# 810010235/DB | C-012-DS-8W-MSUBK/GY/C



Indoor/Outdoor Low Smoke Zero Halogen, TeraSPEED® Tight Buffered Office DistributionFiber Fiber Optic Cable, 12 fiber, Singlemode OS1a, black. Provides Rodent Resistance.

- designed to offer flexibility, strength and compact construction for internal and interbuilding use
- non-metallic construction reinforced by E-glass yarns, which provide rodent resistance and higher tensile strength
- oversheathed with a ULSZH jacket meeting IEC fire performance requirements

#### Product Classification

Regional Availability

Asia | EMEA

Portfolio

CommScope®

Product Type Fiber indoor/outdoor cable

Product Series C-DS

#### General Specifications

Cable TypeTight buffer

Jacket ColorBlackJacket MarkingMetersJacket Marking MethodInkjet

Jacket Marking Text COMMSCOPE GB OPTICAL CABLE 760254801 12 X 9/125 OS2 ULSZH

(BATCH NUMBER) (METRE MARK)

Strength Members E-glass yarns

Fibers per Subunit, quantity 12

Total Fiber Count 12

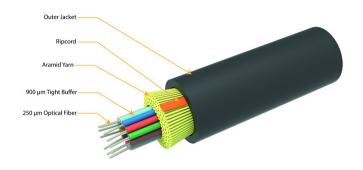
Dimensions

**Diameter Over Jacket** 8 mm | 0.315 in

### Representative Image



# 810010235/DB | C-012-DS-8W-MSUBK/GY/C



#### Mechanical Specifications

Minimum Bend Radius, loaded200 mm | 7.874 inMinimum Bend Radius, unloaded120 mm | 4.724 inTensile Load, short term, maximum1500 N | 337.214 lbfCable Crush Resistance, maximum20 N/mm | 114.203 lb/in

**Optical Specifications** 

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  $-20 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to +140  $^{\circ}\text{F}$ )

Storage Temperature  $-20 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to +140  $^{\circ}\text{F}$ )

EN50575 CPR Cable EuroClass Fire PerformanceCcaEN50575 CPR Cable EuroClass Smoke Ratings2EN50575 CPR Cable EuroClass Droplets Ratingd1EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Low Smoke Zero Halogen (LSZH)

COMMSCOPE®

# 810010235/DB | C-012-DS-8W-MSUBK/GY/C

## Packaging and Weights

Cable weight

69 kg/km | 46.366 lb/kft

#### Included Products

CS-8W-TB - TeraSPEED® Singlemode Fiber

### \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable



# TeraSPEED®

#### TeraSPEED® Singlemode Fiber

#### Product Classification

 Portfolio
 CommScope®

 Product Type
 Optical fiber

General Specifications

**Cladding Diameter** 125 µm **Cladding Diameter Tolerance**  $\pm 0.7 \, \mu m$ 0.7 % Cladding Non-Circularity, maximum **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 Tensile Stress 100,000 psi (0.69 GPa)

Tight Buffer Diameter 900  $\mu m$ Tight Buffer Diameter Tolerance  $\pm 40 \ \mu m$ 

**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

**COMMSCOPE®** 

## CS-8W-TB

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** 0.50 dB/km @ 1,310 nm | 0.50 dB/km @ 1,385

nm | 0.50 dB/km @ 1,490 nm | 0.50 dB/km @ 1,550 nm | 0.50 dB/km @ 1,575 nm | 0.70 dB/km @ 1,270

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

1,385 nm

**Mode Field Diameter Tolerance** ±0.4 μm @ 1310 nm | ±0.5 μm @ 1550 nm | ±0.6 μm

@ 1385 nm

Polarization Mode Dispersion Link Design Value, maximum 0.04 ps/sqrt(km)

Standards Compliance | ITU-T G.652.D | ITU-T G.657.A1 | TIA-492CAAB (OS1a)

**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

\* Footnotes

**COMMSCOPE®** 

# CS-8W-TB

**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

Page 6 of 6