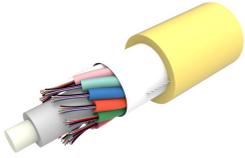


# 810010182/DB | L-144-LN-8W-M12YL/15D/B



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

## Product Classification

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

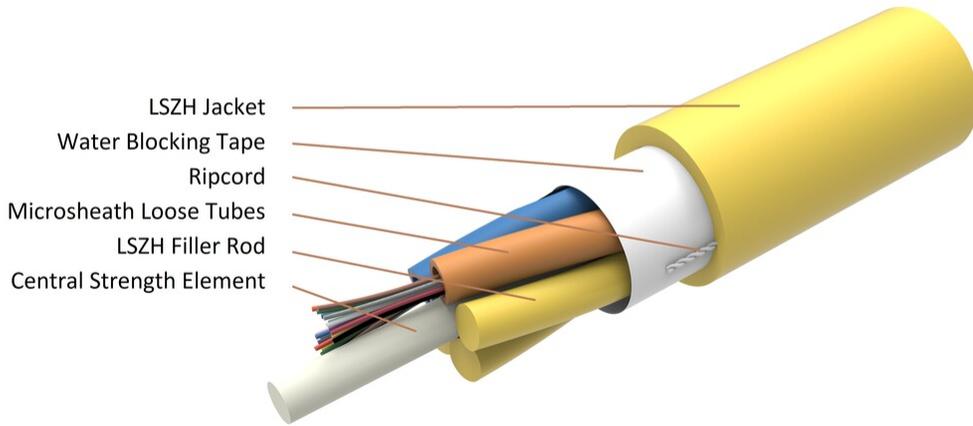
## General Specifications

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

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	1.5 mm   0.059 in
<b>Diameter Over Jacket</b>	10.7 mm   0.421 in

## Representative Image



## Material Specifications

**Inner Jacket Material** Low Smoke Zero Halogen (LSZH)

## Mechanical Specifications

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

## Optical Specifications

**Fiber Type** G.652.D and G.657.A1

## Environmental Specifications

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

---

<b>Installation temperature</b>	0 °C to +50 °C (+32 °F to +122 °F)
<b>Operating Temperature</b>	-10 °C to +60 °C (+14 °F to +140 °F)
<b>Storage Temperature</b>	-40 °C to +70 °C (-40 °F to +158 °F)
<b>Cable Qualification Standards</b>	IEC 60794-1-2
<b>EN50575 CPR Cable EuroClass Fire Performance</b>	B2ca
<b>EN50575 CPR Cable EuroClass Smoke Rating</b>	s1a
<b>EN50575 CPR Cable EuroClass Droplets Rating</b>	d0
<b>EN50575 CPR Cable EuroClass Acidity Rating</b>	a1
<b>Environmental Space</b>	Low Smoke Zero Halogen (LSZH)

## Environmental Test Specifications

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

## Packaging and Weights

<b>Cable weight</b>	118 kg/km   79.292 lb/kft
---------------------	---------------------------

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CHINA-ROHS	Below maximum concentration value
ROHS	Compliant
UK-ROHS	Compliant



## Included Products

CS-8W-250-EMEA – LightScope® ZWP Singlemode Fiber  
8W-250um

## \* Footnotes

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



## LightScope® ZWP Singlemode Fiber

### Product Classification

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber

### General Specifications

<b>Cladding Diameter</b>	125 µm
<b>Cladding Diameter Tolerance</b>	±0.7 µm
<b>Cladding Non-Circularity, maximum</b>	0.7 %
<b>Coating Diameter (Colored)</b>	249 µm
<b>Coating Diameter (Uncolored)</b>	242 µm
<b>Coating Diameter Tolerance (Colored)</b>	±13 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±7 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core/Clad Offset, maximum</b>	0.5 µm
<b>Proof Test</b>	689.476 N/mm <sup>2</sup>   100000 psi

### Dimensions

<b>Fiber Curl, minimum</b>	4 m   13.123 ft
----------------------------	-----------------

### Mechanical Specifications

<b>Macrobending, 20 mm Ø mandrel, 1 turn</b>	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
<b>Macrobending, 30 mm Ø mandrel, 10 turns</b>	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm
<b>Macrobending, 60 mm Ø mandrel, 100 turns</b>	0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm
<b>Coating Strip Force, maximum</b>	8.9 N   2.001 lbf
<b>Coating Strip Force, minimum</b>	1.3 N   0.292 lbf
<b>Dynamic Fatigue Parameter, minimum</b>	20

### Optical Specifications

# CS-8W-250-EMEA | 8W-250um

<b>Cabled Cutoff Wavelength, maximum</b>	1250 nm
<b>Point Defects, maximum</b>	0.05 dB
<b>Zero Dispersion Slope, maximum</b>	0.092 ps/[km-nm-nm]
<b>Zero Dispersion Wavelength, maximum</b>	1324 nm
<b>Zero Dispersion Wavelength, minimum</b>	1300 nm

## Optical Specifications, Wavelength Specific

<b>Attenuation, maximum</b>	0.20 dB/km @ 1550 nm   0.23 dB/km @ 1,625 nm   0.344 dB/km @ 1310 nm   0.344 dB/km @ 1380 – 1385 nm
<b>Dispersion, maximum</b>	18 ps(nm-km) at 1550 nm   22 ps(nm-km) at 1625 nm   3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm
<b>Index of Refraction</b>	1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 nm
<b>Mode Field Diameter</b>	10.4 $\mu$ m @ 1,550 nm   9.2 $\mu$ m @ 1,310 nm
<b>Mode Field Diameter Tolerance</b>	$\pm$ 0.4 $\mu$ m @ 1310 nm   $\pm$ 0.5 $\mu$ m @ 1550 nm
<b>Polarization Mode Dispersion Link Design Value, maximum</b>	0.05 ps/sqrt(km)
<b>Standards Compliance</b>	ITU-T G.652.D   ITU-T G.657.A1

## Environmental Specifications

<b>Heat Aging, maximum</b>	0.05 dB/km @ 85 °C
<b>Temperature Dependence, maximum</b>	0.05 dB/km
<b>Temperature Humidity Cycling, maximum</b>	0.05 dB/km
<b>Water Immersion, maximum</b>	0.05 dB/km @ 23 °C

## \* Footnotes

<b>Temperature Dependence, maximum</b>	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)
<b>Temperature Humidity Cycling, maximum</b>	Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity