# 2160164-1 | L-002-DN-8F-M01WH/AY/D



Fiber indoor/outdoor drop cable, FTTH, 2 Fiber, Singlemode G.657.A1, Gel-free, meters jacket marking, White jacket color, Dca flame rating

#### Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA
Portfolio	CommScope®
Product Type	Fiber drop cable
Product Series	L-DN
General Specifications	
Cable Type	Drop   Semi-tight buffer
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	White
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB SMF G657A MACL9/125 S LSZH EN50575 CLASS Dca [Serial NUMBER] [METRE MARK]
Subunit, quantity	1
Fibers per Subunit, quantity	1
Total Fiber Count	2
Dimensions	
Cable Length	2,000 m   6,561.68 ft
Buffer Tube/Subunit Diameter	0.9 mm   0.035 in
Diameter Over Jacket	4 mm   0.157 in

#### Representative Image

Page 1 of 5

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ULSZH UV Stabilised Jacket Aramid Yarn Strength Elements GRP strength Member Buffered Fibres



**Jacket Material** 

Mechanical Specifications

Minimum Bend Radius, unloaded	60 mm   2.362 in
Tensile Load, long term, maximum	600 N   134.885 lbf
Tensile Load, short term, maximum	1200 N   269.771 lbf
Compression	20 N/mm   114.203 lb/in
Compression Test Method	IEC 60794-1 E3
Impact	5 N-m   44.254 in lb
Impact Test Method	IEC 60794-1 E4
Strain Test Method	IEC 60794-1 E1
Twist	5 cycles
Twist Test Method	IEC 60794-1 E7
Optical Specifications	

Fiber Type

G.657.A1

Low Smoke Zero Halogen (LSZH)

#### **Environmental Specifications**

Installation temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Operating Temperature	-30 °C to +60 °C (-22 °F to +140 °F)

Page 2 of 5

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Storage Temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Cable Qualification Standards	IEC 60794-1-2
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	al
Environmental Space	Drop   Ducted   Façade   Indoor/Outdoor   UV resistant for outdoor and Low Smoke Zero Halogen
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F5
Environmental Test Specifications	
Temperature Cycle	-30 °C to +60 °C (-22 °F to +140 °F)
Temperature Cycle Test Method	IEC 60794-1-2 F1

#### Packaging and Weights

Cable weight
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20 kg/km | 13.439 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-TB

Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber

#### \* 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 Test	689.476 N/mm²   100000 psi
Tight Buffer Diameter	900 µm
Tight Buffer Diameter Tolerance	±40 μm
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

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## CS-8F-TB

Point Defects, maximum	0.1 dB
Zero Dispersion Slope, maximum	0.09 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1324 nm
Zero Dispersion Wavelength, minimum	1300 nm
Optical Specifications, Wavelength Specific	
Attenuation, maximum	0.50 dB/km @ 1,310 nm   0.50 dB/km @ 1,385 nm   0.50 dB/km @ 1,490 nm   0.50 dB/km @ 1,550 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

### **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

Page 5 of 5

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