

Fiber OSP cable, LazrSPEED®, Light Duty, Single Jacket, All-Dielectric, 12 fiber, Gel-Free, Stranded Loose Tube, Multimode OM3, Feet jacket marking, Black jacket color

Product Classification

Regional Availability

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

America

 Portfolio
 CommScope®

 Product Type
 Fiber OSP cable

Product Series D-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

Fibers per Subunit, quantity 12

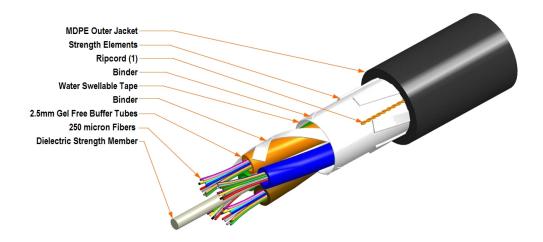
Total Fiber Count 12

Dimensions

Buffer Tube/Subunit Diameter2.5 mm0.098 inDiameter Over Jacket9.3 mm0.366 in

Representative Image





Material Specifications

Jacket Material PE

Mechanical Specifications

Minimum Bend Radius, loaded140 mm5.512 inMinimum Bend Radius, unloaded93 mm3.661 inTensile Load, long term, maximum400 N89.924 lbfTensile Load, short term, maximum1335 N300.12 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 788 m | 2,585.302 ft

Optical Specifications

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



Environmental Specifications

Installation temperature

-30 °C to +70 °C (-22 °F to +158 °F)

Operating Temperature

-40 °C to +70 °C (-40 °F to +158 °F)

Storage Temperature

-40 °C to +75 °C (-40 °F to +167 °F)

Cable Qualification Standards

ANSI/ICEA S-87-640 | EN 187105

Environmental Space Aerial, lashed | Buried

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 °C to +85 °C (-40 °F to +185 °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 52 kg/km | 34.942 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/mm² | 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, maximum $8.9 \,\mathrm{N}$ | $2.001 \,\mathrm{lbf}$ Coating Strip Force, minimum $1.3 \,\mathrm{N}$ | $0.292 \,\mathrm{lbf}$

Dynamic Fatigue Parameter, minimum 18

Optical Specifications

 Numerical Aperture
 0.2

 Numerical Aperture Tolerance
 ±0.015

 Point Defects, maximum
 0.15 dB

Page 5 of 6



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 NoteSuperior 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 dB/km @ $85 \, ^{\circ}\text{C}$

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)

up to 95% relative humidity

Page 6 of 6