



Fiber indoor cable, Low Smoke Zero Halogen Indoor Distribution, 24 fiber single-unit, Multimode OM5, Meters jacket marking, Lime green jacket color

## Product Classification

|                              |                            |
|------------------------------|----------------------------|
| <b>Regional Availability</b> | China                      |
| <b>Portfolio</b>             | CommScope®                 |
| <b>Product Type</b>          | Fiber indoor/outdoor cable |
| <b>Product Series</b>        | L-DS                       |
| <b>Country Specific for</b>  | China                      |

## General Specifications

|                          |               |
|--------------------------|---------------|
| <b>Cable Type</b>        | Tight buffer  |
| <b>Jacket Color</b>      | Lime green    |
| <b>Jacket Marking</b>    | Meters        |
| <b>Strength Members</b>  | E-glass yarns |
| <b>Total Fiber Count</b> | 24            |

## Dimensions

|                                     |                   |
|-------------------------------------|-------------------|
| <b>Buffer Tube/Subunit Diameter</b> | 0.9 mm   0.035 in |
| <b>Diameter Over Jacket</b>         | 8.8 mm   0.346 in |

## Mechanical Specifications

|  |   |
|--|---|
| <b>Minimum Bend Radius, loaded</b>       | 176 mm   6.929 in   |
| <b>Minimum Bend Radius, unloaded</b>     | 88 mm   3.465 in  |
| <b>Tensile Load, long and short term</b> | See Sag and Tension tables in Product Documentation section |
| <b>Tensile Load, long term, maximum</b>  | 396 N   89.024 lbf  |
| <b>Tensile Load, short term, maximum</b> | 1320 N   296.748 lbf  |
| <b>Compression</b>                       | 10 N/mm   57.101 lb/in                                      |
| <b>Compression Test Method</b>           | IEC 60794-1-2 E3  |
| <b>Strain</b>                            | See long and short term tensile loads                       |
| <b>Strain Test Method</b>                | IEC 60794-1-2-E1  |

## Optical Specifications

**Fiber Type** OM5

## Optical Specifications, Wavelength Specific

**Attenuation, maximum** 1.00 dB/km @ 1,300 nm | 3.00 dB/km @ 850 nm

## Environmental Specifications

**Installation temperature** -10 °C to +60 °C (+14 °F to +140 °F)

**Operating Temperature** -20 °C to +70 °C (-4 °F to +158 °F)

**Storage Temperature** -40 °C to +70 °C (-40 °F to +158 °F)

**Cable Qualification Standards** Telcordia GR-409

**Environmental Space** Low Smoke Zero Halogen (LSZH)

**Flame Test Listing** B1

**Flame Test Method** GB/T 31247

## Environmental Test Specifications

**Temperature Cycle** -20 °C to +70 °C (-4 °F to +158 °F)

**Temperature Cycle Test Method** IEC 60794-1-2 F1

## Regulatory Compliance/Certifications

| Agency     | Classification  |
|------------|---|
| CHINA-ROHS | Below maximum concentration value   |
| REACH-SVHC | Compliant as per SVHC revision on <a href="https://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS       | Compliant   |
| UK-ROHS    | Compliant   |



## Included Products

CS-5C-TB-3.0/1.0/093 – OM5 WideBand Multimode Fiber

## \* Footnotes

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

# CS-5C-TB-3.0/1.0/093

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## OM5 WideBand Multimode Fiber

### 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>                   | ±1.0 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>          | ±7 µm                                  |
| <b>Coating Diameter Tolerance (Uncolored)</b>        | ±10 µm                                 |
| <b>Coating/Cladding Concentricity Error, maximum</b> | 10 µm                                  |
| <b>Core Diameter</b>                                 | 50 µm                                  |
| <b>Core Diameter Tolerance</b>                       | ±2.5 µm                                |
| <b>Core/Clad Offset, maximum</b>                     | 1 µm                                   |
| <b>Proof Test</b>                                    | 689.476 N/mm <sup>2</sup>   100000 psi |
| <b>Tight Buffer Diameter</b>                         | 900 µm                                 |
| <b>Tight Buffer Diameter Tolerance</b>               | ±40 µm                                 |

### Mechanical Specifications

|   |                                       |
|---|---------------------------------------|
| <b>Macrobending, 15 mm Ø mandrel, 2 turns</b> | 0.20 dB @ 850 nm   0.50 dB @ 1,300 nm |
| <b>Macrobending, 30 mm Ø mandrel, 2 turns</b> | 0.10 dB @ 850 nm   0.30 dB @ 1,300 nm |
| <b>Coating Strip Force, maximum</b>           | 4.5 N   1.012 lbf                     |
| <b>Coating Strip Force, minimum</b>           | 0.9 N   0.202 lbf                     |
| <b>Dynamic Fatigue Parameter, minimum</b>     | 18                                    |

### Optical Specifications

|                                     |         |
|-------------------------------------|---------|
| <b>Numerical Aperture</b>           | 0.2     |
| <b>Numerical Aperture Tolerance</b> | ±0.015  |
| <b>Point Defects, maximum</b>       | 0.15 dB |

# CS-5C-TB-3.0/1.0/093

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**Zero Dispersion Slope, maximum (OM5)**  $-412/(840(1-(\lambda_0/840)^4))$  ps/[km-nm-nm]

## Optical Specifications, Wavelength Specific

|                                  |  |
|----------------------------------|--|
| <b>1 Gbps Ethernet Distance</b>  | 1,110 m @ 850 nm   600 m @ 1,300 nm  |
| <b>10 Gbps Ethernet Distance</b> | 550 m @ 850 nm   |
| <b>Attenuation, maximum</b>      | 1.00 dB/km @ 1,300 nm   2.30 dB/km @ 953 nm   3.00 dB/km @ 850 nm  |
| <b>Bandwidth, Laser, minimum</b> | 2,470 MHz-km @ 953 nm   4,700 MHz-km @ 850 nm  |
| <b>Bandwidth, OFL, minimum</b>   | 1,850 MHz-km @ 953 nm   3,500 MHz-km @ 850 nm  |
| <b>Index of Refraction</b>       | 1.477 @ 1,300 nm   1.482 @ 850 nm  |
| <b>Standards Compliance</b>      | ANSI/TIA-568.3-D wideband multimode fiber cable   IEC 60793-2-10, edition 6, model A1a.4   ISO 11801-1 cabled optical fiber performance category OM5   TIA-492AAAE (OM5) |

## Environmental Specifications

|  |                    |
|--|--------------------|
| <b>Heat Aging, maximum</b>                   | 0.10 dB/km @ 85 °C |
| <b>Temperature Dependence, maximum</b>       | 0.1 dB/km          |
| <b>Temperature Humidity Cycling, maximum</b> | 0.1 dB/km          |
| <b>Water Immersion, maximum</b>              | 0.10 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 |