# 810010195/DB | C-012-LN-8F-M12BK/14D/AY/D-2000-DK02



Fiber Indoor/outdoor Cable, Low Smoke Zero Halogen / 12 fiber Microsheath, Tube Colours as per DIN/VDE 0888, Gel-free, Singlemode G.657.A1, 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 Type Gel-free

Filler, quantity 5

Jacket Color Black

Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB F.O. CABLE 810010195/DB 12x9/125 ITU-T G.

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

Subunit, quantity 1

Fibers per Subunit, quantity 12

**Total Fiber Count** 12

Dimensions

**Cable Length** 2000 m | 6,561.68 ft

**Diameter Over Jacket** 6.1 mm | 0.24 in

Mechanical Specifications

Minimum Bend Radius, loaded100 mm3.937 inMinimum Bend Radius, unloaded55 mm2.165 inTensile Load, long term, maximum200 N44.962 lbfTensile Load, short term, maximum900 N202.328 lbf

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Cable Crush Resistance, maximum 10 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)

**Environmental Specifications** 

**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 PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd1EN50575 CPR Cable EuroClass Acidity Ratinga1

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

**Temperature Cycle Test Method** IEC 60794-1-22 F1

Packaging and Weights

**Cable weight** 38 kg/km | 25.535 lb/kft

Regulatory Compliance/Certifications

Agency Classification

**COMMSCOPE®** 

# 810010195/DB | C-012-LN-8F-M12BK/14D/AY/D-2000-DK02

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-LT – Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode

Fibe

#### \* 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

