# 760249243 | C-096-LN-8F-MSPBK/14D/AY/D



Fiber indoor/outdoor cable, LSZH, 96 fiber Microsheath, Tube Colours as per DIN/VDE 0888, 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
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB F.O. CABLE 760249243 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
Diameter Over Jacket	6.8 mm   0.268 in
Representative Image	

Page 1 of 5

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### 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, 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

### **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 °C to +70 °C (-40 °F to +158 °F)

Page 2 of 5

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EN50575 CPR Cable EuroClass Fire Performance	Dca
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 W Fiber	/ater Peak, Dispersion-Unshifted Singlemode

## \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

Page 3 of 5

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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 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   1.50 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]

Page 4 of 5

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# 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

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