## P-144-DS-5M-FMU

Fiber indoor cable, LazrSPEED® Plenum Distribution, 144-Fiber Multi-Unit with 12-Fiber Subunits, Multimode OM2+, Gel-free, Feet jacket marking

#### 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 TypeDistributionConstruction TypeNon-armored

Fiber Type, quantity 144

Fibers per Subunit, quantity 12

Jacket Marking Feet

Subunit Type Gel-free

Subunit, quantity 12

Total Fiber Count 144

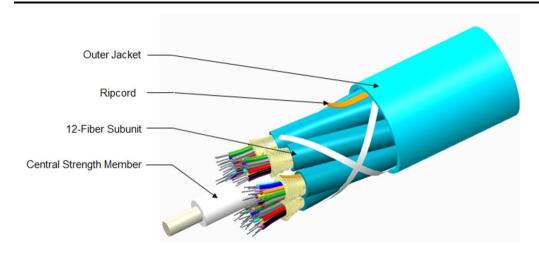
Dimensions

Buffer Tube/Subunit Diameter5.77 mm | 0.227 inDiameter Over Jacket24.41 mm | 0.961 in

Representative Image



# P-144-DS-5M-FMU



## Mechanical Specifications

Minimum Bend Radius, loaded 366 mm | 14.409 in

Minimum Bend Radius, unloaded 244 mm | 9.606 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** 77 m | 252.625 ft

Optical Specifications

**Fiber Type** OM2+, LazrSPEED® 150 | OM2+, LazrSPEED® 150

**Environmental Specifications** 

**Installation temperature** 0 °C to +70 °C (+32 °F to +158 °F)

**COMMSCOPE®** 

## P-144-DS-5M-FMU

**Operating Temperature**  $-20 \,^{\circ}\text{C to } +70 \,^{\circ}\text{C } (-4 \,^{\circ}\text{F to } +158 \,^{\circ}\text{F})$ 

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

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 262

**Environmental Test Specifications** 

**Heat Age**  $-20 \, ^{\circ}\text{C} \text{ to } +85 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F to } +185 \, ^{\circ}\text{F})$ 

Heat Age Test Method IEC 60794-1 F9

**Low High Bend**  $-20 \, ^{\circ}\text{C} \text{ to } +70 \, ^{\circ}\text{C} \, (-4 \, ^{\circ}\text{F to } +158 \, ^{\circ}\text{F})$ 

**Low High Bend Test Method** FOTP-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** 531 kg/km | 356.816 lb/kft

### Regulatory Compliance/Certifications

#### Agency Classification

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



#### Included Products

CS-5M-TB – LazrSPEED® 150 OM2+ Bend-Insensitive Multimode

Fiber

#### \* Footnotes

**Operating Temperature** Specification applicable to non-terminated bulk fiber cable



#### LazrSPEED® 150 OM2+ Bend-Insensitive Multimode Fiber

### LazrSPFFD® 150

#### **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)**  $254 \, \mu m$ **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  $1.5 \, \mu m$ 

**Proof Test** 689.476 N/mm<sup>2</sup> | 100000 psi

Tight Buffer Diameter 900  $\mu m$ Tight Buffer Diameter Tolerance  $\pm 40 \ \mu m$ 

## Mechanical Specifications

 Macrobending, 15 mm mandrel, 2 turns
 0.20 dB @ 850 nm
 | 0.50 dB @ 1,300 nm

 Macrobending, 30 mm mandrel, 2 turns
 0.10 dB @ 850 nm
 | 0.30 dB @ 1,300 nm

Coating Strip Force, maximum $8.9 \, \text{N}$  $2.001 \, \text{lbf}$ Coating Strip Force, minimum $1.3 \, \text{N}$  $0.292 \, \text{lbf}$ 

**COMMSCOPE®** 

## CS-5M-TB

**Dynamic Fatigue Parameter, minimum** 18

Optical Specifications

Numerical Aperture 0.2

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** 600 m @ 1,300 nm | 800 m @ 850 nm

**10 Gbps Ethernet Distance** 150 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
 500 MHz-km @ 1,300 nm | 950 MHz-km @ 850 nm

 Bandwidth, OFL, minimum
 500 MHz-km @ 1,300 nm | 700 MHz-km @ 850 nm

 Differential Mode Delay
 0.70 ps/m @ 850 nm | 0.88 ps/m @ 1,300 nm

**Index of Refraction** 1.479 @ 1,300 nm | 1.483 @ 850 nm

Standards Compliance TIA-492AAAB (OM2+)

**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

COMMSC PE°

# CS-5M-TB

**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

