760240171 | C-048-LA-8W-M12BK/28G/GRP/E



Fiber indoor/outdoor cable, 48-fiber, ULSZH, loose tube, gel-filled, Singlemode G.652.D and G.657.Al, Meters jacket marking, Black jacket color. Provides Rodent Resistance

Product Classification

Regional Availability

Australia/New Zealand | EMEA

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-LA

General Specifications

Armor Type Non-metallic rods

Cable TypeLoose tubeSubunit TypeGel-filled

Filler, quantity 4

Jacket ColorBlackJacket MarkingMetersJacket Marking MethodInkjet

Jacket Marking Text COMMSCOPE GB SYSTEM F.O.CABLE 760240171 EXT GRP ARMOUR 48X9/125 SINGLE

MODE [Serial number] [metre mark]

Fibers per Subunit, quantity 12

Total Fiber Count 48

Dimensions

 Cable Length
 1000 m | 3,280.84 ft

 Diameter Over Jacket
 15 mm | 0.591 in

Mechanical Specifications

Minimum Bend Radius, loaded465 mm18.307 inMinimum Bend Radius, unloaded350 mm13.78 inTensile Load, long term, maximum6000 N1,348.854 lbfTensile Load, short term, maximum9000 N2,023.281 lbf

COMMSCOPE®

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Optical Specifications

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

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.35 dB/km @ 1,300 nm | 0.35 dB/km @ 1,550 nm | 0.45 dB/km @ 1,310 nm

Standards Compliance IEC 60794-1 | TIA-492CAAB (OS2)

Environmental Specifications

Installation temperature $-5 \,^{\circ}\text{C}$ to $+50 \,^{\circ}\text{C}$ (+23 $^{\circ}\text{F}$ to +122 $^{\circ}\text{F}$)

Operating Temperature $-25 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (-13 $^{\circ}\text{F}$ to +158 $^{\circ}\text{F}$)

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

Environmental Space Universal Low Smoke Zero Halogen (ULSZH)

Packaging and Weights

Cable weight 230 kg/km | 154.553 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 1.50 dB @ 1,625 nm

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

