



Fiber indoor cable, Low Smoke Zero Halogen Indoor Distribution, 4 fiber single-unit, singlemode, G.657.A1, Meters jacket marking, Yellow jacket color

Product Classification

Regional Availability	China
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	L-DS
Country Specific for	China

General Specifications

Cable Type	Tight buffer
Jacket Color	Yellow
Jacket Marking	Meters
Strength Members	E-glass yarns
Total Fiber Count	4

Dimensions

Buffer Tube/Subunit Diameter	0.9 mm 0.035 in
Diameter Over Jacket	5 mm 0.197 in

Mechanical Specifications

Minimum Bend Radius, loaded	100 mm 3.937 in
Minimum Bend Radius, unloaded	50 mm 1.969 in
Tensile Load, long and short term	See Sag and Tension tables in Product Documentation section
Tensile Load, long term, maximum	198 N 44.512 lbf
Tensile Load, short term, maximum	660 N 148.374 lbf
Cable Crush Resistance, maximum	10 N/mm 57.101 lb/in
Compression	10 N/mm 57.101 lb/in
Compression Test Method	IEC 60794-1 E3 IEC 60794-1-2 E3
Strain	See long and short term tensile loads

Strain Test Method IEC 60794-1-2-E1

Optical Specifications

Fiber Type G.652.D and G.657.A1

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.3 dB/km @ 1,550 nm | 0.3 dB/km @ 1,625 nm | 0.40 dB/km @ 1,310 nm

Environmental Specifications

Installation temperature -20 °C to +60 °C (-4 °F to +140 °F)

Operating Temperature -20 °C to +60 °C (-4 °F to +140 °F)

Storage Temperature -20 °C to +60 °C (-4 °F to +140 °F)

Cable Qualification Standards Telcordia GR-409

Environmental Space Low Smoke Zero Halogen (LSZH) | Low Smoke Zero Halogen (LSZH)

Flame Test Listing B2

Flame Test Method GB/T 31247

Environmental Test Specifications

Temperature Cycle -20 °C to +60 °C (-4 °F to +140 °F)

Temperature Cycle Test Method IEC 60794-1 F1 | IEC 60794-1-2 F1

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant



Included Products

CS-8Z-TB-0.40/0.30/093 – Low Water Peak, Dispersion-Unshifted Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8Z-TB-0.40/0.30/093

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)	±10 µm
Coating Diameter Tolerance (Uncolored)	±10 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
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
Zero Dispersion Slope, maximum	0.092 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm

CS-8Z-TB-0.40/0.30/093

Zero Dispersion Wavelength, minimum	1300 nm
Optical Specifications, Wavelength Specific	
Attenuation, maximum	0.30 dB/km @ 1,550 nm 0.40 dB/km @ 1,310 nm 0.40 dB/km @ 1,385 nm
Index of Refraction	1.467 @ 1,310 nm 1.468 @ 1,550 nm 1.468 @ 1,625 nm
Mode Field Diameter	9.0 μm @ 1,310 nm
Mode Field Diameter Tolerance	± 0.4 μm @ 1310 nm
Polarization Mode Dispersion Link Design Value, maximum	0.1 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

* 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