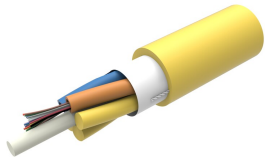


# 810010178/DB | L-024-LN-8W-M12YL/15D/B



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

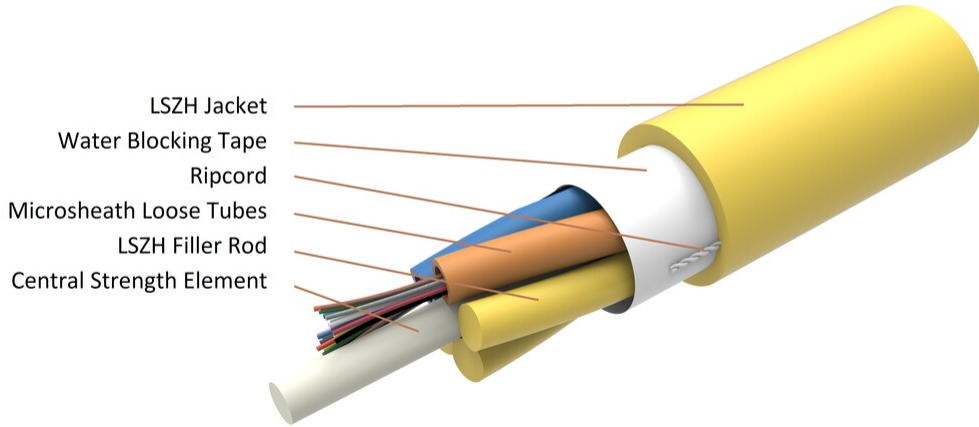
## General Specifications

<b>Cable Type</b>	Stranded microsheat tube
<b>Construction Type</b>	Non-armored
<b>Subunit Type</b>	Gel-free
<b>Filler, quantity</b>	3
<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>	2
<b>Fibers per Subunit, quantity</b>	12
<b>Total Fiber Count</b>	24

## Dimensions

<b>Buffer Tube/Subunit Diameter</b>	1.5 mm   0.059 in
<b>Diameter Over Jacket</b>	6.7 mm   0.264 in

## Representative Image



## Material Specifications

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

## Mechanical Specifications

**Minimum Bend Radius, unloaded** 80 mm | 3.15 in  
**Tensile Load, long term, maximum** 150 N | 33.721 lbf  
**Tensile Load, short term, maximum** 480 N | 107.908 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

## Optical Specifications

**Fiber Type** G.652.D and 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)

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<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>	48.8 kg/km   32.792 lb/kft
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## Regulatory Compliance/Certifications

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



## Included Products

CS-8W-LT	- TeraSPEED® G652D/G657A1 Singlemode Fiber
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## \* Footnotes

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

#### 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>	±5 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core Diameter</b>	8.3 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
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#### 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

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## Optical Specifications

<b>Cabled Cutoff Wavelength, maximum</b>	1260 nm
<b>Point Defects, maximum</b>	0.1 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>	0.22 dB/km @ 1,550 nm   0.25 dB/km @ 1,490 nm   0.25 dB/km @ 1,625 nm   0.36 dB/km @ 1,310 nm   0.36 dB/km @ 1,385 nm
<b>Attenuation, typical</b>	0.19 dB/km @ 1,550 nm   0.33 dB/km @ 1,310 nm
<b>Backscatter Coefficient</b>	-79.6 dB @ 1,310 nm   -82.1 dB @ 1,550 nm
<b>Dispersion, maximum</b>	18 ps(nm-km) at 1550 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 $\mu\text{m}$ @ 1,550 nm   9.2 $\mu\text{m}$ @ 1,310 nm   9.6 $\mu\text{m}$ @ 1,385 nm
<b>Mode Field Diameter Tolerance</b>	$\pm 0.4 \mu\text{m}$ @ 1310 nm   $\pm 0.5 \mu\text{m}$ @ 1550 nm   $\pm 0.6 \mu\text{m}$ @ 1385 nm
<b>Polarization Mode Dispersion Link Design Value, maximum</b>	0.04 ps/sqrt(km)
<b>Standards Compliance</b>	IEC 60793-2-10, edition 6, model A1a.4   ITU-T G.652.D   ITU-T G.657.A1   TIA-492CAAB (OS2)

## 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

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

## \* Footnotes

# CS-8W-LT

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<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