

Fiber indoor cable, TeraSPEED® Low Smoke Zero Halogen Riser Distribution, 6 fiber single-unit, Singlemode G.652.D and G.657.Al, Feet jacket marking, Yellow jacket color, B2ca flame rating

### **Product Classification**

Regional Availability

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

America

Portfolio CommScope®

Product Type Fiber indoor cable

**Product Series** N-DS

General Specifications

Cable TypeDistribution

Construction Type Non-armored

Fiber Type, quantity 6

Jacket ColorYellowJacket MarkingFeet

**Subunit Type** Gel-free

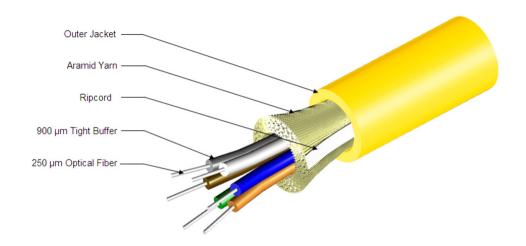
**Total Fiber Count** 6

Dimensions

**Diameter Over Jacket** 5.15 mm | 0.203 in

Representative Image





## Mechanical Specifications

Minimum Bend Radius, loaded

Minimum Bend Radius, unloaded

Tensile Load, long term, maximum

Tensile Load, short term, maximum

Compression

**Compression Test Method** 

Flex

Flex Test Method

Impact

**Impact Test Method** 

Strain

**Strain Test Method** 

**Twist** 

**Twist Test Method** 

Vertical Rise, maximum

**Optical Specifications** 

Fiber Type

77 mm | 3.031 in

51 mm | 2.008 in

200 N | 44.962 lbf

667 N | 149.948 lbf

10 N/mm | 57.101 lb/in

FOTP-41 | IEC 60794-1 E3

100 cycles

FOTP-104 | IEC 60794-1 E6

5.88 N-m | 52.042 in lb

FOTP-25 | IEC 60794-1 E4

See long and short term tensile loads

FOTP-33 | IEC 60794-1 E1

10 cycles

FOTP-85 | IEC 60794-1 E7

500 m | 1,640.42 ft

G.652.D and G.657.A1, TeraSPEED®

## **Environmental Specifications**



Installation temperature  $-10 \, ^{\circ}\text{C}$  to  $+50 \, ^{\circ}\text{C}$  (+14  $^{\circ}\text{F}$  to +122  $^{\circ}\text{F}$ )

**Operating Temperature**  $-20 \, ^{\circ}\text{C} \text{ to } +60 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F to } +140 \, ^{\circ}\text{F})$ 

Storage Temperature -40 °C to +70 °C (-40 °F to +158 °F)

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

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd1

Environmental Space Low Smoke Zero Halogen (LSZH) | Riser

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

Flame Test Method EN 50399 | IEC 60332-3 | IEC 60754-2 | IEC 61034-2

a1

**Environmental Test Specifications** 

**EN50575 CPR Cable EuroClass Acidity Rating** 

**Heat Age**  $-20 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$  ( $-4 \,^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F}$ )

**Heat Age Test Method** IEC 60794-1 F9

**Low High Bend**  $-10 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (+14  $^{\circ}\text{F}$  to +140  $^{\circ}\text{F}$ )

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

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

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

Packaging and Weights

**Cable weight** 25 kg/km | 16.799 lb/kft

### 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



#### Included Products

CS-8W-TB - TeraSPEED® Singlemode Fiber

\* Footnotes



**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

### TeraSPEED® Singlemode Fiber

## TeraSPEED®

#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

### General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance**  $\pm 0.7 \, \mu m$ Cladding Non-Circularity, maximum 0.7 % **Coating Diameter (Colored)**  $249 \, \mu m$ **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 Diameter** 8.3 µm Core/Clad Offset, maximum  $0.5 \, \mu m$ 

**Proof Test** 689.476 N/mm² | 100000 psi

Tight Buffer Diameter 900  $\mu m$ Tight Buffer Diameter Tolerance  $\pm 40 \ \mu m$ 

#### **Dimensions**

**Fiber Curl, minimum** 4 m | 13.123 ft

### Mechanical Specifications

 Macrobending, 20 mm mandrel, 1 turn
 0.75 dB @ 1,550 nm | 1.50 dB @ 1,625 nm

 Macrobending, 30 mm mandrel, 10 turns
 0.25 dB @ 1,550 nm | 1.00 dB @ 1,625 nm

**COMMSCOPE®** 

## CS-8W-TB

**Macrobending, 60 mm mandrel, 100 turns** 0.05 dB @ 1,550 nm | 0.05 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

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

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 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 @ 1,490 nm | 0.50 dB/km @ 1,550 nm | 0.50 dB/km @ 1,575 nm | 0.70 dB/km @ 1,270

nm

**Backscatter Coefficient** -79.6 dB @ 1,310 nm | -82.1 dB @ 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

**Mode Field Diameter**  $10.4 \, \mu \text{m} \ @ \ 1,550 \, \text{nm} \ | \ 9.2 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,000 \, \text{m}$ 

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 0.04 ps/sqrt(km)

Standards Compliance ITU-T G.652.D | ITU-T G.657.A1

**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

COMMSCOPE®

## CS-8W-TB

#### **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

