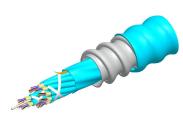
#### N-144-MZ-5K-F12AQ/20T/B2 760249676



Fiber indoor cable, LazrSPEED® Riser/LSZH rated, MPO Trunk, interlocking aluminum armored, Multimode OM4, 144 fiber multi-unit with 12 fiber subunits, Gel-free, Feet jacket marking, Agua 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 Type** Armored **Subunit Type** Gel-free

**Jacket Color** Aqua

**Jacket Marking** Feet

Subunit, quantity Fibers per Subunit, quantity 12

**Total Fiber Count** 144

Dimensions

**Buffer Tube/Subunit Diameter** 2 mm | 0.079 in

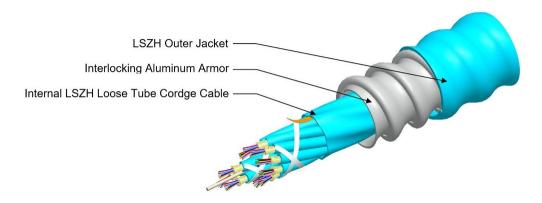
**Diameter Over Armor** 18.4 mm | 0.724 in

**Diameter Over Jacket** 20.4 mm | 0.803 in

Representative Image



## 760249676 | N-144-MZ-5K-F12AQ/20T/B2



## Mechanical Specifications

Minimum Bend Radius, loaded307 mm12.087 inMinimum Bend Radius, unloaded204 mm8.032 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** 58 m | 190.289 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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# 760249676 | N-144-MZ-5K-F12AQ/20T/B2

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**  $0 \,^{\circ}\text{C}$  to +50  $^{\circ}\text{C}$  (+32  $^{\circ}\text{F}$  to +122  $^{\circ}\text{F}$ ) **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** 351 kg/km | 235.861 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®