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



Fiber indoor cable, LazrSPEED® Plenum MPO Trunk, interlocking aluminum armored with plenum jacket, Multimode OM4, 144 fiber multiunit 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

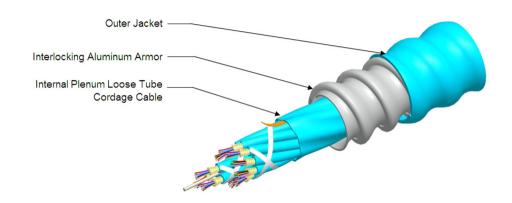
Dimensions

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

Representative Image



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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 OM4, LazrSPEED® 550 | OM4, LazrSPEED® 550

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

Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



LazrSPFFD® 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 **Core Diameter Tolerance** ±2.5 µm

Proof Test 689.476 N/mm² | 100000 psi

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

 $1.5 \, \mu m$

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

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 | 0.88 ps/m @ 1,300 nm

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

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

Standards Compliance IEC 60793-2-10, type A1a.3a | IEC 60793-2-10, type A1a.3b | TIA-

492AAAD (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)

COMMSC PE

CS-5K-MP

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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