## N-036-MP-5K-F12

Fiber indoor cable, LazrSPEED® Low Smoke Zero Halogen Riser MPO Trunk, 36 fiber multi-unit with 12 fiber subunits, Gel-free, Multimode OM4, Feet jacket marking, Dca flame rating

#### Product Classification

Regional Availability

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

America

36

 Portfolio
 CommScope®

 Product Type
 Fiber indoor cable

**Product Series** N-MP

## General Specifications

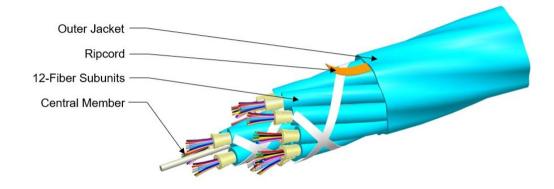
Cable TypeMPO trunk cableConstruction TypeNon-armoredSubunit TypeGel-freeJacket MarkingFeetSubunit, quantity3Fibers per Subunit, quantity12

Dimensions

**Total Fiber Count** 

Buffer Tube/Subunit Diameter3 mm | 0.118 inDiameter Over Jacket9.2 mm | 0.362 in

## Representative Image





## N-036-MP-5K-F12

### Mechanical Specifications

Minimum Bend Radius, loaded138 mm | 5.433 inMinimum Bend Radius, unloaded92 mm | 3.622 inTensile Load, long term, maximum400 N | 89.924 lbfTensile Load, short term, maximum1335 N | 300.12 lbf

 Compression
 10 N/mm | 57.101 lb/in

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

Flex 300 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

**Impact** 2.94 N-m | 26.021 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** 500 m | 1,640.42 ft

**Optical Specifications** 

Fiber Type OM4, LazrSPEED® 550 | OM4, LazrSPEED® 550

## **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)

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

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd1EN50575 CPR Cable EuroClass Acidity Ratinga2

Environmental Space Low Smoke Zero Halogen (LSZH) | Riser

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

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

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# N-036-MP-5K-F12

## **Environmental Test Specifications**

**Heat Age**  $-20 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  ( $-4 \,^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

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 °C to +70 °C (-4 °F to +158 °F)

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

Packaging and Weights

**Cable weight** 71.1 kg/km | 47.777 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-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  $\pm 5 \, \mu m$ 

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

**Core/Clad Offset, maximum** 1.5 μm

**Proof Tensile Stress** 100,000 psi (0.69 GPa)

## 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

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