

810010281/DB | B-012-CN-8G-M12BK/19G

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Fiber OSP cable, LightScope® ZWP Blown Single Jacket All-Dielectric Outdoor Central Tube Construction, Singlemode G.657.A2, 12 fiber, Gel-filled, Meters jacket marking, Black jacket color

Product Classification

|                       |                 |
|-----------------------|-----------------|
| Regional Availability | Europe          |
| Portfolio             | CommScope®      |
| Product Type          | Fiber OSP cable |
| Product Series        | B-CN            |

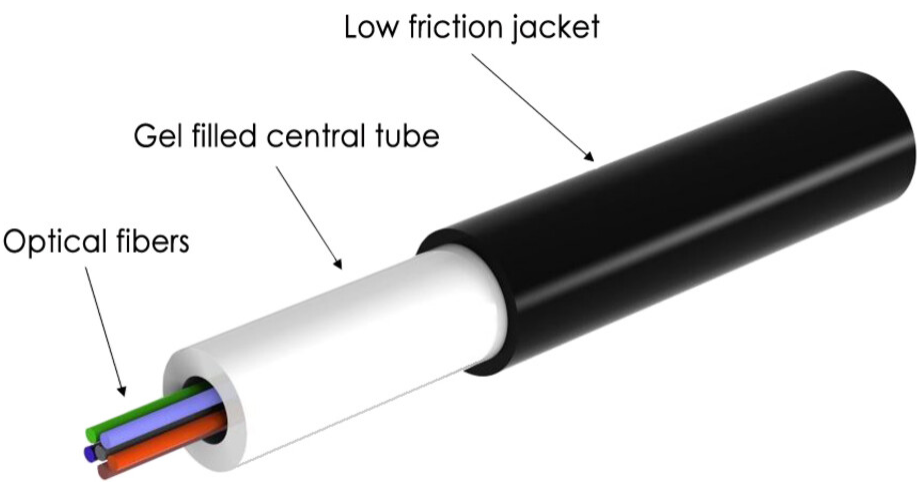
General Specifications

|                              |   |
|------------------------------|---|
| Cable Type                   | Central tube, all dielectric   Microcable   |
| Construction Type            | Non-armored   |
| Subunit Type                 | Gel-filled  |
| Filler, quantity             | 0   |
| Inner Jacket Color           | White   |
| Jacket Color                 | Black   |
| Jacket Marking               | Meters  |
| Jacket Marking Method        | Inkjet  |
| Jacket Marking Text          | COMMScope GB OPTICAL CABLE BLW 810010281/DB 12 x G657A2 SM [SERIAL NUMBER] [METER MARK] |
| Subunit, quantity            | 1   |
| Fibers per Subunit, quantity | 12  |
| Total Fiber Count            | 12  |

Dimensions

|                              |                   |
|------------------------------|-------------------|
| Buffer Tube/Subunit Diameter | 1.9 mm   0.075 in |
| Diameter Over Jacket         | 2.5 mm   0.098 in |

Representative Image



Material Specifications

**Jacket Material** Nylon

Mechanical Specifications

|   |                                       |
|---|---------------------------------------|
| <b>Minimum Bend Radius, loaded</b>        | 30 mm   1.181 in                      |
| <b>Minimum Bend Radius, storage coils</b> | 30 mm   1.181 in                      |
| <b>Minimum Bend Radius, unloaded</b>      | 30 mm   1.181 in                      |
| <b>Tensile Load, long term, maximum</b>   | 75 N   16.861 lbf                     |
| <b>Compression</b>                        | 10 N/mm   57.101 lb/in                |
| <b>Compression Test Method</b>            | IEC 60794-1-21 E3                     |
| <b>Flex</b>                               | 25 cycles                             |
| <b>Impact</b>                             | 2 N-m   17.701 in lb                  |
| <b>Impact Test Method</b>                 | IEC 60794-1-21 E4                     |
| <b>Strain</b>                             | See long and short term tensile loads |
| <b>Strain Test Method</b>                 | IEC 60794-1-21 E1                     |
| <b>Twist</b>                              | 10 cycles                             |
| <b>Twist Test Method</b>                  | IEC 60794-1-21 E7                     |

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 +60 °C (-4 °F to +140 °F)  |
| Storage Temperature           | -20 °C to +60 °C (-4 °F to +140 °F)  |
| Cable Qualification Standards | IEC 60794-1-2   IEC 60794-5-10       |
| Environmental Space           | Air-blown, microduct                 |
| Jacket UV Resistance          | UV stabilized                        |
| Water Penetration             | 24 h                                 |
| Water Penetration Test Method | IEC 60794-1 F5                       |

## Environmental Test Specifications

|                               |                                     |
|-------------------------------|-------------------------------------|
| Low High Bend Test Method     | IEC 60794-1-21 E11                  |
| Temperature Cycle             | -20 °C to +60 °C (-4 °F to +140 °F) |
| Temperature Cycle Test Method | IEC 60794-1-22 F1                   |

## Packaging and Weights

|              |                          |
|--------------|--------------------------|
| Cable weight | 6.9 kg/km   4.637 lb/kft |
|--------------|--------------------------|

## Regulatory Compliance/Certifications

| Agency     | Classification  |
|------------|---|
| CHINA-ROHS | Below maximum concentration value   |
| REACH-SVHC | Compliant as per SVHC revision on <a href="https://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS       | Compliant   |
| UK-ROHS    | Compliant   |



## Included Products

|          |   |  |
|----------|---|--|
| CS-8G-LT | – | 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-LT

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 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   1.00 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-LT

|   |  |
|---|--|
| 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                                    | 0.25 dB/km @ 1,550 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.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 |