# R-001-SP-8G-F29IV/WB



Fiber indoor cable, All-Dielectric Indoor Riser Simplex, Singlemode G.657. A2/B2, Feet jacket marking, Ivory jacket color

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | Latin America | Middle East/Africa | North

America

Portfolio CommScope®

**Product Type** Fiber indoor cable

Product Series R-SP

General Specifications

Cable Type Cordage

Construction Type Non-armored

**Subunit Type** Gel-free

Jacket Color Ivory

Jacket Marking Feet

Total Fiber Count

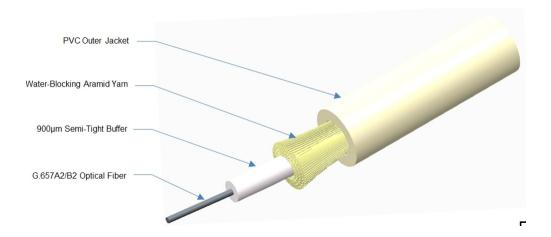
**Dimensions** 

**Diameter Over Jacket** 2.9 mm | 0.114 in

Representative Image



# R-001-SP-8G-F29IV/WB



## Mechanical Specifications

Minimum Bend Radius, loaded50 mm | 1.969 inMinimum Bend Radius, unloaded30 mm | 1.181 inTensile Load, long term, maximum30 N | 6.744 lbfTensile Load, short term, maximum100 N | 22.481 lbf

 Compression
 22 N/mm | 125.623 lb/in

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

Flex 300 cycles

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

**Impact** 0.74 N-m | 6.55 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** 334 m | 1,095.801 ft

**Optical Specifications** 

**Fiber Type** G.657.A2/B2 | G.657.A2/B2

### **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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## R-001-SP-8G-F29IV/WB

**Storage Temperature**  $-40 \,^{\circ}\text{C}$  to  $+75 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+167 \,^{\circ}\text{F}$ )

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

Environmental Space Riser

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

Flame Test Method CSA FT4 | UL 1666

Jacket UV Resistance UV stabilized

**Water Penentration** 24 h

Water Penentration 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**  $-40 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$   $(-40 \,^{\circ}\text{F to} +185 \,^{\circ}\text{F})$ 

**Heat Age Test Method** IEC 60794-1 F9

**Low High Bend**  $-30 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$ 

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

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

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

Packaging and Weights

**Cable weight** 7.9 kg/km | 5.309 lb/kft

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



#### Included Products

CS-8G-TB – 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-8G-TB

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 % **Coating Diameter (Colored)** 249 µm **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  $0.5 \, \mu m$ 

**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
 0.50 dB @ 1,550 nm
 1 1.00 dB @ 1,625 nm

 Macrobending, 20 mm Ø mandrel, 1 turn
 0.10 dB @ 1,550 nm
 1 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

Dynamic Fatigue Parameter, minimum 20

**Optical Specifications** 

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

**COMMSCOPE®** 

## CS-8G-TB

**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** 0.50 dB/km @ 1,310 nm | 0.50 dB/km @ 1,385

nm | 0.50 dB/km @ 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 | 1.467 @ 1,385 nm | 1.468 @ 1,550

nm

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 8.6~\mu m \ @ 1,310~nm \hspace{0.2cm} | \hspace{0.2cm} 9.8~\mu m \ @ 1,550~nm$ 

**Mode Field Diameter Tolerance**  $\pm 0.4 \ \mu m$  @ 1310 nm |  $\pm 0.5 \ \mu m$  @ 1550 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

### 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

