

FMC00160-48 DATA SHEET

N Male to RA N Male Cable LMR-400 Coax in 48 Inch

The type N male to RA type N male 48 inch cable using LMR-400 coax, part number FMC00160-48, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00160-48 type N male to type N male cable assembly operates to 6 GHz. The right angle type N interface on the LMR-400 cable allows for easier connections in tight spaces. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Min	Т	ур	Max	ι	Jnits	
Frequency Range	DC			6		GHz	
VSWR				1.4:1			
Velocity of Propagation		8	35			%	
RF Shielding	90					dB	
Group Delay		1.2	[3.94]		ns/f	t [ns/m	n]
Capacitance		23.9	[78.41]		pF/f	t [pF/m	n]
Inductance		0.06	[0.2]		uH/f	t [uH/n	n]
DC Resistance Inner Conductor		1.39 [4.56]		Ω/1000ft [Ω/Km]			
DC Resistance Outer Cor	nductor	1.65	[5.41]		Ω/100	Oft [Ω/k	(m]
Jacket Spark				8,000	١	/rms	

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	6	GHz
Insertion Loss (Typ.)	0.38	0.41	0.46	0.57	0.74	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of $0.1~\mathrm{dB}$ for the straight connector and $0.2~\mathrm{dB}$ for the right angle connector.

Mechanical Specifications

Cable Assembly

Length* Diameter 48 in [121.92 cm] 0.827 in [21.01 mm]



Configuration:

- N Male
- N Male Right Angle
- LMR-400

Features:

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket

Applications:

- General Purpose
- · Laboratory Use
- Antenna Installations
- Land Mobile Radio & Other Communication Systems
- Cellular & Wi-Fi Systems

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Cable

Cable Type LMR-400 Impedance 50 Ohms Inner Conductor Type Solid

Copper Clad Aluminum Inner Conductor Material and Plating Dielectric Type

PE (F) 2

Number of Shields

Shield Layer 1 Aluminum Tape Shield Layer 2 Tinned Copper Braid

Jacket Material PE, Black

Jacket Diameter 0.405 in [10.29 mm]

One Time Minimum Bend Radius

Repeated Minimum Bend Radius

Bending Moment Flat Plate Crush

Tensile Strength

1 in [25.4 mm]

4 in [101.6 mm] 0.5 lbs-ft [0.68 N-m] 40 lbs/in [0.71 Kg/mm]

160 lbs [72.57 Kg]

Connectors

Description	Connector	1 Connector 2
Туре	N Male	N Male
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Spec.	3 µin minimu	ım 1.27 µm minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Nicke	el Brass, Tri-Metal
Body Plating Spec.	100 µin minim	ium 2 μm minimum
Coupling Nut Material & Pla	ting Brass, Nicke	el Brass, Tri-Metal
Coupling Nut Plating Spec.	100 µin minim	ium 2 µm minimum
Torque		44 in-lbs 4.97 Nm

Mechanical Specification Notes:

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C Storage Range -70 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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^{*}All cable assemblies have a length tolerance of 1.5% or \pm 3/8", whichever is greater.





How to Order

Part Number Configuration:	FMC00160	- xx	uu	
				cm = Centimeters <blank> = Inches Length</blank>

Example: FMC00160-12 = 12 inches long cable

FMC00160-100cm = 100 cm long cable

N Male to RA N Male Cable LMR-400 Coax in 48 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: N Male to RA N Male Cable LMR-400 Coax in 48 Inch FMC00160-48

URL: https://www.fairviewmicrowave.com/n-male-ra-n-male-cable-lmr400-coax-fmc00160-p.aspx

The information contained in 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 implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

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