



N Female Bulkhead to BNC Male Cable LMR-100 Coax

The type N female bulkhead to BNC male cable using LMR-100 coax, part number FMC00252, from Fairview Microwave is in-stock and ships same day. This Fairview type N to BNC cable assembly has a female 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 FMC00252 type N female to BNC male cable assembly operates to 5.8 GHz. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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 | T | ур | Max | U | Inits | |
|-------------------------|---------|--------|--------|-------|-------|----------|-----------|
| Frequency Range | DC | | | 5.8 | | GHz | |
| VSWR | | 1 | :1 | 1.5:1 | | | |
| Velocity of Propagation | | É | 6 | | | % | |
| RF Shielding | 90 | | | | | dB | |
| Group Delay | | 1.54 | [5.05] | | ns/fl | t [ns/m | <u>1]</u> |
| Capacitance | | 30.8 [| 101.05 |] | pF/fl | [pF/m | <u>1]</u> |
| Inductance | | 0.077 | [0.25] | | uH/fl | t [uH/n | n] |
| DC Resistance Inner Cor | nductor | 81 [2 | 65.75] | | Ω/100 | Oft [Ω/k | (m) |
| DC Resistance Outer Cor | nductor | 9.5 [| 31.17] | | Ω/100 | Oft [Ω/k | (m] |
| Jacket Spark | | | | 2,000 | \ | /rms | |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.25 | 0.5 | 1 | 2.5 | 5.8 | GHz |
| Insertion Loss (Typ.) | 0.11 | 0.16 | 0.24 | 0.39 | 0.64 | dB/ft |
| | 0.36 | 0.52 | 0.79 | 1.28 | 2.1 | dB/m |

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.1\ dB$ per connector.

Mechanical Specifications

Cable Assembly

Diameter

0.807 in [20.5 mm]



Configuration:

- N Female Bulkhead
- 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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Cable

Cable TypeLMR-100AImpedance50 OhmsInner Conductor TypeSolid

Inner Conductor Material and Plating Copper Clad Steel Dielectric Type PE

Dielectric Type Pf 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 | Connecto | or 1 | Connect | Connector 2 | |
|-----------------------------|----------------|-----------------------|------------|-------------|--|
| Туре | N Femal | le | BNC Ma | BNC Male | |
| Mount Method | Bulkhea | ad | | | |
| Specification | MIL-STD-3 | 48A | MIL-STD- | 348A | |
| Impedance | 50 Ohm | ıs | 50 Ohms | | |
| Contact Material & Plating | Beryllium Copp | oer, Gold Brass, Gold | | old | |
| Contact Plating Spec. | 30 µin minir | mum | 50 µin min | imum | |
| Dielectric Type | PTFE | PTFE | | | |
| Outer Cond Material & Plati | ng Brass, Nic | kel | | | |
| Outer Cond Plating Spec. | 100 µin mini | nimum | | | |
| Body Material & Plating | | Brass, Nickel | | | |
| Body Plating Spec. | | 100 µin minimum | | | |
| Coupling Nut Material & Pla | iting | Brass, Nickel | | | |
| Coupling Nut Plating Spec. | | 100 µin minimum | | | |
| Hex Size | 3/4 incl | h | | | |
| Mechanical Specification | n Nahaa. | | | | |

Mechanical Specification Notes:

Environmental Specifications

Temperature

Operating Range -40 to +85 deg CStorage 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: | FMC00252 · | - xx | uu | |
|----------------------------|------------|------|----|--|
| | | | | cm = Centimeters <blank> = Inches</blank> |
| | | | | ——— Length |

Example: FMC00252-12 = 12 inches long cable

FMC00252-100cm = 100 cm long cable

N Female Bulkhead to BNC Male Cable LMR-100 Coax 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 Female Bulkhead to BNC Male Cable LMR-100 Coax FMC00252

URL: https://www.fairviewmicrowave.com/n-female-bnc-male-cable-lmr100-coax-fmc00252-p.aspx

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