

LazrSPEED® Plenum Hybrid Distribution Cable, 2 simplex single fiber, 2 conductor 12 AWG, OM3 Bend Insensitive

OBSOLETE

This product was discontinued on: May 25, 2022

Product Classification

Regional AvailabilityNorth AmericaPortfolioCommScope®

Product Type Hybrid cable, copper and fiber

Product Brand LazrSPEED®

General Specifications

Cable Type Distribution | Hybrid | Stranded indoor

Conductor Type, singles Stranded

Conductors, quantity 2

Construction TypeNon-armoredFiber Short DescriptionP-001-SP29

Subunit Type Gel-free

Filler, quantity 0

Jacket Color Aqua

Subunit Jacket Color Aqua

Subunit, quantity 2

Fibers per Subunit, quantity

Total Fiber Count 2

Dimensions

Buffer Tube/Subunit Diameter 2.794 mm | 0.11 in



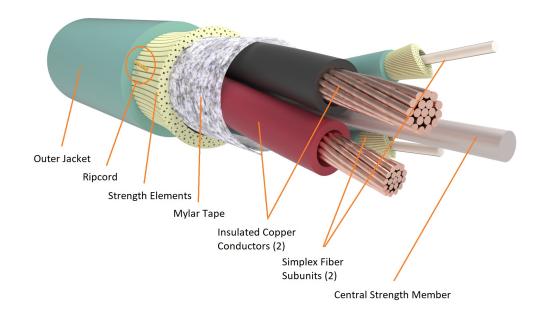
Diameter Over Jacket 9.144 mm | 0.36 in

Conductor Gauge 12 AWG

Electrical Specifications

Conductor dc Resistance 5.413 ohms/km | 1.65 ohms/kft

Representative Image



Material Specifications

Conductor Material Bare copper | Stranded copper wire

Insulation Material, singles PVC

Jacket Material Fire retardant PVC

Ripcord Material Polyester

Mechanical Specifications

Minimum Bend Radius, loaded 135.89 mm | 5.35 in

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Minimum Bend Radius, unloaded90.678 mm3.57 inTensile Load, long term, maximum240.204 N54 lbf

Tensile Load, short term, maximum 796.231 N | 179 lbf

Compression 1.018 kg/mm | 57 lb/in

Compression Test Method FOTP-41

Flex 25 cycles

Flex Test Method FOTP-104

Impact 2.17 ft lb | 2.942 N-m

Impact Test Method FOTP-25

Strain See long and short term tensile loads

Strain Test MethodFOTP-33Twist10 cyclesTwist Test MethodFOTP-85

Vertical Rise, maximum 183.642 m | 602.5 ft

Optical Specifications

Fiber Type OM3, LazrSPEED® | OM3, bend insensitive

Environmental Specifications

Installation temperature $0 \, ^{\circ}\text{C} \, \text{to} + 70 \, ^{\circ}\text{C} \, (-32 \, ^{\circ}\text{F} \, \text{to} + 158 \, ^{\circ}\text{F})$ Operating Temperature $-20 \, ^{\circ}\text{C} \, \text{to} + 70 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F} \, \text{to} + 158 \, ^{\circ}\text{F})$ Storage Temperature $-40 \, ^{\circ}\text{C} \, \text{to} + 75 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F} \, \text{to} + 167 \, ^{\circ}\text{F})$

Cable Qualification StandardsANSI/ICEA S-83-596Telcordia GR-409UL 13UL 444

Environmental Space Plenum | Wireless installation

Flame Test Listing NEC CL3P-OF (ETL) and c(ETL) | NEC CMP-OF (ETL) and c(ETL)

Flame Test Method NFPA 262

Environmental Test Specifications

Low High Bend $0 \degree \text{C to } +70 \degree \text{C (} +32 \degree \text{F to } +158 \degree \text{F)}$

Low High Bend Test Method FOTP-37

Temperature Cycle 0 °C to +70 °C (+32 °F to +158 °F)

Temperature Cycle Test Method FOTP-3



Packaging and Weights

Cable weight 133.339 kg/km | 89.6 lb/kft

Included Products

CS-5L-TB – 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

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

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

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Numerical Aperture Tolerance ±0.015

Point Defects, maximum 0.15 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 | 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 $^{\circ}$ 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

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