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

- **12- and 24-fiber options available**
  - Supports high-density data center applications.
  - Reduces the number of cable assemblies required for system installation

- **Industry-standard connector housing**
  - Simplifies implementation.
  - Compatible with other pre-installed cables

- **Cable assemblies 100% quality tested prior to shipping**
  - Ensures high performance.
  - Reduces customer cost and time associated with testing

- **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

- **EMI gaskets included**
  - Provide electromagnetic interference (EMI) seal between the adapter and mounting surface

Features and Benefits

**Adapters, accessories**

- **Shuttered die cast adapters**
  - Shields and isolates EMI emissions

- **Loopback adapters available**
  - Enables testing and network diagnostics

- **Multi-port EMI adapter options**
  - Ease space constraints on panel and increase ports within an envelope

- **Ceramic or phosphor bronze alignment sleeves (where applicable)**
  - Accommodate single-mode (SM) and multi-mode (MM) performance

**Features and Benefits**

**MTP/MPO Connector**

- **Precision-molded NTT-compatible ferrule**
  - Connects 4 to 24 fibers using ribbon cable

- **Push-pull connector housing**
  - Provides quick and reliable connections

- **Multiple ribbons stacked inside round jacket**
  - Provides low-profile solution for high-density applications

- **Shuttered die cast adapters**
  - Shields and isolates EMI emissions

- **EMI gaskets included**
  - Provide electromagnetic interference (EMI) seal between the adapter and mounting surface
MTP/MPO and LC Data Center Cable Solutions

Features and Advantages

LC Cable Assemblies

**Low loss performance**
Meets tight system insertion-loss budgets

**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

**Tunable connector**
Optimizes insertion-loss performance

**Cable assemblies 100% quality tested prior to shipping**
Ensures high performance. Reduces customer cost and time associated with testing

**Industry-standard LC connector housing**
Simplifies implementation. Compatible with other pre-installed cables

**Common and proven technologies combined in the LC connector system**
Delivers high performance. Easy to implement

Applications

Telecommunications/Networking
- Optical electrical modules
- Optical switches and routers
- PC cards and patch panels

Data Centers
- Servers

Data Center Servers
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

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

**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

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**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

**MECHANICAL PROPERTIES:**
Mating Force: 8.9N
Durability (min.): 250 mating cycles

**PHYSICAL**
Connector Ferrule: Zirconia Ceramic
Housing: Plastic and Zinc
Alignment Sleeve: Phosphor Bronze or Zirconia Ceramic
Operating Temperature: -40 to 85°C

Ordering Information

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