

## BNC Female to Blue FAKRA Plug Cable Using LMR-100A-UF Coax

### RF Cable Assemblies Technical Data Sheet

**PE3C9897**

#### Configuration

- Connector 1: BNC Female
- Connector 2: FAKRA Plug
- Cable Type: LMR-100A-UF
- Coax Flex Type: Flexible

#### Features

- Max Frequency 1 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- TPE Jacket

#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C9897 BNC female to blue FAKRA plug cable using LMR-100A-UF 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 FAKRA cable assembly has a female to plug gender configuration with 50 ohm flexible LMR-100A-UF coax. The PE3C9897 BNC female to FAKRA plug cable assembly operates to 1 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Female to Blue FAKRA Plug Cable Using LMR-100A-UF Coax PE3C9897](#)

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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
VSWR			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		9.5 [31.17]		$\Omega$ /1000ft [ $\Omega$ /Km]
Jacket Spark			2,000	Vrms

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	500	1,000	MHz
Insertion Loss (Max.)	1.051	1.07	1.115391	1.165777	1.240166	dB/ft
	3.45	3.51	3.66	3.82	4.07	dB/m
VSWR (Max.)	1.4:1	1.4:1	1.4:1	1.4:1	1.4:1	
Return Loss (Max.)	15.56	15.563	15.563	15.563	15.563	dB

#### Mechanical Specifications

##### Cable Assembly

Weight 0.027 lbs [12.25 g]

##### Cable

Cable Type LMR-100A-UF  
 Impedance 50 Ohms  
 Inner Conductor Type Stranded  
 Inner Conductor Material and Plating Copper  
 Dielectric Type PE  
 Number of Shields 2  
 Shield Layer 1 Aluminum Tape  
 Shield Layer 2 Tinned Copper  
 Jacket Material TPE, Black  
 Jacket Diameter 0.11 in [2.79 mm]

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One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

#### Connectors

Description	Connector 1	Connector 2
Type	BNC Female	FAKRA Plug
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Phosphor Bronze, Gold
Contact Plating Specification	30 µin minimum	
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Body Material and Plating	Brass, Nickel	Plastic
Body Plating Specification	100 µin minimum	

#### Environmental Specifications

##### Temperature

Operating Range -40 to +85 deg C

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

#### Plotted and Other Data

Notes:

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## BNC Female to Blue FAKRA Plug Cable Using LMR-100A-UF Coax

### RF Cable Assemblies Technical Data Sheet

**PE3C9897**

#### How to Order

Part Number Configuration:

**PE3C9897**

- **xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: PE3C9897-12 = 12 inches long cable  
PE3C9897-100cm = 100 cm long cable

BNC Female to Blue FAKRA Plug Cable Using LMR-100A-UF 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.

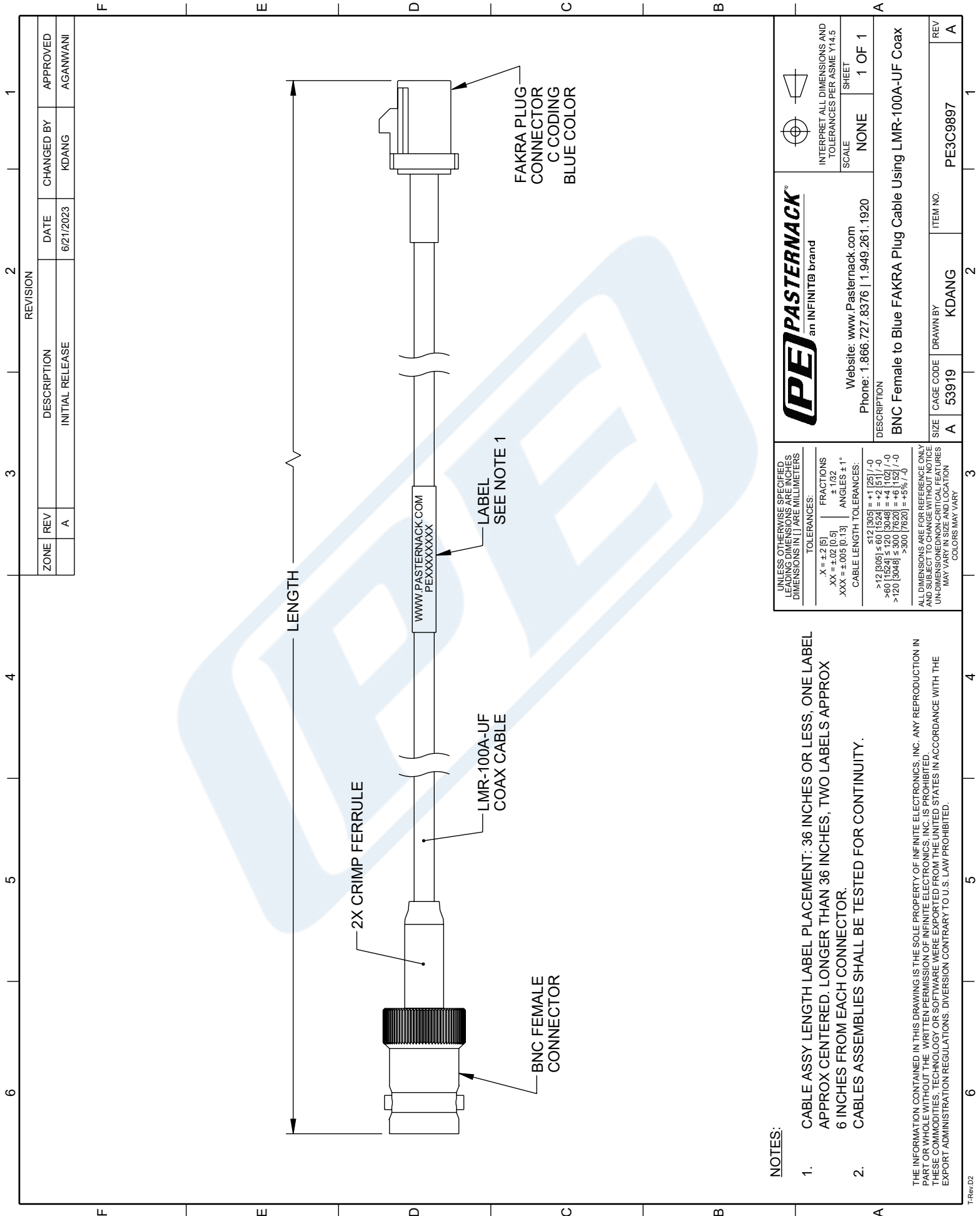
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Female to Blue FAKRA Plug Cable Using LMR-100A-UF Coax PE3C9897](#)

URL: <https://www.pasternack.com/bnc-female-to-fakra-plug-cable-using-lmr-100a-uf-pe3c9897-p.aspx>

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE3C9897 CAD Drawing

## BNC Female to Blue FAKRA Plug Cable Using LMR-100A-UF Coax



ZONE		REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
		A	INITIAL RELEASE	6/21/2023	KDANG	AGANWANI

**UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [ ] ARE MILLIMETERS**

**TOLERANCES:**

.X = ±.2 [5]	FRACTIONS ±.1/32
.XX = ±.02 [0.5]	ANGLES ± 1°
.XXX = ±.005 [0.13]	

**CABLE LENGTH TOLERANCES:**

<12 [305]	±.1 [25]
>12 [305] ≤ 60 [1524]	±.2 [51]
>60 [1524] ≤ 120 [3048]	±.4 [102]
>120 [3048] ≤ 300 [7620]	±.6 [152]
>300 [7620]	±.8 [203]

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS OTHERWISE SPECIFIED. UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN [ ] ARE MILLIMETERS. COLORS MAY VARY.

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Website: [www.Pasternack.com](http://www.Pasternack.com)  
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION  
**BNC Female to Blue FAKRA Plug Cable Using LMR-100A-UF Coax**

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	KDANG	PE3C9897

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE

SHEET: 1 OF 1

- NOTES:**
- CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
  - CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
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