

Fiber OSP cable, LightScope® ZWP Blown Micro Single Jacket, 60 fiber, All-Dielectric Stranded Loose Tube Arid-Core™ Construction, Gel-filled, Singlemode G.652.D and G.657.Al, 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 0

Jacket Color

Jacket Marking

Meters

Jacket Marking Method

Laser

Jacket Marking Text COMMSCOPE OPTICAL CABLE OS2 SM 60F (SERIAL NUMBER) MM/YYYY XXXXXXXM

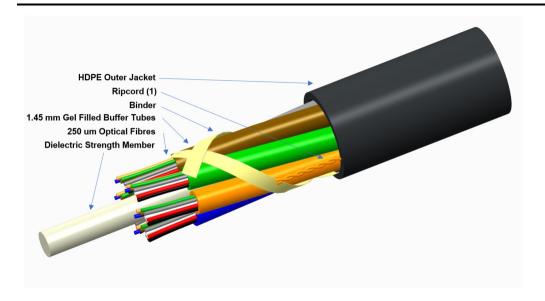
Subunit, quantity 5
Fibers per Subunit, quantity 12
Total Fiber Count 60

Dimensions

Buffer Tube/Subunit Diameter1.45 mm | 0.057 inDiameter Over Jacket5.1 mm | 0.201 in

Representative Image





Material Specifications

Jacket Material High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded77 mm | 3.031 inMinimum Bend Radius, unloaded51 mm | 2.008 inTensile Load, long term, maximum97 N | 21.806 lbfTensile Load, short term, maximum324 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 and G.657.A1

Environmental Specifications

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

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

Storage Temperature $-30 \,^{\circ}\text{C}$ to $+75 \,^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to $+167 \,^{\circ}\text{F}$)

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 $-30 \,^{\circ}\text{C}$ to $+60 \,^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to $+140 \,^{\circ}\text{F}$)

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

Regulatory Compliance/Certifications

| Agency | Classification |
|---------------|--|
| CHINA-ROHS | Below maximum concentration value |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

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Included Products

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



CS-8W-250-EMEA | 250um

LightScope® ZWP Singlemode Fiber

LightScope 2000

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
 1 0.05 dB @ 1,625 nm

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

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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 $\pm 0.4 \,\mu\text{m}$ @ 1310 nm | $\pm 0.5 \,\mu\text{m}$ @ 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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