



N Male to N Male Right Angle Cable 48 Inch Length
Using LMR-400 Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet

PE3C7931-48

Configuration

- Connector 1: N Male
- Connector 2: N Male Right Angle
- Cable Type: LMR-400

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket

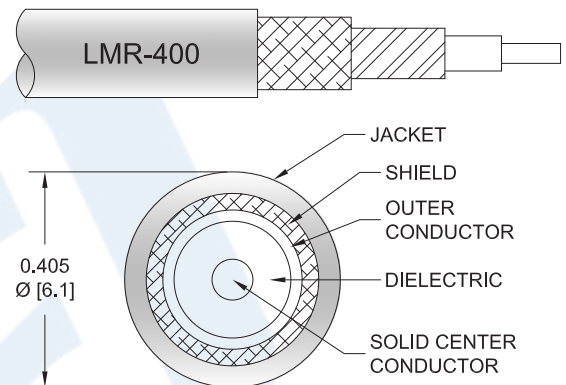
Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C7931-48 type N male to type N male right angle 48 inch cable using LMR-400 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 type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. The PE3C7931-48 type N male to type N male cable assembly operates to 5.8 GHz. The right angle type N interface on the LMR-400 cable allows for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 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.



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 Right Angle Cable 48 Inch Length Using LMR-400 Coax with HeatShrink PE3C7931-48](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.39 [4.56]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ω /1000ft [Ω /Km]
Operating Voltage (AC)			1,000	Vrms
Operating Voltage (DC)			1,500	Vdc
Dielectric Withstanding Voltage (DC)			1,500	Vdc
Jacket Spark			8,000	Vrms
Input Power (Peak)			16	KWatts

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.64	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated 0.15 dB for the right angle connector and 0.05 dB for the straight connector.

Mechanical Specifications

Cable Assembly

Length*	48 in [121.92 cm]
Diameter	0.8 in [20.32 mm]

Cable

Cable Type	LMR-400
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	PE (F)

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Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.405 in [10.29 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]
Repeated Minimum Bend Radius	4 in [101.6 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]
Flat Plate Crush	40 lbs/in [0.71 Kg/mm]
Tensile Strength	160 lbs [72.57 Kg]

Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male Right Angle
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material and Plating	Beryllium Bronze, Gold	Brass, Gold
Contact Plating Specification	50µ in. minimum	
Dielectric Type	PTFE	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	150µ in. minimum	
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	150µ in. minimum	
Hex Size	13/16 Inch	13/16 inch
Torque		30 in-lbs [3.39 Nm]

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Storage Range	-70 to +85 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:

PE3C7931

- **xx**

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

Example: PE3C7931-12 = 12 inches long cable
PE3C7931-100cm = 100 cm long cable

N Male to N Male Right Angle Cable 48 Inch Length Using LMR-400 Coax with HeatShrink from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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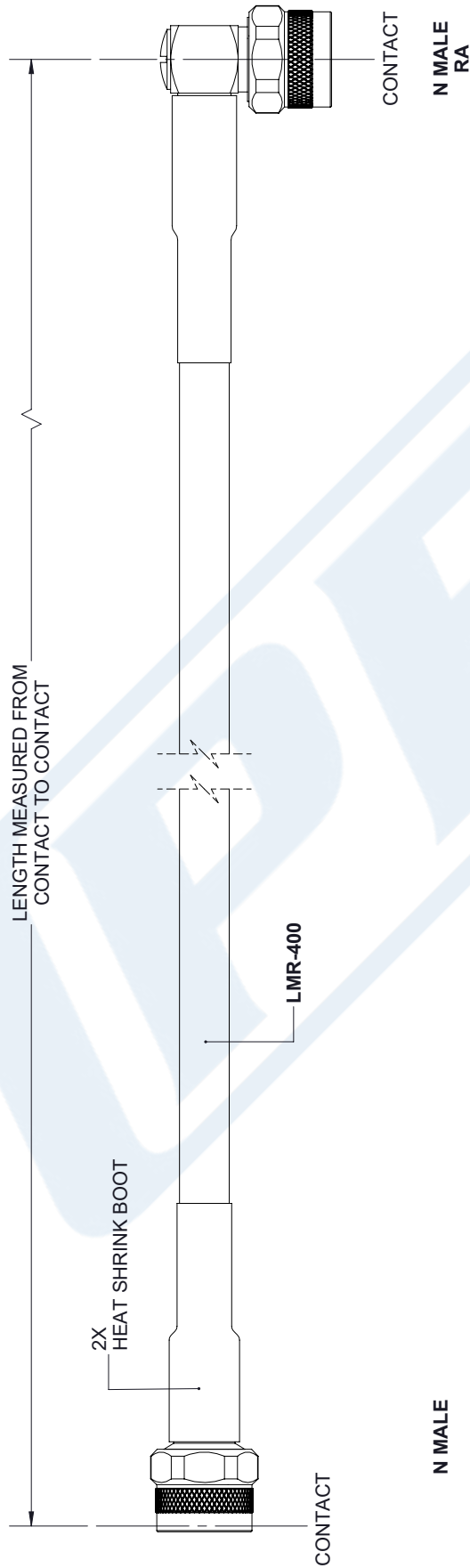
URL: <https://www.pasternack.com/n-male-n-male-lmr400-cable-assembly-pe3c7931-48-p.aspx>

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.

PE3C7931-48 CAD Drawing

N Male to N Male Right Angle Cable 48 Inch Length Using LMR-400 Coax with HeatShrink

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	4/13/2021	SELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	
.X = ± .2	[.08]
.XX = ± .02	[.51]
.XXX = ± .005	[.13]
ANGLES ± 1°	
CABLE LENGTH (L) TOLERANCES:	
L ≤ 12 [305]	± .1 [25] / -0
12 [305] < L ≤ 60 [1524]	± .2 [51] / -0
60 [1524] < L ≤ 120 [3048]	± .4 [102] / -0
120 [3048] < L ≤ 300 [7620]	± .6 [152] / -0
300 [7620] < L	± .5% L / -0
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	

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SIZE	CAGE CODE
A	53919
DRAWN BY	ITEM NO.
K.DANG	PE3C7931
REV	A

THIRD-ANGLE PROJECTION	
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SHEET	1 OF 1
SCALE	N/A