

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



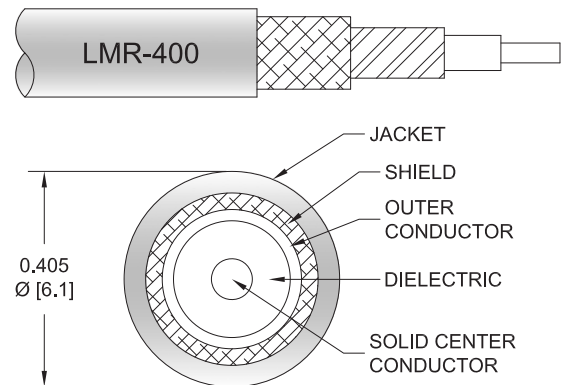
PE3C2309/WP

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 PE3C2309/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 PE3C2309/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 PE3C2309/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	
PE3C2309/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	
PE3C2309/WP-12	12 Inch	Insertion Loss (Typ.)	0.22	0.23	0.25	0.27	0.31	dB	1.269
PE3C2309/WP-24	24 Inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	1.336
PE3C2309/WP-36	36 Inch	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	1.403
PE3C2309/WP-48	48 Inch	Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.64	dB	1.47
PE3C2309/WP-60	60 Inch	Insertion Loss (Typ.)	0.3	0.34	0.41	0.54	0.74	dB	1.537

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:	1.269 pounds
Additional Weight per Inch:	0.00558 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	1.269 lbs [575.61 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	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	150 µin minimum	150 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	150 µin minimum	150 µin minimum
Hex Size	13/16 inch	13/16 inch
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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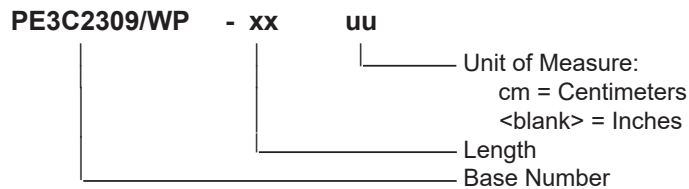


PE3C2309/WP

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3C2309/WP-12 = 12 inches long cable
PE3C2309/WP-100cm = 100 cm long cable

Waterproof IP68 N Male (Plug) to N Male (Plug) Low Loss Cable Using LMR-400 Coax with Times Microwave Components 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.

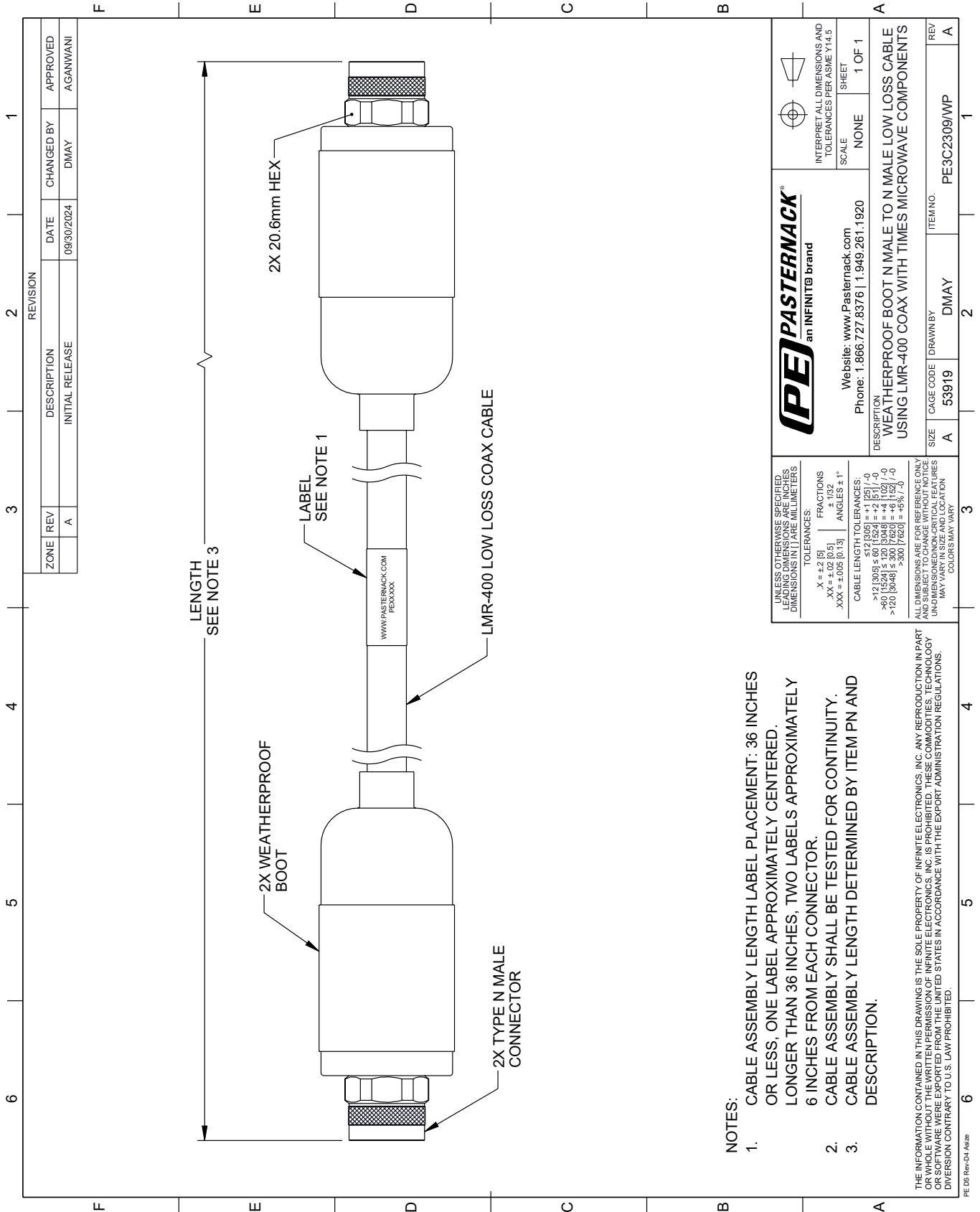
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Waterproof IP68 N Male \(Plug\) to N Male \(Plug\) Low Loss Cable Using LMR-400 Coax with Times Microwave Components PE3C2309/WP](https://www.pasternack.com/waterproof-ip68-n-male-plug-to-n-male-plug-low-loss-cable-using-lmr-400-pe3c2309-wp-p.aspx)

URL: <https://www.pasternack.com/waterproof-ip68-n-male-plug-to-n-male-plug-low-loss-cable-using-lmr-400-pe3c2309-wp-p.aspx>

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PE3C2309/WP CAD Drawing

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NOTES:

1. 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.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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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

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MILLIMETERS. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MILLIMETERS. COLORS MAY VARY.

		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
		SCALE	SHEET
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		NONE	1 OF 1
DESCRIPTION WEATHERPROOF BOOT N MALE TO N MALE LOW LOSS CABLE USING LMR-400 COAX WITH TIMES MICROWAVE COMPONENTS			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	DMAY	PE3C2309/WP
REV			A