



Fiber OSP cable, LightScope® ZWP Blown Single Jacket All-Dielectric Outdoor Central Tube Construction, 4 fiber, Singlemode G.652.D and G.657.A1, Gel-filled, Meters jacket marking, Black jacket color

## Product Classification

<b>Regional Availability</b>	Europe
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber OSP cable
<b>Product Series</b>	B-CN

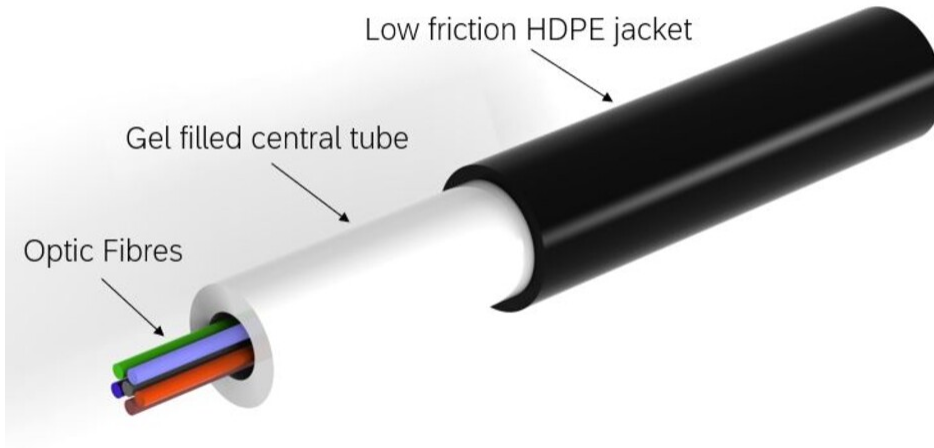
## General Specifications

<b>Cable Type</b>	Central tube, all dielectric   Microcable
<b>Construction Type</b>	Non-armored
<b>Subunit Type</b>	Gel-filled
<b>Filler, quantity</b>	0
<b>Inner Jacket Color</b>	White
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Meters
<b>Jacket Marking Method</b>	Inkjet
<b>Jacket Marking Text</b>	COMMSCOPE GB OPTICAL CABLE BLW 810010117/DB 4x G657A1 SM HDPE [SERIAL NUMBER] [METER MARK]
<b>Subunit, quantity</b>	1
<b>Fibers per Subunit, quantity</b>	4
<b>Total Fiber Count</b>	4

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	3 mm   0.118 in
<b>Diameter Over Jacket</b>	3.9 mm   0.154 in

## Representative Image



## Material Specifications

**Jacket Material** High density polyethylene (HDPE)

## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	47 mm   1.85 in
<b>Minimum Bend Radius, storage coils</b>	47 mm   1.85 in
<b>Minimum Bend Radius, unloaded</b>	47 mm   1.85 in
<b>Tensile Load, long term, maximum</b>	70 N   15.737 lbf
<b>Compression</b>	10 N/mm   57.101 lb/in
<b>Compression Test Method</b>	IEC 60794-1-21 E3
<b>Flex</b>	25 cycles
<b>Impact</b>	2 N-m   17.701 in lb
<b>Impact Test Method</b>	IEC 60794-1-21 E4
<b>Strain</b>	See long and short term tensile loads
<b>Strain Test Method</b>	IEC 60794-1-21 E1
<b>Twist</b>	10 cycles
<b>Twist Test Method</b>	IEC 60794-1-21 E7

## Optical Specifications

# 810010117/DB | B-004-CN-8W-M04BK/30G

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

## Environmental Specifications

**Installation temperature** -10 °C to +60 °C (+14 °F to +140 °F)  
**Operating Temperature** -20 °C to +60 °C (-4 °F to +140 °F)  
**Storage Temperature** -20 °C to +60 °C (-4 °F to +140 °F)  
**Cable Qualification Standards** IEC 60794-1-2 | 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 F5

## Environmental Test Specifications

**Low High Bend Test Method** IEC 60794-1-21 E11  
**Temperature Cycle** -20 °C to +60 °C (-4 °F to +140 °F)  
**Temperature Cycle Test Method** IEC 60794-1-22 F1

## Packaging and Weights

**Cable weight** 8.9 kg/km | 5.981 lb/kft

## 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

<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>	±7 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
<b>Dynamic Fatigue Parameter, minimum</b>	20

### Optical Specifications

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

<b>Cabled Cutoff Wavelength, maximum</b>	1250 nm
<b>Point Defects, maximum</b>	0.05 dB
<b>Zero Dispersion Slope, maximum</b>	0.092 ps/[km-nm-nm]
<b>Zero Dispersion Wavelength, maximum</b>	1324 nm
<b>Zero Dispersion Wavelength, minimum</b>	1300 nm

## Optical Specifications, Wavelength Specific

<b>Attenuation, maximum</b>	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
<b>Dispersion, maximum</b>	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
<b>Index of Refraction</b>	1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 nm
<b>Mode Field Diameter</b>	10.4 $\mu\text{m}$ @ 1,550 nm   9.2 $\mu\text{m}$ @ 1,310 nm
<b>Mode Field Diameter Tolerance</b>	$\pm 0.4 \mu\text{m}$ @ 1310 nm   $\pm 0.5 \mu\text{m}$ @ 1550 nm
<b>Polarization Mode Dispersion Link Design Value, maximum</b>	0.05 ps/sqrt(km)
<b>Standards Compliance</b>	ITU-T G.652.D   ITU-T G.657.A1

## Environmental Specifications

<b>Heat Aging, maximum</b>	0.05 dB/km @ 85 °C
<b>Temperature Dependence, maximum</b>	0.05 dB/km
<b>Temperature Humidity Cycling, maximum</b>	0.05 dB/km
<b>Water Immersion, maximum</b>	0.05 dB/km @ 23 °C

## \* Footnotes

<b>Temperature Dependence, maximum</b>	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)
<b>Temperature Humidity Cycling, maximum</b>	Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity