



Fiber Indoor/outdoor Cable, office distribution, 24 fiber, ULSZH, Gel-free, Singlemode G.652.D and G.657.A1, Meters jacket marking, Yellow jacket color, Cca flame rating. 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 | Yellow |
| Jacket Marking | Meters |
| Jacket Marking Method | Inkjet |
| Jacket Marking Text | COMMScope GB OPTICAL CABLE 1594559-6 24x9/125 OS2 EN50575 CLASS C ULSZH [Serial NUMBER] [METRE MARK] |
| Strength Members | E-glass yarns |
| Total Fiber Count | 24 |

Dimensions

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

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

1594559-6 | C-024-DS-8W-MSUYL/GY/C

| | |
|--|--|
| 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 | Universal Low Smoke Zero Halogen (ULSZH) |

Packaging and Weights

| | |
|--------------|--------------------------|
| Cable weight | 92 kg/km 61.821 lb/kft |
|--------------|--------------------------|

Regulatory Compliance/Certifications

| Agency | Classification |
|------------|--|
| CENELEC | EN 50575 compliant, Declaration of Performance (DoP) available |
| 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

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 | ±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 Test | 689.476 N/mm² 100000 psi |
| 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 |

CS-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 @ 1,270 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 |
| 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 | ±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

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 |