

SMA Male to TNC Male Low Loss Space Cable 18 Inch Length Using PE-R200LL Coax



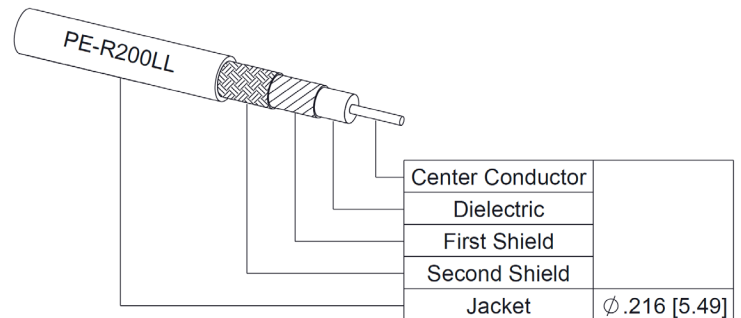
PE3C100014-18

Configuration

- Connector 1: SMA 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 PE3C100014-18 SMA male to TNC male 18 inch 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 SMA to TNC cable assembly has a male to male gender configuration with 50 ohm flexible PE-R200LL coax. The PE3C100014-18 SMA 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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PE3C100014-18

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency		1000	2000	4500	9000	
PE3C100014	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	
PE3C100014-12	12 Inch	Insertion Loss (Typ.)	0.27	0.3	0.35	0.42	0.61	dB	0.129
PE3C100014-18	18 Inch	Insertion Loss (Typ.)	0.31	0.35	0.43	0.53	0.82	dB	0.153
PE3C100014-24	24 Inch	Insertion Loss (Typ.)	0.34	0.4	0.5	0.64	1.02	dB	0.177
PE3C100014-100CM	100 CM	Insertion Loss (Typ.)	0.43	0.53	0.7	0.93	1.55	dB	0.239
PE3C100014-200CM	200 CM	Insertion Loss (Typ.)	0.65	0.85	1.19	1.65	2.89	dB	0.396

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:	0.129 pounds
Additional Weight per Inch:	0.004 pounds

Mechanical Specifications

Cable Assembly

Length	18 in [457.2 mm]
Width/Diameter	0.562 in [14.27 mm]
Weight	0.153 lbs [69.4 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]

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Connectors

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

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.

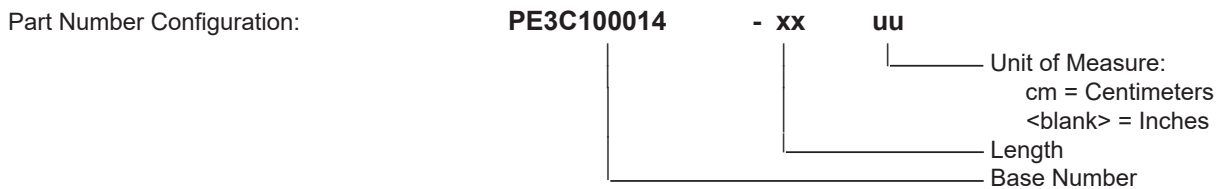
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Typical Performance Data

How to Order



Example: PE3C100014-12 = 12 inches long cable
 PE3C100014-100cm = 100 cm long cable

SMA Male to TNC Male Low Loss Space Cable 18 Inch Length 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.

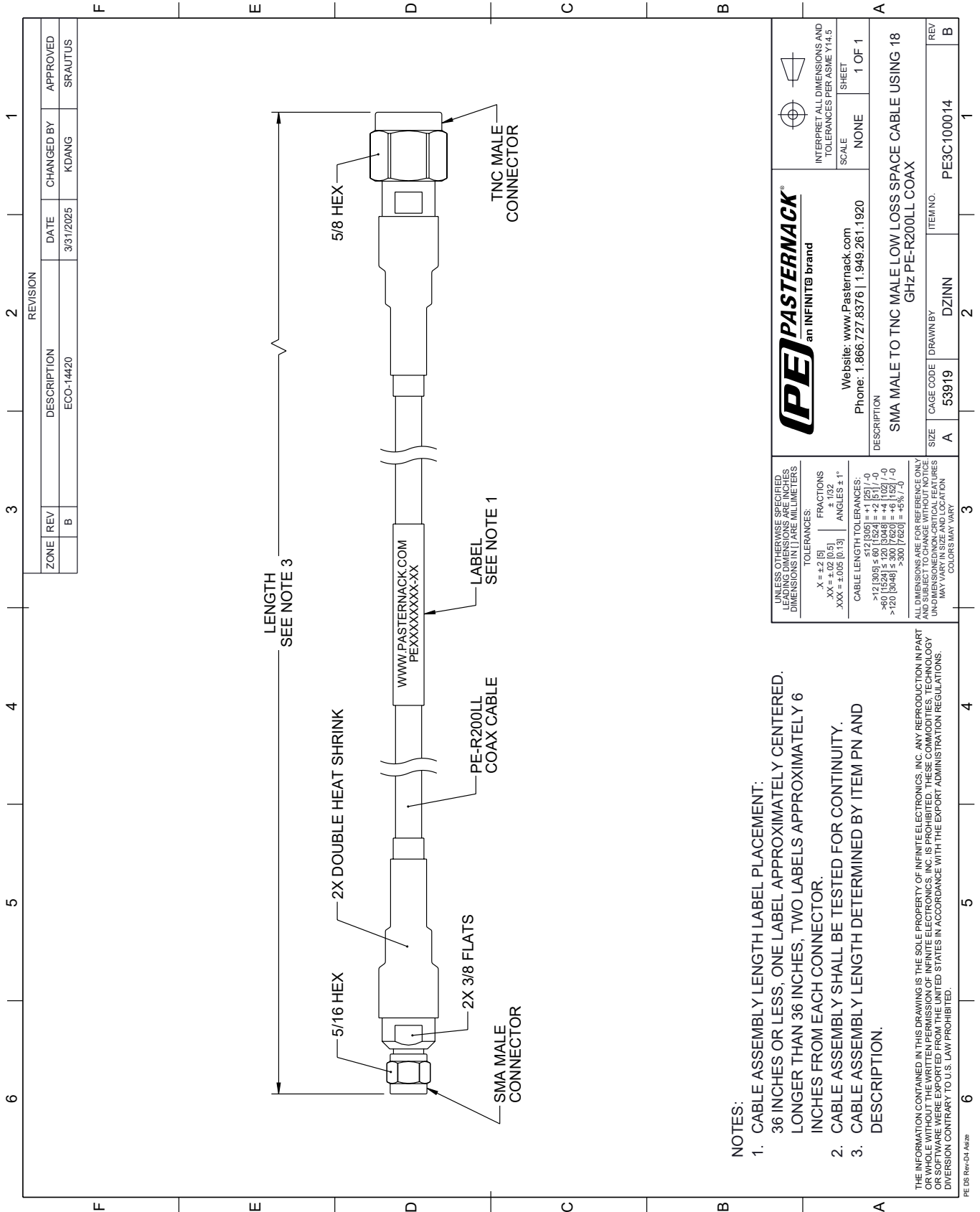
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to TNC Male Low Loss Space Cable 18 Inch Length Using PE-R200LL Coax PE3C100014-18](https://www.pasternack.com/sma-male-to-tnc-male-low-loss-space-cable-18-inch-length-using-pe-r200ll-pe3c100014-18-p.aspx)

URL: <https://www.pasternack.com/sma-male-to-tnc-male-low-loss-space-cable-18-inch-length-using-pe-r200ll-pe3c100014-18-p.aspx>

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PE3C100014-18 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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