



Fiber OSP cable, LightScope® ZWP Blown Micro Single Jacket, 72 fiber, All-Dielectric Stranded Loose Tube Arid-Core™ Construction, Gel-filled, Singlemode G.652.D and G.657.A1, Meters jacket marking, Black jacket color

## Product Classification

|                       |                 |
|-----------------------|-----------------|
| Regional Availability | EMEA            |
| Portfolio             | CommScope®      |
| Product Type          | Fiber OSP cable |
| Product Series        | B-LN            |

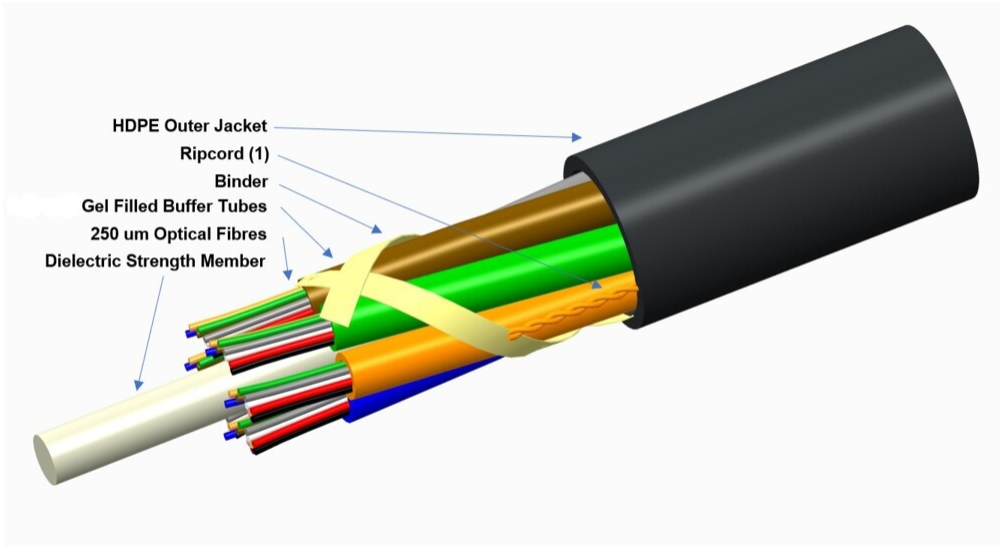
## General Specifications

|                              |                     |
|------------------------------|---------------------|
| Cable Type                   | Stranded loose tube |
| Construction Type            | Non-armored         |
| Subunit Type                 | Gel-filled          |
| Jacket Color                 | Black               |
| Jacket Marking               | Meters              |
| Subunit, quantity            | 6                   |
| Fibers per Subunit, quantity | 12                  |
| Total Fiber Count            | 72                  |

## Dimensions

|                              |                    |
|------------------------------|--------------------|
| Buffer Tube/Subunit Diameter | 1.25 mm   0.049 in |
| Diameter Over Jacket         | 4.6 mm   0.181 in  |

## Representative Image



Material Specifications

Jacket Material

High density polyethylene (HDPE)

Mechanical Specifications

|                                   |                                       |
|-----------------------------------|---------------------------------------|
| Minimum Bend Radius, loaded       | 95 mm   3.74 in                       |
| Minimum Bend Radius, unloaded     | 60 mm   2.362 in                      |
| Tensile Load, long term, maximum  | 400 N   89.924 lbf                    |
| Tensile Load, short term, maximum | 1000 N   224.809 lbf                  |
| Compression                       | 5 N/mm   28.551 lb/in                 |
| Compression Test Method           | IEC 60794-1-21 E3                     |
| Flex                              | 25 cycles                             |
| Flex Test Method                  | IEC 60794-1 E6                        |
| Impact                            | 1 N-m   8.851 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 Type

G.652.D and G.657.A1

### Environmental Specifications

|                               |                                      |
|-------------------------------|--------------------------------------|
| Installation temperature      | -15 °C to +40 °C (+5 °F to +104 °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 | 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 F4                       |

### Environmental Test Specifications

|                               |                                      |
|-------------------------------|--------------------------------------|
| Drip                          | 70 °C   158 °F                       |
| Drip Test Method              | IEC 60794-1-21 E14                   |
| Heat Age                      | -40 °C to +85 °C (-40 °F to +185 °F) |
| Heat Age Test Method          | IEC 60794-1-22 F9                    |
| Temperature Cycle             | -40 °C to +70 °C (-40 °F to +158 °F) |
| Temperature Cycle Test Method | IEC 60794-1-22 F1                    |

### Packaging and Weights

|              |                          |
|--------------|--------------------------|
| Cable weight | 19 kg/km   12.767 lb/kft |
|--------------|--------------------------|

### Included Products

CS-8W-250-EMEA – LightScope® ZWP Singlemode Fiber  
8W-250um

### \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

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)        | ±7 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

|                     |                 |
|---------------------|-----------------|
| 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                       |
| Coating Strip Force, minimum             | 1.3 N   0.292 lbf                       |
| Dynamic Fatigue Parameter, minimum       | 20                                      |

Optical Specifications

# CS-8W-250-EMEA | 8W-250um

|                                     |                     |
|-------------------------------------|---------------------|
| Cabled Cutoff Wavelength, maximum   | 1250 nm             |
| Point Defects, maximum              | 0.05 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                                    | 0.20 dB/km @ 1550 nm   0.23 dB/km @ 1,625 nm   0.344 dB/km @ 1310 nm   0.344 dB/km @ 1380 – 1385 nm  |
| Dispersion, maximum                                     | 18 ps(nm-km) at 1550 nm   22 ps(nm-km) at 1625 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   |
| Mode Field Diameter Tolerance                           | ±0.4 µm @ 1310 nm   ±0.5 µm @ 1550 nm  |
| Polarization Mode Dispersion Link Design Value, maximum | 0.05 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 |

## \* 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 |