

LightScope ZWP® Self-Supporting All-Dielectric Outdoor Drop Cable, 1–12 fiber Arid Core construction, central loose tube

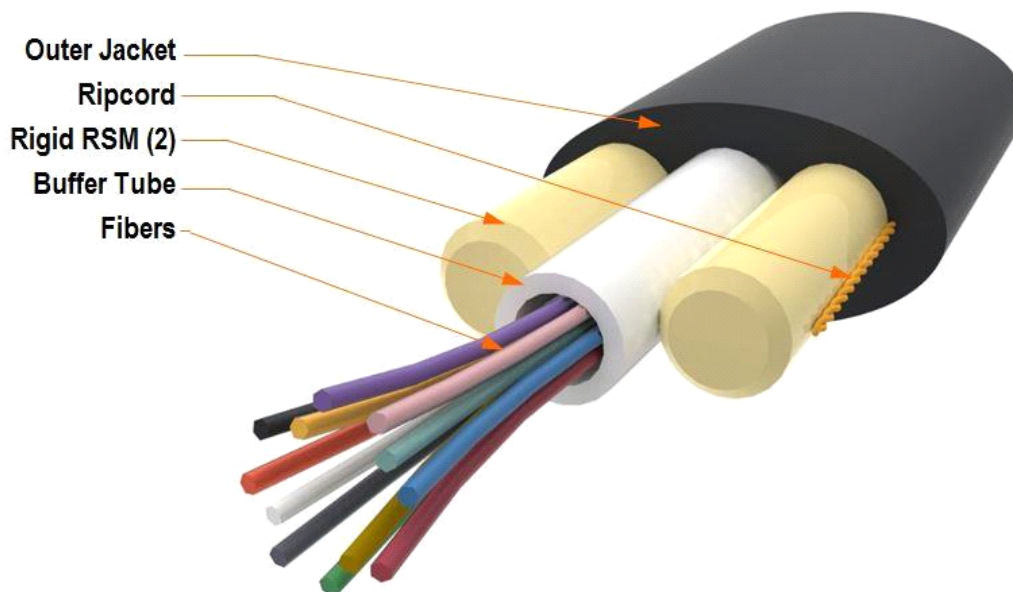
Product Classification

| | |
|------------------------------|---|
| Portfolio | CommScope® |
| Product Type | Fiber drop cable |
| Regional Availability | Asia Australia/New Zealand EMEA Latin America North America |

Standards And Qualifications

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|--------------------------------------|---------------------|
| Cable Qualification Standards | ANSI/ICEA S-110-717 |
|--------------------------------------|---------------------|

Representative Image



General Specifications

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|--------------------------|--------------------|
| Cable Type | Central loose tube |
| Construction Type | Non-armored |
| Subunit Type | Gel-filled |

Construction Materials

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|-------------------------------------|----------------------|
| Fiber Type Solution | G.652.D and G.657.A1 |
| Jacket Material | PE |
| Total Fiber Count | 4 |
| Fiber Type | G.652.D and G.657.A1 |
| Fiber Type, quantity | 4 |
| Fibers per Subunit, quantity | 4 |
| Jacket Color | Black |
| Jacket UV Resistance | UV stabilized |

Dimensions

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|-------------------------------------|--------------------------|
| Buffer Tube/Subunit Diameter | 2.00 mm 0.08 in |
| Cable Weight | 26.0 lb/kft 39.0 kg/km |
| Diameter Over Jacket | 8.00 mm 0.31 in |
| Height Over Jacket | 4.30 mm 0.17 in |
| Subunit, quantity | 1 |

Physical Specifications

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| Minimum Bend Radius, loaded | 8.6 cm 3.4 in |
| Minimum Bend Radius, unloaded | 8.1 cm 3.2 in |
| Tensile Load, long term, maximum | 400 N 90 lbf |
| Tensile Load, short term, maximum | 1334 N 300 lbf |
| Vertical Rise, maximum | 3434.0 ft 1047.0 m |

Environmental Specifications

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|---------------------------------|--------------------------------------|
| Environmental Space | Aerial, self-support Buried |
| 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) |

Mechanical Test Specifications

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|--------------------------------|---------------------------------------|
| Compression | 10 N/mm 57 lb/in |
| Compression Test Method | FOTP-41 IEC 60794-1 E3 |
| Flex | 35 cycles |
| Flex Test Method | FOTP-104 IEC 60794-1 E6 |
| Impact | 2.17 ft lb 2.94 N-m |
| Impact Test Method | FOTP-25 IEC 60794-1 E4 |
| Strain | See long and short term tensile loads |

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| Strain Test Method | FOTP-33 IEC 60794-1 E1 |
| Twist | 10 cycles |
| Twist Test Method | FOTP-85 IEC 60794-1 E7 |
| Water Penetration | 24 h |
| Water Penetration Test Method | FOTP-82 IEC 60794-1 F5 |

Environmental Test Specifications

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|--------------------------------------|--------------------------------------|
| Cable Freeze | -2 °C 28 °F |
| Cable Freeze Test Method | FOTP-98 IEC 60794-1 F15 |
| Drip | 70 °C 158 °F |
| Drip Test Method | FOTP-81 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 | FOTP-37 IEC 60794-1 E11 |
| Temperature Cycle | -40 °C to +70 °C (-40 °F to +158 °F) |
| Temperature Cycle Test Method | FOTP-3 IEC 60794-1 F1 |

Regulatory Compliance/Certifications

| Agency | Classification |
|-----------------|--|
| RoHS 2011/65/EU | Compliant |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |



Included Products

DB-8W-LT (Product Component—not orderable) — LightScope ZWP® Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

Product Classification

| | |
|------------------------------|---|
| Portfolio | CommScope® |
| Product Type | Optical fiber |
| Regional Availability | Asia Australia/New Zealand EMEA Latin America North America |

Optical Specifications, Wavelength Specific

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|--|---|
| Standards Compliance | ITU-T G.652.D ITU-T G.657.A1 TIA-492CAAB (OS2) |
| Attenuation, maximum | 0.22 dB/km @ 1,550 nm 0.23 dB/km @ 1,575 nm 0.25 dB/km @ 1,490 nm 0.25 dB/km @ 1,625 nm 0.31 dB/km @ 1,385 nm 0.35 dB/km @ 1,650 nm |
| Dispersion, maximum | 18 ps(nm-km) at 1550 nm 3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 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 | ±0.3 μm @ 1310 nm ±0.5 μm @ 1550 nm ±0.6 μm @ 1385 nm |
| Index of Refraction | 1.467 @ 1,310 nm 1.468 @ 1,385 nm 1.468 @ 1,550 nm |
| Polarization Mode Dispersion Link Design Value, maximum | 0.04 ps/sqrt(km) |
| Backscatter Coefficient | -79.6 dB @ 1,310 nm -82.1 dB @ 1,550 nm |

Physical Specifications

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| Cladding Diameter | 125.0 μm |
| Cladding Diameter Tolerance | ±0.7 μm |
| Cladding Non-Circularity, maximum | 0.7 % |
| Coating Diameter (Colored) | 253 μm |
| Coating Diameter (Uncolored) | 240 μm |
| Coating Diameter Tolerance (Colored) | ±7 μm |
| Coating Diameter Tolerance (Uncolored) | ±5 μm |
| Coating/Cladding Concentricity Error, maximum | 12 μm |
| Core/Clad Offset, maximum | 0.5 μm |

Optical Specifications, General

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| Cabled Cutoff Wavelength, maximum | 1260 nm |
| Point Defects, maximum | 0.10 dB |
| Zero Dispersion Slope, maximum | 0.090 ps/[km-nm-nm] |
| Zero Dispersion Wavelength, maximum | 1322 nm |
| Zero Dispersion Wavelength, minimum | 1302 nm |

Mechanical Specifications

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| Coating Strip Force, maximum | 8.9 N 2.0 lbf |
| Coating Strip Force, minimum | 1.3 N 0.3 lbf |
| Dynamic Fatigue Parameter, minimum | 20 |
| Fiber Curl, minimum | 4.0 m 13.1 ft |
| Macrobending, 20 mm mandrel, 1 turn | 0.75 dB @ 1,550 nm 1.50 dB @ 1,625 nm |
| Macrobending, 30 mm mandrel, 10 turns | 0.25 dB @ 1,550 nm 1.00 dB @ 1,625 nm |
| Macrobending, 50 mm mandrel, 100 turns | 0.03 dB @ 1,550 nm 0.03 dB @ 1,625 nm |
| Proof Test | 689.48 N/mm ² 100000.00 psi |

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 |