

Fire retardant Outside plant LSZH jacket grade, suitable for drop / aerial installations of up to 68 m. Can be routed indoor.

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA North America
Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable

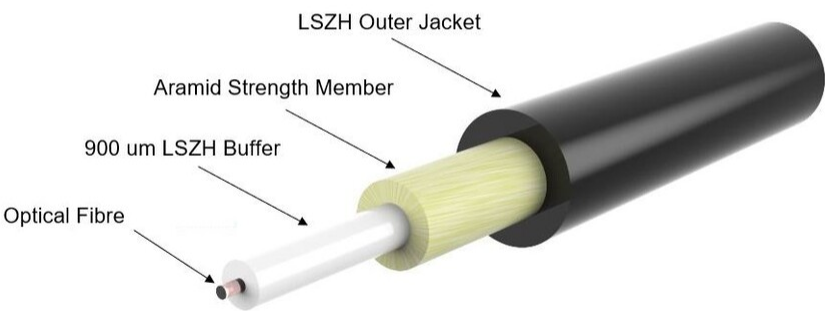
General Specifications

Cable Type	Drop Tight buffer
Construction Type	All Dielectric Non-armored
Subunit Type	Gel-free
Jacket Color	Brown
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMScope GB OPTICAL CABLE 810010113/DB 1x G657A2 SM LSZH [DOM] [SERIAL NUMBER] [METER MARK]
Subunit, quantity	1
Fibers per Subunit, quantity	1
Total Fiber Count	1

Dimensions

Buffer Tube/Subunit Diameter	0.9 mm 0.035 in
Diameter Over Jacket	3 mm 0.118 in

Representative Image



Material Specifications

Jacket Material

Low Smoke Zero Halogen (LSZH)

Mechanical Specifications

Minimum Bend Radius, loaded	30 mm 1.181 in
Tensile Load, long term, maximum	300 N 67.443 lbf
Tensile Load, short term, maximum	620 N 139.382 lbf
Compression	20 N/mm 114.203 lb/in
Compression Test Method	IEC 60794-1 E3
Impact	2 N-m 17.701 in lb
Impact Test Method	IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	IEC 60794-1 E7

Optical Specifications

Fiber Type

G.657.A2, TeraSPEED®

Environmental Specifications

Installation temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Operating Temperature	-30 °C to +65 °C (-22 °F to +149 °F)
Storage Temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Cable Qualification Standards	IEC 60794-1-2
EN50575 CPR Cable EuroClass Fire Performance	Cca
EN50575 CPR Cable EuroClass Smoke Rating	s1a
EN50575 CPR Cable EuroClass Droplets Rating	d0
EN50575 CPR Cable EuroClass Acidity Rating	a2
Environmental Space	Aerial Drop Ducted Indoor/Outdoor
Flame Test Listing	EN 50399
Flame Test Method	IEC 60332-1-2 IEC 60754-2 IEC 61034-2
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F5

Environmental Test Specifications

Temperature Cycle	-30 °C to +60 °C (-22 °F to +140 °F)
Temperature Cycle Test Method	IEC 60794-1-22 F1

Packaging and Weights

Cable weight	8.7 kg/km 5.846 lb/kft
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Included Products

CS-8G-TB	–	Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2)
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* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8G-TB

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G. 657.A2, B2)

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 Tensile Stress	100,000 psi (0.69 GPa)

Dimensions

Fiber Curl, minimum	4 m 13.123 ft
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Mechanical Specifications

Macrobending, 15 mm Ø mandrel, 1 turn	0.50 dB @ 1,550 nm 1.00 dB @ 1,625 nm
Macrobending, 20 mm Ø mandrel, 1 turn	0.10 dB @ 1,550 nm 0.20 dB @ 1,625 nm
Macrobending, 30 mm Ø mandrel, 10 turns	0.03 dB @ 1,550 nm 0.10 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

Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.1 dB

CS-8G-TB

Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1302 nm
Optical Specifications, Wavelength Specific	
Attenuation, maximum	0.50 dB/km @ 1,310 nm 0.50 dB/km @ 1,385 nm 0.50 dB/km @ 1,550 nm
Dispersion, maximum	18 ps(nm-km) at 1550 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	8.6 µm @ 1,310 nm 9.8 µm @ 1,550 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.657.A2 ITU-T G.657.B2

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

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

* 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