

Fiber Indoor/Outdoor Cable, LightScope® ZWP, 12-fiber, Singlemode G.652.D and G.657.A1, dry loose tube, gel-free, yellow jacket color, Dca Flame Rating, Meters jacket marking

**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

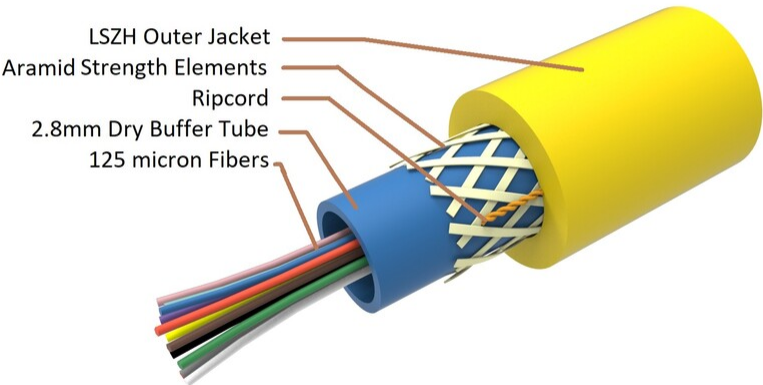
General Specifications

Cable Type	Loose tube
Subunit Type	Gel-free
Jacket Color	Yellow
Jacket Marking	Meters
Fibers per Subunit, quantity	12
Total Fiber Count	12

Dimensions

Cable Length	2000 m   6,561.68 ft
Diameter Over Jacket	6.4 mm   0.252 in

Representative Image



Mechanical Specifications

Minimum Bend Radius, loaded	139.7 mm   5.5 in
Minimum Bend Radius, unloaded	129.5 mm   5.098 in
Tensile Load, long term, maximum	400 N   89.924 lbf
Tensile Load, short term, maximum	500 N   112.405 lbf

Optical Specifications

Fiber Type	OS2
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Optical Specifications, Wavelength Specific

Attenuation, maximum	0.25 dB/km @ 1,300 nm   0.35 dB/km @ 1,550 nm   0.45 dB/km @ 1,310 nm
Standards Compliance	IEC 60794-1   TIA-492CAAB (OS2)

Environmental Specifications

Installation temperature	-5 °C to +50 °C (+23 °F to +122 °F)
Operating Temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Storage Temperature	-10 °C to +60 °C (+14 °F to +140 °F)
EN50575 CPR Cable EuroClass Fire Performance	Dca
EN50575 CPR Cable EuroClass Smoke Rating	s2

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EN50575 CPR Cable EuroClass Droplets Rating	d2
EN50575 CPR Cable EuroClass Acidity Rating	a1
Environmental Space	Universal Low Smoke Zero Halogen (ULSZH)

Packaging and Weights

Cable weight	31 kg/km   20.831 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