

Low Loss BNC Male to N Male Weatherproof Cable LMR-400 Coax in 60 Inch with Times Microwave Components



FMCA100305/WP-60

Configuration

Connector 1: BNC MaleConnector 2: N MaleCable Type: LMR-400Coax Flex Type: Flexible

Features

- · Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- · 85% Phase Velocity
- · Double Shielded
- PF Jacket
- · Silicone Connector Boot
- IP68 Rated

Applications

General Purpose

· Laboratory Use

Description

The BNC male to type N male 60 inch cable using LMR-400 coax, part number FMCA100305/WP-60, from Fairview Microwave is in-stock and ships same day. This Fairview BNC 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 FMCA100305/WP-60 BNC 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
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]
Dielectric Withstanding Voltage (DC)			2,500	Vdc



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)	
		Frequency	250	500	1000	2500	6000	MHz	weight (ms)	
FMCA100305/WP	Custom Lengths	Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.108	dB/ft		
FIVICATUU3U3/WP	Available		0.07	0.1	0.14	0.23	0.36	dB/m		
FMCA100305/WP-24	24 In	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	0.818	
FMCA100305/WP-36	36 In	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	0.885	
FMCA100305/WP-48	48 In	Insertion Loss (Typ.)	0.28	0.2	0.37	0.48	0.64	dB	0.952	
FMCA100305/WP-60	60 In	Insertion Loss (Typ.)	0.3	0.34	0.41	0.54	0.74	dB	1.019	

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: 0.1 dB Loss due to Connector 2: 0.1 dB Base Weight: 0.751 pounds Additional Weight per Inch: 0.00558 pounds

Mechanical Specifications

Cable Assembly

60 in [152.4 cm] Length Width/Diameter 0.5 in [12.7 mm] Weight 1.019 lbs [462.21 g]

Cable

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

Inner Conductor Material and Plating Copper Clad Aluminum

Dielectric Type PE(F) Number of Shields

Shield Layer 1 Aluminum Tape Shield Layer 2 **Tinned Copper Braid** Jacket Material

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
Туре	BNC Male	N Male
Option		Weatherproof Boot
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 μin minimum	50 μin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 μin minimum	150 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80 μin minimum	150 µin minimum
Hex Size		13/16 inch
Boot Material	Silicone	Silicone

Environmental Specifications

Operating Range Temperature Ingress Protection (IP) Rating

-40 to +85 deg C IP68

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Values at 25°C, sea level.



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FMCA100305/WP-60

Typical Performance Data

How to Order

Part Number Configuration:

FMCA100305/WP - xx uu

Unit of Measure:
cm = Centimeters

Length
Base Number

Example: FMCA100305/WP-12 = 12 inches long cable FMCA100305/WP-100cm = 100 cm long cable

Low Loss BNC Male to N Male Weatherproof Cable LMR-400 Coax in 60 Inch with Times Microwave Components 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 BNC Male to N Male Weatherproof Cable LMR®-400 Coax in 60 Inch with Times Microwave Components FMCA100305/WP-60

URL: https://www.fairviewmicrowave.com/low-loss-bnc-male-to-n-male-weatherproof-cable-lmr-400-coax-in-60-inch-with-times-microwave-components-fmca100305-wp-60-p.aspx

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