

Fiber indoor cable, Low Smoke Zero Halogen Distribution, 12 fiber single-unit, Singlemode G.657.A1, Meters jacket marking, Yellow jacket color

Product Classification

Regional Availability	Asia Australia/New Zealand
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	N-DS

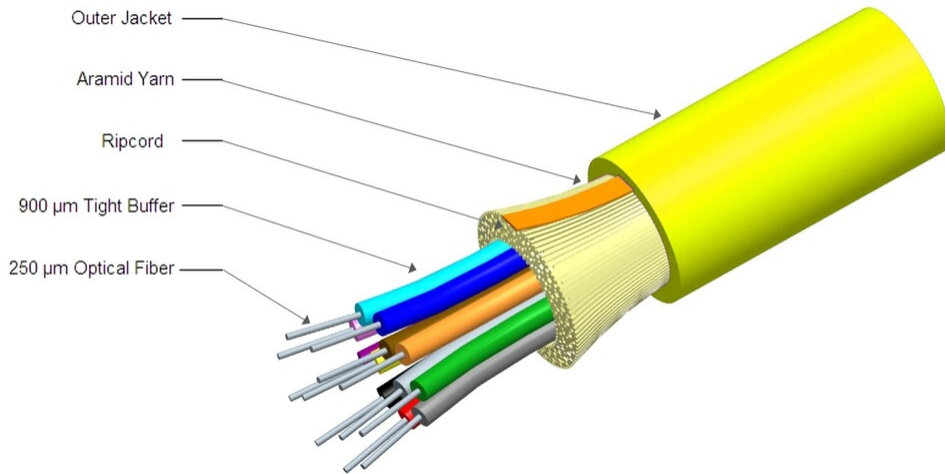
General Specifications

Cable Type	Distribution
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Yellow
Jacket Marking	Meters
Total Fiber Count	12

Dimensions

Diameter Over Jacket	6.2 mm 0.244 in
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Representative Image



Mechanical Specifications

Minimum Bend Radius, loaded	124 mm 4.882 in
Minimum Bend Radius, unloaded	62 mm 2.441 in
Tensile Load, long term, maximum	198 N 44.512 lbf
Tensile Load, short term, maximum	660 N 148.374 lbf
Compression	10 N/mm 57.101 lb/in
Compression Test Method	IEC 60794-1 E3
Strain	See long and short term tensile loads
Strain Test Method	IEC 60794-1-21 E1

Optical Specifications

Fiber Type G.657.A1

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.30 dB/km @ 1,550 nm | 0.40 dB/km @ 1,310 nm

Environmental Specifications

Installation temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Environmental Space	Low Smoke Zero Halogen (LSZH) Riser

Flame Test Listing	NEC OFNR (UL) and c(UL)
Flame Test Method	IEC 60332-3 UL 1666 UL 1685

Environmental Test Specifications

Temperature Cycle	-20 °C to +70 °C (-4 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1 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