810010147/DB | B-024-CN-8W-M24BK/22G



Fiber OSP cable, LightScope® ZWP Blown Single Jacket All-Dielectric Outdoor Central Tube Construction, Singlemode G.652.D and G.657.Al, 24 fiber, Gel-filled, Meters jacket marking, Black jacket color

Product Classification

Regional Availability Europe

PortfolioCommScope®Product TypeFiber OSP cable

Product Series B-CN

General Specifications

Cable Type Central tube, all dielectric | Microcable

Construction TypeNon-armoredSubunit TypeGel-filled

Filler, quantity 0

Inner Jacket Color White
Jacket Color Black
Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE 810010147/DB 24x G657A1 SM [SERIAL NUMBER]

[METER MARK]

Subunit, quantity 1

Fibers per Subunit, quantity 24

Total Fiber Count 24

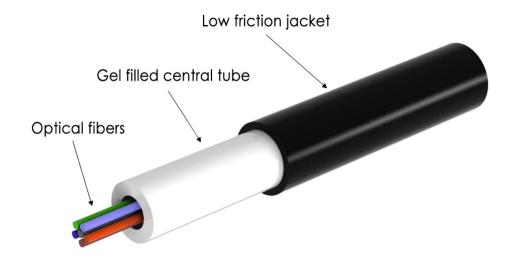
Dimensions

Buffer Tube/Subunit Diameter2.2 mm0.087 inDiameter Over Jacket2.5 mm0.098 in

Representative Image



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Material Specifications

Jacket Material Nylon

Mechanical Specifications

Minimum Bend Radius, loaded30 mm1.181 inMinimum Bend Radius, storage coils30 mm1.181 inMinimum Bend Radius, unloaded30 mm1.181 inTensile Load, long term, maximum75 N16.861 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



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Environmental Specifications

Installation temperature $-10 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ (+14 $^{\circ}\text{F}$ to +140 $^{\circ}\text{F}$)Operating Temperature $-20 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ (-4 $^{\circ}\text{F}$ to +140 $^{\circ}\text{F}$)Storage Temperature $-20 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ (-4 $^{\circ}\text{F}$ to +140 $^{\circ}\text{F}$)

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 6.9 kg/km | 4.637 lb/kft

Included Products

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

* 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 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, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

Optical Specifications



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

Cabled Cutoff Wavelength, maximum1250 nmPoint Defects, maximum0.05 dB

Zero Dispersion Slope, maximum 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.20 dB/km @ 1,550 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

 $\textbf{Mode Field Diameter} \hspace{15mm} 10.4~\mu\text{m} \ \textcircled{@} \ 1,550~\text{nm} \hspace{0.25mm} | \hspace{0.25mm} 9.2~\mu\text{m} \ \textcircled{@} \ 1,310~\text{nm}$

Mode Field Diameter Tolerance $\pm 0.4 \,\mu\text{m}$ @ 1310 nm | $\pm 0.5 \,\mu\text{m}$ @ 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, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 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

