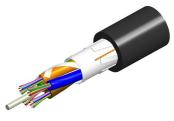
# 760112607 | R-012-LN-5L-F12BK/25D/LTS



Fiber indoor/outdoor cable, LazrSPEED®, Light Duty, Single Jacket, Riser Rated, Gel-Free, , 12 fiberAll-Dielectric Outdoor Stranded Loose Tube, Multimode OM3, Gel-free, Feet jacket marking, Black jacket color

#### **Product Classification**

Regional Availability

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

/Africa | North America

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series R-LN

# General Specifications

Cable Type Stranded loose tube

Construction Type Non-armored

Subunit Type Gel-free

Filler, quantity 3

Jacket Color Black

Jacket Marking Feet

Subunit, quantity 1

Fibers per Subunit, quantity 12

Total Fiber Count 12

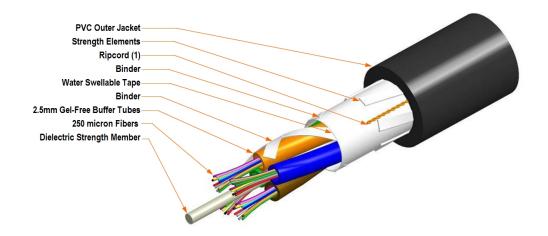
#### Dimensions

Buffer Tube/Subunit Diameter 2.5 mm | 0.098 in Diameter Over Jacket 10.4 mm | 0.409 in

# Representative Image



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### Mechanical Specifications

Minimum Bend Radius, loaded157 mm | 6.181 inMinimum Bend Radius, unloaded104 mm | 4.094 inTensile Load, long term, maximum400 N | 89.924 lbfTensile Load, short term, maximum1335 N | 300.12 lbf

 Compression
 22 N/mm | 125.623 lb/in

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

Flex 25 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** 436 m | 1,430.446 ft

Optical Specifications

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

# **Environmental Specifications**

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

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

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Storage Temperature -40 °C to +75 °C (-40 °F to +167 °F)

Cable Qualification Standards

ANSI/ICEA S-104-696 | EN 187105

Environmental Space Riser

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

Flame Test Method UL 1666

Jacket UV Resistance UV stabilized

Water Penentration 24 h

Water Penentration Test Method FOTP-82 | IEC 60794-1 F5

**Environmental Test Specifications** 

**Cable Freeze** -2 °C | 28.4 °F

Cable Freeze Test Method FOTP-98 | IEC 60794-1 F15

**Heat Age**  $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$ 

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

**Low High Bend**  $-30 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$ 

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

Temperature Cycle -40 °C to +70 °C (-40 °F to +158 °F)

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

Packaging and Weights

**Cable weight** 94 kg/km | 63.165 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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



#### Included Products

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

Fiber

#### \* Footnotes

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



## LazrSPEED® 300

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

#### **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 Core/Clad Offset, maximum  $1.5 \, \mu m$ 

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

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

**Dynamic Fatigue Parameter, minimum** 18

# Optical Specifications

 Numerical Aperture
 0.2

 Numerical Aperture Tolerance
 ±0.015

 Point Defects, maximum
 0.15 dB

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# CS-5L-LT

**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**  $0.20 \text{ dB/km} \ @ \ 85 \ ^{\circ}\text{C}$ 

 Temperature Dependence, maximum
 0.1 dB/km

 Temperature Humidity Cycling, maximum
 0.2 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

**COMMSCOPE®**