



N Male Right Angle to N Male Low Loss Cable Using LMR-400-DB Coax With Times Microwave Components

RF Cable Assemblies Technical Data Sheet

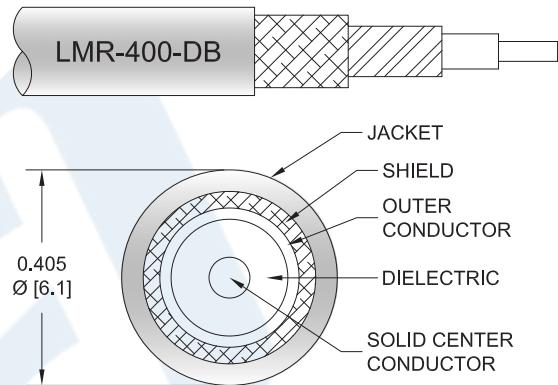
PE3W08603

Configuration

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

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W08603 type N male right angle to type N male cable using LMR-400-DB 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-DB coax. The PE3W08603 type N male to type N male cable assembly operates to 6 GHz. The right angle type N interface on the LMR-400-DB 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 Right Angle to N Male Low Loss Cable Using LMR-400-DB Coax With Times Microwave Components PE3W08603](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	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)			1,500	Vrms
Jacket Spark			8,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	6	GHz
Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.108	dB/ft
	0.07	0.09	0.13	0.22	0.35	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.05 \times \text{SQRT}(f\text{GHz})$ dB for the right angle connector and 0.1 dB for the straight connector.

Mechanical Specifications

Cable Assembly

Weight 0.366 lbs [166.01 g]

Cable

Cable Type LMR-400-DB
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Copper Clad Aluminum
Dielectric Type PE (F)
Number of Shields 2
Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid

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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 Right Angle	N Male
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	1.27 μ m minimum	50 μ in. minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	2 μ m minimum	100 μ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	2 μ m minimum	100 μ in. minimum
Hex Size		20.57 mm
Torque	44 in-lbs [4.97 Nm]	18.417 ft-lbs [24.97 Nm]

Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3W08603

How to Order

Part Number Configuration:

PE3W08603

- **xx**

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

Example: PE3W08603-12 = 12 inches long cable
PE3W08603-100cm = 100 cm long cable

N Male Right Angle to N Male Low Loss Cable Using LMR-400-DB Coax With Times Microwave Components 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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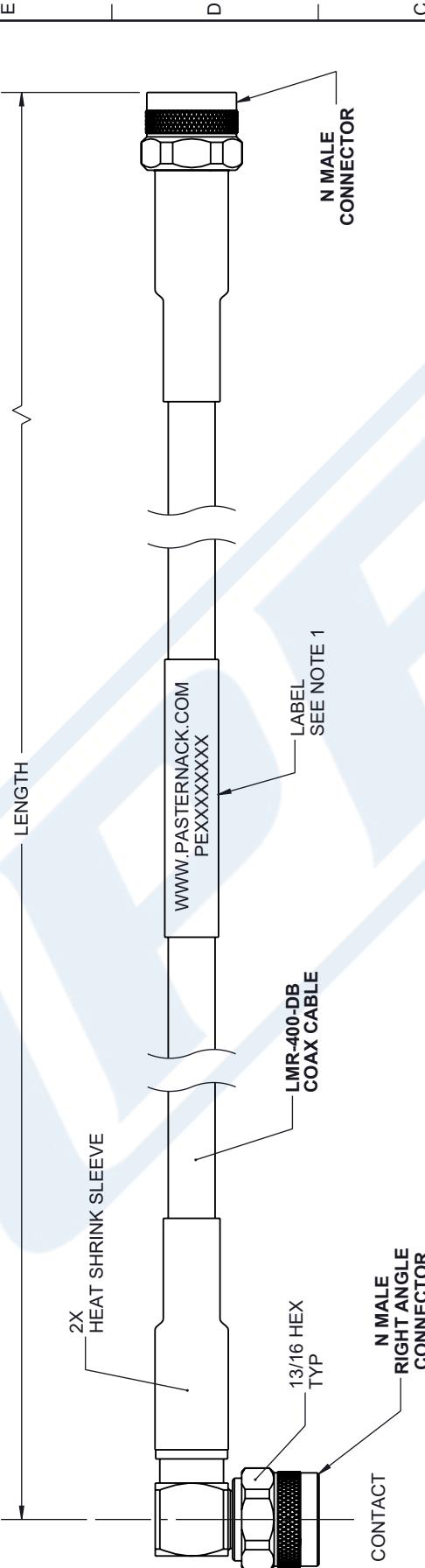
URL: <https://www.pasternack.com/n-male-right-angle-to-n-male-low-loss-cable-using-lmr-400-db-pe3w08603-p.aspx>

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.

PE3W08603 CAD Drawing

N Male Right Angle to N Male Low Loss Cable Using LMR-400-DB Coax With Times Microwave Components

ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	12/16/2022	KDANG	AGANWANI



NOTES:

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
- 2.

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<p>WEBSITE: www.Pasterack.com PHONE: 1.866.727.8376 1.949.261.1920</p>		<p>DESCRIPTION</p> <p>N Male Right Angle to N Male Low Loss Cable Using LMR-400-DB Coax With Times Microwave Components</p>	
<p>$>12 [305] = +1[25] / -0$ $>12 [305] \leq .300 [7620] = +6[152] / -0$ $>60 [1524] \leq .120 [3048] = +4[102] / -0$ $>120 [3048] \leq .300 [7620] = -200 [7620] = +5[45] / -0$</p>		<p>SIZE</p> <p>A</p>	<p>CAGE CODE</p> <p>53919</p> <p>ITEM NO.</p> <p>PE3W08603</p>
<p>ALL DIMENSIONS ARE INCHES AND SUBJECT TO CHANGE WITHOUT NOTICE</p>		<p>REV A</p>	