

Fiber indoor/outdoor cable, LazrSPEED®, Single Jacket All-Dielectric, Plenum Rated, , 12 fiber multimode OM5, Gel-Free, Stranded Loose Tube, PVDF jacket, Black jacket color, Feet cable marking

Product Classification

Regional Availability

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

/Africa | North America

Portfolio CommScope®

Product Type Fiber indoor/outdoor cable

Product Series P-LN

General Specifications

Cable Type Stranded loose tube

Construction Type Non-armored

Subunit Type Gel-free

Filler, quantity 4

Jacket Color Black

Jacket Marking Feet

Subunit, quantity 1

Fibers per Subunit, quantity 12

Total Fiber Count 12

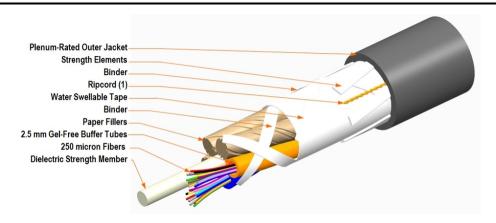
Dimensions

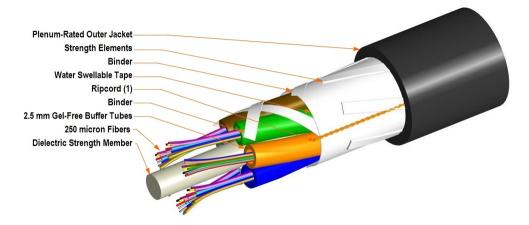
Buffer Tube/Subunit Diameter 2.5 mm | 0.098 in

Diameter Over Jacket 9.7 mm | 0.382 in

Representative Image







Mechanical Specifications

Minimum Bend Radius, loaded

Minimum Bend Radius, unloaded

Tensile Load, long term, maximum

Tensile Load, short term, maximum

Compression

Compression Test Method

Flex

Flex Test Method

Impact

Impact Test Method

Strain

Strain Test Method

Twist

145 mm | 5.709 in

96.5 mm | 3.799 in

800 N | 179.847 lbf

2700 N | 606.984 lbf

22 N/mm | 125.623 lb/in

FOTP-41 | IEC 60794-1 E3

25 cycles

FOTP-104 | IEC 60794-1 E6

2.94 N-m | 26.021 in lb

FOTP-25 | IEC 60794-1 E4

See long and short term tensile loads

FOTP-33 | IEC 60794-1 E1

10 cycles



Twist Test Method FOTP-85 | IEC 60794-1 E7

Vertical Rise, maximum 880 m | 2,887.139 ft

Optical Specifications

Fiber Type OM5, LazrSPEED® wideband

Environmental Specifications

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

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

Storage Temperature $-40 \,^{\circ}\text{C}$ to $+75 \,^{\circ}\text{C}$ (-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 OFNP (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 $-2 \,^{\circ}\text{C} \mid 28.4 \,^{\circ}\text{F}$

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

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

Temperature Cycle -40 °C to +70 °C (-40 °F to +158 °F)

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

Packaging and Weights

Cable weight 92 kg/km | 61.821 lb/kft

Included Products

CS-5G-LT - LazrSPEED® OM5 WideBand Multimode

Fiber



* Footnotes

Operating Temperature Specification applicable to non-terminated bulk fiber cable

LazrSPEED® OM5 WideBand Multimode Fiber

LazrSPEED® 550

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

Proof Tensile Stress 100,000 psi (0.69 GPa)

Mechanical Specifications

Core/Clad Offset, maximum

 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

1 µm

Coating Strip Force, maximum $4.5 \, \text{N}$ | $1.012 \, \text{lbf}$ Coating Strip Force, minimum $0.9 \, \text{N}$ | $0.202 \, \text{lbf}$

Dynamic Fatigue Parameter, minimum 18

Optical Specifications

Numerical Aperture 0.2

COMMSCOPE®

CS-5G-LT

Numerical Aperture Tolerance ±0.010

Point Defects, maximum 0.15 dB

Zero Dispersion Slope, maximum (0M5) -412/(840(1-(λ0/840)^4)) ps/[km-nm-nm]

Zero Dispersion Wavelength, maximum1328 nmZero Dispersion Wavelength, minimum1297 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

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