

Fiber indoor/outdoor cable, All-Dielectric, LSZH/Riser-Rated, Gel-Free, Central Tube Rollable Ribbon, 576 fiber, Singlemode G.657.A2, 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/outdoor cable

Product Series N-CN

General Specifications

Cable Type Ribbon central tube

Construction Type Non-armored

Subunit Type Gel-free

Fibers per Ribbon, quantity 12

Jacket Color Yellow

Jacket Marking Feet

Total Fiber Count 576

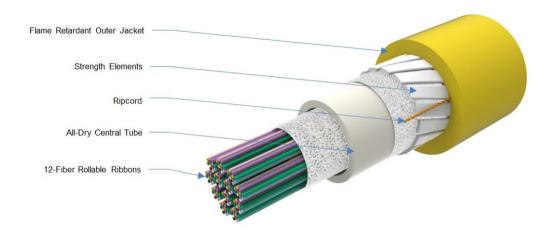
Dimensions

Buffer Tube/Subunit Diameter12 mm0.472 inDiameter Over Jacket17 mm0.669 in

Representative Image



10 N/mm | 57.101 lb/in



Mechanical Specifications

Compression

Minimum Bend Radius, loaded 340 mm | 13.386 in

Minimum Bend Radius, storage coils 680 mm | 26.772 in

Minimum Bend Radius, unloaded 127 mm | 5 in

Tensile Load, long term, maximum 800 N | 179.847 lbf

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

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

Vertical Rise, maximum 289 m | 948.163 ft

Optical Specifications

Fiber Type G.657.A2 | G.657.A2, TeraSPEED®

Environmental Specifications



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

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

Storage 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 PerformanceCcaEN50575 CPR Cable EuroClass Smoke Ratings1bEN50575 CPR Cable EuroClass Droplets Ratingd0

EN50575 CPR Cable EuroClass Acidity Rating a1

Environmental Space Indoor/Outdoor | Low Smoke Zero Halogen (LSZH) | Riser

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

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

1666 | UL 1685

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

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

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

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

Packaging and Weights

Cable weight 283 kg/km | 190.167 lb/kft

Packaging Type Reel

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

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Included Products

CS-8G1-RR-INDOOR

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



CS-8G1-RR-INDOOR

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Rollable Ribbon 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 % **Coating Diameter (Colored)** $249 \, \mu m$ **Coating Diameter (Uncolored)** 242 µm **Coating Diameter Tolerance (Colored)** ±13 μm **Coating Diameter Tolerance (Uncolored)** ±5 µm Coating/Cladding Concentricity Error, maximum 12 µm Core/Clad Offset, maximum 0.5 µm

Proof Tensile Stress 100,000 psi (0.69 GPa)

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, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

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

COMMSCOPE®

CS-8G1-RR-INDOOR

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

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1302 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.3 dB/km @ 1,550 nm | 0.35 dB/km @ 1,385 nm | 0.4

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

Mode Field Diameter 8.6 μ m @ 1,310 nm | 9.8 μ m @ 1,550 nm

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

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

