

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



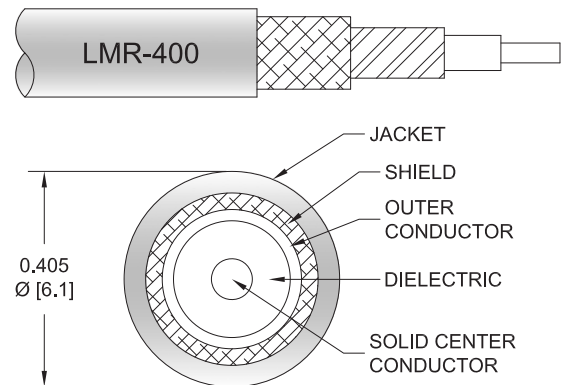
### PE3C0033LF/WP

#### 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 PE3C0033LF/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 PE3C0033LF/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 PE3C0033LF/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]

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



**PE3C0033LF/WP**

**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	
PE3C0033LF/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	
PE3C0033LF/WP-12	12 Inch	Insertion Loss (Typ.)	0.22	0.23	0.25	0.27	0.31	dB	1.209
PE3C0033LF/WP-24	24 Inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	1.276
PE3C0033LF/WP-36	36 Inch	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	1.343
PE3C0033LF/WP-48	48 Inch	Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.64	dB	1.41
PE3C0033LF/WP-60	60 Inch	Insertion Loss (Typ.)	0.3	0.34	0.41	0.54	0.74	dB	1.477

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:	1.209 pounds
Additional Weight per Inch:	0.00558 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter	0.5 in [12.7 mm]
Weight	1.209 lbs [548.39 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]

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



**PE3C0033LF/WP**

Tensile Strength 160 lbs [72.57 Kg]

**Connectors**

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

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

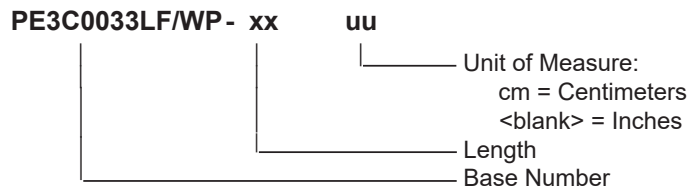


**PE3C0033LF/WP**

**Typical Performance Data**

**How to Order**

Part Number Configuration:



Example: PE3C0033LF/WP-12 = 12 inches long cable  
PE3C0033LF/WP-100cm = 100 cm long cable

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

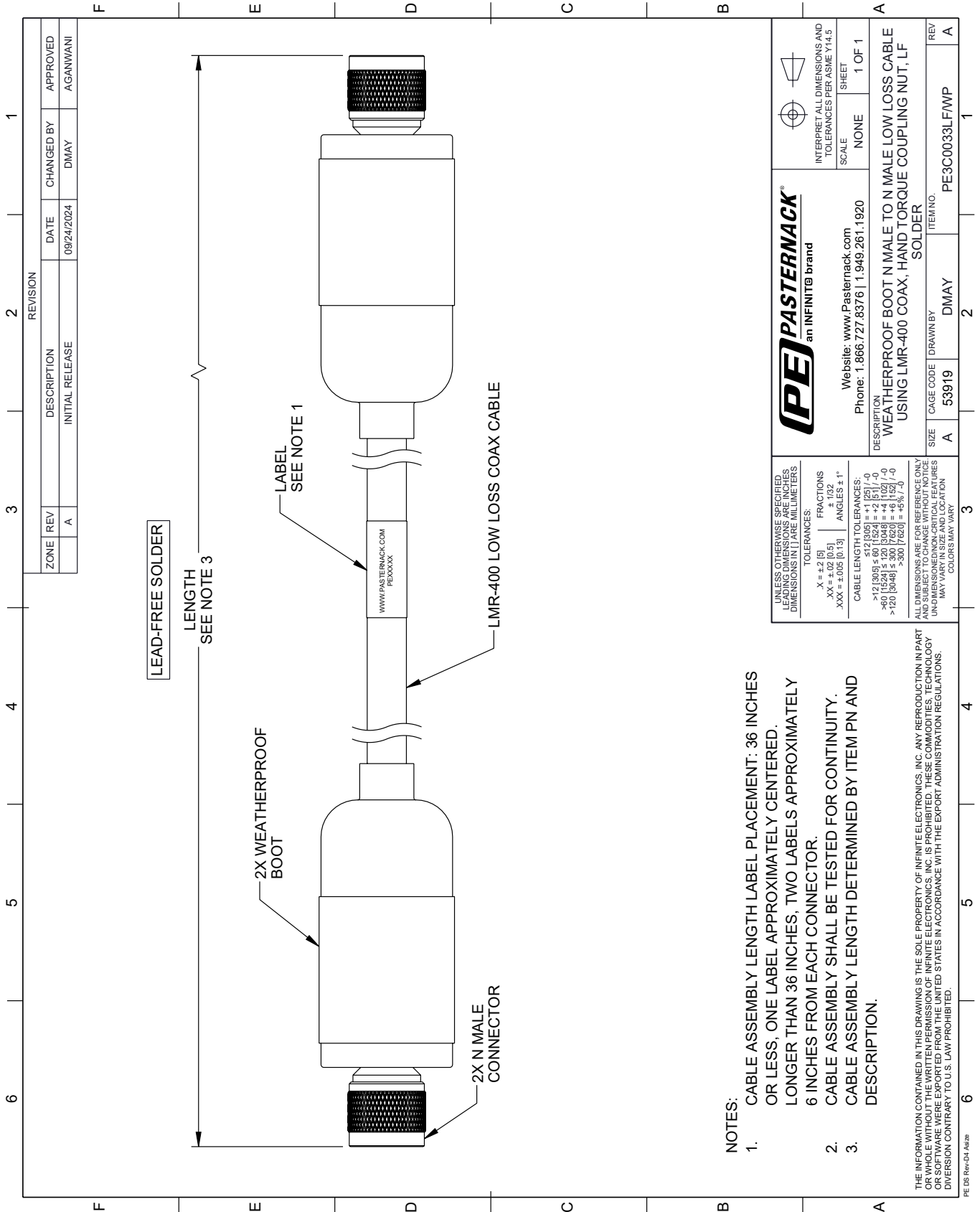
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Waterproof IP68 N Male \(Plug\) to N Male \(Plug\) Low Loss Cable Using LMR-400 Coax, LF Solder PE3C0033LF/WP](#)

URL: <https://www.pasternack.com/waterproof-ip68-n-male-plug-to-n-male-plug-low-loss-cable-using-lmr-400-lf-solder-pe3c0033lf-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.

# PE3C0033LF/WP CAD Drawing

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



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	09/24/2024	DMAY	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

 an INFINITE brand		Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920	
INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5		SCALE: NONE SHEET: 1 OF 1	
DESCRIPTION: WEATHERPROOF BOOT N MALE TO N MALE LOW LOSS CABLE USING LMR-400 COAX, HAND TORQUE COUPLING NUT, LF SOLDER			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	DMAY	PE3C0033LF/WP

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]

FRACTIONS:  
 ± 1/32  
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
 <12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0  
 >300 [7620] = ±.6 [15.2] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE NON-CRITICAL FEATURES. DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

- NOTES:
- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
  - CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
  - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.