



N Male to N Male Low Loss Cable 50 cm Length  
Using PE-P142LL Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet

PE3C0231-50CM

**Configuration**

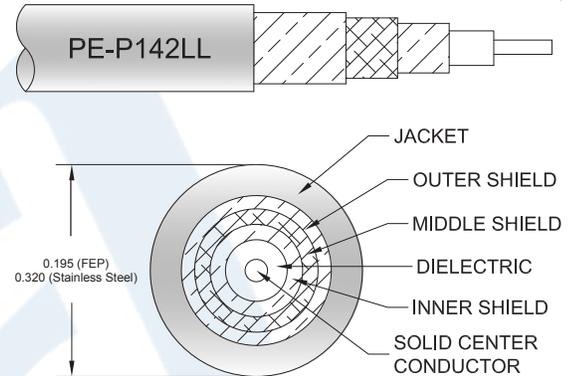
- Connector 1: N Male
- Connector 2: N Male
- Cable Type: PE-P142LL

**Features**

- Passivated Stainless Steel Flexible Armoring
- Type N Male to N Male and SMA Male to SMA Male Configurations Available
- Robust Connector/Armor Interface
- Triple Shielded Low Loss PE-P142LL Coax with Expanded PTFE Tape Dielectric
- Standard inch lengths: 24", 36", 48", 60", 72", 120"
- Standard metric lengths: 50cm, 100cm, 150cm, 200cm
- SMA rated to 20 GHz with a 1.35:1 VSWR
- N type rated to 18 GHz with a 1.35:1 VSWR
- Custom lengths available, call for pricing and lead time

**Applications**

- General Purpose
- Laboratory Use



**Description**

Pasternack's new SMA and type N armored test cables utilize a flexible passivated stainless steel armoring that is designed to handle harsh industrial environments, common in production test systems. Its rugged armoring is very flexible and ensures RF signal integrity during test, even when exposed to a high traffic production environment. These armored RF test cables are equipped with passivated stainless steel connectors, with the SMA designed to operate to 20 GHz and the type N to 18 GHz. A robust mechanical connector/armoring interface increases the durability of the test cables, and its strain relief boot increases the life of the test cable. Pasternack's armored test cables are built using PE-P142LL coaxial cable that is triple shielded with an expanded PTFE dielectric, guaranteeing low loss performance.

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR		1.25:1	1.35:1	
Velocity of Propagation		80		%

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to N Male Low Loss Cable 50 cm Length Using PE-P142LL Coax with HeatShrink PE3C0231-50CM](#)



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#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	3	5	10	18	GHz
Insertion Loss (Typ.)	0.132	0.23	0.296	0.411	0.591	dB
Power Handling (Max.)	220					Watts

#### Electrical Specification Notes:

Insertion loss does not include the loss of the connectors.

Insertion loss is estimated as  $0.05 \times \sqrt{f(\text{GHz})}$  dB per connector.

#### Mechanical Specifications

##### Cable Assembly

Length\* 19.685 in [500 mm]

Weight 0.19 lbs [86.18 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 Braid  
 Shield Layer 2 Aluminum Polyester  
 Shield Layer 3 Silver Plated Copper Braid  
 Jacket Material Passivated Stainless Steel  
 Jacket Diameter 0.32 in [8.13 mm]

Repeated Minimum Bend Radius 1 in [25.4 mm]

#### Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

#### Mechanical Specification Notes:

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\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8$ ", whichever is greater.

**Environmental Specifications**

**Temperature**

Operating Range -55 to +200 deg C

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

**Plotted and Other Data**

Notes:

- Values at 25°C, sea level.

**How to Order**

Part Number Configuration:

PE3C0231 - xx uu

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

Example: PE3C0231-12 = 12 inches long cable  
PE3C0231-100cm = 100 cm long cable

N Male to N Male Low Loss Cable 50 cm Length Using PE-P142LL Coax with HeatShrink 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.

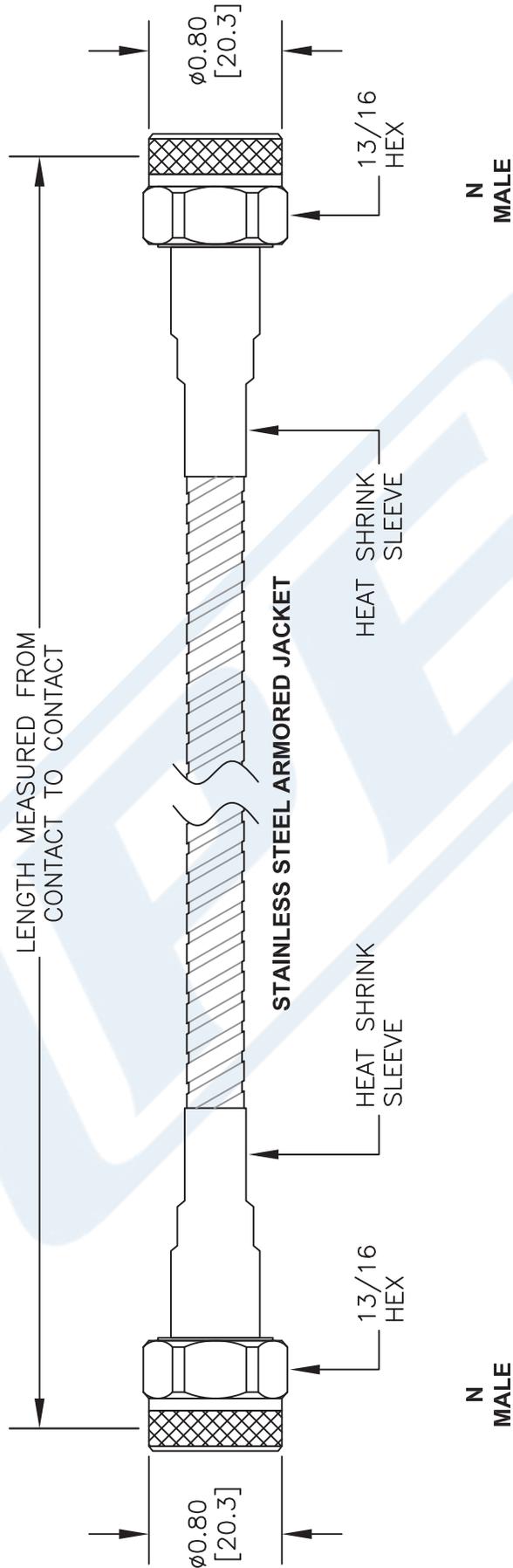
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URL: <https://www.pasternack.com/n-male-n-male-pe-p142ll-cable-assembly-pe3c0231-50cm-p.aspx>

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.

# PE3C0231-50CM CAD Drawing

N Male to N Male Low Loss Cable 50 cm Length Using PE-P142LL Coax with HeatShrink



### STANDARD TOLERANCES

- .X  $\pm 0.2$
- .XX  $\pm 0.1$
- .XXX  $\pm 0.05$

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

DWG TITLE

**PE3C0231**

- 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].

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SCALE N/A

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