

Fiber OSP cable, LightScope® ZWP Mini Single Jacket/Single Armor, 12 fiber, Gel-Filled, Stranded Loose Tube, Singlemode G.657.A2, Meters jacket marking, Black jacket color

 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-LA

General Specifications

Armor Type Corrugated steel

Cable Type Stranded loose tube

Construction TypeArmoredSubunit TypeGel-filled

Filler, quantity 5

Jacket Color Black

Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE TYPE G657A2 SM 12 FIBER [SERIAL NUMBER] [MM

/YYYY] [METRE MARK]

Subunit, quantity 1
Fibers per Subunit, quantity 12
Total Fiber Count 12

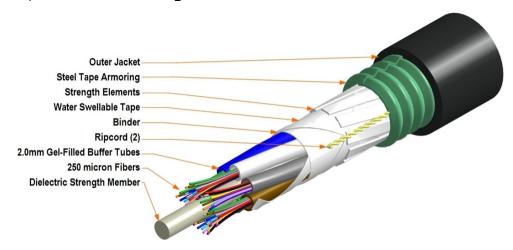
Dimensions

Buffer Tube/Subunit Diameter 2 mm | 0.079 in

Diameter Over Jacket 10.8 mm | 0.425 in



Representative Image



Material Specifications

Jacket Material PE

Mechanical Specifications

Minimum Bend Radius, loaded162 mm | 6.378 inMinimum Bend Radius, unloaded108 mm | 4.252 inTensile Load, long term, maximum800 N | 179.847 lbfTensile Load, short term, maximum2700 N | 606.984 lbf

Compression 44 N/mm | 251.246 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

Twist 10 cycles

Twist Test Method IEC 60794-1 E7

Vertical Rise, maximum 672 m | 2,204.724 ft

Optical Specifications

Fiber Type G.657.A2 | G.657.A2

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Environmental Specifications

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

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

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

Heat Age -40 °C to +85 °C (-40 °F to +185 °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 122 kg/km | 81.98 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-8G-LT

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657.A2, B2)

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



CS-8G-LT

Enhanced Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G. 657.A2, B2)

Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 µm ±0.7 µm **Cladding Diameter Tolerance** 0.7 % Cladding Non-Circularity, maximum 249 µm **Coating Diameter (Colored) 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 Tensile Stress 100,000 psi (0.69 GPa)

Dimensions

Fiber Curl, minimum 4 m | 13.123 ft

Mechanical Specifications

 Macrobending, 15 mm Ø mandrel, 1 turn
 0.50 dB @ 1,550 nm
 1 1.00 dB @ 1,625 nm

 Macrobending, 20 mm Ø mandrel, 1 turn
 0.10 dB @ 1,550 nm
 1 0.20 dB @ 1,625 nm

 Macrobending, 30 mm Ø mandrel, 10 turns
 0.03 dB @ 1,550 nm
 0.10 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

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.1 dB

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CS-8G-LT

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

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1302 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.25 dB/km @ 1,550 nm | 0.33 dB/km @ 1,385

nm | 0.36 dB/km @ 1,310 nm

Dispersion, maximum 18 ps(nm-km) at 1550 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

 $\textbf{Mode Field Diameter} \hspace{1.5cm} 8.6~\mu m \ @ \ 1,310~nm \quad | \ \ 9.8~\mu m \ @ \ 1,550~nm$

Mode Field Diameter Tolerance $\pm 0.4 \, \mu \text{m} \ @ \ 1310 \, \text{nm} \quad | \quad \pm 0.5 \, \mu \text{m} \ @ \ 1550 \, \text{nm}$

Polarization Mode Dispersion Link Design Value, maximum 0.06 ps/sqrt(km)

Standards Compliance ITU-T G.657.A2 | ITU-T G.657.B2

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

Regulatory Compliance/Certifications

Agency Classification

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

* 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

