

Fiber OSP cable, LightScope ZWP® Blown Micro Single Jacket, 36 fiber, All-Dielectric Stranded Loose Tube Arid-Core® Construction, Gel-filled, Singlemode G.652.D and G.657.Al, Meters jacket marking, Black jacket color

#### **Product Classification**

Regional Availability EMEA

PortfolioCommScope®Product TypeFiber OSP cable

Product Series B-LN

## General Specifications

 Cable Type
 Stranded loose tube

Construction Type Non-armored

Subunit Type Gel-filled

Filler, quantity 3

Jacket Color Black

Jacket Marking Meters

Subunit, quantity 3

Fibers per Subunit, quantity 12

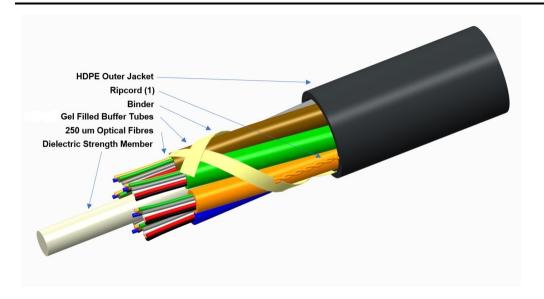
Total Fiber Count 36

#### Dimensions

**Buffer Tube/Subunit Diameter** 1.25 mm | 0.049 in **Diameter Over Jacket** 4.6 mm | 0.181 in

## Representative Image





## Material Specifications

Jacket Material High density polyethylene (HDPE)

## Mechanical Specifications

Minimum Bend Radius, loaded 150 mm | 5.906 in

Minimum Bend Radius, unloaded 90 mm | 3.543 in

Tensile Load, long term, maximum 400 N | 89.924 lbf

Tensile Load, short term, maximum 1000 N | 224.809 lbf

**Compression** 5 N/mm | 28.551 lb/in

**Compression Test Method** IEC 60794-1-21 E3

Flex 25 cycles

Flex Test Method IEC 60794-1 E6

**Impact** 1 N-m | 8.851 in lb

Impact Test Method IEC 60794-1-21 E4

**Strain** See long and short term tensile loads

Strain Test Method IEC 60794-1-21 E1

Twist 10 cycles

Twist Test Method IEC 60794-1-21 E7

Optical Specifications

**Fiber Type** G.652.D and G.657.A1



### **Environmental Specifications**

Installation temperature  $-15 \,^{\circ}\text{C}$  to  $+40 \,^{\circ}\text{C}$  ( $+5 \,^{\circ}\text{F}$  to  $+104 \,^{\circ}\text{F}$ )

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

Storage Temperature -40 °C to +75 °C (-40 °F to +167 °F)

Cable Qualification Standards IEC 60794-5-10

**Environmental Space** Air-blown, microduct

Jacket UV Resistance UV stabilized

Water Penetration 24 h

**Water Penetration Test Method** IEC 60794-1 F4

## **Environmental Test Specifications**

**Drip** 70 °C | 158 °F

**Drip Test Method** IEC 60794-1-21 E14

**Heat Age** -40 °C to +85 °C (-40 °F to +185 °F)

**Heat Age Test Method** IEC 60794-1-22 F9

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

**Temperature Cycle Test Method** IEC 60794-1-22 F1

Packaging and Weights

Cable weight 19 kg/km | 12.767 lb/kft

### Regulatory Compliance/Certifications

#### Agency Classification

CHINA-ROHS Below maximum concentration value

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



#### Included Products

DB-8W-LT - LightScope ZWP® Singlemode

Fiber

\* Footnotes

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**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/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 | 1.50 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, 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**  $\pm 0.4 \, \mu \text{m} \ @ \ 1310 \, \text{nm} \ | \ \pm 0.5 \, \mu \text{m} \ @ \ 1550 \, \text{nm} \ | \ \pm 0.6 \, \mu \text{m}$ 

@ 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

