

Fiber OSP cable, LazrSPEED 550 Mini Single Jacket All-Dielectric, High Tensile Strength, Gel-Filled, Multi-mode OM4, 12 fiber, Stranded Loose Tube, Meters jacket marking, Black jacket color, Provides Rodent Resistance

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA

Portfolio CommScope®
Product Type Fiber OSP cable

Product Series O-LN

General Specifications

Cable Type Stranded loose tube

Construction Type Non-armored

Subunit Type Gel-filled

Filler, quantity 5

Jacket Color

Jacket Marking

Meters

Jacket Marking Method

Inkjet

Jacket Marking Text COMMSCOPE OPTICAL CABLE [MID] OM4 MM (FIBER COUNT) FIBER [SERIAL NUMBER]

[MM/YYYY] [Meter marking] m

Subunit, quantity 1

Fibers per Subunit, quantity 12

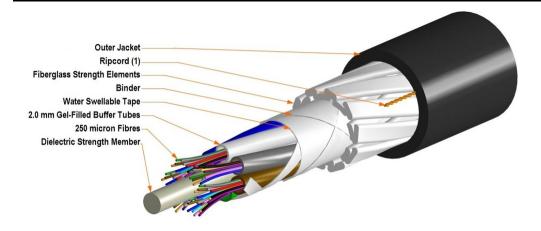
Total Fiber Count 12

Dimensions

Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Jacket11.6 mm | 0.457 in

Representative Image





Material Specifications

Jacket Material PE

Mechanical Specifications

Minimum Bend Radius, loaded174 mm | 6.85 inMinimum Bend Radius, unloaded116 mm | 4.567 inTensile Load, long term, maximum1350 N | 303.492 lbfTensile Load, short term, maximum4500 N | 1,011.641 lbfCompression22 N/mm | 125.623 lb/inCompression Test MethodFOTP-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 1345 m | 4,412.73 ft

Optical Specifications

Fiber Type G.652.D and G.657.A1, TeraSPEED® | OS2

Environmental Specifications

COMMSCOPE°

Installation temperature $-10 \,^{\circ}\text{C}$ to $+50 \,^{\circ}\text{C}$ (+14 $^{\circ}\text{F}$ to +122 $^{\circ}\text{F}$)

Operating Temperature $-30 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to +140 $^{\circ}\text{F}$)

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

Cable Qualification Standards ANSI/ICEA S-87-640 | EN 187105 | IEC 60794-1-2

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

Drip 70 °C | 158 °F

Drip Test Method FOTP-81 | IEC 60794-1 E14

Heat Age 0 °C to +85 °C (+32 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

Low High Bend $-15 \,^{\circ}\text{C}$ to $+40 \,^{\circ}\text{C}$ (+5 $^{\circ}\text{F}$ to +104 $^{\circ}\text{F}$)

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

Temperature Cycle -30 °C to +60 °C (-22 °F to +140 °F)

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

Packaging and Weights

Cable weight 115 kg/km | 77.276 lb/kft

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

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

ROHS Compliant UK-ROHS Compliant



Included Products

CS-5K-LT – LazrSPEED® 550 OM4 Bend-Insensitive Multimode

Fiber

COMMSC PE°

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

LazrSPEED® 550

Product Classification

Portfolio CommScope®

Product Type Optical fiber

General Specifications

Cladding Diameter 125 µm

 $\begin{array}{c} \textbf{Cladding Diameter Tolerance} \\ & \pm 5\,\mu\text{m} \end{array}$

Cladding Non-Circularity, maximum 1 %

Coating Diameter (Colored) 254 µm

Coating Diameter (Uncolored) 245 µm

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

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 μm

Proof Tensile Stress 100,000 psi (0.69 GPa)

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 N | 2.001 lbf

Coating Strip Force, minimum 1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 18

Optical Specifications

Numerical Aperture 0.2

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CS-5K-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 1,110 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

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 (OM4) | IEC 60793-2-10, A1 (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)

up to 95% relative humidity

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