760053744 | D-024-LA-5K-F12NS

Fiber OSP cable, LazrSPEED® Single Jacket/Single Armor, Gel-Free, Stranded Loose Tube, 24 fibers, Multimode OM4, Feet jacket marking, Black jacket color

- Corrugated steel tape armor is strong yet flexible, providing additional crush and rodent protection

Product Classification

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

General Specifications

Armor Type	Corrugated steel
Cable Type	Stranded loose tube
Construction Type	Armored
Subunit Type	Gel-free
Filler, quantity	3
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	2
Fibers per Subunit, quantity	12
Total Fiber Count	24

Dimensions

Buffer Tube/Subunit Diameter	2.5 mm	0.098 in
Diameter Over Jacket	11.5 mm	0.453 in

Representative Image

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Material Specifications

Jacket Material	PE

Mechanical Specifications

Minimum Bend Radius, loaded	173 mm	6.811 in
Minimum Bend Radius, unloaded	115 mm	4.528 in
Tensile Load, long term, maximum	800 N	179.847 lbf
Tensile Load, short term, maximum	2700 N	606.984 lbf
Compression	22 N/mm	125.623 lb/in
Compression Test Method	FOTP-41	IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104	IEC 60794-1 E6
Impact	4.41 N-m	39.032 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	740 m	2,427.822 ft

Optical Specifications

Fiber Type	OM4, LazrSPEED® 550	OM4, LazrSPEED® 550

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Environmental Specifications

Installation temperature	-30 °C to +70 °C (-22 °F to +158 °F)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-87-640	EN 187105
Environmental Space	Aerial, lashed	Buried
Jacket UV Resistance	UV stabilized
Water Penentration	24 h
Water Penetration Qualification Method	ANSI/ICEA S-87-640
Water Penentration Test Method	FOTP-82	IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze	-2 °C	28.4 °F
Cable Freeze Test Method	FOTP-98	IEC 60794-1 F15
Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °F)
Low High Bend Test Method	FOTP-37	IEC 60794-1 E11
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3	IEC 60794-1 F1

Packaging and Weights

Cable weight	110 kg/km	73.917 lb/kft

Regulatory Compliance/Certifications

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

Included Products

CS-5K-LT	–	LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

* Footnotes

Operating Temperature   Specification applicable to non-terminated bulk fiber cable

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CS-5K-LT

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/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

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CS-5K-LT

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

* Footnotes

Temperature Dependence, maximum	Temperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)

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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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