



Fiber OSP cable, HDPE, 8-fiber, Singlemode, loose tube, gel-filled, Singlemode G.652.D and G.657.A1, Meters jacket marking, Black jacket color, 1000 m. Provides Rodent Resistance

Product Classification

| | |
|------------------------------|------------------------------|
| Regional Availability | Australia/New Zealand EMEA |
| Portfolio | CommScope® |
| Product Type | Fiber OSP cable |
| Product Series | O-CA |

General Specifications

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|-------------------------------------|---|
| Armor Type | Corrugated steel |
| Cable Type | Loose tube |
| Subunit Type | Gel-filled |
| Jacket Color | Black |
| Jacket Marking | Meters |
| Jacket Marking Method | Inkjet |
| Jacket Marking Text | COMMSCOPE GB SYSTEM F.O. CABLE 810009834/DB CSA GEL LOOSE TUBE 8X9 /125 OS2 HDPE (Serial NUMBER) (METRE MARK) |
| Fibers per Subunit, quantity | 8 |
| Total Fiber Count | 8 |

Dimensions

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|-----------------------------|----------------------|
| Cable Length | 1000 m 3,280.84 ft |
| Diameter Over Jacket | 10 mm 0.394 in |

Material Specifications

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|------------------------|----------------------------------|
| Jacket Material | High density polyethylene (HDPE) |
|------------------------|----------------------------------|

Mechanical Specifications

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|--------------------------------------|-------------------|
| Minimum Bend Radius, loaded | 150 mm 5.906 in |
| Minimum Bend Radius, unloaded | 100 mm 3.937 in |

810009834/DB | O-008-CA-8W-M08BK/GY/HD

Tensile Load, long term, maximum 1250 N | 281.011 lbf

Flex 25 cycles

Optical Specifications

Fiber Type OS2

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.25 dB/km @ 1,300 nm | 0.35 dB/km @ 1,550 nm | 0.45 dB/km @ 1,310 nm

Standards Compliance TIA-492CAAB (OS2)

Environmental Specifications

Installation temperature -5 °C to +50 °C (+23 °F to +122 °F)

Operating Temperature -20 °C to +70 °C (-4 °F to +158 °F)

Storage Temperature -20 °C to +70 °C (-4 °F to +158 °F)

Packaging and Weights

Cable weight 104 kg/km | 69.885 lb/kft

Regulatory Compliance/Certifications

| Agency | Classification |
|------------|--|
| CHINA-ROHS | Below maximum concentration value |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |



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