



Fiber indoor/outdoor cable, LazrSPEED®, Single Jacket All-Dielectric, Low Smoke Zero Halogen (LSZH), 12 fiber, Multimode OM5, Gel-Free, Stranded Loose Tube, Meters jacket marking, Black jacket color, Eca flame rating

Product Classification

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

General Specifications

Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-free
Filler, quantity	4
Jacket Color	Black
Jacket Marking	Meters
Jacket Marking Method	Inkjet
Jacket Marking Text	COMMScope GB OPTICAL CABLE OM5 MM 12 FIBER EN50575 CLASS E [SERIAL NUMBER] [MM/YY] [METRE MARK]
Subunit, quantity	1
Fibers per Subunit, quantity	12
Total Fiber Count	12

Dimensions

Buffer Tube/Subunit Diameter	2.5 mm 0.098 in
Diameter Over Jacket	11.7 mm 0.461 in

Representative Image



Mechanical Specifications

Minimum Bend Radius, loaded	175 mm 6.89 in
Minimum Bend Radius, unloaded	117 mm 4.606 in
Tensile Load, long term, maximum	800 N 179.847 lbf
Tensile Load, short term, maximum	2700 N 606.984 lbf
Compression	22 N/mm 125.623 lb/in
Compression Test Method	FOTP-41 IEC 60794-1 E3
Flex	25 cycles
Flex Test Method	FOTP-104 IEC 60794-1 E6
Impact	3 N-m 26.552 in lb
Impact Test Method	FOTP-25 IEC 60794-1 E4
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33 IEC 60794-1 E1
Twist	10 cycles
Twist Test Method	FOTP-85 IEC 60794-1 E7
Vertical Rise, maximum	654 m 2,145.669 ft

Optical Specifications

Fiber Type	OM5, LazrSPEED® wideband
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Environmental Specifications

Installation temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)

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Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-104-696 EN 187105 Telcordia GR-20 Telcordia GR-409
EN50575 CPR Cable EuroClass Fire Performance	Eca
Environmental Space	Aerial, lashed Buried Low Smoke Zero Halogen (LSZH)
Flame Test Listing	EN 50399
Flame Test Method	EN 50399 IEC 60332-1-2 IEC 60754-2
Jacket UV Resistance	UV stabilized
Water Penetration	24 h
Water Penetration Test Method	FOTP-82 IEC 60794-1 F5

Environmental Test Specifications

Cable Freeze	-2 °C 28.4 °F
Cable Freeze Test Method	FOTP-98 IEC 60794-1 F15
Drip	70 °C 158 °F
Drip Test Method	FOTP-81 IEC 60794-1 E14
Heat Age	-40 °C to +85 °C (-40 °F to +185 °F)
Heat Age Test Method	IEC 60794-1 F9
Low High Bend	-30 °C to +60 °C (-22 °F to +140 °F)
Low High Bend Test Method	FOTP-37 IEC 60794-1 E11
Temperature Cycle	-40 °C to +70 °C (-40 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3 IEC 60794-1 F1

Packaging and Weights

Cable weight	125 kg/km 83.996 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-5G-LT – LazrSPEED® OM5 WideBand Multimode
Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

LazrSPEED® 550		LazrSPEED® OM5 WideBand Multimode Fiber	
Product Classification			
Portfolio	CommScope®		
Product Type	Optical fiber		
General Specifications			
Cladding Diameter	125 µm		
Cladding Diameter Tolerance	±5 µm		
Cladding Non-Circularity, maximum	0.7 %		
Coating Diameter (Colored)	254 µm		
Coating Diameter (Uncolored)	242 µm		
Coating Diameter Tolerance (Colored)	±7 µm		
Coating Diameter Tolerance (Uncolored)	±5 µm		
Coating/Cladding Concentricity Error, maximum	12 µm		
Core Diameter	50 µm		
Core Diameter Tolerance	±2.5 µm		
Core/Clad Offset, maximum	1 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	4.5 N 1.012 lbf		
Coating Strip Force, minimum	0.9 N 0.202 lbf		
Dynamic Fatigue Parameter, minimum	18		
Optical Specifications			
Numerical Aperture	0.2		

CS-5G-LT

Numerical Aperture Tolerance	±0.010
Point Defects, maximum	0.15 dB
Zero Dispersion Slope, maximum (OM5)	-412/(840(1-(λ0/840)^4)) ps/[km-nm-nm]
Zero Dispersion Wavelength, maximum	1328 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 2.20 dB/km @ 953 nm 3.00 dB/km @ 850 nm
Bandwidth, Laser, minimum	2,600 MHz-km @ 953 nm 4,700 MHz-km @ 850 nm 500 MHz-km @ 1,300 nm
Bandwidth, OFL, minimum	1,950 MHz-km @ 953 nm 3,500 MHz-km @ 850 nm 500 MHz-km @ 1,300 nm
Index of Refraction	1.478 @ 1,300 nm 1.483 @ 850 nm
Standards Compliance	ANSI/TIA-492AAAF (OM5) ANSI/TIA-568.3 (OM5) IEC 60793-2-10, A1 (OM5) ISO/IEC 11801-1 cabled optical fiber performance category OM5

Environmental Specifications

Heat Aging, maximum	0.10 dB/km @ 85 °C
Temperature Dependence, maximum	0.1 dB/km
Temperature Humidity Cycling, maximum	0.1 dB/km
Water Immersion, maximum	0.10 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