760243178 | D-144-LN-5G-F12NS



Fiber OSP cable, LazrSPEED® Single Jacket All-Dielectric, 144 fiber, Gel-Free, Stranded Loose Tube, Multimode OM5, Feet jacket marking, Black jacket color

Product Classification

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America | North

America

Portfolio CommScope®

Product Type Fiber OSP cable

Product Series D-LN

General Specifications

Cable Type Stranded loose tube

Construction Type Non-armored

Subunit TypeGel-freeJacket ColorBlack

Jacket Marking Feet

Subunit, quantity 12
Fibers per Subunit, quantity 12

Total Fiber Count 144

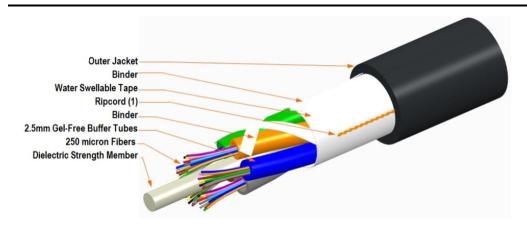
Dimensions

Buffer Tube/Subunit Diameter2.5 mm0.098 inDiameter Over Jacket15.7 mm0.618 in

Representative Image



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Material Specifications

Jacket Material PE

Mechanical Specifications

Minimum Bend Radius, loaded236 mm | 9.291 inMinimum Bend Radius, unloaded157 mm | 6.181 inTensile Load, long term, maximum800 N | 179.847 lbfTensile Load, short term, maximum2700 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 533 m | 1,748.688 ft

Optical Specifications

Fiber Type OM5, LazrSPEED® wideband | OM5, LazrSPEED® wideband



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Environmental Specifications

Installation temperature

-30 °C to +70 °C (-22 °F to +158 °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-87-640 | EN 187105

Environmental Space Aerial, lashed | Buried

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 °C to +85 °C (-40 °F to +185 °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 °C to +70 °C (-40 °F to +158 °F)

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

Packaging and Weights

Cable weight 153 kg/km | 102.811 lb/kft

Regulatory Compliance/Certifications

Agency Classification

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

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** ±0.8 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 Core/Clad Offset, maximum 1 µm

Proof Test 689.476 N/mm² | 100000 psi

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

Dynamic Fatigue Parameter, minimum 18

COMMSCOPE®

CS-5G-LT

Optical Specifications

Numerical Aperture 0.2

Numerical Aperture Tolerance±0.010Point Defects, maximum0.15 dB

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

Zero Dispersion Wavelength, maximum 1328 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 | 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-568.3-D wideband multimode fiber cable | IEC 60793-2-10,

edition 6, model A1a.4 | ISO 11801-1 cabled optical fiber performance

category OM5 | TIA-492AAAE (OM5)

Environmental Specifications

Heat Aging, maximum 0.10 dB/km @ 85 °C

Temperature Dependence, maximum0.1 dB/kmTemperature Humidity Cycling, maximum0.1 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)

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CS-5G-LT

up to 95% relative humidity

