

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

PE3C100015

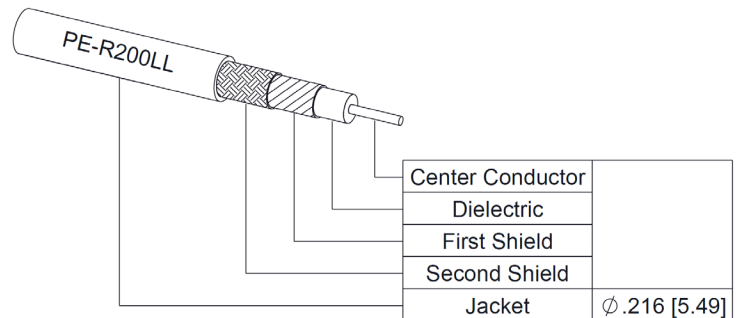


Configuration

- Connector 1: SMA Female Bulkhead
- 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 PE3C100015 SMA female bulkhead 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 SMA to TNC cable assembly has a female to male gender configuration with 50 ohm flexible PE-R200LL coax. The PE3C100015 SMA female to TNC male cable assembly operates to 18 GHz. Our RF cable assembly with SMA 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 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

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Capacitance		25 [82.02]		pF/ft [pF/m]

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	1000	2000	4500	9000	18000	MHz	
PE3C100015	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	
PE3C100015-12	12 Inch	Insertion Loss (Typ.)	0.27	0.3	0.35	0.42	0.61	dB	0.129
PE3C100015-18	18 Inch	Insertion Loss (Typ.)	0.31	0.35	0.43	0.53	0.82	dB	0.153
PE3C100015-24	24 Inch	Insertion Loss (Typ.)	0.34	0.4	0.5	0.64	1.02	dB	0.177
PE3C100015-100CM	100 CM	Insertion Loss (Typ.)	0.43	0.53	0.7	0.93	1.55	dB	0.239
PE3C100015-200CM	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

Width/Diameter	0.562 in [14.27 mm]
Weight	0.129 lbs [58.51 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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Space Cable Using PE-R200LL Coax



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Connectors

Description	Connector 1	Connector 2
Type	SMA Female Bulkhead	TNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, 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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PE3C100015

Typical Performance Data

How to Order

Part Number Configuration:

PE3C100015

- XX

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- Unit of Measure:
cm = Centimeters
<blank> = Inches

- Length

- Base Number

Example: PE3C100015-12 = 12 inches long cable
PE3C100015-100cm = 100 cm long cable

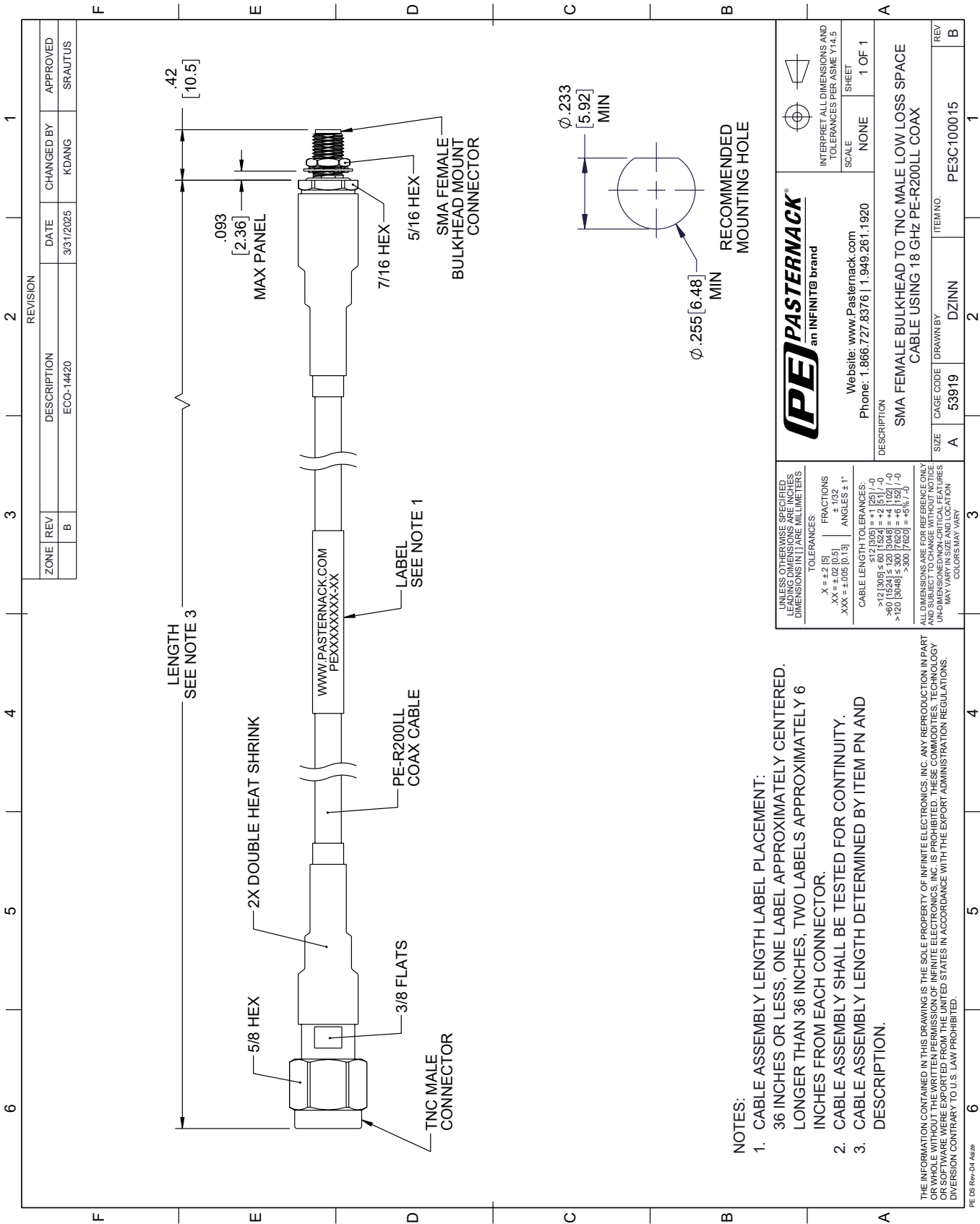
SMA Female Bulkhead to TNC Male Low Loss Space Cable Using PE-R200LL Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead to TNC Male Low Loss Space Cable Using PE-R200LL Coax PE3C100015](#)

URL: <https://www.pasternack.com/sma-female-bulkhead-to-tnc-male-low-loss-space-cable-using-pe-r200ll-pe3c100015-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.

PE3C100015 CAD Drawing
SMA Female Bulkhead to TNC Male Low Loss Space Cable Using PE-R200LL Coax



- NOTES:
- 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.
 - CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.		PE PASTERNAK an INFINITE® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
TOLERANCES:		Website: www.Pasternack.com		SCALE	
X = ±.2 [5]		Phone: 1.866.727.8376 1.949.261.1920		NONE	
.XX = ±.02 [0.5]		DESCRIPTION		SHEET	
.XXX = ±.005 [0.13]		SMA FEMALE BULKHEAD TO TNC MALE LOW LOSS SPACE CABLE USING 18 GHz PE-R200LL COAX		1 OF 1	
CABLE LENGTH TOLERANCES:		SIZE		CAGE CODE	
>12 [305] ≤ 60 [1524] = ±.1 [25] / -0		A		53919	
>60 [1524] ≤ 120 [3048] = ±.1 [25] / -0		DRAWN BY		DZINN	
>120 [3048] ≤ 300 [7620] = ±.1 [25] / -0		ITEM NO.		PE3C100015	
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/UNCALL-OUT FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		REV		B	