760254754 | C-072-LA-8W-M12BK/25G/GRP/E



Indoor/Outdoor Low Smoke Zero Halogen, TeraSPEED® GRP Armoured, Stranded Loose Tube Fiber Optic Cable, 72-fiber, Singlemode OS2, Gelfilled, black. Provides Rodent Resistance.

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-LA

General Specifications

Armor Type Non-metallic rods

Cable TypeLoose tubeConstruction TypeArmoredSubunit TypeGel-filledJacket ColorBlackJacket MarkingMeters

Jacket Marking Method Inkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE 760254754

OS2 SM 72 FIBER EN50575 CLASS Dca [SERIAL NUMBER] [MM

/YY] [METRE MARK]

72

Subunit, quantity6Fibers per Subunit, quantity12

Total Fiber Count

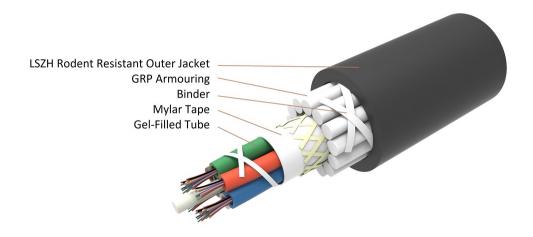
Dimensions

Cable Length2000 m | 6,561.68 ftBuffer Tube/Subunit Diameter2.5 mm | 0.098 inDiameter Over Jacket16.8 mm | 0.661 in

Representative Image



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Mechanical Specifications

Minimum Bend Radius, loaded340 mm | 13.386 inMinimum Bend Radius, unloaded250 mm | 9.843 inTensile Load, long term, maximum6000 N | 1,348.854 lbfTensile Load, short term, maximum9000 N | 2,023.281 lbfCable Crush Resistance, maximum40 N/mm | 228.406 lb/in

Compression Test Method IEC 60794-1-2 E3

Impact 15 N-m | 132.761 in lb

Impact Test Method IEC 60794-1 E4

Twist 5 cycles

Twist Test Method IEC 60794-1 E7

Optical Specifications

Fiber Type OS2

Optical Specifications, Wavelength Specific

Attenuation, maximum 0.35 dB/km @ 1,300 nm | 0.35 dB/km @ 1,550 nm | 0.45 dB/km @

1,310 nm

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

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Environmental Specifications

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

Operating Temperature $-25 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (-13 $^{\circ}\text{F}$ to +158 $^{\circ}\text{F}$)

Storage Temperature $-20 \,^{\circ}\text{C to } +70 \,^{\circ}\text{C } (-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$

EN50575 CPR Cable EuroClass Fire Performance Eca

Environmental Space Low Smoke Zero Halogen (LSZH)

Water Penetration 24 h

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 60794-1-2 F1

Packaging and Weights

Cable weight 223 kg/km | 149.849 lb/kft

Included Products

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

Fiber

* 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

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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

