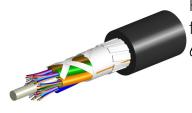
810010358/DB | 0-048-LN-8W-M08BK/20G



Fiber OSP cable, LightScope ZWP® Mini Single Jacket All-Dielectric, 48 fiber Arid Core construction, stranded loose tube, Gel-filled, Singlemode G. 652.D and G.657.A1, Feet jacket marking, Black jacket color

Product Classification

| Regional Availability | EMEA |
|------------------------------|---|
| Portfolio | CommScope® |
| Product Type | Fiber OSP cable |
| Product Series | O-LN |
| General Specifications | |
| Cable Type | Stranded loose tube |
| Construction Type | Non-armored |
| Subunit Type | Gel-filled |
| Filler, quantity | 0 |
| Jacket Color | Black |
| Jacket Marking | Meters |
| Jacket Marking Method | Inkjet |
| Jacket Marking Text | COMMSCOPE GB OPTICAL CABLE TYPE OS2 SM 48 FIBER [SERIAL NUMBER] [MM/YYYY] [METRE MARK] |
| Subunit, quantity | 6 |
| Fibers per Subunit, quantity | 8 |
| Total Fiber Count | 48 |
| Dimensions | |
| Buffer Tube/Subunit Diameter | 2 mm 0.079 in |
| Diameter Over Jacket | 9.5 mm 0.374 in |

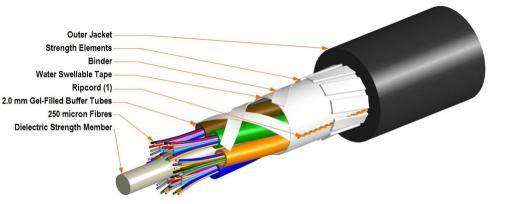
Representative Image

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Material Specifications

| Jacket Material | PE |
|-----------------------------------|---------------------------------------|
| Mechanical Specifications | |
| Minimum Bend Radius, loaded | 143 mm 5.63 in |
| Minimum Bend Radius, unloaded | 95 mm 3.74 in |
| Tensile Load, long term, maximum | 800 N 179.847 lbf |
| Tensile Load, short term, maximum | 2700 N 606.984 lbf |
| Compression | 22 N/mm 125.623 lb/in |
| Compression Test Method | IEC 60794-1 E3 |
| Flex | 25 cycles |
| Flex Test Method | IEC 60794-1 E6 |
| Impact | 2.94 N-m 26.021 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 |
| Vertical Rise, maximum | 1142 m 3,746.719 ft |
| Optical Specifications | |

Fiber Type

G.652.D and G.657.A1 | G.652.D and G.657.A1

Environmental Specifications

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810010358/DB | 0-048-LN-8W-M08BK/20G

| Installation temperature | -30 °C to +70 °C (-22 °F to +158 °F) |
|-------------------------------|--|
| Operating Temperature | -40 °C to +70 °C (-40 °F to +158 °F) |
| Storage Temperature | -40 °C to +75 °C (-40 °F to +167 °F) |
| Cable Qualification Standards | ANSI/ICEA S-87-640 EN 187105 IEC 60794-1-2 |
| Environmental Space | Aerial, lashed Buried |
| Jacket UV Resistance | UV stabilized |
| Water Penetration | 24 h |
| Water Penetration Test Method | IEC 60794-1 F5 |

Environmental Test Specifications

| Cable Freeze | -2 °C 28.4 °F |
|-------------------------------|--------------------------------------|
| Cable Freeze Test Method | IEC 60794-1 F15 |
| Drip | 70 °C 158 °F |
| Drip Test Method | IEC 60794-1 E14 |
| Heat Age | -40 °C to +85 °C (-40 °F to +185 °F) |
| Heat Age Test Method | IEC 60794-1 F9 |
| Low High Bend | -30 °C to +60 °C (-22 °F to +140 °F) |
| Low High Bend Test Method | IEC 60794-1 E11 |
| Temperature Cycle | -40 °C to +70 °C (-40 °F to +158 °F) |
| Temperature Cycle Test Method | IEC 60794-1 F1 |

Packaging and Weights

Cable weight

72 kg/km | 48.382 lb/kft

Included Products

DB-8W-LT – LightScope ZWP® Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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LightScope ZWP® 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 Diameter | 8.3 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, 60 mm Ø mandrel, 100 turns | 0.05 dB @ 1,550 nm 0.05 dB @ 1,625 nm |
| Coating Strip Force, maximum | 8.9 N 2.001 lbf |

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DB-8W-LT

| 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 | 0.092 ps/[km-nm-nm] |
| Zero Dispersion Wavelength, maximum | 1324 nm |
| Zero Dispersion Wavelength, minimum | 1300 nm |
| Optical Specifications, Wavelength Specific | |
| Attenuation, maximum | 0.22 dB/km @ 1,550 nm 0.25 dB/km @ 1,490 nm 0.25 dB/km @ 1,625 nm 0.36 dB/km @ 1,310 nm 0.36 dB/km @ 1,385 nm |
| Attenuation, typical | 0.19 dB/km @ 1,550 nm 0.33 dB/km @ 1,310 nm |
| Backscatter Coefficient | -79.6 dB @ 1,310 nm -82.1 dB @ 1,550 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 | 10.4 μm @ 1,550 nm 9.2 μm @ 1,310 nm 9.6 μm @ 1,385 nm |
| Mode Field Diameter Tolerance | ±0.4 μm @ 1310 nm ±0.5 μm @ 1550 nm ±0.6 μm @ 1385 nm |
| Polarization Mode Dispersion Link Design Value, maximum | 0.04 ps/sqrt(km) |
| Standards Compliance | ITU-T G.652.D ITU-T G.657.A1 |
| | |
| Environmental Specifications | |
| Heat Aging, maximum | 0.05 dB/km @ 85 °C |
| Tomporatura Dopondopoo, maximum | 0.05 dP/km |

Temperature Dependence, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 dB/kmWater Immersion, maximum0.05 dB/km @ 23 °C

Regulatory Compliance/Certifications

Classification

Agency

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

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DB-8W-LT

* Footnotes

Temperature Dependence, maximumTemperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)Temperature Humidity Cycling, maximumTemperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F)up to 95% relative humidityup to 95% relative humidity

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