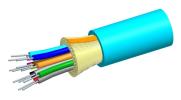
760249368 | N-024-DS-5X-MSUAQ/093



Fiber indoor cable, Low Smoke Zero Halogen Distribution, 24 fiber singleunit, 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 Type	Distribution	
Construction Type	Non-armored	
Subunit Type	Gel-free	
Jacket Color	Aqua	
Jacket Marking	Meters	
Total Fiber Count	24	
Dimensions		
Diameter Over Jacket	8.8 mm 0.346 in	

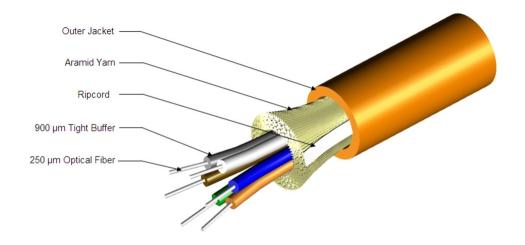
Representative Image

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Mechanical Specifications

Minimum Bend Radius, loaded	176 mm 6.929 in
Minimum Bend Radius, unloaded	88 mm 3.465 in
Tensile Load, long term, maximum	369 N 82.955 lbf
Tensile Load, short term, maximum	1320 N 296.748 lbf
Compression	10 N/mm 57.101 lb/in
Compression Test Method	IEC 60794-1-21 E3
Strain	See long and short term tensile loads
Strain Test Method	IEC 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 °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)
Flame Test Listing	NEC OFNR (UL) and c(UL)

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Flame Test Method

IEC 60332-3 | UL 1666 | UL 1685

Environmental Test Specifications

Temperature Cycle Test Method

IEC 60794-1-22 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

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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 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 Test	689.476 N/mm ² 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
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

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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

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