

Series No.	Component
106005	Loopback, Singlemode and Multimode
106225	MPO Data Center Trunk Cable Assemblies
106114	Simplex EMI Adapter
<u>106181</u>	MTP Quad Adapter Assembly
106283	QSFP+ optical Jumper Cable Assembly
<u>88537</u>	LC-to-LC Data Center Cable Assemblies