



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 Type	Gel-free
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
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, loaded	60 mm 2.362 in
Minimum Bend Radius, unloaded	90 mm 3.543 in
Tensile Load, long term, maximum	200 N 44.962 lbf

810010370/DB | C-096-LN-8F-M12BK/14D/D-0500-DK02

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
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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 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

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-LT	– Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber
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* 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
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 Tensile Stress	100,000 psi (0.69 GPa)

Dimensions

Fiber Curl, minimum	4 m 13.123 ft
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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]

CS-8F-LT

Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	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