# 760256198 | N-128-MZ-5K-F16AQ/30T/B2



Fiber indoor cable, Riser/LSZH rated, MPO Trunk, interlocking aluminum armored, OM4 multi-mode, 128 fiber, 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 16

Total Fiber Count 128

**Dimensions** 

**Buffer Tube/Subunit Diameter** 3 mm | 0.118 in

**Diameter Over Armor** 19.7 mm | 0.776 in

**Diameter Over Jacket** 21.7 mm | 0.854 in

Mechanical Specifications

Minimum Bend Radius, loaded326 mm12.835 inMinimum Bend Radius, unloaded217 mm8.543 in

Page 1 of 6



# 760256198 | N-128-MZ-5K-F16AQ/30T/B2

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

Tensile Load, short term, maximum 1335 N | 300.12 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** 104 m | 341.207 ft

**Optical Specifications** 

Fiber Type OM4, LazrSPEED® 550

## **Environmental Specifications**

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

**Operating Temperature**  $0 \, ^{\circ}\text{C} \text{ to } +60 \, ^{\circ}\text{C} \text{ (+32 } ^{\circ}\text{F to } +140 \, ^{\circ}\text{F)}$ 

**Storage Temperature**  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

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

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings2

EN50575 CPR Cable EuroClass Droplets Rating d1

EN50575 CPR Cable EuroClass Acidity Rating a1

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

Page 2 of 6



# 760256198 | N-128-MZ-5K-F16AQ/30T/B2

**Low High Bend** 0 °C to +60 °C (+32 °F to +140 °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** 392 kg/km | 263.412 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**

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

**Proof Test** 689.476 N/mm<sup>2</sup> | 100000 psi

# Mechanical Specifications

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

 $1.5 \, \mu m$ 

**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 | 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





# CS-5K-MP

### \* 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

