

## 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

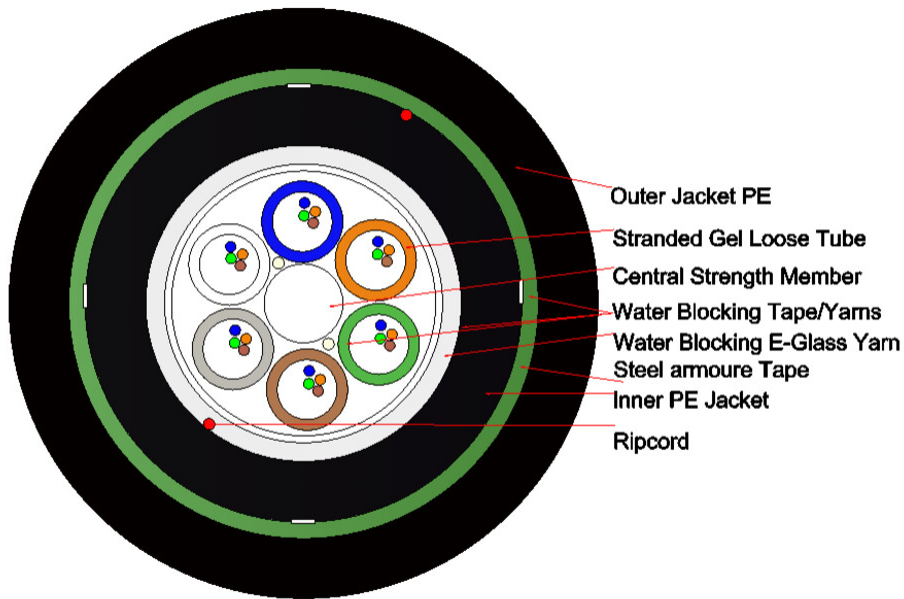
### General Specifications

<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>Filler, quantity</b>	3
<b>Inner Jacket Color</b>	Black
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Meters
<b>Subunit, quantity</b>	3
<b>Fibers per Subunit, quantity</b>	4
<b>Total Fiber Count</b>	12

### Dimensions

<b>Buffer Tube/Subunit Diameter</b>	2 mm   0.079 in
<b>Diameter Over Inner Jacket</b>	10.7 mm   0.421 in
<b>Diameter Over Jacket</b>	16 mm   0.63 in

### Representative Image



## Material Specifications

### Jacket Material

PE

## Mechanical Specifications

### Minimum Bend Radius, loaded

320 mm | 12.598 in

### Minimum Bend Radius, unloaded

240 mm | 9.449 in

### Tensile Load, long term, maximum

1200 N | 269.771 lbf

### Tensile Load, short term, maximum

4000 N | 899.236 lbf

### Compression

30 N/mm | 171.304 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

## 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

**Cable weight** 232 kg/km | 155.897 lb/kft

## Included Products

DB-8W-LT – LightScope ZWP® Singlemode Fiber

## \* Footnotes

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

# DB-8W-LT

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## 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 Diameter</b>	8.3 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

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<b>Coating Strip Force, minimum</b>	1.3 N   0.292 lbf
<b>Dynamic Fatigue Parameter, minimum</b>	20

## Optical Specifications

<b>Cabled Cutoff Wavelength, maximum</b>	1260 nm
<b>Point Defects, maximum</b>	0.1 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>	0.22 dB/km @ 1,550 nm   0.25 dB/km @ 1,490 nm   0.25 dB/km @ 1,625 nm   0.36 dB/km @ 1,310 nm   0.36 dB/km @ 1,385 nm
<b>Attenuation, typical</b>	0.19 dB/km @ 1,550 nm   0.33 dB/km @ 1,310 nm
<b>Backscatter Coefficient</b>	-79.6 dB @ 1,310 nm   -82.1 dB @ 1,550 nm
<b>Dispersion, maximum</b>	18 ps(nm-km) at 1550 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   9.6 $\mu\text{m}$ @ 1,385 nm
<b>Mode Field Diameter Tolerance</b>	$\pm 0.4 \mu\text{m}$ @ 1310 nm   $\pm 0.5 \mu\text{m}$ @ 1550 nm   $\pm 0.6 \mu\text{m}$ @ 1385 nm
<b>Polarization Mode Dispersion Link Design Value, maximum</b>	0.04 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

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

# DB-8W-LT

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## \* 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