# 64623447-48MLT | 0-048-LD-8M-M12BL/15G/PE /PA



#### 48 Core OS2 Outdoor Mini Loose Tube - Double Jacket

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand

Portfolio CommScope®
Product Type Fiber OSP cable

Product Series O-LN

## General Specifications

Cable Type Stranded loose tube

Construction Type Non-armored

Subunit Type Gel-filled

Filler, quantity 2

Jacket Color Blue

Jacket Marking Meters

Subunit, quantity 4

Fibers per Subunit, quantity 12

Total Fiber Count 48

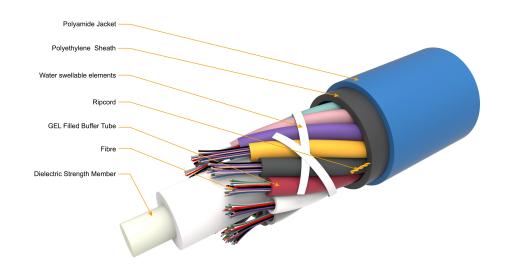
#### Dimensions

Buffer Tube/Subunit Diameter 1.55 mm | 0.061 in Diameter Over Jacket 6.3 mm | 0.248 in

# Representative Image



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# Material Specifications

Jacket Material Nylon | PE

Mechanical Specifications

Minimum Bend Radius, loaded 160 mm | 6.299 in Minimum Bend Radius, unloaded 65 mm | 2.559 in

**Tensile Load, short term, maximum** 1000 N | 224.809 lbf

**Compression** 20 N/mm | 114.203 lb/in

**Compression Test Method** IEC 60794-1-21 E3

Flex 25 cycles

 Impact
 1 N-m | 8.851 in lb

 Impact Test Method
 IEC 60794-1-21 E4

**Strain** See long and short term tensile loads

Strain Test Method IEC 60794-1-21 E1

Twist 10 cycles

Twist Test Method IEC 60794-1-21 E7

Optical Specifications

**Fiber Type** G.652.D

Optical Specifications, Wavelength Specific



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**Attenuation, maximum** 0.21 dB/km @ 1,550 nm | 0.35 dB/km @ 1,310 nm

### **Environmental Specifications**

Installation temperature0 °C to +50 °C (+32 °F to +122 °F)Operating Temperature0 °C to +50 °C (+32 °F to +122 °F)Storage Temperature-20 °C to +70 °C (-4 °F to +158 °F)

Environmental Space Buried | Underground (duct)

Jacket UV Resistance UV stabilized

Water Penentration 24 h

**Water Penentration Test Method** IEC 60794-1 F5C

#### **Environmental Test Specifications**

Temperature Cycle -10 °C to +60 °C (+14 °F to +140 °F)

**Temperature Cycle Test Method** IEC 60794-1-22 F1

Packaging and Weights

Cable weight 33 kg/km | 22.175 lb/kft

#### Included Products

CS-8M-LT – Low Water Peak Dispersion-Unshifted OS2 Singlemode Fiber

#### \* Footnotes

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



# CS-8M-LT

#### Low Water Peak Dispersion-Unshifted OS2 Singlemode Fiber

#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

Cladding Diameter 125  $\mu$ m

Cladding Diameter Tolerance  $\pm 0.7 \,\mu$ m

Cladding Non-Circularity, maximum 0.7 %

Coating Diameter (Colored) 242  $\mu$ m

Coating Diameter Tolerance (Colored)  $\pm 5 \,\mu$ m

Coating/Cladding Concentricity Error, maximum 12  $\mu$ m

Core/Clad Offset, maximum 0.5  $\mu$ m

**Proof Test** 689.476 N/mm<sup>2</sup> | 100000 psi

**Dimensions** 

**Fiber Curl, minimum** 4 m | 13.123 ft

Mechanical Specifications

 Macrobending, 20 mm Ø mandrel, 1 turn
 0.50 dB @ 1,550 nm | 1.50 dB @ 1,625 nm

 Macrobending, 30 mm Ø mandrel, 10 turns
 0.10 dB @ 1,550 nm | 0.30 dB @ 1,625 nm

Macrobending, 32 mm Ø mandrel, 1 turn0.03 dB @ 1,550 nmCoating Strip Force, maximum4.9 N | 1.102 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum1260 nmPoint Defects, maximum0.1 dB

Zero Dispersion Slope, maximum 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1324 nmZero Dispersion Wavelength, minimum1300 nm



# CS-8M-LT

## Optical Specifications, Wavelength Specific

**Attenuation, maximum** 0.22 dB/km @ 1,550 nm | 0.35 dB/km @ 1,310

nm | 0.35 dB/km @ 1,385 nm

**Dispersion, maximum** 18 ps(nm-km) at 1550 nm

**Index of Refraction** 1.467 @ 1,310 nm | 1.468 @ 1,550 nm | 1.468 @ 1,625

nm

 $\textbf{Mode Field Diameter} \hspace{1cm} 10.3~\mu\text{m} \ \textcircled{0} \ 1,550~\text{nm} \hspace{0.2cm} | \hspace{0.2cm} 9.1~\mu\text{m} \ \textcircled{0} \ 1,310~\text{nm}$ 

Mode Field Diameter Tolerance  $\pm 0.4 \, \mu \text{m}$  @ 1310 nm |  $\pm 0.5 \, \mu \text{m}$  @ 1550 nm

Polarization Mode Dispersion Link Design Value, maximum 0.06 ps/sqrt(km)

Standards Compliance | ITU-T G.652.D | ITU-T G.657.A1 | TIA-492CAAB (OS2)

# **Environmental Specifications**

Heat Aging, maximum 0.05 dB/km @ 85 °C

Temperature Dependence, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 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

