

LightScope® ZWP Fiber + Tone Wire Outdoor Drop Cable, 1–24 fiber  
Arid Core construction, central loose tube, 5000 ft

- \*Product complies with the Build America, Buy America Act (BABAA) requirements of the Infrastructure Investment and Jobs Act of 2021 (Pub. L. 117- 58, §§ 70901-70953), or is the subject of a waiver approved by the Secretary of Commerce or designee. Compliance requirements and waiver applicability vary based on government funding program. Check the laws and regulations for your specific program.

Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Hybrid cable, fiber and tone-wire
Product Brand	LightScope® ZWP
Government Requirements	Build America Buy America (BABA) compliant*

General Specifications

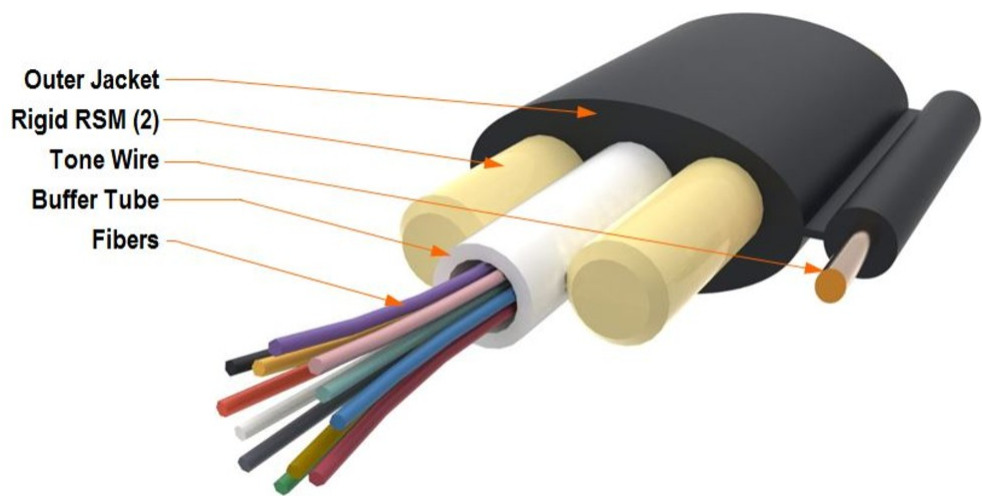
Cable Type	Central loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Jacket Color	Black
Location of Manufacturing	Catawba, North Carolina
Subunit, quantity	1
Fibers per Subunit, quantity	24
Tone Wire, quantity	1
Total Fiber Count	24

Dimensions

Height Over Jacket	4.572 mm   0.18 in
Cable Length	1,524 m   5000 ft
Buffer Tube/Subunit Diameter	3.048 mm   0.12 in
Diameter Over Jacket	9.906 mm   0.39 in
Diameter Over Messenger Jacket	2.032 mm   0.08 in
Tone Wire Gauge	24 AWG

# 810010256/50 | O-024-DF-HY-F24NS/30G /8W024/1X24AWG (5K)

## Representative Image



## Mechanical Specifications

Minimum Bend Radius, loaded	86.36 mm   3.4 in
Minimum Bend Radius, unloaded	63.5 mm   2.5 in
Tensile Load, long term, maximum	400.34 N   90 lbf
Tensile Load, short term, maximum	1,334.466 N   300 lbf
Compression	1.018 kg/mm   57 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	35 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	2.17 ft lb   2.942 N-m
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	889.102 m   2917 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 °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-110-717   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
Drip	70 °C   158 °F
Drip Test Method	FOTP-81   IEC 60794-1 E14
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	40.399 kg/km   27.147 lb/kft
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## Included Products

DB-8W-LT – LightScope® ZWP Singlemode  
Fiber

## \* Footnotes

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