

MLX Coaxial Cable >

Featuring an innovative design that improves flexibility and reduces signal loss over long distances, MLX Coaxial Cable uses foam dielectric to increase velocity of propagation. This cable incorporates superior shielding to better withstand electromagnetic interference (EMI), providing enhanced signal reliability and clarity.



ADVANTAGES AND FEATURES

Improves system performance over long distances

Precision engineering enhances reliability and signal integrity for high-performance applications.

Enables flexible routing in space-constrained installations

A single-time bend radius of 2.5 times the cable diameter enables use in tight spaces and makes installation work easier.

Resists EMI and RF leakage

Enhanced shielding helps withstand high levels of EMI and RFI in high-density systems and environments subject to high radio traffic.

Frequency	Rated up to 8 GHz
Impedance	50 Ohms
Shielding Effectiveness	>90 dB
Cable Options	MLX 100, MLX 195, MLX 200, MLX 240, MLX 400, MLX 500, MLX 600
Operating Temperatures	-40 to +85°C

Delivers long-term reliability for outdoor applications

The rugged design is resistant to ultraviolet light, moisture and temperature extremes, making it ideal for either indoor or outdoor use in harsh environmental conditions.

Provides cost-effective connectivity for high-performance systems

The design provides a balanced solution that offers the flexibility and affordability of traditional coaxial cable but with the high performance of corrugated cable.

MARKETS AND APPLICATIONS

Wireless Infrastructure

- Cellular network base stations
- Cellular antennas and repeaters
- Emergency service communication systems
- RFID reader-to-antenna connections
- Two-way radio systems
- Wi-Fi system access points

Telecommunications

- Distributed antenna systems
- Public safety networks in buildings and tunnels
- Radio transmitters, receivers and antennas
- Satellite dish connections

Military/Aerospace

- Avionics
- Camera systems
- Ground-to-air communication systems
- Imaging system sensors and control units
- Navigation systems
- Shipboard systems
- Tactical radio communication systems



Cellular Network Base Stations



Radio Transmitters, Receivers and Antennas



Imaging System Sensors and Control Units

MLX Coaxial Cable

SPECIFICATIONS

Reference Information

Compatible With: DIN 7/16, 4.3-10, Type N, 2.2-5, TNC, BNC, Type F, FAKRA, BMA, SMB, SMA

Designed In: Inches

Packaging: Spool

Spool Size and Weight:

MLX 100—12 by 8 by 4" (30.5 by 20.3 by 10.2cm), 30 lbs (13.6kg)

MLX 195, MLX 200, MLX 240—16 by 8 by 4" (40.6 by 20.3 by 10.2cm), 42 to 51 lbs (19.0 to 23.1kg)

MLX 400, MLX 500—20 by 16 by 8" (50.8 by 40.6 by 20.3cm), 82 to 83 lbs (37.2 to 37.6kg)

MLX 600—24 by 17 by 12" (61.0 by 43.2 by 30.5cm), 84 lbs (38.1kg)

RoHS: Yes

Electrical

Frequency: Up to 8 GHz

Impedance: 50 Ohms

Shielding Effectiveness: >90 dB

Cutoff Frequency: 10.3 to 90 GHz

Dielectric Constant: 1.32 to 2.3

Velocity of Propagation: 66 to 85%

Nominal Capacitance: 23.4 to 30.8pF/ft

Nominal Inductance: 0.058 to 0.077μH/ft

Mechanical

Outside Diameter: 0.110" (2.80mm), 0.195" (4.95mm), 0.200" (5.08mm), 0.240" (6.10mm), 0.405" (10.29mm), 0.500" (12.70mm), 0.590" (15.00mm)

Bend Radius (min. installed): 2.5 times diameter

Bend Radius (min. repeated): 10 times diameter

Weight: 0.009 to 0.137 lbs/ft (0.013 to 0.203 kg/m)

Tensile Strength: 15 to 350 lbs (6.8 to 158.8kg)

Flat Plate Crush: 10 to 60 lbs/in (1.75 to 10.5 N/mm)

Physical

Cable Type: Double-shield coaxial

Signal Conductor: Copper, copper-clad steel or copper-clad aluminum

Dielectric: MLX 100—solid polyethylene

All other sizes—foam polyethylene

First Shield: Aluminum/polyester tape

Second Shield: Tinned copper braid

Jacket: Polyvinyl chloride or polyethylene

Operating Temperatures: -40 to +85°C

Storage Temperatures: -70 to +85°C

www.molex.com