2-599691-3 | C-024-CA-5L-M24BK/28G/GY

Fiber indoor/outdoor Cable, Armored LSZH, OM3, 24 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

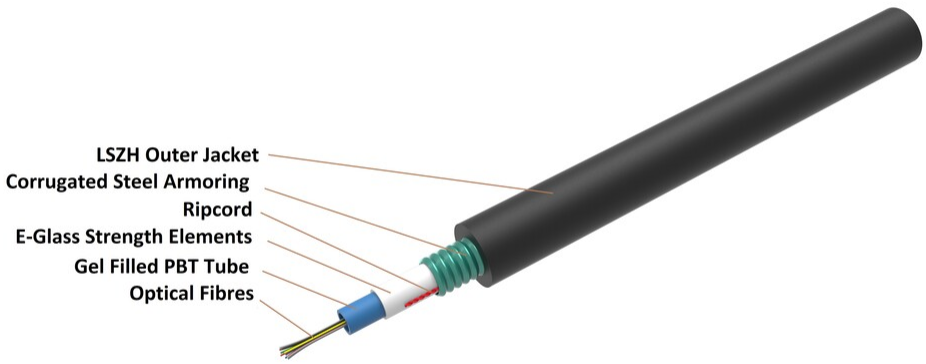
Armor Type	Corrugated steel
Cable Type	Loose tube
Construction Type	Armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMSCOPE GB SYSTEM F.O.CABLE X-599691-3 CSA GEL LOOSE TUBE 24X50/125 OM3 ULSZH [Serial NUMBER] [METER MARK]
Fibers per Subunit, quantity	24
Total Fiber Count	24

Dimensions

Buffer Tube/Subunit Diameter	2.8 mm | 0.11 in
Diameter Over Jacket	10.5 mm | 0.413 in

Representative Image

2-599691-3 | C-024-CA-5L-M24BK/28G/GY



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
Twist	5 cycles
Twist Test Method	IEC 60794-1-21 E7

Optical Specifications

Fiber Type	OM3

Optical Specifications, Wavelength Specific

Attenuation, maximum	1.00 dB/km @ 1,300 nm | 3.00 dB/km @ 850 nm

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)
Cable Qualification Standards	IEC 60794-1-2
Environmental Space	Buried | Ducted | Indoor/Outdoor | Outdoor
Flame Test Method	IEC 60332-1 | IEC 60754-1 | IEC 60754-2 | IEC 61034-2
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 60794-1-2 F1

Packaging and Weights

Cable weight	151 kg/km | 101.467 lb/kft

Included Products

CS-5L-LT	–	LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

LazrSPEED® 300 OM3 Bend-Insensitive Multimode Fiber

LazrSPEED® 300

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	1,020 m @ 850 nm | 600 m @ 1,300 nm
10 Gbps Ethernet Distance	300 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	2,000 MHz-km @ 850 nm | 500 MHz-km @ 1,300 nm
Bandwidth, OFL, minimum	1,500 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 (OM3)

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