## 760240171 | C-048-LA-8W-M12BK/28G/GRP/E



Fiber indoor/outdoor cable, 48-fiber, ULSZH, loose tube, gel-filled, Singlemode G.652.D and G.657.Al, Meters jacket marking, Black jacket color. Provides Rodent Resistance

### **Product Classification**

Regional Availability

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 tubeSubunit TypeGel-filled

Filler, quantity 4

Jacket ColorBlackJacket MarkingMetersJacket Marking MethodInkjet

Jacket Marking Text COMMSCOPE GB SYSTEM F.O.CABLE 760240171 EXT GRP ARMOUR 48X9/125 SINGLE

MODE [Serial number] [metre mark]

Fibers per Subunit, quantity 12

Total Fiber Count 48

**Dimensions** 

 Cable Length
 1000 m | 3,280.84 ft

 Diameter Over Jacket
 15 mm | 0.591 in

Mechanical Specifications

Minimum Bend Radius, loaded465 mm | 18.307 inMinimum Bend Radius, unloaded350 mm | 13.78 inTensile Load, long term, maximum6000 N | 1,348.854 lbfTensile Load, short term, maximum9000 N | 2,023.281 lbf

**COMMSCOPE®** 

# 760240171 | C-048-LA-8W-M12BK/28G/GRP/E

## **Optical Specifications**

**Fiber Type** G.652.D and G.657.A1, TeraSPEED® | 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)

### **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**  $-20 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C} \left(-4 \,^{\circ}\text{F to} + 158 \,^{\circ}\text{F}\right)$ 

**Environmental Space** Universal Low Smoke Zero Halogen (ULSZH)

Packaging and Weights

**Cable weight** 230 kg/km | 154.553 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

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

Coating Diameter (Colored) 249 µm

Coating Diameter (Uncolored) 242 µm

**Coating Diameter Tolerance (Colored)** ±13 μm

Coating Diameter Tolerance (Uncolored) ±5 µm

Coating/Cladding Concentricity Error, maximum 12 µm

Core Diameter 8.3 µm

 $\textbf{Core/Clad Offset, maximum} \hspace{1.5cm} 0.5 \, \mu \text{m}$ 

**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 | 1.50 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 \, \mu \text{m} \ (0.1,550 \, \text{nm} \ | \ 9.2 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu \text{m} \ (0.1,310 \, \text{nm} \ | \ 9.6 \, \mu$ 

1,385 nm

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

@ 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

