



Reverse Polarity TNC Male to N Female Bulkhead Cable  
12 Inch Length Using LMR-400 Coax with HeatShrink

**RF Cable Assemblies Technical Data Sheet**

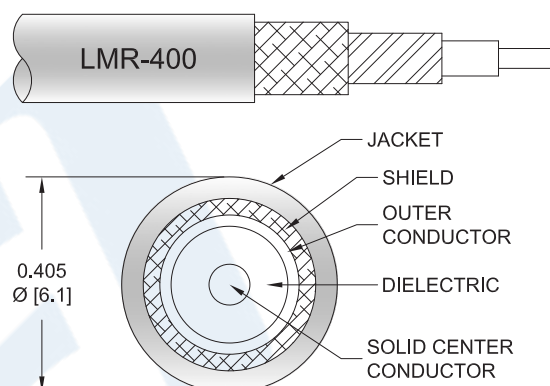
**PE3W02753/HS-12**

**Configuration**

- Connector 1: TNC Male Reverse Polarity
- Connector 2: N Female Bulkhead
- Cable Type: LMR-400

**Features**

- Max Frequency 2 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



**Applications**

- General Purpose
- Laboratory Use

**Description**

Pasternack's PE3W02753/HS-12 reverse polarity TNC male to type N female bulkhead 12 inch cable using LMR-400 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 reverse polarity TNC to type N cable assembly has a male to female gender configuration with 50 ohm flexible LMR-400 coax. The PE3W02753/HS-12 reverse polarity TNC male to type N female cable assembly operates to 2 GHz. Our RF cable assembly with type N 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Reverse Polarity TNC Male to N Female Bulkhead Cable 12 Inch Length Using LMR-400 Coax with HeatShrink PE3W02753/HS-12](#)



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#### Electrical Specifications

| Description                          | Minimum | Typical      | Maximum | Units              |
|--------------------------------------|---------|--------------|---------|--------------------|
| Frequency Range                      | DC      |              | 2       | GHz                |
| VSWR                                 |         |              | 1.5:1   |                    |
| Velocity of Propagation              |         | 85           |         | %                  |
| RF Shielding                         | 90      |              |         | dB                 |
| Group Delay                          |         | 1.2 [3.94]   |         | ns/ft [ns/m]       |
| Capacitance                          |         | 23.9 [78.41] |         | pF/ft [pF/m]       |
| Inductance                           |         | 0.06 [0.2]   |         | uH/ft [uH/m]       |
| DC Resistance Inner Conductor<br>Km] |         | 1.39 [4.56]  |         | Ohms/1000ft [Ohms/ |
| DC Resistance Outer Conductor<br>Km] |         | 1.65 [5.41]  |         | Ohms/1000ft [Ohms/ |
| Jacket Spark                         |         |              | 8,000   | Vrms               |

#### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.1  | 0.25 | 0.5  | 1    | 2    | GHz   |
| Insertion Loss (Max.) | 0.21 | 0.22 | 0.22 | 0.24 | 0.26 | dB    |

#### Electrical Specification Notes:

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

#### Mechanical Specifications

##### Cable Assembly

|          |                     |
|----------|---------------------|
| Length*  | 12 in [304.8 mm]    |
| Diameter | 0.875 in [22.23 mm] |

##### Cable

|                                      |                      |
|--------------------------------------|----------------------|
| Cable Type                           | LMR-400              |
| Impedance                            | 50 Ohms              |
| Inner Conductor Type                 | Solid                |
| Inner Conductor Material and Plating | Copper Clad Aluminum |
| Dielectric Type                      | PE (F)               |
| Number of Shields                    | 2                    |
| Shield Layer 1                       | Aluminum Tape        |
| Shield Layer 2                       | Tinned Copper Braid  |

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|                              |                        |
|------------------------------|------------------------|
| Jacket Material              | PE, Black              |
| Jacket Diameter              | 0.405 in [10.29 mm]    |
| One Time Minimum Bend Radius | 1 in [25.4 mm]         |
| Repeated Minimum Bend Radius | 4 in [101.6 mm]        |
| Bending Moment               | 0.5 lbs-ft [0.68 N-m]  |
| Flat Plate Crush             | 40 lbs/in [0.71 Kg/mm] |
| Tensile Strength             | 160 lbs [72.57 Kg]     |

**Connectors**

| Description                       | Connector 1               | Connector 2            |
|-----------------------------------|---------------------------|------------------------|
| Type                              | TNC Male Reverse Polarity | N Female Bulkhead      |
| Impedance                         | 50 Ohms                   | 50 Ohms                |
| Contact Material and Plating      | Phosphor Bronze, Gold     | Beryllium Copper, Gold |
| Dielectric Type                   | PTFE                      | Teflon                 |
| Body Material and Plating         | Brass, Nickel             | Brass, Nickel          |
| Coupling Nut Material and Plating | Brass, Nickel             |                        |

**Mechanical Specification Notes:**

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

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

**Plotted and Other Data**

Notes:

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**PE3W02753/HS-12**

**How to Order**

Part Number Configuration:

**PE3W02753/HS**

**- xx**

**uu**

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

Example: PE3W02753/HS-12 = 12 inches long cable  
PE3W02753/HS-100cm = 100 cm long cable

Reverse Polarity TNC Male to N Female Bulkhead Cable 12 Inch Length Using LMR-400 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: [Reverse Polarity TNC Male to N Female Bulkhead Cable 12 Inch Length Using LMR-400 Coax with HeatShrink PE3W02753/HS-12](https://www.pasternack.com/tnc-male-n-female-lmr400-cable-assembly-pe3w02753-hs-12-p.aspx)

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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.

**PE3W02753/HS-12 CAD Drawing**  
Reverse Polarity TNC Male to N Female Bulkhead Cable 12 Inch  
Length Using LMR-400 Coax with HeatShrink

