#### D-216-CA-RB-F12NS/8W/99A 760213850



Fiber OSP cable, Steel Armored, Arid-Core, Dry Central Tube Ribbon, 216 fiber, Singlemode G.652.D and G.657.A1, Feet jacket marking, Black jacket color

• \*Product complies with the Build America, Buy America Act (BABAA) requirements of the Infrastructure Investment and Jobs Act of 2021 (Pub. L. 117- 58, §§ 70901-70953), or is the subject of a waiver approved by the Secretary of Commerce or designee. Compliance requirements and waiver applicability vary based on government funding program. Check the laws and regulations for your specific program.

#### Product Classification

| Regional Availability        | Asia   Australia/New Zealand   EMEA   Latin America   North<br>America |
|------------------------------|--|
| Portfolio                    | CommScope®   |
| Product Type                 | Fiber OSP cable  |
| Product Series               | D-CA   |
| Government Requirements      | Build America Buy America (BABA) compliant*                            |
| General Specifications       |  |
| Armor Type                   | Corrugated steel   |
| Cable Type                   | Ribbon central tube  |
| Construction Type            | Armored  |
| Subunit Type                 | Gel-free   |
| Fibers per Ribbon, quantity  | 12   |
| Jacket Color                 | Black  |
| Jacket Marking               | Feet   |
| Location of Manufacturing    | Carrollton, Georgia  |
| Total Fiber Count            | 216  |
| Dimensions                   |  |
| Buffer Tube/Subunit Diameter | 10.4 mm   0.409 in   |
| Diameter Over Jacket         | 18 mm   0.709 in   |
|                              |  |

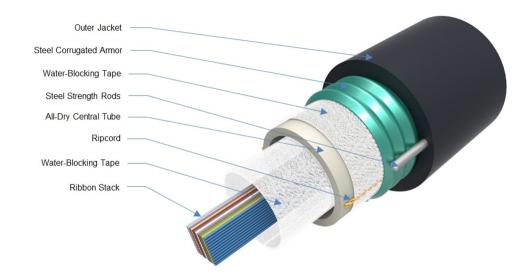
#### Representative Image

Page 1 of 5

©2024 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: November 7, 2024



# 760213850 | D-216-CA-RB-F12NS/8W/99A



### Mechanical Specifications

| Minimum Bend Radius, loaded       | 360.7 mm   14.201 in                        |
|-----------------------------------|---|
| Minimum Bend Radius, unloaded     | 180.3 mm   7.098 in                         |
| Tensile Load, long term, maximum  | 800 N   179.847 lbf                         |
| Tensile Load, short term, maximum | 2700 N   606.984 lbf                        |
| Compression                       | 22 N/mm   125.623 lb/in                     |
| Compression Test Method           | FOTP-41   IEC 60794-1 E3                    |
| Flex                              | 25 cycles                                   |
| Flex Test Method                  | FOTP-104   IEC 60794-1 E6                   |
| Impact                            | 4.4 N-m   38.943 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                    |
| Optical Specifications            |   |
| Fiber Type                        | G.652.D and G.657.A1   G.652.D and G.657.A1 |

### Environmental Specifications

Page 2 of 5

©2024 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: November 7, 2024

**COMMSCOPE**°

# 760213850 | D-216-CA-RB-F12NS/8W/99A

| Installation temperature      | -30 °C to +60 °C (-22 °F to +140 °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-87-640   Telcordia GR-20 |
| Environmental Space           | Aerial, lashed   Buried              |
| Jacket UV Resistance          | UV stabilized                        |
| Water Penetration             | 24 h                                 |
| Water Penetration Test Method | FOTP-82   IEC 60794-1 F5             |

#### **Environmental Test Specifications**

| Heat Age                      | -40 °C to +85 °C (-40 °F to +185 °F) |
|-------------------------------|--------------------------------------|
| Heat Age Test Method          | IEC 60794-1 F9                       |
| Low High Bend                 | -30 °C to +60 °C (-22 °F to +140 °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 | 256 kg/km | 172.024 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-RB-OUTDOOR - TeraSPEED® Singlemode Fiber Rollable Ribbon

#### \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

Page 3 of 5

©2024 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: November 7, 2024



# CS-8W-RB-OUTDOOR

# TeraSPEED®

TeraSPEED® Singlemode Fiber Rollable Ribbon

#### 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/mm <sup>2</sup>   100000 psi  |
| 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 5

©2024 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: October 22, 2024

**COMMSCOPE**°

# CS-8W-RB-OUTDOOR

## 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                                    | 0.25 dB/km @ 1,550 nm   0.35 dB/km @ 1,310 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<br>nm to 1330 nm at 1310 nm |
| Index of Refraction                                     | 1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550<br>nm                     |
| Mode Field Diameter                                     | 10.4 µm @ 1,550 nm   9.2 µm @ 1,310 nm   9.6 µm @<br>1,385 nm                 |
| Mode Field Diameter Tolerance                           | ±0.4 μm @ 1310 nm   ±0.5 μm @ 1550 nm   ±0.6 μm<br>@ 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 (OS2)                            |

## **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 |

### \* 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 5 of 5

©2024 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: October 22, 2024

