

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

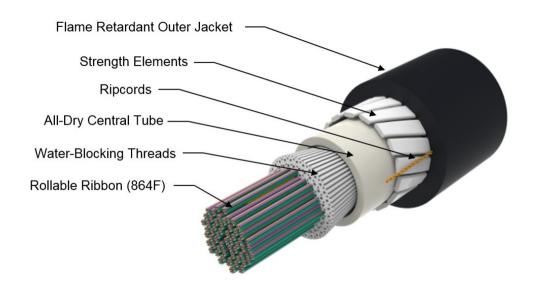
Cable Length 3000 m | 9,842.52 ft

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

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

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)

 $\label{eq:linear_problem} \textit{Flame Test Listing} \qquad \qquad \textit{NEC OFNR (UL) and c(UL)}$

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



Page 3 of 6

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

Cladding Diameter 125 µm **Cladding Diameter Tolerance** ±0.7 µm 1 % **Cladding Non-Circularity, maximum Coating Diameter (Colored)** 250 µm **Coating Diameter (Uncolored)** 245 µm **Coating Diameter Tolerance (Colored)** $\pm 15 \, \mu m$ **Coating Diameter Tolerance (Uncolored)** ±10 μm Coating/Cladding Concentricity Error, maximum 12 µm

Proof Test 689.476 N/mm² | 100000 psi

Dimensions

Core/Clad Offset, maximum

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

0.5 µm

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 \ \mu \text{m} \ @ \ 1,550 \ \text{nm} \quad | \ 9.2 \ \mu \text{m} \ @ \ 1,310 \ \text{nm} \quad | \ 9.6 \ \mu \text{m} \ @ \ 1,000 \ \text{m} \ | \ 9.6 \ \mu \text{m} \ | \ 9.6 \$

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

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