MTP™ / MPO Multi-Fiber Cable Assemblies

Multimode Cable Assemblies

- High Density Fiber Management Solution
- 8 or 12 Fibers per connector
- Mates to all MTP™ or MPO connectors
- Precision polished for minimum insertion loss and back reflection
- Push/Pull Connector Mating
- Plenum Rated Cable
- Meets EIA/TIA 568-B.3
- Fanouts to discrete simplex connectors available
- 50 and 62.5 micron core fiber available

Date Modified: April 20, 2001

**Physical**

<table>
<thead>
<tr>
<th>Cable</th>
<th>50 micron</th>
<th>62.5 micron</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Bend Radius</td>
<td>30mm</td>
<td>30mm</td>
</tr>
<tr>
<td>Core/Cladding Diameters</td>
<td>50/125µm</td>
<td>62.5/125µm</td>
</tr>
<tr>
<td>Certification/Flame Rating</td>
<td>USA (UL)=OFNP, Canada (CSA)=OFN/FT6</td>
<td></td>
</tr>
</tbody>
</table>

**Connectors**

| Ferrule Material              | Glass Filled Resin |
| Guide Pins                    | Surgical Grade Stainless Steel |
| Polish                        | PC, 1 micron (typical) protrusion |

Rematability (per EIA-455-21A)* 200 200

*Connectors cleaned at 5 cycle intervals. 3M recommends inspection and cleaning as necessary before each mating.

**Performance**

<table>
<thead>
<tr>
<th>Connectors (per termination)</th>
<th>50 micron</th>
<th>62.5 micron</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical Insertion Loss</td>
<td>0.13-0.31 dB</td>
<td>0.10-0.24 dB</td>
</tr>
<tr>
<td>Maximum Insertion Loss</td>
<td>0.5 dB</td>
<td>0.5 dB</td>
</tr>
<tr>
<td>Maximum Return Loss</td>
<td>-20.0 dB</td>
<td>-20.0 dB</td>
</tr>
</tbody>
</table>

*This applies when mated to another properly cleaned 3M MTP™ / MPO assembly.

Opposite ends can be configured for various connectors as needed.

**Standard Cable**

<table>
<thead>
<tr>
<th>850 nm</th>
<th>1300 nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable Attenuation:</td>
<td>≤5.0 dB/km</td>
</tr>
<tr>
<td>Cable Attenuation @23°C, Typ:</td>
<td>3.5 dB/km</td>
</tr>
<tr>
<td>LED Bandwidth-62.5µ core:</td>
<td>≥160 MHz-km</td>
</tr>
<tr>
<td>LED Bandwidth-50µ core:</td>
<td>≥500 MHz-km</td>
</tr>
<tr>
<td>Skew</td>
<td>≤45 ps/m</td>
</tr>
</tbody>
</table>

**Environmental**

- Operating Temperature Rating: -5°C to +70°C (exceeds EIA/TIA 568-B.3)
- Storage Temperature Rating: -40°C to +70°C (exceeds EIA/TIA 568-B.3)

UL File No.: E86982

MTP is a trademark of Conec Ltd / ST is a trademark of Lucent Technologies

3M Interconnect Solutions Division
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Austin, TX 78726-9000

For technical, sales or ordering information call
800-225-5373
### MTP™ / MPO Multi-Fiber Cable Assemblies

#### Multimode Cable Assemblies

**Ordering Information**

<table>
<thead>
<tr>
<th>FXXX XXX-XX</th>
<th>XX</th>
<th>XXX.XX</th>
<th>X.XX X X</th>
</tr>
</thead>
</table>

**Multimode Connector A**

- **MFP** = MTP™ Female (used only with AR & AS 8 fiber cable)
- **MPM** = MTP™ Male (used only with AR & AS 8 fiber cable)
- **MTF** = MT Female (MT Ferrule Only, No Housing)
- **MTM** = MT Male (MT Ferrule Only, No Housing)

**Multimode Connector B**

- **SCM** = SC
- **STM** = ST
- **FCM** = FC
- **LCM** = LC
- **CBX** = Cut Blunt (Note: Replace “C” with “D” for duplex SC or LC connectors.)

**Special Construction**

- **Y** = Yes drawing required
- **N** = No drawing required

**Fan Out**

- **F** = Fanout, non reinforced tubing
- **N** = No

**Dimension B Fanout Section Length**

- (Meters, 0.5 meter max)*
- **000** = non-fanout
- **VAR** = Variable length fanouts (Requires drawing)

**Dimension A Total Assembly Length**

- (Meters)

**Multimode Cable**

- **BA** = 62.5/125µm, unjacketed
- **BB** = 62.5/125µm, plenum jacket
- **BC** = 50/125µm, unjacketed
- **BD** = 50/125µm, plenum jacket

**Number of Fibers**

- 08 = 8
- 12 = 12

*Contact your 3M sales representative for special requirements.

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**Tolerance Unless Noted**

| mm [Inch] | ±0.3 | ±0.15 |

| Dimensions for Reference only |

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Note:
1. All dimensions are in "mm" except Dim A is in meters.

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**Length (Dim A) Tolerance (Meters)**

<table>
<thead>
<tr>
<th>Min</th>
<th>Max</th>
<th>Tol</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>20.0</td>
<td>+0.3</td>
</tr>
<tr>
<td>20.1</td>
<td>100.0</td>
<td>+2%</td>
</tr>
<tr>
<td>100.1</td>
<td>300.0</td>
<td>+1%</td>
</tr>
</tbody>
</table>

**TS-0975-07**

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MTP™/MPO Multi-Fiber Cable Assemblies
Multimode

Standard Termination

White Stripe = Fiber #1

To assure accuracy Special Construction or Fan-Out Assemblies will require a customer drawing.

500 ± 50 mm Maximum [20.00]
Additional fan-out lengths available on request.

A
(See note 1)

To assure accuracy Special Construction or Fan-Out Assemblies will require a customer drawing.

MTP™ Adapter
(Order Separately)

• Accommodates bulkhead mating
• Provides alignment and latching for MTP™ Cable Assemblies to mate together.

White Stripe = Fiber #1

MTP™ Adapter
Ordering Information
FA10-0000

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