# P-024-MP-5K-F36

Fiber indoor cable, LazrSPEED® Plenum MPO Light Duty for Patchcords, 24 fiber, Multimode OM4, Feet jacket 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-MP
General Specifications	
Cable Type	MPO trunk cable
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Marking	Feet
Total Fiber Count	24
Dimensions	
Diameter Over Jacket	3.6 mm   0.142 in
Representative Image	
Outer Jacket —	
Aramid Yarn —	
250 µm Optical Fiber	

#### Mechanical Specifications

Minimum Bend Radius, loaded

54 mm | 2.126 in

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Minimum Bend Radius, unloaded	29 mm   1.142 in
Tensile Load, long term, maximum	120 N   26.977 lbf
Tensile Load, short term, maximum	400 N   89.924 lbf
Compression	4 N/mm   22.841 lb/in
Compression Test Method	FOTP-41   IEC 60794-1 E3
Flex	300 cycles
Flex Test Method	FOTP-104   IEC 60794-1 E6
Impact	0.74 N-m   6.55 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	500 m   1,640.42 ft

#### **Optical Specifications**

Fiber Type

OM4, LazrSPEED® 550 | OM4, LazrSPEED® 550

### **Environmental Specifications**

Installation temperature	0 °C to +70 °C (+32 °F to +158 °F)
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 OFNP (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)

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# P-024-MP-5K-F36

#### **Temperature Cycle Test Method**

FOTP-3 | IEC 60794-1 F1

## Packaging and Weights

Cable weight

12 kg/km | 8.064 lb/kft

## Regulatory Compliance/Certifications

Classification

#### Agency

ISO 9001:2015

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



#### Included Products

CS-5K-MP

LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

# \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable

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# LazrSPEED® 550 LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

#### 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/mm²   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
Optical Specifications	
Numerical Aperture	0.2
Numerical Aperture Tolerance	±0.015
Point Defects, maximum	0.15 dB

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# CS-5K-MP

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

#### Agency

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



ISO 9001:2015

# \* 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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