

## TNC Male to TNC Male Low Loss Space Cable Using PE-R200LL Coax



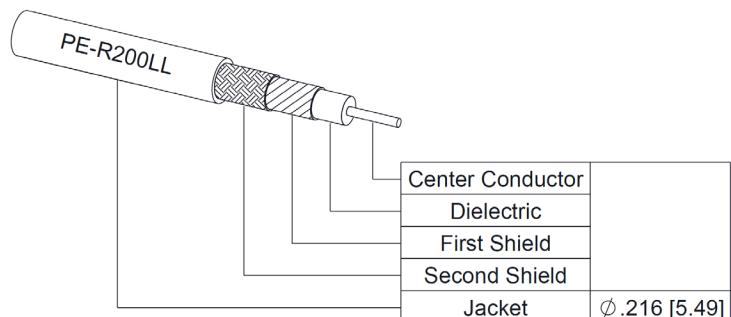
### PE3C100016

#### Configuration

- Connector 1: TNC Male
- Connector 2: TNC Male
- Cable Type: PE-R200LL
- Coax Flex Type: Flexible

#### Features

- Max Frequency 18 GHz
- Shielding Effectivity > 100 dB
- 82% Phase Velocity
- Double Shielded
- ETFE Jacket
- Up to 300 Mrad of Radiation Resistance
- Low Outgassing (TML <1%, CVCM <1%) per ASTM E-595
- Operating Temperature -65 to +150 Deg C
- Built in a Facility with < 100,000 Particles/sq ft
- Built to IPC-A-620 Class 3



#### Applications

- General Purpose
- Laboratory Use
- Vacuum Environments
- Low Earth Orbit (LEO)
- Space (Exploration, Launches, Maintenance, Stations)
- Ground Systems
- Satellites

#### Description

Pasternack's PE3C100016 TNC male to TNC male cable using PE-R200LL 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 male gender configuration with 50 ohm flexible PE-R200LL coax. The PE3C100016 TNC male to TNC male cable assembly operates to 18 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 100 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
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Velocity of Propagation		82		%
RF Shielding	100			dB
Capacitance		25 [82.02]		pF/ft [pF/m]

#### Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	1000	2000	4500	9000	18000	MHz	
PE3C100016	Custom Lengths Available	Insertion Loss (Typ.)	0.068	0.098	0.15	0.22	0.33	dB/ft	
			0.23	0.33	0.5	0.73	1.09	dB/m	
PE3C100016-12	12 Inch	Insertion Loss (Typ.)	0.27	0.3	0.35	0.42	0.61	dB	0.148
PE3C100016-18	18 Inch	Insertion Loss (Typ.)	0.31	0.35	0.43	0.53	0.82	dB	0.172
PE3C100016-24	24 Inch	Insertion Loss (Typ.)	0.34	0.4	0.5	0.64	1.02	dB	0.196
PE3C100016-100CM	100 CM	Insertion Loss (Typ.)	0.43	0.53	0.7	0.93	1.55	dB	0.258
PE3C100016-200CM	200 CM	Insertion Loss (Typ.)	0.65	0.85	1.19	1.65	2.89	dB	0.415

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB

Loss due to Connector 2: 0.1 dB

Base Weight: 0.148 pounds

Additional Weight per Inch: 0.004 pounds

## Mechanical Specifications

### Cable Assembly

Width/Diameter	0.562 in [14.27 mm]
Weight	0.148 lbs [67.13 g]

### Cable

Cable Type	PE-R200LL
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver plated copper
Shield Layer 2	Silver plated copper
Jacket Material	ETFE, Black
Jacket Diameter	0.216 in [5.49 mm]
One Time Minimum Bend Radius	1.08 in [27.43 mm]

## Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 $\mu$ in minimum	30 $\mu$ in minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Stainless Steel, Passivated	Stainless Steel, Passivated

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#### Environmental Specifications

Operating Range Temperature

-65 to +150 deg C

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

#### Plotted and Other Data

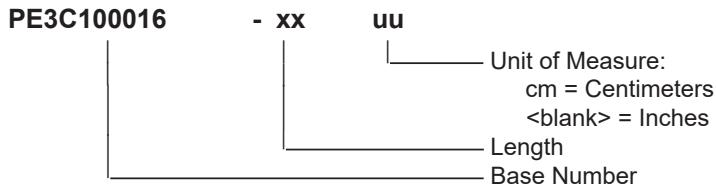
Notes:

Values at 25°C, sea level.

#### Typical Performance Data

#### How to Order

Part Number Configuration:



Example: PE3C100016-12 = 12 inches long cable  
PE3C100016-100cm = 100 cm long cable

TNC Male to TNC Male Low Loss Space Cable Using PE-R200LL 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.

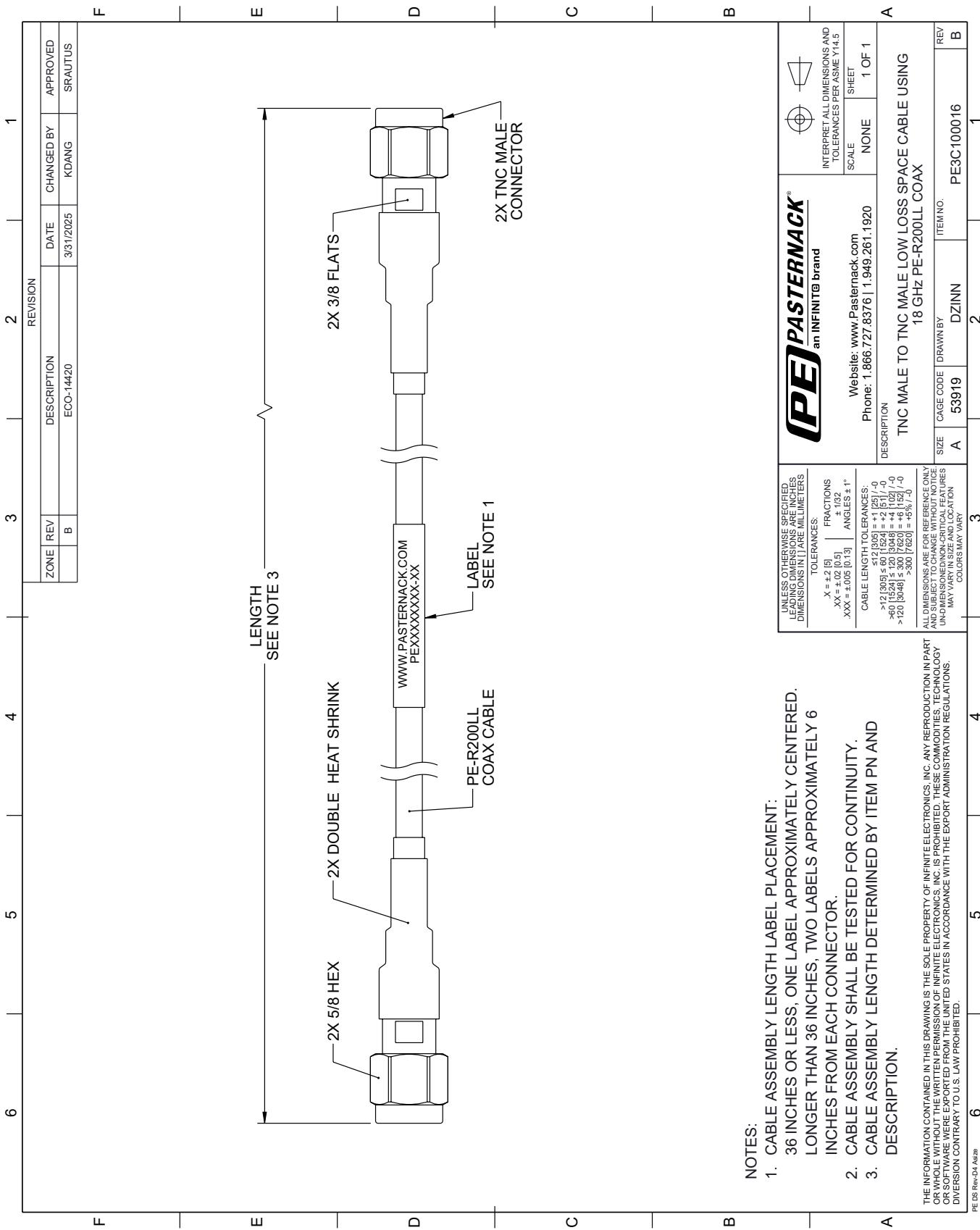
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Male to TNC Male Low Loss Space Cable Using PE-R200LL Coax PE3C100016](#)

URL: <https://www.pasternack.com/tnc-male-to-tnc-male-low-loss-space-cable-using-pe-r200ll-pe3c100016-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

# PE3C100016 CAD Drawing

TNC Male to TNC Male Low Loss Space Cable Using PE-R200LL Coax



<b>PE PASTERNACK®</b> an INFINITE® brand Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.3376   1.949.261.1920		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1
TNC MALE TO TNC MALE LOW LOSS SPACE CABLE USING 18 GHZ PE-R200LL COAX		

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	DZINN	PE3C100016	B