



Fiber indoor/outdoor cable, LightScope® ZWP, Gel-Filled, loose tube, 4 fiber, Singlemode G.652.D, Meters jacket marking, Yellow jacket color, Eca flame rating. Provides Rodent Resistance

OBSOLETE

This product was discontinued on: March 31, 2023

## Product Classification

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

## General Specifications

Cable Type	Loose tube
Subunit Type	Gel-filled
Jacket Color	Yellow
Jacket Marking	Meters
Subunit, quantity	1
Fibers per Subunit, quantity	4
Total Fiber Count	4

## Dimensions

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

## Mechanical Specifications

Minimum Bend Radius, loaded	130 mm   5.118 in
Minimum Bend Radius, unloaded	130 mm   5.118 in
Tensile Load, long term, maximum	650 N   146.126 lbf

# 810009857/DB | C-004-CN-8W-M04YL/28G/GY /E

<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>	0.25 dB/km @ 1,300 nm   0.35 dB/km @ 1,550 nm   0.45 dB/km @ 1,310 nm
<b>Standards Compliance</b>	TIA-492CAAB (OS2)

## Environmental Specifications

<b>Installation temperature</b>	-10 °C to +60 °C (+14 °F to +140 °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>	40 kg/km   26.879 lb/kft
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## 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