

Fiber indoor/outdoor cable, High Tensile Strength, LSZH, LazrSPEED® Multimode OM4, 72 fiber, Mini All-Dielectric Single Jacket, Gel-Filled, Stranded Loose Tube, Black jacket color, Dca flame rating, Provides Rodent Resistance

#### **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 loose tube

Construction Type Non-armored

**Subunit Type** Gel-filled

Jacket Color Black

Jacket Marking Meters

Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE 810009769

/DB 72X OS2 SM LSZH EN50575 CLASS D [SERIAL NUMBER] [METER MARK]

Subunit, quantity 6

Fibers per Subunit, quantity 12

Total Fiber Count 72

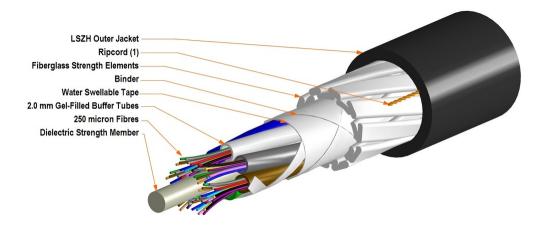
**Dimensions** 

**Buffer Tube/Subunit Diameter** 2 mm | 0.079 in

**Diameter Over Jacket** 12.8 mm | 0.504 in

Representative Image





## Mechanical Specifications

Minimum Bend Radius, loaded 193 mm | 7.598 in

Minimum Bend Radius, unloaded 128 mm | 5.039 in

**Tensile Load, long term, maximum** 1350 N | 303.492 lbf

**Tensile Load, short term, maximum** 4500 N | 1,011.641 lbf

**Compression** 22 N/mm | 125.623 lb/in

Compression Test Method IEC 60794-1 E3

Flex 25 cycles

Flex Test Method IEC 60794-1 E6

**Impact** 4.41 N-m | 39.032 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 10 cycles

Twist Test Method IEC 60794-1 E7

**Vertical Rise, maximum** 816 m | 2,677.165 ft

Optical Specifications

**Fiber Type** G.652.D and G.657.A1, TeraSPEED®

## **Environmental Specifications**

Installation temperature  $-30 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-22  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

Operating Temperature  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

Page 2 of 6



**Storage Temperature**  $-40 \,^{\circ}\text{C}$  to  $+75 \,^{\circ}\text{C}$  ( $-40 \,^{\circ}\text{F}$  to  $+167 \,^{\circ}\text{F}$ )

Cable Qualification Standards EN 187105 | IEC 60794-1-2

EN50575 CPR Cable EuroClass Fire PerformanceDcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Aerial, lashed | Buried | Low Smoke Zero Halogen (LSZH)

Flame Test Method | IEC 60332-1-2 | IEC 60754-2 | IEC 61034-2

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method IEC 60794-1 F5

**Environmental Test Specifications** 

 Cable Freeze
 -2 °C | 28.4 °F

 Cable Freeze Test Method
 IEC 60794-1 F15

Heat Age -40 °C to +85 °C (-40 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

**Low High Bend**  $-30 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-22  $^{\circ}\text{F}$  to  $+140 \,^{\circ}\text{F}$ )

Low High Bend Test Method IEC 60794-1 E11

**Temperature Cycle** -40 °C to +70 °C (-40 °F to +158 °F)

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

Packaging and Weights

**Cable weight** 178 kg/km | 119.61 lb/kft

### Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

REACH-SVHC Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



### Included Products

**COMMSCOPE®** 

NW-OM4B-LT - 50µm OM4 Bend-Insensitive Multimode Fiber

\* Footnotes

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



# NW-OM4B-LT

### 50µm OM4 Bend-Insensitive Multimode Fiber

#### **Product Classification**

PortfolioCommScope®Product TypeOptical fiber

General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance** ±1.0 µm 1 % **Cladding Non-Circularity, maximum Coating Diameter (Colored)** 254 um **Coating Diameter (Uncolored)** 245 µm **Coating Diameter Tolerance (Colored)** ±7 µm **Coating Diameter Tolerance (Uncolored)** ±10 μm Coating/Cladding Concentricity Error, maximum 12 µm

**Core Diameter** 50 μm

**Core Diameter Tolerance** ±2.5 μm

**Proof Tensile Stress** 100,000 psi (0.69 GPa)

Mechanical Specifications

**Macrobending, 75 mm Ø mandrel, 100 turns** 0.50 dB @ 1,300 nm | 0.50 dB @ 850 nm

Coating Strip Force, maximum $8.9 \,\mathrm{N}$  |  $2.001 \,\mathrm{lbf}$ Coating Strip Force, minimum $1.3 \,\mathrm{N}$  |  $0.292 \,\mathrm{lbf}$ 

**Dynamic Fatigue Parameter, minimum** 18

Optical Specifications

 Numerical Aperture
 0.2

 Numerical Aperture Tolerance
 ±0.015

 Point Defects, maximum
 0.15 dB

**Zero Dispersion Slope, maximum** 0.105 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1316 nmZero Dispersion Wavelength, minimum1297 nm

**COMMSCOPE®** 

# NW-OM4B-LT

## Optical Specifications, Wavelength Specific

**1 Gbps Ethernet Distance** 1,020 m @ 850 nm | 600 m @ 1,300 nm

**10 Gbps Ethernet Distance** 550 m @ 850 nm

**Attenuation, maximum** 1.00 dB/km @ 1,300 nm | 3.00 dB/km @ 850 nm

**Backscatter Coefficient** -68.0 dB @ 850 nm | -75.7 dB @ 1,300 nm

 Bandwidth, Laser, minimum
 4,700 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

 Bandwidth, OFL, minimum
 3,500 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm

**Differential Mode Delay** 0.70 ps/m @ 850 nm | 0.88 ps/m @ 1,300 nm

Differential Mode Delay Note Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm

**Index of Refraction** 1.477 @ 1,300 nm | 1.482 @ 850 nm

**Standards Compliance** IEC 60793-2-10, type A1a.3a | IEC 60793-2-10, type A1a.3b | TIA-

492AAAD (OM4)

### **Environmental Specifications**

**Heat Aging, maximum** 0.20 dB/km @ 85 °C

Temperature Dependence, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.2 dB/km

**Water Immersion, maximum** 0.20 dB/km @ 23 °C

### \* 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

