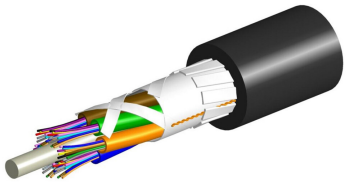
760148395 | Z-144-LN-5L-F12BK/20G/E



Fiber indoor/outdoor cable, LazrSPEED®, Mini Single Jacket, All-Dielectric, Riser/LSZH rated, 144 fiber, Gel-Filled, Stranded Loose Tube, Multimode OM3, Feet jacket marking, Black jacket color, Eca flame rating

Product Classification

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

General Specifications

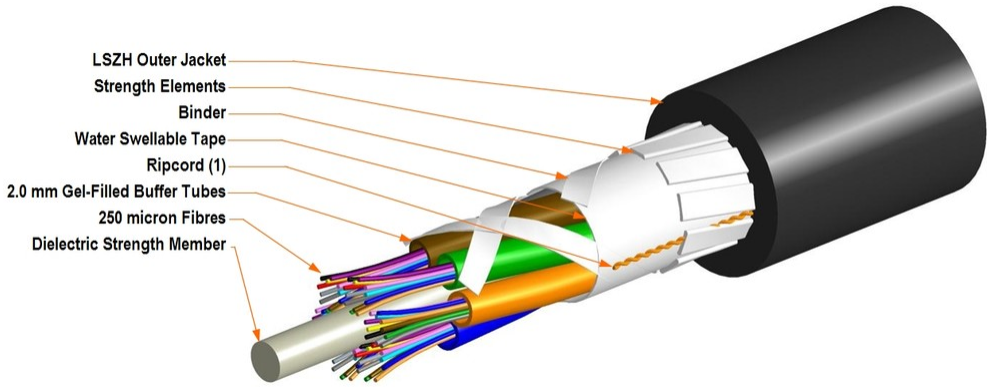
Cable Type	Stranded loose tube
Construction Type	Non-armored
Subunit Type	Gel-filled
Jacket Color	Black
Jacket Marking	Feet
Subunit, quantity	12
Fibers per Subunit, quantity	12
Total Fiber Count	144

Dimensions

Buffer Tube/Subunit Diameter	2 mm | 0.079 in
Diameter Over Jacket	14.7 mm | 0.579 in

Representative Image

760148395 | Z-144-LN-5L-F12BK/20G/E



Mechanical Specifications

Minimum Bend Radius, loaded	220 mm | 8.661 in
Minimum Bend Radius, unloaded	147 mm | 5.787 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	5.15 N-m | 45.581 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	363 m | 1,190.945 ft

Optical Specifications

Fiber Type	OM3, LazrSPEED® 300 | OM3, LazrSPEED® 300

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)

Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-104-696 | EN 187105 | Telcordia GR-409
EN50575 CPR Cable EuroClass Fire Performance	Eca
Environmental Space	Aerial, lashed | Buried | Low Smoke Zero Halogen (LSZH) | Riser
Flame Test Listing	NEC OFNR-ST1 (ETL) and c(ETL)
Flame Test Method	CSA FT4 | IEC 60332-3 | IEC 60754-2 | IEC 61034-2 | IEEE 1202 | NES 713 | UL 1666 | UL 1685
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	225 kg/km | 151.193 lb/kft

Regulatory Compliance/Certifications

Agency	Classification
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

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