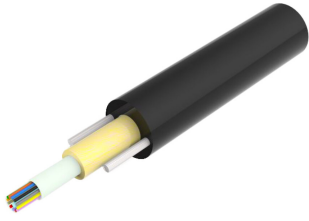


810010477/DB | D-012-DN-8G-M12BK/AY-0500-UK00



Optical Fiber OSP Drop cable, HDPE jacket, ST buffer, Singlemode, G.657. A2, 12 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 |

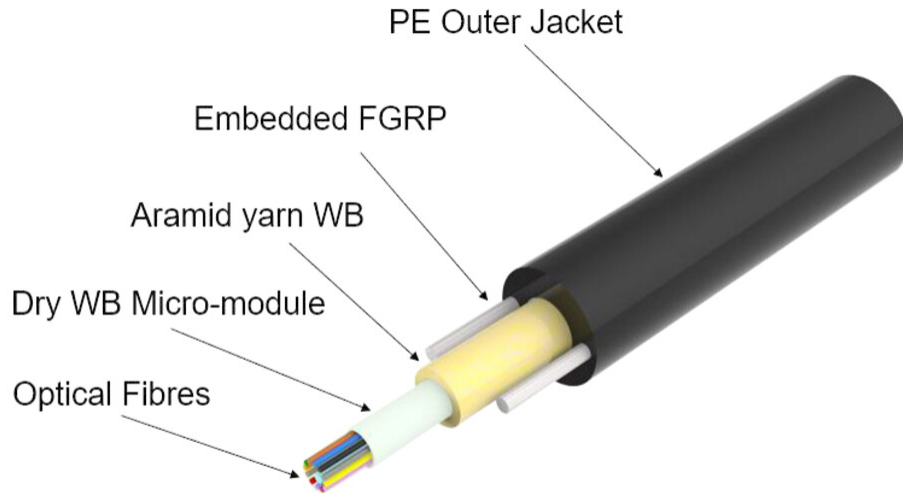
General Specifications

| | |
|-------------------------------------|--------------------|
| Cable Type | Drop |
| Construction Type | Non-armored |
| Jacket Color | Black |
| Jacket Marking | Meters |
| Fibers per Subunit, quantity | 12 |
| Total Fiber Count | 12 |
| Buffer Type | Micro-module |
| Buffer Strip | 500 mm 19.685 in |

Dimensions

| | |
|-------------------------------------|---------------------|
| Cable Length | 500 m 1,640.42 ft |
| Buffer Tube/Subunit Diameter | 1.45 mm 0.057 in |
| Diameter Over Jacket | 5 mm 0.197 in |

Representative Image



Material Specifications

Jacket Material High density polyethylene (HDPE)

Mechanical Specifications

| | |
|--|---------------------------|
| Minimum Bend Radius, loaded | 60 mm 2.362 in |
| Minimum Bend Radius, unloaded | 30 mm 1.181 in |
| Tensile Load, long term, maximum | 400 N 89.924 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 |

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

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 | ±0.7 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 µm |
| Proof Test | 689.476 N/mm ² 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, maximum | 8.9 N 2.001 lbf |
| Coating Strip Force, minimum | 1.3 N 0.292 lbf |
| Dynamic Fatigue Parameter, minimum | 20 |

Optical Specifications

| | |
|--|---------|
| Cabled Cutoff Wavelength, maximum | 1260 nm |
| Point Defects, maximum | 0.1 dB |

CS-8G-MP

| | |
|--|---------------------|
| Zero Dispersion Slope, maximum | 0.092 ps/[km-nm-nm] |
| Zero Dispersion Wavelength, maximum | 1324 nm |
| Zero Dispersion Wavelength, minimum | 1302 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 nm $\pm 0.5 \mu\text{m}$ @ 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, 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 |