

Fiber indoor/outdoor cable, All-Dielectric, LSZH, Gel-Free, Riser Rated, Central Core Rollable Ribbon, 2880 fiber, Singlemode G.657.A2, 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

Fibers per Subunit, quantity 144

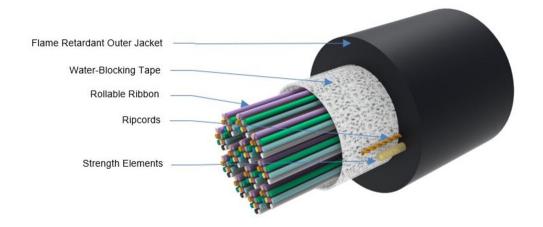
Total Fiber Count 2880

**Dimensions** 

**Diameter Over Jacket** 28 mm | 1.102 in

Representative Image





### Mechanical Specifications

Minimum Bend Radius, loaded 560 mm | 22.047 in

Minimum Bend Radius, unloaded280 mm11.024 inTensile Load, long term, maximum810 N182.095 lbf

**Tensile Load, short term, maximum** 2700 N | 606.984 lbf

**Compression** 22 N/mm | 125.623 lb/in

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

Flex 25 cycles

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

**Impact** 4.4 N-m | 38.943 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

### **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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-40 °C to +70 °C (-40 °F to +158 °F) **Storage Temperature** 

ANSI/ICEA S-104-696 | Telcordia GR-20 **Cable Qualification Standards** 

**EN50575 CPR Cable EuroClass Fire Performance** Cca **EN50575 CPR Cable EuroClass Smoke Rating** s1b **EN50575 CPR Cable EuroClass Droplets Rating** d0 **EN50575 CPR Cable EuroClass Acidity Rating** a1

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

Flame Test Method 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 720 kg/km | 483.818 lb/kft

### Regulatory Compliance/Certifications

#### Classification Agency **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/mm<sup>2</sup> | 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

