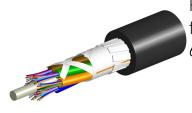
810010356/DB | 0-024-LN-8W-M06BK/20G



Fiber OSP cable, LightScope ZWP® Mini Single Jacket All-Dielectric, 24 fiber Arid Core construction, stranded loose tube, Gel-filled, Singlemode G. 652.D and G.657.A1, Feet jacket marking, Black jacket color

Product Classification

Regional Availability	EMEA
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	O-LN
General Specifications	
Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Filler, quantity	2
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB OPTICAL CABLE TYPE OS2 SM 24 FIBER [SERIAL NUMBER] [MM/YYYY] [METRE MARK]
Subunit, quantity	4
Fibers per Subunit, quantity	6
Total Fiber Count	24
Dimensions	
Buffer Tube/Subunit Diameter	2 mm 0.079 in
Diameter Over Jacket	9.5 mm 0.374 in

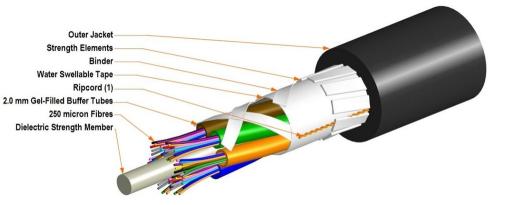
Representative Image

Page 1 of 6

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: March 5, 2024



810010356/DB | 0-024-LN-8W-M06BK/20G



Material Specifications

Jacket Material	PE	
Mechanical Specifications		
Minimum Bend Radius, loaded	143 mm 5.63 in	
Minimum Bend Radius, unloaded	95 mm 3.74 in	
Tensile Load, long term, maximum	800 N 179.847 lbf	
Tensile Load, short term, maximum	2700 N 606.984 lbf	
Compression	22 N/mm 125.623 lb/in	
Compression Test Method	IEC 60794-1 E3	
Flex	25 cycles	
Flex Test Method	IEC 60794-1 E6	
Impact	2.94 N-m 26.021 in lb	
Impact Test Method	IEC 60794-1 E4	
Strain	See long and short term tensile loads	
Strain Test Method	IEC 60794-1 E1	
Twist	10 cycles	
Twist Test Method	IEC 60794-1 E7	
Vertical Rise, maximum	1142 m 3,746.719 ft	
Optical Specifications		

Fiber Type

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

Environmental Specifications

Page 2 of 6

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: March 5, 2024



810010356/DB | 0-024-LN-8W-M06BK/20G

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-87-640 EN 187105 IEC 60794-1-2
Environmental Space	Aerial, lashed Buried
Jacket UV Resistance	UV stabilized
Water Penentration	24 h
Water Penentration Test Method	IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze	-2 °C 28.4 °F
Cable Freeze Test Method	IEC 60794-1 F15
Drip	70 °C 158 °F
Drip Test Method	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	IEC 60794-1 E11
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1 F1

Packaging and Weights

Cable weight

72 kg/km | 48.382 lb/kft

Included Products

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

Page 3 of 6

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: March 5, 2024



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

Page 4 of 6

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: January 25, 2024

COMMSCOPE®

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
Tomporatura Dopondopoo, maximum	0.05 dP/km

Temperature Dependence, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 dB/kmWater Immersion, maximum0.05 dB/km @ 23 °C

Regulatory Compliance/Certifications

Classification

Agency

ISO 9001:2015

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

Page 5 of 6

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: January 25, 2024



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

Page 6 of 6

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: January 25, 2024

