## 8107301/DB/GS | D-060-LA-8W-F12NS/GS



Fiber OSP cable, LightScope ZWP® Single Jacket/Single Armor, 60 fibers, Gel-Free, Stranded Loose Tube, Singlemode G.652.D and G.657.A1, Feet 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

Black

 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

Jacket Marking Feet

Subunit, quantity 5

Fibers per Subunit, quantity 12

**Total Fiber Count** 60

Dimensions

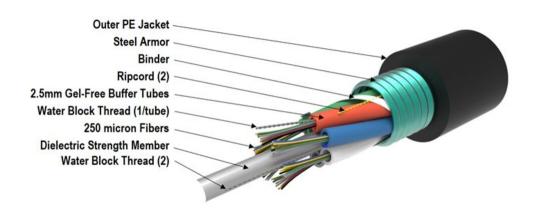
**Jacket Color** 

Buffer Tube/Subunit Diameter2.5 mm | 0.098 inDiameter Over Jacket11.5 mm | 0.453 in

Representative Image



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### Material Specifications

Jacket Material PE

### Mechanical Specifications

Minimum Bend Radius, loaded173 mm | 6.811 inMinimum Bend Radius, unloaded115 mm | 4.528 inTensile Load, long term, maximum800 N | 179.847 lbfTensile Load, short term, maximum2700 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** 

**Fiber Type** G.652.D and G.657.A1 | G.652.D and G.657.A1



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#### **Environmental Specifications**

Installation temperature  $-30 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-22 °F to +158 °F)

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-40 °F to +158 °F)

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+75 \,^{\circ}\text{C}$  (-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**  $-30 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-22  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

**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

Included Products

DB-8W-LT – LightScope ZWP® Singlemode

#### \* Footnotes

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



### LightScope ZWP® Singlemode Fiber



#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

### General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance**  $\pm 0.7 \, \mu m$ 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  $0.5 \, \mu m$ 

**Proof Test** 689.476 N/mm<sup>2</sup> | 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 1.50 dB @ 1,625 nm

 Macrobending, 30 mm Ø mandrel, 10 turns
 0.25 dB @ 1,550 nm
 1 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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Coating Strip Force, minimum 1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

**Optical Specifications** 

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.1 dB

**Zero Dispersion Slope, maximum** 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 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  $\pm 0.4 \, \mu \text{m}$  @ 1310 nm |  $\pm 0.5 \, \mu \text{m}$  @ 1550 nm |  $\pm 0.6 \, \mu \text{m}$ 

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.04 ps/sgrt(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

Agency Classification

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

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# DB-8W-LT

#### \* Footnotes

**Temperature Dependence, maximum** Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

**Temperature Humidity Cycling, maximum** Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F)

up to 95% relative humidity

