



N Male Right Angle to N Female Bulkhead Low Loss Test Cable Using PE-P300LL Coax, RoHS

RF Cable Assemblies Technical Data Sheet

PE3C2953

Configuration

- Connector 1: N Male Right Angle
- Connector 2: N Female Bulkhead
- Cable Type: PE-P300LL

Features

- 83% Velocity of Propagation
- Shielding effectiveness > 95 dB
- Maximum VSWR is < 1.40:1 to 18 GHz
- Minimum Bend Radius of 1.5 inches
- Operating Temperature range of -55 to +125 °C
- ROHS and REACH Compliant
- Same day shipment of custom lengths
- 100% Continuity and RF tested



Description

The PE3C2953 high performance test cable's 0.3 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 PE3C2953 cable assemblies are 100% Continuity 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	
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 Male Right Angle to N Female Bulkhead Low Loss Test Cable Using PE-P300LL Coax, RoHS PE3C2953](#)



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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.)	0.06 [0.20]	0.08 [0.26]	0.12 [0.39]	0.18 [0.59]	0.26 [0.85]	dB/ft [dB/m]
Insertion Loss (Typ.)	0.05 [0.16]	0.07 [0.23]	0.1 [0.33]	0.15 [0.49]	0.22 [0.72]	dB/ft [dB/m]
Power Handling (Max.)	1,800	1,200	900	650	400	Watts

Electrical Specification Notes:

Power handling values are calculated based on Cable properties. Power handling will vary based on the actual VSWR of the cable assembly. Insertion Loss does not include the loss of the connectors, insertion loss is estimated as .1dB per connector.

Mechanical Specifications

Cable Assembly

Diameter 0.875 in [22.23 mm]

Weight 0.178 lbs [80.74 g]

Cable

Cable Type PE-P300LL
 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 0.3 in [7.62 mm]
 Repeated Minimum Bend Radius 1.5 in [38.1 mm]

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Connectors

Description	Connector 1	Connector 2
Type	N Male Right Angle	N Female Bulkhead
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold over Nickel
Contact Plating Specification	ASTM-B488	50 µin minimum
Dielectric Type	PTFE	PEI
Outer Conductor Material and Plating		Passivated Stainless Steel
Outer Conductor Plating Specification		SAE-AMS-2700
Coupling Nut Material and Plating	Passivated Stainless Steel	
Coupling Nut Plating Specification	SAE-AMS-2700	
Torque		20 in-lbs [2.26 Nm]
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700

Mechanical Specification Notes:

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

Environmental Specifications

Temperature

Operating Range -55 to +125 deg C

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

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3C2953

- **xx**

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

Example: PE3C2953-12 = 12 inches long cable
PE3C2953-100cm = 100 cm long cable

N Male Right Angle to N Female Bulkhead Low Loss Test Cable Using PE-P300LL 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male Right Angle to N Female Bulkhead Low Loss Test Cable Using PE-P300LL Coax, RoHS PE3C2953](https://www.pasternack.com/n-male-n-female-pe-p300ll-cable-assembly-pe3c2953-p.aspx)

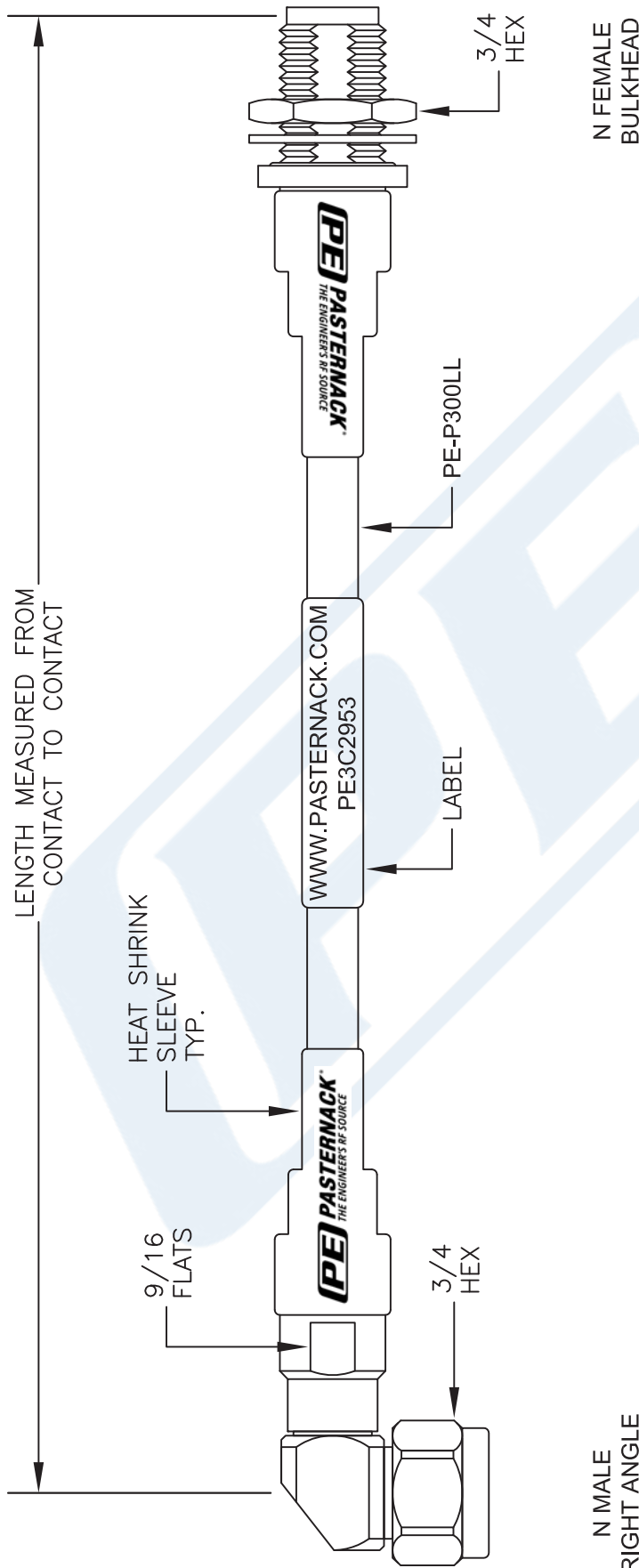
URL: <https://www.pasternack.com/n-male-n-female-pe-p300ll-cable-assembly-pe3c2953-p.aspx>

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.

PE3C2953 CAD Drawing

N Male Right Angle to N Female Bulkhead Low Loss

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

- 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 $\pm 1.5\%$ OR $3/8"$, WHICHEVER IS GREATER.

DWG TITLE

PE3C2953

PASTERNAK®
THE ENGINEER'S RF SOURCE

Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | Fax: (949) 261-7451
Website: www.pasternack.com | E-Mail: sales@pasternack.com

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SCALE N/A

SIZE A

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