

Fiber OSP cable, LightScope® ZWP Mini Single Jacket/Single Armor, 6 fiber, Gel-Filled, Stranded Loose Tube, Singlemode G.652.D and G.657.A1, Meters jacket marking, Black jacket color

 Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

#### **Product Classification**

Regional Availability EMEA

 Portfolio
 CommScope®

 Product Type
 Fiber OSP cable

Product Series O-LA

### General Specifications

Armor Type Corrugated steel

Cable Type Stranded loose tube

Construction TypeArmoredSubunit TypeGel-filled

Filler, quantity 5

Jacket Color Black

Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE TYPE OS2 SM 6 FIBER [SERIAL NUMBER] [MM/YYYY]

[METRE MARK]

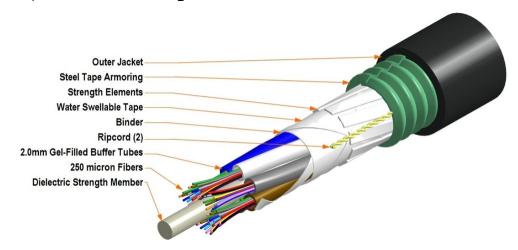
Subunit, quantity 1
Fibers per Subunit, quantity 6
Total Fiber Count 6

#### **Dimensions**

Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Jacket10.8 mm | 0.425 in



### Representative Image



#### Material Specifications

Jacket Material PE

### Mechanical Specifications

Minimum Bend Radius, loaded162 mm | 6.378 inMinimum Bend Radius, unloaded108 mm | 4.252 inTensile Load, long term, maximum800 N | 179.847 lbfTensile Load, short term, maximum2700 N | 606.984 lbf

**Compression** 44 N/mm | 251.246 lb/in

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

Flex 25 cycles

Flex Test Method IEC 60794-1 E6

**Impact** 10 N-m | 88.507 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

**Vertical Rise, maximum** 672 m | 2,204.724 ft

Optical Specifications

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

**COMMSCOPE®** 

### **Environmental Specifications**

Installation temperature  $-30 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-22  $^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

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 ANSI/ICEA S-87-640 | EN 187105 | IEC 60794-1-2

Environmental Space Aerial, lashed | Buried

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 °F

Cable Freeze Test MethodIEC 60794-1 F15Drip70 °C | 158 °FDrip Test MethodIEC 60794-1 E14

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

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

**Low High Bend** -30 °C to +60 °C (-22 °F to +140 °F)

**Low High Bend Test Method** IEC 60794-1 E11

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

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

Packaging and Weights

**Cable weight** 122 kg/km | 81.98 lb/kft

### Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
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

**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

