

Waterproof IP68 SMA Male (Plug) to N Male (Plug)  
Low Loss Cable 48 Inch Length Using LMR-195 Coax  
with Times Microwave Components



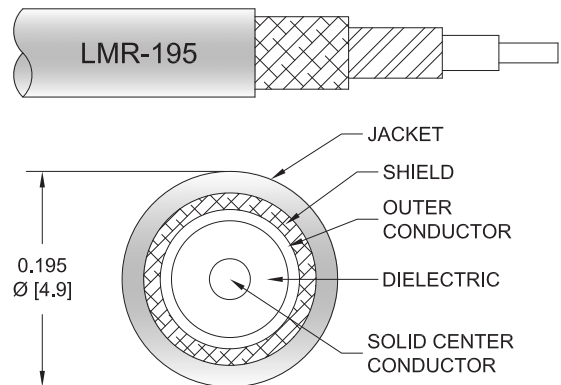
**PE3C0121/WP-48**

**Configuration**

- Connector 1: SMA Male
- Connector 2: N Male
- Cable Type: LMR-195
- Coax Flex Type: Flexible

**Features**

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket
- Silicone Connector Boot
- IP68 Rated



**Applications**

- General Purpose
- Laboratory Use

**Description**

Pasternack's PE3C0121/WP-48 SMA male to type N male 48 inch cable using LMR-195 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 SMA to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-195 coax. The PE3C0121/WP-48 SMA male to type N male 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		80		%
RF Shielding	90			dB
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		7.6 [24.93]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (DC)			1,000	Vdc

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## PE3C0121/WP-48

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			3,000	Vrms

### Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3C0121/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.057	0.081	0.116	0.19	0.299	dB/ft	
			0.19	0.27	0.39	0.63	0.99	dB/m	
PE3C0121/WP-12	12 Inch	Insertion Loss (Typ.)	0.26	0.29	0.32	0.39	0.5	dB	0.625
PE3C0121/WP-24	24 Inch	Insertion Loss (Typ.)	0.32	0.37	0.44	0.58	0.8	dB	0.647
PE3C0121/WP-36	36 Inch	Insertion Loss (Typ.)	0.38	0.45	0.55	0.77	1.1	dB	0.669
PE3C0121/WP-48	48 Inch	Insertion Loss (Typ.)	0.43	0.53	0.67	0.96	1.4	dB	0.691
PE3C0121/WP-60	60 Inch	Insertion Loss (Typ.)	0.49	0.61	0.78	1.15	1.7	dB	0.713

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:	0.625 pounds
Additional Weight per Inch:	0.00183 pounds

Electrical Specification Notes:  
Values at 25°C, sea level.

### Mechanical Specifications

#### Cable Assembly

Length	48 in [121.92 cm]
Width/Diameter	0.5 in [12.7 mm]
Weight	0.691 lbs [313.43 g]

#### Cable

Cable Type	LMR-195
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	2 in [50.8 mm]
Bending Moment	0.2 lbs-ft [0.27 N-m]
Flat Plate Crush	15 lbs/in [0.27 Kg/mm]
Tensile Strength	40 lbs [18.14 Kg]

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## PE3C0121/WP-48

### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N Male
Option	Weatherproof Boot	Weatherproof Boot
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	ASTM B488	50 µin minimum
Dielectric Type	Teflon	Teflon
Body Material and Plating	Passivated Stainless Steel	Brass, Tri-Metal
Coupling Nut Material and Plating	Passivated Stainless Steel	Brass, Tri-Metal
Boot Material	Silicone	Silicone

### Environmental Specifications

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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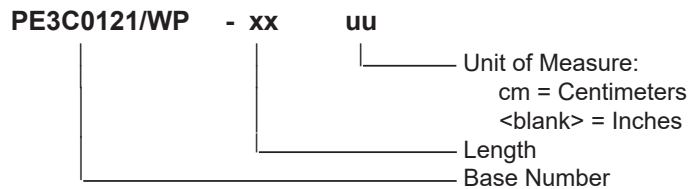


**PE3C0121/WP-48**

**Typical Performance Data**

**How to Order**

Part Number Configuration:



Example: PE3C0121/WP-12 = 12 inches long cable  
PE3C0121/WP-100cm = 100 cm long cable

Waterproof IP68 SMA Male (Plug) to N Male (Plug) Low Loss Cable 48 Inch Length Using LMR-195 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.

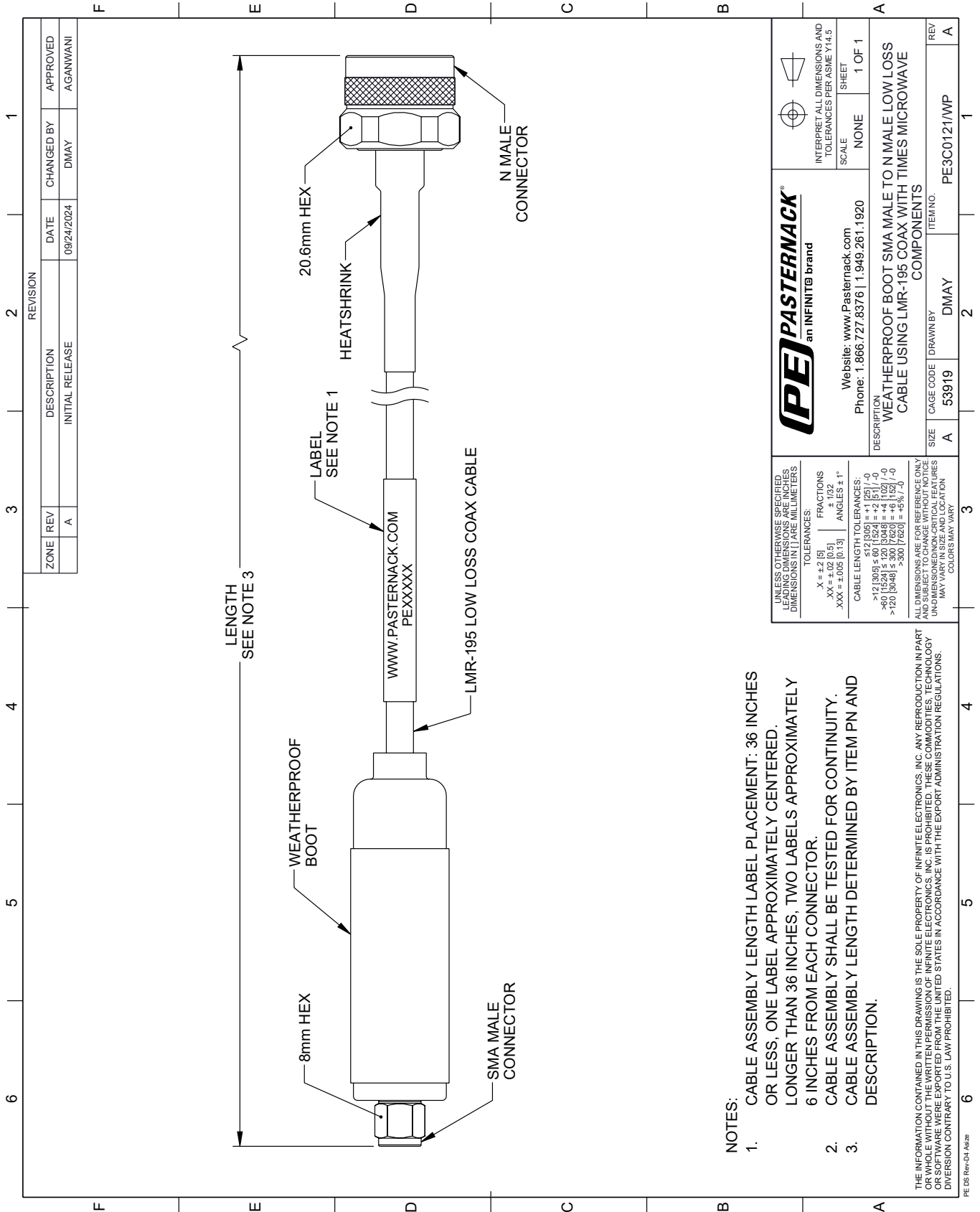
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Waterproof IP68 SMA Male \(Plug\) to N Male \(Plug\) Low Loss Cable 48 Inch Length Using LMR-195 Coax with Times Microwave Components PE3C0121/WP-48](https://www.pasternack.com/waterproof-ip68-sma-male-plug-to-n-male-plug-low-loss-cable-48-inch-length-using-lmr-195-pe3c0121-wp-48-p.aspx)

URL: <https://www.pasternack.com/waterproof-ip68-sma-male-plug-to-n-male-plug-low-loss-cable-48-inch-length-using-lmr-195-pe3c0121-wp-48-p.aspx>

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# PE3C0121/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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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:

X = ±.2 [5]	FRACTIONS
.XX = ±.02 [0.5]	± 1/32
.XXX = ±.005 [0.13]	ANGLES ± 1°

CABLE LENGTH TOLERANCES:

>12 [305]	±.60 [15.24]
>60 [1524]	±.120 [3048]
>120 [3048]	±.300 [7620]

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE  
SHEET: 1 OF 1

DESCRIPTION: WEATHERPROOF BOOT SMA MALE TO N MALE LOW LOSS CABLE USING LMR-195 COAX WITH TIMES MICROWAVE COMPONENTS

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	DMAY	PE3C0121/WP

REV: A