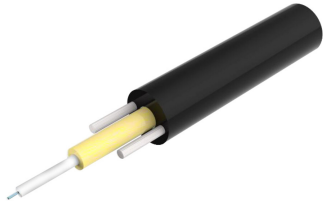


# 810010475/DB | D-001-DN-8G-M01BK/AY-0500-UK00

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Optical Fiber OSP Drop cable, HDPE jacket, ST buffer, Singlemode, G.657. A2, 1 fiber, meter marked, black jacket color. Box Packaged in 500m lengths.

## Product Classification

|                              |   |
|------------------------------|---|
| <b>Regional Availability</b> | Asia   Australia/New Zealand   EMEA   Latin America |
| <b>Portfolio</b>             | CommScope®  |
| <b>Product Type</b>          | Fiber drop cable                                    |
| <b>Product Series</b>        | D-DN  |

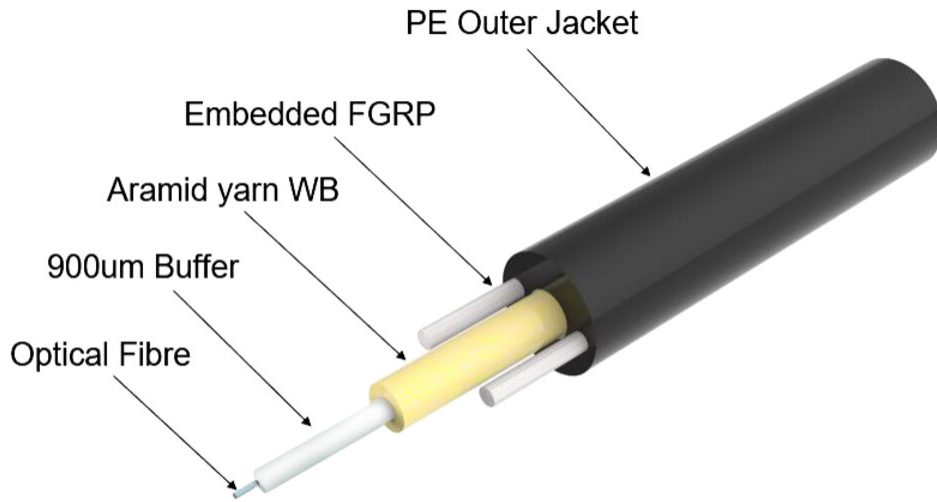
## General Specifications

|                                     |                    |
|-------------------------------------|--------------------|
| <b>Cable Type</b>                   | Drop               |
| <b>Construction Type</b>            | Non-armored        |
| <b>Jacket Color</b>                 | Black              |
| <b>Jacket Marking</b>               | Meters             |
| <b>Fibers per Subunit, quantity</b> | 1                  |
| <b>Total Fiber Count</b>            | 1                  |
| <b>Buffer Type</b>                  | Semi-tight         |
| <b>Buffer Strip</b>                 | 500 mm   19.685 in |

## Dimensions

|                                     |                     |
|-------------------------------------|---------------------|
| <b>Cable Length</b>                 | 500 m   1,640.42 ft |
| <b>Buffer Tube/Subunit Diameter</b> | 0.9 mm   0.035 in   |
| <b>Diameter Over Jacket</b>         | 5 mm   0.197 in     |

## Representative Image



## Material Specifications

**Jacket Material** High density polyethylene (HDPE)

## Mechanical Specifications

|  |                           |
|--|---------------------------|
| <b>Minimum Bend Radius, loaded</b>       | 60 mm   2.362 in          |
| <b>Minimum Bend Radius, unloaded</b>     | 30 mm   1.181 in          |
| <b>Tensile Load, long term, maximum</b>  | 400 N   89.924 lbf        |
| <b>Fiber Strain, long term, maximum</b>  | 0.33 %                    |
| <b>Tensile Load, short term, maximum</b> | 800 N   179.847 lbf       |
| <b>Fiber Strain, short term, maximum</b> | 0.66 %                    |
| <b>Compression</b>                       | 20 N/mm   114.203 lb/in   |
| <b>Compression Test Method</b>           | FOTP-41   IEC 60794-1 E3  |
| <b>Flex</b>                              | 100 cycles                |
| <b>Flex Test Method</b>                  | FOTP-104   IEC 60794-1 E6 |
| <b>Impact</b>                            | 10 N-m   88.507 in lb     |
| <b>Impact Test Method</b>                | FOTP-25   IEC 60794-1 E4  |
| <b>Strain Test Method</b>                | FOTP-33   IEC 60794-1 E1  |
| <b>Twist</b>                             | 10 cycles                 |
| <b>Twist Test Method</b>                 | FOTP-85   IEC 60794-1 E7  |

## Optical Specifications

**Fiber Type** 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 °C to +60 °C (+14 °F to +140 °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

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

## Product Classification

|                     |               |
|---------------------|---------------|
| <b>Portfolio</b>    | CommScope®    |
| <b>Product Type</b> | Optical fiber |

## General Specifications

|  |  |
|--|--|
| <b>Cladding Diameter</b>                             | 125 µm                                 |
| <b>Cladding Diameter Tolerance</b>                   | ±0.7 µm                                |
| <b>Cladding Non-Circularity, maximum</b>             | 0.7 %                                  |
| <b>Coating Diameter (Colored)</b>                    | 249 µm                                 |
| <b>Coating Diameter (Uncolored)</b>                  | 242 µm                                 |
| <b>Coating Diameter Tolerance (Colored)</b>          | ±13 µm                                 |
| <b>Coating Diameter Tolerance (Uncolored)</b>        | ±5 µm                                  |
| <b>Coating/Cladding Concentricity Error, maximum</b> | 12 µm                                  |
| <b>Core/Clad Offset, maximum</b>                     | 0.5 µm                                 |
| <b>Proof Test</b>                                    | 689.476 N/mm <sup>2</sup>   100000 psi |

## Dimensions

|                            |                 |
|----------------------------|-----------------|
| <b>Fiber Curl, minimum</b> | 4 m   13.123 ft |
|----------------------------|-----------------|

## Mechanical Specifications

|  |   |
|--|---|
| <b>Macrobending, 15 mm Ø mandrel, 1 turn</b>   | 0.50 dB @ 1,550 nm   1.00 dB @ 1,625 nm |
| <b>Macrobending, 20 mm Ø mandrel, 1 turn</b>   | 0.10 dB @ 1,550 nm   0.20 dB @ 1,625 nm |
| <b>Macrobending, 30 mm Ø mandrel, 10 turns</b> | 0.03 dB @ 1,550 nm   0.10 dB @ 1,625 nm |
| <b>Coating Strip Force, maximum</b>            | 8.9 N   2.001 lbf                       |
| <b>Coating Strip Force, minimum</b>            | 1.3 N   0.292 lbf                       |
| <b>Dynamic Fatigue Parameter, minimum</b>      | 20                                      |

## Optical Specifications

|  |         |
|--|---------|
| <b>Cabled Cutoff Wavelength, maximum</b> | 1260 nm |
| <b>Point Defects, maximum</b>            | 0.1 dB  |

# CS-8G-MP

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|  |                     |
|--|---------------------|
| <b>Zero Dispersion Slope, maximum</b>      | 0.092 ps/[km-nm-nm] |
| <b>Zero Dispersion Wavelength, maximum</b> | 1324 nm             |
| <b>Zero Dispersion Wavelength, minimum</b> | 1302 nm             |

## Optical Specifications, Wavelength Specific

|  |   |
|--|---|
| <b>Attenuation, maximum</b>                                    | 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 |
| <b>Dispersion, maximum</b>                                     | 18 ps(nm-km) at 1550 nm   3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm                    |
| <b>Index of Refraction</b>                                     | 1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 nm  |
| <b>Mode Field Diameter</b>                                     | 8.6 $\mu\text{m}$ @ 1,310 nm   9.8 $\mu\text{m}$ @ 1,550 nm                                   |
| <b>Mode Field Diameter Tolerance</b>                           | $\pm 0.4 \mu\text{m}$ @ 1310 nm   $\pm 0.5 \mu\text{m}$ @ 1550 nm                             |
| <b>Polarization Mode Dispersion Link Design Value, maximum</b> | 0.06 ps/sqrt(km)  |
| <b>Standards Compliance</b>                                    | ITU-T G.657.A2   ITU-T G.657.B2   |

## Environmental Specifications

|  |                    |
|--|--------------------|
| <b>Heat Aging, maximum</b>                   | 0.05 dB/km @ 85 °C |
| <b>Temperature Dependence, maximum</b>       | 0.05 dB/km         |
| <b>Temperature Humidity Cycling, maximum</b> | 0.05 dB/km         |
| <b>Water Immersion, maximum</b>              | 0.05 dB/km @ 23 °C |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

## \* Footnotes

|  |   |
|--|---|
| <b>Temperature Dependence, maximum</b>       | Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)                                   |
| <b>Temperature Humidity Cycling, maximum</b> | Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity |