# 760249685 | N-144-MZ-5G-F12AQ/20T/B2



Fiber indoor cable, LazrSPEED® Riser/LSZH rated, MPO Trunk, interlocking aluminum armored, Multimode OM5, 144 fiber multi-unit with 12 fiber subunits, Feet jacket marking, Lime-green jacket color, B2ca flame rating

## **Product Classification**

Regional Availability

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

America

 Portfolio
 CommScope®

 Product Type
 Fiber indoor cable

**Product Series** N-MZ

General Specifications

Armor Type Interlocking aluminum

Cable Type MPO trunk cable

Construction TypeArmoredSubunit TypeGel-free

**Jacket Color** Lime green

Jacket MarkingFeetSubunit, quantity12Fibers per Subunit, quantity12Total Fiber Count144

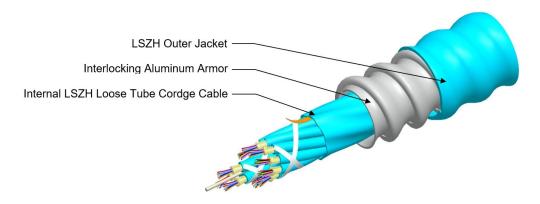
Dimensions

Buffer Tube/Subunit Diameter2 mm | 0.079 inDiameter Over Armor18.4 mm | 0.724 inDiameter Over Jacket20.4 mm | 0.803 in

Representative Image



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# Mechanical Specifications

Minimum Bend Radius, loaded307 mm1 12.087 inMinimum Bend Radius, unloaded204 mm8.032 inTensile Load, long term, maximum200 N | 44.962 lbfTensile Load, short term, maximum667 N | 149.948 lbf

 Compression
 85 N/mm | 485.363 lb/in

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

Flex 300 cycles

Flex 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 58 m | 190.289 ft

Optical Specifications

Fiber Type OM5, LazrSPEED® wideband

# **Environmental Specifications**

Installation temperature  $0 \, ^{\circ}\text{C} \, \text{to} + 60 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F} \, \text{to} + 140 \, ^{\circ}\text{F})$ Operating Temperature  $0 \, ^{\circ}\text{C} \, \text{to} + 70 \, ^{\circ}\text{C} \, (+32 \, ^{\circ}\text{F} \, \text{to} + 158 \, ^{\circ}\text{F})$ Storage Temperature  $-40 \, ^{\circ}\text{C} \, \text{to} + 70 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F} \, \text{to} + 158 \, ^{\circ}\text{F})$ 

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Cable Qualification Standards ANSI/ICEA S-83-596 | Telcordia GR-409

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd1EN50575 CPR Cable EuroClass Acidity Ratinga1

Environmental Space Low Smoke Zero Halogen (LSZH) | Riser

Flame Test Listing NEC OFCR-ST1 (ETL) and c(ETL)

Flame Test Method | IEC 60332-3 | IEC 60754-2 | IEC 61034-2 | UL 1666 | UL 1685

**Environmental Test Specifications** 

Heat Age 0 °C to +85 °C (+32 °F to +185 °F)

Heat Age Test Method IEC 60794-1 F9

Low High Bend0 °C to +70 °C (+32 °F to +158 °F)Low High Bend Test MethodFOTP-37 | IEC 60794-1 E11

**Temperature Cycle**  $0 \,^{\circ}\text{C to } +70 \,^{\circ}\text{C (+32 °F to } +158 \,^{\circ}\text{F)}$ 

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

Packaging and Weights

**Cable weight** 351 kg/km | 235.861 lb/kft

#### Included Products

CS-5G-MP – LazrSPEED® OM5 WideBand Multimode Fiber

#### \* Footnotes

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



# LazrSPEED®

#### LazrSPFFD® OM5 WideBand 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** 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 Test** 689.476 N/mm<sup>2</sup> | 100000 psi

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

**Dynamic Fatigue Parameter, minimum** 18

# Optical Specifications

 Numerical Aperture
 0.2

 Numerical Aperture Tolerance
 ±0.010

 Point Defects, maximum
 0.15 dB

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# CS-5G-MP

**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-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, 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

COMMSCOPE®