# 810010369/DB | C-048-LN-8F-M12BK/14D/D-0500-DK02



Fiber Indoor/outdoor Cable, Low Smoke Zero Halogen / 24 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	2
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	0000M 2 x 12SM G.657.A1 SWE LSZH TDC -NET A/S - Lyslederkabel - GIV AGT - USYNLIGT LASERLYS COMMSCOPE UK [YYYY/WW] – [serial number]
Subunit, quantity	4
Fibers per Subunit, quantity	12
Total Fiber Count	48
Dimensions	
Cable Length	500 m   1,640.42 ft
Diameter Over Jacket	6.1 mm   0.24 in
Mechanical Specifications	
Minimum Bend Radius, loaded	100 mm   3.937 in
Minimum Bend Radius, unloaded	55 mm   2.165 in
Tensile Load, long term, maximum	200 N   44.962 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 °C to +70 °C (-40 °F to +158 °F)	
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)	
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °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 Space	Universal 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	

IEC 60794-1 F5

Water Penentration Test Method

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

38 kg/km | 25.535 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

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#### 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	
Cladding Non-Circularity, maximum	0.7 %	
Coating Diameter (Colored)	249 µm	
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   1.50 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	
Coating Strip Force, maximum	8.9 N   2.001 lbf	
Coating Strip Force, minimum	1.3 N   0.292 lbf	
Dynamic Fatigue Parameter, minimum	20	
Optical Specifications		
Cabled Cutoff Wavelength, maximum	1260 nm	
Point Defects, maximum	0.1 dB	
Zero Dispersion Slope, maximum	0.09 ps/[km-nm-nm]	

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## CS-8F-LT

Zero Dispersion Wavelength, maximum Zero Dispersion Wavelength, minimum	1324 nm 1300 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	±0.4 μm @ 1310 nm   ±0.5 μm @ 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, maximum	0.05 dB/km
Temperature Humidity Cycling, maximum	0.05 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

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