



## N Female Bulkhead to N Female Bulkhead Low Loss Cable Using PE-P142LL Coax, RoHS

### RF Cable Assemblies Technical Data Sheet

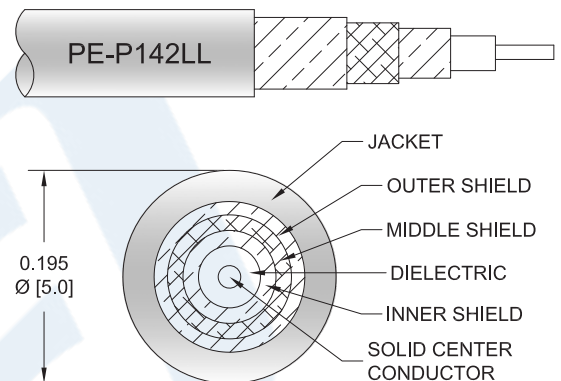
PE3C1000

#### Configuration

- Connector 1: N Female Bulkhead
- Connector 2: N Female Bulkhead
- Cable Type: PE-P142LL

#### Features

- 83% Velocity of Propagation
- Shielding effectiveness >95 dB
- Maximum VSWR is < 1.40:1 to 18 GHz
- Minimum Bend Radius of 1 inch
- Operating Temperature range of -55 to +125 °C
- RoHS and REACH Compliant
- Same day shipment and custom lengths
- 100% Continuity, Hi-Pot, and RF tested



#### Description

The PE3C1000 series high performance test cable's 0.195 inch diameter and 83% phase velocity offer very low loss performance up to 18 GHz. The durable stainless steel connectors and FEP jacket provide a cost effective design ideal for test environments where a rugged cable assembly is required. The series is offered with Type N, TNC, and SMA connectors all rated to 18 GHz. A heavy duty boot provides improved strain relief and adds to the durability of the cable assemblies. These cable assemblies are built using a double shielded flexible cable, providing excellent shielding effectiveness of greater than 95 dB. All PE3C1000 cable assemblies are 100% Continuity, Hi-POT, and RF tested to published specifications. Custom lengths are built to order and shipped same day.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Return Loss	15.56			dB
Velocity of Propagation		83		%
RF Shielding	95			dB
Capacitance		25 [82.02]		pF/ft [pF/m]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Female Bulkhead to N Female Bulkhead Low Loss Cable Using PE-P142LL Coax, RoHS PE3C1000](#)



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#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Max.)	0.1 [0.33]	0.14 [0.46]	0.2 [0.66]	0.29 [0.95]	0.4 [1.31]	dB/ft [dB/m]
Insertion Loss (Typ.)	0.07 [0.23]	0.1 [0.33]	0.16 [0.52]	0.23 [0.75]	0.33 [1.08]	dB/ft [dB/m]

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.05dB x vFrequency (GHz) per connector.

#### Mechanical Specifications

##### Cable Assembly

Diameter 0.875 in [22.23 mm]

Weight 0.188 lbs [85.28 g]

##### Cable

Cable Type PE-P142LL  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper, Silver  
 Dielectric Type PTFE  
 Number of Shields 3  
 Shield Layer 1 Silver Plated Copper Tape  
 Shield Layer 2 Aluminum Polyester  
 Shield Layer 3 Silver Plated Copper Wire  
 Jacket Material FEP, Green  
 Jacket Diameter 0.195 in [4.95 mm]

One Time Minimum Bend Radius 1 in [25.4 mm]

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**Connectors**

Description	Connector 1	Connector 2
Type	N Female Bulkhead	N Female Bulkhead
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	ASTM-B488, 50µ In. Minimum	ASTM-B488, 50µ In. Minimum
Dielectric Type	PEI	PEI
Outer Conductor Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Outer Conductor Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700

**Environmental Specifications**

**Temperature**

Operating Range -55 to +125 deg C

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant Yes  
 REACH Compliant 12/17/2015

**Plotted and Other Data**

Notes:

- Values at 25°C, sea level.

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RF Cable Assemblies Technical Data Sheet

PE3C1000

**How to Order**

Part Number Configuration:

**PE3C1000**

- **xx**

**uu**

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

Example: PE3C1000-12 = 12 inches long cable  
PE3C1000-100cm = 100 cm long cable

N Female Bulkhead to N Female Bulkhead Low Loss Cable Using PE-P142LL Coax, RoHS from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

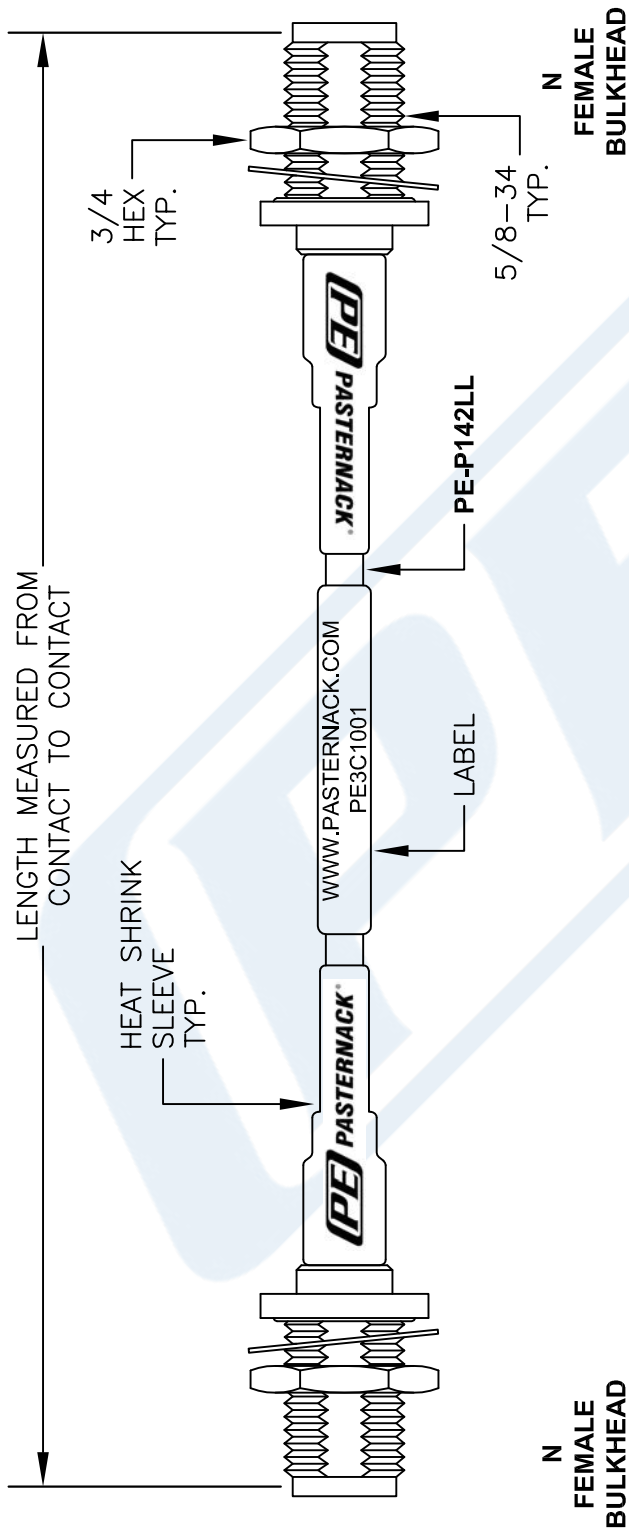
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URL: <https://www.pasternack.com/n-female-n-female-pe-p142ll-cable-assembly-pe3c1000-p.aspx>

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.

# PE3C1000 CAD Drawing

N Female Bulkhead to N Female Bulkhead Low Loss Cable Using PE-P142LL Coax, RoHS



**NOTE:**  
LABEL FOR CABLE LENGTHS 48" OR SHORTER TO BE CENTERED. 48" OR LONGER WILL BE 12" AWAY FROM CONNECTOR.

Part Number Configuration		How To Order	
PE3zzzzz	YY - xx uu	Part # Ext.	Length In Inches
		-12	12"
		-24	24"
		-36	36"
		-48	48"
		-60	60"
		-xx	Custom Length
		-25CM	25Cm
		-50CM	50Cm
		-75CM	75Cm
		-100CM	100Cm
		-125CM	125Cm
		-xxCM	Custom Length

LF = RoHS Compliant  
< Blank > = Standard  
Note: LF applies only to RF cables

**NOTES:**  
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  
3. DIMENSIONS ARE IN INCHES [mm].  
4. LENGTH TOLERANCE IS ± 1.5% OR 3/8", WHICHEVER IS GREATER.

DWG TITLE  
**PE3C1000**

**PE PASTERNAK**  
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CAD FILE	100914	SCALE	N/A	SIZE	A
FSCM NO.	53919				
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