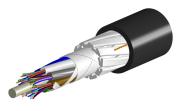
810009765/DB | C-012-LN-8W-M12BK/20G/HTS

/D



Fiber indoor/outdoor cable, LightScope® ZWP High Tensile Strength, LSZH, Singlemode G.652.D and G.657.A1, 12 fiber, Mini All-Dielectric Single Jacket, Gel-Filled, Stranded Loose Tube, Black jacket color, Dca 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

Subunit Type Gel-filled

Filler, quantity 5

Jacket ColorBlackJacket MarkingMetersJacket Marking MethodInkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE 810009765/DB

12X OS2 SM LSZH EN50575 CLASS D [SERIAL NUMBER] [METER MARK]

Subunit, quantity

Fibers per Subunit, quantity 12

Total Fiber Count 12

Dimensions

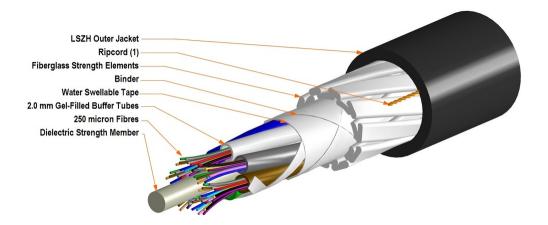
Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Jacket12.8 mm | 0.504 in

Representative Image



810009765/DB | C-012-LN-8W-M12BK/20G/HTS

/D



Mechanical Specifications

Minimum Bend Radius, loaded 193 mm | 7.598 in

Minimum Bend Radius, unloaded 128 mm | 5.039 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 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

Optical Specifications

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

Environmental Specifications

Installation temperature $-10 \,^{\circ}\text{C} \text{ to } +50 \,^{\circ}\text{C} \text{ (+14 }^{\circ}\text{F to } +122 \,^{\circ}\text{F)}$

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

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

Cable Qualification StandardsEN 187105I EC 60794-1-2

COMMSCOPE®

810009765/DB | C-012-LN-8W-M12BK/20G/HTS

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

Environmental SpaceBuried | Low Smoke Zero Halogen (LSZH)Flame Test MethodIEC 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

Cable Freeze Test Method IEC 60794-1 F15

Heat Age $-40 \,^{\circ}\text{C}$ to $+85 \,^{\circ}\text{C}$ $(-40 \,^{\circ}\text{F to} +185 \,^{\circ}\text{F})$

Heat Age Test Method IEC 60794-1 F9

Low High Bend -15 °C to +23 °C (+5 °F to +73 °F)

Low High Bend Test Method IEC 60794-1 E11

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

Temperature Cycle Test Method IEC 60794-1 F1

Packaging and Weights

Cable weight 180 kg/km | 120.954 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

