

Fiber indoor/outdoor cable, LightScope® ZWP, Gel-Filled loose tube. Singlemode G.652.D, 6 fiber, Meters jacket marking, Yellow jacket color, Eca flame rating. Provides Rodent Resistance

## OBSOLETE

This product was discontinued on: March 31, 2023

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber indoor/outdoor cable
<b>Product Series</b>	C-DN

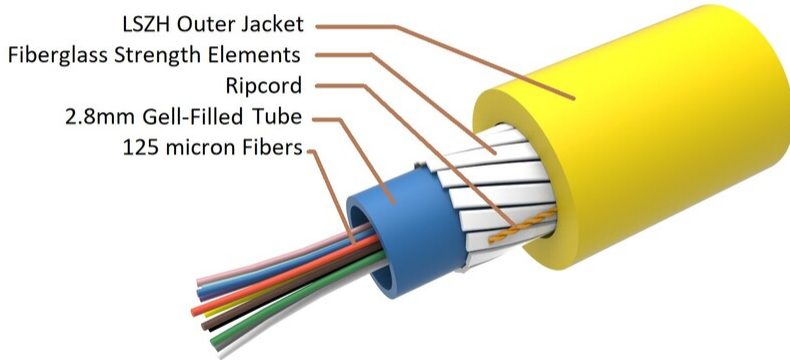
## General Specifications

<b>Cable Type</b>	Central loose tube
<b>Subunit Type</b>	Gel-filled
<b>Jacket Color</b>	Yellow
<b>Jacket Marking</b>	Meters
<b>Subunit, quantity</b>	1
<b>Fibers per Subunit, quantity</b>	6
<b>Total Fiber Count</b>	6

## Dimensions

<b>Cable Length</b>	1000 m   3,280.84 ft
<b>Buffer Tube/Subunit Diameter</b>	2.8 mm   0.11 in
<b>Diameter Over Jacket</b>	6.4 mm   0.252 in

## Representative Image



## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	130 mm   5.118 in
<b>Minimum Bend Radius, unloaded</b>	130 mm   5.118 in
<b>Tensile Load, long term, maximum</b>	650 N   146.126 lbf
<b>Tensile Load, short term, maximum</b>	1000 N   224.809 lbf
<b>Cable Crush Resistance, maximum</b>	20 N/mm   114.203 lb/in
<b>Compression Test Method</b>	IEC 60794-1-2 E3
<b>Impact</b>	5 N-m   44.254 in lb
<b>Impact Test Method</b>	IEC 60794-1 E4
<b>Twist</b>	5 cycles
<b>Twist Test Method</b>	IEC 60794-1-21 E7

## Optical Specifications

<b>Fiber Type</b>	G.652.D   OS2
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## Optical Specifications, Wavelength Specific

<b>Attenuation, maximum</b>	0.35 dB/km @ 1,300 nm   0.35 dB/km @ 1,550 nm   0.45 dB/km @ 1,310 nm
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## Environmental Specifications

# 810009858/DB | C-006-DN-8W-M06YL/28G/GY /E

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<b>Installation temperature</b>	-5 °C to +50 °C (+23 °F to +122 °F)
<b>Operating Temperature</b>	-10 °C to +60 °C (+14 °F to +140 °F)
<b>Storage Temperature</b>	-10 °C to +60 °C (+14 °F to +140 °F)
<b>EN50575 CPR Cable EuroClass Fire Performance</b>	Eca
<b>Environmental Space</b>	Universal Low Smoke Zero Halogen (ULSZH)

## Packaging and Weights

<b>Cable weight</b>	48 kg/km   32.255 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 | 250µm

**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 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** 0.06 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