

Fiber OSP cable, LightScope® ZWP Blown Micro Single Jacket, 144 fiber, All-Dielectric Stranded Loose Tube Arid-Core™ Construction, Gel-filled, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color

#### OBSOLETE

This product was discontinued on: December 7, 2020

#### Product Classification

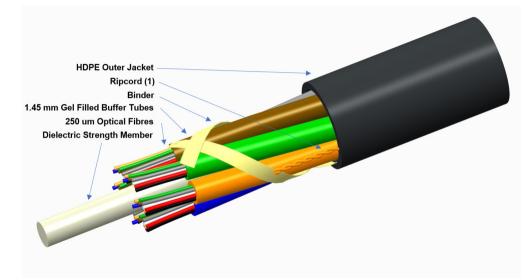
Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	B-LN
General Specifications	
Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Filler, quantity	0
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	12
Fibers per Subunit, quantity	12
Total Fiber Count	144
Dimensions	
Buffer Tube/Subunit Diameter	1.45 mm   0.057 in
Diameter Over Jacket	8.4 mm   0.331 in

### Representative Image

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#### Material Specifications

**Jacket Material** 

High density polyethylene (HDPE)

#### Mechanical Specifications

Minimum Bend Radius, loaded	126 mm   4.961 in
Minimum Bend Radius, unloaded	84 mm   3.307 in
Tensile Load, long term, maximum	469 N   105.435 lbf
Tensile Load, short term, maximum	1566 N   352.051 lbf
Compression	10 N/mm   57.101 lb/in
Compression Test Method	IEC 60794-1-21 E3
Flex	25 cycles
Flex Test Method	IEC 60794-1 E6
Impact	0.3 N-m   2.655 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
Vertical Rise, maximum	769 m   2,522.966 ft

#### **Optical Specifications**

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Fiber Type

G.652.D | G.652.D and G.657.A1

### **Environmental Specifications**

Installation temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Storage Temperature	-30 °C to +75 °C (-22 °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**

Cable Freeze	-2 °C   28.4 °F
Cable Freeze Test Method	IEC 60794-1 F15
Drip	70 °C   158 °F
Drip Test Method	IEC 60794-1-21 E14
Heat Age	-30 °C to +85 °C (-22 °F to +185 °F)
Heat Age Test Method	IEC 60794-1-22 F9
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °F)
Low High Bend Test Method	IEC 60794-1-21 E11
Temperature Cycle	-30 °C to +70 °C (-22 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1-22 F1

#### Packaging and Weights

Cable weight

63 kg/km | 42.334 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

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#### Included Products

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

\* Footnotes

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

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

#### LightScope® ZWP Singlemode Fiber

### LightScope<sup>®</sup> 2000

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   1.50 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
Coating Strip Force, minimum	1.3 N   0.292 lbf
Dynamic Fatigue Parameter, minimum	20

### Optical Specifications

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

Cabled Cutoff Wavelength, maximum	1250 nm
Point Defects, maximum	0.05 dB
Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1300 nm
Optical Specifications, Wavelength Specific	
Attenuation, maximum	0.20 dB/km @ 1550 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
Mode Field Diameter	10.4 μm @ 1,550 nm   9.2 μm @ 1,310 nm
Mode Field Diameter Tolerance	±0.4 μm @ 1310 nm 🔰 ±0.5 μm @ 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

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