## 760164749 | P-024-LZ-5L-F12BK/25D



Fiber indoor/outdoor cable, LazrSPEED®, Plenum Rated, Gel-Free, 24 fiber, Stranded Loose Tube with Aluminum Interlocking Armor containing a Plenum Rated Outer Jacket, Multimode OM3, Feet jacket marking, Black jacket color

#### **Product Classification**

Regional Availability

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

24

/Africa | North America

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series P-LZ

General Specifications

Armor Type Interlocking aluminum

Cable Type Stranded loose tube

Construction TypeArmoredSubunit TypeGel-free

Filler, quantity 3

Jacket Color Black

Jacket Marking Feet

Subunit, quantity 2

Fibers per Subunit, quantity 12

**Dimensions** 

**Total Fiber Count** 

 Buffer Tube/Subunit Diameter
 2.5 mm | 0.098 in

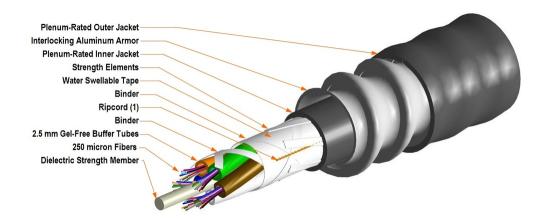
 Diameter Over Armor
 15.9 mm | 0.626 in

 Diameter Over Jacket
 17.9 mm | 0.705 in

Representative Image



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#### Mechanical Specifications

Minimum Bend Radius, loaded 358 mm | 14.094 in

Minimum Bend Radius, unloaded 250 mm | 9.843 in

**Tensile Load, long term, maximum** 400 N | 89.924 lbf

**Tensile Load, short term, maximum** 1335 N | 300.12 lbf

**Compression** 85 N/mm | 485.363 lb/in

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

Flex 25 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** 144 m | 472.441 ft

Optical Specifications

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

## **Environmental Specifications**

Installation temperature  $-30 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-22  $^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

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  $-40 \,^{\circ}\text{C}$  to  $+75 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+167 \,^{\circ}\text{F}$ )

Cable Qualification Standards ANSI/ICEA S-104-696 | EN 187105 | Telcordia GR-409

Environmental Space Plenum

Flame Test Listing

NEC OFCP (ETL) and c(ETL)

Flame Test Method

NFPA 130 | NFPA 262

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration 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**  $-40 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C } (-40 \,^{\circ}\text{F to} + 158 \,^{\circ}\text{F})$ 

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

Packaging and Weights

**Cable weight** 283 kg/km | 190.167 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 OM3 Bend-Insensitive Multimode Fiber

## LazrSPEED® 300

#### **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)

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

Optical Specifications

Numerical Aperture 0.2

**COMMSCOPE®** 

## CS-5L-LT

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

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 (OM3)

### **Environmental Specifications**

Heat Aging, maximum 0.20 dB/km @ 85 °C

Temperature Dependence, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.2 dB/km

 $\textbf{Water Immersion, maximum} \hspace{1.5cm} 0.20 \hspace{1mm} \text{dB/km} \hspace{1mm} \textcircled{@} \hspace{1mm} 23 \hspace{1mm} ^{\circ} \text{C}$ 

## 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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