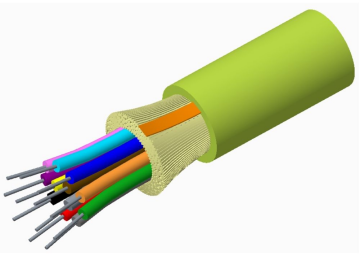
# 760257849 | N-012-DS-5C-MSULM/093



Fiber indoor cable, Low Smoke Zero Halogen Distribution, 12 fiber single-unit, Multimode OM5, Meters jacket marking, Lime green jacket color

## Product Classification

| | |
|---|---|
| **Regional Availability** | Asia \| Australia/New Zealand |
| **Portfolio** | CommScope® |
| **Product Type** | Fiber indoor cable |
| **Product Series** | N-DS |

## General Specifications

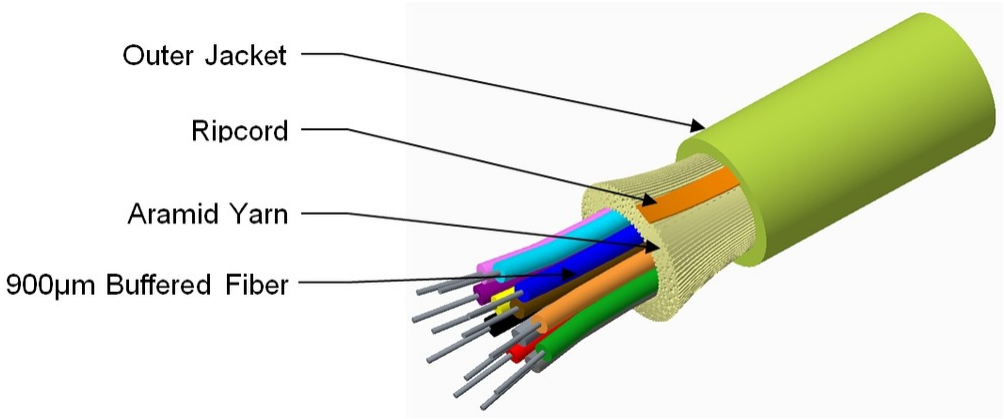
| | |
|---|---|
| **Cable Type** | Distribution |
| **Construction Type** | Non-armored |
| **Subunit Type** | Gel-free |
| **Jacket Color** | Lime green |
| **Jacket Marking** | Meters |
| **Total Fiber Count** | 12 |

## Dimensions

| | |
|---|---|
| **Diameter Over Jacket** | 6.2 mm \| 0.244 in |

## Representative Image

# 760257849 | N-012-DS-5C-MSULM/093




## Mechanical Specifications

| | |
|---|---|
| **Minimum Bend Radius, loaded** | 124 mm \| 4.882 in |
| **Minimum Bend Radius, unloaded** | 62 mm \| 2.441 in |
| **Tensile Load, long term, maximum** | 198 N \| 44.512 lbf |
| **Tensile Load, short term, maximum** | 660 N \| 148.374 lbf |
| **Compression** | 10 N/mm \| 57.101 lb/in |
| **Compression Test Method** | IEC 60794-1 E3 |
| **Strain Test Method** | IEC 60794-1-21 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) |
| **Environmental Space** | Low Smoke Zero Halogen (LSZH) \| Riser |
| **Flame Test Listing** | NEC OFNR (UL) and c(UL) |
| **Flame Test Method** | IEC 60332-3 \| UL 1666 \| UL 1685 |

## Environmental Test Specifications

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

## Regulatory Compliance/Certifications

| Agency | Classification |
|---|---|
| CHINA-ROHS | Below maximum concentration value |
| REACH-SVHC | Compliant as per SVHC revision on www.commscope.com/ProductCompliance |
| ROHS | Compliant |
| UK-ROHS | Compliant |

## Included Products

CS-5X-TB-3.0/1.0/093 – OM4 Bend-Insensitive Multimode Fiber

## * Footnotes

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

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

OM4 Bend-Insensitive Multimode Fiber

## Product Classification

| | |
|---|---|
| **Portfolio** | CommScope® |
| **Product Type** | Optical fiber |

## General Specifications

| | |
|---|---|
| **Cladding Diameter** | 125 µm |
| **Cladding Diameter Tolerance** | ±5 µm |
| **Cladding Non-Circularity, maximum** | 1 % |
| **Coating Diameter (Colored)** | 245 µm |
| **Coating Diameter Tolerance (Colored)** | ±10 µm |
| **Coating/Cladding Concentricity Error, maximum** | 12 µm |
| **Core Diameter** | 50 µm |
| **Core Diameter Tolerance** | ±2.5 µm |
| **Core/Clad Offset, maximum** | 1.5 µm |
| **Proof Tensile Stress** | 100,000 psi (0.69 GPa) |
| **Tight Buffer Diameter** | 900 µm |
| **Tight Buffer Diameter Tolerance** | ±40 µm |

## Mechanical Specifications

| | |
|---|---|
| **Macrobending, 15 mm Ø mandrel, 2 turns** | 0.20 dB @ 850 nm \| 0.50 dB @ 1,300 nm |
| **Macrobending, 30 mm Ø mandrel, 2 turns** | 0.10 dB @ 850 nm \| 0.30 dB @ 1,300 nm |
| **Macrobending, 75 mm Ø mandrel, 100 turns** | 0.50 dB @ 1,300 nm \| 0.50 dB @ 850 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** | 18 |

## Optical Specifications

| | |
|---|---|
| **Numerical Aperture** | 0.2 |
| **Numerical Aperture Tolerance** | ±0.015 |
| **Point Defects, maximum** | 0.15 dB |

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

## Optical Specifications, Wavelength Specific

| | |
|---|---|
| **1 Gbps Ethernet Distance** | 1,110 m @ 850 nm \| 600 m @ 1,300 nm |
| **10 Gbps Ethernet Distance** | 550 m @ 850 nm |
| **Attenuation, maximum** | 1.00 dB/km @ 1,300 nm \| 3.00 dB/km @ 850 nm |
| **Backscatter Coefficient** | -68.0 dB @ 850 nm \| -75.7 dB @ 1,300 nm |
| **Bandwidth, Laser, minimum** | 4,700 MHz-km @ 850 nm \| 500 MHz-km @ 1,300 nm |
| **Bandwidth, OFL, minimum** | 3,500 MHz-km @ 850 nm \| 500 MHz-km @ 1,300 nm |
| **Differential Mode Delay** | 0.70 ps/m @ 850 nm \| 0.88 ps/m @ 1,300 nm |
| **Differential Mode Delay Note** | Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm |
| **Index of Refraction** | 1.477 @ 1,300 nm \| 1.482 @ 850 nm |
| **Standards Compliance** | IEC 60793-2-10, type A1a.3a \| IEC 60793-2-10, type A1a.3b \| TIA-492AAAD (OM4) |

## Environmental Specifications

| | |
|---|---|
| **Heat Aging, maximum** | 0.20 dB/km @ 85 °C |
| **Temperature Dependence, maximum** | 0.1 dB/km |
| **Temperature Humidity Cycling, maximum** | 0.2 dB/km |
| **Water Immersion, maximum** | 0.20 dB/km @ 23 °C |

## * 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 |