



Fiber Indoor/outdoor Cable, Low Smoke Zero Halogen / 48 fiber Microsheath, Gel-free, Meters jacket marking, Black jacket color, B2ca flame rating

Product Classification

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

General Specifications

Cable Type	Stranded microsheath tube
Subunit Type	Gel-free
Filler, quantity	1
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB OPTICAL CABLE 760256242 48 x 5K 50/125 EN50575 CLASS B ULSZH [Serial number] [metre mark]
Subunit, quantity	4
Fibers per Subunit, quantity	12
Total Fiber Count	48

Dimensions

Cable Length	2000 m 6,561.68 ft
Buffer Tube/Subunit Diameter	1.5 mm 0.059 in
Diameter Over Jacket	6.7 mm 0.264 in

Mechanical Specifications

Minimum Bend Radius, loaded	150 mm 5.906 in
Minimum Bend Radius, unloaded	100 mm 3.937 in
Tensile Load, long term, maximum	150 N 33.721 lbf

760256242 | C-048-LN-5K-M12BK/15D/B2

Tensile Load, short term, maximum	480 N 107.908 lbf
Cable Crush Resistance, maximum	10 N/mm 57.101 lb/in
Compression Test Method	IEC 60794-1-21 E3
Impact	2 N-m 17.701 in lb
Impact Test Method	IEC 60794-1-21 E4
Strain Test Method	IEC 60794-1-21 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 @ 1,300 nm 3.00 dB/km @ 850 nm
-----------------------------	---

Environmental Specifications

Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s1a
EN50575 CPR Cable EuroClass Droplets Rating	d0
EN50575 CPR Cable EuroClass Acidity Rating	a1
Environmental Space	Universal Low Smoke Zero Halogen (ULSZH)
Water Penetration Test Method	IEC 60794-1 F5

Environmental Test Specifications

Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1-22 F1

Packaging and Weights

Cable weight	48.9 kg/km 32.859 lb/kft
---------------------	----------------------------

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	±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/mm ² 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

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)
--	---

CS-5K-LT

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