



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

## Product Classification

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

## General Specifications

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

## Dimensions

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

## Mechanical Specifications

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

<b>Flex</b>	25 cycles
<b>Strain</b>	See long and short term tensile loads
<b>Strain Test Method</b>	IEC 60794-1-2-E1

## Optical Specifications

<b>Fiber Type</b>	OS2
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## Optical Specifications, Wavelength Specific

<b>Attenuation, maximum</b>	0.22 dB/km @ 1,550 nm   0.38 dB/km @ 1,310 nm
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## Environmental Specifications

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

## Environmental Test Specifications

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

## Packaging and Weights

<b>Cable weight</b>	92 kg/km   61.821 lb/kft
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant



## Included Products

CS-8Z-LT	- Low Water Peak, Dispersion-Unshifted Singlemode
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Fiber

\* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

# CS-8Z-LT

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Low Water Peak, Dispersion-Unshifted Singlemode Fiber

## Product Classification

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber

## General Specifications

<b>Cladding Diameter</b>	125 µm
<b>Cladding Diameter Tolerance</b>	±0.7 µm
<b>Cladding Non-Circularity, maximum</b>	1 %
<b>Coating Diameter (Colored)</b>	250 µm
<b>Coating Diameter (Uncolored)</b>	245 µm
<b>Coating Diameter Tolerance (Colored)</b>	±15 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±10 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core/Clad Offset, maximum</b>	0.5 µm
<b>Proof Test</b>	689.476 N/mm <sup>2</sup>   100000 psi

## Dimensions

<b>Fiber Curl, minimum</b>	4 m   13.123 ft
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## Mechanical Specifications

<b>Macrobending, 32 mm mandrel, 1 turn</b>	0.50 dB @ 1,550 nm
<b>Macrobending, 50 mm mandrel, 100 turns</b>	0.05 dB @ 1,550 nm
<b>Coating Strip Force, maximum</b>	8.9 N   2.001 lbf
<b>Coating Strip Force, minimum</b>	1.3 N   0.292 lbf
<b>Dynamic Fatigue Parameter, minimum</b>	18

## Optical Specifications

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

# CS-8Z-LT

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

## Environmental Specifications

<b>Heat Aging, maximum</b>	0.05 dB/km @ 85 °C
<b>Temperature Dependence, maximum</b>	0.05 dB/km
<b>Temperature Humidity Cycling, maximum</b>	0.05 dB/km
<b>Water Immersion, maximum</b>	0.05 dB/km @ 23 °C

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



### \* Footnotes

<b>Temperature Dependence, maximum</b>	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)
<b>Temperature Humidity Cycling, maximum</b>	Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity