

Waterproof IP68 N Male Right Angle to TNC Male  
Low Loss Cable 48 Inch Length Using LMR-400 Coax  
with Times Microwave Components



**PE3W01954/WP-48**

**Configuration**

- Connector 1: N Male Right Angle
- 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**

Pasternack's PE3W01954/WP-48 type N male right angle to TNC male 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 TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. The PE3W01954/WP-48 type N male to TNC male cable assembly operates to 6 GHz. The right angle type N interface on the LMR-400 cable allows for easier connections in tight spaces. 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	
PE3W01954/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	
PE3W01954/WP-24	24 Inch	Insertion Loss (Typ.)	0.34	0.36	0.39	0.44	0.52	dB	0.861
PE3W01954/WP-36	36 Inch	Insertion Loss (Typ.)	0.36	0.39	0.43	0.51	0.63	dB	0.928
PE3W01954/WP-48	48 Inch	Insertion Loss (Typ.)	0.38	0.42	0.47	0.58	0.74	dB	0.995
PE3W01954/WP-60	60 Inch	Insertion Loss (Typ.)	0.4	0.44	0.51	0.64	0.84	dB	1.062

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:	0.2 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.794 pounds
Additional Weight per Inch:	0.00558 pounds

### Mechanical Specifications

#### Cable Assembly

Length	48 in [121.92 cm]
Width/Diameter	.5 in [12.7 mm]
Weight	0.995 lbs [451.32 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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## PE3W01954/WP-48

### Connectors

Description	Connector 1	Connector 2
Type	N Male Right Angle	TNC Male
Option		Weatherproof Boot
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification		50 µin minimum
Dielectric Type	Teflon	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification		80 µin minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification		80 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)

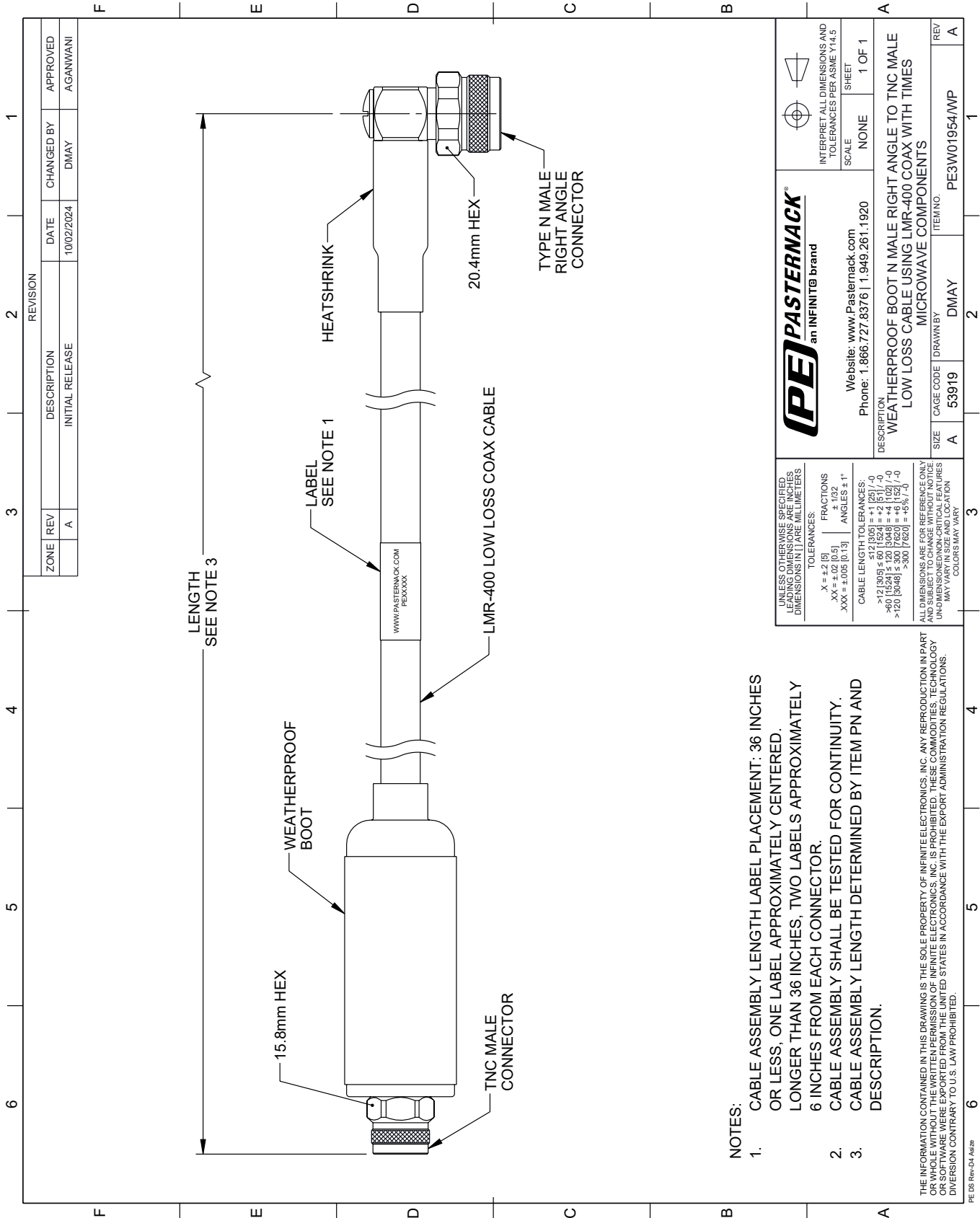
### Plotted and Other Data

Notes:  
Values at 25°C, sea level.



# PE3W01954/WP-48 CAD Drawing

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**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.

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<p><b>PASTERNAK</b> an INFINITE brand</p> <p>Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920</p>	<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
	<p>DESCRIPTION: WEATHERPROOF BOOT N MALE RIGHT ANGLE TO TNC MALE LOW LOSS CABLE USING LMR-400 COAX WITH TIMES MICROWAVE COMPONENTS</p>
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:          .X = ±.2 [5]          .XX = ±.02 [0.5]          .XXX = ±.005 [0.13]          FRACTIONS: ± 1/32          ANGLES: ± 1°</p> <p>CABLE LENGTH TOLERANCES:          &gt;12 [305] ≤ 60 [1524] = ±.125 [-0          &gt;60 [1524] ≤ 120 [3048] = ±.102 [-0          &gt;120 [3048] ≤ 300 [7620] = ±.075 [-0          &gt;300 [7620] = ±.05 [-0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>	<p>SIZE: A</p> <p>CAGE CODE: 53919</p> <p>DRAWN BY: DMAY</p> <p>ITEM NO.: PE3W01954/WP</p>