# R-036-DS-5K-FMU

Fiber indoor cable, LazrSPEED® Riser Distribution, 36 fiber Multi-Unit with 12-Fiber Subunits, Multimode OM4, Gel-free, Feet jacket marking

#### Product Classification

Regional Availability

Asia | Australia/New Zealand | Latin America | Middle East

/Africa | North America

Portfolio CommScope®

**Product Type** Fiber indoor cable

**Product Series** R-DS

### General Specifications

Cable TypeDistributionConstruction TypeNon-armoredSubunit TypeGel-freeJacket MarkingFeetSubunit, quantity3

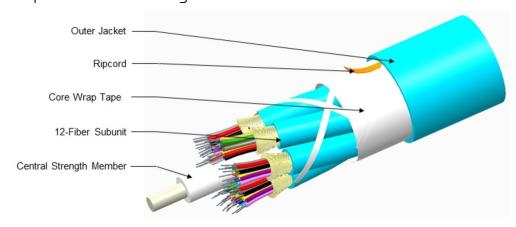
Fibers per Subunit, quantity 12

Total Fiber Count 36

#### **Dimensions**

Buffer Tube/Subunit Diameter5.95 mm | 0.234 inDiameter Over Jacket14.45 mm | 0.569 in

## Representative Image



Page 1 of 6



## R-036-DS-5K-FMU

## Mechanical Specifications

Minimum Bend Radius, loaded217 mm | 8.543 inMinimum Bend Radius, unloaded145 mm | 5.709 inTensile Load, long term, maximum400 N | 89.924 lbfTensile Load, short term, maximum1335 N | 300.12 lbfCompression10 N/mm | 57.101 lb/inCompression Test MethodFOTP-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** 244 m | 800.525 ft

**Optical Specifications** 

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

## **Environmental Specifications**

Installation temperature $-20 \, ^{\circ}\text{C}$  to  $+70 \, ^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to  $+158 \, ^{\circ}\text{F}$ )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 StandardsANSI/ICEA S-83-596Telcordia GR-409

Environmental Space Riser

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

Flame Test Method UL 1666

**Environmental Test Specifications** 

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

Heat Age Test Method IEC 60794-1 F9

**COMMSCOPE®** 

# R-036-DS-5K-FMU

**Low High Bend** -20 °C to +70 °C (-4 °F to +158 °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** 167 kg/km | 112.219 lb/kft

#### Regulatory Compliance/Certifications

Agency Classification

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

#### Included Products

CS-5K-TB – 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** ±5 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 Tensile Stress** 100,000 psi (0.69 GPa)

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

 Macrobending, 75 mm Ø mandrel, 100 turns
 0.50 dB @ 1,300 nm | 0.50 dB @ 850 nm

 $1.5 \, \mu m$ 

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

**Dynamic Fatigue Parameter, minimum** 18

**COMMSCOPE®** 

# CS-5K-TB

#### **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

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)

Page 5 of 6



# CS-5K-TB

up to 95% relative humidity

