

LazrSPEED® Riser Distribution Cable, 4 fiber single-unit

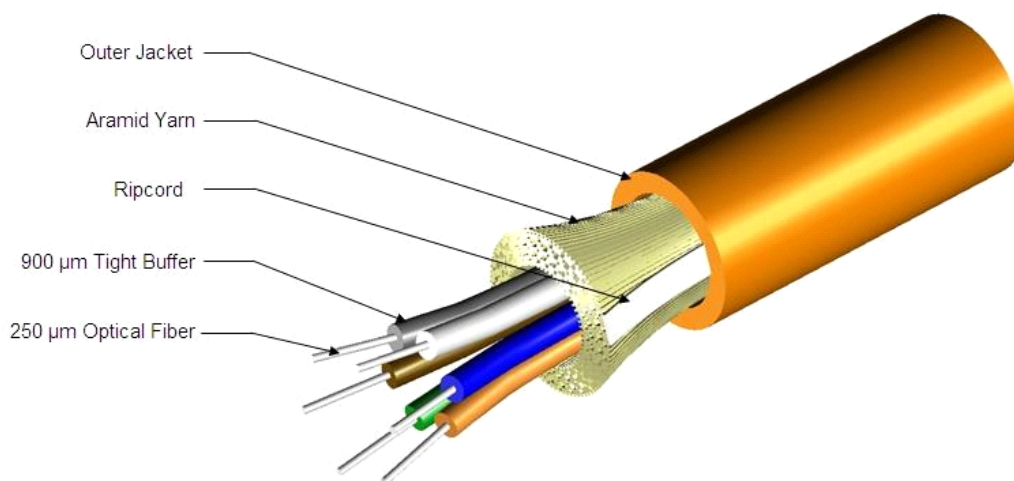
## Product Classification

|                              |   |
|------------------------------|---|
| <b>Portfolio</b>             | CommScope®  |
| <b>Product Type</b>          | Fiber indoor cable  |
| <b>Regional Availability</b> | Asia   Australia/New Zealand   EMEA   Latin America   North America |

## Standards And Qualifications

|                                      |                                       |
|--------------------------------------|---------------------------------------|
| <b>Cable Qualification Standards</b> | ANSI/ICEA S-83-596   Telcordia GR-409 |
|--------------------------------------|---------------------------------------|

## Representative Image



## General Specifications

|                          |              |
|--------------------------|--------------|
| <b>Cable Type</b>        | Distribution |
| <b>Construction Type</b> | Non-armored  |
| <b>Subunit Type</b>      | Gel-free     |

## Construction Materials

|                            |                     |
|----------------------------|---------------------|
| <b>Fiber Type Solution</b> | OM3, LazrSPEED® 300 |
| <b>Total Fiber Count</b>   | 4                   |

|                             |                     |
|-----------------------------|---------------------|
| <b>Fiber Type</b>           | OM3, LazrSPEED® 300 |
| <b>Fiber Type, quantity</b> | 4                   |
| <b>Jacket Color</b>         | Aqua                |

## Dimensions

|                             |                          |
|-----------------------------|--------------------------|
| <b>Cable Weight</b>         | 12.8 lb/kft   19.0 kg/km |
| <b>Diameter Over Jacket</b> | 4.65 mm   0.18 in        |

## Physical Specifications

|  |                     |
|--|---------------------|
| <b>Minimum Bend Radius, loaded</b>       | 7.0 cm   2.8 in     |
| <b>Minimum Bend Radius, unloaded</b>     | 4.6 cm   1.8 in     |
| <b>Tensile Load, long term, maximum</b>  | 45 lbf   200 N      |
| <b>Tensile Load, short term, maximum</b> | 150 lbf   667 N     |
| <b>Vertical Rise, maximum</b>            | 500.0 m   1640.4 ft |

## Flame Test Specifications

|                           |                           |
|---------------------------|---------------------------|
| <b>Flame Test Listing</b> | NEC OFNR (ETL) and c(ETL) |
| <b>Flame Test Method</b>  | UL 1666                   |

## Environmental Specifications

|                                 |                                      |
|---------------------------------|--------------------------------------|
| <b>Environmental Space</b>      | Riser                                |
| <b>Installation Temperature</b> | -20 °C to +70 °C (-4 °F to +158 °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) |

## Mechanical Test Specifications

|                                |                                       |
|--------------------------------|---------------------------------------|
| <b>Compression</b>             | 10 N/mm   57 lb/in                    |
| <b>Compression Test Method</b> | FOTP-41   IEC 60794-1 E3              |
| <b>Flex</b>                    | 100 cycles                            |
| <b>Flex Test Method</b>        | FOTP-104   IEC 60794-1 E6             |
| <b>Impact</b>                  | 4.34 ft lb   5.88 N-m                 |
| <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              |

## 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             |

## Regulatory Compliance/Certifications

| <b>Agency</b>   | <b>Classification</b>  |
|-----------------|--|
| RoHS 2011/65/EU | Compliant  |
| ISO 9001:2015   | Designed, manufactured and/or distributed under this quality management system |



## Included Products

CS-5L-TB (Product Component—not orderable) — LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber

## \* Footnotes

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

## LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber

## LazrSPEED® 300

## Product Classification

|                              |   |
|------------------------------|---|
| <b>Portfolio</b>             | CommScope®  |
| <b>Product Type</b>          | Optical fiber   |
| <b>Regional Availability</b> | Asia   Australia/New Zealand   EMEA   Latin America   North America |

## Optical Specifications, Wavelength Specific

|                                     |  |
|-------------------------------------|--|
| <b>Standards Compliance</b>         | TIA-492AAAC (OM3)                                    |
| <b>Attenuation, maximum</b>         | 1.00 dB/km @ 1300 nm<br>3.00 dB/km @ 850 nm          |
| <b>Differential Mode Delay Note</b> | Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm |
| <b>Index of Refraction</b>          | 1.479 @ 1300 nm<br>1.483 @ 850 nm                    |
| <b>1 Gbps Ethernet Distance</b>     | 600 m @ 1300 nm<br>1020 m @ 850 nm                   |
| <b>10 Gbps Ethernet Distance</b>    | 300 m @ 850 nm<br>984 ft @ 850 nm                    |
| <b>Bandwidth, Laser, minimum</b>    | 500 MHz-km @ 1300 nm<br>2000 MHz-km @ 850 nm         |
| <b>Bandwidth, OFL, minimum</b>      | 500 MHz-km @ 1300 nm<br>1500 MHz-km @ 850 nm         |
| <b>Differential Mode Delay</b>      | 0.70 ps/m @ 850 nm<br>0.88 ps/m @ 1300 nm            |
| <b>Backscatter Coefficient</b>      | -75.7 dB @ 1300 nm<br>-68.0 dB @ 850 nm              |

## Physical Specifications

|  |          |
|--|----------|
| <b>Cladding Diameter</b>                             | 125.0 µm |
| <b>Cladding Diameter Tolerance</b>                   | ±1.0 µm  |
| <b>Cladding Non-Circularity, maximum</b>             | 1.0 %    |
| <b>Coating Diameter (Colored)</b>                    | 254 µm   |
| <b>Coating Diameter (Uncolored)</b>                  | 245 µm   |
| <b>Coating Diameter Tolerance (Colored)</b>          | ±7 µm    |
| <b>Coating Diameter Tolerance (Uncolored)</b>        | ±10 µm   |
| <b>Tight Buffer Diameter</b>                         | 900 µm   |
| <b>Tight Buffer Diameter Tolerance</b>               | ±40 µm   |
| <b>Coating/Cladding Concentricity Error, maximum</b> | 12 µm    |
| <b>Core Diameter</b>                                 | 50.0 µm  |

|                                  |         |
|----------------------------------|---------|
| <b>Core Diameter Tolerance</b>   | ±2.5 µm |
| <b>Core/Clad Offset, maximum</b> | 1.5 µm  |

## Optical Specifications, General

|  |                     |
|--|---------------------|
| <b>Numerical Aperture</b>                  | 0.200               |
| <b>Numerical Aperture Tolerance</b>        | ±0.015              |
| <b>Point Defects, maximum</b>              | 0.15 dB             |
| <b>Zero Dispersion Slope, maximum</b>      | 0.105 ps/[km-nm-nm] |
| <b>Zero Dispersion Wavelength, maximum</b> | 1316 nm             |
| <b>Zero Dispersion Wavelength, minimum</b> | 1297 nm             |

## Mechanical Specifications

|   |  |
|---|--|
| <b>Coating Strip Force, maximum</b>           | 8.9 N   2.0 lbf                          |
| <b>Coating Strip Force, minimum</b>           | 1.3 N   0.3 lbf                          |
| <b>Dynamic Fatigue Parameter, minimum</b>     | 18                                       |
| <b>Macrobending, 15 mm mandrel, 2 turns</b>   | 0.20 dB @ 850 nm<br>0.50 dB @ 1300 nm    |
| <b>Macrobending, 30 mm mandrel, 2 turns</b>   | 0.10 dB @ 850 nm<br>0.30 dB @ 1300 nm    |
| <b>Macrobending, 75 mm mandrel, 100 turns</b> | 0.50 dB @ 850 nm<br>0.50 dB @ 1300 nm    |
| <b>Proof Test</b>                             | 689.48 N/mm <sup>2</sup>   100000.00 psi |

## Environmental Specifications

|  |                    |
|--|--------------------|
| <b>Heat Aging, maximum</b>                   | 0.20 dB/km @ 85 °C |
| <b>Temperature Dependence, maximum</b>       | 0.10 dB/km         |
| <b>Temperature Humidity Cycling, maximum</b> | 0.20 dB/km         |
| <b>Water Immersion, maximum</b>              | 0.20 dB/km @ 23 °C |

## Regulatory Compliance/Certifications

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



### \* Footnotes

|  |   |
|--|---|
| <b>Temperature Dependence, maximum</b> | 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