

Fiber OSP cable, Zero Water Peak® Blown Micro Single Jacket, 96 fiber, All-Dielectric Outdoor Stranded Loose Tube 200um Fiber Arid-Core™ Construction, Singlemode G.657.Al, Gel-filled, Meters 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 Type Stranded loose tube

Construction Type Non-armored

Subunit Type Gel-filled

Filler, quantity 2

Jacket ColorBlackJacket MarkingMeters

Jacket Marking Method Laser

Jacket Marking Text COMMSCOPE GB (YYYY) 810009954/DB 96 X G657A1 200um (Serial number) (meters) M

Subunit, quantity 4

Fibers per Subunit, quantity 24

**Total Fiber Count** 96

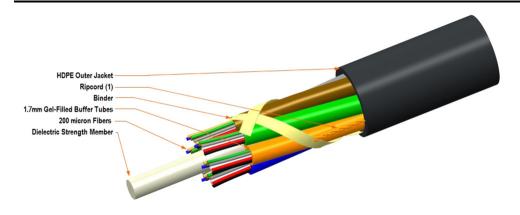
**Dimensions** 

Buffer Tube/Subunit Diameter 1.7 mm | 0.067 in Diameter Over Jacket 6.2 mm | 0.244 in

## Representative Image



FOTP-41 | IEC 60794-1 E3



## Material Specifications

Jacket Material High density polyethylene (HDPE)

### Mechanical Specifications

**Compression Test Method** 

Minimum Bend Radius, loaded348 mm13.701 inMinimum Bend Radius, unloaded110 mm4.331 inTensile Load, long term, maximum335 N | 75.311 lbf

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

**Compression** 10 N/mm | 57.101 lb/in

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

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

**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** 33.2 kg/km | 22.309 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-8F-200UM-LT – 200 Micron Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode

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Fiber

\* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

## CS-8F-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 Core/Clad Offset, maximum 0.5 µm

**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
 | 1.50 dB @ 1,625 nm

 Macrobending, 30 mm Ø mandrel, 10 turns
 0.25 dB @ 1,550 nm
 | 1.00 dB @ 1,625 nm

 Macrobending, 50 mm Ø mandrel, 100 turns
 0.03 dB @ 1,550 nm
 | 0.05 dB @ 1,625 nm

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

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

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

**COMMSCOPE®** 

## CS-8F-200UM-LT

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm

Optical Specifications, Wavelength Specific

**Attenuation, maximum** 0.25 dB/km @ 1,550 nm | 0.27 dB/km @ 1,490

nm | 0.27 dB/km @ 1,625 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

 Mode Field Diameter
 8.6 μm @ 1,310 nm | 9.8 μm @ 1,550 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/sqrt(km)

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

### **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

## 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

