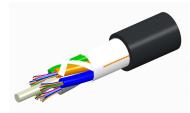
# 810009926/DB | D-012-LN-8W-M12NS-CY04



Fiber OSP cable, LightScope® ZWP Single Jacket All-Dielectric, 12 fiber, Gel-Free, Stranded Loose Tube, Singlemode G.652.D and G.657.A1, Meters jacket marking, Black jacket color

#### Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America	
Portfolio	CommScope®	
Product Type	Fiber OSP cable	
Product Series	D-LN	
General Specifications		
Cable Type	Stranded loose tube	
Construction Type	Non-armored	
Subunit Type	Gel-free	
Filler, quantity	4	
Jacket Color	Black	
Jacket Marking	Meters	
Subunit, quantity	1	
Fibers per Subunit, quantity	12	
Total Fiber Count	12	
Dimensions		
Buffer Tube/Subunit Diameter	2.5 mm   0.098 in	
Diameter Over Jacket	10.2 mm   0.402 in	

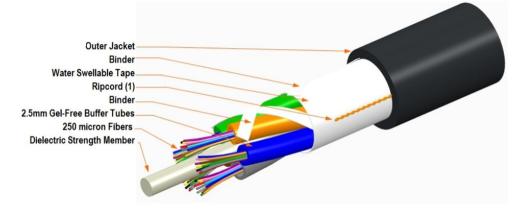
#### Representative Image

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# 810009926/DB | D-012-LN-8W-M12NS-CY04



#### Material Specifications

Jacket Material	PE
Mechanical Specifications	
Minimum Bend Radius, loaded	153 mm   6.024 in
Minimum Bend Radius, unloaded	102 mm   4.016 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	1307 m   4,288.058 ft
Optical Specifications	

Fiber Type

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

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# 810009926/DB | D-012-LN-8W-M12NS-CY04

#### **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   Telcordia GR-20
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	
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

63 kg/km | 42.334 lb/kft

#### 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

### LightScope<sup>®</sup> 2000

#### 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 Tensile Stress	100,000 psi (0.69 GPa)	
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	
Coating Strip Force, minimum	1.3 N   0.292 lbf	
Dynamic Fatigue Parameter, minimum	20	

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## DB-8W-LT

### 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, 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

#### \* Footnotes

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## DB-8W-LT

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 humidity

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