

Fiber OSP cable, TeraSPEED® Mini Single Jacket All-Dielectric, High Tensile Strength, 48 fiber, Singlemode G.652.D and G.657.Al, Gel-Filled, Outdoor Stranded Loose Tube, Black jacket color, Meters cable marking, Provides Rodent Resistance

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA

 Portfolio
 CommScope®

 Product Type
 Fiber OSP cable

Product Series O-LN

General Specifications

Cable Type Stranded loose tube

Construction TypeNon-armoredSubunit TypeGel-filled

Filler, quantity 2

Jacket Color Black

Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE 760244891 OS2 SM 48 MDPE [SERIAL NUMBER]

[METRE MARK]

Subunit, quantity 4

Fibers per Subunit, quantity 12

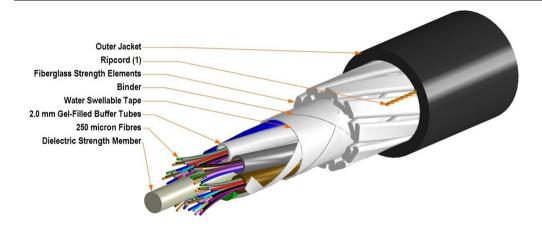
Total Fiber Count 48

Dimensions

Buffer Tube/Subunit Diameter 2 mm | 0.079 in **Diameter Over Jacket** 11.6 mm | 0.457 in

Representative Image





Material Specifications

Jacket Material PE

Mechanical Specifications

Minimum Bend Radius, loaded174 mm | 6.85 inMinimum Bend Radius, unloaded116 mm | 4.567 inTensile Load, long term, maximum1350 N | 303.492 lbfTensile Load, short term, maximum4500 N | 1,011.641 lbfCompression22 N/mm | 125.623 lb/inCompression Test MethodFOTP-41 | IEC 60794-1 E3

Flex 25 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

Impact 2.94 N-m | 26.021 in lb

Impact Test Method FOTP-25 | IEC 60794-1 E4

Strain See long and short term tensile loads

Strain Test Method FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

Vertical Rise, maximum 1345 m | 4,412.73 ft

Optical Specifications

Fiber Type G.652.D and G.657.A1, TeraSPEED® | OS2

Environmental Specifications

COMMSCOPE®

Installation temperature $-10 \,^{\circ}\text{C}$ to $+50 \,^{\circ}\text{C}$ (+14 $^{\circ}\text{F}$ to +122 $^{\circ}\text{F}$)

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

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

Cable Qualification Standards ANSI/ICEA S-87-640 | EN 187105 | IEC 60794-1-2

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method FOTP-82 | IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze -2 °C | 28.4 °F

Cable Freeze Test Method FOTP-98 | IEC 60794-1 F15

Drip 70 °C | 158 °F

Drip Test Method FOTP-81 | IEC 60794-1 E14

Heat Age 0 °C to +85 °C (+32 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

Low High Bend $-15 \,^{\circ}\text{C} \text{ to } +40 \,^{\circ}\text{C} \, (+5 \,^{\circ}\text{F to } +104 \,^{\circ}\text{F})$

Low High Bend Test Method FOTP-37 | IEC 60794-1 E11

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

Temperature Cycle Test Method FOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight 112 kg/km | 75.261 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



Included Products

CS-8W-250-EMEA

Page 3 of 6



250um

LightScope ZWP® Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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
 1 0.05 dB @ 1,625 nm

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

COMMSCOPE®

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, 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

COMMSC PE®