810010370/DB | C-024-LN-8F-M12BK/14D/D-0500-DK02



Indoor/Outdoor Low Smoke Zero Halogen / 96F Microsheath Breakout Fiber Optic Cable - Black

Product Classification

Regional Availability 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 0000M 8 x 12SM G.657.A1 SWE LSZH TDC -NET A/S - Lyslederkabel - GIV

AGT - USYNLIGT LASERLYS COMMSCOPE UK [YYYY/WW] - [serial

number]

Subunit, quantity 8

Fibers per Subunit, quantity 12

Total Fiber Count 96

Dimensions

 Cable Length
 500 m | 1,640.42 ft

 Buffer Tube/Subunit Diameter
 1.4 mm | 0.055 in

 Diameter Over Jacket
 6.8 mm | 0.268 in

Mechanical Specifications

Minimum Bend Radius, loaded60 mm2.362 inMinimum Bend Radius, unloaded90 mm3.543 inTensile Load, long term, maximum200 N44.962 lbf

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

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

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

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

EN50575 CPR Cable EuroClass Fire Performance Dca

EN50575 CPR Cable EuroClass Smoke Rating s1a

EN50575 CPR Cable EuroClass Droplets Rating d2

EN50575 CPR Cable EuroClass Acidity Rating a1

Environmental SpaceUniversal Low Smoke Zero Halogen (ULSZH)

Flame Test Listing EN 50399 | IEC 60332-1-2

Flame Test Method EN 50399 | IEC 60332-1-2 | IEC 60754-2 | IEC 61034-2

Water Penentration 336 h

Water Penentration 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

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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

* 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 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 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]

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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

