



Fiber indoor/outdoor cable, loose tube gel-filled CST, 144 fiber, Singlemode G.652.D and G.657.A1, Meters jacket marking, Black jacket color

Product Classification

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

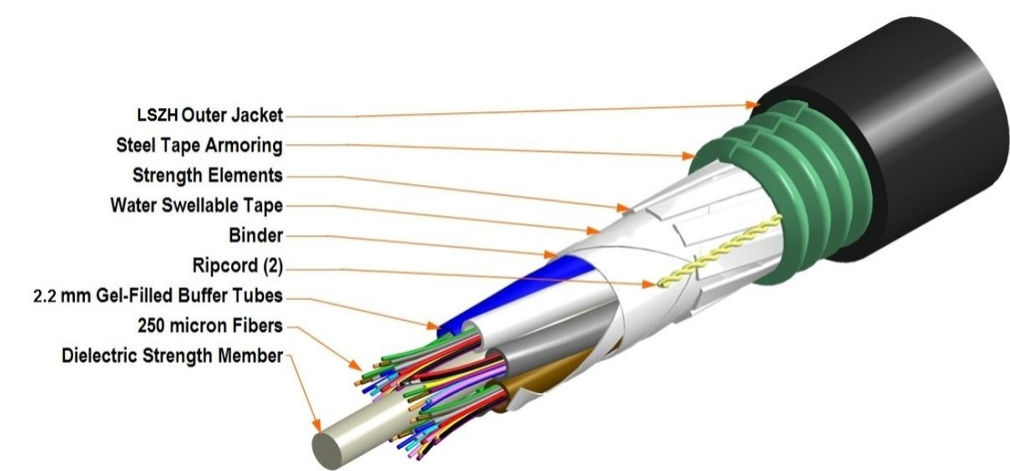
General Specifications

Armor Type	Corrugated steel
Cable Type	Stranded loose tube
Construction Type	Armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Meters
Subunit, quantity	12
Fibers per Subunit, quantity	12
Total Fiber Count	144

Dimensions

Buffer Tube/Subunit Diameter	2.2 mm 0.087 in
Diameter Over Jacket	16.6 mm 0.654 in

Representative Image



Mechanical Specifications

Minimum Bend Radius, loaded	332 mm 13.071 in
Minimum Bend Radius, unloaded	166 mm 6.535 in
Tensile Load, short term, maximum	2000 N 449.618 lbf
Compression	15 N/mm 85.652 lb/in
Compression Test Method	IEC 60794-1-2 E3
Strain	See long and short term tensile loads
Strain Test Method	IEC 60794-1-21 E1

Optical Specifications

Fiber Type	G.652.D and G.657.A1 OS2
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Optical Specifications, Wavelength Specific

Attenuation, maximum	0.22 dB/km @ 1,550 nm 0.36 dB/km @ 1,310 nm
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Environmental Specifications

Installation temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Environmental Space	Buried Ducted Indoor/Outdoor Low Smoke Zero Halogen (LSZH)
Flame Test Method	IEC 60332-1 IEC 60332-3-24 IEC 60754-2 IEC 61034-2
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F5B

Environmental Test Specifications

Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1-2 F1

Packaging and Weights

Cable weight	301 kg/km 202.263 lb/kft
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Included Products

CS-8Z-LT	– Low Water Peak, Dispersion-Unshifted Singlemode Fiber
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* Footnotes

Operating Temperature	Specification applicable to non-terminated bulk fiber cable
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CS-8Z-LT

Low Water Peak, Dispersion-Unshifted 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	1 %
Coating Diameter (Colored)	250 µm
Coating Diameter (Uncolored)	245 µm
Coating Diameter Tolerance (Colored)	±15 µm
Coating Diameter Tolerance (Uncolored)	±10 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, 32 mm Ø mandrel, 1 turn	0.50 dB @ 1,550 nm
Macrobending, 50 mm Ø mandrel, 100 turns	0.05 dB @ 1,550 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	18

Optical Specifications

Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.1 dB
Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm

CS-8Z-LT

Zero Dispersion Wavelength, minimum	1300 nm
Optical Specifications, Wavelength Specific	
Attenuation, maximum	0.25 dB/km @ 1,550 nm 0.35 dB/km @ 1,310 nm 0.35 dB/km @ 1,385 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 9.6 µm @ 1,385 nm
Mode Field Diameter Tolerance	±0.4 µm @ 1310 nm ±0.5 µm @ 1550 nm ±0.6 µm @ 1385 nm
Polarization Mode Dispersion Link Design Value, maximum	0.08 ps/sqrt(km)
Standards Compliance	ITU-T G.652.D ITU-T G.657.A1 TIA-492CAAB (OS2)

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