

Fiber OSP cable, Zero Water Peak,® Blown Micro Single Jacket All-Dielectric Outdoor Stranded Loose Tube 200um Fiber Arid-Core™ Construction, 48 fiber, Singlemode G652.D and G.657.Al, Gel-filled, Meters jacket marking, Black jacket color

Product Classification

Regional Availability EMEA

 Portfolio
 CommScope®

 Product Type
 Fiber OSP cable

Product Series B-LN

General Specifications

 Cable Type
 Stranded loose tube

Construction TypeNon-armoredSubunit TypeGel-filled

Filler, quantity 4

Jacket ColorBlackJacket MarkingMetersJacket Marking MethodLaserSubunit, quantity6Fibers per Subunit, quantity24

Dimensions

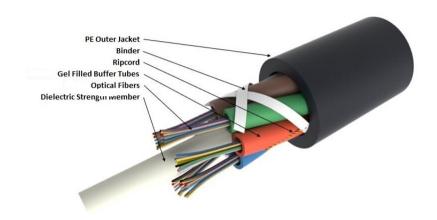
Total Fiber Count

Buffer Tube/Subunit Diameter1.4 mm0.055 inDiameter Over Jacket5.1 mm0.201 in

Representative Image



48



Material Specifications

Jacket Material High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded 100 mm | 3.937 in

Minimum Bend Radius, unloaded 70 mm | 2.756 in

Tensile Load, long term, maximum 300 N | 67.443 lbf

Tensile Load, short term, maximum 1000 N | 224.809 lbf

Cable Crush Resistance, maximum 5 N/mm | 28.551 lb/in

Compression Test Method IEC 60794-1 E3

Flex 25 cycles

Flex Test Method IEC 60794-1 E6

Impact 1 N-m | 8.851 in lb

Impact Test Method 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 IEC 60794-1 E7

Optical Specifications

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Fiber Type G.652.D and G.657.A1

Environmental Specifications

Installation temperature $-15 \,^{\circ}\text{C}$ to $+40 \,^{\circ}\text{C}$ ($+5 \,^{\circ}\text{F}$ to $+104 \,^{\circ}\text{F}$)

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

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

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 F5

Environmental Test Specifications

 Cable Freeze Test Method
 IEC 60794-1 F15

 Drip
 70 °C | 158 °F

 Drip Test Method
 IEC 60794-1 E14

-30 °C to +85 °C (-22 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

Temperature Cycle -30 °C to +70 °C (-22 °F to +158 °F)

Temperature Cycle Test Method IEC 60794-1 F1

Packaging and Weights

Cable weight 24.5 kg/km | 16.463 lb/kft

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-200-EMEA 8W-200um Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



CS-8W-200-EMEA | 8W-200um

Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125 µm **Cladding Diameter Tolerance** $\pm 0.7 \, \mu m$ 0.7 % **Cladding Non-Circularity, maximum Coating Diameter (Colored)** 200 um **Coating Diameter (Uncolored)** 190 µm **Coating Diameter Tolerance (Colored)** ±10 µm **Coating Diameter Tolerance (Uncolored)** ±10 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, 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, 50 mm Ø mandrel, 100 turns
 0.05 dB @ 1,550 nm
 0.05 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, maximum1250 nmPoint Defects, maximum0.05 dB

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

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CS-8W-200-EMEA | 8W-200um

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.20 dB/km @ 1550 nm | 0.23 dB/km @ 1,625

nm | 0.344 dB/km @ 1310 nm | 0.344 dB/km @ 1380

- 1385 nm

Dispersion, maximum 18 ps(nm-km) at 1550 nm | 22 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 | 1.467 @ 1,385 nm | 1.468 @ 1,550

nm

 $\textbf{Mode Field Diameter} \hspace{15mm} 10.4~\mu\text{m} \ \textcircled{@} \ 1,550~\text{nm} \hspace{0.25mm} | \hspace{0.25mm} 9.2~\mu\text{m} \ \textcircled{@} \ 1,310~\text{nm}$

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 0.05 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, 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

