



BNC Male Right Angle to BNC Male Right Angle Cable Using  
RG223 Coax with HeatShrink and 90 Deg. Clock in 144 Inch

## RF Cable Assemblies Technical Data Sheet

**PE3816/HS/PH90-144**

### 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

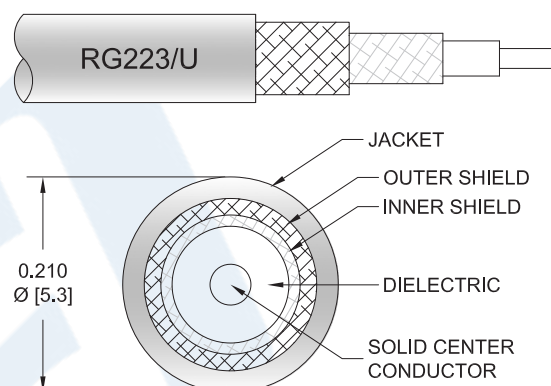
### Applications

- General Purpose
- Laboratory Use

### Description

Pasternack's PE3816/HS/PH90-144 BNC male right angle to BNC male right angle 365.8 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/PH90-144 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 144 Inch PE3816/HS/PH90-144](#)



BNC Male Right Angle to BNC Male Right Angle Cable Using  
RG223 Coax with HeatShrink and 90 Deg. Clock in 144 Inch

## RF Cable Assemblies Technical Data Sheet

**PE3816/HS/PH90-144**

### 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.) | 0.88 | 1.14 | 1.48 | 2.01 | 3.38 | dB    |

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* | 144 in [365.76 cm]   |
| Weight  | 0.454 lbs [205.93 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]             |

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 144 Inch PE3816/HS/PH90-144](#)



BNC Male Right Angle to BNC Male Right Angle Cable Using RG223 Coax with HeatShrink and 90 Deg. Clock in 144 Inch

## RF Cable Assemblies Technical Data Sheet

**PE3816/HS/PH90-144**

### 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.

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 144 Inch PE3816/HS/PH90-144](#)



BNC Male Right Angle to BNC Male Right Angle Cable Using  
RG223 Coax with HeatShrink and 90 Deg. Clock in 144 Inch

## RF Cable Assemblies Technical Data Sheet

**PE3816/HS/PH90-144**

### How to Order

Part Number Configuration:

**PE3816/HS/PH90**

- **xx**

**uu**

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 144 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.

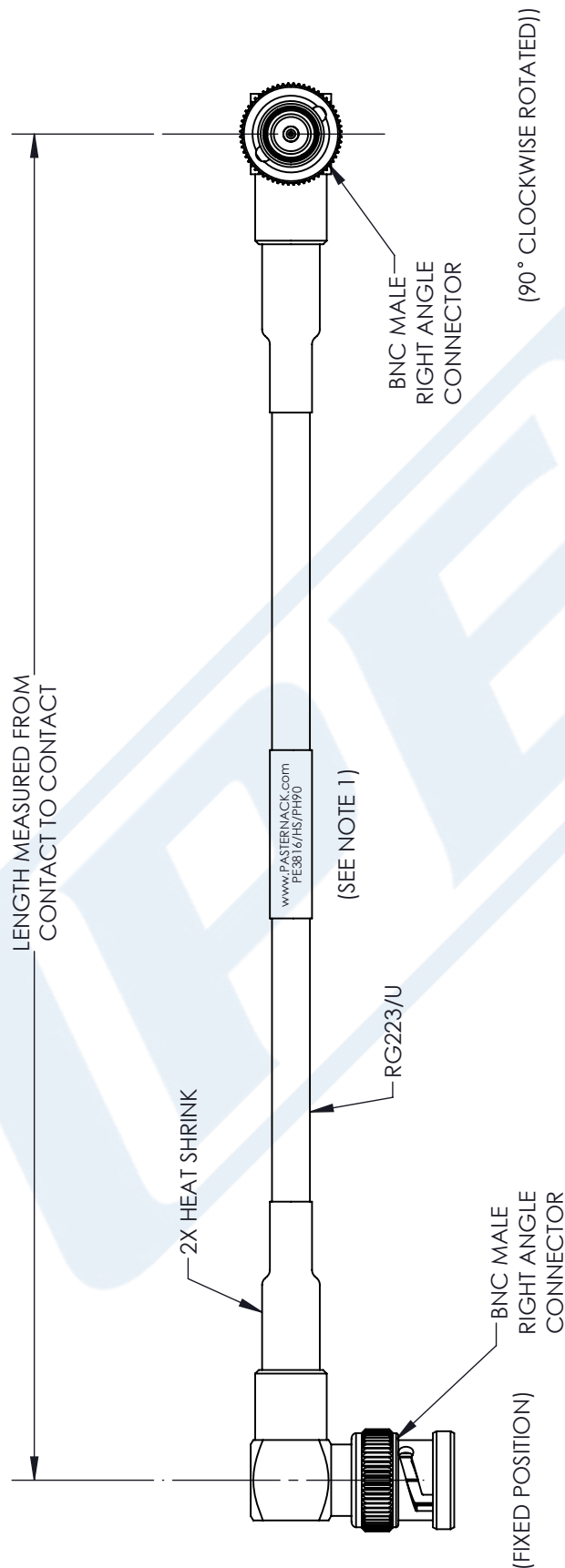
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Male Right Angle to BNC Male Right Angle Cable Using RG223 Coax with HeatShrink and 90 Deg. Clock in 144 Inch PE3816/HS/PH90-144](#)

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-ph90-144-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.

BNC Male Right Angle to BNC Male Right Angle Cable Using  
RG223 Coax with HeatShrink and 90 Deg. Clock in 144 Inch

| 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

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

|                                                                                                                                                                                                                                                                                                 |                                                                    |                                             |                                                                                                                                                                                                                                                                                        |                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <p>UNLESS OTHERWISE SPECIFIED<br/>LEADING DIMENSIONS ARE INCHES<br/>DIMENSIONS IN [ ] ARE MILLIMETERS</p>                                                                                                                                                                                       | <p>TOLERANCES:</p>                                                 |                                             |                                                                                                                                                                                                                                                                                        | <p>THIRD-ANGLE PROJECTION</p>  |
|                                                                                                                                                                                                                                                                                                 | <p>X ± .2 [ .508 ]<br/>XX ± .02 [ .51 ]<br/>XXX ± .005 [ .13 ]</p> | <p>FRACTIONS<br/>± 1/32<br/>ANGLES ± 1°</p> | <p>CABLE LENGTH (L) TOLERANCES:<br/><br/>L ≤ 12 [ 305 ] = +.1 [ 25 ] / -0<br/>12 [ 305 ] &lt; L ≤ 60 [ 1524 ] = +2 [ 51 ] / -0<br/>60 [ 1524 ] &lt; L ≤ 120 [ 3048 ] = +4 [ 102 ] / -0<br/>120 [ 3048 ] &lt; L ≤ 300 [ 7620 ] = +6 [ 152 ] / -0<br/>300 [ 7620 ] &lt; L = +5% / -0</p> |                                                                                                                   |
| <p><b>PE PASTERNAK</b><br/>an INFINITE® brand</p>                                                                                                                                                                                                                                               |                                                                    |                                             |                                                                                                                                                                                                                                                                                        |                                                                                                                   |
| <p>Pasternack Enterprises, Inc.<br/>P.O. Box 16759, Irvine, CA 92623.<br/>Phone: 1.949.261.1920   1.866.727.8376<br/>Fax: 1.949.261.7451<br/>Website: <a href="http://www.pasternack.com">www.pasternack.com</a><br/>E-mail: <a href="mailto:sales@pasternack.com">sales@pasternack.com</a></p> |                                                                    |                                             |                                                                                                                                                                                                                                                                                        |                                                                                                                   |
| SIZE                                                                                                                                                                                                                                                                                            | CAGE CODE                                                          | DRAWN BY                                    | ITEM NO                                                                                                                                                                                                                                                                                | REV                                                                                                               |
| A                                                                                                                                                                                                                                                                                               | 53919                                                              | BPUCHASKI                                   | PE3816/HS/PH90                                                                                                                                                                                                                                                                         | A                                                                                                                 |