



Indoor/Outdoor Low Smoke Zero Halogen, TeraSPEED® Tight Buffered Office Distribution Fiber Fiber Optic Cable, 2 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

<b>Regional Availability</b>	Asia   EMEA
<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Fiber indoor/outdoor cable
<b>Product Series</b>	C-DS

## General Specifications

<b>Cable Type</b>	Tight buffer
<b>Jacket Color</b>	Black
<b>Jacket Marking</b>	Meters
<b>Jacket Marking Method</b>	Inkjet
<b>Jacket Marking Text</b>	COMMSCOPE GB OPTICAL CABLE 760254799 2x9/125 OS2 ULSZH [BATCH NUMBER] [METRE MARK]
<b>Strength Members</b>	E-glass yarns
<b>Fibers per Subunit, quantity</b>	2
<b>Total Fiber Count</b>	2

## Dimensions

<b>Diameter Over Jacket</b>	5.2 mm   0.205 in
-----------------------------	-------------------

## Representative Image



## Mechanical Specifications

<b>Minimum Bend Radius, loaded</b>	130 mm   5.118 in
<b>Minimum Bend Radius, unloaded</b>	80 mm   3.15 in
<b>Tensile Load, short term, maximum</b>	1000 N   224.809 lbf
<b>Cable Crush Resistance, maximum</b>	20 N/mm   114.203 lb/in

## Optical Specifications

<b>Fiber Type</b>	OS2
-------------------	-----

## Optical Specifications, Wavelength Specific

<b>Standards Compliance</b>	IEC 60794-1   TIA-492CAAB (OS2)
-----------------------------	---------------------------------

## Environmental Specifications

<b>Installation temperature</b>	-5 °C to +50 °C (+23 °F to +122 °F)
<b>Operating Temperature</b>	-20 °C to +60 °C (-4 °F to +140 °F)
<b>Storage Temperature</b>	-20 °C to +60 °C (-4 °F to +140 °F)
<b>EN50575 CPR Cable EuroClass Fire Performance</b>	B2ca
<b>EN50575 CPR Cable EuroClass Smoke Rating</b>	s1a
<b>EN50575 CPR Cable EuroClass Droplets Rating</b>	d1
<b>EN50575 CPR Cable EuroClass Acidity Rating</b>	a1
<b>Environmental Space</b>	Low Smoke Zero Halogen (LSZH)

# 810010233/DB | C-002-DS-8W-MSUBK/GY/B

---

## Packaging and Weights

### Cable weight

32 kg/km | 21.503 lb/kft

## Included Products

DB-8W-TB – LightScope ZWP® Singlemode  
Fiber

## \* Footnotes

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

# DB-8W-TB

---

## LightScope ZWP® Singlemode Fiber



### Product Classification

<b>Portfolio</b>	CommScope®
<b>Product Type</b>	Optical fiber

### General Specifications

<b>Cladding Diameter</b>	125 µm
<b>Cladding Diameter Tolerance</b>	±0.7 µm
<b>Cladding Non-Circularity, maximum</b>	0.7 %
<b>Coating Diameter (Colored)</b>	249 µm
<b>Coating Diameter (Uncolored)</b>	242 µm
<b>Coating Diameter Tolerance (Colored)</b>	±13 µm
<b>Coating Diameter Tolerance (Uncolored)</b>	±5 µm
<b>Coating/Cladding Concentricity Error, maximum</b>	12 µm
<b>Core Diameter</b>	8.3 µm
<b>Core/Clad Offset, maximum</b>	0.5 µm
<b>Proof Test</b>	689.476 N/mm <sup>2</sup>   100000 psi
<b>Tight Buffer Diameter</b>	900 µm
<b>Tight Buffer Diameter Tolerance</b>	±40 µm

### Dimensions

<b>Fiber Curl, minimum</b>	4 m   13.123 ft
----------------------------	-----------------

### Mechanical Specifications

<b>Macrobending, 20 mm Ø mandrel, 1 turn</b>	0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm
<b>Macrobending, 30 mm Ø mandrel, 10 turns</b>	0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm

# DB-8W-TB

<b>Macrobending, 60 mm Ø mandrel, 100 turns</b>	0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm
<b>Coating Strip Force, maximum</b>	8.9 N   2.001 lbf
<b>Coating Strip Force, minimum</b>	1.3 N   0.292 lbf
<b>Dynamic Fatigue Parameter, minimum</b>	20

## Optical Specifications

<b>Cabled Cutoff Wavelength, maximum</b>	1260 nm
<b>Point Defects, maximum</b>	0.1 dB
<b>Zero Dispersion Slope, maximum</b>	0.092 ps/[km-nm-nm]
<b>Zero Dispersion Wavelength, maximum</b>	1324 nm
<b>Zero Dispersion Wavelength, minimum</b>	1300 nm

## Optical Specifications, Wavelength Specific

<b>Attenuation, maximum</b>	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 @ 1,625 nm   1.00 dB/km @ 1,650 nm
<b>Backscatter Coefficient</b>	-79.6 dB @ 1,310 nm   -82.1 dB @ 1,550 nm
<b>Dispersion, maximum</b>	18 ps(nm-km) at 1550 nm   3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm
<b>Index of Refraction</b>	1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 nm
<b>Mode Field Diameter</b>	10.4 µm @ 1,550 nm   9.2 µm @ 1,310 nm   9.6 µm @ 1,385 nm
<b>Mode Field Diameter Tolerance</b>	±0.4 µm @ 1310 nm   ±0.5 µm @ 1550 nm   ±0.6 µm @ 1385 nm
<b>Polarization Mode Dispersion Link Design Value, maximum</b>	0.04 ps/sqrt(km)
<b>Standards Compliance</b>	ITU-T G.652.D   ITU-T G.657.A1   TIA-492CAAB (OS1a)

## Environmental Specifications

<b>Heat Aging, maximum</b>	0.05 dB/km @ 85 °C
<b>Temperature Dependence, maximum</b>	0.05 dB/km
<b>Temperature Humidity Cycling, maximum</b>	0.05 dB/km
<b>Water Immersion, maximum</b>	0.05 dB/km @ 23 °C

## Regulatory Compliance/Certifications

# DB-8W-TB

---

**Agency**

ISO 9001:2015

**Classification**

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