# 8107557/DB | D-006-LA-8W-M06NS



Fiber OSP cable, LightScope ZWP® Single Jacket/Single Armor, Gel-Free, 6 fibers, Stranded Loose Tube, Singlemode G.652.D and G.657.A1, Meters jacket marking, Black jacket color

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

## Product Classification

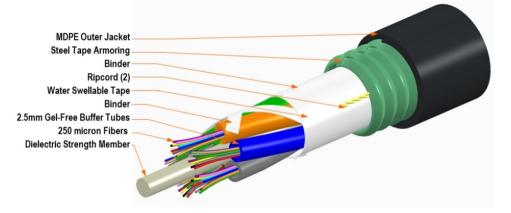
Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America	
Portfolio	CommScope®	
Product Type	Fiber OSP cable	
Product Series	D-LA	
General Specifications		
Armor Type	Corrugated steel	
Cable Type	Stranded loose tube	
Construction Type	Armored	
Subunit Type	Gel-free	
Filler, quantity	4	
Jacket Color	Black	
Jacket Marking	Meters	
Subunit, quantity	1	
Fibers per Subunit, quantity	6	
Total Fiber Count	6	
Dimensions		
Buffer Tube/Subunit Diameter	2.5 mm   0.098 in	
Diameter Over Jacket	11.5 mm   0.453 in	

## Representative Image

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## Material Specifications

**Fiber Type** 

Jacket Material	PE
Mechanical Specifications	
Minimum Bend Radius, loaded	173 mm   6.811 in
Minimum Bend Radius, unloaded	115 mm   4.528 in
Tensile Load, long term, maximum	800 N   179.847 lbf
Tensile Load, short term, maximum	2700 N   606.984 lbf
Compression	22 N/mm   125.623 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	4.41 N-m   39.032 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	740 m   2,427.822 ft
Optical Specifications	

#### 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-87-640   EN 187105
Environmental Space	Aerial, lashed   Buried
Jacket UV Resistance	UV stabilized
Water Penentration	24 h
Water Penetration Qualification Method	ANSI/ICEA S-87-640
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
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

110 kg/km | 73.917 lb/kft

## Regulatory Compliance/Certifications

Classification

#### Agency

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

### Included Products

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

## \* Footnotes

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

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## 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
Tomperatura Dapandanaa mavimum	0.05 dP/lm

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

## Regulatory Compliance/Certifications

#### Agency

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

Classification

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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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