

Fiber outdoor drop cable, LightScope® ZWP Self-Supporting All-Dielectric, Singlemode G.652.D and G.657.A1, 1–fiber Arid Core construction, Gel-filled, central loose tube, Meters jacket marking, Black jacket color

Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber drop cable
Product Series	O-DF

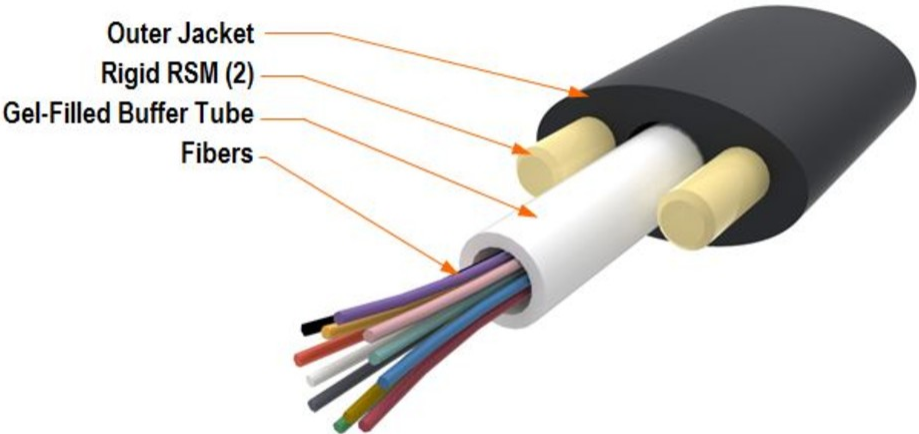
General Specifications

Cable Type	Central loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	1
Fibers per Subunit, quantity	1
Total Fiber Count	1

Dimensions

Height Over Jacket	4.5 mm   0.177 in
Buffer Tube/Subunit Diameter	3 mm   0.118 in
Diameter Over Jacket	7.9 mm   0.311 in

Representative Image



Material Specifications

Jacket Material	PE
Mechanical Specifications	
Minimum Bend Radius, loaded	90 mm   3.543 in
Minimum Bend Radius, unloaded	81 mm   3.189 in
Tensile Load, long term, maximum	400 N   89.924 lbf
Tensile Load, short term, maximum	1334 N   299.895 lbf
Compression	10 N/mm   57.101 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	35 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	2.94 N-m   26.021 in lb
Impact Test Method	FOTP-25   IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33   IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85   IEC 60794-1 E7
Vertical Rise, maximum	1047 m   3,435.039 ft

Optical Specifications

Fiber TypeG.652.D and G.657.A1 | G.652.D and G.657.A1

### 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-110-717
Environmental Space	Aerial, self-support   Buried
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	FOTP-82   IEC 60794-1 F5

### Environmental Test Specifications

Cable Freeze	-2 °C   28.4 °F
Cable Freeze Test Method	FOTP-98   IEC 60794-1 F15
Drip	70 °C   158 °F
Drip Test Method	FOTP-81   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	FOTP-37   IEC 60794-1 E11
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3   IEC 60794-1 F1

### Packaging and Weights

Cable weight	39 kg/km   26.207 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 <a href="https://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
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 Tensile Stress	100,000 psi (0.69 GPa)

## 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	±0.4 µm @ 1310 nm   ±0.5 µm @ 1550 nm   ±0.6 µm @ 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