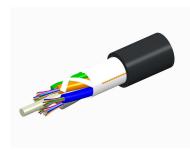
760252939 | C-144-LN-5K-M12BK/25D/E



Fiber indoor/outdoor cable, LazrSPEED®, Single Jacket All-Dielectric, Low Smoke Zero Halogen (LSZH), 144 fiber, Multimode OM4, Gel-Free, Stranded Loose Tube, Meters jacket marking, Black jacket color, Eca flame rating

Product Classification

Regional Availability

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

America

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-LN

General Specifications

Cable Type Stranded loose tube

Construction Type Non-armored

Subunit TypeGel-freeJacket ColorBlackJacket MarkingMetersJacket Marking MethodInkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE OM4

MM 144 FIBER EN50575 CLASS E [SERIAL NUMBER] [MM

/YY] [METRE MARK]

Subunit, quantity 12
Fibers per Subunit, quantity 12
Total Fiber Count 144

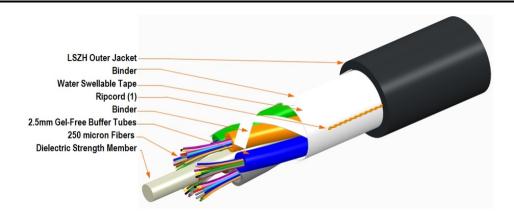
Dimensions

Buffer Tube/Subunit Diameter2.5 mm0.098 inDiameter Over Jacket17.3 mm0.681 in

Representative Image



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Mechanical Specifications

Minimum Bend Radius, loaded 206 mm | 8.11 in

Minimum Bend Radius, unloaded173 mm6.811 inTensile Load, long term, maximum800 N179.847 lbf

Tensile Load, short term, maximum 2700 N | 606.984 lbf

Compression 22 N/mm | 125.623 lb/in

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

Flex 25 cycles

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

Impact 3 N-m | 26.552 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 5 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

Vertical Rise, maximum 5 m | 16.404 ft

Optical Specifications

Fiber Type OM4, LazrSPEED® 550

Environmental Specifications

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

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 °C to +75 °C (-40 °F to +167 °F)

Cable Qualification Standards ANSI/ICEA S-104-696 | EN 187105 | Telcordia GR-20 | Telcordia GR-

409

EN50575 CPR Cable EuroClass Fire Performance Eca

Environmental Space Aerial, lashed | Buried | Low Smoke Zero Halogen (LSZH)

Flame Test Listing EN 50399

Flame Test Method EN 50399 | IEC 60332-1-2 | IEC 60754-2

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method FOTP-82 | IEC 60794-1 F5

Environmental Test Specifications

-40 °C to +85 °C (-40 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

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 272 kg/km | 182.776 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

* Fnotnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



LazrSPFFD® 550 OM4 Bend-Insensitive Multimode Fiber

LazrSPEED® 550

Product Classification

PortfolioCommScope®Product TypeOptical 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

Proof Test 689.476 N/mm² | 100000 psi

Mechanical Specifications

Core Diameter Tolerance

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

±2.5 µm

 $1.5 \, \mu m$

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 18

COMMSCOPE®

CS-5K-LT

Optical Specifications

Numerical Aperture 0.2

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 | 0.88 ps/m @ 1,300 nm

Differential Mode Delay Note Superior 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)

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CS-5K-LT

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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