

## TNC Female Bulkhead to SMB Plug Low Loss Cable Using LMR-100 Coax with HeatShrink



### PE3W16612/HS

#### Configuration

- Connector 1: TNC Female Bulkhead
- Connector 2: SMB Plug
- Cable Type: LMR-100A
- Coax Flex Type: Flexible

#### Features

- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W16612/HS TNC female bulkhead to SMB plug cable using LMR-100 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 TNC to SMB cable assembly has a female to plug gender configuration with 50 ohm flexible LMR-100A coax. Our RF cable assembly with 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. 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                 |
|-------------------------------|---------|---------------|---------|-----------------------|
| Velocity of Propagation       |         | 66            |         | %                     |
| RF Shielding                  | 90      |               |         | dB                    |
| Group Delay                   |         | 1.54 [5.05]   |         | ns/ft [ns/m]          |
| Capacitance                   |         | 30.8 [101.05] |         | pF/ft [pF/m]          |
| Inductance                    |         | 0.077 [0.25]  |         | uH/ft [uH/m]          |
| DC Resistance Inner Conductor |         | 81 [265.75]   |         | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor |         | 9.5 [31.17]   |         | Ohms/1000ft [Ohms/Km] |

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**Electrical Specifications**

| Description  | Minimum | Typical | Maximum | Units |
|--------------|---------|---------|---------|-------|
| Jacket Spark |         |         | 2,000   | Vrms  |

**Mechanical Specifications**

**Cable Assembly**

|                |                     |
|----------------|---------------------|
| Width/Diameter | 0.5 in [12.7 mm]    |
| Weight         | 0.067 lbs [30.39 g] |

**Cable**

|                                      |                        |
|--------------------------------------|------------------------|
| Cable Type                           | LMR-100A               |
| Impedance                            | 50 Ohms                |
| Inner Conductor Type                 | Solid                  |
| Inner Conductor Material and Plating | Copper Clad Steel      |
| Dielectric Type                      | PE                     |
| Number of Shields                    | 2                      |
| Shield Layer 1                       | Aluminum Tape          |
| Shield Layer 2                       | Tinned Copper Braid    |
| Jacket Material                      | PVC, Black             |
| Jacket Diameter                      | 0.11 in [2.79 mm]      |
| One Time Minimum Bend Radius         | 0.25 in [6.35 mm]      |
| Repeated Minimum Bend Radius         | 1 in [25.4 mm]         |
| Bending Moment                       | 0.1 lbs-ft [0.14 N-m]  |
| Flat Plate Crush                     | 10 lbs/in [0.18 Kg/mm] |
| Tensile Strength                     | 15 lbs [6.8 Kg]        |

**Connectors**

| Description                        | Connector 1         | Connector 2            |
|------------------------------------|---------------------|------------------------|
| Type                               | TNC Female Bulkhead | SMB Plug               |
| Specification                      |                     | MIL-STD-348A           |
| Impedance                          | 50 Ohms             | 50 Ohms                |
| Configuration                      | Straight            | Straight               |
| Contact Material and Plating       |                     | Beryllium Copper, Gold |
| Contact Plating Specification      |                     | 30 µin minimum         |
| Dielectric Type                    |                     | PTFE                   |
| Body Material and Plating          | Brass, Nickel       | Brass, Nickel          |
| Body Plating Specification         |                     | 100 µin minimum        |
| Coupling Nut Material and Plating  |                     | Brass, Nickel          |
| Coupling Nut Plating Specification |                     | 100 µin minimum        |

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### PE3W16612/HS

#### Environmental Specifications

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

#### Plotted and Other Data

Notes:

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3W16612/HS - xx uu**

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

Example: PE3W16612/HS-12 = 12 inches long cable  
 PE3W16612/HS-100cm = 100 cm long cable

TNC Female Bulkhead to SMB Plug Low Loss Cable Using LMR-100 Coax with HeatShrink 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.

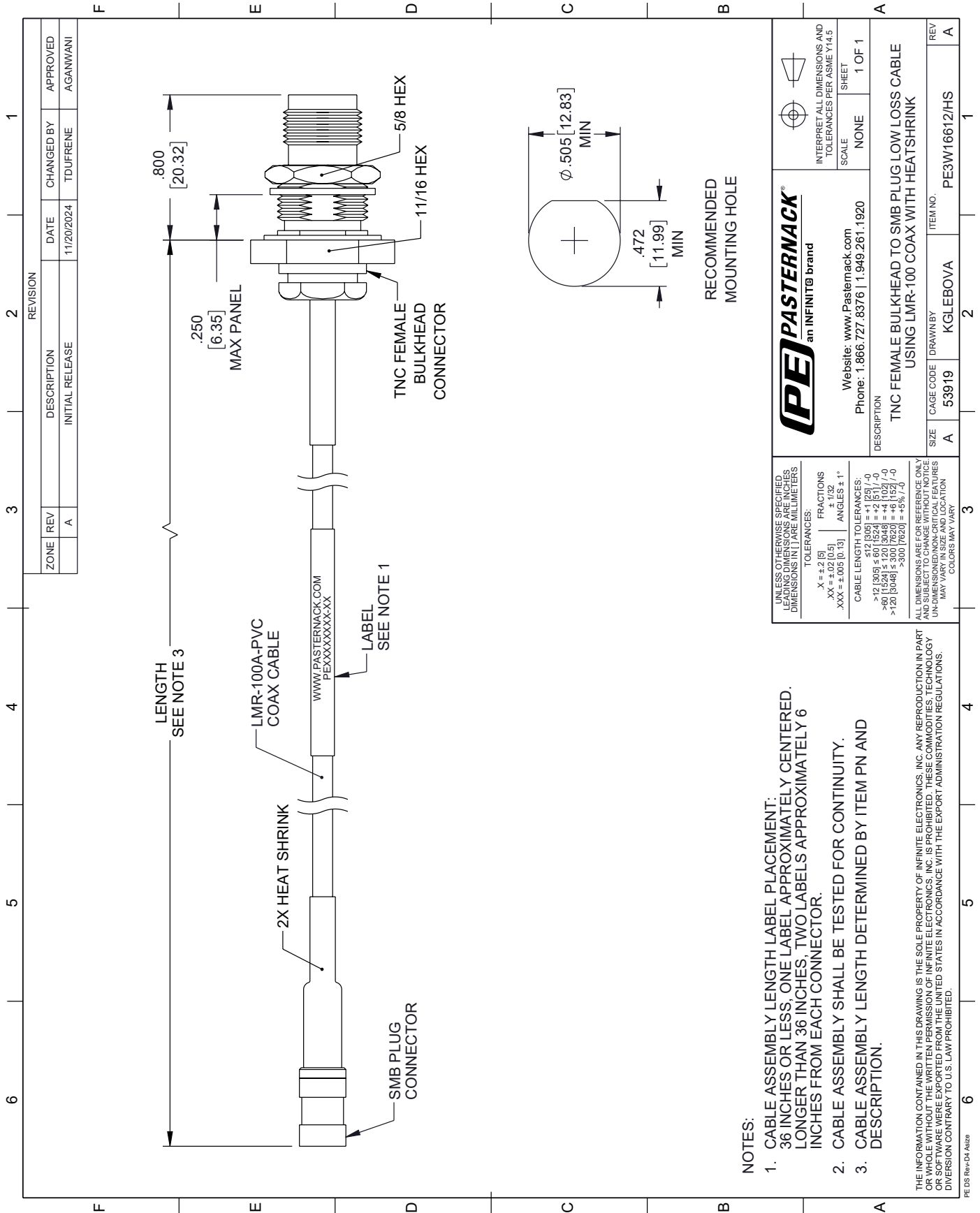
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Female Bulkhead to SMB Plug Low Loss Cable Using LMR-100 Coax with HeatShrink PE3W16612/HS](#)

URL: <https://www.pasternack.com/tnc-female-bulkhead-to-smb-plug-low-loss-cable-using-lmr-100-with-heatshrink-pe3w16612-hs-p.aspx>

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# PE3W16612/HS 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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|   |                  |
|---|------------------|
| UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN PAREMILLIMETERS  |                  |
| TOLERANCES:   |                  |
| X = ±.2 [5]   | FRACTIONS ± 1/32 |
| .XX = ±.02 [0.5]  | ANGLES ± 1°      |
| .XXX = ±.005 [0.13]   |                  |
| CABLE LENGTH TOLERANCES:  |                  |
| >12 [305] ≤ 60 [1524] = +.1 [25] / -0   |                  |
| >60 [1524] ≤ 120 [3048] = +.4 [102] / -0  |                  |
| >120 [3048] ≤ 300 [7620] = +.5 [12.7] / -0  |                  |
| >300 [7620] = +.5 [12.7] / -0   |                  |
| ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED. UNDIMENSIONED CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY. |                  |

|   |                       |
|---|-----------------------|
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| INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5  | SCALE NONE            |
| SHEET 1 OF 1  |                       |
| DESCRIPTION<br>TNC FEMALE BULKHEAD TO SMB PLUG LOW LOSS CABLE USING LMR-100 COAX WITH HEATSHRINK              |                       |
| SIZE A  | CAGE CODE 53919       |
| DRAWN BY KGLEBOVA   | ITEM NO. PE3W16612/HS |
| REV A   |                       |