P-048-MP-5K-F24

Fiber indoor cable, LazrSPEED® Plenum for MPO Trunks, 48 fiber with 24 fiber subunits, Multimode OM4, Feet jacket 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-MP

General Specifications

Cable Type MPO trunk cable

Construction Type Non-armored

Subunit Type Gel-free

Jacket Marking Feet

Subunit, quantity 2

Fibers per Subunit, quantity 24

Total Fiber Count 48

Dimensions

Height Over Jacket 4.47 mm | 0.176 in

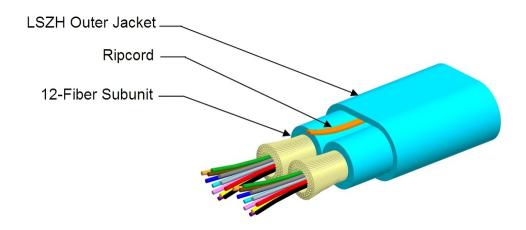
Width Over Jacket 8.08 mm | 0.318 in

Buffer Tube/Subunit Diameter 3.6 mm | 0.142 in

Representative Image



P-048-MP-5K-F24



Mechanical Specifications

Minimum Bend Radius, loaded67 mm | 2.638 inMinimum Bend Radius, unloaded45 mm | 1.772 inTensile Load, long term, maximum240 N | 53.954 lbfTensile Load, short term, maximum801 N | 180.072 lbf

 Compression
 10 N/mm | 57.101 lb/in

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

Flex 300 cycles

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

Impact 0.74 N-m | 6.55 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 500 m | 1,640.42 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 °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 StandardsANSI/ICEA S-83-596Telcordia GR-409

Environmental Space Plenum

Flame Test Listing NEC OFNP (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 $0 \degree \text{C to } +70 \degree \text{C (} +32 \degree \text{F to } +158 \degree \text{F)}$

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

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

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

Packaging and Weights

Cable weight 38 kg/km | 25.535 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 $\pm 5 \, \mu m$

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

Core/Clad Offset, maximum 1.5 μm

Proof Tensile Stress 100,000 psi (0.69 GPa)

Mechanical Specifications

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

Coating Strip Force, maximum 8.9 N | 2.001 lbf

Coating Strip Force, minimum 1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 18

Optical Specifications

Numerical Aperture 0.2

COMMSCOPE®

CS-5K-MP

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)

up to 95% relative humidity

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