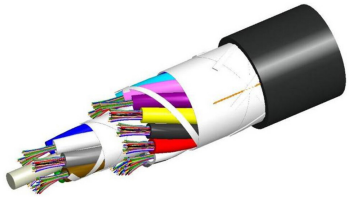
8108050/DB | O-576-LN-8W-F24NS



Fiber OSP cable, LightScope® ZWP Single Jacket All-Dielectric, High Fiber Count, 576 fiber, Gel-Filled, Stranded Loose Tube, Singlemode G. 652.D and G.657.A1, Feet jacket marking, Black jacket color

- *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	Fiber OSP cable
Product Series	O-LN
Government Requirements	Build America Buy America (BABA) compliant*

General Specifications

Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Feet
Location of Manufacturing	Claremont, North Carolina
Subunit, quantity	24
Fibers per Subunit, quantity	24
Total Fiber Count	576

Dimensions

Buffer Tube/Subunit Diameter	3.5 mm | 0.138 in
Diameter Over Jacket	24.8 mm | 0.976 in

Representative Image

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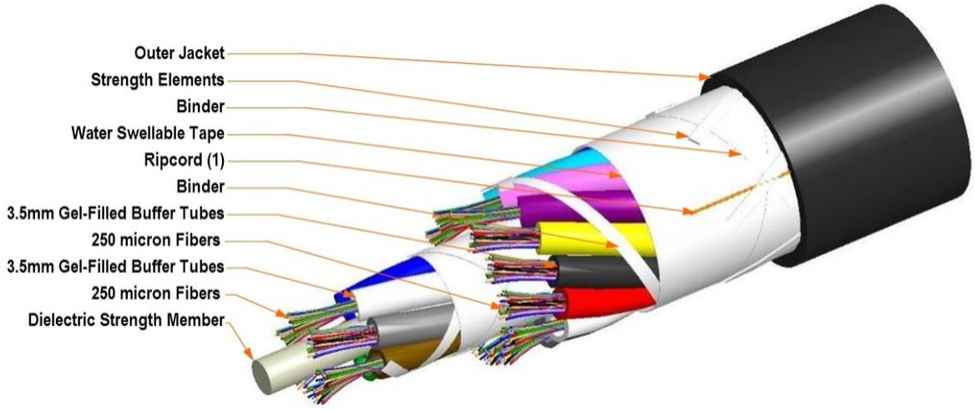
8108050/DB | 0-576-LN-8W-F24NS



Material Specifications

Jacket Material	PE

Mechanical Specifications

Minimum Bend Radius, loaded	372 mm | 14.646 in
Minimum Bend Radius, unloaded	248 mm | 9.764 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	FOTP-41 | IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104 | IEC 60794-1 E6
Impact	7.35 N-m | 65.053 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	236 m | 774.278 ft

Optical Specifications

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

Environmental Specifications

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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
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	347 kg/km | 233.173 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

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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