

# 810010362/DB | D-432-CN-RR-F12NS/8W/99A /200

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Fiber OSP cable, Non-Armored, All-Dielectric, Arid-Core, Dry Central Tube Rollable Ribbon, 432 fiber, 200um Singlemode G.652.D and G.657.A1, Gel-free, Feet jacket marking, Black jacket color

## Product Classification

### Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North America

### Portfolio

CommScope®

### Product Type

Fiber OSP cable

## General Specifications

### Cable Type

Ribbon central tube

### Construction Type

Non-armored

### Subunit Type

Gel-free

### Fibers per Ribbon, quantity

12

### Jacket Color

Black

### Jacket Marking

Feet

### Location of Manufacturing

Carrollton, Georgia

### Total Fiber Count

432

## Dimensions

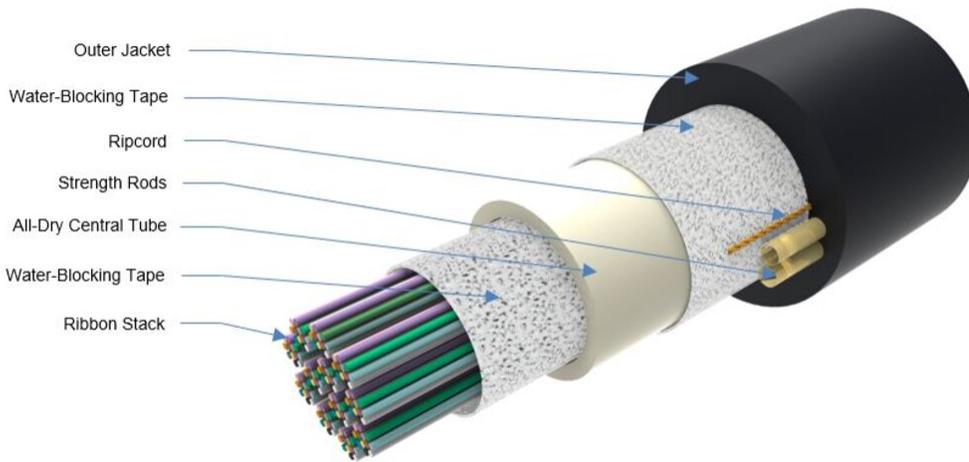
### Buffer Tube/Subunit Diameter

7.1 mm | 0.28 in

### Diameter Over Jacket

10 mm | 0.394 in

## Representative Image



## Mechanical Specifications

|  |                                       |
|--|---------------------------------------|
| <b>Minimum Bend Radius, loaded</b>       | 200 mm   7.874 in                     |
| <b>Minimum Bend Radius, unloaded</b>     | 200 mm   7.874 in                     |
| <b>Tensile Load, long term, maximum</b>  | 530 N   119.149 lbf                   |
| <b>Tensile Load, short term, maximum</b> | 1780 N   400.16 lbf                   |
| <b>Compression</b>                       | 22 N/mm   125.623 lb/in               |
| <b>Compression Test Method</b>           | FOTP-41   IEC 60794-1 E3              |
| <b>Flex</b>                              | 25 cycles                             |
| <b>Flex Test Method</b>                  | FOTP-104   IEC 60794-1 E6             |
| <b>Impact</b>                            | 4.4 N-m   38.943 in lb                |
| <b>Impact Test Method</b>                | FOTP-25   IEC 60794-1 E4              |
| <b>Strain</b>                            | See long and short term tensile loads |
| <b>Strain Test Method</b>                | FOTP-33   IEC 60794-1 E1              |
| <b>Twist</b>                             | 10 cycles                             |
| <b>Twist Test Method</b>                 | FOTP-85   IEC 60794-1 E7              |

## Optical Specifications

|                   |   |
|-------------------|---|
| <b>Fiber Type</b> | G.652.D and G.657.A1   G.652.D and G.657.A1 |
|-------------------|---|

## Environmental Specifications

|                                 |                                      |
|---------------------------------|--------------------------------------|
| <b>Installation temperature</b> | -30 °C to +60 °C (-22 °F to +140 °F) |
|---------------------------------|--------------------------------------|

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|                                      |                                      |
|--------------------------------------|--------------------------------------|
| <b>Operating Temperature</b>         | -40 °C to +70 °C (-40 °F to +158 °F) |
| <b>Storage Temperature</b>           | -40 °C to +70 °C (-40 °F to +158 °F) |
| <b>Cable Qualification Standards</b> | ANSI/ICEA S-87-640   Telcordia GR-20 |
| <b>Environmental Space</b>           | Aerial, lashed   Buried              |
| <b>Jacket UV Resistance</b>          | UV stabilized                        |
| <b>Water Penetration</b>             | 24 h                                 |
| <b>Water Penetration Test Method</b> | FOTP-82   IEC 60794-1 F5             |

## Environmental Test Specifications

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| <b>Heat Age</b>                      | -40 °C to +85 °C (-40 °F to +185 °F) |
| <b>Heat Age Test Method</b>          | IEC 60794-1 F9                       |
| <b>Low High Bend</b>                 | -30 °C to +60 °C (-22 °F to +140 °F) |
| <b>Low High Bend Test Method</b>     | FOTP-37   IEC 60794-1 E11            |
| <b>Temperature Cycle</b>             | -40 °C to +70 °C (-40 °F to +158 °F) |
| <b>Temperature Cycle Test Method</b> | FOTP-3   IEC 60794-1 F1              |

## Packaging and Weights

|                     |                            |
|---------------------|----------------------------|
| <b>Cable weight</b> | 78.4 kg/km   52.682 lb/kft |
|---------------------|----------------------------|

## Included Products

CS-8W-RR-OUTDOOR – TeraSPEED® Singlemode Fiber Rollable Ribbon

## \* Footnotes

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

# CS-8W-RR-OUTDOOR

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## TeraSPEED®

TeraSPEED® Singlemode Fiber Rollable Ribbon

### Product Classification

|                     |               |
|---------------------|---------------|
| <b>Portfolio</b>    | CommScope®    |
| <b>Product Type</b> | Optical fiber |

### General Specifications

|  |                        |
|--|------------------------|
| <b>Cladding Diameter</b>                             | 125 µm                 |
| <b>Cladding Diameter Tolerance</b>                   | ±0.7 µm                |
| <b>Cladding Non-Circularity, maximum</b>             | 0.7 %                  |
| <b>Coating Diameter (Colored)</b>                    | 249 µm                 |
| <b>Coating Diameter (Uncolored)</b>                  | 242 µm                 |
| <b>Coating Diameter Tolerance (Colored)</b>          | ±13 µm                 |
| <b>Coating Diameter Tolerance (Uncolored)</b>        | ±5 µm                  |
| <b>Coating/Cladding Concentricity Error, maximum</b> | 12 µm                  |
| <b>Core Diameter</b>                                 | 8.3 µm                 |
| <b>Core/Clad Offset, maximum</b>                     | 0.5 µm                 |
| <b>Proof Tensile Stress</b>                          | 100,000 psi (0.69 GPa) |

### Dimensions

|                            |                 |
|----------------------------|-----------------|
| <b>Fiber Curl, minimum</b> | 4 m   13.123 ft |
|----------------------------|-----------------|

### Mechanical Specifications

|   |   |
|---|---|
| <b>Macrobending, 20 mm Ø mandrel, 1 turn</b>    | 0.75 dB @ 1,550 nm   1.50 dB @ 1,625 nm |
| <b>Macrobending, 30 mm Ø mandrel, 10 turns</b>  | 0.25 dB @ 1,550 nm   1.00 dB @ 1,625 nm |
| <b>Macrobending, 60 mm Ø mandrel, 100 turns</b> | 0.05 dB @ 1,550 nm   0.05 dB @ 1,625 nm |
| <b>Coating Strip Force, maximum</b>             | 8.9 N   2.001 lbf                       |
| <b>Coating Strip Force, minimum</b>             | 1.3 N   0.292 lbf                       |
| <b>Dynamic Fatigue Parameter, minimum</b>       | 20                                      |

# CS-8W-RR-OUTDOOR

## Optical Specifications

|  |                     |
|--|---------------------|
| <b>Cabled Cutoff Wavelength, maximum</b>   | 1260 nm             |
| <b>Point Defects, maximum</b>              | 0.1 dB              |
| <b>Zero Dispersion Slope, maximum</b>      | 0.092 ps/[km-nm-nm] |
| <b>Zero Dispersion Wavelength, maximum</b> | 1324 nm             |
| <b>Zero Dispersion Wavelength, minimum</b> | 1300 nm             |

## Optical Specifications, Wavelength Specific

|  |   |
|--|---|
| <b>Attenuation, maximum</b>                                    | 0.3 dB/km @ 1,550 nm   0.4 dB/km @ 1,310 nm   0.4 dB/km @ 1,383 nm                                  |
| <b>Attenuation, typical</b>                                    | 0.22 dB/km @ 1,550 nm   0.3 dB/km @ 1,383 nm   0.35 dB/km @ 1,310 nm                                |
| <b>Backscatter Coefficient</b>                                 | -79.6 dB @ 1,310 nm   -82.1 dB @ 1,550 nm   |
| <b>Dispersion, maximum</b>                                     | 18 ps(nm-km) at 1550 nm   3.5 ps(nm-km) from 1285 nm to 1330 nm at 1310 nm                          |
| <b>Index of Refraction</b>                                     | 1.467 @ 1,310 nm   1.467 @ 1,385 nm   1.468 @ 1,550 nm  |
| <b>Mode Field Diameter</b>                                     | 10.4 $\mu\text{m}$ @ 1,550 nm   9.2 $\mu\text{m}$ @ 1,310 nm   9.6 $\mu\text{m}$ @ 1,385 nm         |
| <b>Mode Field Diameter Tolerance</b>                           | $\pm 0.4 \mu\text{m}$ @ 1310 nm   $\pm 0.5 \mu\text{m}$ @ 1550 nm   $\pm 0.6 \mu\text{m}$ @ 1385 nm |
| <b>Polarization Mode Dispersion Link Design Value, maximum</b> | 0.04 ps/sqrt(km)  |
| <b>Standards Compliance</b>                                    | ITU-T G.652.D   ITU-T G.657.A1   TIA-492CAAB (OS2)  |

## Environmental Specifications

|  |                    |
|--|--------------------|
| <b>Heat Aging, maximum</b>                   | 0.05 dB/km @ 85 °C |
| <b>Temperature Dependence, maximum</b>       | 0.05 dB/km         |
| <b>Temperature Humidity Cycling, maximum</b> | 0.05 dB/km         |
| <b>Water Immersion, maximum</b>              | 0.05 dB/km @ 23 °C |

## \* Footnotes

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