



Fiber indoor cable, Riser/LSZH rated, MPO Trunk, interlocking aluminum armored, Singlemode OM4 mult-mode, 48 fiber, Feet jacket marking, Aqua jacket color, B2ca flame rating

Product Classification

Regional Availability	Asia Australia/New Zealand EMEA Latin America North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	N-MZ

General Specifications

Armor Type	Interlocking aluminum
Cable Type	MPO trunk cable
Construction Type	Armored
Subunit Type	Gel-free
Filler, quantity	1
Jacket Color	Aqua
Jacket Marking	Feet
Subunit, quantity	3
Fibers per Subunit, quantity	16
Total Fiber Count	48

Dimensions

Buffer Tube/Subunit Diameter	3 mm 0.118 in
Diameter Over Armor	17.1 mm 0.673 in
Diameter Over Jacket	19.2 mm 0.756 in

Mechanical Specifications

Minimum Bend Radius, loaded	288 mm 11.339 in
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760256195 | N-048-MZ-5K-F16AQ/30T/B2

Minimum Bend Radius, unloaded	192 mm 7.559 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	300 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	142 m 465.879 ft

Optical Specifications

Fiber Type	OM4, LazrSPEED® 550
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Environmental Specifications

Installation temperature	0 °C to +70 °C (-32 °F to +158 °F)
Operating Temperature	0 °C to +60 °C (+32 °F to +140 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	ANSI/ICEA S-83-596 Telcordia GR-409
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s2
EN50575 CPR Cable EuroClass Droplets Rating	d1
EN50575 CPR Cable EuroClass Acidity Rating	a1
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	0 °C to +85 °C (+32 °F to +185 °F)
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Heat Age Test Method	IEC 60794-1 F9
Low High Bend	0 °C to +60 °C (+32 °F to +140 °F)
Low High Bend Test Method	FOTP-37 IEC 60794-1 E11
Temperature Cycle	0 °C to +70 °C (+32 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3 IEC 60794-1 F1

Packaging and Weights

Cable weight	290 kg/km 194.871 lb/kft
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Included Products

CS-5K-MP	-	LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber
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* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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	689.476 N/mm ² 100000 psi

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

CS-5K-MP

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

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system



CS-5K-MP

* 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