

## 1.6mm Low Smoke Zero Halogen Riser Simplex Cable

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North

America

Portfolio CommScope®

Product Type Fiber indoor cable

**Product Series** N-SP

General Specifications

Cable Type Cordage

Construction Type Non-armored

Subunit TypeGel-freeJacket ColorYellowJacket MarkingFeet

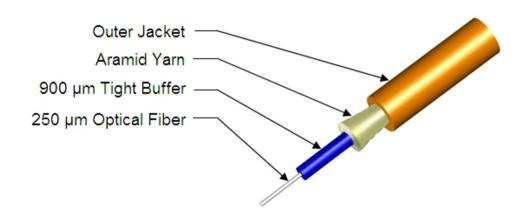
Total Fiber Count 1

**Dimensions** 

**Diameter Over Jacket** 1.7 mm | 0.067 in

Representative Image





#### Mechanical Specifications

Minimum Bend Radius, loaded38 mm1.496 inMinimum Bend Radius, unloaded15 mm0.591 inTensile Load, long term, maximum29 N | 6.519 lbfTensile Load, short term, maximum98 N | 22.031 lbf

 Compression
 10 N/mm | 57.101 lb/in

 Compression Test Method
 FOTP-41 | IEC 60794-1 E3

Flex 300 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

**Impact** 0.74 N-m | 6.55 in lb

Impact Test Method FOTP-25 | IEC 60794-1 E4

**Strain** See long and short term tensile loads

Strain Test Method FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

**Vertical Rise, maximum** 500 m | 1,640.42 ft

Optical Specifications

**Fiber Type** G.657.A2/B2 | G.657.A2/B2

## **Environmental Specifications**



Installation temperature  $-20 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

**Operating Temperature**  $-20 \,^{\circ}\text{C to } +70 \,^{\circ}\text{C } (-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

Cable Qualification Standards ANSI/ICEA S-83-596 | Telcordia GR-409

EN50575 CPR Cable EuroClass Fire Performance Eca

Environmental Space Low Smoke Zero Halogen (LSZH) | Riser

Flame Test Listing NEC OFNR-ST1 (ETL) and c(ETL)

Flame Test Method | IEC 60332-1-2 | IEC 60332-3 | IEC 60754-2 | IEC 61034-2 | UL

1666 | UL 1685

**Environmental Test Specifications** 

**Heat Age** -20 °C to +85 °C (-4 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

**Low High Bend**  $-20 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \left(-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F}\right)$ 

**Low High Bend Test Method** FOTP-37 | IEC 60794-1 E11

**Temperature Cycle**  $-20 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \left(-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F}\right)$ 

**Temperature Cycle Test Method** FOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight 2.8 kg/km | 1.882 lb/kft

Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

CHINA-ROHS Below maximum concentration value

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

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



#### Included Products

CS-8G-TB – Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T

G.657.A2, B2)



#### \* 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 ±0.7 µm **Cladding Diameter Tolerance** 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  $0.5 \, \mu m$ 

**Proof Test** 689.476 N/mm<sup>2</sup> | 100000 psi

Dimensions

Fiber Curl, minimum 4 m | 13.123 ft

Mechanical Specifications

 Macrobending, 15 mm Ø mandrel, 1 turn
 0.50 dB @ 1,550 nm
 1 1.00 dB @ 1,625 nm

 Macrobending, 20 mm Ø mandrel, 1 turn
 0.10 dB @ 1,550 nm
 1 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, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

**Optical Specifications** 

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.1 dB

COMMSCOPE®

## CS-8G-TB

**Zero Dispersion Slope, maximum** 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1302 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

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 8.6~\mu m \ @ 1,310~nm \hspace{0.2cm} | \hspace{0.2cm} 9.8~\mu m \ @ 1,550~nm$ 

**Mode Field Diameter Tolerance**  $\pm 0.4 \,\mu\text{m}$  @ 1310 nm |  $\pm 0.5 \,\mu\text{m}$  @ 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

