

## LightScope® ZWP Double Jacket/Single Armor, Gel-Filled, Outdoor Stranded Loose Tube Cable

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

### Product Classification

<b>Regional Availability</b>	EMEA
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber OSP cable
<b>Product Series</b>	O-L2

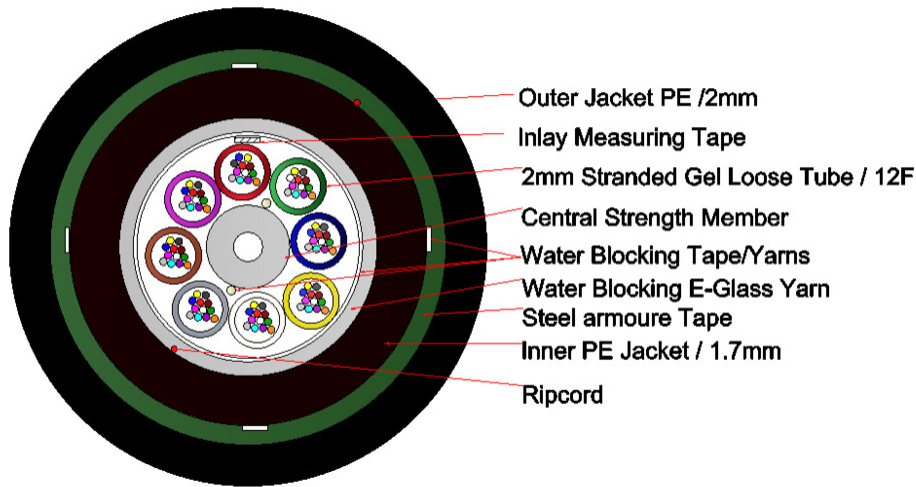
### General Specifications

<b>Armor Type</b>	Corrugated steel
<b>Cable Type</b>	Stranded loose tube
<b>Construction Type</b>	Armored
<b>Subunit Type</b>	Gel-filled
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Meters
<b>Subunit, quantity</b>	8
<b>Fibers per Subunit, quantity</b>	12
<b>Total Fiber Count</b>	96

### Dimensions

<b>Buffer Tube/Subunit Diameter</b>	2 mm   0.079 in
<b>Diameter Over Inner Jacket</b>	12.1 mm   0.476 in
<b>Diameter Over Jacket</b>	17.4 mm   0.685 in

### Representative Image



## Material Specifications

**Jacket Material** PE

## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	348 mm   13.701 in
<b>Minimum Bend Radius, unloaded</b>	261 mm   10.276 in
<b>Tensile Load, long term, maximum</b>	1200 N   269.771 lbf
<b>Tensile Load, short term, maximum</b>	4000 N   899.236 lbf
<b>Compression</b>	30 N/mm   171.304 lb/in
<b>Compression Test Method</b>	IEC 60794-1 E3
<b>Flex</b>	25 cycles
<b>Flex Test Method</b>	IEC 60794-1 E6
<b>Impact</b>	10 N-m   88.507 in lb
<b>Impact Test Method</b>	IEC 60794-1 E4
<b>Strain</b>	See long and short term tensile loads
<b>Strain Test Method</b>	IEC 60794-1 E1

## Optical Specifications

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

## Optical Specifications, Wavelength Specific

**Standards Compliance** ITU-T G.652.D | ITU-T G.657.A1

## Environmental Specifications

<b>Installation temperature</b>	-30 °C to +60 °C (-22 °F to +140 °F)
<b>Operating Temperature</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Storage Temperature</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Cable Qualification Standards</b>	IEC 60794-1-2
<b>EN50575 CPR Cable EuroClass Fire Performance</b>	Fca
<b>Environmental Space</b>	Buried
<b>Jacket UV Resistance</b>	UV stabilized
<b>Water Penetration</b>	24 h
<b>Water Penetration Test Method</b>	IEC 60794-1 F5

## Environmental Test Specifications

<b>Heat Age</b>	-40 °C to +85 °C (-40 °F to +185 °F)
<b>Heat Age Test Method</b>	IEC 60794-1 F9
<b>Temperature Cycle</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Temperature Cycle Test Method</b>	IEC 60794-1 F1

## Packaging and Weights

<b>Cable weight</b>	273 kg/km   183.448 lb/kft
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## Included Products

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

## \* Footnotes

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

## LightScope® ZWP Singlemode Fiber



### Product Classification

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber

### General Specifications

<b>Cladding Diameter</b>	125 µm
<b>Cladding Diameter Tolerance</b>	±0.7 µm
<b>Cladding Non-Circularity, maximum</b>	0.7 %
<b>Coating Diameter (Colored)</b>	249 µm
<b>Coating Diameter (Uncolored)</b>	242 µm
<b>Coating Diameter Tolerance (Colored)</b>	±13 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±5 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core/Clad Offset, maximum</b>	0.5 µm
<b>Proof Test</b>	689.476 N/mm <sup>2</sup>   100000 psi

### Dimensions

<b>Fiber Curl, minimum</b>	4 m   13.123 ft
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### Mechanical Specifications

<b>Macrobending, 20 mm Ø mandrel, 1 turn</b>	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
<b>Macrobending, 30 mm Ø mandrel, 10 turns</b>	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
<b>Macrobending, 60 mm Ø mandrel, 100 turns</b>	0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm
<b>Coating Strip Force, maximum</b>	8.9 N   2.001 lbf
<b>Coating Strip Force, minimum</b>	1.3 N   0.292 lbf

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

**Dynamic Fatigue Parameter, minimum** 20

## Optical Specifications

**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** 0.21 dB/km @ 1,550 nm | 0.24 dB/km @ 1625 nm | 0.25 dB/km @ 1,490 nm | 0.35 dB/km @ 1,310 nm | 0.35 dB/km @ 1,385 nm

**Dispersion, maximum** 18 ps(nm-km) at 1550 nm | 2.2 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 | 1.468 @ 1,550 nm

**Mode Field Diameter** 10.4  $\mu\text{m}$  @ 1,550 nm | 9.2  $\mu\text{m}$  @ 1,310 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** 0.06 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