

Fiber indoor/outdoor cable, All-Dielectric, LSZH Riser-Rated, Gel-Free, Central Tube Rollable Ribbon, 432 fiber, Singlemode G.652.D and G.657. Al, Feet jacket marking, Black jacket color, Cca flame rating

#### **Product Classification**

Regional Availability

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

America

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

**Product Series** Z-CN

General Specifications

Cable Type Ribbon central tube

Construction Type Non-armored

**Subunit Type** Gel-free

Fibers per Ribbon, quantity 12

Jacket Color Black

Jacket Marking Feet

Total Fiber Count 432

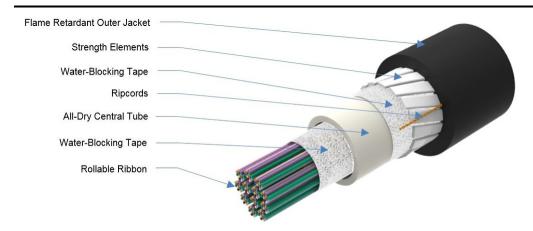
**Dimensions** 

**Buffer Tube/Subunit Diameter** 10.4 mm | 0.409 in

**Diameter Over Jacket** 15.5 mm | 0.61 in

Representative Image





### Mechanical Specifications

Minimum Bend Radius, loaded 310 mm | 12.205 in

Minimum Bend Radius, unloaded 102 mm | 4.016 in

**Tensile Load, long term, maximum** 800 N | 179.847 lbf

**Tensile Load, short term, maximum** 2670 N | 600.24 lbf

**Compression** 10 N/mm | 57.101 lb/in

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

Flex 25 cycles

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

**Impact** 2.94 N-m | 26.021 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

Optical Specifications

**Fiber Type** G.652.D and G.657.A1, TeraSPEED®

### **Environmental Specifications**

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

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

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

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Cable Qualification Standards ANSI/ICEA S-104-696 | EN 187105 | Telcordia GR-409

EN50575 CPR Cable EuroClass Fire PerformanceCcaEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Aerial, lashed | Buried | Low Smoke Zero Halogen (LSZH) | Riser

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

Flame Test Method CSA FT4 | IEC 60332-1-2 | IEC 60754-2 | IEC 61034-2 | UL

1666 | UL 1685

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method FOTP-82 | IEC 60794-1 F5

**Environmental Test Specifications** 

**Cable Freeze** -2 °C | 28.4 °F

**Cable Freeze Test Method** FOTP-98 | IEC 60794-1 F15

Heat Age -40 °C to +85 °C (-40 °F to +185 °F)

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

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

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

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

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

Packaging and Weights

**Cable weight** 254 kg/km | 170.68 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



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#### Included Products

CS-8F-RB – Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

#### \* Footnotes

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



### CS-8F-RB

### Low Macrobending, Zero 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 0.7 % **Cladding Non-Circularity, maximum Coating Diameter (Colored)** 249 um **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 µm

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

**Dimensions** 

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

Mechanical Specifications

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

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

 Macrobending, 50 mm Ø mandrel, 100 turns
 0.03 dB @ 1,550 nm
 0.05 dB @ 1,625 nm

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

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

**Zero Dispersion Slope, maximum** 0.09 ps/[km-nm-nm]

**COMMSCOPE®** 

### CS-8F-RB

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

**Attenuation, maximum** 0.30 dB/km @ 1,550 nm | 0.40 dB/km @ 1,310 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
 8.6 μm @ 1,310 nm | 9.8 μm @ 1,550 nm

 Mode Field Diameter Tolerance
 ±0.4 μm @ 1310 nm | ±0.5 μm @ 1550 nm

Polarization Mode Dispersion Link Design Value, maximum 0.06 ps/sqrt(km)

Standards Compliance ITU-T G.657.A1 | TIA-492CAAB (OS2)

**Environmental Specifications** 

**Heat Aging, maximum** 0.05 dB/km @ 85 °C

Temperature Dependence, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 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

