

BNC Male to N Male Low Loss Cable Using LMR-400-DB Coax with Times Microwave Components



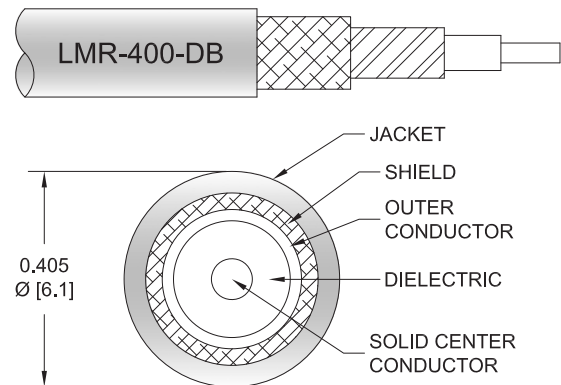
PE3W13931

Configuration

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

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W13931 BNC male to type N male cable using LMR-400-DB 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 type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400-DB coax. The PE3W13931 BNC male to type N male 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		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]

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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	100	250	500	1000	4000	MHz	
PE3W13931	Custom Lengths Available	Insertion Loss (Typ.)	0.012	0.02	0.028	0.041	0.085	dB/ft	
			0.04	0.07	0.1	0.14	0.28	dB/m	
PE3W13931-12	12 In	Insertion Loss (Typ.)	0.22	0.22	0.23	0.25	0.29	dB	0.3
PE3W13931-24	24 In	Insertion Loss (Typ.)	0.23	0.24	0.26	0.29	0.37	dB	0.371
PE3W13931-36	36 In	Insertion Loss (Typ.)	0.24	0.26	0.29	0.33	0.46	dB	0.441
PE3W13931-48	48 In	Insertion Loss (Typ.)	0.25	0.28	0.32	0.37	0.54	dB	0.511
PE3W13931-60	60 In	Insertion Loss (Typ.)	0.26	0.3	0.34	0.41	0.63	dB	0.581

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:	0.3 pounds
Additional Weight per Inch:	0.00584 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.3 lbs [136.08 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	BNC Male	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification		1.27 µm minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		2 µm minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification		2 µm minimum
Hex Size		20.57 mm
Torque		44 in-lbs 4.97 Nm

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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PE3W13931

Typical Performance Data

How to Order

Part Number Configuration:

PE3W13931

- XX

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

- Length

- Base Number

Example: PE3W13931-12 = 12 inches long cable
PE3W13931-100cm = 100 cm long cable

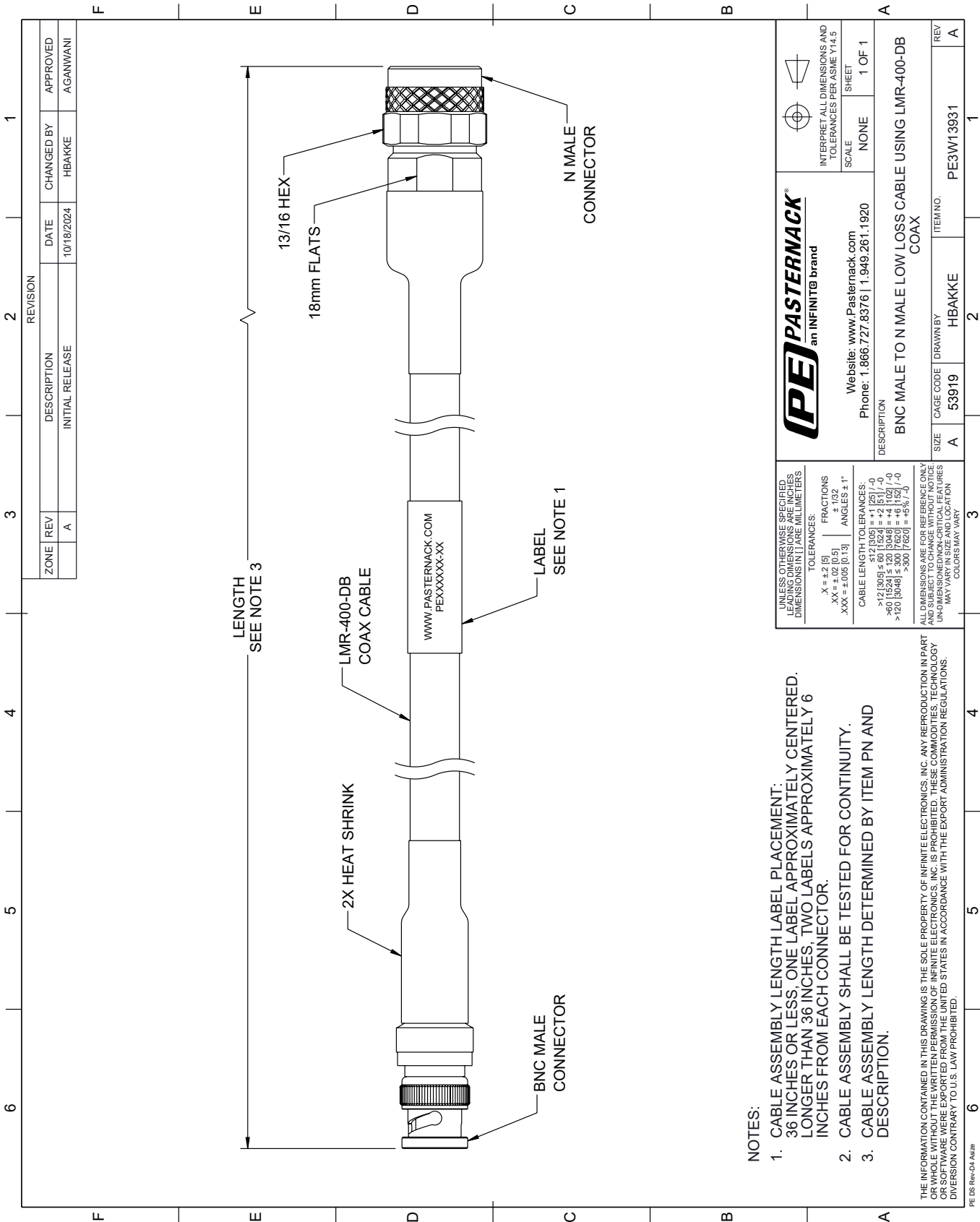
BNC Male to N Male Low Loss Cable Using LMR-400-DB Coax with Times Microwave Components from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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 N Male Low Loss Cable Using LMR-400-DB Coax with Times Microwave Components PE3W13931](#)

URL: <https://www.pasternack.com/bnc-male-to-n-male-low-loss-cable-using-lmr-400-db-pe3w13931-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to implement improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3W13931 CAD Drawing
BNC Male to N Male Low Loss Cable Using LMR-400-DB Coax with Times Microwave Components



NOTES:

- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
- 2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
- 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, TRAILING DIMENSIONS ARE IN MILLIMETERS		TOLERANCES:		FRACTIONS		ANGLES	
X = ±.2 (5)		.XX = ±.02 (0.5)		.XXX = ±.005 (0.13)		± 1/32	
CABLE LENGTH TOLERANCES:		>12 (305) ≤ 60 (1524) = ±.1 (25) / -0		>60 (1524) ≤ 120 (3048) = ±.1 (25) / -0		>120 (3048) ≤ 300 (7620) = ±.1 (25) / -0	
ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS SHALL BE TO THE CENTER OF THE CABLE ASSEMBLY UNLESS OTHERWISE SPECIFIED. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		PASTERNACK® an INFINITE® brand		Website: www.Pasternack.com		Phone: 1.866.727.8376 1.949.261.1920	
DESCRIPTION		BNC MALE TO N MALE LOW LOSS CABLE USING LMR-400-DB COAX		SCALE		NONE	
SIZE		A		CAGE CODE		53919	
DRAWN BY		HBAKKE		ITEM NO.		PE3W13931	
REV		A		SHEET		1 OF 1	