760249675 | N-096-MZ-5K-F12AQ/20T/B2



Fiber indoor cable, LazrSPEED® Riser/LSZH rated, MPO Trunk, interlocking aluminum armored, Multimode OM4, 96 fiber, Gel-free, Feet jacket marking, Aqua jacket color, B2ca flame rating

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North

America

Portfolio CommScope®

Product Type Fiber indoor cable

Product Series N-MZ

General Specifications

Armor Type Interlocking aluminum

Cable TypeMPO trunk cable

Construction TypeArmoredSubunit TypeGel-free

Jacket Color Aqua

Jacket Marking Feet

Subunit, quantity 8

Fibers per Subunit, quantity 12

Total Fiber Count 96

Dimensions

Buffer Tube/Subunit Diameter 2 mm | 0.079 in

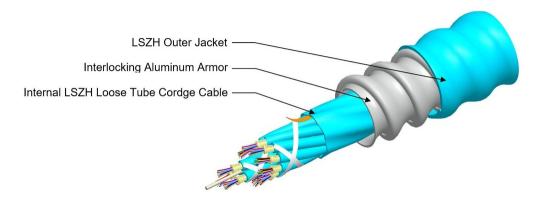
Diameter Over Armor 15.9 mm | 0.626 in

Diameter Over Jacket 17.9 mm | 0.705 in

Representative Image



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Mechanical Specifications

Minimum Bend Radius, loaded269 mm10.591 inMinimum Bend Radius, unloaded179 mm7.047 inTensile Load, long term, maximum200 N44.962 lbfTensile Load, short term, maximum667 N149.948 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 76 m | 249.344 ft

Optical Specifications

Fiber Type OM4, LazrSPEED® 550

Environmental Specifications

Installation temperature $0 \, ^{\circ}\text{C} \, \text{to} +50 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F} \, \text{to} +122 \, ^{\circ}\text{F})$ Operating Temperature $0 \, ^{\circ}\text{C} \, \text{to} +60 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F} \, \text{to} +140 \, ^{\circ}\text{F})$ Storage Temperature $-40 \, ^{\circ}\text{C} \, \text{to} +70 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F} \, \text{to} +158 \, ^{\circ}\text{F})$

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

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd1EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Low Smoke Zero Halogen (LSZH) | Riser

Flame Test Listing NEC OFCR-ST1 (ETL) and c(ETL)

Flame Test Method | IEC 60332-3 | IEC 60754-2 | IEC 61034-2 | UL 1666 | UL 1685

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 +50 °C (+32 °F to +122 °F)

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

 Temperature Cycle
 0 °C to +60 °C (+32 °F to +140 °F)

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

Packaging and Weights

Cable weight 267 kg/km | 179.416 lb/kft

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 $\pm 0.8 \ \mu m$

Cladding Non-Circularity, maximum 1 %

Coating Diameter (Colored) 254 µm

Coating Diameter (Uncolored) 245 µm

Coating Diameter Tolerance (Colored) $\pm 7 \,\mu m$

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 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 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

COMMSC PE®