# P-036-MZ-5M-F12

Fiber indoor cable, LazrSPEED® Plenum MPO Trunk, interlocking aluminum armored with plenum jacket, Multimode OM2+, 36 fiber multi-unit with 12 fiber subunits, Feet cable marking

#### Product Classification

Regional Availability

Asia | Australia/New Zealand | Latin America | Middle East

/Africa | North America

 Portfolio
 CommScope®

 Product Type
 Fiber indoor cable

**Product Series** P-MZ

General Specifications

Armor Type Interlocking aluminum

Cable Type MPO trunk cable

Construction TypeArmoredSubunit TypeGel-freeJacket MarkingFeetSubunit, quantity3

Fibers per Subunit, quantity 12

Total Fiber Count 36

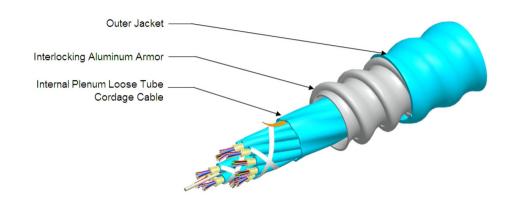
Dimensions

Buffer Tube/Subunit Diameter3 mm | 0.118 inDiameter Over Armor15.88 mm | 0.625 inDiameter Over Jacket17.9 mm | 0.705 in

Representative Image



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# Mechanical Specifications

Minimum Bend Radius, loaded358 mm14.094 inMinimum Bend Radius, unloaded251 mm9.882 in

Tensile Load, long term, maximum 400 N | 89.924 lbf

Tensile Load, short term, maximum 1335 N | 300.12 lbf

 Compression
 85 N/mm | 485.363 lb/in

 Compression Test Method
 FOTP-41 | IEC 60794-1 E3

Flex 300 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

**Impact** 35 N-m | 309.776 in lb

Impact Test Method FOTP-25 | IEC 60794-1 E4

**Strain** See long and short term tensile loads

Strain Test Method FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

**Vertical Rise, maximum** 159 m | 521.654 ft

**Optical Specifications** 

Fiber Type OM2+, LazrSPEED® 150 | OM2+, LazrSPEED® 150

**Environmental Specifications** 

**Installation temperature** 0 °C to +70 °C (+32 °F to +158 °F)

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**Operating Temperature**  $0 \, ^{\circ}\text{C to } +70 \, ^{\circ}\text{C (} +32 \, ^{\circ}\text{F to } +158 \, ^{\circ}\text{F})$ 

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

Cable Qualification Standards ANSI/ICEA S-83-596 | Telcordia GR-409

Environmental Space Plenum

Flame Test Listing NEC OFCP (ETL) and c(ETL)

Flame Test Method NFPA 262

**Environmental Test Specifications** 

**Heat Age** 0 °C to +85 °C (+32 °F to +185 °F)

**Heat Age Test Method** IEC 60794-1 F9

**Low High Bend** 0 °C to +70 °C (+32 °F to +158 °F)

**Low High Bend Test Method** FOTP-37 | IEC 60794-1 E11

**Temperature Cycle** 0 °C to +70 °C (+32 °F to +158 °F)

**Temperature Cycle Test Method** FOTP-3 | IEC 60794-1 F1

Packaging and Weights

**Cable weight** 257 kg/km | 172.696 lb/kft

## Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

#### Included Products

CS-5M-MP – LazrSPEED® 150 OM2+ Bend-Insensitive Multimode

Fiber

#### \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable



#### LazrSPFFD® 150 OM2+ Bend-Insensitive Multimode Fiber

## LazrSPFFD® 150

### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±5 µm Cladding Non-Circularity, maximum 1 % **Coating Diameter (Colored)** 254 µm **Coating Diameter (Uncolored)** 245 µm **Coating Diameter Tolerance (Colored)** ±7 µm **Coating Diameter Tolerance (Uncolored)** ±10 μm Coating/Cladding Concentricity Error, maximum 12 µm **Core Diameter** 50 µm **Core Diameter Tolerance** ±2.5 µm

**Proof Tensile Stress** 100,000 psi (0.69 GPa)

Mechanical Specifications

Core/Clad Offset, maximum

 Macrobending, 15 mm Ø mandrel, 2 turns
 0.20 dB @ 850 nm
 0.50 dB @ 1,300 nm

 Macrobending, 30 mm Ø mandrel, 2 turns
 0.10 dB @ 850 nm
 0.30 dB @ 1,300 nm

 $1.5 \, \mu m$ 

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

**Dynamic Fatigue Parameter, minimum** 18

**Optical Specifications** 

Numerical Aperture 0.2

Numerical Aperture Tolerance ±0.015

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# CS-5M-MP

Point Defects, maximum 0.15 dB

**Zero Dispersion Slope, maximum** 0.105 ps/[km-nm-nm]

**Zero Dispersion Wavelength, maximum** 1316 nm **Zero Dispersion Wavelength, minimum** 1297 nm

### Optical Specifications, Wavelength Specific

**1 Gbps Ethernet Distance** 600 m @ 1,300 nm | 800 m @ 850 nm

**10 Gbps Ethernet Distance** 150 m @ 850 nm

**Attenuation, maximum** 1.00 dB/km @ 1,300 nm | 3.00 dB/km @ 850 nm

**Backscatter Coefficient** -68.0 dB @ 850 nm | -75.7 dB @ 1,300 nm

 Bandwidth, Laser, minimum
 500 MHz-km @ 1,300 nm | 950 MHz-km @ 850 nm

 Bandwidth, OFL, minimum
 500 MHz-km @ 1,300 nm | 700 MHz-km @ 850 nm

 Differential Mode Delay
 0.70 ps/m @ 850 nm | 0.88 ps/m @ 1,300 nm

0.70 ps/111 @ 0.00 ps/111 @ 1,500 111

**Index of Refraction** 1.479 @ 1,300 nm | 1.483 @ 850 nm

Standards Compliance TIA-492AAAB (OM2+)

### **Environmental Specifications**

Heat Aging, maximum 0.20 dB/km @ 85 °C

Temperature Dependence, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.2 dB/km

Water Immersion, maximum 0.20 dB/km @ 23 °C

## Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

## \* Footnotes

**Temperature Dependence, maximum** Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

Temperature Humidity Cycling, maximum Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F)

up to 95% relative humidity

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