



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

**RF Cable Assemblies Technical Data Sheet**

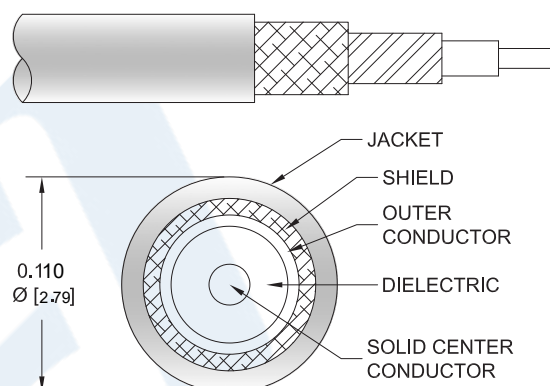
**PE3C8038**

**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 |
|-----------------|------------------|

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

**Plotted and Other Data**

Notes:

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

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**PE3C8038**

#### How to Order

Part Number Configuration:

**PE3C8038**

- **xx**

**uu**

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.

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](#)

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

# PE3C8038 CAD Drawing

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

