

Fiber indoor cable, TeraSPEED® Low Smoke Zero Halogen Riser Distribution, 12 fiber single-unit, Singlemode G.652.D and G.657.A1, Feet jacket marking, Blue jacket color, Dca flame rating

Product Classification

|                       |   |
|-----------------------|---|
| Regional Availability | Asia   Australia/New Zealand   EMEA   Latin America   North America |
| Portfolio             | CommScope®  |
| Product Type          | Fiber indoor cable  |
| Product Series        | N-DS  |

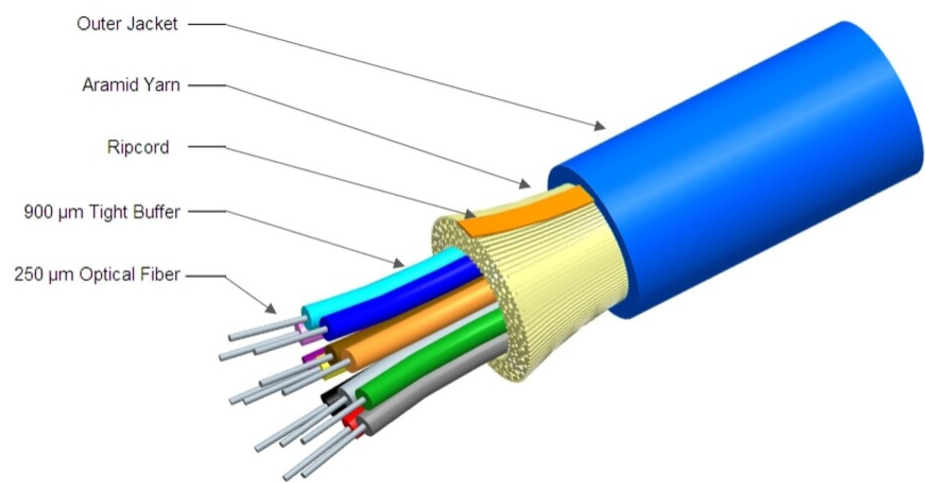
General Specifications

|                   |              |
|-------------------|--------------|
| Cable Type        | Distribution |
| Construction Type | Non-armored  |
| Subunit Type      | Gel-free     |
| Jacket Color      | Blue         |
| Jacket Marking    | Feet         |
| Total Fiber Count | 12           |

Dimensions

|                      |                    |
|----------------------|--------------------|
| Diameter Over Jacket | 6.07 mm   0.239 in |
|----------------------|--------------------|

Representative Image



Mechanical Specifications

|                                   |                                       |
|-----------------------------------|---------------------------------------|
| Minimum Bend Radius, loaded       | 91 mm   3.583 in                      |
| Minimum Bend Radius, unloaded     | 61 mm   2.402 in                      |
| Tensile Load, long term, maximum  | 200 N   44.962 lbf                    |
| Tensile Load, short term, maximum | 667 N   149.948 lbf                   |
| Compression                       | 10 N/mm   57.101 lb/in                |
| Compression Test Method           | FOTP-41   IEC 60794-1 E3              |
| Flex                              | 100 cycles                            |
| Flex Test Method                  | FOTP-104   IEC 60794-1 E6             |
| Impact                            | 2.94 N-m   26.021 in lb               |
| Impact Test Method                | FOTP-25   IEC 60794-1 E4              |
| Strain                            | See long and short term tensile loads |
| Strain Test Method                | FOTP-33   IEC 60794-1 E1              |
| Twist                             | 10 cycles                             |
| Twist Test Method                 | FOTP-85   IEC 60794-1 E7              |
| Vertical Rise, maximum            | 500 m   1,640.42 ft                   |

Optical Specifications

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

## Environmental Specifications

|  |   |
|--|---|
| Installation temperature                     | -10 °C to +60 °C (+14 °F to +140 °F)                        |
| Operating Temperature                        | -20 °C to +70 °C (-4 °F to +158 °F)                         |
| Storage Temperature                          | -40 °C to +70 °C (-40 °F to +158 °F)                        |
| Cable Qualification Standards                | ANSI/ICEA S-83-596   Telcordia GR-409                       |
| EN50575 CPR Cable EuroClass Fire Performance | Dca   |
| EN50575 CPR Cable EuroClass Smoke Rating     | s1a   |
| EN50575 CPR Cable EuroClass Droplets Rating  | d1  |
| EN50575 CPR Cable EuroClass Acidity Rating   | a2  |
| Environmental Space                          | Low Smoke Zero Halogen (LSZH)   Riser                       |
| Flame Test Listing                           | NEC OFNR-ST1 (ETL) and c(ETL)                               |
| Flame Test Method                            | IEC 60332-3   IEC 60754-2   IEC 61034-2   UL 1666   UL 1685 |

## Environmental Test Specifications

|                               |                                      |
|-------------------------------|--------------------------------------|
| Heat Age                      | -20 °C to +85 °C (-4 °F to +185 °F)  |
| Heat Age Test Method          | IEC 60794-1 F9                       |
| Low High Bend                 | -10 °C to +60 °C (+14 °F to +140 °F) |
| Low High Bend Test Method     | FOTP-37   IEC 60794-1 E11            |
| Temperature Cycle             | -20 °C to +70 °C (-4 °F to +158 °F)  |
| Temperature Cycle Test Method | FOTP-3   IEC 60794-1 F1              |

## Packaging and Weights

|              |                          |
|--------------|--------------------------|
| Cable weight | 34 kg/km   22.847 lb/kft |
|--------------|--------------------------|

## Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| CENELEC       | EN 50575 compliant, Declaration of Performance (DoP) available                 |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |



## 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 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                       |

# 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

---

|  |   |
|--|---|
| <b>Temperature Dependence, maximum</b>       | Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)                                   |
| <b>Temperature Humidity Cycling, maximum</b> | Temperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F) up to 95% relative humidity |