

# 760249410 | B-024-LN-5K-M12NS/15G



Fiber OSP cable, LazrSPEED® Blown Micro Single Jacket All-Dielectric, 24 fiber, Stranded Loose Tube Arid-Core™ Construction, Gel-filled, Multimode OM4, Meters jacket marking, Black jacket color

## Product Classification

Regional Availability	Asia   Australia/New Zealand   EMEA   Latin America   North America
Portfolio	CommScope®
Product Type	Fiber OSP cable
Product Series	B-LN

## General Specifications

Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Filler, quantity	3
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Laser
Jacket Marking Text	COMMScope OPTICAL CABLE OM4 MM 24F (SERIAL NUMBER) MM/YYYY XXXXXXXM
Subunit, quantity	2
Fibers per Subunit, quantity	12
Total Fiber Count	24

## Dimensions

Buffer Tube/Subunit Diameter	1.45 mm   0.057 in
Diameter Over Jacket	5.1 mm   0.201 in

## Representative Image



## Material Specifications

Jacket Material

High density polyethylene (HDPE)

## Mechanical Specifications

Minimum Bend Radius, loaded	77 mm   3.031 in
Minimum Bend Radius, unloaded	51 mm   2.008 in
Tensile Load, long term, maximum	97 N   21.806 lbf
Tensile Load, short term, maximum	324 N   72.838 lbf
Compression	10 N/mm   57.101 lb/in
Compression Test Method	IEC 60794-1-21 E3
Flex	25 cycles
Flex Test Method	IEC 60794-1 E6
Impact	0.3 N-m   2.655 in lb
Impact Test Method	IEC 60794-1-21 E4
Strain	See long and short term tensile loads
Strain Test Method	IEC 60794-1-21 E1
Twist	10 cycles
Twist Test Method	IEC 60794-1-21 E7
Vertical Rise, maximum	492 m   1,614.173 ft

## Optical Specifications

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**Fiber Type** OM4, LazrSPEED® 550

## Environmental Specifications

<b>Installation temperature</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Operating Temperature</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Storage Temperature</b>	-30 °C to +75 °C (-22 °F to +167 °F)
<b>Cable Qualification Standards</b>	IEC 60794-5-10
<b>Environmental Space</b>	Air-blown, microduct
<b>Jacket UV Resistance</b>	UV stabilized
<b>Water Penetration</b>	24 h
<b>Water Penetration Test Method</b>	IEC 60794-1 F4

## Environmental Test Specifications

<b>Cable Freeze</b>	-2 °C   28.4 °F
<b>Cable Freeze Test Method</b>	IEC 60794-1 F15
<b>Drip</b>	70 °C   158 °F
<b>Drip Test Method</b>	IEC 60794-1-21 E14
<b>Heat Age</b>	-30 °C to +85 °C (-22 °F to +185 °F)
<b>Heat Age Test Method</b>	IEC 60794-1-22 F9
<b>Low High Bend</b>	-30 °C to +60 °C (-22 °F to +140 °F)
<b>Low High Bend Test Method</b>	IEC 60794-1-21 E11
<b>Temperature Cycle</b>	-30 °C to +70 °C (-22 °F to +158 °F)
<b>Temperature Cycle Test Method</b>	IEC 60794-1-22 F1

## Packaging and Weights

<b>Cable weight</b>	22 kg/km   14.783 lb/kft
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## Included Products

CS-5K-LT	– LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber
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## \* Footnotes

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

## LazrSPEED® 550

### 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
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
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# CS-5K-LT

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
Differential Mode Delay Note	Superior to ANSI/TIA TIA-492AAAF and IEC 60793-2-10 at 850 nm
Index of Refraction	1.479 @ 1,300 nm   1.483 @ 850 nm
Standards Compliance	ANSI/TIA-492AAAF (OM4)   IEC 60793-2-10, A1 (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

## \* 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