760251607 | L-144-LN-5K-M12AQ/14D/GY/C



Fiber indoor cable, Single Jacket All-Dielectric, 144 fiber, Gel-Free, Stranded Microsheath Tube, Multimode OM4, Meters jacket marking, Aqua jacket color, Cca Flame rating. Provides Rodent Resistance

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America

Portfolio CommScope®

Product Type Fiber indoor cable

Product Series L-LN

General Specifications

Cable Type Stranded microsheath tube

Construction Type Non-armored

Subunit Type Gel-free

Jacket Color Aqua

Jacket Marking Meters

Jacket Marking Method Inkjet

Jacket Marking TextCOMMSCOPE GB OPTICAL CABLE 760251607 144x 50

/125 OM4 LSZH EN50575 CLASS C [SERIAL NUMBER] [METER MARK

Subunit, quantity 12

Fibers per Subunit, quantity 12

Total Fiber Count 144

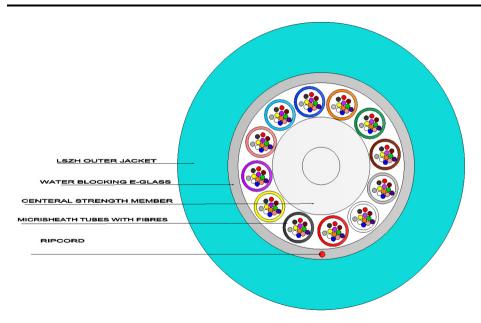
Dimensions

Buffer Tube/Subunit Diameter 1.4 mm | 0.055 in Diameter Over Jacket 10.2 mm | 0.402 in

Representative Image



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Material Specifications

Inner Jacket Material Low Smoke Zero Halogen (LSZH)

Mechanical Specifications

Minimum Bend Radius, loaded 200 mm | 7.874 in

Minimum Bend Radius, unloaded 150 mm | 5.906 in

Tensile Load, long term, maximum 1000 N | 224.809 lbf

Tensile Load, short term, maximum 1800 N | 404.656 lbf

Compression 10 N/mm | 57.101 lb/in

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

Impact 2 N-m | 17.701 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

Vertical Rise, maximum 970 m | 3,182.415 ft

Optical Specifications

Fiber Type OM4

Environmental Specifications



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Installation temperature $0 \, ^{\circ}\text{C} \text{ to } +50 \, ^{\circ}\text{C} \text{ (+32 } ^{\circ}\text{F to } +122 \, ^{\circ}\text{F)}$

Operating Temperature -10 °C to +60 °C (+14 °F to +140 °F)

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

Cable Qualification Standards IEC 60794-1-2

EN50575 CPR Cable EuroClass Fire PerformanceCcaEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Low Smoke Zero Halogen (LSZH)

Environmental Test Specifications

Cable Freeze -2 °C | 28.4 °F

Cable Freeze Test Method FOTP-98 | IEC 60794-1 F15

Temperature Cycle $-10 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \text{ (+14 }^{\circ}\text{F to } +140 \,^{\circ}\text{F)}$

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

Packaging and Weights

Cable weight 111 kg/km | 74.589 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-8F-LT – Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode

Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



CS-8F-LT

Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 µm **Cladding Diameter Tolerance** ±0.7 µm 0.7 % **Cladding Non-Circularity, maximum Coating Diameter (Colored)** 249 um **Coating Diameter (Uncolored)** 242 µm **Coating Diameter Tolerance (Colored)** ±13 µm **Coating Diameter Tolerance (Uncolored)** ±5 µm Coating/Cladding Concentricity Error, maximum 12 µm Core/Clad Offset, maximum 0.5 µm

Proof Test 689.476 N/mm² | 100000 psi

Dimensions

Fiber Curl, minimum 4 m | 13.123 ft

Mechanical Specifications

 Macrobending, 20 mm Ø mandrel, 1 turn
 0.75 dB @ 1,550 nm
 | 1.50 dB @ 1,625 nm

 Macrobending, 30 mm Ø mandrel, 10 turns
 0.25 dB @ 1,550 nm
 | 1.00 dB @ 1,625 nm

 Macrobending, 50 mm Ø mandrel, 100 turns
 0.03 dB @ 1,550 nm
 | 0.05 dB @ 1,625 nm

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

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.1 dB

Zero Dispersion Slope, maximum 0.09 ps/[km-nm-nm]

COMMSCOPE®

CS-8F-LT

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.25 dB/km @ 1,550 nm | 0.27 dB/km @ 1,490

nm | 0.27 dB/km @ 1,625 nm | 0.33 dB/km @ 1,385

nm | 0.36 dB/km @ 1,310 nm

Dispersion, maximum 18 ps(nm-km) at 1550 nm | 3.5 ps(nm-km) from 1285

nm to 1330 nm at 1310 nm

Index of Refraction 1.467 @ 1,310 nm | 1.467 @ 1,385 nm | 1.468 @ 1,550

nm

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 8.6~\mu m \ @ \ 1,310~nm \quad | \ \ 9.8~\mu m \ @ \ 1,550~nm$

Mode Field Diameter Tolerance $\pm 0.4 \, \mu \text{m}$ @ 1310 nm | $\pm 0.5 \, \mu \text{m}$ @ 1550 nm

Polarization Mode Dispersion Link Design Value, maximum 0.06 ps/sqrt(km)

Standards Compliance ITU-T G.657.A1 | TIA-492CAAB (OS2)

Environmental Specifications

Heat Aging, maximum 0.05 dB/km @ 85 °C

Temperature Dependence, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 dB/km

Water Immersion, maximum 0.05 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

