



Fiber OSP cable, PE, Gel-filled Central Tube, CST, 6 fiber, Singlemode G. 657.A1, Meters jacket marking, Black jacket color

Product Classification

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

General Specifications

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|-------------------------------------|--------------------|
| Cable Type | Central loose tube |
| Construction Type | Armored |
| Subunit Type | Gel-filled |
| Jacket Color | Black |
| Jacket Marking | Feet |
| Fibers per Subunit, quantity | 6 |
| Total Fiber Count | 6 |

Dimensions

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|-------------------------------------|-------------------|
| Buffer Tube/Subunit Diameter | 2.8 mm 0.11 in |
| Diameter Over Jacket | 9.1 mm 0.358 in |

Mechanical Specifications

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|--|-------------------------|
| Minimum Bend Radius, loaded | 182 mm 7.165 in |
| Minimum Bend Radius, unloaded | 91 mm 3.583 in |
| Tensile Load, long term, maximum | 890 N 200.08 lbf |
| Tensile Load, short term, maximum | 2700 N 606.984 lbf |
| Compression | 20 N/mm 114.203 lb/in |
| Compression Test Method | IEC 60794-1-2 E3 |

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|---------------------------|---------------------------------------|
| Flex | 25 cycles |
| Strain | See long and short term tensile loads |
| Strain Test Method | IEC 60794-1-2-E1 |

Optical Specifications

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

Optical Specifications, Wavelength Specific

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|-----------------------------|---|
| Attenuation, maximum | 0.22 dB/km @ 1,550 nm 0.38 dB/km @ 1,310 nm |
|-----------------------------|---|

Environmental Specifications

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|--------------------------------------|--------------------------------------|
| Installation temperature | -10 °C to +60 °C (+14 °F to +140 °F) |
| Operating Temperature | -40 °C to +70 °C (-40 °F to +158 °F) |
| Storage Temperature | -40 °C to +70 °C (-40 °F to +158 °F) |
| Environmental Space | Buried Ducted Outdoor |
| Water Penetration | 24 h |
| Water Penetration Test Method | IEC 60794-1 F5B |

Environmental Test Specifications

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|--------------------------------------|--------------------------------------|
| Temperature Cycle | -40 °C to +70 °C (-40 °F to +158 °F) |
| Temperature Cycle Test Method | IEC 60794-1-2 F1 |

Packaging and Weights

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|---------------------|--------------------------|
| Cable weight | 92 kg/km 61.821 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-8Z-LT – Low Water Peak, Dispersion-Unshifted Singlemode
Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8Z-LT

Low Water Peak, Dispersion-Unshifted 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 | 1 % |
| Coating Diameter (Colored) | 250 µm |
| Coating Diameter (Uncolored) | 245 µm |
| Coating Diameter Tolerance (Colored) | ±15 µm |
| Coating Diameter Tolerance (Uncolored) | ±10 µm |
| Coating/Cladding Concentricity Error, maximum | 12 µm |
| Core/Clad Offset, maximum | 0.5 µm |
| Proof Test | 689.476 N/mm ² 100000 psi |

Dimensions

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|----------------------------|-----------------|
| Fiber Curl, minimum | 4 m 13.123 ft |
|----------------------------|-----------------|

Mechanical Specifications

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|---|--------------------|
| Macrobending, 32 mm Ø mandrel, 1 turn | 0.50 dB @ 1,550 nm |
| Macrobending, 50 mm Ø mandrel, 100 turns | 0.05 dB @ 1,550 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 | 18 |

Optical Specifications

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|--|---------------------|
| Cabled Cutoff Wavelength, maximum | 1260 nm |
| Point Defects, maximum | 0.1 dB |
| Zero Dispersion Slope, maximum | 0.092 ps/[km-nm-nm] |
| Zero Dispersion Wavelength, maximum | 1324 nm |

CS-8Z-LT

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|--|---|
| Zero Dispersion Wavelength, minimum | 1300 nm |
| Optical Specifications, Wavelength Specific | |
| Attenuation, maximum | 0.25 dB/km @ 1,550 nm 0.35 dB/km @ 1,310 nm 0.35 dB/km @ 1,385 nm |
| Index of Refraction | 1.467 @ 1,310 nm 1.468 @ 1,550 nm |
| Mode Field Diameter | 10.4 μm @ 1,550 nm 9.2 μm @ 1,310 nm 9.6 μm @ 1,385 nm |
| Mode Field Diameter Tolerance | $\pm 0.4 \mu\text{m}$ @ 1310 nm $\pm 0.5 \mu\text{m}$ @ 1550 nm $\pm 0.6 \mu\text{m}$ @ 1385 nm |
| Polarization Mode Dispersion Link Design Value, maximum | 0.08 ps/sqrt(km) |
| Standards Compliance | ITU-T G.652.D ITU-T G.657.A1 TIA-492CAAB (OS2) |

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 |

Regulatory Compliance/Certifications

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

* 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 |