

Fiber indoor cable, Low Smoke Zero Halogen Distribution, 48 fiber multi-unit, Singlemode G.657.A1, Meters jacket marking, Yellow jacket color

## Product Classification

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

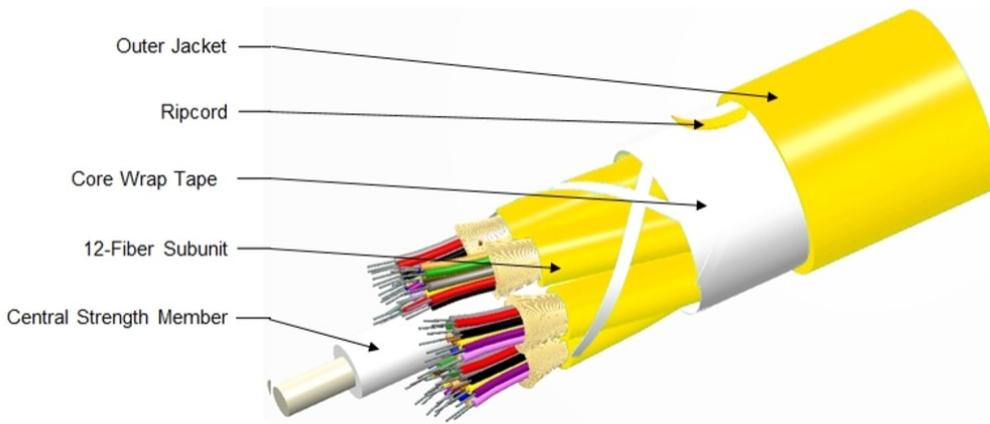
## General Specifications

<b>Cable Type</b>	Distribution
<b>Construction Type</b>	Non-armored
<b>Subunit Type</b>	Gel-free
<b>Jacket Color</b>	Yellow
<b>Jacket Marking</b>	Meters
<b>Subunit, quantity</b>	4
<b>Fibers per Subunit, quantity</b>	12
<b>Total Fiber Count</b>	48

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	6 mm   0.236 in
<b>Diameter Over Jacket</b>	17.9 mm   0.705 in

## Representative Image



## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	358 mm   14.094 in
<b>Minimum Bend Radius, unloaded</b>	179 mm   7.047 in
<b>Tensile Load, long term, maximum</b>	396 N   89.024 lbf
<b>Tensile Load, short term, maximum</b>	1320 N   296.748 lbf
<b>Compression</b>	10 N/mm   57.101 lb/in
<b>Compression Test Method</b>	IEC 60794-1-21 E3
<b>Strain</b>	See long and short term tensile loads
<b>Strain Test Method</b>	IEC 60794-1-21 E1
<b>Twist</b>	10 cycles

## Optical Specifications

<b>Fiber Type</b>	G.657.A1
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## Optical Specifications, Wavelength Specific

<b>Attenuation, maximum</b>	0.30 dB/km @ 1,550 nm   0.4 dB/km @ 1,310 nm
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## Environmental Specifications

<b>Installation temperature</b>	-10 °C to +60 °C (+14 °F to +140 °F)
<b>Operating Temperature</b>	-20 °C to +70 °C (-4 °F to +158 °F)
<b>Storage Temperature</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Environmental Space</b>	Low Smoke Zero Halogen (LSZH)
<b>Flame Test Listing</b>	NEC OFNR (UL)

**Flame Test Method**

IEC 60332-3 | UL 1666 | UL 1685

Environmental Test Specifications

**Temperature Cycle Test Method**

IEC 60794-1-22 F1

Regulatory Compliance/Certifications

**Agency**

**Classification**

CHINA-ROHS

Below maximum concentration value

REACH-SVHC

Compliant as per SVHC revision on [www.commscope.com/ProductCompliance](http://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

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Low Water Peak, Dispersion-Unshifted Singlemode Fiber

## Product Classification

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber

## General Specifications

<b>Cladding Diameter</b>	125 µm
<b>Cladding Diameter Tolerance</b>	±0.7 µm
<b>Cladding Non-Circularity, maximum</b>	1 %
<b>Coating Diameter (Colored)</b>	250 µm
<b>Coating Diameter (Uncolored)</b>	245 µm
<b>Coating Diameter Tolerance (Colored)</b>	±10 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±10 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core/Clad Offset, maximum</b>	0.5 µm
<b>Proof Test</b>	689.476 N/mm <sup>2</sup>   100000 psi

## Dimensions

<b>Fiber Curl, minimum</b>	4 m   13.123 ft
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## Mechanical Specifications

<b>Macrobending, 20 mm Ø mandrel, 1 turn</b>	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
<b>Macrobending, 30 mm Ø mandrel, 10 turns</b>	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
<b>Coating Strip Force, maximum</b>	8.9 N   2.001 lbf
<b>Coating Strip Force, minimum</b>	1.3 N   0.292 lbf
<b>Dynamic Fatigue Parameter, minimum</b>	20

## Optical Specifications

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

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

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<b>Zero Dispersion Wavelength, minimum</b>	1300 nm
<b>Optical Specifications, Wavelength Specific</b>	
<b>Attenuation, maximum</b>	0.30 dB/km @ 1,550 nm   0.40 dB/km @ 1,310 nm   0.40 dB/km @ 1,385 nm
<b>Index of Refraction</b>	1.467 @ 1,310 nm   1.468 @ 1,550 nm   1.468 @ 1,625 nm
<b>Mode Field Diameter</b>	9.0 $\mu\text{m}$ @ 1,310 nm
<b>Mode Field Diameter Tolerance</b>	$\pm 0.4$ $\mu\text{m}$ @ 1310 nm
<b>Polarization Mode Dispersion Link Design Value, maximum</b>	0.1 ps/sqrt(km)
<b>Standards Compliance</b>	ITU-T G.652.D   ITU-T G.657.A1   TIA-492CAAB (OS2)

## Environmental Specifications

<b>Heat Aging, maximum</b>	0.05 dB/km @ 85 °C
<b>Temperature Dependence, maximum</b>	0.05 dB/km
<b>Temperature Humidity Cycling, maximum</b>	0.05 dB/km
<b>Water Immersion, maximum</b>	0.05 dB/km @ 23 °C

## \* Footnotes

<b>Temperature Dependence, maximum</b>	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)
<b>Temperature Humidity Cycling, maximum</b>	Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity