

Waterproof IP68 N Male (Plug) to N Male (Plug) Low Loss Cable Using LMR-400 Coax



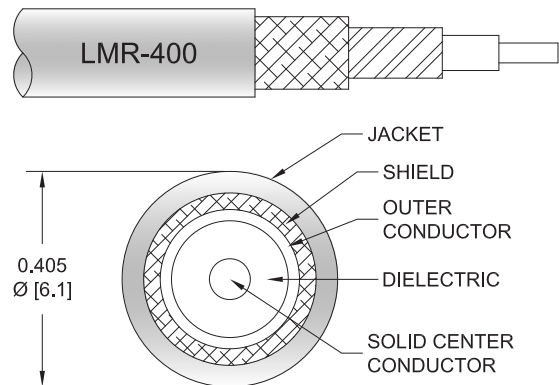
PE3C0046/WP

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: LMR-400
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket
- Silicone Connector Boot
- IP68 Rated



Applications

- General Purpose
- Laboratory Use

Description

The Pasternack PE3C0046/WP is a weatherproof low loss cable assembly that comes with type N male connection with weatherproof boot on one end and type N male with weatherproof boot on the other. Pasternack's RF coaxial cable assembly products are designed for typical use, production, laboratory test and measurement, defense/military, aerial antenna towers, etc. The low loss cable has a 50 Ohm impedance and is specifically ready for quicker shipment than most in the industry can provide.

This weatherproof low loss RF cable assembly operates at a maximum frequency of 6 GHz. Our RF cable assembly has a PE jacket with 0.405 inches diameter. The type N male to type N male cable assembly PE3C0046/WP is built with LMR-400 coax, which has a flexible design. This RF cable assembly with 0.5 inches diameter has copper clad aluminum as cable's inner conducting material and PE (F) dielectric type. The weatherproof boot low loss cable can operate at a temperature range of -40 to 85 degrees C. Additional dimensions, specifications, and CAD drawings for this PE3C0046/WP low loss RF cable are available on our downloadable PDF datasheet.

Pasternack stocks a wide selection of weatherproof low loss cable assemblies that ship the same business day as ordered from our warehouse. Make your online purchase right now to take advantage of our same-day shipping. For further information on similar products, our expert technical support and knowledgeable sales team can help you get the ideal type N male to type N male cable assembly as per your requirements.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
DC Resistance Inner Conductor		1.39 [4.56]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (DC)			2,500	Vdc
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	250	500	1000	2500	6000	
PE3C0046/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.108	dB/ft	
			0.07	0.1	0.14	0.23	0.36	dB/m	
PE3C0046/WP-12	12 Inch	Insertion Loss (Typ.)	0.22	0.23	0.25	0.27	0.31	dB	1.217
PE3C0046/WP-24	24 Inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	1.284
PE3C0046/WP-36	36 Inch	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	1.351
PE3C0046/WP-48	48 Inch	Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.64	dB	1.418
PE3C0046/WP-60	60 Inch	Insertion Loss (Typ.)	0.3	0.34	0.41	0.54	0.74	dB	1.485

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:	1.217 pounds
Additional Weight per Inch:	0.00558 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	1.217 lbs [552.02 g]

Cable

Cable Type	LMR-400
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE
Jacket Diameter	0.405 in [10.29 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]
Repeated Minimum Bend Radius	4 in [101.6 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]
Flat Plate Crush	40 lbs/in [0.71 Kg/mm]

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Tensile Strength 160 lbs [72.57 Kg]

Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male
Option	Weatherproof Boot	Weatherproof Boot
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	15 µin minimum	15 µin minimum
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
Boot Material	Silicone	Silicone

Environmental Specifications

Operating Range Temperature -40 to +85 deg C
Ingress Protection (IP) Rating IP68

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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Typical Performance Data

How to Order

Part Number Configuration:

PE3C0046/WP - xx uu

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: PE3C0046/WP-12 = 12 inches long cable
PE3C0046/WP-100cm = 100 cm long cable

Waterproof IP68 N Male (Plug) to N Male (Plug) Low Loss Cable Using LMR-400 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: [Waterproof IP68 N Male \(Plug\) to N Male \(Plug\) Low Loss Cable Using LMR-400 Coax PE3C0046/WP](https://www.pasternack.com/waterproof-ip68-n-male-plug-to-n-male-plug-low-loss-cable-using-lmr-400-pe3c0046-wp)

URL: <https://www.pasternack.com/waterproof-ip68-n-male-plug-to-n-male-plug-low-loss-cable-using-lmr-400-pe3c0046-wp-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.

PE3C0046/WP CAD Drawing

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