810010142/DB | B-002-CN-8W-M02BK/20G

Fiber OSP cable, LightScope® ZWP Blown Single Jacket All-Dielectric 2-fiber, Central Tube Construction, Singlemode G.657.A1, Gel-filled, Meters jacket marking, Black jacket color

Product Classification

Regional Availability	Europe
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	B-CN

General Specifications

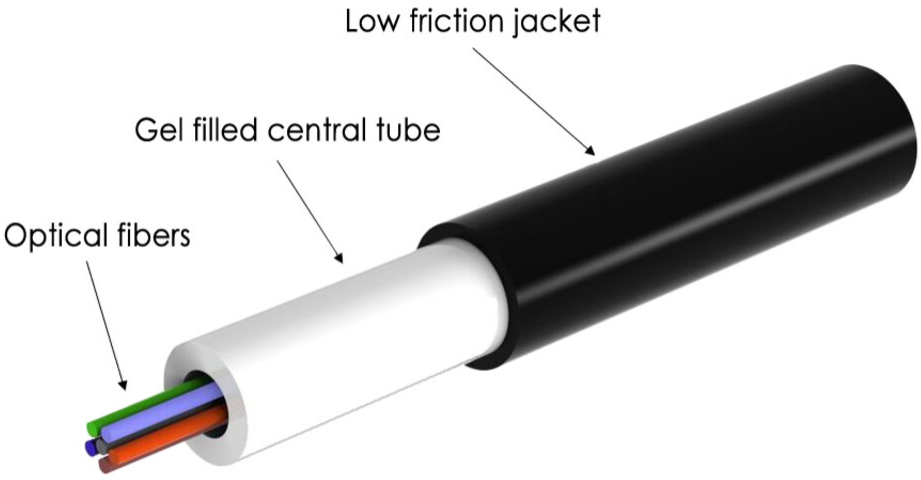
Cable Type	Central tube, all dielectric | Microcable
Construction Type	Non-armored
Subunit Type	Gel-filled
Filler, quantity	0
Inner Jacket Color	White
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB OPTICAL CABLE 810010142/DB 2x G657A1 SM [SERIAL NUMBER] [METER MARK]
Subunit, quantity	1
Fibers per Subunit, quantity	2
Total Fiber Count	2

Dimensions

Buffer Tube/Subunit Diameter	2 mm | 0.079 in
Diameter Over Jacket	2.5 mm | 0.098 in

Representative Image

810010142/DB | B-002-CN-8W-M02BK/20G



Material Specifications

Jacket Material	Nylon

Mechanical Specifications

Minimum Bend Radius, loaded	30 mm | 1.181 in
Minimum Bend Radius, storage coils	30 mm | 1.181 in
Minimum Bend Radius, unloaded	30 mm | 1.181 in
Tensile Load, long term, maximum	75 N | 16.861 lbf
Compression	10 N/mm | 57.101 lb/in
Compression Test Method	IEC 60794-1-21 E3
Flex	25 cycles
Impact	2 N-m | 17.701 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

Optical Specifications

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

Environmental Specifications

Installation temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Operating Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Storage Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Cable Qualification Standards	IEC 60794-1-2 | 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 F5

Environmental Test Specifications

Low High Bend Test Method	IEC 60794-1-21 E11
Temperature Cycle	-20 °C to +60 °C (-4 °F to +140 °F)
Temperature Cycle Test Method	IEC 60794-1-22 F1

Packaging and Weights

Cable weight	6.1 kg/km | 4.099 lb/kft

Included Products

CS-8W-250-EMEA 8W-250um – LightScope® ZWP Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8W-250-EMEA | 8W-250um

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)	±7 µm
Coating/Cladding Concentricity Error, maximum	12 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
Coating Strip Force, minimum	1.3 N | 0.292 lbf
Dynamic Fatigue Parameter, minimum	20

Optical Specifications

Cabled Cutoff Wavelength, maximum	1250 nm
Point Defects, maximum	0.05 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	0.20 dB/km @ 1550 nm | 0.23 dB/km @ 1,625 nm | 0.344 dB/km @ 1310 nm | 0.344 dB/km @ 1380 – 1385 nm
Dispersion, maximum	18 ps(nm-km) at 1550 nm | 22 ps(nm-km) at 1625 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
Mode Field Diameter Tolerance	±0.4 µm @ 1310 nm | ±0.5 µm @ 1550 nm
Polarization Mode Dispersion Link Design Value, maximum	0.05 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

* 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