

LightScope® ZWP Double Jacket/Single Armor, Gel-Filled, Outdoor Stranded Loose Tube Cable

- Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

Product Classification

Regional Availability	EMEA
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	O-L2

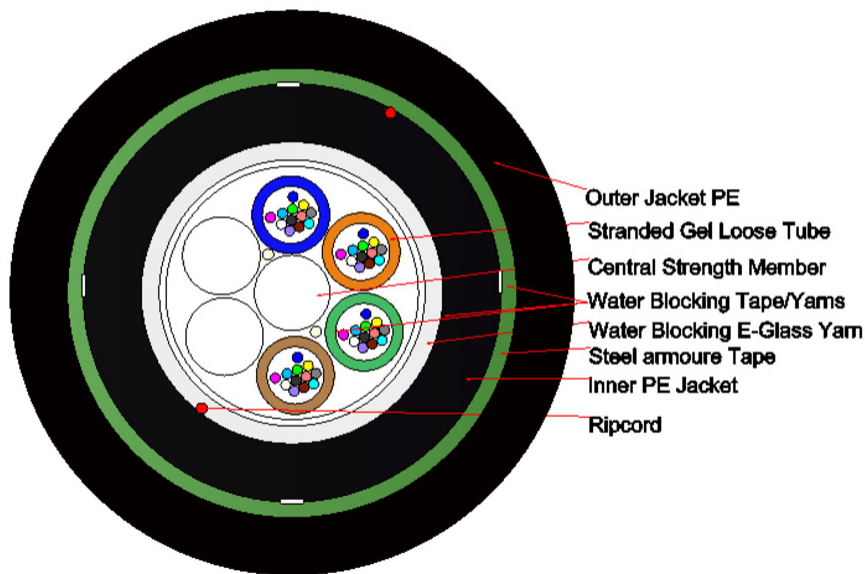
General Specifications

Armor Type	Corrugated steel
Cable Type	Stranded loose tube
Construction Type	Armored
Subunit Type	Gel-filled
Filler, quantity	2
Inner Jacket Color	Black
Jacket Color	Black
Jacket Marking	Meters
Subunit, quantity	4
Fibers per Subunit, quantity	12
Total Fiber Count	48

Dimensions

Buffer Tube/Subunit Diameter	2 mm 0.079 in
Diameter Over Inner Jacket	10.7 mm 0.421 in
Diameter Over Jacket	16 mm 0.63 in

Representative Image



Material Specifications

Jacket Material

PE

Mechanical Specifications

Minimum Bend Radius, loaded	320 mm 12.598 in
Minimum Bend Radius, unloaded	240 mm 9.449 in
Tensile Load, long term, maximum	1200 N 269.771 lbf
Tensile Load, short term, maximum	4000 N 899.236 lbf
Compression	30 N/mm 171.304 lb/in
Compression Test Method	IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	IEC 60794-1 E6
Impact	10 N-m 88.507 in lb
Impact Test Method	IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	IEC 60794-1 E1

Optical Specifications

Fiber Type

G.652.D and G.657.A1

Optical Specifications, Wavelength Specific

Standards Compliance	ITU-T G.652.D ITU-T G.657.A1
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Environmental Specifications

Installation temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	IEC 60794-1-2
EN50575 CPR Cable EuroClass Fire Performance	Fca
Environmental Space	Buried
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F5

Environmental Test Specifications

Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1 F1

Packaging and Weights

Cable weight	235 kg/km 157.913 lb/kft
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Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
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/mm² 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 | 250um

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