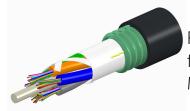
# 8108435/DB | D-108-LA-8W-M12NS



Fiber OSP cable, LightScope® ZWP Single Jacket/Single Armor, 108 fiber, Gel-Free, 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

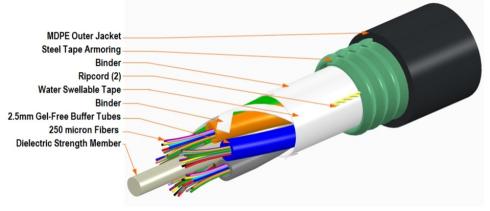
PortfolioCommScope@Product TypeFiber OSP cableProduct SeriesD-LAGeneral SpecificationsCorrugated steelArmor TypeCorrugated steelCable TypeStranded loose tubeConstruction TypeGel-freeSubunit TypeGel-freeFiller, quantity1Jacket ColorBlackSubunit, quantity9Fibers per Subunit, quantity12Fibers per Subunit, quantity108Buffer Tube/Subunit Diameter2.5 mm   0.098 inDiameter Over Jacket15 mm   0.591 in	Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America	
Product SeriesD-LAGeneral SpecificationsCorrugated steelArmor TypeCorrugated steelCable TypeStranded loose tubeConstruction TypeArmoredSubunit TypeGel-freeFiller, quantity1Jacket ColorBlackJacket Marking9Subunit, quantity12Fibers per Subunit, quantity108DimensionsStrong 10.098 in	Portfolio	CommScope®	
General SpecificationsArmor TypeCorrugated steelCable TypeStranded loose tubeConstruction TypeArmoredSubunit TypeGel-freeFiller, quantity1Jacket ColorBlackJacket MarkingMetersSubunit, quantity1Fibers per Subunit, quantity12Total Fiber Count108DimensionsStrand 1 0.098 in	Product Type	Fiber OSP cable	
Armor TypeCorrugated steelCable TypeStranded loose tubeConstruction TypeArmoredSubunit TypeGel-freeFiller, quantity1Jacket ColorBlackJacket MarkingMetersSubunit, quantity9Fibers per Subunit, quantity12Total Fiber Count108Dimensions2.5 mm   0.098 in	Product Series	D-LA	
Cable TypeStranded loose tubeConstruction TypeArmoredSubunit TypeGel-freeFiller, quantity1Jacket ColorBlackJacket MarkingMetersSubunit, quantity9Fibers per Subunit, quantity12Total Fiber Count108Dimensions2.5 mm   0.098 in	General Specifications		
Construction TypeArmoredSubunit TypeGel-freeFiller, quantity1Jacket ColorBlackJacket MarkingMetersSubunit, quantity9Fibers per Subunit, quantity12Total Fiber Count108Dimensions2.5 mm   0.098 in	Armor Type	Corrugated steel	
Subunit TypeGel-freeFiller, quantity1Jacket ColorBlackJacket MarkingMetersSubunit, quantity9Fibers per Subunit, quantity12Total Fiber Count108Dimensions2.5 mm   0.098 in	Cable Type	Stranded loose tube	
Filler, quantity1Jacket ColorBlackJacket MarkingMetersSubunit, quantity9Fibers per Subunit, quantity12Total Fiber Count108Dimensions2.5 mm   0.098 in	Construction Type	Armored	
Jacket ColorBlackJacket MarkingMetersSubunit, quantity9Fibers per Subunit, quantity12Total Fiber Count108Dimensions5.000000000000000000000000000000000000	Subunit Type	Gel-free	
Jacket MarkingMetersSubunit, quantity9Fibers per Subunit, quantity12Total Fiber Count108Dimensions	Filler, quantity	1	
Subunit, quantity9Fibers per Subunit, quantity12Total Fiber Count108Dimensions2.5 mm   0.098 in	Jacket Color	Black	
Fibers per Subunit, quantity12Total Fiber Count108Dimensions2.5 mm   0.098 in	Jacket Marking	Meters	
Total Fiber Count 108   Dimensions 2.5 mm   0.098 in	Subunit, quantity	9	
Dimensions Buffer Tube/Subunit Diameter 2.5 mm   0.098 in	Fibers per Subunit, quantity	12	
Buffer Tube/Subunit Diameter2.5 mm   0.098 in	Total Fiber Count	108	
	Dimensions		
Diameter Over Jacket 15 mm   0.591 in	Buffer Tube/Subunit Diameter	2.5 mm   0.098 in	
	Diameter Over Jacket	15 mm   0.591 in	

## Representative Image

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# 8108435/DB | D-108-LA-8W-M12NS



## Material Specifications

Jacket Material	PE
Mechanical Specifications	
Minimum Bend Radius, loaded	225 mm   8.858 in
Minimum Bend Radius, unloaded	150 mm   5.906 in
Tensile Load, long term, maximum	800 N   179.847 lbf
Tensile Load, short term, maximum	2700 N   606.984 lbf
Compression	44 N/mm   251.246 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	438 m   1,437.008 ft
Optical Specifications	

### Fiber Type

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

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# 8108435/DB | D-108-LA-8W-M12NS

## **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 Qualification Method	ANSI/ICEA S-87-640
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

187 kg/km | 125.658 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

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
Townsystum Donondonos, 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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**COMMSCOPE**°

## 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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