



Fiber indoor/outdoor cable, 48-fiber, ULSZH, loose tube, gel-filled, Singlemode G.652.D and G.657.A1, Meters jacket marking, Black jacket color. Provides Rodent Resistance

Product Classification

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

General Specifications

Armor Type	Non-metallic rods
Cable Type	Loose tube
Subunit Type	Gel-filled
Filler, quantity	4
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB SYSTEM F.O.CABLE 760240171 EXT GRP ARMOUR 48X9/125 SINGLE MODE [Serial number] [metre mark]
Fibers per Subunit, quantity	12
Total Fiber Count	48

Dimensions

Cable Length	1000 m 3,280.84 ft
Diameter Over Jacket	15 mm 0.591 in

Mechanical Specifications

Minimum Bend Radius, loaded	465 mm 18.307 in
Minimum Bend Radius, unloaded	350 mm 13.78 in
Tensile Load, long term, maximum	6000 N 1,348.854 lbf
Tensile Load, short term, maximum	9000 N 2,023.281 lbf

760240171 | C-048-LA-8W-M12BK/28G/GRP/E

Optical Specifications

Fiber Type G.652.D and G.657.A1, TeraSPEED® | OS2

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.35 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 -25 °C to +70 °C (-13 °F to +158 °F)

Storage Temperature -20 °C to +70 °C (-4 °F to +158 °F)

Environmental Space Universal Low Smoke Zero Halogen (ULSZH)

Packaging and Weights

Cable weight 230 kg/km | 154.553 lb/kft

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

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)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum	0.5 µm
Proof Test	689.476 N/mm ² 100000 psi

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

CS-8W-250-EMEA | 250um

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 $\pm 0.4 \mu\text{m}$ @ 1310 nm | $\pm 0.5 \mu\text{m}$ @ 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