

Fiber indoor cable, Low Smoke Zero Halogen Riser MPO Trunk, 48 fiber multi-unit with 12 fiber subunits, Gel-free, Singlemode G.657.A2/B2, Feet jacket marking, Yellow jacket color, Dca 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-MP

## General Specifications

Cable Type MPO trunk cable

Construction Type Non-armored

**Subunit Type** Gel-free

Jacket Color Yellow

Jacket Marking Feet

Subunit, quantity 4

Fibers per Subunit, quantity 12

Total Fiber Count 48

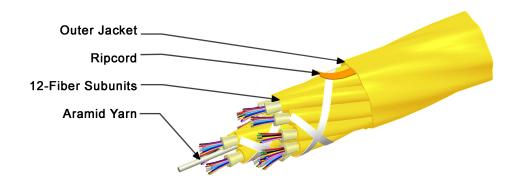
### Dimensions

Buffer Tube/Subunit Diameter 3 mm | 0.118 in

Diameter Over Jacket 9.2 mm | 0.362 in

Representative Image





## Mechanical Specifications

Minimum Bend Radius, unloaded

Minimum Bend Radius, loaded 138 mm | 5.433 in

Tensile Load, long term, maximum 400 N | 89.924 lbf

**Tensile Load, short term, maximum** 1335 N | 300.12 lbf

 Compression
 10 N/mm | 57.101 lb/in

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

92 mm | 3.622 in

Flex 300 cycles

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

**Impact** 5.88 N-m | 52.042 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** 500 m | 1,640.42 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  $+140 \,^{\circ}\text{F}$ )

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

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-83-596 | Telcordia GR-409

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd1EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Low Smoke Zero Halogen (LSZH) | Riser

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

Flame Test Method | IEC 60332-3 | IEC 60754-2 | IEC 61034-2 | UL 1666 | UL 1685

**Environmental Test Specifications** 

**Heat Age**  $-20 \,^{\circ}\text{C}$  to  $+85 \,^{\circ}\text{C}$   $(-4 \,^{\circ}\text{F}$  to  $+185 \,^{\circ}\text{F})$ 

Heat Age Test Method IEC 60794-1 F9

Low High Bend $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4 °F to +158 °F)Low High Bend Test MethodFOTP-37 | IEC 60794-1 E11Temperature Cycle $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4 °F to +158 °F)

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

Packaging and Weights

**Cable weight** 72 kg/km | 48.382 lb/kft

## Regulatory Compliance/Certifications

Agency Classification

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

CHINA-ROHS Below maximum concentration value

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

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

ROHS Compliant UK-ROHS Compliant



### Included Products

CS-8G1-MP – Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T

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G.657.A2, B2)

\* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

# CS-8G1-MP

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 % **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
 | 1.00 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

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# CS-8G1-MP

**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** 0.40 dB/km @ 1,310 nm | 0.40 dB/km @ 1,385

nm | 0.40 dB/km @ 1,550 nm | 0.50 dB/km @ 1,625

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 μm @ 1,310 nm | 9.8 μm @ 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

## 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

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