



BNC Male Right Angle to BNC Male Right Angle Cable Using
RG223 Coax with HeatShrink and 90 Deg. Clock in 180 Inch

RF Cable Assemblies Technical Data Sheet

PE3816/HS/PH90-180

Configuration

- Connector 1: BNC Male Right Angle
- Connector 2: BNC Male Right Angle
- Cable Type: RG223

Features

- Max Frequency 4 GHz
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

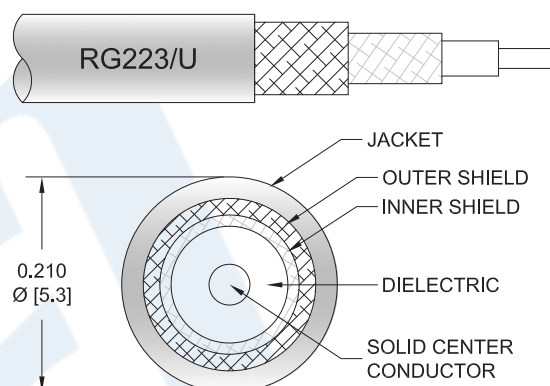
Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3816/HS/PH90-180 BNC male right angle to BNC male right angle 457.2 cm cable using RG223 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 BNC to BNC cable assembly has a male to male gender configuration with 50 ohm flexible RG223 coax. The PE3816/HS/PH90-180 BNC male to BNC male cable assembly operates to 4 GHz. The right angle BNC interfaces on the RG223 cable allow for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

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.



Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Male Right Angle to BNC Male Right Angle Cable Using RG223 Coax with HeatShrink and 90 Deg. Clock in 180 Inch PE3816/HS/PH90-180](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR			1.5:1	
Velocity of Propagation		66		%
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Operating Voltage (AC)			500	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	1	1.32	1.75	2.41	4.12	

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.2 dB per connector.

Mechanical Specifications

Cable Assembly

Length*	180 in [457.2 cm]
Weight	0.548 lbs [248.57 g]

Cable

Cable Type	RG223
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.209 in [5.31 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]

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Connectors

Description	Connector 1	Connector 2
Type	BNC Male Right Angle	BNC Male Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum

Environmental Specifications

Temperature

Operating Range -20 to +80 deg C

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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How to Order

Part Number Configuration:

PE3816/HS/PH90

- **xx**

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3816/HS/PH90-12 = 12 inches long cable
PE3816/HS/PH90-100cm = 100 cm long cable

BNC Male Right Angle to BNC Male Right Angle Cable Using RG223 Coax with HeatShrink and 90 Deg. Clock in 180 Inch 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: [BNC Male Right Angle to BNC Male Right Angle Cable Using RG223 Coax with HeatShrink and 90 Deg. Clock in 180 Inch PE3816/HS/PH90-180](https://www.pasternack.com/bnc-male-right-angle-to-bnc-male-cable-12-inch-length-using-rg223-with-heatshrink-and-90-deg.-clock-pe3816-hs-ph90-180-p.aspx)

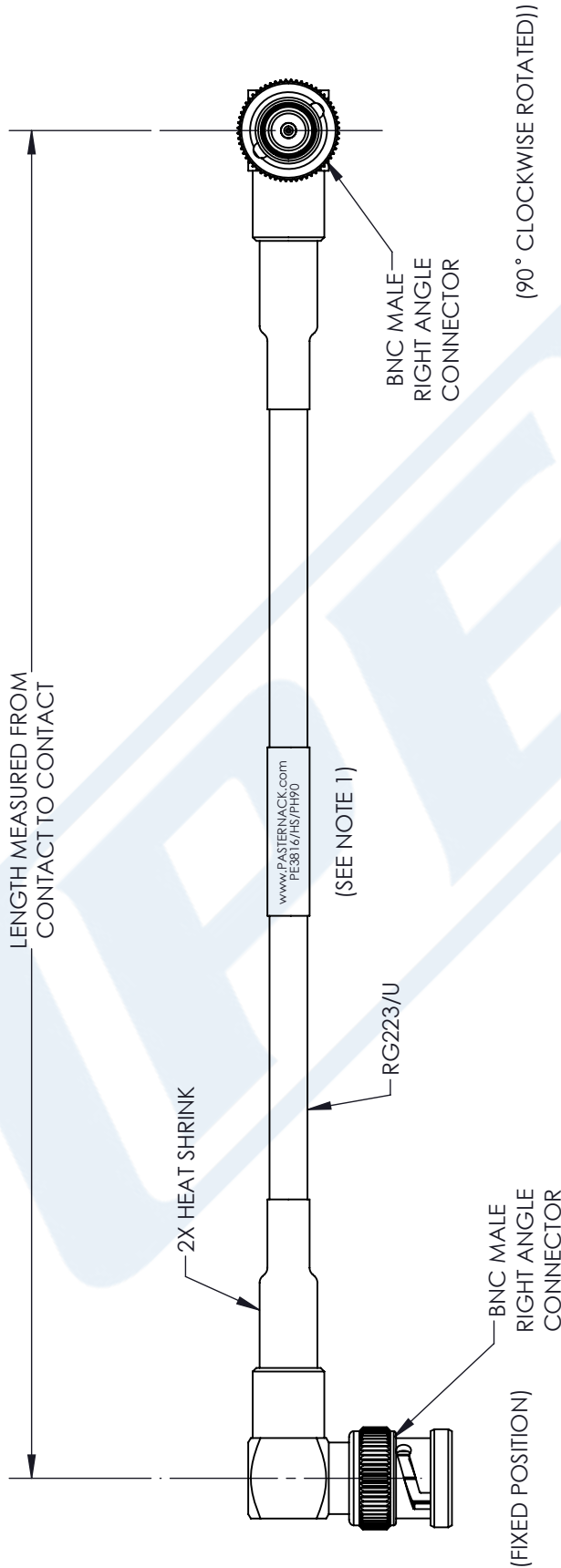
URL: <https://www.pasternack.com/bnc-male-right-angle-to-bnc-male-cable-12-inch-length-using-rg223-with-heatshrink-and-90-deg.-clock-pe3816-hs-ph90-180-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

PE3816/HS/PH90-180 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	08/10/2022	AGANWANI



NOTES:

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END 6.0" FROM END OF CONNECTOR

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UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

.X = ± .2 [.008] FRACTIONS

.XX = ± .02 [.51] ± 1/32

.XXX = ± .005 [.13] ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0

12 [305] < L ≤ 60 [1524] = +2 [51] / -0

60 [1524] < L ≤ 120 [3048] = +4 [102] / -0

120 [3048] < L ≤ 300 [7620] = +6 [152] / -0

300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.



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SIZE A CAGE CODE 53919 DRAWN BY BPUCHASKI ITEM NO. PE3816/HS/PH90 REV A



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SHEET 1 OF 1

SCALE N/A

REV A