



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

Product Classification

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

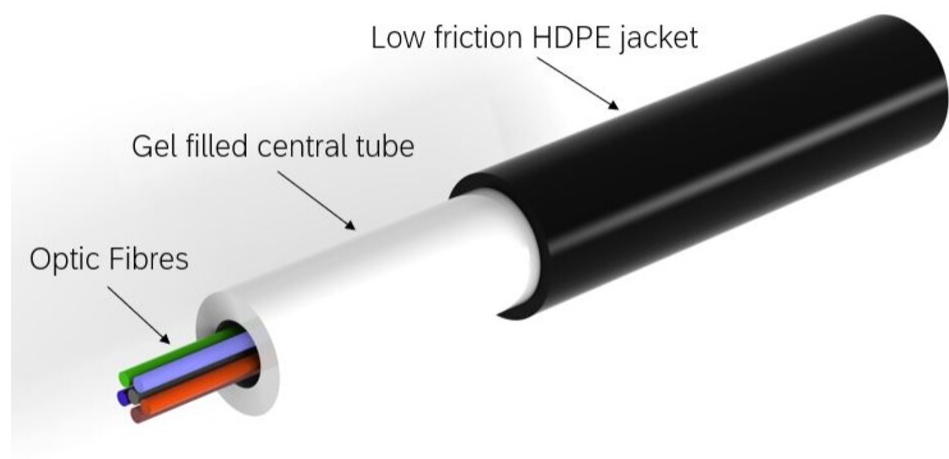
General Specifications

| | |
|------------------------------|--|
| 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 810010286/DB 12 x G657A2 SM HDPE [SERIAL NUMBER] [METER MARK] |
| Subunit, quantity | 1 |
| Fibers per Subunit, quantity | 12 |
| Total Fiber Count | 12 |

Dimensions

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|------------------------------|-------------------|
| Buffer Tube/Subunit Diameter | 3 mm 0.118 in |
| Diameter Over Jacket | 3.9 mm 0.154 in |

Representative Image



Material Specifications

Jacket Material

High density polyethylene (HDPE)

Mechanical Specifications

| | |
|------------------------------------|---------------------------------------|
| Minimum Bend Radius, loaded | 47 mm 1.85 in |
| Minimum Bend Radius, storage coils | 47 mm 1.85 in |
| Minimum Bend Radius, unloaded | 47 mm 1.85 in |
| Tensile Load, long term, maximum | 70 N 15.737 lbf |
| Compression | 10 N/mm 57.101 lb/in |
| Compression Test Method | IEC 60794-1-21 E3 |
| Flex | 25 cycles |
| Impact | 2 N-m 17.701 in lb |
| Impact Test Method | IEC 60794-1-21 E4 |
| Strain | See long and short term tensile loads |
| Strain Test Method | IEC 60794-1-21 E1 |
| Twist | 10 cycles |
| Twist Test Method | IEC 60794-1-21 E7 |

Optical Specifications

Fiber TypeG.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

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|--------------|--------------------------|
| Cable weight | 8.9 kg/km 5.981 lb/kft |
|--------------|--------------------------|

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

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|---|------------------------|
| 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

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

Mechanical Specifications

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|---|---|
| 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

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|-----------------------------------|---------|
| 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

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|---------------------------------------|--------------------|
| 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 |