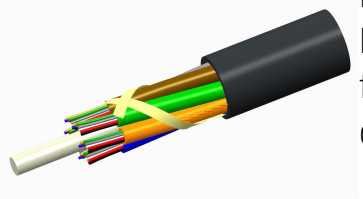
810010136/DB | B-024-LN-8F-M12NS/15G



Fiber OSP cable, LightScope ZWP® Blown Micro Single Jacket All-Dielectric Outdoor Stranded Loose Tube Arid-Core® Construction, 24 fiber, Singlemode G.652.D, Gel-filled, Meters jacket marking, Black jacket color

Product Classification

Regional Availability	Asia | Australia/New Zealand | EMEA | Latin America | North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	B-LN

General Specifications

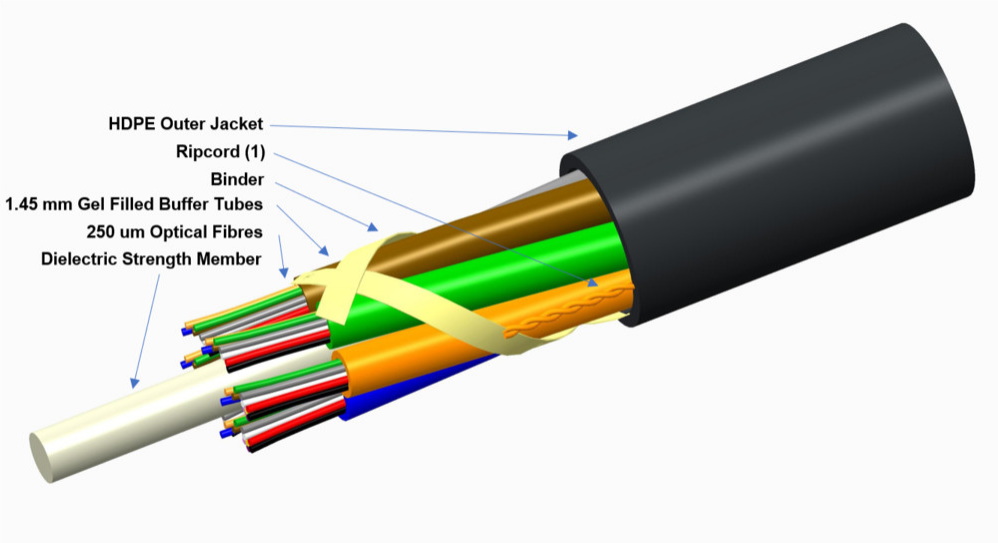
Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Filler, quantity	3
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Laser
Jacket Marking Text	COMMSCOPE OPTICAL CABLE G657A1 SM 24F (SERIAL NUMBER) [MM /YYYY] [M]
Subunit, quantity	2
Fibers per Subunit, quantity	12
Total Fiber Count	24

Dimensions

Buffer Tube/Subunit Diameter	1.45 mm | 0.057 in
Diameter Over Jacket	5.1 mm | 0.201 in

Representative Image

810010136/DB | B-024-LN-8F-M12NS/15G



Material Specifications

Jacket Material	High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded	77 mm | 3.031 in
Minimum Bend Radius, unloaded	51 mm | 2.008 in
Tensile Load, long term, maximum	97 N | 21.806 lbf
Tensile Load, short term, maximum	324 N | 72.838 lbf
Compression	10 N/mm | 57.101 lb/in
Compression Test Method	IEC 60794-1-21 E3
Flex	25 cycles
Flex Test Method	IEC 60794-1 E6
Impact	0.3 N-m | 2.655 in lb
Impact Test Method	IEC 60794-1-21 E4
Strain	See long and short term tensile loads
Strain Test Method	IEC 60794-1-21 E1
Twist	10 cycles
Twist Test Method	IEC 60794-1-21 E7
Vertical Rise, maximum	492 m | 1,614.173 ft

Optical Specifications

Fiber Type	G.652.D | G.652.D

Environmental Specifications

Installation temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Storage Temperature	-30 °C to +75 °C (-22 °F to +167 °F)
Cable Qualification Standards	IEC 60794-5-10
Environmental Space	Air-blown, microduct
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F4

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 60794-1-21 E14
Heat Age	-30 °C to +85 °C (-22 °F to +185 °F)
Heat Age Test Method	IEC 60794-1-22 F9
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °F)
Low High Bend Test Method	IEC 60794-1-21 E11
Temperature Cycle	-30 °C to +70 °C (-22 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1-22 F1

Packaging and Weights

Cable weight	22 kg/km | 14.783 lb/kft

Included Products

CS-8F-TB	–	Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8F-TB

Low Macrobending, Zero Water Peak, Dispersion-Unshifted 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/Clad Offset, maximum	0.5 µm
Proof Test	689.476 N/mm² | 100000 psi
Tight Buffer Diameter	900 µm
Tight Buffer Diameter Tolerance	±40 µm

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, 50 mm Ø mandrel, 100 turns	0.03 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

Optical Specifications

Cabled Cutoff Wavelength, maximum	1260 nm

Point Defects, maximum	0.1 dB
Zero Dispersion Slope, maximum	0.09 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1300 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum	0.50 dB/km @ 1,310 nm | 0.50 dB/km @ 1,385 nm | 0.50 dB/km @ 1,490 nm | 0.50 dB/km @ 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	8.6 µm @ 1,310 nm | 9.8 µm @ 1,550 nm
Mode Field Diameter Tolerance	±0.4 µm @ 1310 nm | ±0.5 µm @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.06 ps/sqrt(km)
Standards Compliance	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

* 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