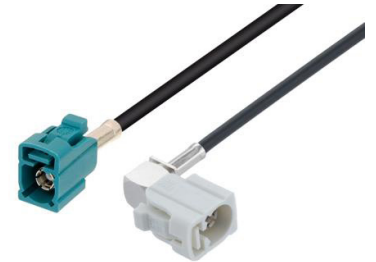


## Water Blue FAKRA Jack to FAKRA Jack Right Angle Low Loss Cable Using PE-C100-LSZH Coax



### PE3W16639

#### Configuration

- Connector 1: FAKRA Jack
- Connector 2: FAKRA Jack Right Angle
- Cable Type: PE-C100-LSZH
- Coax Cable Group: 8
- Coax Flex Type: Flexible

#### Features

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

#### Applications

- General Purpose
- Laboratory Use

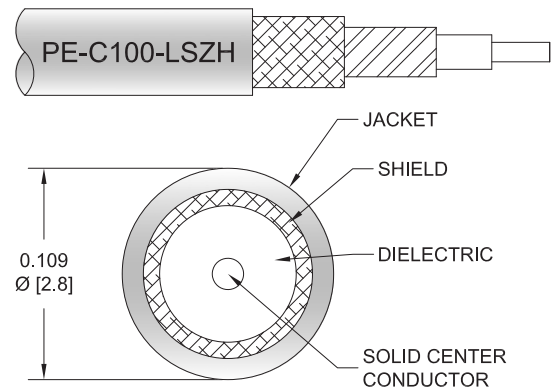
#### Description

Pasternack's PE3W16639 water blue FAKRA jack to FAKRA jack right angle cable using PE-C100-LSZH 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 jack gender configuration with 50 ohm flexible PE-C100-LSZH coax. The PE3W16639 FAKRA jack to FAKRA jack cable assembly operates to 4 GHz. The right angle FAKRA interface on the PE-C100-LSZH cable allows for easier connections in tight spaces. 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		1.62 [5.31]		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



Water Blue FAKRA Jack to FAKRA Jack Right Angle  
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**PE3W16639**

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Dielectric Withstanding Voltage (AC)			1,000	Vrms
Jacket Spark			2,000	Vrms

**Specifications by Frequency**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	4000	MHz	
PE3W16639	Custom Lengths Available	Insertion Loss (Typ.)	0.07	0.115	0.166	0.24	0.522	dB/ft	
			0.23	0.38	0.55	0.79	1.72	dB/m	
PE3W16639-12	12 inch	Insertion Loss (Typ.)	0.37	0.42	0.47	0.54	0.83	dB	0.031
PE3W16639-24	24 inch	Insertion Loss (Typ.)	0.44	0.53	0.64	0.78	1.35	dB	0.042
PE3W16639-36	36 inch	Insertion Loss (Typ.)	0.51	0.65	0.8	1.02	1.87	dB	0.052
PE3W16639-48	48 inch	Insertion Loss (Typ.)	0.58	0.76	0.97	1.26	2.39	dB	0.062
PE3W16639-60	60 inch	Insertion Loss (Typ.)	0.65	0.88	1.13	1.5	2.91	dB	0.072

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:	0.2 dB
Base Weight:	0.031 pounds
Additional Weight per Inch:	0.00084 pounds

**Mechanical Specifications**

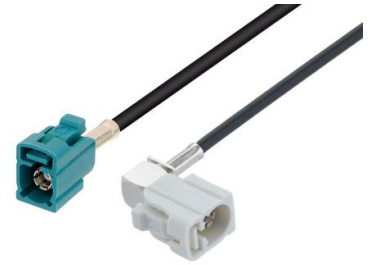
**Cable Assembly**

Width/Diameter	0.5 in [12.7 mm]
Weight	0.031 lbs [14.06 g]

**Cable**

Cable Type	PE-C100-LSZH
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	LSZH, Black
Jacket Diameter	0.109 in [2.77 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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**PE3W16639**

**Connectors**

Description	Connector 1	Connector 2
Type	FAKRA Jack	FAKRA Jack Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Color	WB	WH
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

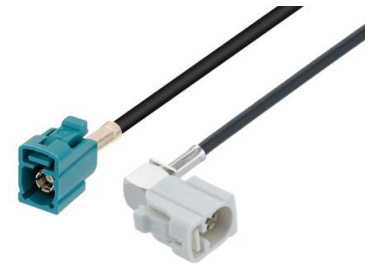
**Environmental Specifications**

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

**Plotted and Other Data**

Notes:

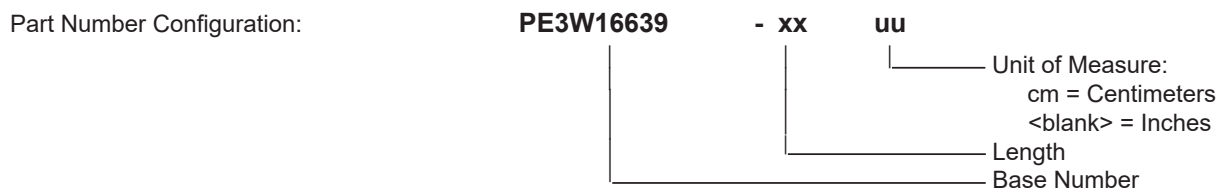
Water Blue FAKRA Jack to FAKRA Jack Right Angle  
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**PE3W16639**

**Typical Performance Data**

**How to Order**



Example: PE3W16639-12 = 12 inches long cable  
PE3W16639-100cm = 100 cm long cable

Water Blue FAKRA Jack to FAKRA Jack Right Angle Low Loss Cable Using PE-C100-LSZH 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 FAKRA Jack Right Angle Low Loss Cable Using PE-C100-LSZH Coax PE3W16639](https://www.pasternack.com/fakra-jack-to-fakra-jack-right-angle-low-loss-cable-using-pe-c100-lszh-coax-pe3w16639)

URL: <https://www.pasternack.com/fakra-jack-to-fakra-jack-low-loss-cable-using-pe-c100-lszh-pe3w16639-p.aspx>

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

# PE3W16639 CAD Drawing

Water Blue FAKRA Jack to FAKRA Jack Right Angle Low Loss Cable Using PE-C100-LSZH Coax

