760256142 | C-072-LN-8W-M12BK/15D/B2



Fiber Indoor/outdoor Cable, Low Smoke Zero Halogen / 72 fiber Microsheath,, Gel-free, Singlemode, Meters jacket marking, Black jacket color, B2ca flame rating

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 microsheath tube

Subunit TypeGel-freeJacket ColorBlackJacket MarkingMeters

Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE 760256142 72 x G652D 9/125

EN50575 CLASS B ULSZH [Serial number] [metre mark]

Subunit, quantity 6
Fibers per Subunit, quantity 12
Total Fiber Count 72

Dimensions

 Cable Length
 2000 m | 6,561.68 ft

 Buffer Tube/Subunit Diameter
 1.5 mm | 0.059 in

 Diameter Over Jacket
 7.7 mm | 0.303 in

Mechanical Specifications

Minimum Bend Radius, loaded150 mm5.906 inMinimum Bend Radius, unloaded105 mm4.134 inTensile Load, long term, maximum180 N40.466 lbfTensile Load, short term, maximum600 N134.885 lbf

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Cable Crush Resistance, maximum 10 N/mm | 57.101 lb/in

Compression Test Method IEC 60794-1-21 E3

Impact 2 N-m | 17.701 in lb

Impact Test Method IEC 60794-1-21 E4

Strain Test Method IEC 60794-1-21 E1

Twist 5 cycles

Twist Test Method IEC 60794-1 E7

Optical Specifications

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

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.25 dB/km @ 1,550 nm | 0.27 dB/km @ 1,625 nm | 0.36 dB/km @

1,310 nm

Environmental Specifications

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

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Rating\$1aEN50575 CPR Cable EuroClass Droplets Ratingd0EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Universal Low Smoke Zero Halogen (ULSZH)

Water Penetration Test Method IEC 60794-1 F5

Environmental Test Specifications

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

Temperature Cycle Test Method IEC 60794-1-22 F1

Packaging and Weights

Cable weight 68 kg/km | 45.694 lb/kft

Included Products

CS-8W-LT - TeraSPEED® G652D/G657A1 Singlemode

Fiber



760256142 | C-072-LN-8W-M12BK/15D/B2

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

TeraSPEED® G652D/G657A1 Singlemode Fiber

TeraSPEED®

Product Classification

Portfolio CommScope®

Product Type Optical fiber

General Specifications

Cladding Diameter 125 µm

 ${\color{red} \textbf{Cladding Diameter Tolerance}} \\ {\color{red} \pm 0.7~\mu m} \\$

 ${\bf Cladding\ Non-Circularity,\ maximum} \\ {\bf 0.7\ \%}$

Coating Diameter (Colored) 249 µm

Coating Diameter (Uncolored) 242 µm

Coating Diameter Tolerance (Colored) ±13 μm

Coating Diameter Tolerance (Uncolored) ±5 µm

 $\textbf{Coating/Cladding Concentricity Error, maximum} \hspace{1.5cm} 12~\mu m$

Core Diameter 8.3 μm

Core/Clad Offset, maximum 0.5 μm

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 | 1.50 dB @ 1,625 nm

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

COMMSCOPE®

CS-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 IEC 60793-2-10, edition 6, model A1a.4 | 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, 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

COMMSCOPE®

CS-8W-LT

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

