# 810010476/DB | D-004-DN-8G-M04BK/AY-0500-UK00



Optical Fiber OSP Drop cable, HDPE jacket, ST buffer, Singlemode, G.657. A2, 4 fiber, meter marked, black jacket color. Box Packaged in 500m lengths.

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America

 Portfolio
 CommScope®

 Product Type
 Fiber drop cable

**Product Series** D-DN

General Specifications

Cable Type Drop

Construction Type Non-armored

Jacket ColorBlackJacket MarkingMeters

Fibers per Subunit, quantity 4

Total Fiber Count 4

**Buffer Type** Micro-module

**Buffer Strip** 500 mm | 19.685 in

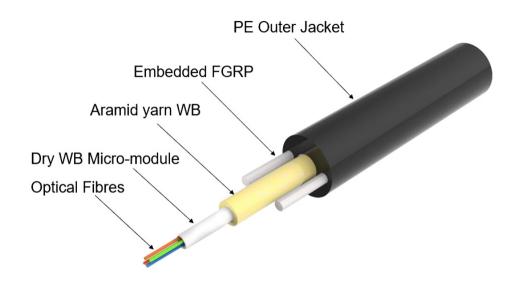
**Dimensions** 

Cable Length500 m | 1,640.42 ftBuffer Tube/Subunit Diameter1.1 mm | 0.043 inDiameter Over Jacket5 mm | 0.197 in

Representative Image



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# Material Specifications

Jacket Material High density polyethylene (HDPE)

## Mechanical Specifications

Minimum Bend Radius, loaded60 mm2.362 inMinimum Bend Radius, unloaded30 mm1.181 inTensile Load, long term, maximum400 N89.924 lbf

Fiber Strain, long term, maximum 0.33%

**Tensile Load, short term, maximum** 800 N | 179.847 lbf

Fiber Strain, short term, maximum 0.66 %

**Compression** 20 N/mm | 114.203 lb/in

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

Flex 100 cycles

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

**Impact** 10 N-m | 88.507 in lb

 Impact Test Method
 FOTP-25 | IEC 60794-1 E4

 Strain Test Method
 FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

**COMMSCOPE®** 

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## Optical Specifications

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

### **Environmental Specifications**

Installation temperature

-10 °C to +60 °C (+14 °F to +140 °F)

Operating Temperature

-20 °C to +70 °C (-4 °F to +158 °F)

Storage Temperature

-20 °C to +70 °C (-4 °F to +158 °F)

Cable Qualification Standards

IEC 60794-1-2 | Telcordia GR-20

Environmental Space Aerial, self-support | 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 Test Method FOTP-98 | IEC 60794-1 F15

**Heat Age** -20 °C to +85 °C (-4 °F to +185 °F)

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

**Low High Bend**  $-10 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \text{ (+14 }^{\circ}\text{F to } +140 \,^{\circ}\text{F)}$ 

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

**Temperature Cycle** -20 °C to +60 °C (-4 °F to +140 °F)

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

Packaging and Weights

Cable weight 15 kg/km | 10.08 lb/kft

#### Included Products

CS-8G-MP – 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-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** 0.7 % Cladding Non-Circularity, maximum **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 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

**COMMSCOPE®** 

# 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

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

**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

