

N Male to BNC Male Cable LMR-100 Coax in 48 Inch

The type N male to BNC male 48 inch cable using LMR-100 coax, part number FMC00253-48, from Fairview Microwave is in-stock and ships same day. This Fairview type N to BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-100A coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00253-48 type N male to BNC male cable assembly operates to 5.8 GHz. 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	Typ	Max	Units
Frequency Range	DC		5.8	GHz
VSWR		1:1	1.25:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω /1000ft [Ω /Km]
Jacket Spark			2,000	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.6	0.86	1.16	1.79	2.76	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 dB per connector.

Mechanical Specifications

Cable Assembly

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

Cable

Cable Type LMR-100A
 Impedance 50 Ohms



Configuration:

- N Male
- BNC Male
- LMR-100A

Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

Applications:

- General Purpose
- Laboratory Use

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Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

Connectors

Description	Connector 1	Connector 2
Type	N Male	BNC Male
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	
Contact Material & Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Spec.		50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Nickel	Brass, Nickel
Body Plating Spec.		100 µin minimum
Coupling Nut Material & Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Spec.		100 µin minimum

Mechanical Specification Notes:

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

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)

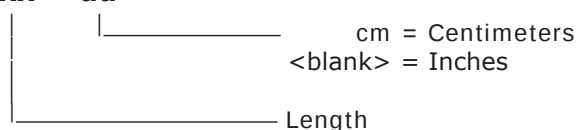
Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00253 - xx uu



Example: FMC00253-12 = 12 inches long cable
 FMC00253-100cm = 100 cm long cable

N Male to BNC Male Cable LMR-100 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.

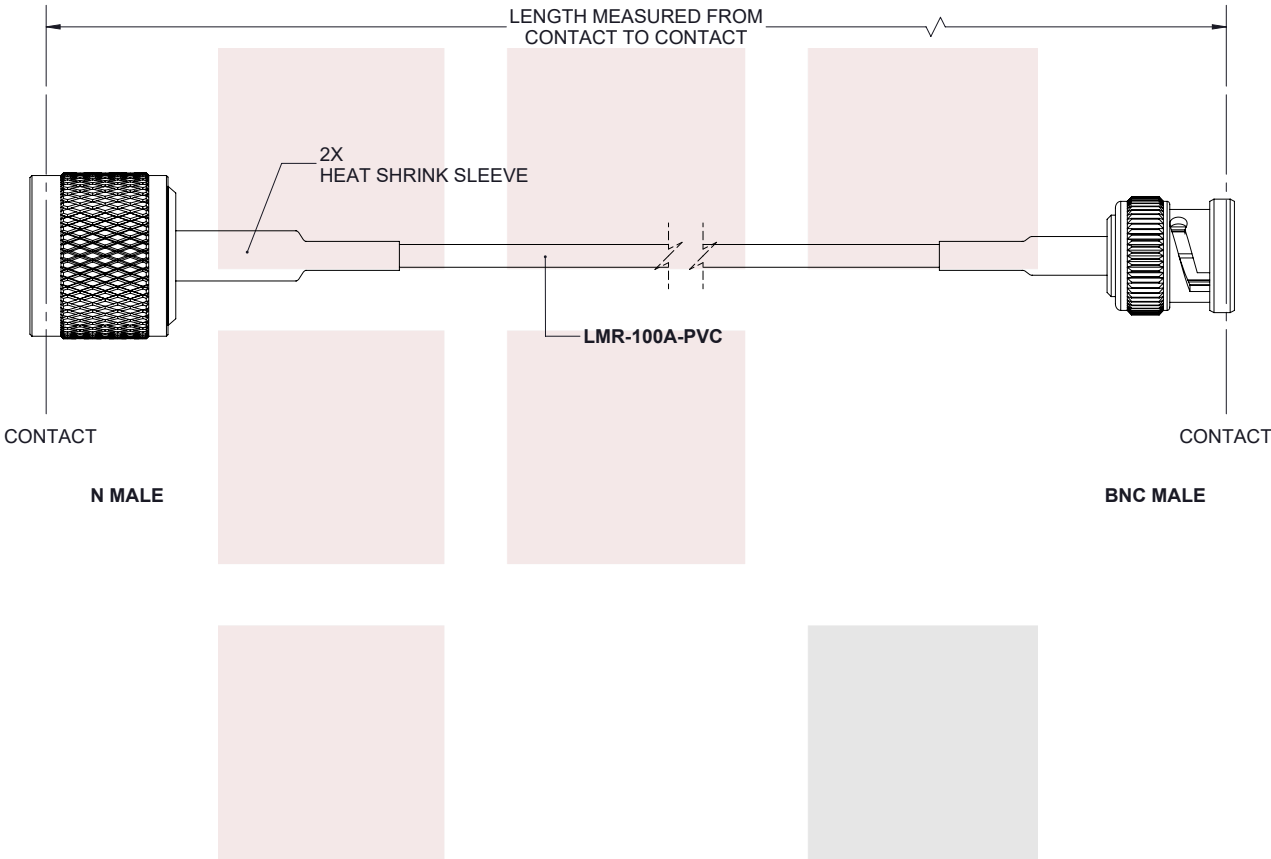
Click the following link to obtain additional part information: [N Male to BNC Male Cable LMR-100 Coax in 48 Inch FMC00253-48](https://www.fairviewmicrowave.com/n-male-bnc-male-cable-lmr100-coax-fmc00253-48-p.aspx)

URL: <https://www.fairviewmicrowave.com/n-male-bnc-male-cable-lmr100-coax-fmc00253-48-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.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/18/2020	S.ELLIS



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Fairview Microwave an INFINITE brand		UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		THIRD-ANGLE PROJECTION 	
TITLE N Male to BNC Male Cable LMR-100 Coax in 48 Inch		TOLERANCES:		CABLE LENGTH (L) TOLERANCES:	
		.X = ±.2 [.51] FRACTIONS L ≤ 12 [305] = +1 [25] / -0 .XX = ±.02 [.51] ± 1/32 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 .XXX = ±.005 [.13] ANGLES ± 1° 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 300 [7620] < L = +5%L / -0		THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		SHEET 1 OF 1		SCALE N/A	
SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMC00253	REV A	

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