# 810009865/DB | C-024-CN-8W-M24YL/40G/GY



Fiber indoor/outdoor cable, LightScope ZWP®, gel-filled, loose tube, 24 fiber, yellow, Singlemode G.652.D and G.657.A1, Yellow jacket color, Dca flame rating. Provides Rodent Resistance

#### **OBSOLETE**

This product was discontinued on: March 31, 2023

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA

Meters

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

**Product Series** C-CN

#### General Specifications

Cable TypeLoose tubeConstruction TypeNon-armoredSubunit TypeGel-filledJacket ColorYellow

Subunit, quantity 1

Fibers per Subunit, quantity 24

Total Fiber Count 24

#### Dimensions

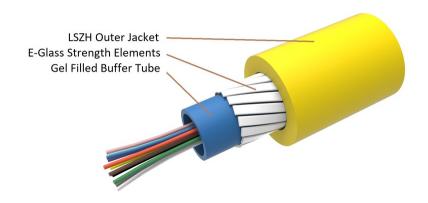
**Jacket Marking** 

Cable Length2000 m | 6,561.68 ftBuffer Tube/Subunit Diameter4 mm | 0.157 inDiameter Over Jacket8 mm | 0.315 in

#### Representative Image



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#### Mechanical Specifications

Minimum Bend Radius, loaded110 mm4.331 inMinimum Bend Radius, unloaded60 mm2.362 inTensile Load, long term, maximum1000 N224.809 lbfTensile Load, short term, maximum1300 N292.252 lbf

**Compression** 30 N/mm | 171.304 lb/in

Compression Test Method IEC 60794-1-2 E3

Impact 20 N-m | 177.015 in lb

Impact Test Method IEC 60794-1 E4

Optical Specifications

Fiber Type OS2

Optical Specifications, Wavelength Specific

Standards Compliance IEC 60794-1 | TIA-492CAAB (OS2)

**Environmental Specifications** 

Installation temperature  $-5 \,^{\circ}\text{C}$  to  $+50 \,^{\circ}\text{C}$  (+23  $^{\circ}\text{F}$  to +122  $^{\circ}\text{F}$ )

Operating Temperature  $-30 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-22  $^{\circ}\text{F}$  to +158  $^{\circ}\text{F}$ )

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Storage Temperature -30 °C to +70 °C (-22 °F to +158 °F)

 EN50575 CPR Cable EuroClass Fire Performance
 Dca

 EN50575 CPR Cable EuroClass Smoke Rating
 s2

 EN50575 CPR Cable EuroClass Droplets Rating
 d2

EN50575 CPR Cable EuroClass Acidity Rating a1

Environmental Space Universal Low Smoke Zero Halogen (ULSZH)

Water Penetration 24 h

Water Penetration Test Method IEC 60794-1 F5

**Environmental Test Specifications** 

**Temperature Cycle**  $-30 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-22  $^{\circ}\text{F}$  to  $+158 \,^{\circ}\text{F}$ )

**Temperature Cycle Test Method** IEC 60794-1-2 F1

Packaging and Weights

 Cable weight
 74 kg/km | 49.726 lb/kft

Included Products

DB-8W-LT – LightScope ZWP® Singlemode Fiber

#### \* Footnotes

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



#### LightScope ZWP® Singlemode Fiber



#### **Product Classification**

 Portfolio
 CommScope®

 Product Type
 Optical fiber

#### General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance**  $\pm 0.7 \, \mu m$ 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 Diameter** 8.3 µm 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
 0.75 dB @ 1,550 nm
 1 1.50 dB @ 1,625 nm

 Macrobending, 30 mm Ø mandrel, 10 turns
 0.25 dB @ 1,550 nm
 1 1.00 dB @ 1,625 nm

 Macrobending, 60 mm Ø mandrel, 100 turns
 0.05 dB @ 1,550 nm
 0.05 dB @ 1,625 nm

Coating Strip Force, maximum 8.9 N | 2.001 lbf

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### DB-8W-LT

Coating Strip Force, minimum 1.3 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

Optical Specifications, Wavelength Specific

**Attenuation, maximum** 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

**Attenuation, typical** 0.19 dB/km @ 1,550 nm | 0.33 dB/km @ 1,310 nm

**Backscatter Coefficient** -79.6 dB @ 1,310 nm | -82.1 dB @ 1,550 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** 10.4 μm @ 1,550 nm | 9.2 μm @ 1,310 nm | 9.6 μm @

1,385 nm

Mode Field Diameter Tolerance  $\pm 0.4 \, \mu \text{m}$  @ 1310 nm |  $\pm 0.5 \, \mu \text{m}$  @ 1550 nm |  $\pm 0.6 \, \mu \text{m}$ 

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.04 ps/sgrt(km)

Standards Compliance ITU-T G.652.D | ITU-T G.657.A1

**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

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# DB-8W-LT

#### \* 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

