

LightScope ZWP® Double Jacket/Single Armor, Gel-Filled, Outdoor Stranded Loose Tube Cable

- Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

Product Classification

| | |
|------------------------------|-----------------|
| Regional Availability | EMEA |
| Portfolio | CommScope® |
| Product Type | Fiber OSP cable |
| Product Series | O-L2 |

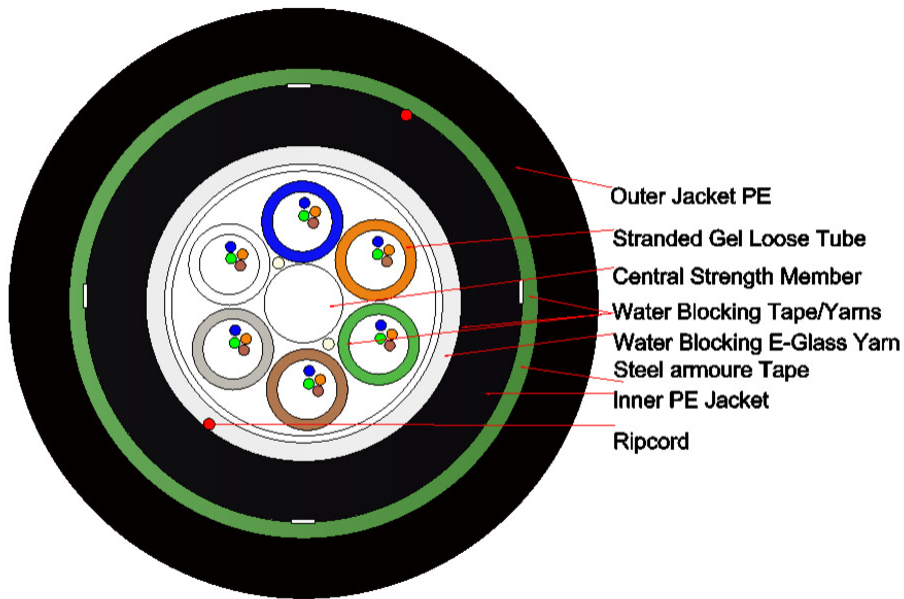
General Specifications

| | |
|-------------------------------------|---------------------|
| Armor Type | Corrugated steel |
| Cable Type | Stranded loose tube |
| Construction Type | Armored |
| Subunit Type | Gel-filled |
| Filler, quantity | 3 |
| Inner Jacket Color | Black |
| Jacket Color | Black |
| Jacket Marking | Meters |
| Subunit, quantity | 3 |
| Fibers per Subunit, quantity | 4 |
| Total Fiber Count | 12 |

Dimensions

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|-------------------------------------|--------------------|
| Buffer Tube/Subunit Diameter | 2 mm 0.079 in |
| Diameter Over Inner Jacket | 10.7 mm 0.421 in |
| Diameter Over Jacket | 16 mm 0.63 in |

Representative Image



Material Specifications

Jacket Material

PE

Mechanical Specifications

Minimum Bend Radius, loaded

320 mm | 12.598 in

Minimum Bend Radius, unloaded

240 mm | 9.449 in

Tensile Load, long term, maximum

1200 N | 269.771 lbf

Tensile Load, short term, maximum

4000 N | 899.236 lbf

Compression

30 N/mm | 171.304 lb/in

Compression Test Method

IEC 60794-1 E3

Flex

25 cycles

Flex Test Method

IEC 60794-1 E6

Impact

10 N-m | 88.507 in lb

Impact Test Method

IEC 60794-1 E4

Strain

See long and short term tensile loads

Strain Test Method

IEC 60794-1 E1

Optical Specifications

Fiber Type

G.652.D and G.657.A1

Optical Specifications, Wavelength Specific

Standards Compliance ITU-T G.652.D | ITU-T G.657.A1

Environmental Specifications

| | |
|---|--------------------------------------|
| Installation temperature | -30 °C to +60 °C (-22 °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 | Fca |
| Environmental Space | Buried |
| Jacket UV Resistance | UV stabilized |
| Water Penetration | 24 h |
| Water Penetration Test Method | IEC 60794-1 F5 |

Environmental Test Specifications

| | |
|--------------------------------------|--------------------------------------|
| Heat Age | -40 °C to +85 °C (-40 °F to +185 °F) |
| Heat Age Test Method | IEC 60794-1 F9 |
| 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 232 kg/km | 155.897 lb/kft

Included Products

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

DB-8W-LT

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/mm ² 100000 psi |

Dimensions

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

Mechanical Specifications

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|---|---|
| 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 |

DB-8W-LT

| | |
|---|-------------------|
| 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 |
| 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 | $\pm 0.4 \mu\text{m}$ @ 1310 nm $\pm 0.5 \mu\text{m}$ @ 1550 nm $\pm 0.6 \mu\text{m}$ @ 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 |
| 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 |

DB-8W-LT

* 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