760249597 | C-096-LN-8F-MSPBK/14D/AY/D/4x500m



Fiber indoor/outdoor cable, LSZH, 96 fiber Microsheath Breakout, Singlemode G.657.A1, Gel-free, Meters jacket marking, Black jacket color, Dca flame rating

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-LN

General Specifications

 Cable Type
 Stranded microsheath tube

Subunit TypeGel-freeJacket ColorBlackJacket MarkingMetersJacket Marking MethodInkjet

Jacket Marking Text COMMSCOPE GB F.O. CABLE 760249597 96x9/125 ITU-T G.

657A1 EN50575 CLASS D ULSZH (serial number) (metre mark)

Subunit, quantity 8
Fibers per Subunit, quantity 12
Total Fiber Count 96

Dimensions

 Cable Length
 2000 m | 6,561.68 ft

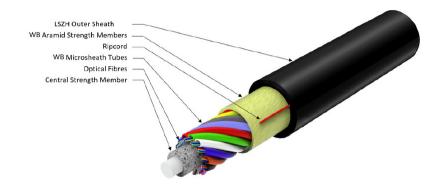
 Buffer Tube/Subunit Diameter
 1.4 mm | 0.055 in

 Diameter Over Jacket
 6.8 mm | 0.268 in

Representative Image



760249597 | C-096-LN-8F-MSPBK/14D/AY/D/4x500m



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 200 N | 44.962 lbf

Tensile Load, short term, maximum 900 N | 202.328 lbf

Cable Crush Resistance, maximum10 N/mm | 57.101 lb/in

Compression Test Method IEC 60794-1-21 E3

Impact 2 N-m | 17.701 in lb

Impact Test Method IEC 60794-1-21 E4

Strain Test Method IEC 60794-1-21 E1

Twist 5 cycles

Twist Test Method IEC 60794-1 E7

Optical Specifications

Fiber Type G.657.A1

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 | 0.36 dB/km @ 1,310 nm

Standards Compliance TIA-492CAAB (OS2)



760249597 | C-096-LN-8F-MSPBK/14D/AY/D/4x500m

Environmental Specifications

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

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

EN50575 CPR Cable EuroClass Fire PerformanceDca **EN50575 CPR Cable EuroClass Smoke Rating**s1a

EN50575 CPR Cable EuroClass Droplets Rating d0

EN50575 CPR Cable EuroClass Acidity Rating a1

Environmental Space Universal Low Smoke Zero Halogen (ULSZH)

Water Penetration 336 h

Water Penetration Test Method IEC 60794-1 F5

Environmental Test Specifications

Temperature Cycle -40 °C to +70 °C (-40 °F to +158 °F)

Temperature Cycle Test Method IEC 60794-1-22 F1

Packaging and Weights

Cable weight 47 kg/km | 31.583 lb/kft

Included Products

CS-8F-LT – Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



CS-8F-LT

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)** 249 um **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, 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
 0.03 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-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

