

Fiber indoor cable, All-Dielectric, LSZH/Riser-Rated, Gel-Free, Central Tube 200µm Rollable Ribbon, 288 fiber, Singlemode G.657.A2/B2, Feet jacket marking, Yellow jacket color, Cca flame rating

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North

America

Portfolio CommScope®

Product Type Fiber indoor cable

Product Series N-CN

General Specifications

Cable Type Ribbon central tube

Construction Type Non-armored

Subunit Type Gel-free

Fibers per Ribbon, quantity 16

Jacket Color Yellow

Jacket Marking Feet

Total Fiber Count 288

Dimensions

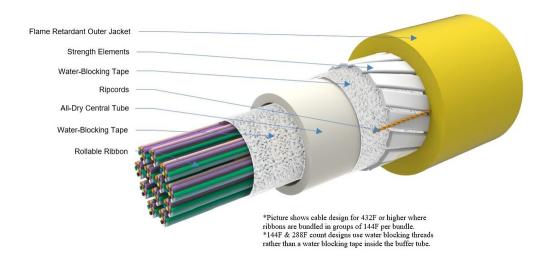
Buffer Tube/Subunit Diameter 6.5 mm | 0.256 in

Diameter Over Jacket 10.9 mm | 0.429 in

Representative Image



/C



Mechanical Specifications

•	
Minimum Bend Radius, loaded	109 mm 4.291 in
Minimum Bend Radius, storage coils	218 mm 8.583 in
Minimum Bend Radius, unloaded	55 mm 2.165 in
Tensile Load, long term, maximum	800 N 179.847 lbf
Tensile Load, short term, maximum	2700 N 606.984 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 | G.657.A2/B2

Environmental Specifications



/

Storage Temperature

Installation temperature $-20 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ (-4 $^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

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

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** s1a

EN50575 CPR Cable EuroClass Droplets Rating d1
EN50575 CPR Cable EuroClass Acidity Rating a1

Environmental Space Low Smoke Zero Halogen (LSZH) | Riser

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

Flame Test Method CSA FT4 | IEC 60332-1-2 | IEC 60754-2 | IEC 61034-2 | UL

1666 | UL 1685

-40 °C to +70 °C (-40 °F to +158 °F)

Environmental Test Specifications

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 $-20 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C} \left(-4 \,^{\circ}\text{F to} + 158 \,^{\circ}\text{F}\right)$

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

Packaging and Weights

Cable weight 95 kg/km | 63.837 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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-8G-200UM-LT – 200 Micron Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2)

* Footnotes

Page 3 of 6



Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8G-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 ±0.7 µm **Cladding Diameter Tolerance** 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
 0.50 dB @ 1,550 nm
 1 0.00 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, minimum0.4 N | 0.09 lbf

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

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

COMMSCOPE®

CS-8G-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

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

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, 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

