MIC® Interlocking Armored Plenum Cables, 2-24 Fibers

Features and Benefits

Aluminum interlocking armor
Seven times crush protection compared to unarmored

TBI® Buffered Fibers
Easy, consistent stripping

Flame-retardant jacket
Rugged and durable

Standards

Approval and Listings
National Electrical Code® (NEC®) OFCP, CSA FT-4, ICEA S-104-696

Flame Resistance
NFPA 262 (for plenum, riser and general building applications)

Corning Cable Systems MIC® Interlocking Armored Plenum Cables are designed for use in plenum, riser and general purpose environments for intrabuilding backbone and horizontal installations. These multifiber cables use individually jacketed TBI® Buffered Fibers enabling easy, consistent stripping and facilitating termination. The fibers are grouped into jacketed subunits and surrounded by a dielectric central member.

The core is protected by a flexible, spirally wrapped, aluminum interlocking armor that offers easy, one-step installation and over seven times the crush protection of unarmored cables. With a flame-retardant outer jacket, this cable is particularly useful for heavy traffic or more challenging mechanical exposure conditions and applications requiring extra rugged cables.

This cable is available in 12 different jacket colors - blue, orange, green, brown, slate, white, red, black, yellow, purple, rose and aqua. The colored jacket allows for easy visual identification of the cables. The standard jacket color will be determined by the dominant fiber type in the cable and will use the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.
MIC® Interlocking Armored Plenum Cables, 2-24 Fibers

Specifications

Temperature Range

<table>
<thead>
<tr>
<th></th>
<th>Storage</th>
<th>Installation</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-40 °C to 70 °C (-40 °F to 158 °F)</td>
<td>0 °C to 60 °C (32 °F to 140 °F)</td>
<td>0 °C to 70 °C (32 °F to 158 °F)</td>
</tr>
</tbody>
</table>

* Corning Cable Systems recommends storing cable in a proper temperature environment prior to installation to allow the cable temperature to meet installation temperature range specifications for best installation results.

Mechanical Characteristics Cable

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Product Type</th>
<th>Nominal Inner Cable Diameter</th>
<th>Nominal Outer Diameter</th>
<th>Min. Bend Radius Installation</th>
<th>Min. Bend Radius Operation</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Interlocking armor</td>
<td>5 mm (0.2 in)</td>
<td>12.2 mm (0.48 in)</td>
<td>183 mm (7.2 in)</td>
<td>122 mm (4.8 in)</td>
<td>131 kg/km (87 lb/1000 ft)</td>
</tr>
<tr>
<td>4</td>
<td>Interlocking armor</td>
<td>5.3 mm (0.21 in)</td>
<td>12.2 mm (0.48 in)</td>
<td>183 mm (7.2 in)</td>
<td>122 mm (4.8 in)</td>
<td>136 kg/km (91 lb/1000 ft)</td>
</tr>
<tr>
<td>6</td>
<td>Interlocking armor</td>
<td>5.3 mm (0.21 in)</td>
<td>12.2 mm (0.48 in)</td>
<td>183 mm (7.2 in)</td>
<td>122 mm (4.8 in)</td>
<td>138 kg/km (92 lb/1000 ft)</td>
</tr>
<tr>
<td>8 - 12</td>
<td>Interlocking armor</td>
<td>6.1 mm (0.24 in)</td>
<td>12.6 mm (0.5 in)</td>
<td>189 mm (7.4 in)</td>
<td>126 mm (5 in)</td>
<td>151 kg/km (105 lb/1000 ft)</td>
</tr>
</tbody>
</table>
### Fiber Count and Product Specifications

<table>
<thead>
<tr>
<th>Fiber Count</th>
<th>Product Type</th>
<th>Nominal Inner Cable Diameter</th>
<th>Nominal Outer Diameter</th>
<th>Min. Bend Radius Installation</th>
<th>Min. Bend Radius Operation</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Interlocking armor</td>
<td>7.4 mm (0.29 in)</td>
<td>13.7 mm (0.54 in)</td>
<td>206 mm (8.1 in)</td>
<td>137 mm (5.4 in)</td>
<td>181 kg/km (125 lb/1000 ft)</td>
</tr>
<tr>
<td>24</td>
<td>Interlocking armor</td>
<td>7.8 mm (0.31 in)</td>
<td>14.3 mm (0.56 in)</td>
<td>215 mm (8.5 in)</td>
<td>143 mm (5.6 in)</td>
<td>197 kg/km (136 lb/1000 ft)</td>
</tr>
</tbody>
</table>

### Transmission Performance

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Fiber Core Diameter (µm)</th>
<th>Multimode 62.5</th>
<th>Multimode 50</th>
<th>Multimode 50</th>
<th>OM1</th>
<th>OM2</th>
<th>OM3</th>
<th>OM4</th>
<th>OM4 Extended Distance</th>
<th>OS2</th>
<th>Single-mode 8.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Category</td>
<td>OM1</td>
<td>OM2</td>
<td>OM3</td>
<td>OM4</td>
<td>OM4 Extended Distance</td>
<td>OS2</td>
<td>Single-mode 8.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiber Code</td>
<td>K</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Option Code</td>
<td>30</td>
<td>31</td>
<td>80</td>
<td>90</td>
<td>91</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wavelengths (nm)</td>
<td>850 / 1300</td>
<td>850 / 1300</td>
<td>850 / 1300</td>
<td>850 / 1300</td>
<td>850 / 1300</td>
<td>1310 / 1383 / 1550</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Attenuation (dB/km)</td>
<td>3.4 / 1.0</td>
<td>2.8 / 1</td>
<td>2.8 / 1</td>
<td>2.8 / 1</td>
<td>2.8 / 1</td>
<td>2.8 / 1</td>
<td>0.65 / 0.65 / 0.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min. Overfilled Launch (OFL) Bandwidth (MHz*km)</td>
<td>200 / 500</td>
<td>700 / 500</td>
<td>1500 / 500</td>
<td>3500 / 500</td>
<td>3500 / 500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Effective Modal Bandwidth (EMB) (MHz*km)</td>
<td>220 / -</td>
<td>950 / -</td>
<td>2000 / -</td>
<td>4700 / -</td>
<td>5350 / -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serial 1 Gigabit Ethernet (m)</td>
<td>300 / 550</td>
<td>750 / 600</td>
<td>1000 / 600</td>
<td>1100 / 600</td>
<td>1100 / 600</td>
<td>5000 / - / -</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serial 10 Gigabit Ethernet (m)</td>
<td>33 / -</td>
<td>150 / -</td>
<td>300 / -</td>
<td>550 / -</td>
<td>600 / -</td>
<td>10000 / - / 40000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Induced Attenuation @ 7.5 mm Radius (dB)</td>
<td>&lt; 30 up to 80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Assumes 1.0 dB maximum total connector/splice loss.
* Assumes 0.7 dB maximum total connector/splice loss.
* Meets 0.75 ns optical skew when used in all Corning Cable Systems Plug & Play™/Pretium EDGE® Systems Solutions.
* ITU-T G.652 D compliant.

Notes:
1. Improved attenuation and bandwidth options available.
2. Bend-insensitive single-mode fibers available on request.
3. Contact a Corning Cable Systems Customer Care Representative for additional information.
4. 50 µm multimode fiber macrobend loss ≤ 0.2 dB at 850 nm for two turns around 7.5 mm radius mandrel.
This cable is available in 12 different jacket colors - blue, orange, green, brown, slate, white, red, black, yellow, purple, rose and aqua. The colored jacket allows for easy visual identification of the cables while still providing all of the required environmental protection of an indoor/outdoor cable jacket. Black is the standard jacket color using the standard part numbers shown here. Contact Customer Care at 1-800-743-2675 to order other color options.