## N-012-DS-5M-FSU

Fiber indoor cable, LazrSPEED® Low Smoke Zero Halogen Riser Distribution, 12 fiber single-unit, Multimode OM2+, Gel-free, Feet jacket marking, Dca 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-DS

General Specifications

Cable TypeDistributionConstruction TypeNon-armoredSubunit TypeGel-free

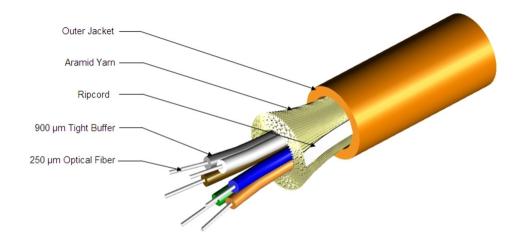
Jacket Marking Feet

Total Fiber Count 12

**Dimensions** 

**Diameter Over Jacket** 6.07 mm | 0.239 in

## Representative Image



Mechanical Specifications

Page 1 of 6

## N-012-DS-5M-FSU

Minimum Bend Radius, loaded91 mm | 3.583 inMinimum Bend Radius, unloaded61 mm | 2.402 inTensile Load, long term, maximum200 N | 44.962 lbf

**Tensile Load, short term, maximum** 667 N | 149.948 lbf

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

Flex 100 cycles

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

**Impact** 5.88 N-m | 52.042 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** 

Compression

Fiber Type OM2+, LazrSPEED® 150 | OM2+, LazrSPEED® 150

10 N/mm | 57.101 lb/in

### **Environmental Specifications**

Installation temperature  $-10 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (+14  $^{\circ}\text{F}$  to +140  $^{\circ}\text{F}$ )

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

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 PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 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

**Environmental Test Specifications** 

Page 2 of 6



## N-012-DS-5M-FSU

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

Heat Age Test Method IEC 60794-1 F9

**Low High Bend**  $-10 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (+14  $^{\circ}\text{F}$  to +140  $^{\circ}\text{F}$ )

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

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

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

Packaging and Weights

Cable weight 34 kg/km | 22.847 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-5M-TB – LazrSPEED® 150 OM2+ Bend-Insensitive Multimode

Fiber

#### \* Footnotes

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



#### LazrSPFFD® 150 OM2+ Bend-Insensitive Multimode Fiber

### LazrSPFFD® 150

#### **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)**  $254 \, \mu m$ **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

Tight Buffer Diameter 900  $\mu m$ Tight Buffer Diameter Tolerance  $\pm 40 \ \mu m$ 

## 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

 $1.5 \, \mu m$ 

Coating Strip Force, maximum $8.9 \, \text{N}$  $2.001 \, \text{lbf}$ Coating Strip Force, minimum $1.3 \, \text{N}$  $0.292 \, \text{lbf}$ 

**COMMSCOPE®** 

## CS-5M-TB

Dynamic Fatigue Parameter, minimum 18

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** 600 m @ 1,300 nm | 800 m @ 850 nm

**10 Gbps Ethernet Distance** 150 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
 500 MHz-km @ 1,300 nm | 950 MHz-km @ 850 nm

 Bandwidth, OFL, minimum
 500 MHz-km @ 1,300 nm | 700 MHz-km @ 850 nm

 Differential Mode Delay
 0.70 ps/m @ 850 nm | 0.88 ps/m @ 1,300 nm

**Index of Refraction** 1.479 @ 1,300 nm | 1.483 @ 850 nm

Standards Compliance TIA-492AAAB (OM2+)

**Environmental Specifications** 

**Heat Aging, maximum**  $0.20 \text{ dB/km} \otimes 85 \text{ }^{\circ}\text{C}$ 

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)

Page 5 of 6

# CS-5M-TB

up to 95% relative humidity

