760260747 | C-144-LN-8W-M12BK/25D/HTS/B2



Fiber indoor/outdoor cable, TeraSPEED® High Tensile Strength LSZH, 144 fiber, Stranded Loose Tube, Mini All-Dielectric Single Jacket, Singlemode G.652.D and G.657.A1, Gel-Filled, Meters jacket marking, Bca flame rating. Provides Rodent Resistance

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-LN

General Specifications

Cable Type Stranded loose tube

Construction Type Non-armored

Subunit Type Gel-filled

Filler, quantity 0

Jacket Color Black

Jacket Marking Meters

Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE 760243336 144X OS2 SM LSZH

EN50575 CLASS D [SERIAL NUMBER] [METER MARK]

Subunit, quantity 12

Fibers per Subunit, quantity 12

Total Fiber Count 144

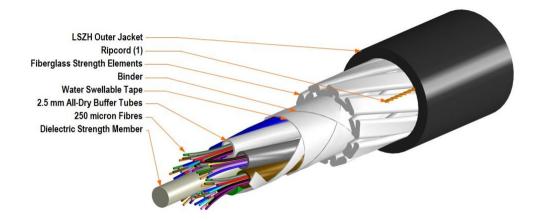
Dimensions

Buffer Tube/Subunit Diameter 2.5 mm | 0.098 in Diameter Over Jacket 18.5 mm | 0.728 in

Representative Image



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Mechanical Specifications

Minimum Bend Radius, loaded 241 mm | 9.488 in

Minimum Bend Radius, unloaded 161 mm | 6.339 in

Tensile Load, long term, maximum 1350 N | 303.492 lbf

Tensile Load, short term, maximum 4500 N | 1,011.641 lbf

Compression 22 N/mm | 125.623 lb/in

Compression Test Method IEC 60794-1 E3

Flex 25 cycles

Flex Test Method IEC 60794-1 E6

Impact 10 N-m | 88.507 in lb

Impact Test Method IEC 60794-1 E4

Strain See long and short term tensile loads

Strain Test Method IEC 60794-1 E1

Twist 10 cycles

Twist Test Method IEC 60794-1 E7

Vertical Rise, maximum 363 m | 1,190.945 ft

Optical Specifications

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

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 EN 187105 | IEC 60794-1-2

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

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

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

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method IEC 60794-1 F5

Environmental Test Specifications

 Cable Freeze
 -2 °C | 28.4 °F

 Cable Freeze Test Method
 IEC 60794-1 F15

 Drip
 70 °C | 158 °F

 Drip Test Method
 IEC 60794-1 E14

Heat Age -40 °C to +85 °C (-40 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

Low High Bend -30 °C to +60 °C (-22 °F to +140 °F)

Low High Bend Test Method IEC 60794-1 E11

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

Temperature Cycle Test Method IEC 60794-1 F1

Packaging and Weights

Cable weight 264 kg/km | 177.4 lb/kft

Included Products

CS-8W-250-EMEA – LightScope® ZWP Singlemode Fiber 8W-250um

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



CS-8W-250-EMEA | 8W-250um

LightScope® ZWP Singlemode Fiber



Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 µm **Cladding Diameter Tolerance** ±0.7 µm Cladding Non-Circularity, maximum 0.7 % **Coating Diameter (Colored)** 249 µm **Coating Diameter (Uncolored)** 242 µm **Coating Diameter Tolerance (Colored)** ±13 μm **Coating Diameter Tolerance (Uncolored)** ±7 μm Coating/Cladding Concentricity Error, maximum 12 µm Core/Clad Offset, maximum 0.5 µm

Proof Tensile Stress 100,000 psi (0.69 GPa)

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, 60 mm Ø mandrel, 100 turns
 0.05 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



CS-8W-250-EMEA | 8W-250um

Cabled Cutoff Wavelength, maximum1250 nmPoint Defects, maximum0.05 dB

Zero Dispersion Slope, maximum 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.20 dB/km @ 1,550 nm | 0.23 dB/km @ 1,625

nm | 0.344 dB/km @ 1310 nm | 0.344 dB/km @ 1380

- 1385 nm

Dispersion, maximum 18 ps(nm-km) at 1550 nm | 22 ps(nm-km) at 1625

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

 $\textbf{Mode Field Diameter} \hspace{15mm} 10.4~\mu\text{m} \ \textcircled{@} \ 1,550~\text{nm} \hspace{0.25mm} | \hspace{0.25mm} 9.2~\mu\text{m} \ \textcircled{@} \ 1,310~\text{nm}$

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 0.05 ps/sqrt(km)

Standards Compliance ITU-T G.652.D | ITU-T G.657.A1

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

* 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

