

Fiber indoor/outdoor cable, Interlocking Armored, LSZH Riser-Rated, Gel-Free, Central Tube Rollable Ribbon, 432 fiber, Singlemode G.657.A2/B2, Feet jacket marking, Black jacket color, B2ca 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-CZ

General Specifications

Cable Type Ribbon central tube

Construction TypeArmoredSubunit TypeGel-free

Fibers per Ribbon, quantity 12

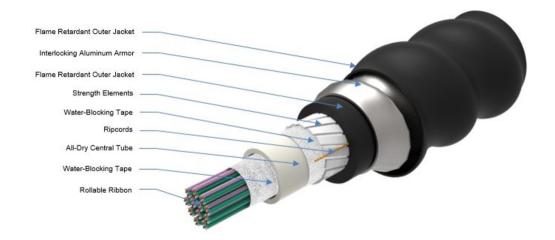
Inner Jacket Color Black
Jacket Color Black
Jacket Marking Feet
Total Fiber Count 432

**Dimensions** 

Buffer Tube/Subunit Diameter10.4 mm0.409 inDiameter Over Jacket24.3 mm0.957 in

Representative Image





### Mechanical Specifications

Minimum Bend Radius, loaded 485 mm | 19.094 in

Minimum Bend Radius, unloaded 340 mm | 13.386 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** 5.15 N-m | 45.581 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.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  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

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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-104-696 | EN 187105 | Telcordia GR-409

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd2EN50575 CPR Cable EuroClass Acidity Ratinga1

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

Flame Test Listing NEC OFCR-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** 475 kg/km | 319.185 lb/kft

Regulatory Compliance/Certifications

Agency Classification

ANATEL Compliant



Included Products

CS-8G1-RR-I/O



Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Rollable Ribbon Fiber (ITU-T G.657.A2, B2)

## \* Footnotes

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



## CS-8G1-RR-I/O

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Rollable Ribbon Fiber (ITU-T G.657.A2, B2)

#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±0.3 µm 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/Clad Offset, maximum 0.5 µm

Proof Tensile Stress 100,000 psi (0.69 GPa)

Dimensions

Fiber Curl, minimum 4 m | 13.123 ft

Mechanical Specifications

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

 Macrobending, 20 mm Ø mandrel, 1 turn
 0.10 dB @ 1,550 nm
 | 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-8G1-RR-I/O

**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** 0.3 dB/km @ 1,550 nm | 0.4 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  $\pm 0.4 \,\mu\text{m}$  @ 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

