

Water Blue FAKRA Jack to FAKRA Plug Low Loss Cable Using LMR-100A-UF Coax with HeatShrink



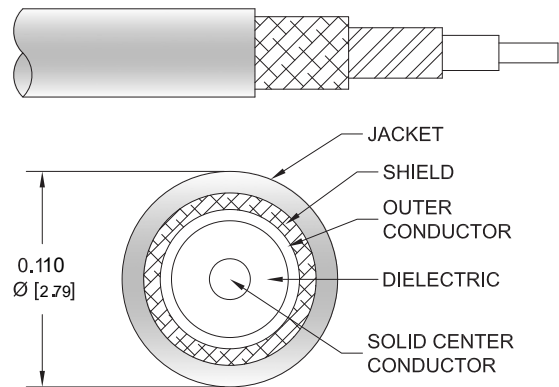
PE3W14583/HS

Configuration

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

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W14583/HS water blue FAKRA jack to 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 FAKRA to FAKRA cable assembly has a jack to plug gender configuration with 50 ohm flexible LMR-100A-UF coax. The PE3W14583/HS FAKRA jack to FAKRA plug 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		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]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			335	Vrms
Dielectric Withstanding Voltage (AC)			800	Vrms

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			2,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency						
PE3W14583/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.07	0.115	0.166	0.24	0.511	dB/ft	
			0.23	0.38	0.55	0.79	1.68	dB/m	
PE3W14583/HS-24	24 In	Insertion Loss (Typ.)	0.34	0.43	0.54	0.68	1.23	dB	0.029
PE3W14583/HS-36	36 In	Insertion Loss (Typ.)	0.41	0.55	0.7	0.92	1.74	dB	0.037
PE3W14583/HS-48	48 In	Insertion Loss (Typ.)	0.48	0.66	0.87	1.16	2.25	dB	0.045
PE3W14583/HS-100CM	100 CM	Insertion Loss (Typ.)	0.43	0.58	0.75	0.99	1.88	dB	0.039
PE3W14583/HS-200CM	200 CM	Insertion Loss (Typ.)	0.66	0.96	1.29	1.78	3.56	dB	0.065

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:	0.02 pounds
Additional Weight per Inch:	0.00067 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.012 lbs [5.44 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]
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]

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Connectors

Description	Connector 1	Connector 2
Type	FAKRA Jack	FAKRA Plug
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Color	WB	WB
Mating Cycles	300	
Contact Material and Plating	Phosphor Bronze, Gold	Phosphor Bronze, Gold
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Nickel	Brass, Nickel
Body Material and Plating	Plastic	Plastic

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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PE3W14583/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3W14583/HS

- **xx**

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W14583/HS-12 = 12 inches long cable
PE3W14583/HS-100cm = 100 cm long cable

Water Blue FAKRA Jack to FAKRA Plug Low Loss Cable Using LMR-100A-UF Coax with HeatShrink 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 FAKRA Plug Low Loss Cable Using LMR-100A-UF Coax with HeatShrink PE3W14583/HS](https://www.pasternack.com/fakra-jack-to-fakra-plug-low-loss-cable-using-lmr-100a-uf-with-heatshrink-pe3w14583-hs-p.aspx)

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PE3W14583/HS CAD Drawing

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