

Indoor/Outdoor Riser 3.5mm Interconnect, dielectric, with 900um Buffers, 2-fiber, Singlemode G.657.B3, Gel-free, Feet jacket marking, Ivory 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

|                                |   |
|--------------------------------|---|
| <b>Regional Availability</b>   | Asia   Australia/New Zealand   EMEA   Latin America   North America |
| <b>Portfolio</b>               | CommScope®  |
| <b>Product Type</b>            | Fiber drop cable  |
| <b>Government Requirements</b> | Build America Buy America (BABA) compliant*                         |

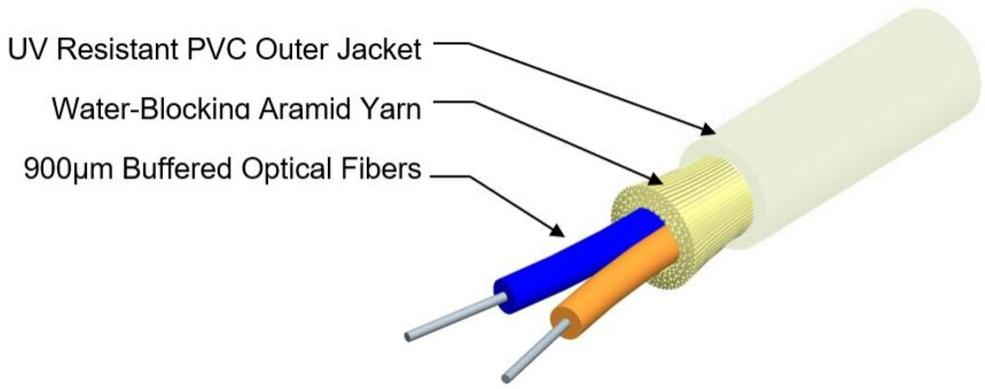
## General Specifications

|                                  |   |
|----------------------------------|---|
| <b>Cable Type</b>                | Drop  |
| <b>Construction Type</b>         | Non-armored   |
| <b>Subunit Type</b>              | Gel-free  |
| <b>Jacket Color</b>              | Ivory   |
| <b>Jacket Marking</b>            | Feet  |
| <b>Location of Manufacturing</b> | Catawba, North Carolina   Claremont, North Carolina |
| <b>Total Fiber Count</b>         | 2   |

## Dimensions

|                             |                   |
|-----------------------------|-------------------|
| <b>Diameter Over Jacket</b> | 3.5 mm   0.138 in |
|-----------------------------|-------------------|

## Representative Image



## Material Specifications

**Jacket Material** PVC

## Mechanical Specifications

|  |                                       |
|--|---------------------------------------|
| <b>Minimum Bend Radius, loaded</b>       | 4 mm   0.157 in                       |
| <b>Minimum Bend Radius, unloaded</b>     | 4 mm   0.157 in                       |
| <b>Tensile Load, long term, maximum</b>  | 93 N   20.907 lbf                     |
| <b>Tensile Load, short term, maximum</b> | 311 N   69.916 lbf                    |
| <b>Compression</b>                       | 3.5 N/mm   19.986 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                   |

## Optical Specifications

**Fiber Type** G.657.B3

## Environmental Specifications

# 810010527/DB | R-002-IC-8H-F35IV/RNB

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|                                      |  |
|--------------------------------------|--|
| <b>Installation temperature</b>      | -5 °C to +60 °C (+23 °F to +140 °F)                |
| <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-83-596                                 |
| <b>Environmental Space</b>           | Drop   Indoor/Outdoor   Riser   Sunlight resistant |
| <b>Flame Test Listing</b>            | NEC OFNR (ETL) and c(ETL)   UL 1666                |
| <b>Flame Test Method</b>             | FT4   UL 1666                                      |
| <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>Low High Bend</b>                 | 0 °C to +60 °C (+32 °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>   | 12.54 kg/km   8.426 lb/kft |
| <b>Packaging Type</b> | Reel in box                |

## Included Products

|          |   |  |
|----------|---|--|
| CS-8H-TB | - | Ultra Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G. 657.B3) |
|----------|---|--|

## \* Footnotes

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

# CS-8H-TB

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Ultra Low Macrobending, Zero Water Peak, Dispersion-Unshifted Singlemode Fiber (ITU-T G.657. B3)

## 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>                    | 250 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/Clad Offset, maximum</b>                     | 0.5 µm                                 |
| <b>Proof Test</b>                                    | 689.476 N/mm <sup>2</sup>   100000 psi |

## Dimensions

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

## Mechanical Specifications

|  |   |
|--|---|
| <b>Macrobending, 15 mm Ø mandrel, 1 turn</b> | 0.08 dB @ 1,550 nm   0.25 dB @ 1,625 nm |
| <b>Macrobending, 20 mm Ø mandrel, 1 turn</b> | 0.03 dB @ 1,550 nm   0.10 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                                      |

## 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] |

# CS-8H-TB

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|  |         |
|--|---------|
| <b>Zero Dispersion Wavelength, maximum</b> | 1324 nm |
| <b>Zero Dispersion Wavelength, minimum</b> | 1304 nm |

## Optical Specifications, Wavelength Specific

|  |  |
|--|--|
| <b>Attenuation, maximum</b>                                    | 0.3 dB/km @ 1,550 nm   0.4 dB/km @ 1,310 nm   0.40 dB/km @ 1,385 nm        |
| <b>Attenuation, typical</b>                                    | 0.20 dB/m @ 1,550 nm   0.34 dB/km @ 1,310 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>                                     | 8.6 $\mu\text{m}$ @ 1,310 nm   9.7 $\mu\text{m}$ @ 1,550 nm                |
| <b>Mode Field Diameter Tolerance</b>                           | $\pm 0.4 \mu\text{m}$ @ 1310 nm   $\pm 0.5 \mu\text{m}$ @ 1550 nm          |
| <b>Polarization Mode Dispersion Link Design Value, maximum</b> | 0.06 ps/sqrt(km)   |
| <b>Standards Compliance</b>                                    | ITU-T G.657.B3   |

## 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 |