

## 7/16 DIN Male to 7/16 DIN Male Low Loss Cable Using LMR-LW600 Coax



### PE3W16778

#### Configuration

- Connector 1: 7/16 DIN Male
- Connector 2: 7/16 DIN Male
- Cable Type: LMR-LW600
- Coax Flex Type: Flexible

#### Features

- Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket

#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W16778 7/16 DIN male to 7/16 DIN male cable using LMR-LW600 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 7/16 DIN to 7/16 DIN cable assembly has a male to male gender configuration with 50 ohm flexible LMR-LW600 coax. The PE3W16778 7/16 DIN male to 7/16 DIN male cable assembly operates to 8 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		8	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Group Delay		1.17 [3.84]		ns/ft [ns/m]
Capacitance		23.4 [76.77]		pF/ft [pF/m]
Inductance		0.058 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor		0.53 [1.74]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		4.4 [14.44]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (AC)			750	Vrms

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**PE3W16778**

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Jacket Spark			8,000	Vrms

**Specifications by Frequency**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W16778	Custom Lengths Available	Insertion Loss (Typ.)	0.018	0.026	0.039	0.07	0.088	dB/ft	
			0.06	0.09	0.13	0.23	0.29	dB/m	
PE3W16778-24	24 inch	Insertion Loss (Typ.)	0.24	0.26	0.28	0.34	0.38	dB	0.589
PE3W16778-36	36 inch	Insertion Loss (Typ.)	0.26	0.28	0.32	0.41	0.47	dB	0.693
PE3W16778-48	48 inch	Insertion Loss (Typ.)	0.28	0.31	0.36	0.48	0.56	dB	0.797
PE3W16778-120	120 inch	Insertion Loss (Typ.)	0.38	0.46	0.59	0.9	1.08	dB	1.421
PE3W16778-180	180 inch	Insertion Loss (Typ.)	0.47	0.59	0.79	1.25	1.52	dB	1.941

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:	0.589 pounds
Additional Weight per Inch:	0.00867 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter	0.5 in [12.7 mm]
Weight	0.484 lbs [219.54 g]

**Cable**

Cable Type	LMR-LW600
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	Foam PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Aluminum
Jacket Material	PE, Black
Jacket Diameter	0.59 in [14.99 mm]
One Time Minimum Bend Radius	1.5 in [38.1 mm]
Repeated Minimum Bend Radius	6 in [152.4 mm]
Bending Moment	2.75 lbs-ft [3.73 N-m]
Flat Plate Crush	60 lbs/in [1.07 Kg/mm]
Tensile Strength	260 lbs [117.93 Kg]

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**Connectors**

Description	Connector 1	Connector 2
Type	7/16 DIN Male	7/16 DIN Male
Specification	IEC 61169-4	IEC 61169-4
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Silver
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal

**Environmental Specifications**

Operating Range Temperature -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

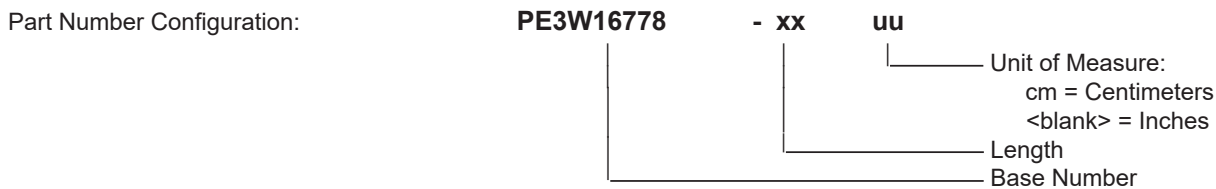
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**PE3W16778**

**Typical Performance Data**

**How to Order**



Example:    PE3W16778-12 = 12 inches long cable  
              PE3W16778-100cm = 100 cm long cable

7/16 DIN Male to 7/16 DIN Male Low Loss Cable Using LMR-LW600 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: [7/16 DIN Male to 7/16 DIN Male Low Loss Cable Using LMR-LW600 Coax PE3W16778](https://www.pasternack.com/7-16-din-male-to-7-16-din-male-low-loss-cable-using-lmr-lw600-pe3w16778)

URL: <https://www.pasternack.com/7-16-din-male-to-7-16-din-male-low-loss-cable-using-lmr-lw600-pe3w16778-p.aspx>

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# PE3W16778 CAD Drawing

7/16 DIN Male to 7/16 DIN Male Low Loss Cable Using LMR-LW600 Coax

