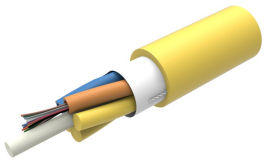
810010182/DB | L-144-LN-8F-M12YL/15D/B



Single Jacket All-Dielectric, Gel-Free, Indoor Stranded Microsheath Tube Cable

Product Classification

Regional Availability	Asia | Australia/New Zealand | EMEA | Latin America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	L-LN

General Specifications

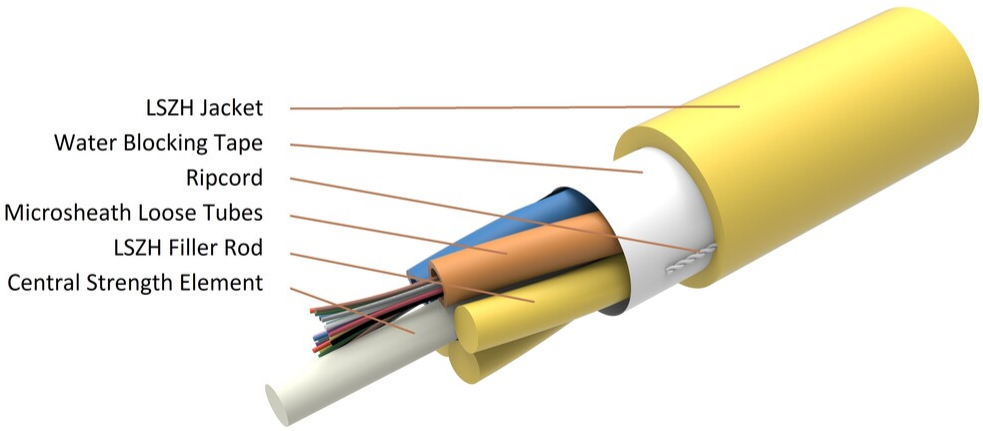
Cable Type	Stranded microsheath tube
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Yellow
Jacket Marking	Custom printing
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB OPTICAL CABLE 810010178/DB 24 X G657A1 EN50575 CLASS C ULSZH [Serial number] [metre mark]
Subunit, quantity	12
Fibers per Subunit, quantity	12
Total Fiber Count	144

Dimensions

Buffer Tube/Subunit Diameter	1.5 mm | 0.059 in
Diameter Over Jacket	10.7 mm | 0.421 in

Representative Image

810010182/DB | L-144-LN-8F-M12YL/15D/B



Material Specifications

Inner Jacket Material	Low Smoke Zero Halogen (LSZH)

Mechanical Specifications

Minimum Bend Radius, unloaded	120 mm | 4.724 in
Tensile Load, long term, maximum	150 N | 33.721 lbf
Tensile Load, short term, maximum	1200 N | 269.771 lbf
Compression	10 N/mm | 57.101 lb/in
Compression Test Method	IEC 60794-1 E3
Impact	2 N-m | 17.701 in lb
Impact Test Method	IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	IEC 60794-1 E1
Twist	5 cycles
Twist Test Method	IEC 60794-1 E7

Optical Specifications

Fiber Type	G.657.A1, TeraSPEED®

Environmental Specifications

Installation temperature	0 °C to +50 °C (+32 °F to +122 °F)
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	B2ca
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

Temperature Cycle	-10 °C to +60 °C (+14 °F to +140 °F)
Temperature Cycle Test Method	IEC 60794-1 F1

Packaging and Weights

Cable weight	118 kg/km | 79.292 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 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]

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