860646622/DB | 0-072-LN-8W-M12BK/20G



Fiber OSP cable, LightScope ZWP® Mini Single Jacket All-Dielectric, 72 fiber Arid Core construction, stranded loose tube, Gel-filled, Singlemode G. 652.D and G.657.Al, 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

Jacket Color Black

Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE TYPE OS2 SM 72 FIBER [SERIAL NUMBER] [MM/YYYY]

[METRE MARK]

Meters

Subunit, quantity 6

Fibers per Subunit, quantity 12

Total Fiber Count 72

Dimensions

Jacket Marking

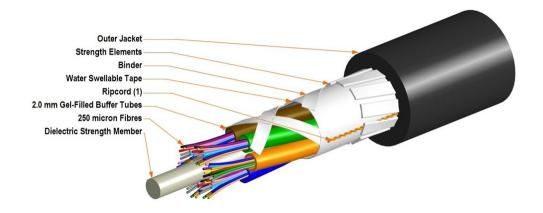
Buffer Tube/Subunit Diameter 2 mm | 0.079 in **Diameter Over Jacket** 9.5 mm | 0.374 in

Representative Image



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22 N/mm | 125.623 lb/in



Material Specifications

Compression

Jacket Material PE

Mechanical Specifications

Minimum Bend Radius, loaded143 mm | 5.63 inMinimum Bend Radius, unloaded95 mm | 3.74 inTensile Load, long term, maximum800 N | 179.847 lbf

Tensile Load, short term, maximum 2700 N | 606.984 lbf

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



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Installation temperature $-30 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to $+158 \,^{\circ}\text{F}$)

Operating Temperature $-40 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+158 \,^{\circ}\text{F}$)

Storage Temperature $-40 \,^{\circ}\text{C}$ to $+75 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+167 \,^{\circ}\text{F}$)

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 Penetration 24 h

Water Penetration 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

Drip rest method

Heat Age $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

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 $-40 \,^{\circ}\text{C} \text{ to } +70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$

Temperature Cycle Test Method IEC 60794-1 F1

Packaging and Weights

Cable weight 72 kg/km | 48.382 lb/kft

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

Included Products

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

COMMSCOPE®

CS-8W-250-EMEA | 250um

LightScope ZWP® Singlemode Fiber



Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 µm **Cladding Diameter Tolerance** $\pm 0.7 \, \mu m$ 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 $0.5 \, \mu m$

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 1.50 dB @ 1,625 nm

 Macrobending, 30 mm Ø mandrel, 10 turns
 0.25 dB @ 1,550 nm
 1 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



CS-8W-250-EMEA | 250um

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

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 0.21 dB/km @ 1,550 nm | 0.24 dB/km @ 1625

nm | 0.25 dB/km @ 1,490 nm | 0.35 dB/km @ 1,310

nm | 0.35 dB/km @ 1,385 nm

Dispersion, maximum 18 ps(nm-km) at 1550 nm | 2.2 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 | 1.468 @ 1,550 nm

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 10.4~\mu\text{m} \ \textcircled{@} \ 1,550~\text{nm} \hspace{0.2cm} | \hspace{0.2cm} 9.2~\mu\text{m} \ \textcircled{@} \ 1,310~\text{nm}$

Mode Field Diameter Tolerance ±0.4 μm @ 1310 nm | ±0.5 μm @ 1550 nm

Polarization Mode Dispersion Link Design Value, maximum 0.06 ps/sgrt(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

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