# 760004465 | R-036-DS-8W-FMUYL



Fiber indoor cable, TeraSPEED® Riser Distribution, 36 fiber multi-unit with 12 fiber subunits, Singlemode G.652.D and G.657.A1, Gel-free, Feet jacket marking, Yellow jacket color

### Product Classification

| Regional Availability        | Asia   Australia/New Zealand   Latin America   Middle East<br>/Africa   North America |
|------------------------------|---|
| Portfolio                    | CommScope®  |
| Product Type                 | Fiber indoor cable  |
| Product Series               | R-DS  |
| General Specifications       |   |
| Cable Type                   | Distribution  |
| Construction Type            | Non-armored   |
| Subunit Type                 | Gel-free  |
| Jacket Color                 | Yellow  |
| Jacket Marking               | Feet  |
| Subunit, quantity            | 3   |
| Fibers per Subunit, quantity | 12  |
| Total Fiber Count            | 36  |
| Dimensions                   |   |
| Buffer Tube/Subunit Diameter | 5.95 mm   0.234 in  |
| Diameter Over Jacket         | 14.45 mm   0.569 in   |
|                              |   |

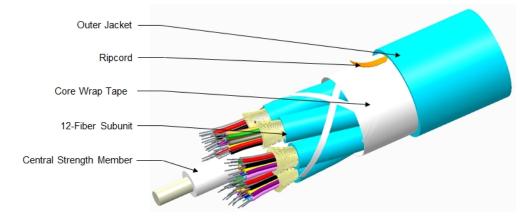
### Representative Image

Page 1 of 6

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: December 12, 2023



# 760004465 | R-036-DS-8W-FMUYL



### Mechanical Specifications

| Minimum Bend Radius, loaded       | 217 mm   8.543 in                     |
|-----------------------------------|---------------------------------------|
| Minimum Bend Radius, unloaded     | 145 mm   5.709 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                            | 5.88 N-m   52.042 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            | 244 m   800.525 ft                    |
| Optical Specifications            |                                       |

Fiber Type

G.652.D and G.657.A1,  $\ensuremath{\mathsf{TeraSPEED}}\xspace^{\ensuremath{\mathbb{B}}}$ 

#### **Environmental Specifications**

| Installation temperature | -20 °C to +70 °C (-4 °F to +158 °F) |
|--------------------------|-------------------------------------|
| Operating Temperature    | -20 °C to +70 °C (-4 °F to +158 °F) |

Page 2 of 6

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: December 12, 2023



# 760004465 | R-036-DS-8W-FMUYL

| Storage Temperature           | -40 °C to +70 °C (-40 °F to +158 °F)  |
|-------------------------------|---------------------------------------|
| Cable Qualification Standards | ANSI/ICEA S-83-596   Telcordia GR-409 |
| Environmental Space           | Riser                                 |
| Flame Test Listing            | NEC OFNR (ETL) and c(ETL)             |
| Flame Test Method             | UL 1666                               |

#### **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                 | -20 °C to +70 °C (-4 °F to +158 °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

167 kg/km | 112.219 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 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

Page 3 of 6

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: December 12, 2023



# CS-8W-TB

# 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                       |
| Dynamic Fatigue Parameter, minimum            | 20                                      |

Page 4 of 6

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: December 11, 2023



## CS-8W-TB

#### **Optical Specifications** Cabled Cutoff Wavelength, maximum 1260 nm 0.1 dB Point Defects, maximum 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

**Mode Field Diameter** 

Mode Field Diameter Tolerance

Polarization Mode Dispersion Link Design Value, maximum Standards Compliance

### **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

nm

1,385 nm

@ 1385 nm

0.04 ps/sqrt(km)



Page 5 of 6

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: December 11, 2023



1.467 @ 1,310 nm | 1.467 @ 1,385 nm | 1.468 @ 1,550

10.4 µm @ 1,550 nm | 9.2 µm @ 1,310 nm | 9.6 µm @

±0.4 µm @ 1310 nm | ±0.5 µm @ 1550 nm | ±0.6 µm

ITU-T G.652.D | ITU-T G.657.A1 | TIA-492CAAB (OS1a)

## CS-8W-TB

## \* 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 |

Page 6 of 6

©2023 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: December 11, 2023

