

Fiber drop cable, LightScope® ZWP Single Jacket Single Armor Outdoor Drop Cable, 2 fiber Arid Core construction, central loose tube, Gel-filled, Singlemode G.652.D and G.657.A1, Meter jacket marking, Black jacket color

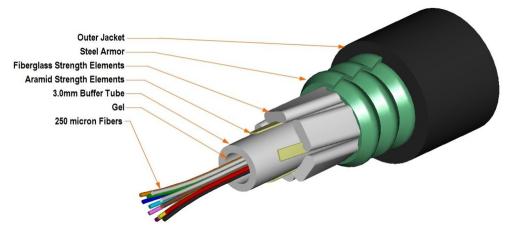
• Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

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	2
Total Fiber Count	2
Dimensions	
Buffer Tube/Subunit Diameter	3 mm 0.118 in
Diameter Over Jacket	8 mm 0.315 in

Representative Image





Material Specifications

Mechanical Specifications

Jacket Material

ΡE

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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LightScope® ZWP Singlemode Fiber

LightScope[®] 2000

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 Tensile Stress	100,000 psi (0.69 GPa)	
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	
Coating Strip Force, minimum	1.3 N 0.292 lbf	
Dynamic Fatigue Parameter, minimum	20	

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DB-8W-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/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

Classification

Agency

ISO 9001:2015

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

* Footnotes

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DB-8W-LT

Temperature Dependence, maximumTemperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)Temperature Humidity Cycling, maximumTemperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F)

up to 95% relative humidity

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