

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

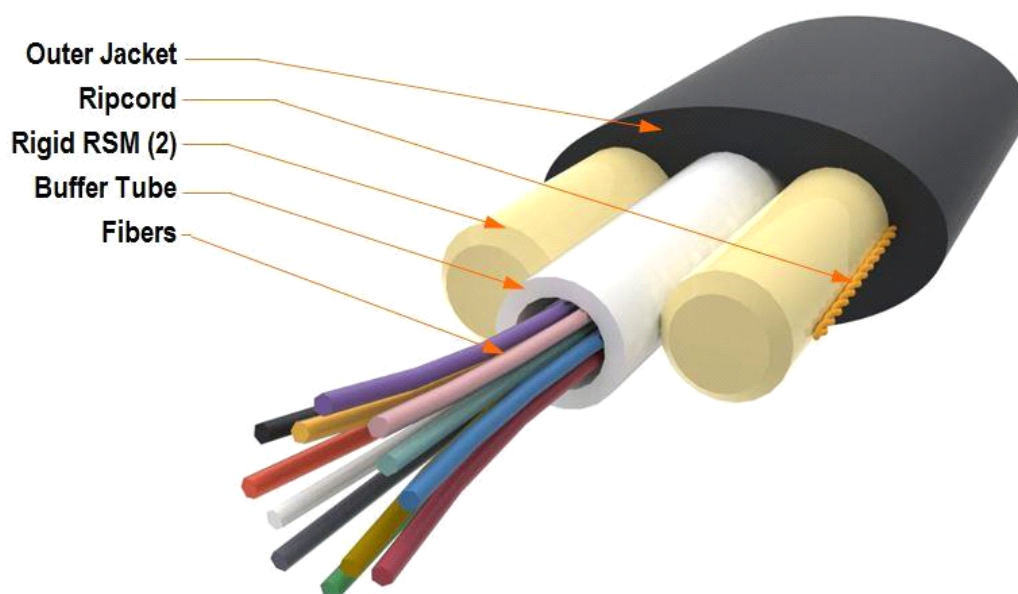
## Product Classification

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

## Standards And Qualifications

|                                      |                     |
|--------------------------------------|---------------------|
| <b>Cable Qualification Standards</b> | ANSI/ICEA S-110-717 |
|--------------------------------------|---------------------|

## Representative Image



## General Specifications

|                          |                    |
|--------------------------|--------------------|
| <b>Cable Type</b>        | Central loose tube |
| <b>Construction Type</b> | Non-armored        |
| <b>Subunit Type</b>      | Gel-filled         |

## Construction Materials

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

## Dimensions

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

## Physical Specifications

|  |                      |
|--|----------------------|
| <b>Minimum Bend Radius, loaded</b>       | 8.6 cm   3.4 in      |
| <b>Minimum Bend Radius, unloaded</b>     | 8.1 cm   3.2 in      |
| <b>Tensile Load, long term, maximum</b>  | 400 N   90 lbf       |
| <b>Tensile Load, short term, maximum</b> | 1334 N   300 lbf     |
| <b>Vertical Rise, maximum</b>            | 1047.0 m   3435.0 ft |

## Environmental Specifications

|                                 |                                      |
|---------------------------------|--------------------------------------|
| <b>Environmental Space</b>      | Aerial, self-support   Buried        |
| <b>Installation Temperature</b> | -30 °C to +70 °C (-22 °F to +158 °F) |
| <b>Operating Temperature</b>    | -40 °C to +70 °C (-40 °F to +158 °F) |
| <b>Storage Temperature</b>      | -40 °C to +75 °C (-40 °F to +167 °F) |

## Mechanical Test Specifications

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

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

## Environmental Test Specifications

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| <b>Cable Freeze</b>                  | -2 °C   28 °F                        |
| <b>Cable Freeze Test Method</b>      | FOTP-98   IEC 60794-1 F15            |
| <b>Drip</b>                          | 70 °C   158 °F                       |
| <b>Drip Test Method</b>              | FOTP-81   IEC 60794-1 E14            |
| <b>Heat Age</b>                      | -40 °C to +85 °C (-40 °F to +185 °F) |
| <b>Heat Age Test Method</b>          | IEC 60794-1 F9                       |
| <b>Low High Bend</b>                 | -30 °C to +60 °C (-22 °F to +140 °F) |
| <b>Low High Bend Test Method</b>     | FOTP-37   IEC 60794-1 E11            |
| <b>Temperature Cycle</b>             | -40 °C to +70 °C (-40 °F to +158 °F) |
| <b>Temperature Cycle Test Method</b> | 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

|                     |               |
|---------------------|---------------|
| <b>Portfolio</b>    | CommScope®    |
| <b>Product Type</b> | Optical fiber |

## Optical Specifications, Wavelength Specific

|  |   |
|--|---|
| <b>Standards Compliance</b>                                    | ITU-T G.652.D   ITU-T G.657.A1   TIA-492CAAB (OS2)  |
| <b>Attenuation, maximum</b>                                    | 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   0.34 dB/km @ 1,310 nm   0.35 dB/km @ 1,650 nm |
| <b>Dispersion, maximum</b>                                     | 18 ps/(nm-km) at 1550 nm   3.5 ps/(nm-km) from 1285 nm to 1330 nm at 1310 nm  |
| <b>Mode Field Diameter</b>                                     | 10.4 μm @ 1,550 nm   9.2 μm @ 1,310 nm   9.6 μm @ 1,385 nm  |
| <b>Mode Field Diameter Tolerance</b>                           | ±0.3 μm @ 1310 nm   ±0.5 μm @ 1550 nm   ±0.6 μm @ 1385 nm   |
| <b>Index of Refraction</b>                                     | 1.467 @ 1,310 nm   1.468 @ 1,385 nm   1.468 @ 1,550 nm  |
| <b>Polarization Mode Dispersion Link Design Value, maximum</b> | 0.04 ps/sqrt(km)  |
| <b>Backscatter Coefficient</b>                                 | -79.6 dB @ 1,310 nm   -82.1 dB @ 1,550 nm   |

## Physical Specifications

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

## Optical Specifications, General

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

## Mechanical Specifications

|                                     |                 |
|-------------------------------------|-----------------|
| <b>Coating Strip Force, maximum</b> | 8.9 N   2.0 lbf |
|-------------------------------------|-----------------|

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

## Environmental Specifications

|  |                    |
|--|--------------------|
| <b>Heat Aging, maximum</b>                   | 0.05 dB/km @ 85 °C |
| <b>Temperature Dependence, maximum</b>       | 0.05 dB/km         |
| <b>Temperature Humidity Cycling, maximum</b> | 0.05 dB/km         |
| <b>Water Immersion, maximum</b>              | 0.05 dB/km @ 23 °C |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |



### \* Footnotes

|  |   |
|--|---|
| <b>Temperature Dependence, maximum</b>       | Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)                                   |
| <b>Temperature Humidity Cycling, maximum</b> | Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity |