

# N-002-ZC-8F-F29

Fiber indoor cable, Low Smoke Zero Halogen Riser Zipcord, 2 fiber, Singlemode G.657.A1, 2.9 mm diameter, Feet jacket marking

## Product Classification

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

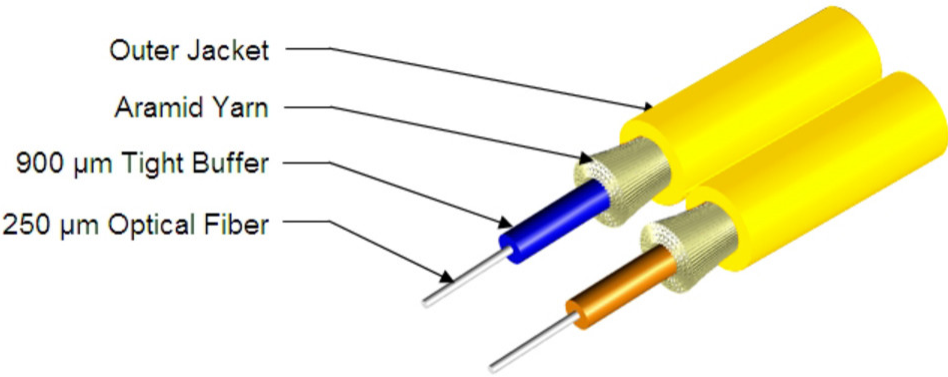
## General Specifications

|                   |             |
|-------------------|-------------|
| Cable Type        | Cordage     |
| Construction Type | Non-armored |
| Subunit Type      | Gel-free    |
| Jacket Marking    | Feet        |
| Total Fiber Count | 2           |

## Dimensions

|                    |                   |
|--------------------|-------------------|
| Height Over Jacket | 2.9 mm   0.114 in |
| Width Over Jacket  | 5.9 mm   0.232 in |

## Representative Image



## Mechanical Specifications

# N-002-ZC-8F-F29

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|  |                                       |
|--|---------------------------------------|
| <b>Minimum Bend Radius, loaded</b>       | 44 mm   1.732 in                      |
| <b>Minimum Bend Radius, unloaded</b>     | 23 mm   0.906 in                      |
| <b>Tensile Load, long term, maximum</b>  | 120 N   26.977 lbf                    |
| <b>Tensile Load, short term, maximum</b> | 400 N   89.924 lbf                    |
| <b>Compression</b>                       | 10 N/mm   57.101 lb/in                |
| <b>Compression Test Method</b>           | FOTP-41   IEC 60794-1 E3              |
| <b>Flex</b>                              | 300 cycles                            |
| <b>Flex Test Method</b>                  | FOTP-104   IEC 60794-1 E6             |
| <b>Impact</b>                            | 0.74 N-m   6.55 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              |
| <b>Vertical Rise, maximum</b>            | 500 m   1,640.42 ft                   |

## Environmental Specifications

|                                      |   |
|--------------------------------------|---|
| <b>Installation temperature</b>      | -20 °C to +60 °C (-4 °F to +140 °F)                         |
| <b>Operating Temperature</b>         | -20 °C to +70 °C (-4 °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-83-596   Telcordia GR-409                       |
| <b>Environmental Space</b>           | Low Smoke Zero Halogen (LSZH)   Riser                       |
| <b>Flame Test Listing</b>            | NEC OFNR-ST1 (ETL) and c(ETL)                               |
| <b>Flame Test Method</b>             | IEC 60332-3   IEC 60754-2   IEC 61034-2   UL 1666   UL 1685 |

## Environmental Test Specifications

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

# N-002-ZC-8F-F29

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## Packaging and Weights

**Cable weight** 18 kg/km | 12.095 lb/kft

## Regulatory Compliance/Certifications

| Agency        | Classification   |
|---------------|--|
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system |

## Included Products

|          |  |
|----------|--|
| CS-8F-TB | – Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber |
|----------|--|

## \* Footnotes

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

# CS-8F-TB

Low Macrobending, Zero Water Peak, Dispersion-Unshifted 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/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, 50 mm Ø mandrel, 100 turns | 0.03 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                                      |

## Optical Specifications

|                                   |         |
|-----------------------------------|---------|
| Cabled Cutoff Wavelength, maximum | 1260 nm |
|-----------------------------------|---------|

# CS-8F-TB

|   |   |
|---|---|
| Point Defects, maximum                                  | 0.1 dB  |
| Zero Dispersion Slope, maximum                          | 0.09 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 |
| 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                                     | 8.6 µm @ 1,310 nm   9.8 µm @ 1,550 nm   |
| Mode Field Diameter Tolerance                           | ±0.4 µm @ 1310 nm   ±0.5 µm @ 1550 nm   |
| Polarization Mode Dispersion Link Design Value, maximum | 0.06 ps/sqrt(km)  |
| Standards Compliance                                    | ITU-T G.657.A1  |

## 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

|                                       |   |
|---------------------------------------|---|
| 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 |