



BNC Female Bulkhead to TNC Female Bulkhead  
Cable 48 Inch Length Using RG174 Coax

RF Cable Assemblies Technical Data Sheet

PE3W09944-48

**Configuration**

- Connector 1: BNC Female Bulkhead
- Connector 2: TNC Female Bulkhead
- Cable Type: RG174

**Features**

- Max Frequency 1 GHz
- 66% Phase Velocity
- PVC Jacket

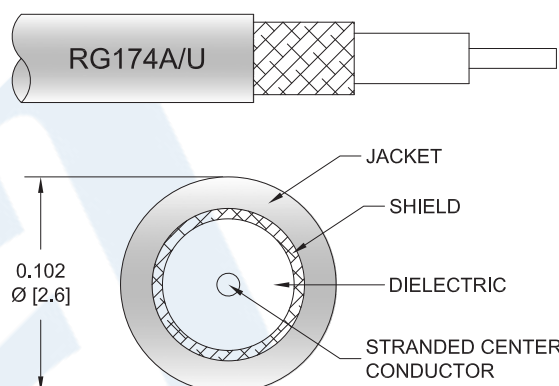
**Applications**

- General Purpose
- Laboratory Use

**Description**

Pasternack's PE3W09944-48 BNC female bulkhead to TNC female bulkhead 48 inch cable using RG174 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 TNC cable assembly has a female to female gender configuration with 50 ohm flexible RG174 coax. The PE3W09944-48 BNC female to TNC female cable assembly operates to 1 GHz. Our RF cable assembly with BNC bulkhead and TNC 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 Female Bulkhead to TNC Female Bulkhead Cable 48 Inch Length Using RG174 Coax PE3W09944-48](#)



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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
VSWR			1.4:1	
Velocity of Propagation		66		%
Capacitance		31.08 [101.97]		pF/ft [pF/m]

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	100	250	500	1,000		MHz
Insertion Loss (Typ.)	0.52	0.68	0.96	1.48		dB

**Electrical Specification Notes:**

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

**Mechanical Specifications**

**Cable Assembly**

Length*	48 in [121.92 cm]
Diameter	0.689 in [17.5 mm]

**Cable**

Cable Type	RG174
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	1
Shield Layer 1	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]

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**Connectors**

Description	Connector 1	Connector 2
Type	BNC Female Bulkhead	TNC Female Bulkhead
Specification		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

**Environmental Specifications**

**Temperature**

Operating Range

-40 to +80 deg C

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

**Plotted and Other Data**

Notes:

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**How to Order**

Part Number Configuration:

**PE3W09944**

- **xx**

**uu**

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

Example: PE3W09944-12 = 12 inches long cable  
PE3W09944-100cm = 100 cm long cable

BNC Female Bulkhead to TNC Female Bulkhead Cable 48 Inch Length Using RG174 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 Female Bulkhead to TNC Female Bulkhead Cable 48 Inch Length Using RG174 Coax PE3W09944-48](https://www.pasternack.com/bnc-female-tnc-female-rg174au-cable-assembly-pe3w09944-48-p.aspx)

URL: <https://www.pasternack.com/bnc-female-tnc-female-rg174au-cable-assembly-pe3w09944-48-p.aspx>

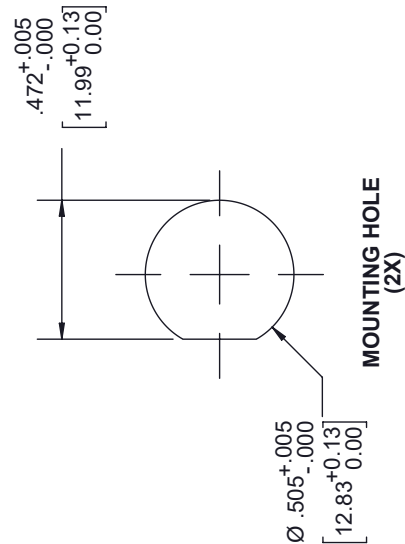
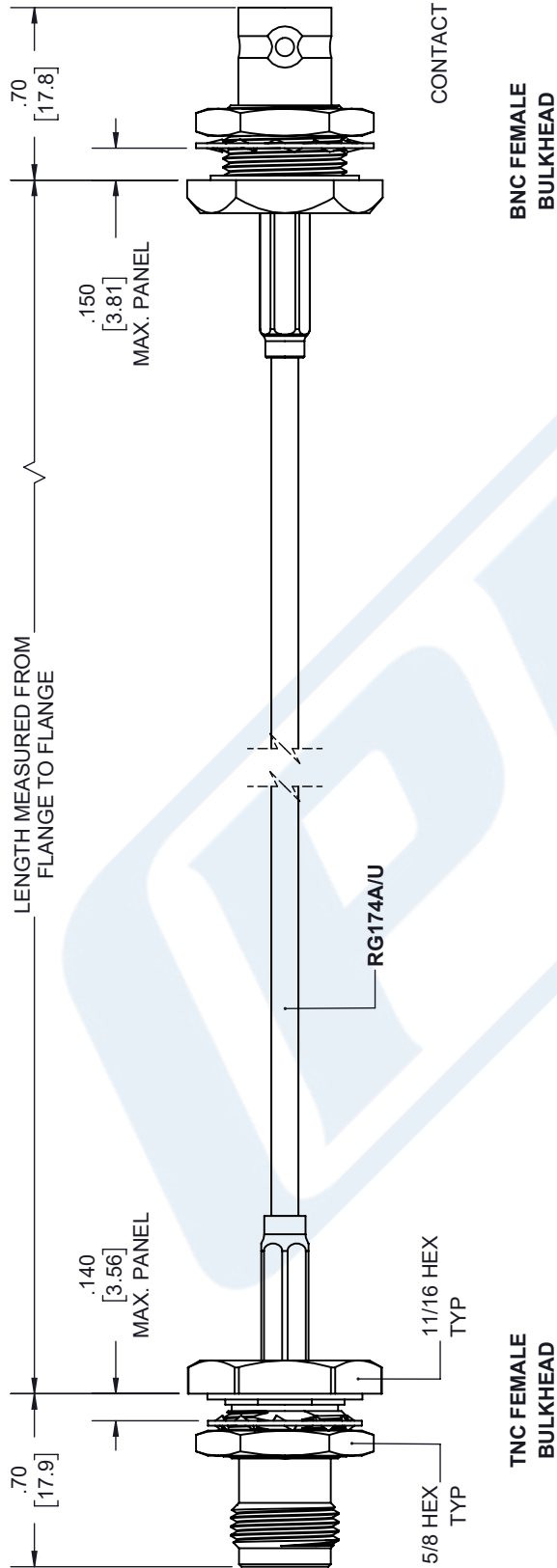
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such 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.

# PE3W09944-48 CAD Drawing

BNC Female Bulkhead to TNC Female Bulkhead Cable

48 Inch Length Using RG174 Coax

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	10/19/2020	S. ELLIS



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

TOLERANCES:

SIZE	FRACTIONS	ANGLES
X = ± .2	[.008]	± 1/32
.XX = ± .02	[.51]	± 1°
.XXX = ± .005	[.13]	± 1°

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305]	± .125 [-0]
12 [305] < L ≤ 60 [1524]	± .125 [-0]
60 [1524] < L ≤ 120 [3048]	± .125 [-0]
120 [3048] < L ≤ 300 [7620]	± .125 [-0]
300 [7620] < L	± .125 [-0]

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
an INFINITE brand

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SHEET 1 OF 1

SCALE N/A

REV A

ITEM NO. PE3W09944

DRAWN BY K.DANG

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