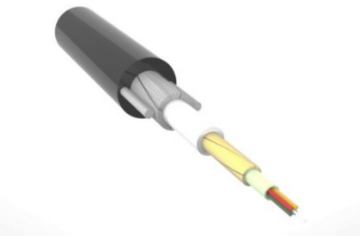
# 810010000/DB | D-004-DD-8F-M04BK/GY/20 /AY/D-DE00



Fiber Drop Cable, Duct and Aerial, FTTH, 4 fibers, Singlemode, G.657.A1, Gel-filled, Feet jacket marking, Black jacket, dual sheathed with indoor element (Dca class for subunit only)

## Product Classification

| | |
|---|---|
| **Regional Availability** | Asia \| Australia/New Zealand \| EMEA \| North America |
| **Portfolio** | CommScope® |
| **Product Type** | Fiber drop cable |
| **Product Series** | D-DD |

## General Specifications

| | |
|---|---|
| **Cable Type** | Central loose tube \| Drop \| Tight buffer |
| **Construction Type** | Breakout \| Non-armored |
| **Subunit Type** | Gel-free |
| **Inner Jacket Color** | White |
| **Jacket Color** | Black |
| **Jacket Marking** | Meters |
| **Jacket Marking Method** | Inkjet |
| **Jacket Marking Text** | COMMSCOPE GB F.O CABLE 810010000/DB 4X9/125 ITU-T G. 657A1 HDPE SERIAL No METER MARK |
| **Subunit, quantity** | 1 |
| **Fibers per Subunit, quantity** | 4 |
| **Total Fiber Count** | 4 |

## Dimensions

| | |
|---|---|
| **Cable Length** | 2,000 m \| 6,561.68 ft |
| **Buffer Tube/Subunit Diameter** | 2 mm \| 0.079 in |
| **Diameter Over Jacket** | 5 mm \| 0.197 in |

## Representative Image

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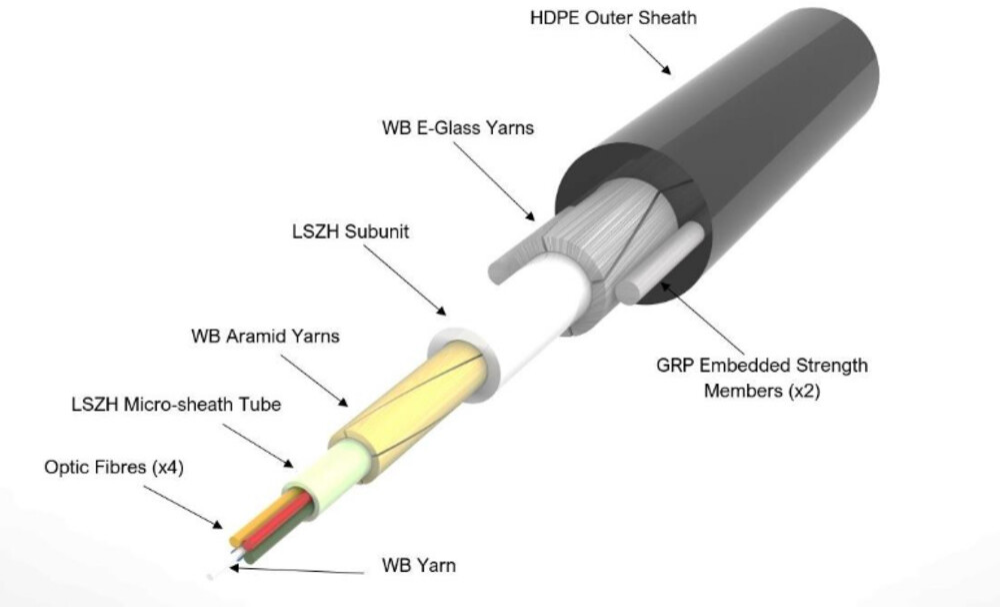


## Material Specifications

| | |
|---|---|
| **Jacket Material** | High density polyethylene (HDPE) |
| **Inner Jacket Material** | Low Smoke Zero Halogen (LSZH) |

## Mechanical Specifications

| | |
|---|---|
| **Minimum Bend Radius, loaded** | 50 mm \| 1.969 in |
| **Minimum Bend Radius, unloaded** | 30 mm \| 1.181 in |
| **Tensile Load, long term, maximum** | 400 N \| 89.924 lbf |
| **Tensile Load, short term, maximum** | 880 N \| 197.832 lbf |
| **Compression** | 300 N/mm \| 1,713.044 lb/in |
| **Compression Test Method** | IEC 60794-1 E3 |
| **Impact** | 7 N-m \| 61.955 in lb |
| **Impact Test Method** | IEC 60794-1 E4 |
| **Strain** | See long and short term tensile loads |
| **Strain Test Method** | IEC 60794-1 E1 |
| **Twist** | 10 cycles |
| **Twist Test Method** | IEC 60794-1 E7 |

## Optical Specifications

| | |
|---|---|
| **Fiber Type** | G.657.A1 |

## Environmental Specifications

| | |
|---|---|
| **Installation temperature** | -10 °C to +60 °C (+14 °F to +140 °F) |
| **Operating Temperature** | -40 °C to +70 °C (-40 °F to +158 °F) |
| **Storage Temperature** | -40 °C to +70 °C (-40 °F to +158 °F) |
| **Cable Qualification Standards** | IEC 60794-1-2 |
| **EN50575 CPR Cable EuroClass Fire Performance** | Dca |
| **EN50575 CPR Cable EuroClass Smoke Rating** | s1a |
| **EN50575 CPR Cable EuroClass Droplets Rating** | d0 |
| **EN50575 CPR Cable EuroClass Acidity Rating** | a1 |
| **Environmental Space** | Outdoor |
| **Jacket UV Resistance** | UV stabilized |
| **Water Penetration** | 168 h |
| **Water Penetration Test Method** | IEC 60794-1 F5 |

## Environmental Test Specifications

| | |
|---|---|
| **Temperature Cycle** | -40 °C to +70 °C (-40 °F to +158 °F) |
| **Temperature Cycle Test Method** | IEC 60794-1-22 F1 |

## Packaging and Weights

| | |
|---|---|
| **Cable weight** | 23 kg/km \| 15.455 lb/kft |

## Included Products

| | | |
|---|---|---|
| CS-8F-LT | – | Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber |

## * Footnotes

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

# CS-8F-LT

Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

## 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/mm² \| 100000 psi |

## Dimensions

| | |
|---|---|
| **Fiber Curl, minimum** | 4 m \| 13.123 ft |

## Mechanical Specifications

| | |
|---|---|
| **Macrobending, 20 mm Ø mandrel, 1 turn** | 0.75 dB @ 1,550 nm \| 1.50 dB @ 1,625 nm |
| **Macrobending, 30 mm Ø mandrel, 10 turns** | 0.25 dB @ 1,550 nm \| 1.00 dB @ 1,625 nm |
| **Macrobending, 50 mm Ø mandrel, 100 turns** | 0.03 dB @ 1,550 nm \| 0.05 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 |
| **Zero Dispersion Slope, maximum** | 0.09 ps/[km-nm-nm] |

| | |
|---|---|
| **Zero Dispersion Wavelength, maximum** | 1324 nm |
| **Zero Dispersion Wavelength, minimum** | 1300 nm |

## Optical Specifications, Wavelength Specific

| | |
|---|---|
| **Attenuation, maximum** | 0.25 dB/km @ 1,550 nm \| 0.27 dB/km @ 1,490 nm \| 0.27 dB/km @ 1,625 nm \| 0.33 dB/km @ 1,385 nm \| 0.36 dB/km @ 1,310 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** | ±0.4 µm @ 1310 nm \| ±0.5 µm @ 1550 nm |
| **Polarization Mode Dispersion Link Design Value, maximum** | 0.06 ps/sqrt(km) |
| **Standards Compliance** | ITU-T G.657.A1 \| TIA-492CAAB (OS2) |

## 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 |