

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



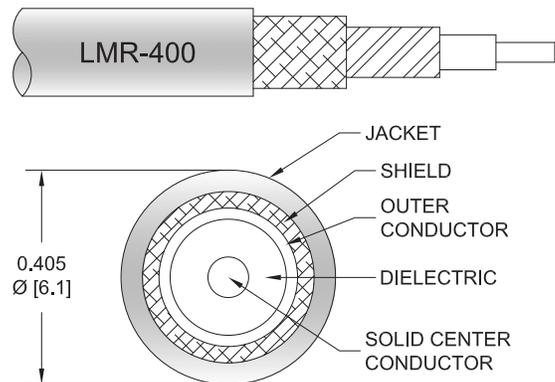
### PE3C0031/WP

#### Configuration

- Connector 1: N Male
- Connector 2: TNC 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 PE3C0031/WP is a weatherproof low loss cable assembly that comes with type N male connection with weatherproof boot on one end and TNC 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 TNC male cable assembly PE3C0031/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 PE3C0031/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 TNC 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]
DC Resistance Inner Conductor		1.39 [4.56]		Ohms/1000ft [Ohms/Km]

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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
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					MHz	
PE3C0031/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	
PE3C0031/WP-12	12 Inch	Insertion Loss (Typ.)	0.22	0.23	0.25	0.27	0.31	dB	1.205
PE3C0031/WP-24	24 Inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	1.272
PE3C0031/WP-36	36 Inch	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	1.339
PE3C0031/WP-48	48 Inch	Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.64	dB	1.406
PE3C0031/WP-60	60 Inch	Insertion Loss (Typ.)	0.3	0.34	0.41	0.54	0.74	dB	1.473

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:	1.205 pounds
Additional Weight per Inch:	0.00558 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter	0.5 in [12.7 mm]
Weight	1.205 lbs [546.58 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]
Tensile Strength	160 lbs [72.57 Kg]

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**Connectors**

Description	Connector 1	Connector 2
Type	N Male	TNC Male
Option	Weatherproof Boot	Weatherproof Boot
Specification	MIL-STD-348A	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	70 µin minimum	ASTM-B700
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	ASTM-B689
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	ASTM-B689
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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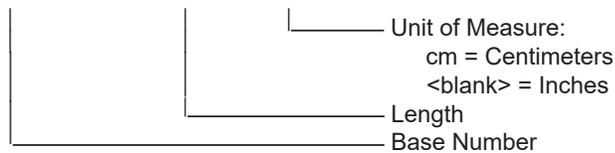
**PE3C0031/WP**

**Typical Performance Data**

**How to Order**

Part Number Configuration:

**PE3C0031/WP - xx uu**



Example: PE3C0031/WP-12 = 12 inches long cable  
PE3C0031/WP-100cm = 100 cm long cable

Waterproof IP68 N Male (Plug) to TNC 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 TNC Male \(Plug\) Low Loss Cable Using LMR-400 Coax PE3C0031/WP](#)

URL: <https://www.pasternack.com/waterproof-ip68-n-male-plug-to-tnc-male-plug-low-loss-cable-using-lmr-400-pe3c0031-wp-p.aspx>

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# PE3C0031/WP CAD Drawing

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