



Water Blue FAKRA Jack to MCX Plug Low Loss Cable Using LMR-100 Coax

TECHNICAL DATA SHEET

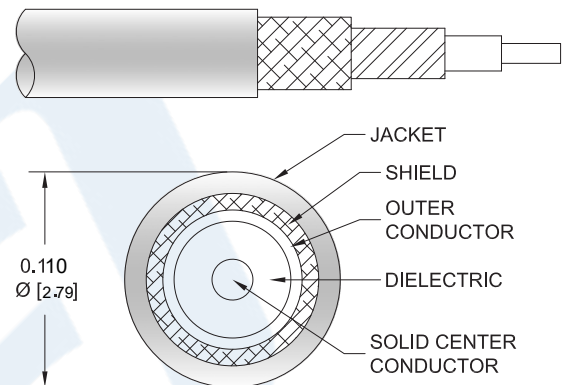
PE3W05353

Configuration

- Connector 1: FAKRA Jack
- Connector 2: MCX Plug
- Cable Type: LMR-100A
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W05353 water blue FAKRA jack to MCX plug 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 MCX cable assembly has a jack to plug gender configuration with 50 ohm flexible LMR-100A coax. The PE3W05353 FAKRA jack to MCX plug cable assembly operates to 3 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 MCX Plug Low Loss Cable Using LMR-100 Coax PE3W05353](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	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

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency						
PE3W05353	Custom Lengths Available	Insertion Loss (Typ.)	0.06	0.12	0.17	0.24	0.43	dB/ft	
			0.21	0.38	0.55	0.79	1.42	dB/m	
PE3W05353-24	24 inch	Insertion Loss (Typ.)	0.33	0.43	0.53	0.68	1.07	dB	0.034
PE3W05353-36	36 inch	Insertion Loss (Typ.)	0.4	0.55	0.7	0.92	1.5	dB	0.043
PE3W05353-48	48 inch	Insertion Loss (Typ.)	0.46	0.66	0.86	1.16	1.93	dB	0.052
PE3W05353-100CM	100 cm	Insertion Loss (Typ.)	0.41	0.58	0.75	0.99	1.62	dB	0.046
PE3W05353-200CM	200 cm	Insertion Loss (Typ.)	0.62	0.96	1.29	1.78	3.04	dB	0.076

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:	0.025 pounds
Additional Weight per Inch:	0.00075 pounds

Mechanical Specifications

Cable Assembly

Weight 0.025 lbs [11.34 g]

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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]
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 Push-On	MCX Plug Push-On
Specification		CECC 22220
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Phosphor Bronze, Gold	Brass, Gold
Contact Plating Specification		30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Nickel	
Body Material and Plating	Plastic	Brass, Nickel
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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How to Order

Part Number Configuration:

PE3W05353

- **xx**

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

Example: PE3W05353-12 = 12 inches long cable
PE3W05353-100cm = 100 cm long cable

Water Blue FAKRA Jack to MCX Plug 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.

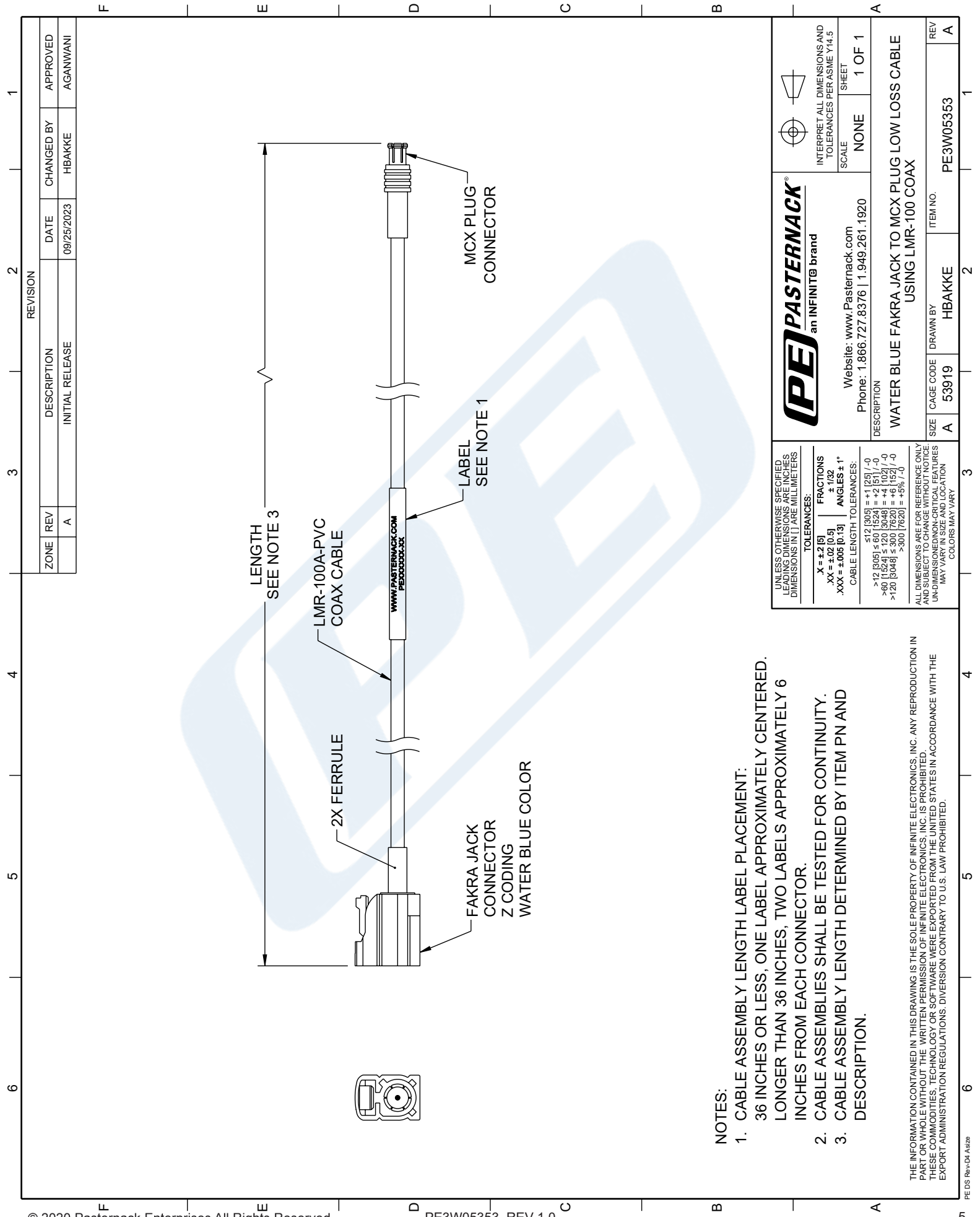
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Water Blue FAKRA Jack to MCX Plug Low Loss Cable Using LMR-100 Coax PE3W05353](https://www.pasternack.com/fakra-jack-to-mcx-plug-low-loss-cable-using-lmr-100-pe3w05353-p.aspx)

URL: <https://www.pasternack.com/fakra-jack-to-mcx-plug-low-loss-cable-using-lmr-100-pe3w05353-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.

PE3W05353 CAD Drawing

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NOTES:

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

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ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	09/25/2023	HBAKKE	AGANWANI

		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		
DESCRIPTION: WATER BLUE FAKRA JACK TO MCX PLUG LOW LOSS CABLE USING LMR-100 COAX		
SIZE: A	CAGE CODE: 53919	DRAWN BY: HBAKKE
		ITEM NO.: PE3W05353
		REV: A

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

TOLERANCES:	FRACTIONS
.X = ±.2 [5]	± 1/32
.XX = ±.02 [0.5]	± 1/64
.XXX = ±.005 [0.13]	± .005
CABLE LENGTH TOLERANCES:	ANGLES ± 1°
<12 [305] ≤ 60 [1524]	± 1 [5]
>60 [1524] ≤ 120 [3048]	± 2 [5]
>120 [3048] ≤ 300 [7620]	± 4 [102]
>300 [7620]	± 6 [152]
	± 10 [254]

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE NON-CRITICAL FEATURES. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.