

2-599687-2 | C-012-CA-5K-M12BK/28G/GY



Fiber indoor/outdoor Cable, Armoured LSZH, OM4, 12 fiber, loose tube, gel-filled

Product Classification

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

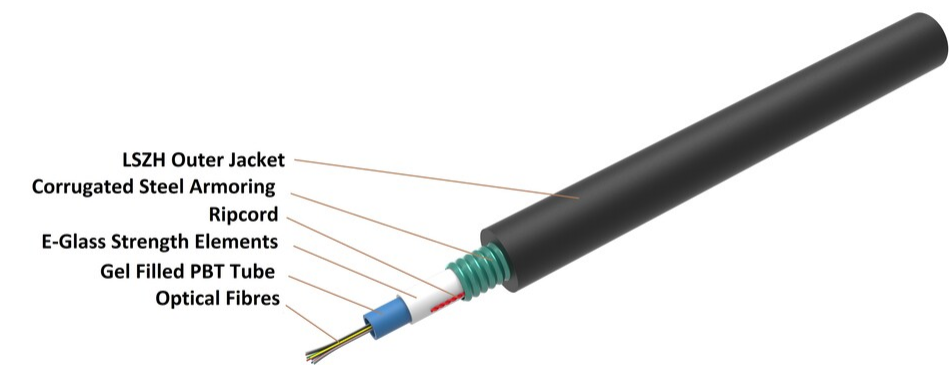
General Specifications

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-599687-2 CSA GEL LOOSE TUBE 12X50/125 OM4 ULSZH (Serial NUMBER) (METRE)
Fibers per Subunit, quantity	12
Total Fiber Count	12

Dimensions

Buffer Tube/Subunit Diameter	2.8 mm 0.11 in
Diameter Over Jacket	10 mm 0.394 in

Representative Image



Material Specifications

Jacket Material

Low Smoke Zero Halogen (LSZH)

Mechanical Specifications

Minimum Bend Radius, loaded

210 mm | 8.268 in

Minimum Bend Radius, unloaded

160 mm | 6.299 in

Tensile Load, long term, maximum

625 N | 140.506 lbf

Tensile Load, short term, maximum

1200 N | 269.771 lbf

Cable Crush Resistance, maximum

30 N/mm | 171.304 lb/in

Compression Test Method

IEC 60794-1-2 E3

Impact

5 N-m | 44.254 in lb

Impact Test Method

IEC 60794-1-21 E4

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

Standards Compliance

TIA-492AAAD (OM4)

Environmental Specifications

Installation temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-20 °C to +75 °C (-4 °F to +167 °F)
Environmental Space	Buried Ducted Indoor/Outdoor Outdoor
Water Penetration	24 h
Water Penetration Test Method	IEC 60794-1 F5

Environmental Test Specifications

Temperature Cycle	-20 °C to +70 °C (-4 °F to +158 °F)
Temperature Cycle Test Method	IEC 60794-1 F1

Packaging and Weights

Cable weight	135 kg/km 90.716 lb/kft
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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
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* 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
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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