

Fiber Indoor Cable, LazrSPEED® 1.6mm Low Smoke Zero Halogen Riser, 1-fiber Simplex, Multimode OM4, Feet jacket marking, Aqua jacket color, Eca Flame Rating

Product Classification

Regional Availability

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

America

Portfolio CommScope®

Product Type Fiber indoor cable

Product Series N-SP

General Specifications

Cable Type Cordage

Construction Type Non-armored

Subunit Type Gel-free

Jacket Color Aqua

Jacket Marking Feet

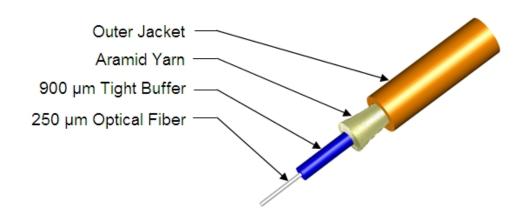
Dimensions

Total Fiber Count

Diameter Over Jacket 1.7 mm | 0.067 in

Representative Image





Mechanical Specifications

Minimum Bend Radius, loaded38 mm1.496 inMinimum Bend Radius, unloaded15 mm0.591 inTensile Load, long term, maximum29 N | 6.519 lbfTensile Load, short term, maximum98 N | 22.031 lbf

 Compression
 10 N/mm | 57.101 lb/in

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

Flex 300 cycles

FIEX Test Method FOTP-104 | IEC 60794-1 E6

Impact 0.74 N-m | 6.55 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 500 m | 1,640.42 ft

Optical Specifications

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

Environmental Specifications

Installation temperature $-20 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ ($-4 \,^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

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Operating Temperature $-20 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$

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

Cable Qualification Standards ANSI/ICEA S-83-596 | Telcordia GR-409

EN50575 CPR Cable EuroClass Fire Performance Eca

Environmental Space Low Smoke Zero Halogen (LSZH) | Riser

Flame Test Listing NEC OFNR-ST1 (ETL) and c(ETL)

Flame Test Method | IEC 60332-1-2 | IEC 60332-3 | IEC 60754-2 | IEC 61034-2 | UL

1666 | UL 1685

Environmental Test Specifications

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

Heat Age Test Method IEC 60794-1 F9

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 $-20 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \left(-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F}\right)$

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

Packaging and Weights

Cable weight 2.8 kg/km | 1.882 lb/kft

Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

CHINA-ROHS Below maximum concentration value

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

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



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 LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 μ m

Cladding Diameter Tolerance $\pm 0.8 \, \mu$ m

Cladding Non-Circularity, maximum 1 %

Coating Diameter (Colored) 254 μ m

Coating Diameter (Uncolored) 245 μ m

Coating Diameter Tolerance (Colored) $\pm 7 \, \mu$ m

Coating Diameter Tolerance (Uncolored) $\pm 10 \, \mu$ m

Coating Diameter Tolerance (Uncolored)±10 μmCoating/Cladding Concentricity Error, maximum12 μmCore Diameter50 μm

 $\textbf{Core Diameter Tolerance} \hspace{1.5cm} \pm 2.5 \ \mu m$

 $\textbf{Core/Clad Offset, maximum} \hspace{1.5cm} 1.5\,\mu m$

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

COMMSCOPE®

CS-5K-TB

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 1,110 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 | 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 IEC 60793-2-10, type A1a.3a | IEC 60793-2-10, type A1a.3b | TIA-

492AAAD (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)

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CS-5K-TB

up to 95% relative humidity

