760147058 | N-048-DZ-5K-FMUAQ



Fiber indoor cable, LazrSPEED® Riser/LSZH rated, Distribution, interlocking aluminum armored, Multimode OM4, 48 fiber multi-unit with 12 fiber subunits, Gel-free, Feet jacket marking, Aqua jacket color

Product Classification

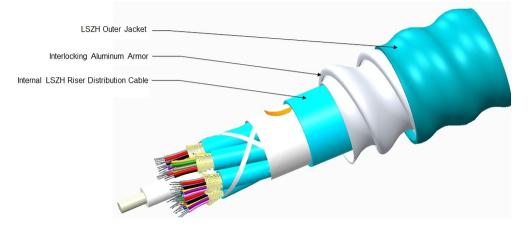
Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	N-DZ
General Specifications	
Armor Type	Interlocking aluminum
Cable Type	Distribution
Construction Type	Armored
Subunit Type	Gel-free
Jacket Color	Aqua
Jacket Marking	Feet
Subunit, quantity	4
Fibers per Subunit, quantity	12
Total Fiber Count	48
Dimensions	
Buffer Tube/Subunit Diameter	6.07 mm 0.239 in
Diameter Over Armor	22.23 mm 0.875 in
Diameter Over Jacket	24.3 mm 0.957 in
Representative Image	

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Mechanical Specifications

Minimum Bend Radius, loaded	364 mm 14.331 in
Minimum Bend Radius, unloaded	243 mm 9.567 in
Tensile Load, long term, maximum	400 N 89.924 lbf
Tensile Load, short term, maximum	1335 N 300.12 lbf
Compression	85 N/mm 485.363 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	35 N-m 309.776 in lb
Impact Test Method	FOTP-25 IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33 IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85 IEC 60794-1 E7
Vertical Rise, maximum	92 m 301.837 ft
Optical Specifications	
Fiber Type	OM4, LazrSPEED® 550 OM4, LazrSPEED® 550

Environmental Specifications

Installation temperature

Operating Temperature

-10 °C to +60 °C (+14 °F to +140 °F) -20 °C to +70 °C (-4 °F to +158 °F)

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Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	ANSI/ICEA S-83-596 Telcordia GR-409
Environmental Space	Low Smoke Zero Halogen (LSZH) Riser
Flame Test Listing	NEC OFCR-ST1 (ETL) and c(ETL)
Flame Test Method	IEC 60332-3 IEC 60754-2 IEC 61034-2 UL 1666 UL 1685

Environmental Test Specifications

Heat Age	-20 °C to +85 °C (-4 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-10 °C to +60 °C (+14 °F to +140 °F)
Low High Bend Test Method	FOTP-37 IEC 60794-1 E11
Temperature Cycle	-20 °C to +70 °C (-4 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3 IEC 60794-1 F1

Packaging and Weights

Cable weight

443 kg/km | 297.682 lb/kft

Regulatory Compliance/Certifications

Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

CENELEC

Included Products

CS-5K-TB

LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

LazrSPEED® 550

Product Classification

Portfolio	CommScope®
Product Type	Optical fiber
General Specifications	
Cladding Diameter	125 µm
Cladding Diameter Tolerance	±0.8 µm
Cladding Non-Circularity, maximum	1 %
Coating Diameter (Colored)	254 µm
Coating Diameter (Uncolored)	245 µm
Coating Diameter Tolerance (Colored)	±7 μm
Coating Diameter Tolerance (Uncolored)	±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	100000 psi 689.476 N/mm ²
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

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CS-5K-TB

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
Zero Dispersion Slope, maximum	0.105 ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1316 nm
Zero Dispersion Wavelength, minimum	1297 nm

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	1.479 @ 1,300 nm 1.483 @ 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

Regulatory Compliance/Certifications

Classification

ISO 9001:2015

Agency

Designed, manufactured and/or distributed under this quality management system

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CS-5K-TB

* 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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