

Fiber indoor/outdoor cable, All-Dielectric, LSZH, Riser-Rated, Gel-Free, Central Tube Rollable Ribbon, 864 fiber, Singlemode G.657.A2/B2, 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

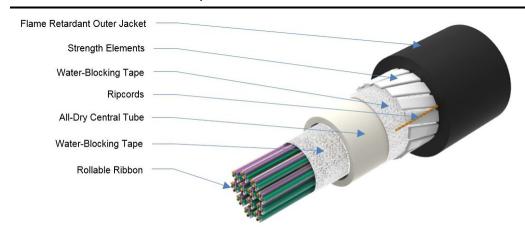
Total Fiber Count 864

Dimensions

Buffer Tube/Subunit Diameter9.2 mm0.362 inDiameter Over Jacket17 mm0.669 in

Representative Image





Mechanical Specifications

Minimum Bend Radius, loaded 432 mm | 17.008 in

Minimum Bend Radius, unloaded 216 mm | 8.504 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.657.A2/B2

Environmental Specifications

Installation temperature $-20 \,^{\circ}\text{C} \, \text{to} + 60 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F to} + 140 \,^{\circ}\text{F})$ Operating Temperature $-40 \,^{\circ}\text{C} \, \text{to} + 70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to} + 158 \,^{\circ}\text{F})$ Storage Temperature $-40 \,^{\circ}\text{C} \, \text{to} + 70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to} + 158 \,^{\circ}\text{F})$

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

EN50575 CPR Cable EuroClass Fire Performance Cca **EN50575 CPR Cable EuroClass Smoke Rating** s1b **EN50575 CPR Cable EuroClass Droplets Rating** d2 **EN50575 CPR Cable EuroClass Acidity Rating** a1

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

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

Flame Test Method CSA FT4 | EN 50399 | IEC 60332-1-1 | 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 °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 269 kg/km | 180.76 lb/kft

Regulatory Compliance/Certifications

Agency Classification **ANATEL** Compliant

CHINA-ROHS Below maximum concentration value

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant **UK-ROHS** Compliant









Included Products

CS-8G1-200UM-LT

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



CS-8G1-200UM-LT

200 Micron Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode 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 % 200 µm **Coating Diameter (Colored) Coating Diameter (Uncolored)** 190 µm **Coating Diameter Tolerance (Colored)** ±10 μm **Coating Diameter Tolerance (Uncolored)** ±10 μm Coating/Cladding Concentricity Error, maximum 12 µm Core/Clad Offset, maximum $0.5 \, \mu m$

Proof Test 689.476 N/mm² | 100000 psi

Dimensions

Fiber Curl, minimum 4 m | 13.123 ft

Mechanical Specifications

Macrobending, 15 mm Ø mandrel, 1 turn 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, maximum $8.9 \, \text{N}$ | $2.001 \, \text{lbf}$ Coating Strip Force, minimum $0.4 \, \text{N}$ | $0.09 \, \text{lbf}$

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

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

COMMSCOPE®

CS-8G1-200UM-LT

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

Zero Dispersion Wavelength, maximum1322 nmZero Dispersion Wavelength, minimum1302 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.25 dB/km @ 1,550 nm | 0.33 dB/km @ 1,385

nm | 0.36 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

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 8.7~\mu m \ @ 1,310~nm \quad | \quad 9.8~\mu m \ @ 1,550~nm$

Mode Field Diameter Tolerance $\pm 0.3 \, \mu \text{m} \ @ \ 1310 \, \text{nm} \ | \ \pm 0.5 \, \mu \text{m} \ @ \ 1550 \, \text{nm}$

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, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 dB/km

Water Immersion, maximum 0.05 dB/km @ 23 °C

* 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

