

## N Male to BNC Male Cable LMR-100 Coax in 50 CM

The type N male to BNC male 50 cm cable using LMR-100 coax, part number FMC00253-50CM, 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 FMC00253-50CM 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.)	0.38	0.47	0.59	0.85	1.25	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*	19.68 in [499.87 mm]
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 $\mu$ in minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Nickel	Brass, Nickel
Body Plating Spec.		100 $\mu$ in minimum
Coupling Nut Material & Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Spec.		100 $\mu$ in 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**

cm = Centimeters  
 <blank> = Inches

Length

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

N Male to BNC Male Cable LMR-100 Coax in 50 CM 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.

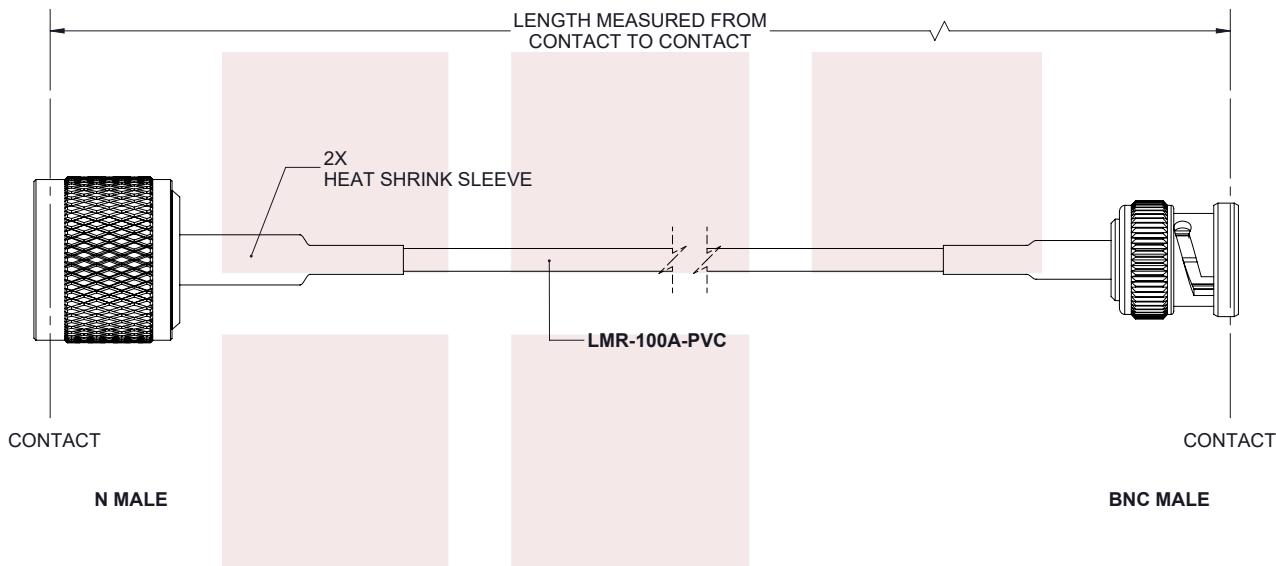
Click the following link to obtain additional part information: [N Male to BNC Male Cable LMR-100 Coax in 50 CM FMC00253-50CM](#)

URL: <https://www.fairviewmicrowave.com/n-male-bnc-male-cable-lmr100-coax-fmc00253-50cm-p.aspx>

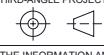
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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/18/2020	S.ELLIS



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	TOLERANCES:	CABLE LENGTH (L) TOLERANCES:	
TITLE	.X = ± 2 [5.08] FRACTIONS .XX = ± .02 [.51] ± 1/32 .XXX = ± .005 [.13] ANGLES ± 1°		L ≤ 12 [305] = +1 [25] / -0 12 [305] < L ≤ 60 [1524] = +2 [51] / -0 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 300 [7620] < L = +5%L / -0
N Male to BNC Male Cable LMR-100 Coax in 50 CM	ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.		SCALE N/A
	SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG
		ITEM NO. FMC00253	REV A

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