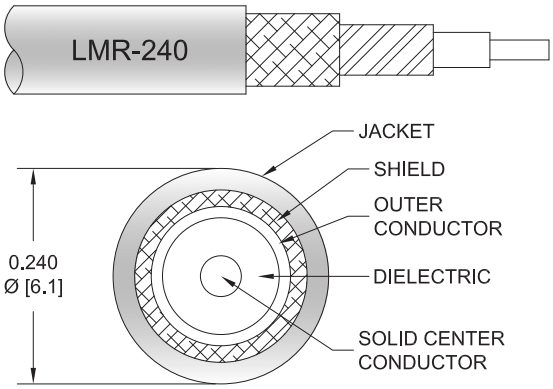
BNC Male to BNC Female Low Loss Cable Using LMR-240 Coax

PE3C5175

Configuration

- Connector 1: BNC Male
- Connector 2: BNC Female
- Cable Type: LMR-240
- Coax Flex Type: Flexible



Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C5175 BNC male to BNC female cable using LMR-240 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack BNC to BNC cable assembly has a male to female gender configuration with 50 ohm flexible LMR-240 coax. The PE3C5175 BNC male to BNC female cable assembly operates to 4 GHz. The double shielding of this Pasternack 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 available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. 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		4	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	4000	MHz	
PE3C5175	Custom Lengths Available	Insertion Loss (Typ.)	0.023	0.039	0.055	0.079	0.161	dB/ft	
			0.08	0.13	0.19	0.26	0.53	dB/m	
PE3C5175-12	12 In	Insertion Loss (Typ.)	0.23	0.24	0.26	0.28	0.37	dB	0.09
PE3C5175-24	24 In	Insertion Loss (Typ.)	0.25	0.28	0.31	0.36	0.53	dB	0.123
PE3C5175-36	36 In	Insertion Loss (Typ.)	0.27	0.32	0.37	0.44	0.69	dB	0.156
PE3C5175-48	48 In	Insertion Loss (Typ.)	0.3	0.36	0.42	0.52	0.85	dB	0.189
PE3C5175-60	60 In	Insertion Loss (Typ.)	0.32	0.4	0.48	0.6	1.01	dB	0.222

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:	0.09	pounds
Additional Weight per Inch:	0.00275	pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.09 lbs [40.82 g]

Cable

Cable Type	LMR-240
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
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	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	BNC Male	BNC Female
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Body Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Material and Plating	Brass, Nickel	

Environmental Specifications

Operating Range Temperature	-40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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Typical Performance Data

How to Order

Part Number Configuration: **PE3C5175 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3C5175 — Base Number

Example: PE3C5175-12 = 12 inches long cable
PE3C5175-100cm = 100 cm long cable

BNC Male to BNC Female Low Loss Cable Using LMR-240 Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: BNC Male to BNC Female Low Loss Cable Using LMR-240 Coax PE3C5175

URL: https://www.pasternack.com/bnc-male-to-bnc-female-low-loss-cable-using-lmr-240-pe3c5175-p.aspx

PE3C5175 CAD Drawing

BNC Male to BNC Female Low Loss Cable Using LMR-240 Coax