

# P-144-MZ-5M-F12

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Fiber indoor cable, LazrSPEED® Plenum MPO Trunk, interlocking aluminum armored with plenum jacket, Multimode OM2+, 144 fiber multi-unit with 12 fiber subunits, Feet cable marking

## Product Classification

Regional Availability	Asia   Australia/New Zealand   Latin America   Middle East /Africa   North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	P-MZ

## General Specifications

Armor Type	Interlocking aluminum
Cable Type	MPO trunk cable
Construction Type	Armored
Subunit Type	Gel-free
Jacket Marking	Feet
Subunit, quantity	12
Fibers per Subunit, quantity	12
Total Fiber Count	144

## Dimensions

Buffer Tube/Subunit Diameter	3 mm   0.118 in
Diameter Over Armor	20.96 mm   0.825 in
Diameter Over Jacket	23 mm   0.906 in

## Representative Image

# P-144-MZ-5M-F12



## Mechanical Specifications

Minimum Bend Radius, loaded	434 mm   17.087 in
Minimum Bend Radius, unloaded	304 mm   11.969 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	104 m   341.207 ft

## Optical Specifications

Fiber Type	OM2+, LazrSPEED® 150   OM2+, LazrSPEED® 150
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## Environmental Specifications

Installation temperature	0 °C to +70 °C (+32 °F to +158 °F)
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# P-144-MZ-5M-F12

Operating Temperature	0 °C to +70 °C (+32 °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
Environmental Space	Plenum
Flame Test Listing	NEC OFCP (ETL) and c(ETL)
Flame Test Method	NFPA 262

## Environmental Test Specifications

Heat Age	0 °C to +85 °C (+32 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	0 °C to +70 °C (+32 °F to +158 °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	392 kg/km   263.412 lb/kft
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## Regulatory Compliance/Certifications

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

## Included Products

CS-5M-MP	–	LazrSPEED® 150 OM2+ Bend-Insensitive Multimode Fiber
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## \* Footnotes

Operating Temperature	Specification applicable to non-terminated bulk fiber cable
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LazrSPEED® 150

LazrSPEED® 150 OM2+ Bend-Insensitive Multimode Fiber

## Product Classification

Portfolio	CommScope®
Product Type	Optical fiber

## General Specifications

Cladding Diameter	125 µm
Cladding Diameter Tolerance	±5 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 Tensile Stress	100,000 psi (0.69 GPa)

## 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
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

# CS-5M-MP

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	600 m @ 1,300 nm   800 m @ 850 nm
10 Gbps Ethernet Distance	150 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	500 MHz-km @ 1,300 nm   950 MHz-km @ 850 nm
Bandwidth, OFL, minimum	500 MHz-km @ 1,300 nm   700 MHz-km @ 850 nm
Differential Mode Delay	0.70 ps/m @ 850 nm   0.88 ps/m @ 1,300 nm
Index of Refraction	1.479 @ 1,300 nm   1.483 @ 850 nm
Standards Compliance	TIA-492AAAB (OM2+)

## 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

## \* 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