## 760249677 | N-192-MZ-5K-F12AQ/20T/B2



Fiber indoor cable, LazrSPEED® Riser/LSZH rated, MPO Trunk, interlocking aluminum armored, Multimode OM4, 192 fiber multi-unit with 12 fiber subunits, Gel-free, Feet jacket marking, Aqua jacket color, B2ca flame rating

#### **Product Classification**

Regional Availability

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

America

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Portfolio CommScope®

Product Type Fiber indoor cable

**Product Series** N-MZ

General Specifications

Armor Type Interlocking aluminum

Cable Type MPO trunk cable

Construction TypeArmoredSubunit TypeGel-free

Filler, quantity 2

Jacket ColorAquaJacket MarkingFeetSubunit, quantity16

**Total Fiber Count** 192

Dimensions

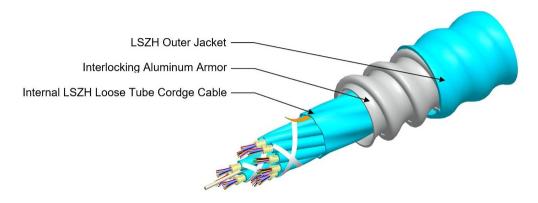
Fibers per Subunit, quantity

Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Armor19.7 mm | 0.776 inDiameter Over Jacket21.7 mm | 0.854 in

Representative Image



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### Mechanical Specifications

Minimum Bend Radius, loaded326 mm12.835 inMinimum Bend Radius, unloaded217 mm8.543 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** 54 m | 177.165 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 Ratingd2EN50575 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 Bend0 °C to +50 °C (+32 °F to +122 °F)Low High Bend Test MethodFOTP-37 | IEC 60794-1 E11Temperature Cycle0 °C to +60 °C (+32 °F to +140 °F)

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

Packaging and Weights

**Cable weight** 375 kg/km | 251.988 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/mm<sup>2</sup> | 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®