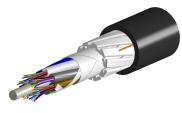
## 810009768/DB | C-048-LN-8W-M12BK/20G/HTS

## /D



Fiber indoor/outdoor cable, LightScope ZWP® High Tensile Strength, LSZH, Singlemode G.652.D and G.657.A1, 48 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

Construction Type Non-armored

**Subunit Type** Gel-filled

Filler, quantity 2

**Jacket Color** Black

Jacket Marking Meters

Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE 810009768

/DB 48X OS2 SM LSZH EN50575 CLASS D [SERIAL NUMBER] [METER MARK]

Subunit, quantity 4

Fibers per Subunit, quantity 12

Total Fiber Count 48

#### **Dimensions**

**Buffer Tube/Subunit Diameter** 2 mm | 0.079 in

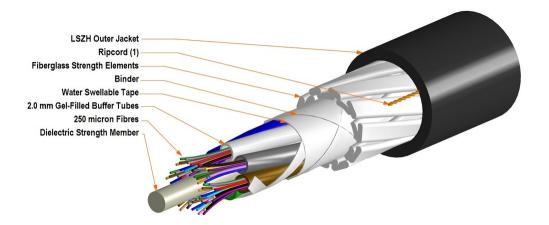
**Diameter Over Jacket** 12.8 mm | 0.504 in

### Representative Image



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## /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** 4.41 N-m | 39.032 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

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  $^{\circ}\text{F}$ )

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**Cable Qualification Standards** EN 187105 | IEC 60794-1-2

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings3EN50575 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 | 28.4 °FCable Freeze Test MethodIEC 60794-1 F15

-40 °C to +85 °C (-40 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

**Low High Bend**  $-15 \,^{\circ}\text{C}$  to  $+23 \,^{\circ}\text{C}$  ( $+5 \,^{\circ}\text{F}$  to  $+73 \,^{\circ}\text{F}$ )

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** 178 kg/km | 119.61 lb/kft

Included Products

DB-8W-LT – LightScope ZWP® Singlemode Fiber

#### \* Footnotes

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



### 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 Diameter** 8.3 µm Core/Clad Offset, maximum  $0.5 \, \mu m$ 

**Proof Test** 689.476 N/mm<sup>2</sup> | 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, maximum 8.9 N | 2.001 lbf

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## DB-8W-LT

Coating Strip Force, minimum 1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

**Optical Specifications** 

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.1 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** 0.22 dB/km @ 1,550 nm | 0.25 dB/km @ 1,490

nm | 0.25 dB/km @ 1,625 nm | 0.36 dB/km @ 1,310

nm | 0.36 dB/km @ 1,385 nm

**Attenuation, typical** 0.19 dB/km @ 1,550 nm | 0.33 dB/km @ 1,310 nm

**Backscatter Coefficient** -79.6 dB @ 1,310 nm | -82.1 dB @ 1,550 nm

**Dispersion, maximum** 18 ps(nm-km) at 1550 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

**Mode Field Diameter** 10.4 μm @ 1,550 nm | 9.2 μm @ 1,310 nm | 9.6 μm @

1,385 nm

Mode Field Diameter Tolerance  $\pm 0.4 \, \mu \text{m}$  @ 1310 nm |  $\pm 0.5 \, \mu \text{m}$  @ 1550 nm |  $\pm 0.6 \, \mu \text{m}$ 

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.04 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, maximum
 0.05 dB/km

 Temperature Humidity Cycling, maximum
 0.05 dB/km

Water Immersion, maximum 0.05 dB/km @ 23 °C

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

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# DB-8W-LT

### \* 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

