



Indoor/Outdoor Low Smoke Zero Halogen, LazrSPEED® Central Loose Tube Fiber Optic Cable, 24-fiber, Multimode OM3, Gel-filled, black

- non-metallic construction reinforced by E-glass yarns, which provide rodent resistance and higher tensile strength

Product Classification

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

General Specifications

Cable Type	Loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB OPTICAL CABLE 760254778 INT/EXT GEL LOOSE TUBE 24X50/125 OM4 [Serial NUMBER] [METRE MARK]
Fibers per Subunit, quantity	24
Total Fiber Count	24

Dimensions

Cable Length	2000 m 6,561.68 ft
Buffer Tube/Subunit Diameter	4 mm 0.157 in
Diameter Over Jacket	8 mm 0.315 in

Mechanical Specifications

Minimum Bend Radius, loaded	150 mm 5.906 in
Minimum Bend Radius, unloaded	140 mm 5.512 in
Tensile Load, long term, maximum	300 N 67.443 lbf

760254778 | C-024-CN-5K-M24BK/40G/AY/E

Tensile Load, short term, maximum	600 N 134.885 lbf
Compression	20 N/mm 114.203 lb/in
Compression Test Method	IEC 60794-1-2 E3
Impact	20 N-m 177.015 in lb
Impact Test Method	IEC 60794-1 E4

Optical Specifications

Fiber Type	OM4, LazrSPEED®
-------------------	-----------------

Optical Specifications, Wavelength Specific

Standards Compliance	IEC 60794-1 TIA-492CAAB (OS2)
-----------------------------	---------------------------------

Environmental Specifications

Installation temperature	-5 °C to +50 °C (+23 °F to +122 °F)
Operating Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Storage Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
EN50575 CPR Cable EuroClass Fire Performance	Eca
Environmental Space	Low Smoke Zero Halogen (LSZH)
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F5

Environmental Test Specifications

Temperature Cycle	-30 °C to +70 °C (-22 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1-2 F1

Packaging and Weights

Cable weight	60 kg/km 40.318 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