

Fiber indoor/outdoor cable, LSZH Riser Rollable Ribbon, 864 fiber, Singlemode G.652.D and G.657.A1, Gel-free, 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 864

**Dimensions** 

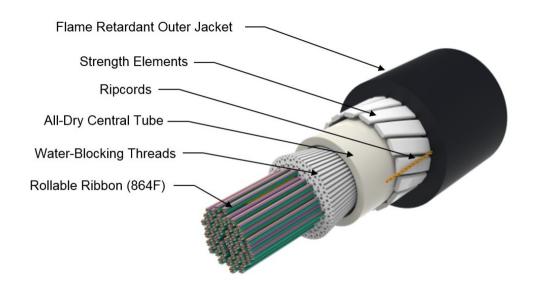
**Cable Length** 3000 m | 9,842.52 ft

**Buffer Tube/Subunit Diameter** 15.6 mm | 0.614 in

**Diameter Over Jacket** 21.8 mm | 0.858 in

Representative Image





#### Material Specifications

Inner Jacket Material Low Smoke Zero Halogen (LSZH)

### Mechanical Specifications

Minimum Bend Radius, loaded436 mm | 17.165 inMinimum Bend Radius, unloaded218 mm | 8.583 inTensile Load, long term, maximum450 N | 101.164 lbfTensile Load, short term, maximum1340 N | 301.244 lbf

 Compression
 22 N/mm | 125.623 lb/in

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

Flex 25 cycles

FIEX 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 | G.652.D and G.657.A1

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### **Environmental Specifications**

 Installation temperature
 -10 °C to +60 °C (+14 °F to +140 °F)

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

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

Cable Qualification StandardsANSI/ICEA S-104-696

EN50575 CPR Cable EuroClass Fire PerformanceCcaEN50575 CPR Cable EuroClass Smoke Ratings1bEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Low Smoke Zero Halogen (LSZH)

Flame Test Listing NEC OFNR (UL) and c(UL)

Flame Test Method CSA FT4 | 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

 Low High Bend
 -20 °C to +60 °C (-4 °F to +140 °F)

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

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

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

Packaging and Weights

**Cable weight** 431 kg/km | 289.619 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-8Z-RR-I\O – Low Water Peak Dispersion-Unshifted Singlemode Rollable Ribbon

\* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



## CS-8Z-RR-I\O

#### Low Water Peak Dispersion-Unshifted Singlemode Rollable Ribbon

#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Coating/Cladding Concentricity Error, maximum12 μmCore/Clad Offset, maximum0.5 μm

Proof Tensile Stress 100,000 psi (0.69 GPa)

**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, 60 mm Ø mandrel, 100 turns
 0.03 dB @ 1,550 nm
 0.03 dB @ 1,625 nm

Dynamic Fatigue Parameter, minimum 18

Optical Specifications

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

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

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## CS-8Z-RR-I\O

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 | 0.40 dB/km @ 1,385 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 | 1.468 @ 1,385 nm | 1.468 @ 1,550

nm

**Mode Field Diameter** 10.4 μm @ 1,550 nm | 9.2 μm @ 1,310 nm | 9.6 μm @

1,385 nm

**Mode Field Diameter Tolerance**  $\pm 0.4 \, \mu \text{m} \ @ \ 1310 \, \text{nm} \ | \ \pm 0.5 \, \mu \text{m} \ @ \ 1550 \, \text{nm} \ | \ \pm 0.6 \, \mu \text{m}$ 

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.2 ps/sqrt(km)

Standards Compliance ITU-T G.652.D | 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

