



Fiber OSP cable, PE, Gel-filled Central Tube, CST, 12 fiber, Singlemode G. 652.D and G.657.A1, Meters jacket marking, Black jacket color

Product Classification

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

General Specifications

Cable Type	Central loose tube
Construction Type	Armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Feet
Fibers per Subunit, quantity	12
Total Fiber Count	12

Dimensions

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

Material Specifications

Jacket Material	MDPE
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Mechanical Specifications

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

760249702 | O-012-CA-8Z-M12BK/28G/093

Compression	20 N/mm 114.203 lb/in
Compression Test Method	IEC 60794-1-2 E3
Flex	25 cycles
Strain	See long and short term tensile loads
Strain Test Method	IEC 60794-1-2-E1

Optical Specifications

Fiber Type	G.652.D and G.657.A1 OS2
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Optical Specifications, Wavelength Specific

Attenuation, maximum	0.22 dB/km @ 1,550 nm 0.38 dB/km @ 1,310 nm
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Environmental Specifications

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

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

Packaging and Weights

Cable weight	92 kg/km 61.821 lb/kft
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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

Fiber Curl, minimum	4 m 13.123 ft
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Mechanical Specifications

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

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

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

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