



BNC Male to BNC Female Bulkhead Cable Using RG316 Coax

RF Cable Assemblies Technical Data Sheet

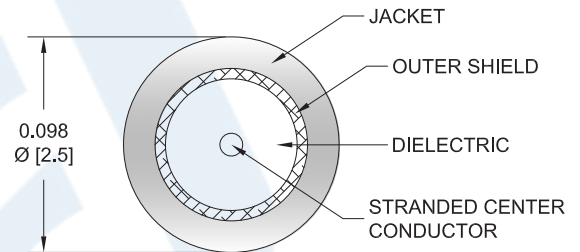
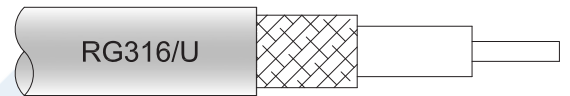
PE3C3446

Configuration

- Connector 1: BNC Male
- Connector 2: BNC Female Bulkhead
- Cable Type: RG316

Features

- Max Frequency 1 GHz
- 69% Phase Velocity
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C3446 BNC male to BNC female bulkhead cable using RG316 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 female gender configuration with 50 ohm flexible RG316 coax. The PE3C3446 BNC male to BNC female cable assembly operates to 1 GHz. Our RF cable assembly with BNC bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

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 to BNC Female Bulkhead Cable Using RG316 Coax PE3C3446](#)



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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------------|---------|--------------|---------|-----------------|
| Frequency Range | DC | | 1,000 | MHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 69 | | % |
| Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |
| DC Resistance Inner Conductor | | 8.41 [27.59] | | Ω/1000ft [Ω/Km] |
| Operating Voltage (AC) | | | 335 | Vrms |
| Jacket Spark | | | 2,000 | Vrms |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|-------|--------|--------|--------|----|-------|
| Frequency | 100 | 250 | 500 | 1,000 | | MHz |
| Insertion Loss (Max.) | 1.11 | 1.15 | 1.2 | 1.3 | | dB/ft |
| | 3.64 | 3.77 | 3.94 | 4.27 | | dB/m |
| Insertion Loss (Typ.) | 0.31 | 0.36 | 0.438 | 0.58 | | dB/ft |
| | 1.02 | 1.18 | 1.44 | 1.9 | | dB/m |
| VSWR (Max.) | 1.4:1 | 1.4:1 | 1.4:1 | 1.4:1 | | |
| Return Loss (Max.) | 15.56 | 15.563 | 15.563 | 15.563 | | dB |

Mechanical Specifications

Cable Assembly

Diameter 0.689 in [17.5 mm]

Weight 0.082 lbs [37.19 g]

Cable

Cable Type RG316
 Impedance 50 Ohms
 Inner Conductor Type Stranded
 Inner Conductor Material and Plating Copper Clad Steel, Silver
 Dielectric Type PTFE
 Number of Shields 1
 Shield Layer 1 Silver Plated Copper Braid
 Jacket Material FEP, Tan
 Jacket Diameter 0.102 in [2.59 mm]

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Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|------------------|---------------------|
| Type | BNC Male | BNC Female Bulkhead |
| Specification | MIL-STD-348A | |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Gold | Brass, Gold |
| Contact Plating Specification | 50µ in. minimum | 30 µin minimum |
| Dielectric Type | Teflon | PTFE |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | 100µ in. minimum | 100 µin minimum |
| Coupling Nut Material and Plating | Brass, Nickel | |
| Coupling Nut Plating Specification | 100µ in. minimum | |

Mechanical Specification Notes:

*All cable assemblies have a length tolerance of 1.5% or $\pm 3/8"$, whichever is greater.

Environmental Specifications

Temperature

Operating Range -55 to +165 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:

PE3C3446

- **xx**

uu

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

Example: PE3C3446-12 = 12 inches long cable
PE3C3446-100cm = 100 cm long cable

BNC Male to BNC Female Bulkhead Cable Using RG316 Coax 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.

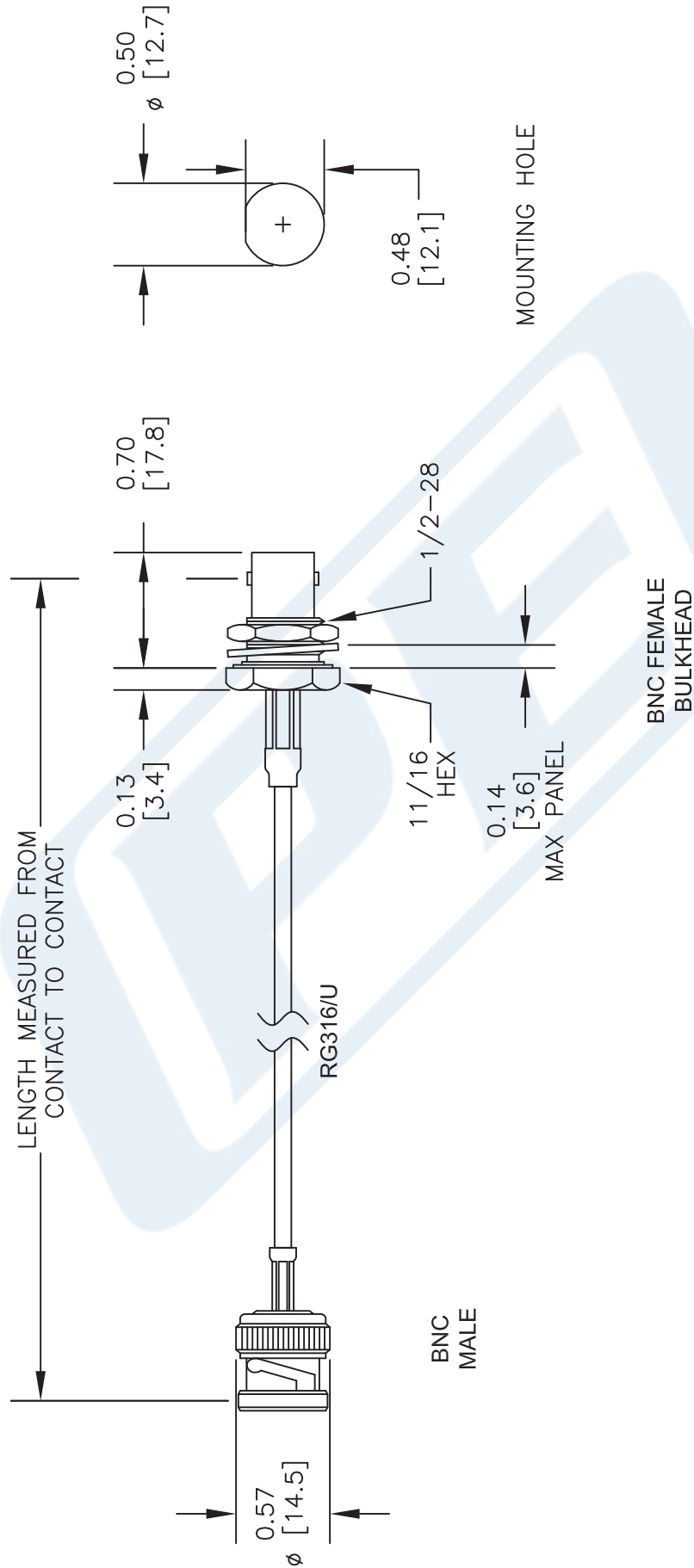
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Male to BNC Female Bulkhead Cable Using RG316 Coax PE3C3446](https://www.pasternack.com/bnc-male-bnc-female-rg316u-cable-assembly-pe3c3446-p.aspx)

URL: <https://www.pasternack.com/bnc-male-bnc-female-rg316u-cable-assembly-pe3c3446-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.

PE3C3446 CAD Drawing

BNC Male to BNC Female Bulkhead Cable Using RG316 Coax



DWG TITLE

PE3C3446

- NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
 3. DIMENSIONS ARE IN INCHES [mm].
 4. LENGTH TOLERANCE IS $\pm 1.5\%$ OR $3/8"$, WHICHEVER IS GREATER.

FSCM NO. 53919

CAD FILE 101816

SCALE N/A

SIZE A

2233

PE PASTERNAK
THE ENGINEER'S RF SOURCE

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