

Fiber OSP cable, LightScope ZWP® Blown Micro Single Jacket, 36 fiber, All-Dielectric Stranded Loose Tube Arid-Core® Construction, Gel-filled, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color

- *Product complies with the Build America, Buy America Act (BABAA) requirements of the Infrastructure Investment and Jobs Act of 2021 (Pub. L. 117- 58, §§ 70901-70953), or is the subject of a waiver approved by the Secretary of Commerce or designee. Compliance requirements and waiver applicability vary based on government funding program. Check the laws and regulations for your specific program.

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	B-LN
Government Funding	Build America Buy America (BABA) compliant*

General Specifications

Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Filler, quantity	2
Jacket Color	Black
Jacket Marking	Feet
Jacket Marking Method	Laser
Jacket Marking Text	COMMSCOPE OPTICAL CABLE OS2 SM 24F (SERIAL NUMBER) MM/YYYY XXXXXXXXFT
Subunit, quantity	3
Fibers per Subunit, quantity	12
Total Fiber Count	36

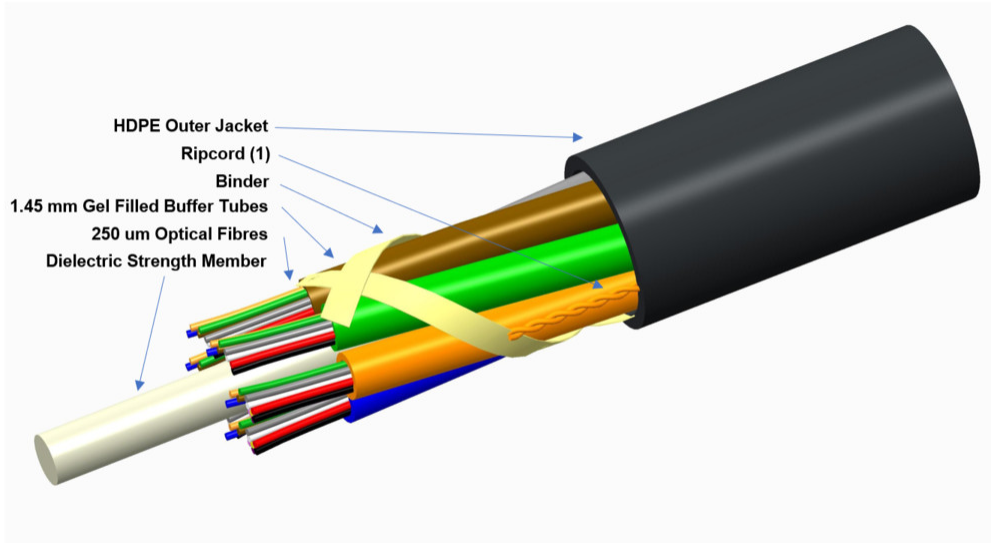
Dimensions

Buffer Tube/Subunit Diameter	1.45 mm 0.057 in
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Diameter Over Jacket

5.1 mm | 0.201 in

Representative Image



Material Specifications

Jacket Material

High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded

208.3 mm | 8.201 in

Minimum Bend Radius, unloaded

55 mm | 2.165 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

810009642/DB | B-036-LN-8W-F12NS/15G

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 °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

Regulatory Compliance/Certifications

Agency

CHINA-ROHS

ISO 9001:2015

Classification

Below maximum concentration value

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



Included Products

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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)	±5 µm
Coating/Cladding Concentricity Error, maximum	12 µm
Core/Clad Offset, maximum	0.5 µm
Proof Test	689.476 N/mm ² 100000 psi

Dimensions

Fiber Curl, minimum	4 m 13.123 ft
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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

CS-8W-250-EMEA | 250µm

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 0.21 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

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 0.06 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