810010222/DB | C-012-CN-8W-M12BK/28G/GY/E



Indoor/Outdoor Low Smoke Zero Halogen, TeraSPEED® Central Loose Tube Fiber Optic Cable, 12-fiber, Singlemode OS2, Gel-filled, black. Provides Rodent Resistance.

• non-metallic construction reinforced by E-glass yarns, which provide rodent resistance and higher tensile strength

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-CN

General Specifications

Cable TypeLoose tubeSubunit TypeGel-filledJacket ColorBlackJacket MarkingMetersJacket Marking MethodInkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE 760254742 INT/EXT RODENT RESIST

GLT 12X9/125 G657A EN50575 CLASS Eca (Serial NUMBER) (METRE

MARK)

Fibers per Subunit, quantity 12

Total Fiber Count 12

Dimensions

 Cable Length
 2000 m | 6,561.68 ft

 Diameter Over Jacket
 6.4 mm | 0.252 in

Mechanical Specifications

Minimum Bend Radius, loaded129.5 mm | 5.098 inMinimum Bend Radius, unloaded80 mm | 3.15 inTensile Load, long term, maximum650 N | 146.126 lbfTensile Load, short term, maximum1250 N | 281.011 lbf

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-20 °C to +70 °C (-4 °F to +158 °F)

Compression 200 N/mm | 1,142.029 lb/in

Compression Test Method IEC 60794-1-2 E3

Impact 5 N-m | 44.254 in lb

Impact Test Method IEC 60794-1 E4

Twist 5 cycles

Twist Test Method IEC 60794-1 E7

Optical Specifications

Storage Temperature

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

EN50575 CPR Cable EuroClass Fire Performance Eca

Environmental SpaceLow Smoke Zero Halogen (LSZH)

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method IEC 60794-1 F5

Packaging and Weights

Cable weight 48 kg/km | 32.255 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

