

Fiber OSP cable, A2 Dual-sheathed HDPE Drop, LSZH Subunit, Loose buffer, Singlemode, G.657.A2, 1 fiber, Gel-filled, Meters jacket marking, Black jacket color

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America

 Portfolio
 CommScope®

 Product Type
 Fiber drop cable

**Product Series** Z-DN

## General Specifications

Cable Type Outdoor drop with indoor subunit

Construction TypeNon-armoredSubunit TypeGel-filledInner Jacket ColorWhite

Jacket ColorBlackJacket MarkingMetersJacket Marking MethodInkjet

Jacket Marking Text COMMSCOPE 760243583 [DD/MM/YYYY] 1FO G657A2 [SERIAL NUMBER] [METRE MARK]

Subunit, quantity 1

Fibers per Subunit, quantity 1

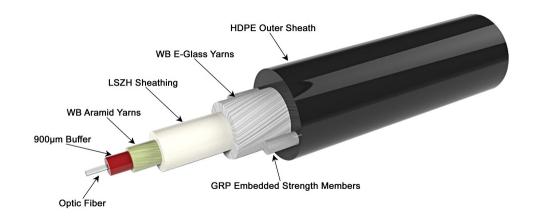
Total Fiber Count 1

**Dimensions** 

Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Jacket5 mm | 0.197 in

## Representative Image





## Material Specifications

Jacket MaterialHigh density polyethylene (HDPE)Inner Jacket MaterialLow Smoke Zero Halogen (LSZH)

#### Mechanical Specifications

Minimum Bend Radius, loaded50 mm1.969 inTensile Load, long term, maximum400 N89.924 lbfTensile Load, short term, maximum880 N1.97.832 lbf

 Compression
 20 N/mm | 114.203 lb/in

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

Flex 35 cycles

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

**Impact** 5 N-m | 44.254 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 | G.657.A2, TeraSPEED®

## **Environmental Specifications**



Operating Temperature  $-40 \,^{\circ}\text{C}$  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 StandardsIEC 60794-1-2| Telcordia GR-20

Environmental Space Aerial, lashed | Buried | Drop | Façade | Underground (duct)

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** -30 °C to +60 °C (-22 °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** 23.5 kg/km | 15.791 lb/kft

## Regulatory Compliance/Certifications

#### Agency Classification

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

G.657.A2, B2)

#### \* Footnotes

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

# CS-8G-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 ±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

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-8G-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

0.06 ps/sgrt(km)

**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  $\pm 0.4 \ \mu m$  @ 1310 nm |  $\pm 0.5 \ \mu m$  @ 1550 nm

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

Polarization Mode Dispersion Link Design Value, maximum

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

