

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

 Portfolio
 CommScope®

 Product Type
 Fiber 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 ColorBlackJacket MarkingMeters

Subunit, quantity 3
Fibers per Subunit, quantity 12

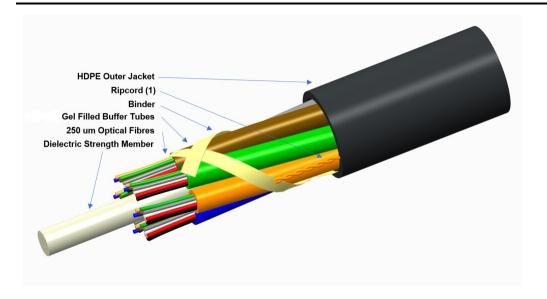
**Total Fiber Count** 36

### Dimensions

Buffer Tube/Subunit Diameter1.25 mm | 0.049 inDiameter Over Jacket4.6 mm | 0.181 in

## Representative Image





## Material Specifications

Jacket Material High density polyethylene (HDPE)

## Mechanical Specifications

Minimum Bend Radius, loaded95 mm | 3.74 inMinimum Bend Radius, unloaded60 mm | 2.362 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**  $-40 \,^{\circ}\text{C}$  to  $+75 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+167 \,^{\circ}\text{F}$ )

**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

CS-8W-250-EMEA – LightScope® ZWP Singlemode Fiber 8W-250um

### \* Footnotes

Page 3 of 6

**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

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

**Mode Field Diameter Tolerance**  $\pm 0.4 \,\mu\text{m}$  @ 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, maximum
 0.05 dB/km

 Temperature Humidity Cycling, maximum
 0.05 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

