

Fiber OSP cable, LightScope® ZWP Blown Micro Single Jacket, 48 fiber, All-Dielectric Stranded Loose Tube Arid-Core™ Construction, Gel-filled, Singlemode G.652.D and G.657.A1, Meters jacket marking, Black jacket color

## Product Classification

Regional Availability	EMEA
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	B-LN

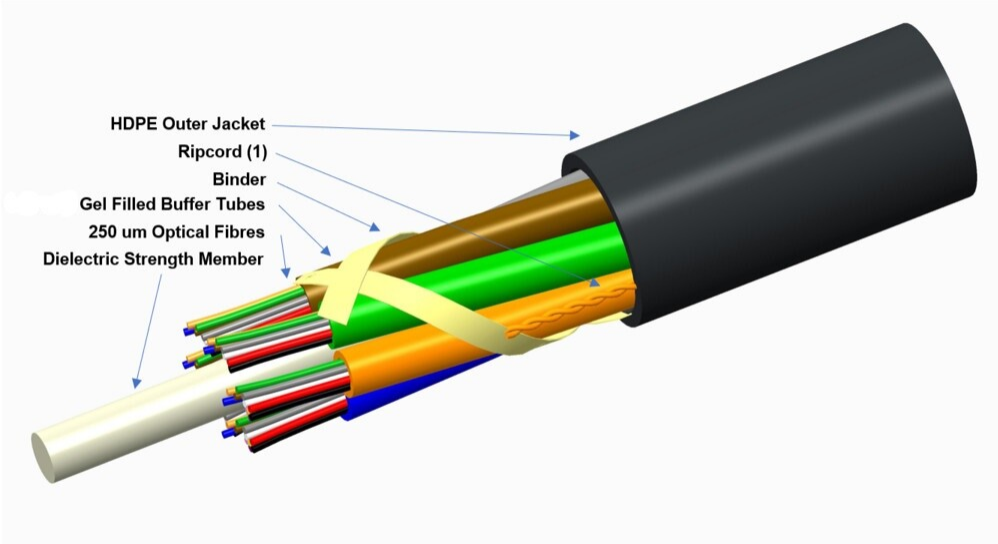
## General Specifications

Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Filler, quantity	2
Jacket Color	Black
Jacket Marking	Meters
Subunit, quantity	4
Fibers per Subunit, quantity	12
Total Fiber Count	48

## 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	95 mm   3.74 in
Minimum Bend Radius, unloaded	60 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 °C to +40 °C (+5 °F to +104 °F)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °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
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## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on <a href="https://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
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

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
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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

# 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