

Waterproof IP68 N Male (Plug) to N Female (Jack)
Low Loss Cable 48 Inch Length Using LMR-400 Coax
with Times Microwave Components



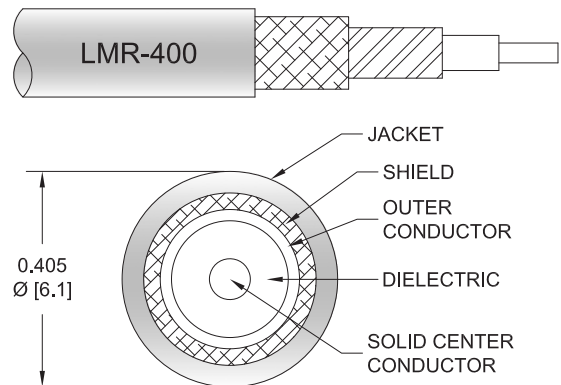
PE3C3952/WP-48

Configuration

- Connector 1: N Male
- Connector 2: N Female
- 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

Pasternack's PE3C3952/WP-48 type N male to type N female 48 inch cable using LMR-400 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 type N to type N cable assembly has a male to female gender configuration with 50 ohm flexible LMR-400 coax. The PE3C3952/WP-48 type N male to type N female cable assembly operates to 6 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		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]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (DC)			2,500	Vdc

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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	
PE3C3952/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.057	0.028	0.041	0.068	0.108	dB/ft	
			0.19	0.1	0.14	0.23	0.36	dB/m	
PE3C3952/WP-24	24 In	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	0.0823
PE3C3952/WP-36	36 In	Insertion Loss (Typ.)	0.26	0.29	0.33	0.41	0.53	dB	0.89
PE3C3952/WP-48	48 In	Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.64	dB	0.957
PE3C3952/WP-60	60 In	Insertion Loss (Typ.)	0.3	0.34	0.41	0.54	0.74	dB	1.024

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:	0.756 pounds
Additional Weight per Inch:	0.00558 pounds

Mechanical Specifications

Cable Assembly

Length	48 in [121.92 cm]
Width/Diameter	0.5 in [12.7 mm]
Weight	0.957 lbs [434.09 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	N Female
Option	Weatherproof Boot	
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Copper, Gold
Contact Plating Specification	50 µin minimum	
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	150 µin minimum	
Coupling Nut Material and Plating	Brass, Tri-Metal	
Coupling Nut Plating Specification	150 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.

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PE3C3952/WP-48

Typical Performance Data

How to Order

Part Number Configuration:

PE3C3952/WP - xx uu

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

Length

Base Number

Example: PE3C3952/WP-12 = 12 inches long cable
PE3C3952/WP-100cm = 100 cm long cable

Waterproof IP68 N Male (Plug) to N Female (Jack) Low Loss Cable 48 Inch Length 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.

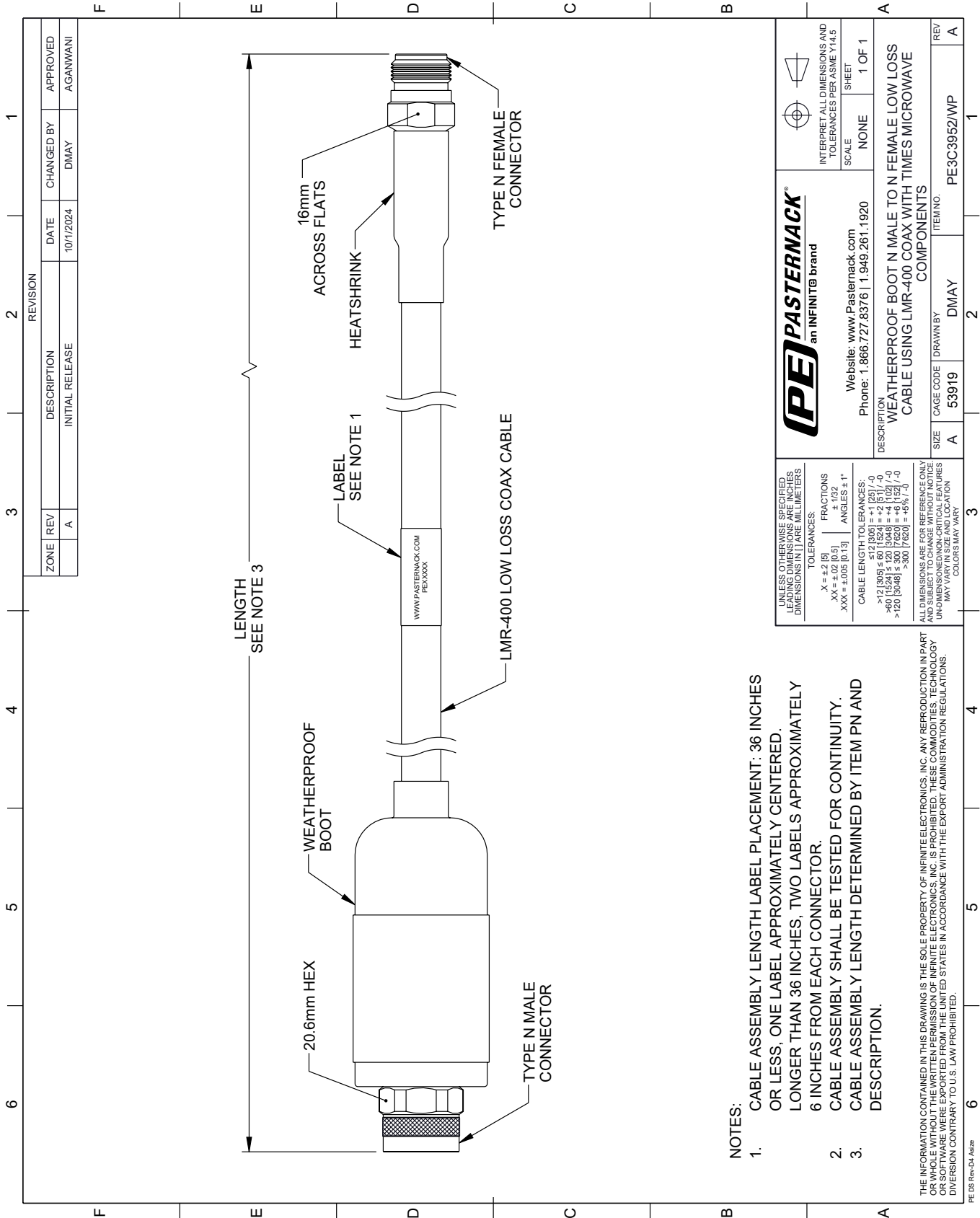
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Waterproof IP68 N Male \(Plug\) to N Female \(Jack\) Low Loss Cable 48 Inch Length Using LMR®-400 Coax with Times Microwave Components PE3C3952/WP-48](#)

URL: <https://www.pasternack.com/waterproof-ip68-n-male-plug-to-n-female-jack-low-loss-cable-48-inch-length-using-lmr-400-pe3c3952-wp-48-p.aspx>

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PE3C3952/WP-48 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.