760242118 | P-048-MP-5K-F12AQ/20T



Fiber indoor cable, LazrSPEED® Plenum MPO Trunk, 48 fiber multi-unit with 12 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 Type MPO trunk cable

Construction Type Non-armored

Subunit Type Gel-free

Jacket Color Aqua

Jacket Marking Feet

Subunit, quantity 4

Fibers per Subunit, quantity 12

Total Fiber Count 48

Dimensions

Buffer Tube/Subunit Diameter 2 mm | 0.079 in

Diameter Over Jacket 7.7 mm | 0.303 in

Representative Image



760242118 | P-048-MP-5K-F12AQ/20T



Mechanical Specifications

Minimum Bend Radius, loaded 116 mm | 4.567 in

Minimum Bend Radius, unloaded 77 mm | 3.031 in

Tensile Load, long term, maximum 200 N | 44.962 lbf

Tensile Load, short term, maximum 667 N | 149.948 lbf

Compression 10 N/mm | 57.101 lb/in

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

Flex 300 cycles

FIEX 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 316 m | 1,036.745 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 $-40 \, ^{\circ}\text{C} \, \text{to} + 70 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F} \, \text{to} + 158 \, ^{\circ}\text{F})$

Page 2 of 6



760242118 | P-048-MP-5K-F12AQ/20T

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 65 kg/km | 43.678 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/mm² | 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)

Page 5 of 6



CS-5K-MP

up to 95% relative humidity

