760175224 | P-096-LZ-5K-F12BK/25D



Fiber indoor/outdoor cable, LazrSPEED®, Plenum Rated, Gel-Free, Stranded Loose Tube with Aluminum Interlocking Armor containing a Plenum Rated Outer Jacket, 96 fiber, Multimode OM4, Feet jacket marking, Black jacket color

Product Classification

Regional Availability

Asia | Australia/New Zealand | Latin America | Middle East

96

/Africa | North America

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series P-LZ

General Specifications

Armor Type Interlocking aluminum

Cable Type Stranded loose tube

Construction Type Armored
Subunit Type Gel-free
Jacket Color Black
Jacket Marking Feet
Subunit, quantity 8
Fibers per Subunit, quantity 12

Dimensions

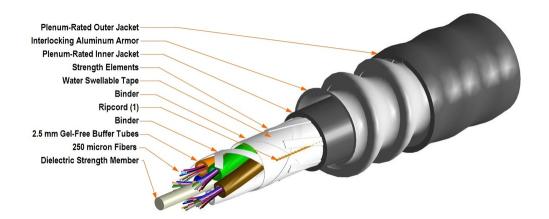
Total Fiber Count

Buffer Tube/Subunit Diameter2.5 mm | 0.098 inDiameter Over Armor18.42 mm | 0.725 inDiameter Over Jacket20.4 mm | 0.803 in

Representative Image



760175224 | P-096-LZ-5K-F12BK/25D



Mechanical Specifications

Minimum Bend Radius, loaded 408 mm | 16.063 in

Minimum Bend Radius, unloaded 286 mm | 11.26 in

Tensile Load, long term, maximum 400 N | 89.924 lbf

Tensile Load, short term, maximum 1335 N | 300.12 lbf

Compression 85 N/mm | 485.363 lb/in

Compression Test Method FOTP-41 | IEC 60794-1 E3

Flex 25 cycles

FIex Test Method FOTP-104 | IEC 60794-1 E6

Impact 35 N-m | 309.776 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 114 m | 374.016 ft

Optical Specifications

Fiber Type OM4, LazrSPEED® 550 | OM4, LazrSPEED® 550

Environmental Specifications

Installation temperature $-30 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (-22 $^{\circ}\text{F}$ to $+158 \,^{\circ}\text{F}$)

Operating Temperature $-40 \,^{\circ}\text{C}$ to $+70 \,^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$ to $+158 \,^{\circ}\text{F}$)

Page 2 of 5



760175224 | P-096-LZ-5K-F12BK/25D

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

Environmental Space Plenum

Flame Test Listing NEC OFCP (ETL) and c(ETL)
Flame Test Method NFPA 130 | NFPA 262

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

Heat Age $-40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

Heat Age Test Method IEC 60794-1 F9

Low High Bend $-30 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-22 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$

Low High Bend Test Method FOTP-37 | IEC 60794-1 E11

Temperature Cycle $-40 \,^{\circ}\text{C to} + 70 \,^{\circ}\text{C } (-40 \,^{\circ}\text{F to} + 158 \,^{\circ}\text{F})$

Temperature Cycle Test Method FOTP-3 | IEC 60794-1 F1

Packaging and Weights

Cable weight 360 kg/km | 241.909 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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

Included Products

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

Fiber

* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable



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 $\pm 5 \, \mu m$

Cladding Non-Circularity, maximum 1 %

Coating Diameter (Colored) 254 µm

Coating Diameter (Uncolored) 245 µm

Coating Diameter Tolerance (Colored) ±7 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

COMMSCOPE®

CS-5K-LT

Numerical Aperture Tolerance±0.015Point Defects, maximum0.15 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, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.2 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

COMMSC PE°