# 760242139 | P-144-MZ-5G-F12LM/20T



Fiber indoor cable, LazrSPEED® Plenum MPO Trunk, interlocking aluminum armored with plenum jacket, Multimode OM5, 144 fiber multiunit with 12 fiber subunits, Lime-green jacket color, Feet cable marking

### **Product Classification**

Regional Availability

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

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/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 ColorLime green

Jacket MarkingFeetSubunit, quantity12Fibers per Subunit, quantity12

Dimensions

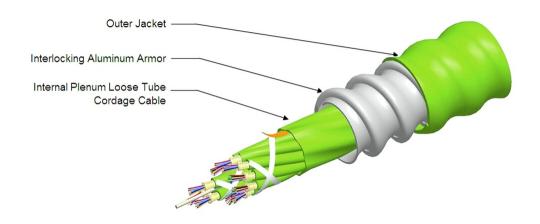
**Total Fiber Count** 

Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Armor18.4 mm | 0.724 inDiameter Over Jacket20.5 mm | 0.807 in

## Representative Image



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### Mechanical Specifications

Minimum Bend Radius, loaded307 mm12.087 inMinimum Bend Radius, unloaded205 mm8.071 inTensile Load, long term, maximum200 N | 44.962 lbfTensile Load, short term, maximum667 N | 149.948 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** 57 m | 187.008 ft

**Optical Specifications** 

Fiber Type OM5, LazrSPEED® wideband | OM5, LazrSPEED® wideband

**Environmental Specifications** 

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

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**Operating Temperature** 0 °C to +70 °C (+32 °F to +158 °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 130 | 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**  $0 \,^{\circ}\text{C to } +70 \,^{\circ}\text{C (+32 °F to } +158 \,^{\circ}\text{F)}$ 

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

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

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

Packaging and Weights

**Cable weight** 356 kg/km | 239.221 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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

Included Products

CS-5G-MP – LazrSPEED® OM5 WideBand Multimode

Fiber

### \* Footnotes

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



# LazrSPEED®

#### LazrSPEED® OM5 WideBand Multimode Fiber

#### Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±5 µm Cladding Non-Circularity, maximum 0.7 % **Coating Diameter (Colored)** 254 µm **Coating Diameter (Uncolored)** 242 µm **Coating Diameter Tolerance (Colored)** ±7 µm **Coating Diameter Tolerance (Uncolored)** ±5 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

 Macrobending, 75 mm Ø mandrel, 100 turns
 0.50 dB @ 1,300 nm | 0.50 dB @ 850 nm

1 µm

Coating Strip Force, maximum $4.5 \, \text{N}$  |  $1.012 \, \text{lbf}$ Coating Strip Force, minimum $0.9 \, \text{N}$  |  $0.202 \, \text{lbf}$ 

**Dynamic Fatigue Parameter, minimum** 18

Optical Specifications

Numerical Aperture 0.2

**COMMSCOPE®** 

## CS-5G-MP

Numerical Aperture Tolerance ±0.010

Point Defects, maximum 0.15 dB

**Zero Dispersion Slope, maximum (OM5)**  $-412/(840(1-(\lambda 0/840)^4)))$  ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1328 nmZero Dispersion Wavelength, minimum1297 nm

## Optical Specifications, Wavelength Specific

**1 Gbps Ethernet Distance** 1,110 m @ 850 nm | 600 m @ 1,300 nm

**10 Gbps Ethernet Distance** 550 m @ 850 nm

**Attenuation, maximum** 1.00 dB/km @ 1,300 nm | 2.20 dB/km @ 953 nm | 3.00 dB/km @

850 nm

**Bandwidth, Laser, minimum** 2,600 MHz-km @ 953 nm | 4,700 MHz-km @ 850 nm | 500 MHz-km

@ 1,300 nm

**Bandwidth, OFL, minimum** 1,950 MHz-km @ 953 nm | 3,500 MHz-km @ 850 nm | 500 MHz-km

@ 1,300 nm

**Index of Refraction** 1.478 @ 1,300 nm | 1.483 @ 850 nm

**Standards Compliance** ANSI/TIA-492AAAF (OM5) | ANSI/TIA-568.3 (OM5) | IEC 60793-2-10,

A1 (OM5) | ISO/IEC 11801-1 cabled optical fiber performance category

OM5

### **Environmental Specifications**

**Heat Aging, maximum** 0.10 dB/km @ 85 °C

Temperature Dependence, maximum 0.1 dB/km
Temperature Humidity Cycling, maximum 0.1 dB/km

Water Immersion, maximum 0.10 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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