810009811/DB | L-096-LN-8F-M12YL/14D/GY/C



Fiber indoor cable, Single Jacket All-Dielectric, 96 fiber, Gel-Free, Stranded Microsheath Tube, Singlemode, G.657.A1, Meters jacket marking, Yellow jacket color, Cca Flame rating. Provides Rodent Resistance

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	L-LN
General Specifications	
Cable Type	Stranded microsheath tube
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Yellow
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB OPTICAL CABLE 810009811/DB 96x 9/125 G657A1 LSZH EN50575 CLASS C [SERIAL NUMBER] [METER MARK]
Subunit, quantity	8
Fibers per Subunit, quantity	12
Total Fiber Count	96
Dimensions	
Buffer Tube/Subunit Diameter	1.4 mm 0.055 in
Diameter Over Jacket	8.4 mm 0.331 in

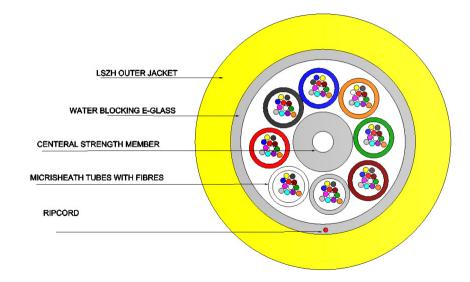
Representative Image

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Material Specifications

Inner Jacket Material

Mechanical Specifications

Minimum Bend Radius, loaded 170 mm | 6.693 in Minimum Bend Radius, unloaded 120 mm | 4.724 in Tensile Load, long term, maximum 950 N | 213.569 lbf Tensile Load, short term, maximum 1600 N | 359.694 lbf 10 N/mm | 57.101 lb/in Compression FOTP-41 | IEC 60794-1 E3 **Compression Test Method** 2 N-m | 17.701 in lb Impact FOTP-25 | IEC 60794-1 E4 Impact Test Method Strain See long and short term tensile loads FOTP-33 | IEC 60794-1 E1 Strain Test Method Vertical Rise, maximum 1100 m | 3,608.924 ft **Optical Specifications**

Fiber Type

G.657.A1, TeraSPEED®

Environmental Specifications

Installation temperature

0 °C to +50 °C (+32 °F to +122 °F)

Low Smoke Zero Halogen (LSZH)

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COMMSCOPE°

810009811/DB | L-096-LN-8F-M12YL/14D/GY/C

Operating Temperature	-10 °C to +60 °C (+14 °F to +140 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	IEC 60794-1-2
EN50575 CPR Cable EuroClass Fire Performance	Сса
EN50575 CPR Cable EuroClass Smoke Rating	s1a
EN50575 CPR Cable EuroClass Droplets Rating	d0
EN50575 CPR Cable EuroClass Acidity Rating	a1
Environmental Space	Low Smoke Zero Halogen (LSZH)

Environmental Test Specifications

Cable Freeze	-2 °C 28.4 °F
Cable Freeze Test Method	FOTP-98 IEC 60794-1 F15
Temperature Cycle	-10 °C to +60 °C (+14 °F to +140 °F)
Temperature Cycle Test Method	FOTP-3 IEC 60794-1 F1

Packaging and Weights

80 kg/km | 53.758 lb/kft

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ROHS	Compliant
UK-ROHS	Compliant



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 \mid 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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