

## Low Loss Flexible LMR-400-FR Fire Rated Rated Coax Cable Double Shielded with Black FRPE Jacket, By The Foot



#### LMR-400-FR-LC

#### **Times Microwave Systems Coax Cable Specification**

#### Configuration

- · Low Loss, Outdoor Flexible Cable
- 2 Shield(s)

#### **Features**

- · FRPE Jacket
- Max Operating Temperature +85°C
- · Min Install Bend Radius of 1 inches

#### **Applications**

- · In-Building Riser Runs
- · Antenna Installations
- · RF Test Systems

- · Phase Velocity 84% VoP
- Max Operating Frequency of 8 GHz
- · CMR Fire Rated Coax
- · General Purpose RF Interconnect
- · Laboratory Applications

#### **Description**

LMR-400-FR-LC coax cable from L-com is only one of a large number of radio frequency coaxial cable types specifically stocked to be ready for quick shipment. L-com LMR-400-FR-LC coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss flexible 50 Ohm coax cable LMR-400-FR-LC is constructed with a 0.405 inch diameter and Black FRPE jacket.

LMR-400-FR-LC flexible 50 Ohm coax cable with PVC jacket is rated for a 8 GHz maximum operating frequency. This 50 Ohm 0.405 inch diameter and low loss flexible coax cable is built with a double shield count and RF shielding of 90 dB. L-com LMR-400-FR-LC coax is constructed with Foam PE dielectric and a maximum operating temperature of +85 degrees C. Times Microwave LMR-400-FR-LC coax cable specs for this wire properties can be found on its RF coax cable LMR-400-FR-LC datasheet.

LMR-400-FR-LC cable is part of more than one million RF, microwave parts in stock at L-com. This Times Microwave low loss LMR-400-FR-LC coax cable is ready to buy and can be shipped worldwide. L-com also maintains a wide selection of other radio frequency coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave components.

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		8	GHz
Impedance		50		Ohms
Velocity of Propagation		84		%
Time Delay		1.2 [3.94]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			2,500	Vdc
Jacket Spark			8,000	Vrms
Inner Conductor DC Resistance			1.39	Ohms/1000ft
Outer Conductor DC Resistance			1.65	Ohms/1000ft
Nominal Capacitance		23.9 [78.41]		pF/ft [pF/m]

<sup>\*</sup> LMR™ is a trademark of Times Microwave Systems.



# Low Loss Flexible LMR-400-FR Fire Rated Rated Coax Cable Double Shielded with Black FRPE Jacket, By The Foot



#### LMR-400-FR-LC

#### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Nominal Inductance		0.06 [0.2]		uH/ft [uH/m]
Input Power (Peak)			16	kWatts

#### **Performance by Frequency Band**

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz
Attenuation, Typ	0.9	1.5	1.9	2.7	3.9	dB/100ft
	2.95	4.92	6.23	8.86	12.8	dB/100m
Input Power (CW), Max	2,570	1,470	1,200	830	580	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	5.1	5.7	6	6.8	10.8	dB/100ft
	16.73	18.7	19.69	22.31	35.43	dB/100m
Input Power (CW), Max	440	400	370	330	210	Watts

#### **Mechanical Specifications**

Diameter Weight

Min. Bend Radius (Installation)

Min. Bend Radius (Repeated) Bending Moment

Tensile Strength
Flat Plate Crush

0.405 in [10.29 mm]

0.068 lbs/ft [0.1 kg/m] 1 in [25.4 mm]

4 in [101.6 mm]

0.5 lbs-ft [0.68 N-m] 160 lbs [72.57 kg]

40 lbs/in [0.71 kg/mm]

#### **Construction Specifications**

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.108 in [2.74 mm]
Conductor Type	Solid	
Dielectric	Foam PE	0.285 in [7.24 mm]
First Shield	Aluminum Tape	
Second Shield	Tinned Copper	
Jacket	FRPE, Black	0.405 in [10.29 mm]

#### **Environmental Specifications**

Temperature

Operating Range -40 to +85 deg C



### Low Loss Flexible LMR-400-FR Fire Rated Rated Coax Cable Double Shielded with Black FRPE Jacket, By The Foot



#### LMR-400-FR-LC

Installation Range Storage Range -40 to +85 deg C

-70 to +85 deg C

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

Low Loss Flexible LMR-400-FR Fire Rated Rated Coax Cable Double Shielded with Black FRPE Jacket, By The Foot from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

URL: https://www.l-com.com/low-loss-flexible-Imr-400-fr-fire-rated-coax-cable-double-shielded-black-frpe-jacket-by-the-foot-Imr-400-fr-lc-p.aspx

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

### LMR-400-FR-LC CAD Drawing

Low Loss Flexible LMR-400-FR Fire Rated Rated Coax Cable Double Shielded with Black FRPE Jacket, By The Foot

