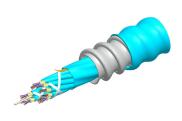
# 760242138 | P-144-MZ-5K-F12AQ/20T



Fiber indoor cable, LazrSPEED® Plenum MPO Trunk, interlocking aluminum armored with plenum jacket, Multimode OM4, 144 fiber multi-unit with 12 fiber subunits, gel-free, Feet jacket marking, Aqua jacket color

#### **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 ColorAquaJacket MarkingFeet

Subunit, quantity 12
Fibers per Subunit, quantity 12
Total Fiber Count 144

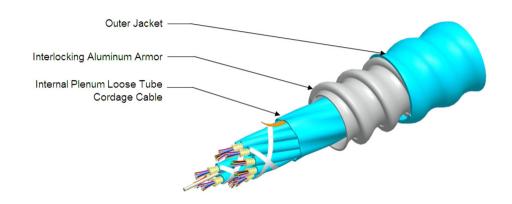
#### Dimensions

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

### Representative Image



## 760242138 | P-144-MZ-5K-F12AQ/20T



## 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 OM4, LazrSPEED® 550 | OM4, LazrSPEED® 550

**Environmental Specifications** 

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

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## 760242138 | P-144-MZ-5K-F12AQ/20T

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

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

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**  $0 \degree \text{C to } +70 \degree \text{C (} +32 \degree \text{F to } +158 \degree \text{F)}$ 

**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-5K-MP – LazrSPEED® 550 OM4 Bend-Insensitive Multimode

Fiber

#### \* Footnotes

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



#### LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

### LazrSPEED® 550

#### **Product Classification**

Portfolio CommScope®
Product Type Optical fiber

### General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±0.8 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

**Proof Test** 689.476 N/mm<sup>2</sup> | 100000 psi

## Mechanical Specifications

**Core Diameter Tolerance** 

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

±2.5 µm

 $1.5 \, \mu m$ 

Coating Strip Force, maximum $8.9 \,\mathrm{N}$  |  $2.001 \,\mathrm{lbf}$ Coating Strip Force, minimum $1.3 \,\mathrm{N}$  |  $0.292 \,\mathrm{lbf}$ 

**Dynamic Fatigue Parameter, minimum** 18

COMMSCOPE®

## CS-5K-MP

#### **Optical Specifications**

Numerical Aperture 0.2

Numerical Aperture Tolerance±0.015Point Defects, maximum0.15 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** 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 | 3.00 dB/km @ 850 nm

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

 Bandwidth, Laser, minimum
 4,700 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

 Bandwidth, OFL, minimum
 3,500 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

**Differential Mode Delay** 0.70 ps/m @ 850 nm

Differential Mode Delay Note Superior to ANSI/TIA TIA-492AAAF and IEC 60793-2-10 at 850 nm

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

**Standards Compliance** ANSI/TIA-492AAAF (OM4) | IEC 60793-2-10, A1 (OM4)

## **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)

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# CS-5K-MP

up to 95% relative humidity

