

Fiber indoor/outdoor cable, TeraSPEED® Plenum Distribution, 6 fiber single-unit, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color

Product Classification

|                       |   |
|-----------------------|---|
| Regional Availability | Asia   Australia/New Zealand   Latin America   Middle East/Africa   North America |
| Portfolio             | CommScope®  |
| Product Type          | Fiber indoor/outdoor cable  |
| Product Series        | P-OD  |

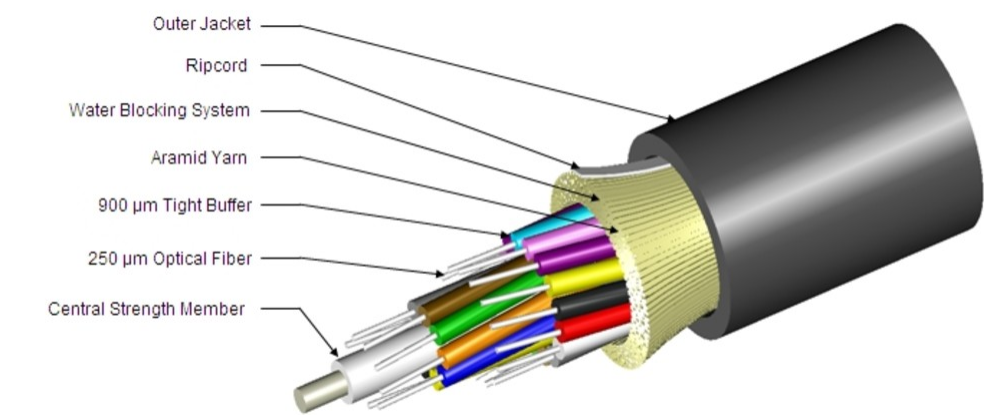
General Specifications

|                   |              |
|-------------------|--------------|
| Cable Type        | Distribution |
| Construction Type | Non-armored  |
| Jacket Color      | Black        |
| Jacket Marking    | Feet         |
| Total Fiber Count | 6            |

Dimensions

|                      |                   |
|----------------------|-------------------|
| Diameter Over Jacket | 5.4 mm   0.213 in |
|----------------------|-------------------|

Representative Image



Mechanical Specifications

|                                   |                                       |
|-----------------------------------|---------------------------------------|
| Minimum Bend Radius, loaded       | 81 mm   3.189 in                      |
| Minimum Bend Radius, unloaded     | 54 mm   2.126 in                      |
| Tensile Load, long term, maximum  | 400 N   89.924 lbf                    |
| Tensile Load, short term, maximum | 1335 N   300.12 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 | -30 °C to +70 °C (-22 °F to +158 °F) |
|--------------------------|--------------------------------------|

|                               |  |
|-------------------------------|--|
| Operating Temperature         | -40 °C to +70 °C (-40 °F to +158 °F)   |
| Storage Temperature           | -40 °C to +75 °C (-40 °F to +167 °F)   |
| Cable Qualification Standards | ANSI/ICEA S-104-696   Telcordia GR-20 (water penetration)   Telcordia GR-409 |
| Environmental Space           | Plenum   |
| Flame Test Listing            | NEC OFNP (ETL) and c(ETL)  |
| Flame Test Method             | NFPA 130   NFPA 262  |
| Jacket UV Resistance          | UV stabilized  |
| Water Penetration             | 24 h   |
| Water Penetration Test Method | FOTP-82   IEC 60794-1 F5   |

### Environmental Test Specifications

|                               |                                      |
|-------------------------------|--------------------------------------|
| Cable Freeze Test Method      | IEC 60794-1 F15                      |
| Heat Age                      | -40 °C to +85 °C (-40 °F to +185 °F) |
| Heat Age Test Method          | IEC 60794-1 F9                       |
| Low High Bend                 | -40 °C to +70 °C (-40 °F to +158 °F) |
| Low High Bend Test Method     | FOTP-37   IEC 60794-1 E11            |
| Temperature Cycle             | -40 °C to +70 °C (-40 °F to +158 °F) |
| Temperature Cycle Test Method | FOTP-3   IEC 60794-1 F1              |

### Packaging and Weights

|              |                          |
|--------------|--------------------------|
| Cable weight | 28 kg/km   18.815 lb/kft |
|--------------|--------------------------|

### Regulatory Compliance/Certifications

| Agency        | Classification  |
|---------------|---|
| CHINA-ROHS    | Below maximum concentration value   |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system  |
| REACH-SVHC    | Compliant as per SVHC revision on <a href="https://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| 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 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

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|  |   |
|--|---|
| <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 |