

Fiber OSP cable, Zero Water Peak® Blown Micro Single Jacket All-Dielectric Outdoor Stranded Loose Tube 200um Fiber Arid-Core® Construction, 288 fiber, Singlemode G.657.A1, Gel-filled, Feet jacket marking, Black jacket color

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North America

Portfolio CommScope®

Product Type Fiber OSP cable

Product Series B-LN

General Specifications

Cable TypeStranded loose tube

Construction TypeNon-armoredSubunit TypeGel-filled

Filler, quantity 0

Jacket Color Black
Jacket Marking Feet
Jacket Marking Method Laser

Jacket Marking Text COMMSCOPE GB (YYYY) 810009731/DB 288 X G657A1 200um (Serial number) (feet) FT

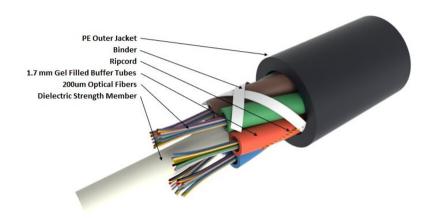
Subunit, quantity 12
Fibers per Subunit, quantity 24
Total Fiber Count 288

Dimensions

Buffer Tube/Subunit Diameter1.7 mm0.067 inDiameter Over Jacket9.5 mm0.374 in

Representative Image





Material Specifications

Jacket Material High density polyethylene (HDPE)

Mechanical Specifications

Minimum Bend Radius, loaded143 mm | 5.63 inMinimum Bend Radius, unloaded95 mm | 3.74 inTensile Load, long term, maximum335 N | 75.311 lbfTensile Load, short term, maximum1000 N | 224.809 lbfCompression10 N/mm | 57.101 lb/in

Compression Test Method FOTP-41 | IEC 60794-1 E3

Flex 25 cycles

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

Impact 0.3 N-m | 2.655 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 769 m | 2,522.966 ft

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Optical Specifications

Fiber Type G.657.A1, TeraSPEED®

Environmental Specifications

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

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

Storage Temperature $-40 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (-40 °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 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 -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 FOTP-37 | 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 FOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight 77.5 kg/km | 52.078 lb/kft

Included Products

CS-8W-200UM-LT – 200 Micron Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode

Fiber

* Footnotes



Operating Temperature Specification applicable to non-terminated bulk fiber cable

CS-8W-200UM-LT

200 Micron 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** ±0.7 µm 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

Proof Test 689.476 N/mm² | 100000 psi

Dimensions

Core/Clad Offset, maximum

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
 0.05 dB @ 1,625 nm

0.5 µm

Coating Strip Force, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum0.5 N | 0.112 lbf

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.05 dB

Zero Dispersion Slope, maximum 0.09 ps/[km-nm-nm]

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CS-8W-200UM-LT

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.25 dB/km @ 1,550 nm | 0.29 dB/km @ 1,625

nm | 0.36 dB/km @ 1,310 nm | 0.36 dB/km @ 1,385

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

Mode Field Diameter $10.4 \, \mu \text{m} \ @ \ 1,550 \, \text{nm} \ | \ 9.2 \, \mu \text{m} \ @ \ 1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ @ \ 1,000 \, \text{m}$

1,385 nm

Mode Field Diameter Tolerance ±0.4 μm @ 1310 nm | ±0.5 μm @ 1550 nm | ±0.6 μm

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.04 ps/sqrt(km)

Standards Compliance ITU-T G.652.D | ITU-T G.657.A1 | TIA-492CAAB (OS2)

Environmental Specifications

Heat Aging, maximum $0.05 \text{ dB/km} \otimes 85 \text{ }^{\circ}\text{C}$

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

