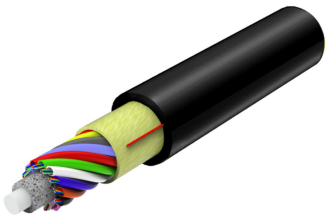
810010340/DB | C-024-LN-8F-M12BK/14D/D-DE00



Fiber Indoor/Outdoor Cable, Low Smoke Zero Halogen, 24 fiber, Microsheath, 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

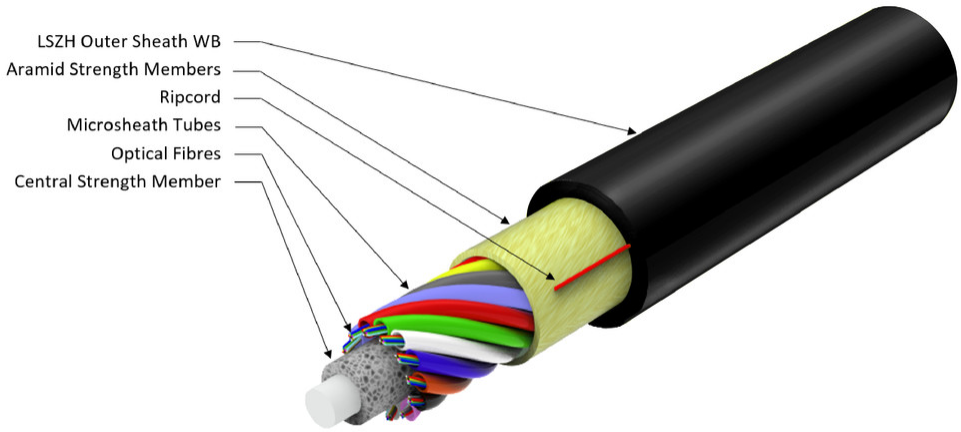
Cable Type	Stranded microsheath tube
Subunit Type	Gel-free
Filler, quantity	4
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Subunit, quantity	2
Fibers per Subunit, quantity	12
Total Fiber Count	24

Dimensions

Cable Length	2000 m | 6,561.68 ft
Diameter Over Jacket	6.1 mm | 0.24 in

Representative Image

810010340/DB | C-024-LN-8F-M12BK/14D/D-DE00



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
Tensile Load, short term, maximum	700 N | 157.366 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)
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)
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	37 kg/km | 24.863 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

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

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]

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