

Low Loss BNC Male to TNC Male Weatherproof Cable LMR-400 Coax in 12 Inch with Times Microwave Components



FMC00685/WP-12

Configuration

- Connector 1: BNC Male
- Connector 2: TNC Male
- Cable Type: LMR-400
- Coax Flex Type: Flexible

Features

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

Applications

- General Purpose
- Laboratory Use

Description

The BNC male to TNC male 12 inch cable using LMR-400 coax, part number FMC00685/WP-12, from Fairview Microwave is in-stock and ships same day. This Fairview BNC to TNC 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 FMC00685/WP-12 BNC male to TNC 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	
FMC00685/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.108	dB/ft	
			0.07	0.1	0.14	0.23	0.36	dB/m	
FMC00685/WP-24	24 In	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	0.808
FMC00685/WP-36	36 In	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	0.875
FMC00685/WP-48	48 In	Insertion Loss (Typ.)	0.28	0.2	0.37	0.48	0.64	dB	0.942
FMC00685/WP-60	60 In	Insertion Loss (Typ.)	0.3	0.34	0.41	0.54	0.74	dB	1.009

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:	0.741 pounds
Additional Weight per Inch:	0.00558 pounds

Mechanical Specifications

Cable Assembly

Length	12 in [304.8 mm]
Width/Diameter	0.5 in [12.7 mm]
Weight	0.741 lbs [336.11 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	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE
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	BNC Male	TNC 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	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 µin minimum	80 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80 µin minimum	80 µin minimum
Boot Material	Silicone	Silicone

Environmental Specifications

Operating Range Temperature	-40 to +85 deg C
Ingress Protection (IP) Rating	IP68

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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Typical Performance Data

How to Order

Part Number Configuration:

FMC00685/WP

- xx

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: FMC00685/WP-12 = 12 inches long cable
FMC00685/WP-100cm = 100 cm long cable

Low Loss BNC Male to TNC Male Weatherproof Cable LMR-400 Coax in 12 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 TNC Male Weatherproof Cable LMR®-400 Coax in 12 Inch with Times Microwave Components FMC00685/WP-12](https://www.fairviewmicrowave.com/low-loss-bnc-male-to-tnc-male-weatherproof-cable-lmr-400-coax-in-12-inch-with-times-microwave-components-fmc00685-wp-12)

URL: <https://www.fairviewmicrowave.com/low-loss-bnc-male-to-tnc-male-weatherproof-cable-lmr-400-coax-in-12-inch-with-times-microwave-components-fmc00685-wp-12-p.aspx>

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FMC00685/WP-12 CAD Drawing
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