

# 8108284/DB | D-108-LN-8W-F12NS

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Fiber OSP cable, LightScope® ZWP Single Jacket All-Dielectric, 108 fiber, Gel-Free, Stranded Loose Tube, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color

## Product Classification

<b>Regional Availability</b>	Asia   Australia/New Zealand   EMEA   Latin America   North America
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber OSP cable
<b>Product Series</b>	D-LN

## General Specifications

<b>Cable Type</b>	Stranded loose tube
<b>Construction Type</b>	Non-armored
<b>Subunit Type</b>	Gel-free
<b>Filler, quantity</b>	1
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Feet
<b>Subunit, quantity</b>	9
<b>Fibers per Subunit, quantity</b>	12
<b>Total Fiber Count</b>	108

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	2.5 mm   0.098 in
<b>Diameter Over Jacket</b>	13.6 mm   0.535 in

## Representative Image



## Material Specifications

**Jacket Material** PE

## Mechanical Specifications

**Minimum Bend Radius, loaded** 204 mm | 8.032 in  
**Minimum Bend Radius, unloaded** 136 mm | 5.354 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** 694 m | 2,276.903 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

<b>Installation temperature</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Operating Temperature</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Storage Temperature</b>	-40 °C to +75 °C (-40 °F to +167 °F)
<b>Cable Qualification Standards</b>	ANSI/ICEA S-87-640   EN 187105   Telcordia GR-20
<b>Environmental Space</b>	Aerial, lashed   Buried
<b>Jacket UV Resistance</b>	UV stabilized
<b>Water Penetration</b>	24 h
<b>Water Penetration Test Method</b>	FOTP-82   IEC 60794-1 F5

## Environmental Test Specifications

<b>Cable Freeze</b>	-2 °C   28.4 °F
<b>Cable Freeze Test Method</b>	FOTP-98   IEC 60794-1 F15
<b>Heat Age</b>	-40 °C to +85 °C (-40 °F to +185 °F)
<b>Heat Age Test Method</b>	IEC 60794-1 F9
<b>Low High Bend</b>	-30 °C to +60 °C (-22 °F to +140 °F)
<b>Low High Bend Test Method</b>	FOTP-37   IEC 60794-1 E11
<b>Temperature Cycle</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Temperature Cycle Test Method</b>	FOTP-3   IEC 60794-1 F1

## Packaging and Weights

<b>Cable weight</b>	118 kg/km   79.292 lb/kft
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
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