

Fiber drop cable, LightScope® ZWP Single Jacket Single Armor Outdoor Drop Cable, 4 fiber Arid Core construction, central loose tube, Gel-filled, Singlemode G.652.D and G.657.A1, Meter jacket marking, Black jacket color

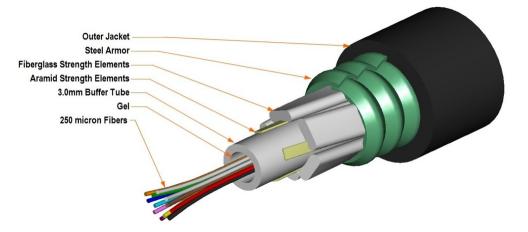
• Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

## Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America	
Portfolio	CommScope®	
Product Type	Fiber drop cable	
Product Series	O-DA	
General Specifications		
Armor Type	Corrugated steel	
Cable Type	Central loose tube	
Construction Type	Armored	
Subunit Type	Gel-filled	
Jacket Color	Black	
Jacket Marking	Meters	
Subunit, quantity	1	
Fibers per Subunit, quantity	4	
Total Fiber Count	4	
Dimensions		
Buffer Tube/Subunit Diameter	3 mm   0.118 in	
Diameter Over Jacket	8 mm   0.315 in	

## Representative Image





### Material Specifications

Mechanical Specifications

#### **Jacket Material**

ΡE

Minimum Bend Radius, loaded	120 mm   4.724 in
Minimum Bend Radius, unloaded	80 mm   3.15 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	595 m   1,952.1 ft

## **Optical Specifications**

Fiber Type

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

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## **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, lashed   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** 

69 kg/km | 46.366 lb/kft

## Regulatory Compliance/Certifications

#### Agency Classification

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

## Included Products

DB-8W-LT – LightScope® ZWP Singlemode Fiber

## \* Footnotes

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**COMMSCOPE**°

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

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**COMMSCOPE**°

## LightScope® ZWP 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	0.7 %
Coating Diameter (Colored)	249 µm
Coating Diameter (Uncolored)	242 µm
Coating Diameter Tolerance (Colored)	±13 μm
Coating Diameter Tolerance (Uncolored)	±5 μm
Coating/Cladding Concentricity Error, maximum	12 µm
Core Diameter	8.3 µm
Core/Clad Offset, maximum	0.5 µm
Proof Test	689.476 N/mm²   100000 psi
Dimensions	
Fiber Curl, minimum	4 m   13.123 ft
Mechanical Specifications	
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

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# DB-8W-LT

Coating Strip Force, minimum	1.3 N   0.292 lbf
Dynamic Fatigue Parameter, minimum	20
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
Zero Dispersion Wavelength, minimum	1300 nm
Optical Specifications, Wavelength Specific	
Attenuation, maximum	0.22 dB/km @ 1,550 nm   0.25 dB/km @ 1,490 nm   0.25 dB/km @ 1,625 nm   0.36 dB/km @ 1,310 nm   0.36 dB/km @ 1,385 nm
Attenuation, typical	0.19 dB/km @ 1,550 nm   0.33 dB/km @ 1,310 nm
Backscatter Coefficient	-79.6 dB @ 1,310 nm   -82.1 dB @ 1,550 nm
Dispersion, maximum	18 ps(nm-km) at 1550 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   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	0.04 ps/sqrt(km)
Standards Compliance	ITU-T G.652.D   ITU-T G.657.A1
Environmental Specifications	
Heat Aging, maximum	0.05 dB/km @ 85 °C
Temperature Dependence, movimum	0.0E dD/l/m

Temperature Dependence, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 dB/kmWater Immersion, maximum0.05 dB/km @ 23 °C

# Regulatory Compliance/Certifications

Classification

#### Agency

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

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# DB-8W-LT

## \* Footnotes

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

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