

Fiber indoor/outdoor cable, LightScope® ZWP, gel-filled, loose tube, 12 fiber, Singlemode G.652.D and G.657.A1, Meters jacket marking, Yellow jacket color, Eca flame rating

OBSOLETE

This product was discontinued on: March 31, 2023

Product Classification

| | |
|-----------------------|-------------------------------------|
| Regional Availability | Asia Australia/New Zealand EMEA |
| Portfolio | CommScope® |
| Product Type | Fiber indoor/outdoor cable |
| Product Series | C-DN |

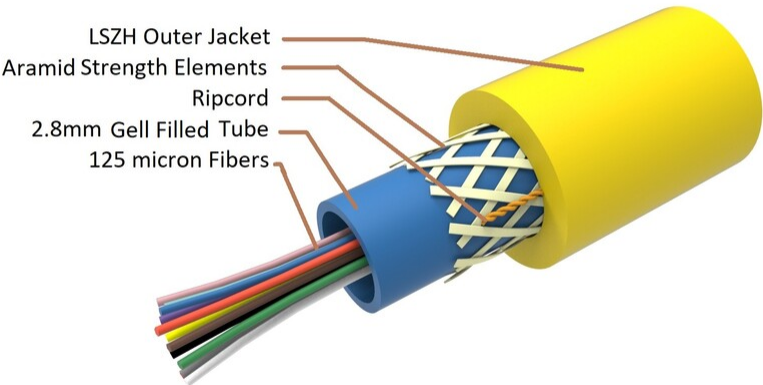
General Specifications

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|------------------------------|-------------|
| Cable Type | Loose tube |
| Construction Type | Non-armored |
| Subunit Type | Gel-filled |
| Jacket Color | Yellow |
| Jacket Marking | Meters |
| Subunit, quantity | 1 |
| Fibers per Subunit, quantity | 12 |
| Total Fiber Count | 12 |

Dimensions

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|------------------------------|----------------------|
| Cable Length | 2000 m 6,561.68 ft |
| Buffer Tube/Subunit Diameter | 2.8 mm 0.11 in |
| Diameter Over Jacket | 6.4 mm 0.252 in |

Representative Image



Mechanical Specifications

| | |
|-----------------------------------|-------------------------|
| Minimum Bend Radius, loaded | 140 mm 5.512 in |
| Minimum Bend Radius, unloaded | 130 mm 5.118 in |
| Tensile Load, long term, maximum | 400 N 89.924 lbf |
| Tensile Load, short term, maximum | 500 N 112.405 lbf |
| Compression | 20 N/mm 114.203 lb/in |
| Compression Test Method | IEC 60794-1-2 E3 |
| Impact | 2 N-m 17.701 in lb |
| Impact Test Method | IEC 60794-1 E4 |

Optical Specifications

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|------------|-----|
| Fiber Type | OS2 |
|------------|-----|

Optical Specifications, Wavelength Specific

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|----------------------|-----------------------|
| Attenuation, maximum | 0.35 dB/km @ 1,300 nm |
|----------------------|-----------------------|

Environmental Specifications

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|--------------------------|--------------------------------------|
| Installation temperature | -10 °C to +60 °C (+14 °F to +140 °F) |
| Operating Temperature | -10 °C to +60 °C (+14 °F to +140 °F) |

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| | |
|--|--|
| Storage Temperature | -10 °C to +60 °C (+14 °F to +140 °F) |
| EN50575 CPR Cable EuroClass Fire Performance | Eca |
| Environmental Space | Universal Low Smoke Zero Halogen (ULSZH) |

Environmental Test Specifications

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|-------------------------------|--------------------------------------|
| Temperature Cycle | -10 °C to +60 °C (+14 °F to +140 °F) |
| Temperature Cycle Test Method | IEC 60794-1-2 F1 |

Packaging and Weights

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|--------------|--------------------------|
| Cable weight | 31 kg/km 20.831 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

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) | ±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

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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 |
| 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

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|---|--|
| 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

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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 |

* 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 |