2-1716211-2 | C-012-L2-5K-M12BK/40G/GY/FS/B

LazrSPEED® Indoor/Outdoor, 120 min Fire Survival, Low Smoke Zero Halogen (LSZH), Gel-Filled, Central Loose Tube cable. Provides Rodent Resistance.

Product Classification

Regional Availability	Asia | Australia/New Zealand | EMEA
Portfolio	CommScope®
Product Type	Fiber indoor/outdoor cable
Product Series	C-L2

General Specifications

Armor Type	Corrugated steel
Cable Type	Loose tube
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB SYSTEM F O CABLE X-1716211-2 INT/EXT FIRE SURVIVAL 12 X 50/125 OM4 [Serial NUMBER] [METRE MARK]
Fibers per Subunit, quantity	12
Total Fiber Count	12

Dimensions

Cable Length	2000 m | 6,561.68 ft
Buffer Tube/Subunit Diameter	4 mm | 0.157 in
Diameter Over Jacket	12.7 mm | 0.5 in

Mechanical Specifications

Minimum Bend Radius, loaded	330 mm | 12.992 in
Minimum Bend Radius, unloaded	255 mm | 10.039 in
Tensile Load, long term, maximum	400 N | 89.924 lbf

Tensile Load, short term, maximum	1400 N | 314.733 lbf
Compression	30 N/mm | 171.304 lb/in
Compression Test Method	IEC 60794-1 E3
Impact	10 N-m | 88.507 in lb
Impact Test Method	IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	IEC 60794-1 E1
Twist	5 cycles
Twist Test Method	IEC 60794-1 E7

Optical Specifications

Fiber Type	OM4, LazrSPEED®

Optical Specifications, Wavelength Specific

Attenuation, maximum	1.00 dB/km @ 1,310 nm | 3.00 dB/km @ 850 nm
Standards Compliance	TIA-492AAAD (OM4)

Environmental Specifications

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	EN 187105 | IEC 60794-1-2
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s1b
EN50575 CPR Cable EuroClass Droplets Rating	d0
EN50575 CPR Cable EuroClass Acidity Rating	a1
Environmental Space	Aerial, lashed | Buried | Universal Low Smoke Zero Halogen (ULSZH)
Flame Test Listing	EN 50399 | IEC 60332-1-2
Flame Test Method	IEC 60331-25 (120) Fire resistance: 120 minutes at 750 °C (no fiber break) | IEC 60332-1-2
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F5

Environmental Test Specifications

Low High Bend Test Method	IEC 60794-1 E11
Temperature Cycle	-25 °C to +70 °C (-13 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1 F1

Packaging and Weights

Cable weight	216 kg/km | 145.145 lb/kft

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
REACH-SVHC	Compliant as per SVHC revision on www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

Included Products

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

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

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