

Fiber OSP cable, TeraSPEED® Mini Single Jacket/Single Armor, 96 fiber, Gel-Filled, Stranded Loose Tube, Singlemode G.652.D and G.657.A1, Meters jacket marking, Black jacket color

- Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

Product Classification

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

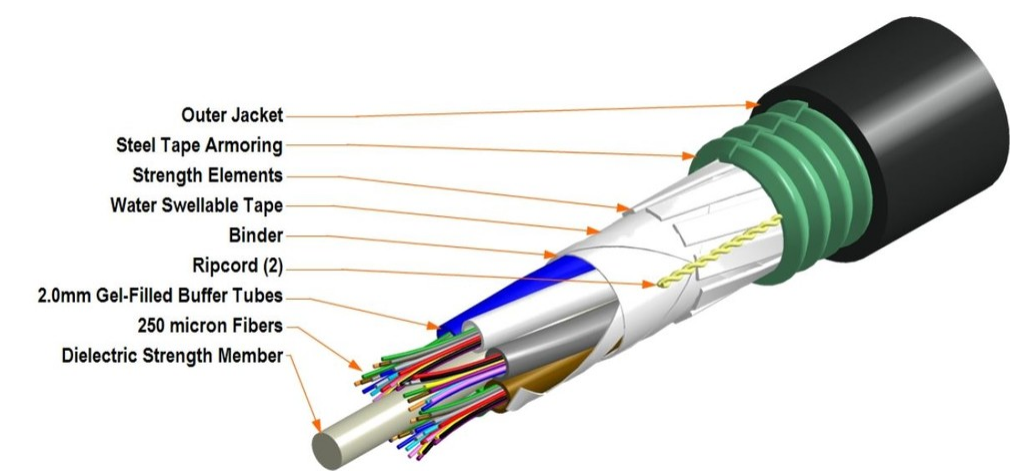
General Specifications

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|------------------------------|--|
| Armor Type | Corrugated steel |
| Cable Type | Stranded loose tube |
| Construction Type | Armored |
| Subunit Type | Gel-filled |
| Jacket Color | Black |
| Jacket Marking | Meters |
| Jacket Marking Method | Inkjet |
| Jacket Marking Text | COMMScope GB OPTICAL CABLE OS2 SM 96 FIBER [SERIAL NUMBER] [MM /YY] [METRE MARK] |
| Subunit, quantity | 8 |
| Fibers per Subunit, quantity | 12 |
| Total Fiber Count | 96 |

Dimensions

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|------------------------------|-------------------|
| Buffer Tube/Subunit Diameter | 2 mm 0.079 in |
| Diameter Over Jacket | 12.2 mm 0.48 in |

Representative Image



Material Specifications

Jacket MaterialPE

Mechanical Specifications

Minimum Bend Radius, loaded183 mm | 7.205 in

Minimum Bend Radius, unloaded122 mm | 4.803 in

Tensile Load, long term, maximum800 N | 179.847 lbf

Tensile Load, short term, maximum2700 N | 606.984 lbf

Compression44 N/mm | 251.246 lb/in

Compression Test MethodIEC 60794-1 E3

Flex25 cycles

Flex Test MethodIEC 60794-1 E6

Impact4.41 N-m | 39.032 in lb

Impact Test MethodIEC 60794-1 E4

StrainSee long and short term tensile loads

Strain Test MethodIEC 60794-1 E1

Twist10 cycles

Twist Test MethodIEC 60794-1 E7

Vertical Rise, maximum583 m | 1,912.73 ft

Optical Specifications

Fiber TypeG.652.D and G.657.A1, TeraSPEED®

Environmental Specifications

| | |
|-------------------------------|--|
| 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) |
| Cable Qualification Standards | ANSI/ICEA S-87-640 EN 187105 IEC 60794-1-2 |
| Environmental Space | Aerial, lashed Buried |
| Jacket UV Resistance | UV stabilized |
| Water Penetration | 24 h |
| Water Penetration Test Method | IEC 60794-1 F5 |

Environmental Test Specifications

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|-------------------------------|--------------------------------------|
| Cable Freeze | -2 °C 28.4 °F |
| Cable Freeze Test Method | IEC 60794-1 F15 |
| Drip | 70 °C 158 °F |
| Drip Test Method | 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 | IEC 60794-1 E11 |
| Temperature Cycle | -40 °C to +70 °C (-40 °F to +158 °F) |
| Temperature Cycle Test Method | IEC 60794-1 F1 |

Packaging and Weights

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|--------------|---------------------------|
| Cable weight | 140 kg/km 94.076 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

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|---|------------------------|
| 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 |
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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

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|-------------------------------------|---------------------|
| 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 |