

Fiber drop cable, LightScope ZWP® Single Jacket Single Armor Outdoor Drop Cable, 12 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

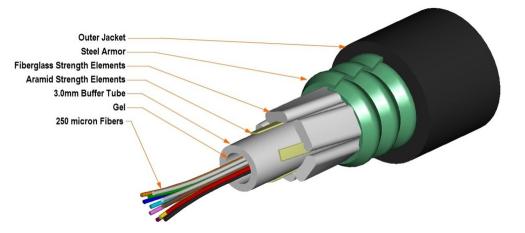
## Product Classification

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	12
Total Fiber Count	12
Dimensions	
Buffer Tube/Subunit Diameter	3 mm   0.118 in
Diameter Over Jacket	8 mm   0.315 in

# Representative Image

Page 1 of 7





### 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

Page 2 of 7



## **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 Penentration	24 h	
Water Penentration 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

Page 3 of 7



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

Page 4 of 7



## 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	

Page 5 of 7

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: January 25, 2024

**COMMSCOPE**°

# 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
Tomporatura Dopondopoo, maximum	0.05 dP/km

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

Classification

#### Agency

ISO 9001:2015

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

Page 6 of 7



# 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

Page 7 of 7

