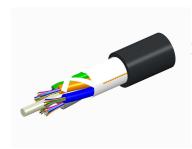
810010034/DB | C-012-LN-8W-M12BK/25D/E



LightSCOPE ZWP® Indoor/Outdoor, Single Jacket All-Dielectric, Low Smoke Zero Halogen (LSZH), Gel-Free, Stranded Loose Tube Cable

OBSOLETE

This product was discontinued on: March 13, 2015

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North

America

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-free

Filler, quantity 4

Jacket Color Black

Jacket Marking Meters

Subunit, quantity 1

Fibers per Subunit, quantity 12

Total Fiber Count 12

Dimensions

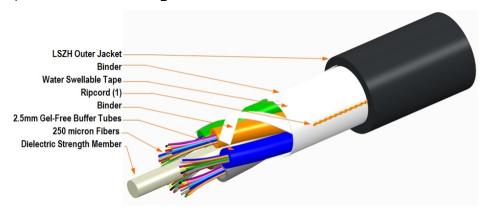
Buffer Tube/Subunit Diameter 2.5 mm | 0.098 in

Diameter Over Jacket 11.7 mm | 0.461 in

COMMSC PE°

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Representative Image



Mechanical Specifications

Minimum Bend Radius, loaded 175 mm | 6.89 in

Minimum Bend Radius, unloaded 117 mm | 4.606 in

Tensile Load, long term, maximum 800 N | 179.847 lbf

Tensile Load, short term, maximum 2700 N | 606.984 lbf

Compression 22 N/mm | 125.623 lb/in

Compression Test Method FOTP-41 | IEC 60794-1 E3

Flex 25 cycles

Flex Test Method FOTP-104 | IEC 60794-1 E6

Impact 2.94 N-m | 26.021 in lb

Impact Test Method FOTP-25 | IEC 60794-1 E4

Strain See long and short term tensile loads

Strain Test Method FOTP-33 | IEC 60794-1 E1

Twist 10 cycles

Twist Test Method FOTP-85 | IEC 60794-1 E7

Vertical Rise, maximum 654 m | 2,145.669 ft

Optical Specifications

Fiber Type G.652.D and G.657.A1

Environmental Specifications

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

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Operating Temperature $-40 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to} + 158 \,^{\circ}\text{F})$ Storage Temperature $-40 \,^{\circ}\text{C to} + 75 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to} + 167 \,^{\circ}\text{F})$

Cable Qualification Standards ANSI/ICEA S-104-696 | EN 187105 | Telcordia GR-20 | Telcordia GR-

409

EN50575 CPR Cable EuroClass Fire Performance Eca

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

Flame Test Listing NEC OFN-LS (ETL) and c(ETL)

Flame Test Method | IEC 60332-3 | IEC 60754-2 | IEC 61034-2 | IEEE 1202 | UL 1685

Jacket UV Resistance UV stabilized

Water Penetration 24 h

Water Penetration Test Method FOTP-82 | IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze -2 °C | 28.4 °F

Cable Freeze Test Method FOTP-98 | IEC 60794-1 F15

Heat Age $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

Heat Age Test Method IEC 60794-1 F9

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

Low High Bend Test Method FOTP-37 | IEC 60794-1 E11

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

Temperature Cycle Test Method FOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight 125 kg/km | 83.996 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/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, 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

