

Indoor/Outdoor Low Smoke Zero Halogen, TeraSPEED® Tight Buffered Office Distribution Fiber Fiber Optic Cable, 24 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 |

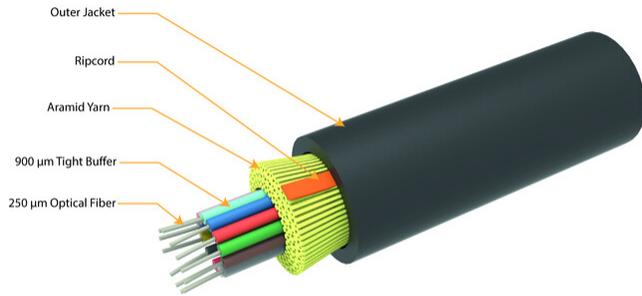
General Specifications

| | |
|------------------------------|--|
| Cable Type | Tight buffer |
| Jacket Color | Black |
| Jacket Marking | Meters |
| Jacket Marking Method | Inkjet |
| Jacket Marking Text | COMMSCOPE GB OPTICAL CABLE 760254805 24x9/125 OS1a ULSZH [BATCH NUMBER] [METRE MARK] |
| Strength Members | E-glass yarns |
| Total Fiber Count | 24 |

Dimensions

| | |
|-----------------------------|-------------------|
| Diameter Over Jacket | 9.5 mm 0.374 in |
|-----------------------------|-------------------|

Representative Image



Mechanical Specifications

| | |
|--|-------------------------|
| Minimum Bend Radius, loaded | 240 mm 9.449 in |
| Minimum Bend Radius, unloaded | 150 mm 5.906 in |
| Tensile Load, short term, maximum | 2000 N 449.618 lbf |
| Cable Crush Resistance, maximum | 20 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 °C to +50 °C (+23 °F to +122 °F) |
| Operating Temperature | -20 °C to +60 °C (-4 °F to +140 °F) |
| Storage Temperature | -20 °C to +60 °C (-4 °F to +140 °F) |
| EN50575 CPR Cable EuroClass Fire Performance | Cca |
| EN50575 CPR Cable EuroClass Smoke Rating | s2 |
| EN50575 CPR Cable EuroClass Droplets Rating | d1 |
| EN50575 CPR Cable EuroClass Acidity Rating | a1 |
| Environmental Space | Low Smoke Zero Halogen (LSZH) |

Packaging and Weights

Cable weight

92 kg/km | 61.821 lb/kft

Regulatory Compliance/Certifications

Agency

Classification

CHINA-ROHS

Below maximum concentration value

REACH-SVHC

Compliant as per SVHC revision on www.commscope.com/ProductCompliance

ROHS

Compliant

UK-ROHS

Compliant



Included Products

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



Product Classification

| | |
|---------------------|---------------|
| Portfolio | CommScope® |
| Product Type | Optical fiber |

General Specifications

| | |
|--|------------------------|
| Cladding Diameter | 125 µm |
| Cladding Diameter Tolerance | ±0.7 µm |
| Cladding Non-Circularity, maximum | 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 |
| Core/Clad Offset, maximum | 0.5 µm |
| Proof Tensile Stress | 100,000 psi (0.69 GPa) |
| Tight Buffer Diameter | 900 µm |
| Tight Buffer Diameter Tolerance | ±40 µm |

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 |
| Coating Strip Force, minimum | 1.3 N 0.292 lbf |

DB-8W-TB

Dynamic Fatigue Parameter, minimum 20

Optical Specifications

Cabled Cutoff Wavelength, maximum 1260 nm

Point Defects, maximum 0.1 dB

Zero Dispersion Slope, maximum 0.092 ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum 1324 nm

Zero Dispersion Wavelength, minimum 1300 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 @ 1,625 nm | 1.00 dB/km @ 1,650 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/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

DB-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