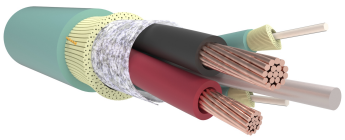
760250284 | P-002-DS-HY-5K-F29AQ/2X12AWG



LazrSPEED® Plenum Hybrid Distribution Cable, 2 simplex single fiber, 2 conductor 12 AWG, OM4 Bend Insensitive

OBSOLETE

Product Classification

Regional Availability	North America
Portfolio	CommScope®
Product Type	Hybrid cable, copper and fiber
Product Brand	LazrSPEED®

General Specifications

Cable Type	Distribution | Hybrid | Stranded indoor
Conductor Type, singles	Stranded
Conductors, quantity	2
Construction Type	Non-armored
Fiber Short Description	P-001-SP29
Subunit Type	Gel-free
Filler, quantity	0
Jacket Color	Aqua
Subunit Jacket Color	Aqua
Subunit, quantity	2
Fibers per Subunit, quantity	1
Total Fiber Count	2

Dimensions

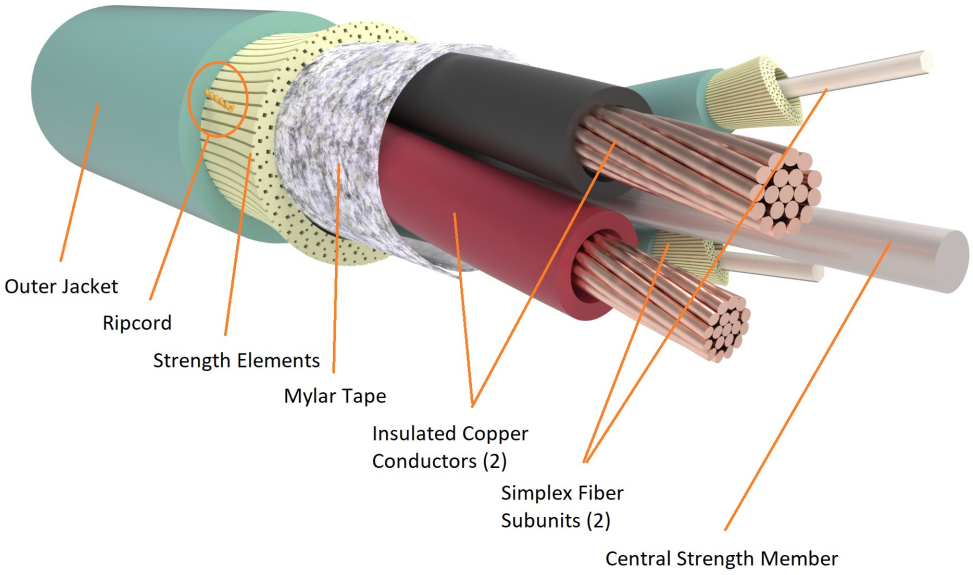
Buffer Tube/Subunit Diameter	2.794 mm | 0.11 in
Diameter Over Jacket	9.144 mm | 0.36 in

Conductor Gauge	12 AWG

Electrical Specifications

Conductor dc Resistance	5.413 ohms/km | 1.65 ohms/kft

Representative Image



Material Specifications

Conductor Material	Bare copper | Stranded copper wire
Insulation Material, singles	PVC
Jacket Material	Fire retardant PVC
Ripcord Material	Polyester

Mechanical Specifications

Minimum Bend Radius, loaded	135.89 mm | 5.35 in
Minimum Bend Radius, unloaded	90.678 mm | 3.57 in

Tensile Load, long term, maximum	240.204 N | 54 lbf
Tensile Load, short term, maximum	796.231 N | 179 lbf
Compression	1.018 kg/mm | 57 lb/in
Compression Test Method	FOTP-41
Flex	25 cycles
Flex Test Method	FOTP-104
Impact	2.17 ft lb | 2.942 N-m
Impact Test Method	FOTP-25
Strain	See long and short term tensile loads
Strain Test Method	FOTP-33
Twist	10 cycles
Twist Test Method	FOTP-85
Vertical Rise, maximum	183.642 m | 602.5 ft

Optical Specifications

Fiber Type	OM4, LazrSPEED® | OM4, bend insensitive

Environmental Specifications

Installation temperature	0 °C to +70 °C (-32 °F to +158 °F)
Operating Temperature	-20 °C to +70 °C (-4 °F to +158 °F)
Storage Temperature	-40 °C to +75 °C (-40 °F to +167 °F)
Cable Qualification Standards	ANSI/ICEA S-83-596 | Telcordia GR-409 | UL 13 | UL 444
Environmental Space	Plenum | Wireless installation
Flame Test Listing	NEC CL3P-OF (ETL) and c(ETL) | NEC CMP-OF (ETL) and c(ETL)
Flame Test Method	NFPA 262

Environmental Test Specifications

Low High Bend	0 °C to +70 °C (+32 °F to +158 °F)
Low High Bend Test Method	FOTP-37
Temperature Cycle	0 °C to +70 °C (+32 °F to +158 °F)
Temperature Cycle Test Method	FOTP-3

Packaging and Weights

Cable weight	133.339 kg/km | 89.6 lb/kft

Included Products

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

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

LazrSPEED® 550 LazrSPEED® 550 OM4 Bend-Insensitive Multimode Fiber

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

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	1,110 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 | 0.88 ps/m @ 1,300 nm
Differential Mode Delay Note	Superior to TIA-492AAAC and IEC 60793-2-10 at 850 nm
Index of Refraction	1.479 @ 1,300 nm | 1.483 @ 850 nm
Standards Compliance	IEC 60793-2-10, type A1a.3a | IEC 60793-2-10, type A1a.3b | TIA-492AAAD (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