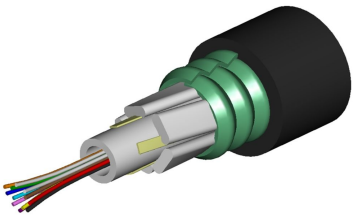# 8106552/DB | O-006-DA-8W-M06NS

Fiber drop cable, LightScope ZWP® Single Jacket Single Armor Outdoor Drop Cable, 6 fiber Arid Core construction, central loose tube, Gel-filled, Singlemode G.652.D and G.657.A1, Meter 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
Portfolio	CommScope®
Product Type	Fiber drop cable
Product Series	O-DA

General Specifications

Armor Type	Corrugated steel
Cable Type	Central loose tube
Construction Type	Armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Meters
Subunit, quantity	1
Fibers per Subunit, quantity	6
Total Fiber Count	6

Dimensions

Buffer Tube/Subunit Diameter	3 mm	0.118 in
Diameter Over Jacket	8 mm	0.315 in

Representative Image

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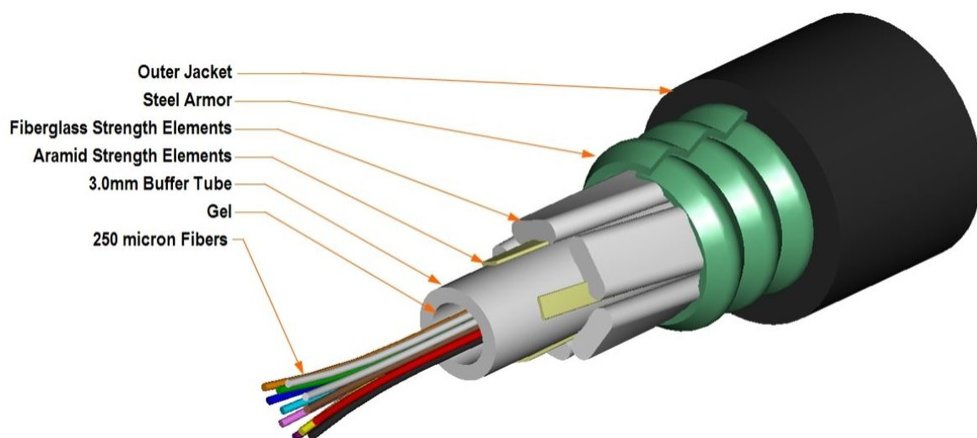
Material Specifications

Jacket Material	PE

Mechanical Specifications

Minimum Bend Radius, loaded	120 mm	4.724 in
Minimum Bend Radius, unloaded	80 mm	3.15 in
Tensile Load, long term, maximum	400 N	89.924 lbf
Tensile Load, short term, maximum	1334 N	299.895 lbf
Compression	10 N/mm	57.101 lb/in
Compression Test Method	FOTP-41	IEC 60794-1 E3
Flex	35 cycles
Flex Test Method	FOTP-104	IEC 60794-1 E6
Impact	2.94 N-m	26.021 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	595 m	1,952.1 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
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	69 kg/km	46.366 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

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Operating Temperature   Specification applicable to non-terminated bulk fiber cable

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DB-8W-LT

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
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

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