## N-036-MZ-5L-F12

Fiber indoor cable, LazrSPEED® Riser/LSZH rated, MPO Trunk, interlocking aluminum armored, Multimode OM3, 36 fiber multi-unit with 12 fiber subunits, Feet jacket marking, 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 Type MPO trunk cable

Construction TypeArmoredSubunit TypeGel-freeJacket MarkingFeetSubunit, quantity3

Fibers per Subunit, quantity 12

Total Fiber Count 36

Dimensions

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

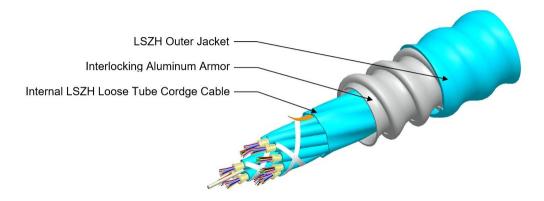
 Diameter Over Armor
 15.88 mm | 0.625 in

 Diameter Over Jacket
 17.9 mm | 0.705 in

Representative Image



## N-036-MZ-5L-F12



### Mechanical Specifications

Tensile Load, short term, maximum

Minimum Bend Radius, loaded358 mm1 44.094 inMinimum Bend Radius, unloaded251 mm9.882 inTensile Load, long term, maximum400 N | 89.924 lbf

 Compression
 85 N/mm | 485.363 lb/in

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

1335 N | 300.12 lbf

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** 166 m | 544.619 ft

**Optical Specifications** 

Fiber Type OM3, LazrSPEED® 300 | OM3, LazrSPEED® 300

## **Environmental Specifications**

Installation temperature  $-20 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-4 °F to +140 °F)

Operating Temperature  $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4 °F to +158 °F)

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

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## N-036-MZ-5L-F12

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** -20 °C to +85 °C (-4 °F to +185 °F)

**Heat Age Test Method** IEC 60794-1 F9

**Low High Bend**  $-20 \,^{\circ}\text{C to } +70 \,^{\circ}\text{C } (-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

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

**Temperature Cycle**  $-20 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C} \left(-4 \,^{\circ}\text{F to} + 158 \,^{\circ}\text{F}\right)$ 

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

Packaging and Weights

**Cable weight** 247 kg/km | 165.976 lb/kft

## Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

CENELEC

#### Included Products

CS-5L-MP – LazrSPEED® 300 OM3 Bend-Insensitive Multimode

Fiber

### \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable



#### LazrSPFFD® 300 OM3 Bend-Insensitive Multimode Fiber

## LazrSPEED® 300

#### **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 **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-5L-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** 1,020 m @ 850 nm | 600 m @ 1,300 nm

**10 Gbps Ethernet Distance** 300 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
 2,000 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

 Bandwidth, OFL, minimum
 1,500 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 TIA-492AAAC (OM3)

## **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)

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# CS-5L-MP

up to 95% relative humidity

