

## Low Loss N Male to N Male Cable LMR-400-DB Coax

### FMC00032



#### Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: LMR-400-DB
- Coax Flex Type: Flexible

#### Features

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

#### Applications

- General Purpose
- Laboratory Use

#### Description

The type N male to type N male cable using LMR-400-DB coax, part number FMC00032, 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-DB coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00032 type N male to type N male cable assembly operates to 6 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                   | Minimum | Typical      | Maximum | Units                 |
|-------------------------------|---------|--------------|---------|-----------------------|
| Frequency Range               | DC      |              | 6       | GHz                   |
| VSWR                          |         |              | 1.4:1   |                       |
| Velocity of Propagation       |         | 85           |         | %                     |
| RF Shielding                  | 90      |              |         | dB                    |
| Group Delay                   |         | 1.2 [3.94]   |         | ns/ft [ns/m]          |
| Capacitance                   |         | 23.9 [78.41] |         | pF/ft [pF/m]          |
| Inductance                    |         | 0.06 [0.2]   |         | uH/ft [uH/m]          |
| DC Resistance Inner Conductor |         | 1.39 [4.56]  |         | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor |         | 1.65 [5.41]  |         | Ohms/1000ft [Ohms/Km] |
| Jacket Spark                  |         |              | 8,000   | Vrms                  |

#### Specifications by Frequency

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| Part Number | Length                   | Description           | F1   | F2   | F3   | F4   | F5   | Units | Weight (lbs) |
|-------------|--------------------------|-----------------------|------|------|------|------|------|-------|--------------|
|             |                          | Frequency             | 250  | 500  | 1000 | 2500 | 5800 | MHz   |              |
| FMC00032    | Custom Lengths Available | Insertion Loss (Typ.) | 0.02 | 0.03 | 0.04 | 0.07 | 0.11 | dB/ft |              |
|             |                          |                       | 0.07 | 0.1  | 0.14 | 0.23 | 0.36 | dB/m  |              |
| FMC00032-12 | 12 inch                  | Insertion Loss (Typ.) | 0.08 | 0.12 | 0.17 | 0.26 | 0.4  | dB    | 0.224        |
| FMC00032-24 | 24 inch                  | Insertion Loss (Typ.) | 0.1  | 0.15 | 0.21 | 0.33 | 0.51 | dB    | 0.295        |
| FMC00032-36 | 36 inch                  | Insertion Loss (Typ.) | 0.12 | 0.17 | 0.25 | 0.4  | 0.62 | dB    | 0.365        |
| FMC00032-48 | 48 inch                  | Insertion Loss (Typ.) | 0.14 | 0.2  | 0.29 | 0.47 | 0.73 | dB    | 0.435        |
| FMC00032-60 | 60 inch                  | Insertion Loss (Typ.) | 0.16 | 0.23 | 0.33 | 0.53 | 0.83 | dB    | 0.505        |

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.06 x sqrt(fGHz) dB  
 Loss due to Connector 2: 0.06 x sqrt(fGHz) dB  
 Base Weight: 0.224 pounds  
 Additional Weight per Inch: 0.00584 pounds

## Mechanical Specifications

### Cable Assembly

Weight 0.224 lbs [101.6 g]

### Cable

Cable Type LMR-400-DB  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper Clad Aluminum  
 Dielectric Type PE (F)  
 Number of Shields 2  
 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 1 in [25.4 mm]  
 Repeated Minimum Bend Radius 4 in [101.6 mm]  
 Bending Moment 0.5 lbs-ft [0.68 N-m]  
 Flat Plate Crush 40 lbs/in [0.71 Kg/mm]  
 Tensile Strength 160 lbs [72.57 Kg]

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### Connectors

| Description                        | Connector 1     | Connector 2     |
|------------------------------------|-----------------|-----------------|
| Type                               | N Male          | N Male          |
| Impedance                          | 50 Ohms         | 50 Ohms         |
| Configuration                      | Straight        | Straight        |
| Contact Material and Plating       | Brass, Gold     | Brass, Gold     |
| Contact Plating Specification      | 3 µin minimum   | 3 µin minimum   |
| Dielectric Type                    | PTFE            | PTFE            |
| Body Material and Plating          | Brass, Nickel   | Brass, Nickel   |
| Body Plating Specification         | 100 µin minimum | 100 µin minimum |
| Coupling Nut Material and Plating  | Brass, Nickel   | Brass, Nickel   |
| Coupling Nut Plating Specification | 100 µin minimum | 100 µin minimum |

### Environmental Specifications

Operating Range Temperature -40 to +85 deg C

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

## Low Loss N Male to N Male Cable LMR-400-DB Coax



### FMC00032

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**FMC00032**

**- xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches

Length

Base Number

Example: FMC00032-12 = 12 inches long cable  
FMC00032-100cm = 100 cm long cable

Low Loss N Male to N Male Cable LMR-400-DB Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Low Loss N Male to N Male Cable LMR-400-DB Coax FMC00032](#)

URL: <https://www.fairviewmicrowave.com/low-loss-n-male-to-n-male-cable-lmr-400-db-coax-fmc00032-p.aspx>

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FMC00032 CAD Drawing
Low Loss N Male to N Male Cable LMR-400-DB Coax

