810009863/DB | C-024-CN-8W-M24YL/40G/AY





Fiber indoor/outdoor cable, LightScope® ZWP, gel-filled, loose tube, 24 fiber, Singlemode G.652.D and G.657.Al, Meters jacket marking, Yellow jacket color, Eca flame rating

OBSOLETE

This product was discontinued on: March 31, 2023

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-CN

General Specifications

Cable Type Loose tube

Construction Type Non-armored

Subunit TypeGel-filledJacket ColorYellowJacket MarkingMeters

Subunit, quantity 1
Fibers per Subunit, quantity 24
Total Fiber Count 24

Dimensions

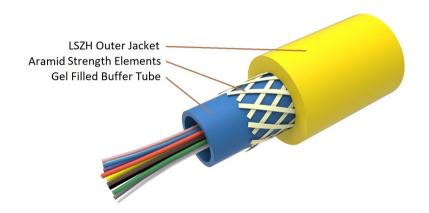
Cable Length 2000 m | 6,561.68 ft

Buffer Tube/Subunit Diameter4 mm0.157 inDiameter Over Jacket8 mm0.315 in

Representative Image



30 N/mm | 171.304 lb/in



Mechanical Specifications

Minimum Bend Radius, loaded110 mm | 4.331 inMinimum Bend Radius, unloaded60 mm | 2.362 inTensile Load, long term, maximum1000 N | 224.809 lbfTensile Load, short term, maximum1300 N | 292.252 lbf

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

Compression

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 $^{\circ}\text{F}$)

Page 2 of 5

810009863/DB | C-024-CN-8W-M24YL/40G/AY

/E

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

EN50575 CPR Cable EuroClass Fire PerformanceEcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd2EN50575 CPR Cable EuroClass Acidity Ratinga1

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

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



CS-8W-250-EMEA | 250um

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

Proof Test 689.476 N/mm² | 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, maximum8.9 N | 2.001 lbfCoating Strip Force, minimum1.3 N | 0.292 lbf

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CS-8W-250-EMEA | 250um

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum1250 nmPoint Defects, maximum0.05 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 0.21 dB/km @ 1,550 nm | 0.24 dB/km @ 1625

nm | 0.25 dB/km @ 1,490 nm | 0.35 dB/km @ 1,310

nm | 0.35 dB/km @ 1,385 nm

Dispersion, maximum 18 ps(nm-km) at 1550 nm | 2.2 ps(nm-km) at 1625

nm | 3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310

nm

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

 $\textbf{Mode Field Diameter} \hspace{15mm} 10.4~\mu\text{m} \ @ \ 1,550~\text{nm} \hspace{3mm} | \hspace{3mm} 9.2~\mu\text{m} \ @ \ 1,310~\text{nm}$

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/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, maximum0.05 dB/kmTemperature Humidity Cycling, maximum0.05 dB/km

Water Immersion, maximum 0.05 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

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