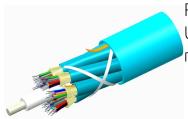
760241124 | P-048-DS-5K-FMUVI



Fiber indoor cable, LazrSPEED® Plenum Distribution, 48-Fiber Multi-Unit with 12-Fiber Subunits, Multimode OM4, Gel-free, Feet jacket marking, Violet jacket color

Product Classification

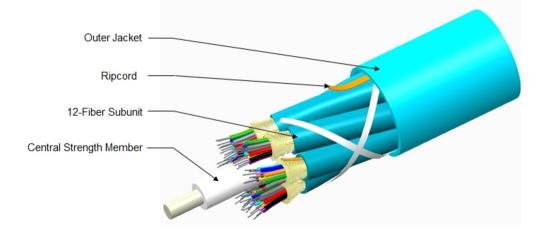
Regional Availability	Asia Australia/New Zealand Latin America Middle East /Africa North America
Portfolio	CommScope®
Product Type	Fiber indoor cable
Product Series	P-DS
General Specifications	
Cable Type	Distribution
Construction Type	Non-armored
Subunit Type	Gel-free
Jacket Color	Violet
Jacket Marking	Feet
Subunit, quantity	4
Fibers per Subunit, quantity	12
Total Fiber Count	48
Dimensions	
Buffer Tube/Subunit Diameter	5.77 mm 0.227 in
Diameter Over Jacket	14.91 mm 0.587 in

Representative Image

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Mechanical Specifications

Minimum Bend Radius, loaded	224 mm 8.819 in	
Minimum Bend Radius, unloaded	149 mm 5.866 in	
Tensile Load, long term, maximum	400 N 89.924 lbf	
Tensile Load, short term, maximum	1335 N 300.12 lbf	
Compression	10 N/mm 57.101 lb/in	
Compression Test Method	FOTP-41 IEC 60794-1 E3	
Flex	100 cycles	
Flex Test Method	FOTP-104 IEC 60794-1 E6	
Impact	5.88 N-m 52.042 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	199 m 652.887 ft	
Optical Specifications		
Fiber Type	OM4, LazrSPEED® 550 OM4, LazrSPEED® 550	

Environmental Specifications

Installation temperature

0 °C to +70 °C (+32 °F to +158 °F)

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Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Cable Qualification Standards	ANSI/ICEA S-83-596 Telcordia GR-409
Environmental Space	Plenum
Flame Test Listing	NEC OFNP (ETL) and c(ETL)
Flame Test Method	NFPA 130 NFPA 262

Environmental Test Specifications

Heat Age	-20 °C to +85 °C (-4 °F to +185 °F)	
Heat Age Test Method	IEC 60794-1 F9	
Low High Bend	-20 °C to +70 °C (-4 °F to +158 °F)	
Low High Bend Test Method	ligh Bend Test MethodFOTP-37 IEC 60794-1 E11	
Temperature Cycle	-20 °C to +70 °C (-4 °F to +158 °F)	
Temperature Cycle Test Method	FOTP-3 IEC 60794-1 F1	

Packaging and Weights

Cable weight

205 kg/km | 137.754 lb/kft

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

Included Products

CS-5K-TB – LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

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COMMSCOPE°

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/mm² 100000 psi
Tight Buffer Diameter	900 µm
Tight Buffer Diameter Tolerance	±40 µm
Mechanical Specifications	

Magrobonding 15 mm (mandral 2 turns

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

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CS-5K-TB

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	1,110 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

Classification

Agency
ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

* Footnotes

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CS-5K-TB

Temperature Dependence, maximumTemperature dependence is conducted at -60 °C to +85 °C (-76 °F to +185 °F)Temperature Humidity Cycling, maximumTemperature humidity cycling is conducted at -10 °C to +85 °C (+14 °F to +185 °F)

up to 95% relative humidity

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