

## Waterproof IP68 SMA Male (Plug) to BNC Male (Plug) Low Loss Cable 48 Inch Length Using LMR-240 Coax with Times Microwave Components



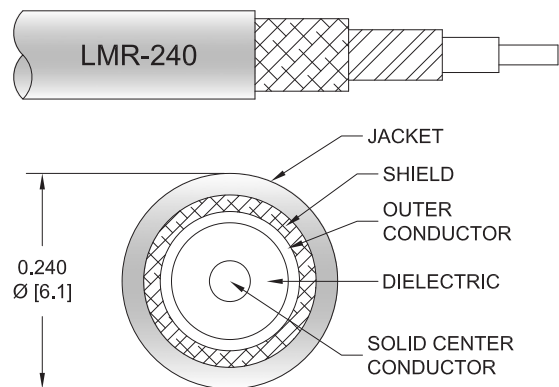
### PE3C1830/WP-48

#### Configuration

- Connector 1: SMA Male
- Connector 2: BNC Male
- Cable Type: LMR-240
- Coax Flex Type: Flexible

#### Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket
- Silicone Connector Boot
- IP68 Rated



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C1830/WP-48 SMA male to BNC male 48 inch cable using LMR-240 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 BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240 coax. The PE3C1830/WP-48 SMA male to BNC male cable assembly operates to 4 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		4	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (DC)			1,500	Vdc

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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

**Specifications by Frequency**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3C1830/WP	Custom Lengths Available	Insertion Loss (Typ.)	0.023	0.039	0.055	0.079	0.161	dB/ft	
			0.08	0.13	0.19	0.26	0.53	dB/m	
PE3C1830/WP-24	24 Inch	Insertion Loss (Typ.)	0.25	0.28	0.31	0.36	0.53	dB	0.619
PE3C1830/WP-36	36 Inch	Insertion Loss (Typ.)	0.27	0.32	0.37	0.44	0.69	dB	0.652
PE3C1830/WP-48	48 Inch	Insertion Loss (Typ.)	0.3	0.36	0.42	0.52	0.85	dB	0.685
PE3C1830/WP-60	60 Inch	Insertion Loss (Typ.)	0.32	0.4	0.48	0.6	1.01	dB	0.718

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:	0.586 pounds
Additional Weight per Inch:	0.00275 pounds

**Mechanical Specifications**

**Cable Assembly**

Length	48 in [121.92 cm]
Width/Diameter	0.5 in [12.7 mm]
Weight	0.685 lbs [310.71 g]

**Cable**

Cable Type	LMR-240
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	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

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### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	BNC Male
Option	Weatherproof Boot	
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	ASTM B488	
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Passivated Stainless Steel, Gold	
Body Material and Plating	Passivated Stainless Steel, Gold	Brass, Nickel
Body Plating Specification	SAE-AMS-2700	
Coupling Nut Material and Plating	Passivated Stainless Steel	Brass, Nickel
Coupling Nut Plating Specification	SAE-AMS-2700	
Boot Material	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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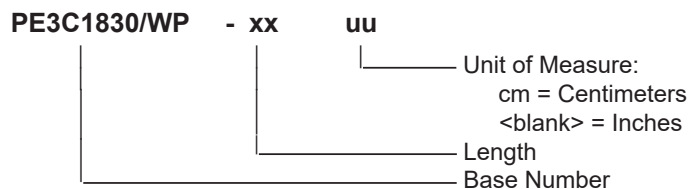


**PE3C1830/WP-48**

**Typical Performance Data**

**How to Order**

Part Number Configuration:



Example: PE3C1830/WP-12 = 12 inches long cable  
PE3C1830/WP-100cm = 100 cm long cable

Waterproof IP68 SMA Male (Plug) to BNC Male (Plug) Low Loss Cable 48 Inch Length Using LMR-240 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.

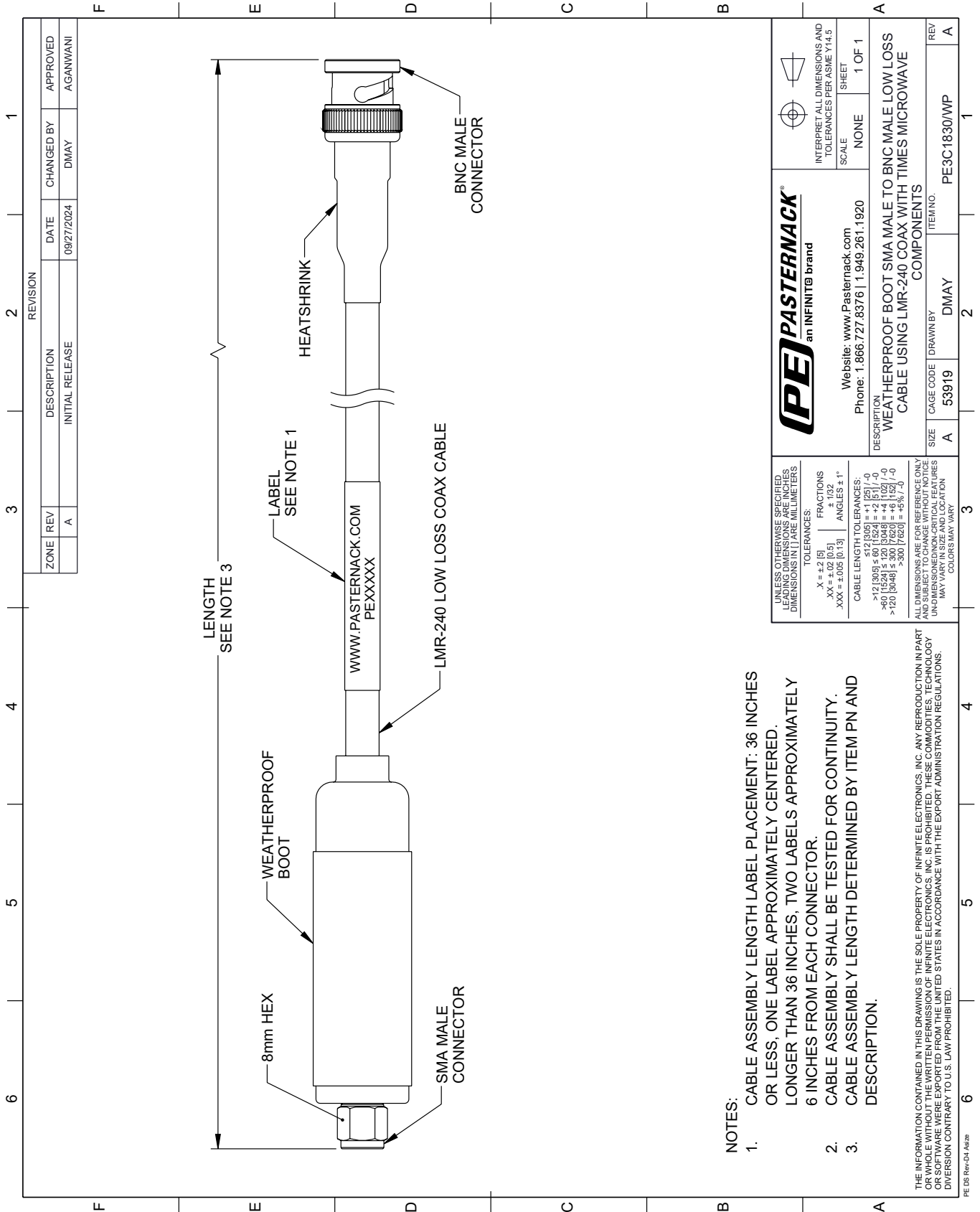
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Waterproof IP68 SMA Male \(Plug\) to BNC Male \(Plug\) Low Loss Cable 48 Inch Length Using LMR-240 Coax with Times Microwave Components PE3C1830/WP-48](https://www.pasternack.com/waterproof-ip68-sma-male-plug-to-bnc-male-plug-low-loss-cable-48-inch-length-using-lmr-240-pe3c1830-wp-48-p.aspx)

URL: <https://www.pasternack.com/waterproof-ip68-sma-male-plug-to-bnc-male-plug-low-loss-cable-48-inch-length-using-lmr-240-pe3c1830-wp-48-p.aspx>

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# PE3C1830/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.

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PE DS Rev-04 Add2

<b>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS.</b>		<b>PE PASTERNAK</b> an INFINITE brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1	
TOLERANCES: .X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]		FRACTIONS: ± 1/32 ANGLES ± 1°		Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920	
CABLE LENGTH TOLERANCES: >12 [305] ≤ 60 [1524] = ±.1 [25] / -0 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0 >120 [3048] ≤ 300 [7620] = ±.5% / -0		ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS AND LOCATIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		DESCRIPTION: WEATHERPROOF BOOT SMA MALE TO BNC MALE LOW LOSS CABLE USING LMR-240 COAX WITH TIMES MICROWAVE COMPONENTS	
ZONE A	REV A	DESCRIPTION INITIAL RELEASE	DATE 09/27/2024	CHANGED BY DMAY	APPROVED AGANWANI
SIZE A	CAGE CODE 53919	DRAWN BY DMAY	ITEM NO. PE3C1830/WP	REV A	REV A