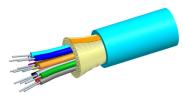
# 760249367 | N-012-DS-5X-MSUAQ/093



Fiber indoor cable, Low Smoke Zero Halogen Distribution, 12 fiber single-unit, Multimode OM4, Meters jacket marking, Aqua jacket color

### **Product Classification**

Regional Availability

Asia | Australia/New Zealand

Portfolio CommScope®

**Product Type** Fiber indoor cable

**Product Series** N-DS

### General Specifications

Cable TypeDistributionConstruction TypeNon-armored

Subunit TypeGel-freeJacket ColorAquaJacket MarkingMeters

**Total Fiber Count** 12

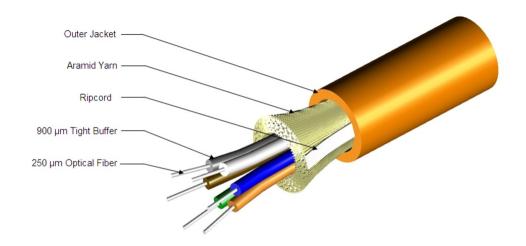
**Dimensions** 

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

Representative Image



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## Mechanical Specifications

Minimum Bend Radius, loaded124 mm | 4.882 inMinimum Bend Radius, unloaded62 mm | 2.441 inTensile Load, long term, maximum198 N | 44.512 lbfTensile Load, short term, maximum667 N | 149.948 lbfCompression10 N/mm | 57.101 lb/in

Compression Test MethodIEC 60794-1 E3Strain Test MethodIEC 60794-1-21 E1

Optical Specifications

**Fiber Type** OM4

### Optical Specifications, Wavelength Specific

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

## **Environmental Specifications**

Installation temperature  $-10 \,^{\circ}\text{C}$  to  $+60 \,^{\circ}\text{C}$  (+14  $^{\circ}\text{F}$  to +140  $^{\circ}\text{F}$ )

Operating Temperature  $-20 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-4  $^{\circ}\text{F}$  to +158  $^{\circ}\text{F}$ )

Storage Temperature  $-40 \,^{\circ}\text{C}$  to  $+70 \,^{\circ}\text{C}$  (-40  $^{\circ}\text{F}$  to +158  $^{\circ}\text{F}$ )

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

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## **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** ±1.0 µm Cladding Non-Circularity, maximum 1 % **Coating Diameter (Colored)** 245 um **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

**Proof Test** 689.476 N/mm<sup>2</sup> | 100000 psi

**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

 $1.5 \, \mu m$ 

8.9 N | 2.001 lbf Coating Strip Force, maximum **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, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.2 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

