

Fiber Optic Cable, 24-fiber, OS2, Yellow

- non-metallic construction reinforced by E-glass yarns, which provide rodent resistance and higher tensile strength

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

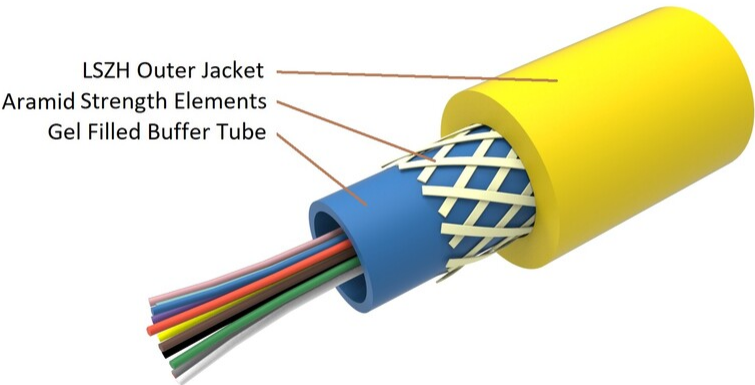
General Specifications

Cable Type	Loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Jacket Color	Yellow
Jacket Marking	Meters
Fibers per Subunit, quantity	24
Total Fiber Count	24

Dimensions

Cable Length	2000 m 6,561.68 ft
Buffer Tube/Subunit Diameter	4 mm 0.157 in
Diameter Over Jacket	8 mm 0.315 in

Representative Image



Mechanical Specifications

Minimum Bend Radius, loaded	150 mm 5.906 in
Minimum Bend Radius, unloaded	140 mm 5.512 in
Tensile Load, long term, maximum	300 N 67.443 lbf
Tensile Load, short term, maximum	600 N 134.885 lbf
Compression	20 N/mm 114.203 lb/in
Compression Test Method	IEC 60794-1-2 E3
Impact	20 N-m 177.015 in lb
Impact Test Method	IEC 60794-1 E4

Optical Specifications

Fiber Type	OS2
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Optical Specifications, Wavelength Specific

Standards Compliance	IEC 60794-1 TIA-492CAAB (OS2)
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Environmental Specifications

Installation temperature	-5 °C to +50 °C (+23 °F to +122 °F)
Operating Temperature	-20 °C to +60 °C (-4 °F to +140 °F)

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Storage Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
EN50575 CPR Cable EuroClass Fire Performance	Eca
Environmental Space	Universal Low Smoke Zero Halogen (ULSZH)
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F5

Environmental Test Specifications

Temperature Cycle	-30 °C to +70 °C (-22 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1-2 F1

Packaging and Weights

Cable weight	60 kg/km 40.318 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