

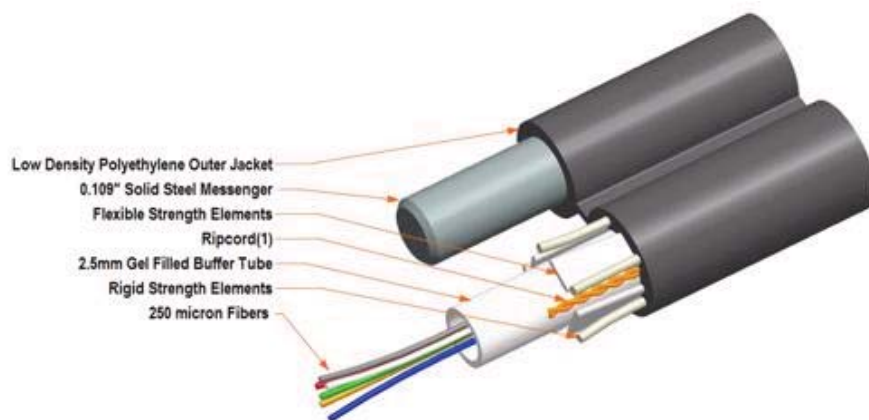


## Broadband Solutions

8108269/DB | M-002-MN-8W-F02NS/109

**Self-Supporting Non-Armored Figure-8 Outdoor Drop Cable, 1-6 fiber Arid Core construction with 0.109 in messenger, central loose tube**

## Representative Image



## General Specifications

Cable Type	Central loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled

## Construction Materials

Fiber Type Solution	LightScope® ZWP®, zero water peak singlemode fiber (G.652.D)
Jacket Material	PE
Total Fiber Count	2
Fiber Type	LightScope® ZWP®, zero water peak singlemode fiber (G.652.D)
Fiber Type, quantity	2
Fibers per Subunit, quantity	2
Jacket Color	Black
Jacket UV Resistance	UV stabilized



## Dimensions

Buffer Tube/Subunit Diameter	2.50 mm   0.10 in
Cable Weight	52.0 lb/kft   77.0 kg/km
Diameter Over Jacket	5.10 mm   0.20 in
Diameter Over Messenger Jacket	4.30 mm   0.17 in
Height Over Jacket	10.70 mm   0.42 in

For more information or to place an order, please contact Supply Solutions at 866-978-7759. Courtesy of CommScope.

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Subunit, quantity 1

## Physical Specifications

Minimum Bend Radius, loaded	7.7 cm   3.0 in
Minimum Bend Radius, unloaded	5.1 cm   2.0 in
Tensile Load, long term, maximum	400 N   90 lbf
Tensile Load, short term, maximum	1334 N   300 lbf
Vertical Rise, maximum	1736.0 ft   529.0 m

## Environmental Specifications

Environmental Space	Aerial, self-support
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)

## Mechanical Test Specifications

Compression	10 N/mm   57 lb/in
Compression Test Method	FOTP-41   IEC 60794-1-2, Section 7
Flex	35 cycles
Flex Test Method	FOTP-24   IEC 60794-1-2, Section 10
Impact	1.08 ft lb   1.47 N-m
Impact Test Method	FOTP-25   IEC 60794-1-2, Section 8
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33   IEC 60794-1-2, Section 5
Twist	10 cycles
Twist Test Method	FOTP-85   IEC 60794-1-2, Section 11
Water Penetration	24 h
Water Penetration Test Method	FOTP-82   IEC 60794-1-2, Section 24

## Environmental Test Specifications

Cable Freeze	-2 °C   28 °F
Cable Freeze Test Method	FOTP-98
Drip	70 °C   158 °F
Drip Test Method	FOTP-81   IEC 60794-1-2, Section 17
Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	Not applicable
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °F)
Low High Bend Test Method	FOTP-28   IEC 60794-1-2, Section 28
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3   IEC 60794-1-2, Section 22

## Qualification Specifications

Cable Qualification Standards ANSI/ICEA S-110-717-2003

## Regulatory Compliance/Certifications

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**Agency**

RoHS 2002/95/EC  
ISO 9001:2008

**Classification**

Compliant  
Designed, manufactured and/or distributed under this quality management system

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**Included Products**

DB-8W-LT (Product Component—not orderable) — LightScope ZWP® Singlemode Fiber



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**Broadband Solutions**  
**DB-8W-LT**  
**LightScope ZWP® Singlemode Fiber**

## Optical Specifications, Wavelength Specific

Standards Compliance	ITU-T G.652.D   TIA-492CAAB (OS2)
Attenuation, maximum	0.22 db/km @ 1550 nm 0.31 db/km @ 1385 nm 0.34 db/km @ 1310 nm
Dispersion, maximum	18 ps(nm-km) at 1550 nm   3.2 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm
Mode Field Diameter	9.2 $\mu\text{m}$ @ 1310 nm 9.6 $\mu\text{m}$ @ 1385 nm 10.4 $\mu\text{m}$ @ 1550 nm
Mode Field Diameter Tolerance	$\pm 0.3 \mu\text{m}$ @ 1310 nm   $\pm 0.5 \mu\text{m}$ @ 1550 nm   $\pm 0.6 \mu\text{m}$ @ 1385 nm
Index of Refraction	1.467 @ 1310 nm 1.468 @ 1385 nm 1.468 @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.06 ps/sqrt(km)
Backscatter Coefficient	-82.1 dB @ 1550 nm -79.6 dB @ 1310 nm

## Physical Specifications

Cladding Diameter	125.0 $\mu\text{m}$
Cladding Diameter Tolerance	$\pm 0.7 \mu\text{m}$
Cladding Non-Circularity, maximum	1 %
Coating Diameter (Colored)	254 $\mu\text{m}$
Coating Diameter (Uncolored)	245 $\mu\text{m}$
Coating Diameter Tolerance (Colored)	$\pm 7 \mu\text{m}$
Coating Diameter Tolerance (Uncolored)	$\pm 10 \mu\text{m}$
Coating/Cladding Concentricity Error, maximum	12 $\mu\text{m}$
Core/Clad Offset, maximum	0.5 $\mu\text{m}$

## Optical Specifications, General

Cabled Cutoff Wavelength, maximum	1260 nm
Point Defects, maximum	0.10 dB
Zero Dispersion Slope, maximum	0.090 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1322 nm
Zero Dispersion Wavelength, minimum	1302 nm

## Mechanical Specifications

Coating Strip Force, maximum	8.9 N   2.0 lbf
Coating Strip Force, minimum	1.3 N   0.3 lbf
Dynamic Fatigue Parameter, minimum	20 nd
Fiber Curl, minimum	4.0 m   13.1 ft
Macrobending, 32 mm mandrel, 1 turn	0.05 dB @ 1550 nm
Macrobending, 50 mm mandrel, 100 turns	0.05 dB @ 1550 nm

DB-8WLT

Proof Test 0.69 N/mm<sup>2</sup> | 100.00 psi

## Environmental Specifications

Heat Aging, maximum	0.05 dB @ 85 °C
Temperature Dependence, maximum	0.05 dB
Temperature Humidity Cycling, maximum	0.05 dB
Water Immersion, maximum	0.05 dB @ 23 °C

## Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

### \* 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



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