

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



RF Cable Assemblies Technical Data Sheet

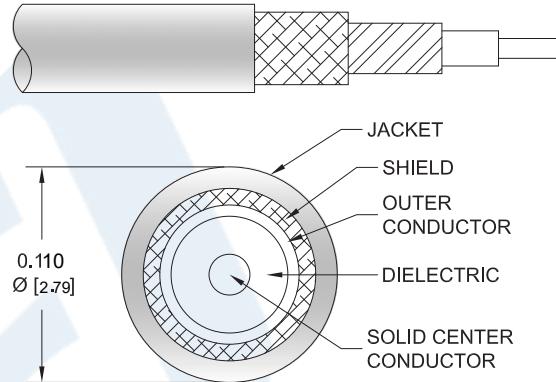
PE3C7630

Configuration

- Connector 1: TNC Male
- Connector 2: TNC Female Bulkhead
- 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 PE3C7630 TNC male to TNC female bulkhead 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 TNC cable assembly has a male to female gender configuration with 50 ohm flexible LMR-100A coax. The PE3C7630 TNC male to TNC female 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 Male to TNC Female Bulkhead Low Loss Cable Using LMR-100 Coax PE3C7630](#)



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

RF Cable Assemblies Technical Data Sheet

PE3C7630

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
VSWR			1.4:1	
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]
Jacket Spark			2,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	50	100	250	500	1,000	MHz
Insertion Loss (Typ.)	0.051	0.07	0.115	0.165	0.24	dB/ft
	0.17	0.23	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 for the TNC Female connector and $-0.1 \times \text{SQRT}(f\text{GHz})$ TNC Male connector.

Mechanical Specifications

Cable Assembly

Weight 0.098 lbs [44.45 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]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male to TNC Female Bulkhead Low Loss Cable Using LMR-100 Coax PE3C7630](#)



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

RF Cable Assemblies Technical Data Sheet

PE3C7630

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 Male	TNC Female Bulkhead
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	15 μ in	30 μ in minimum
Dielectric Type	Teflon	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 μ in	100 μ in minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 μ in	

Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

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

Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male to TNC Female Bulkhead Low Loss Cable Using LMR-100 Coax PE3C7630](#)



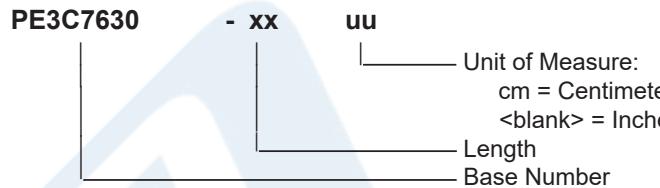
TNC Male to TNC Female Bulkhead Low Loss Cable Using LMR-100 Coax

RF Cable Assemblies Technical Data Sheet

PE3C7630

How to Order

Part Number Configuration:



Example: PE3C7630-12 = 12 inches long cable
PE3C7630-100cm = 100 cm long cable

TNC Male to TNC Female Bulkhead Low Loss Cable Using LMR-100 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: [TNC Male to TNC Female Bulkhead Low Loss Cable Using LMR-100 Coax PE3C7630](#)

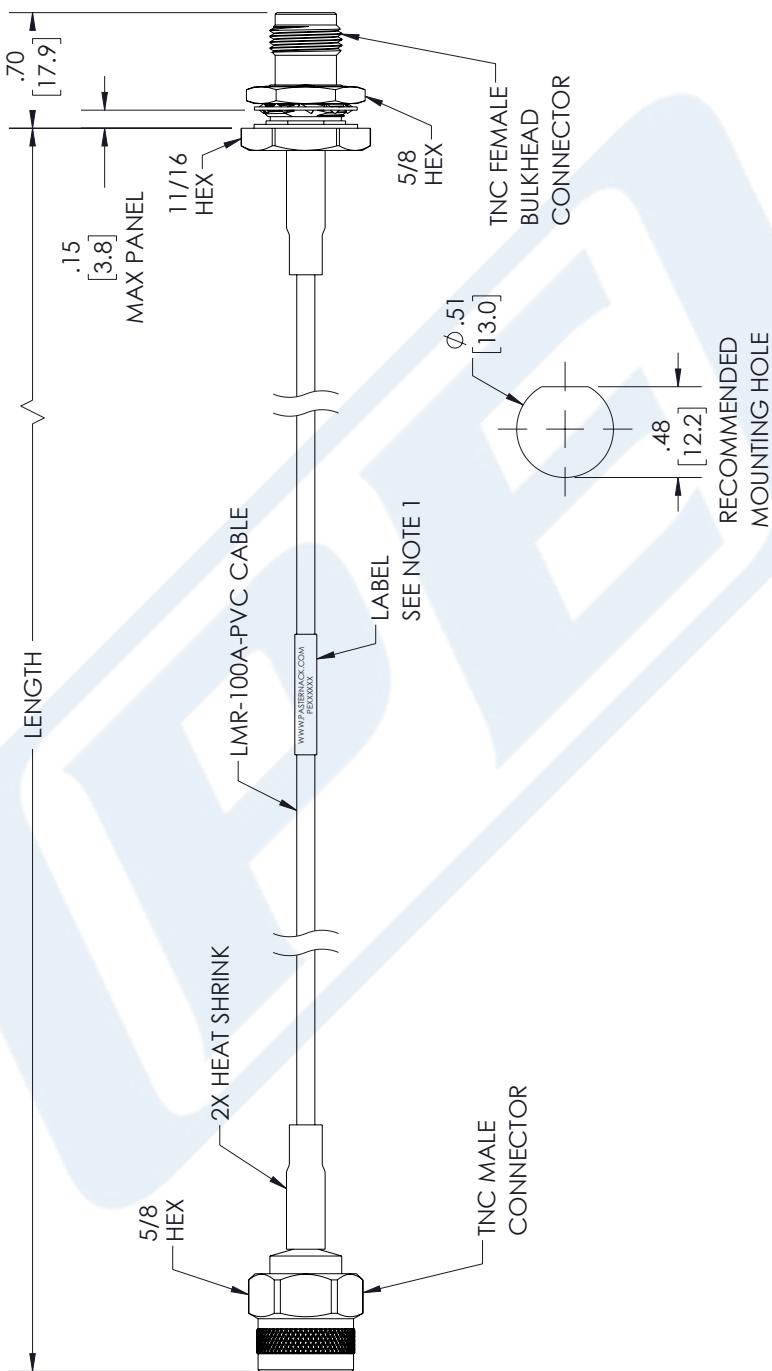
URL: <https://www.pasternack.com/tnc-male-to-tnc-female-bulkhead-low-loss-cable-using-lmr-100-pe3c7630-p.aspx>

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.

PE3C7630 CAD Drawing

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

REVISION			
ZONE	REV.	DESCRIPTION	DATE
	A	INITIAL RELEASE	01/25/2023



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 ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE PROVIDED FROM THE UNITED STATES IN ACCORDANCE WITH THE