

## TNC Female Bulkhead to N Male Low Loss Cable Using LMR-100 Coax with HeatShrink



### RF Cable Assemblies Technical Data Sheet

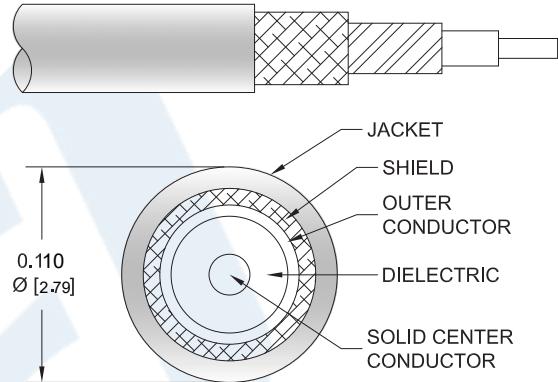
**PE3W09019/HS**

#### Configuration

- Connector 1: TNC Female Bulkhead
- Connector 2: N Male
- Cable Type: LMR-100A

#### Features

- Max Frequency 1 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W09019/HS TNC female bulkhead to type N male 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 type N cable assembly has a female to male gender configuration with 50 ohm flexible LMR-100A coax. The PE3W09019/HS TNC female to type N male cable assembly operates to 1 GHz. 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.

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 N Male Low Loss Cable Using LMR-100 Coax with HeatShrink PE3W09019/HS](#)



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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
VSWR			1.5:1	
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]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω/1000ft [Ω/Km]
Operating Voltage (AC)			900	Vrms
Dielectric Withstanding Voltage (DC)			500	Vdc
Jacket Spark			2,000	Vrms
Input Power (Peak)			600	Watts

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	500	1,000	MHz
Insertion Loss (Typ.)	0.039	0.064	0.115	0.165	0.24	dB/ft
	0.13	0.21	0.38	0.54	0.79	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

#### Mechanical Specifications

##### Cable Assembly

###### 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

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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	N Male
Specification	MIL-STD-348	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Phosphor Bronze, Gold	Brass, Gold
Contact Plating Specification		30 $\mu$ in minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification		100 $\mu$ in minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 $\mu$ in minimum

#### Environmental Specifications

##### Temperature

Operating Range

-40 to +85 deg C

Ingress Protection (IP) Rating

IP67 Rated (Unmated)

#### Compliance Certifications (see product page for current document)

#### Plotted and Other Data

Notes:

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**PE3W09019/HS**

#### How to Order

Part Number Configuration:

**PE3W09019/HS - xx uu**

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

Example: PE3W09019/HS-12 = 12 inches long cable  
PE3W09019/HS-100cm = 100 cm long cable

TNC Female Bulkhead to N Male 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.

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URL: <https://www.pasternack.com/tnc-female-bulkhead-to-n-male-low-loss-cable-using-lmr-100-with-heatshrink-pe3w09019-hs-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.

# PE3W09019/HS CAD Drawing

TNC Female Bulkhead to N Male Low Loss Cable Using LMR-100 Coax with HeatShrink

