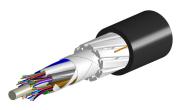
# 810009765/DB | C-012-LN-8W-M12BK/20G/HTS

# /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 1

Fibers per Subunit, quantity 12

Total Fiber Count 12

**Dimensions** 

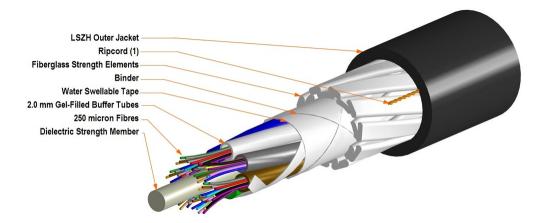
Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Jacket12.8 mm | 0.504 in

Representative Image



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### Mechanical Specifications

Minimum Bend Radius, loaded193 mm7.598 inMinimum Bend Radius, unloaded128 mm5.039 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  $-10 \,^{\circ}\text{C}$  to  $+50 \,^{\circ}\text{C}$  (+14  $^{\circ}\text{F}$  to +122  $^{\circ}\text{F}$ )

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

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

Cable Qualification Standards EN 187105 | IEC 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 °C to +85 °C (-40 °F to +185 °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 250um

### \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable



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

### LightScope ZWP® Singlemode Fiber



### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

### General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance**  $\pm 0.7 \, \mu m$ 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)** ±5 µm Coating/Cladding Concentricity Error, maximum 12 µm Core/Clad Offset, maximum  $0.5 \, \mu m$ 

**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 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



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

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

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** 0.21 dB/km @ 1,550 nm | 0.24 dB/km @ 1625

nm | 0.25 dB/km @ 1,490 nm | 0.35 dB/km @ 1,310

nm | 0.35 dB/km @ 1,385 nm

**Dispersion, maximum** 18 ps(nm-km) at 1550 nm | 2.2 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 | 1.468 @ 1,550 nm

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 10.4~\mu\text{m} \ \textcircled{@} \ 1,550~\text{nm} \hspace{0.2cm} | \hspace{0.2cm} 9.2~\mu\text{m} \ \textcircled{@} \ 1,310~\text{nm}$ 

**Mode Field Diameter Tolerance** ±0.4 μm @ 1310 nm | ±0.5 μm @ 1550 nm

Polarization Mode Dispersion Link Design Value, maximum 0.06 ps/sgrt(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

**COMMSCOPE®**