



Water Blue FAKRA Jack to TNC Male Low
Loss Cable Using LMR-100 Coax

RF Cable Assemblies Technical Data Sheet

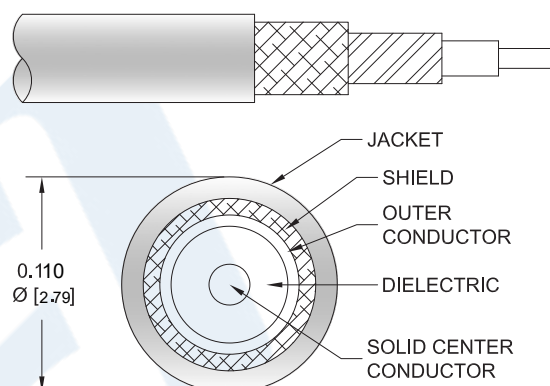
PE3C8038

Configuration

- Connector 1: FAKRA Jack
- Connector 2: TNC Male
- Cable Type: LMR-100A

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C8038 water blue FAKRA jack to TNC male cable using LMR-100 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 FAKRA to TNC cable assembly has a jack to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3C8038 FAKRA jack to TNC 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Water Blue FAKRA Jack to TNC Male Low Loss Cable Using LMR-100 Coax PE3C8038](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
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]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω/1000ft [Ω/Km]
Jacket Spark			2,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Typ.)	0.07	0.115	0.165	0.24	0.508	dB/ft
	0.23	0.38	0.54	0.79	1.67	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB for the straight connector.

Mechanical Specifications

Cable Assembly

Weight 0.06 lbs [27.22 g]

Cable

Cable Type LMR-100A
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Steel
 Dielectric Type PE
 Number of Shields 2
 Shield Layer 1 Aluminum Tape
 Shield Layer 2 Tinned Copper Braid
 Jacket Material PVC, 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	FAKRA Jack	TNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Phosphor Bronze, Gold	Beryllium Copper, Gold
Contact Plating Specification		15 µin
Dielectric Type	PTFE	Teflon
Outer Conductor Material and Plating	Brass, Nickel	
Body Material and Plating	Plastic	Brass, Nickel
Body Plating Specification		100 µin
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 µin

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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RF Cable Assemblies Technical Data Sheet

PE3C8038

How to Order

Part Number Configuration:

PE3C8038

- **xx**

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

Example: PE3C8038-12 = 12 inches long cable
PE3C8038-100cm = 100 cm long cable

Water Blue FAKRA Jack to TNC Male Low Loss Cable Using LMR-100 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.

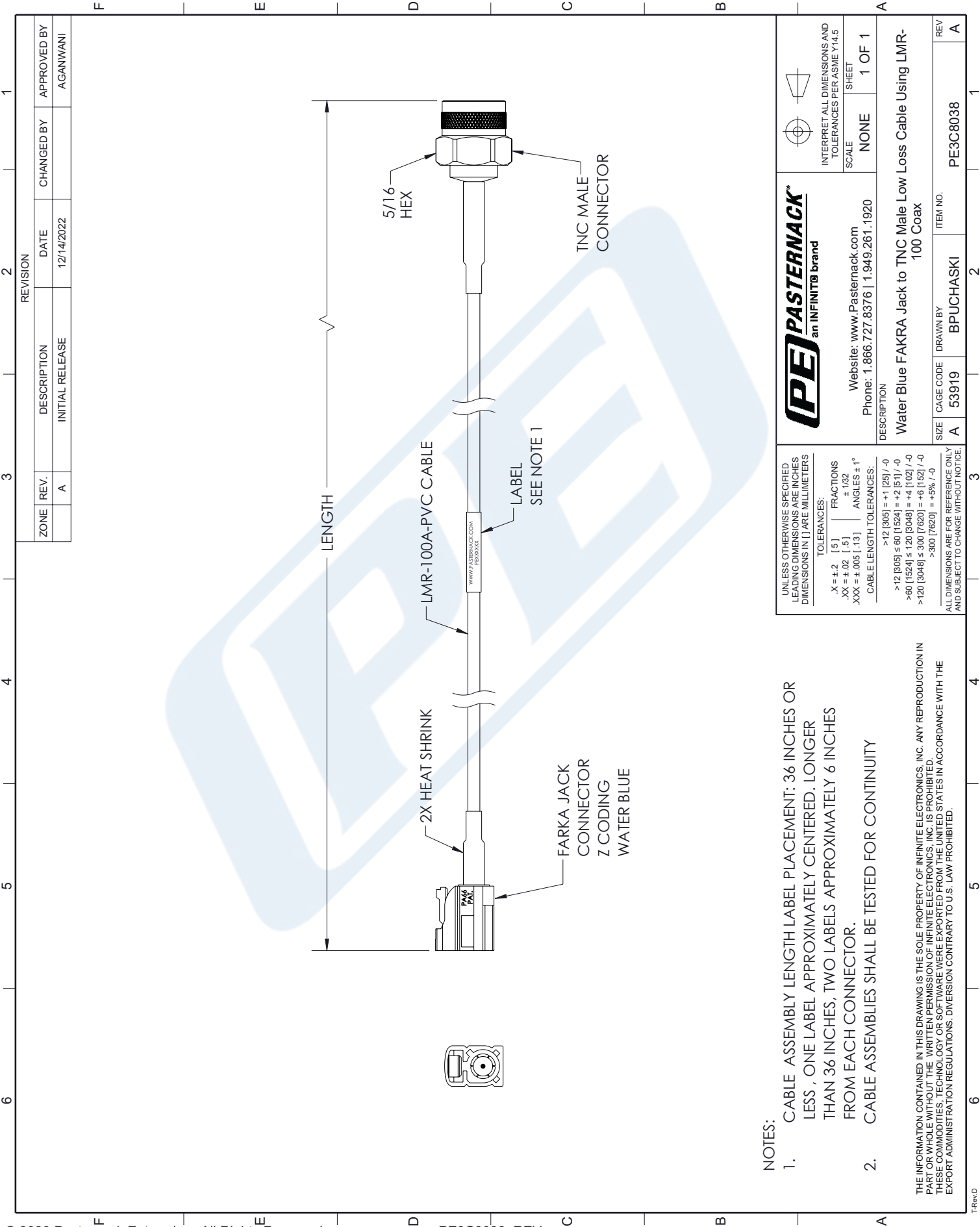
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URL: <https://www.pasternack.com/jack-to-tnc-male-low-loss-cable-using-lmr-100-pe3c8038-p.aspx>

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PE3C8038 CAD Drawing

Water Blue FAKRA Jack to TNC Male Low Loss Cable Using LMR-100 Coax



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 ASSEMBLIES SHALL BE TESTED FOR CONTINUITY
- THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	
X = ±.2 [5]	FRACTIONS ± 1/32
.XX = ±.02 [.5]	ANGLES ± 1°
XXX = ±.005 [.13]	CABLE LENGTH TOLERANCES:
	>12 [305] = ±1 [25] / -0
	>12 [305] ≤ 60 [1524] = ±2 [51] / -0
	>60 [1524] ≤ 120 [3048] = ±4 [102] / -0
	>120 [3048] ≤ 300 [7620] = ±6 [152] / -0
	>300 [7620] = ±5% / -0
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.	

PE PASTERNAK an INFINITO brand	
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920	
INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	SHEET 1 OF 1
DESCRIPTION Water Blue FAKRA Jack to TNC Male Low Loss Cable Using LMR-100 Coax	
SIZE A	CAGE CODE 53919
DRAWN BY BPUCHASKI	ITEM NO. PE3C8038
REV A	