

Fiber outdoor drop cable, LightScope® ZWP Self-Supporting All-Dielectric, Singlemode G.652.D and G.657.A1, 12 fiber Arid Core construction, Gel-filled, central loose tube, no ripcords, Meters jacket marking, Black jacket color

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America
Portfolio	CommScope®
Product Type	Fiber drop cable
Product Series	O-DF

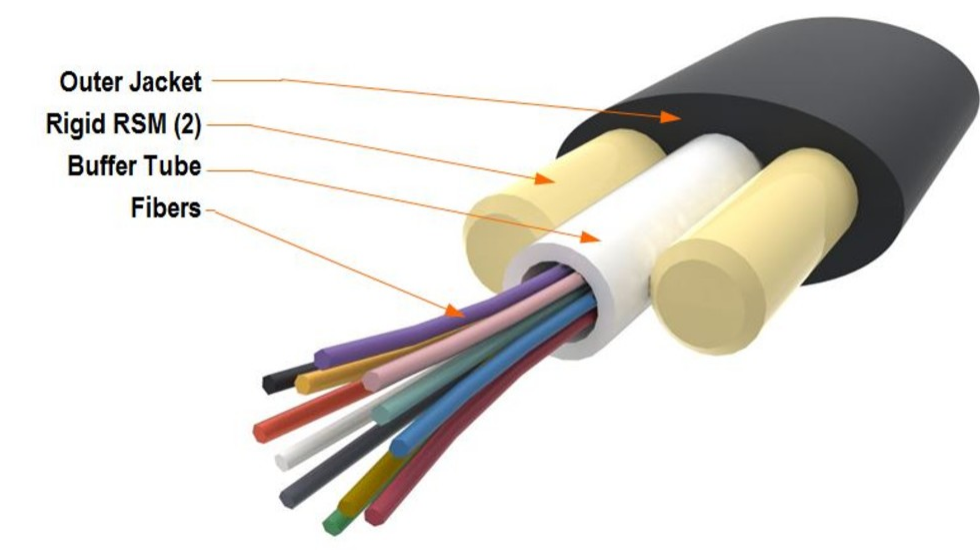
General Specifications

Cable Type	Central loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	1
Fibers per Subunit, quantity	12
Total Fiber Count	12

Dimensions

Height Over Jacket	4.3 mm 0.169 in
Buffer Tube/Subunit Diameter	2 mm 0.079 in
Diameter Over Jacket	8 mm 0.315 in

Representative Image



Material Specifications

Jacket Material	PE
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Mechanical Specifications

Minimum Bend Radius, loaded	86 mm 3.386 in
Minimum Bend Radius, unloaded	81 mm 3.189 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	1047 m 3,435.039 ft

Optical Specifications

Fiber Type

G.652.D and G.657.A1 | G.652.D and G.657.A1

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, self-support | 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

39 kg/km | 26.207 lb/kft

Included Products

DB-8W1-LT – LightScope® ZWP Singlemode
Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.3 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 Tensile Stress	100,000 psi (0.69 GPa)

Dimensions

Fiber Curl, minimum	4 m 13.123 ft
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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
Coating Strip Force, minimum	1.3 N 0.292 lbf
Dynamic Fatigue Parameter, minimum	20

DB-8W1-LT

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/m @ 1,550 nm 0.33 dB/m @ 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 TIA-492CAAB (OS2)

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

* 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