# 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 Type	Armored
Subunit Type	Gel-free
Jacket Color	Lime green
Jacket Marking	Feet
Subunit, quantity	12
Fibers per Subunit, quantity	12
Total Fiber Count	144
Dimensions	
Buffer Tube/Subunit Diameter	2 mm   0.079 in
Diameter Over Armor	18.4 mm   0.724 in
Diameter Over Jacket	20.4 mm   0.803 in

## Representative Image

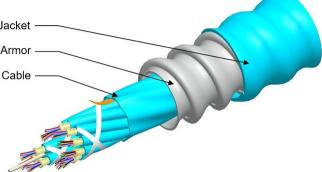
Page 1 of 5

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: December 4, 2024



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

LSZH Outer Jacket — Interlocking Aluminum Armor — Internal LSZH Loose Tube Cordge Cable —



## Mechanical Specifications

Minimum Bend Radius, loaded	307 mm   12.087 in
Minimum Bend Radius, unloaded	204 mm   8.032 in
Tensile Load, long term, maximum	200 N   44.962 lbf
Tensile Load, short term, maximum	667 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 °C to +50 °C (+32 °F to +122 °F)
Operating Temperature	0 °C to +60 °C (+32 °F to +140 °F)
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)

Page 2 of 5

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: December 4, 2024



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

Cable Qualification Standards	ANSI/ICEA S-83-596   Telcordia GR-409
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s1a
EN50575 CPR Cable EuroClass Droplets Rating	d1
EN50575 CPR Cable EuroClass Acidity Rating	al
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 Bend	0 °C to +50 °C (+32 °F to +122 °F)
Low High Bend Test Method	FOTP-37   IEC 60794-1 E11
Temperature Cycle	0 °C to +60 °C (+32 °F to +140 °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

Page 3 of 5

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: December 4, 2024



# LazrSPEED®

#### LazrSPEED® 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
Core/Clad Offset, maximum	1 µm
Proof Test	689.476 N/mm²   100000 psi
Mechanical Specifications	

#### ł

**Numerical Aperture** 

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 N   1.012 lbf
Coating Strip Force, minimum	0.9 N   0.202 lbf
Dynamic Fatigue Parameter, minimum	18
Optical Specifications	

Page 4 of 5

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: October 22, 2024

0.2



# CS-5G-MP

Numerical Aperture Tolerance	±0.010
Point Defects, maximum	0.15 dB
Zero Dispersion Slope, maximum (OM5)	-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-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

Page 5 of 5

©2024 CommScope, Inc. All rights reserved. CommScope and the CommScope logo are registered trademarks of CommScope and/or its affiliates in the U.S. and other countries. For additional trademark information see https://www.commscope.com/trademarks. All product names, trademarks and registered trademarks are property of their respective owners. Revised: October 22, 2024

