760251004 | P-144-MP-5K-F16AQ



Fiber indoor cable, LazrSPEED® Plenum MPO Trunk, 144 fiber multi-unit with 16 fiber subunits, Multimode OM4, 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-MP

General Specifications

Cable TypeMPO trunk cable

Construction Type Non-armored

Subunit Type Gel-free

Jacket Color Aqua

Jacket Marking Feet

Subunit, quantity 9

Fibers per Subunit, quantity 16

Total Fiber Count 144

Dimensions

Buffer Tube/Subunit Diameter 3 mm | 0.118 in

Diameter Over Jacket 13.4 mm | 0.528 in

Mechanical Specifications

Minimum Bend Radius, loaded 202 mm | 7.953 in

Minimum Bend Radius, unloaded 134 mm | 5.276 in

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

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

Compression 10 N/mm | 57.101 lb/in

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

Flex 300 cycles

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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 219 m | 718.504 ft

Optical Specifications

Fiber Type OM4, LazrSPEED® 550 | OM4, LazrSPEED® 550

Environmental Specifications

Installation temperature $0 \, ^{\circ}\text{C} \, \text{to} + 70 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F} \, \text{to} + 158 \, ^{\circ}\text{F})$ Operating Temperature $0 \, ^{\circ}\text{C} \, \text{to} + 70 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F} \, \text{to} + 158 \, ^{\circ}\text{F})$ Storage Temperature $-40 \, ^{\circ}\text{C} \, \text{to} + 70 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F} \, \text{to} + 158 \, ^{\circ}\text{F})$

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

Environmental Space Plenum

Flame Test Listing

NEC OFNP (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 °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 186 kg/km | 124.986 lb/kft

Included Products

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

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Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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

Product Classification

PortfolioCommScope®Product TypeOptical 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 Core/Clad Offset, maximum $1.5 \, \mu m$

Proof Test 689.476 N/mm² | 100000 psi

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

Dynamic Fatigue Parameter, minimum 18

Optical Specifications

 Numerical Aperture
 0.2

 Numerical Aperture Tolerance
 ±0.015

 Point Defects, maximum
 0.15 dB

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CS-5K-MP

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)

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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