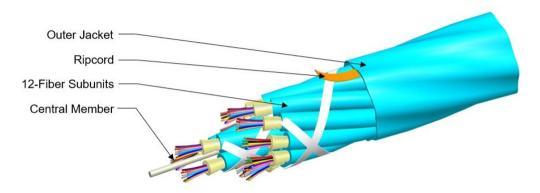
N-144-MP-5L-F12

Fiber indoor cable, LazrSPEED® Low Smoke Zero Halogen Riser MPO Trunk, 144 fiber multi-unit with 12 fiber subunits, Gel-free, Multimode OM3, Feet jacket marking, Dca 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-MP
General Specifications	
Cable Type	MPO trunk cable
Construction Type Non-armored	
Subunit Type Gel-free	
Jacket Marking Feet	
Subunit, quantity 12	
Fibers per Subunit, quantity12	
Total Fiber Count	144
Dimensions	
Buffer Tube/Subunit Diameter	3 mm 0.118 in
Diameter Over Jacket	14.22 mm 0.56 in

Representative Image



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N-144-MP-5L-F12

Mechanical Specifications

Minimum Bend Radius, loaded	200 mm 7.874 in
Minimum Bend Radius, unloaded	133 mm 5.236 in
Tensile Load, long term, maximum	400 N 89.924 lbf
Tensile Load, short term, maximum	1335 N 300.12 lbf
Compression	10 N/mm 57.101 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	300 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	5.88 N-m 52.042 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	280 m 918.635 ft
Optical Specifications	
Fiber Type	OM3, LazrSPEED® 300 OM3, LazrSPEED® 300

Environmental Specifications

Installation temperature	-20 °C to +60 °C (-4 °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)	
Cable Qualification Standards	ANSI/ICEA S-83-596 Telcordia GR-409	
EN50575 CPR Cable EuroClass Fire Performance	Dca	
EN50575 CPR Cable EuroClass Smoke Rating	s1a	
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 OFNR-ST1 (ETL) and c(ETL)	
Flame Test Method	IEC 60332-3 IEC 60754-2 IEC 61034-2 UL 1666 UL 1685	

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N-144-MP-5L-F12

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	-20 °C to +70 °C (-4 °F to +158 °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

Regulatory Compliance/Certifications

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

Included Products

CS-5L-MP – LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber

LazrSPEED® 300

Product Classification

Portfolio	CommScope®
Fortiono	Commiscope
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

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CS-5L-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	1,020 m @ 850 nm 600 m @ 1,300 nm
10 Gbps Ethernet Distance	300 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	2,000 MHz-km @ 850 nm 500 MHz-km @ 1,300 nm
Bandwidth, OFL, minimum	1,500 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	TIA-492AAAC (OM3)

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

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ISO 9001:2015

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

* 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)

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up to 95% relative humidity

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