



## N Male to 7/16 DIN Male Low Loss Cable Using LMR-400 Coax

### RF Cable Assemblies Technical Data Sheet

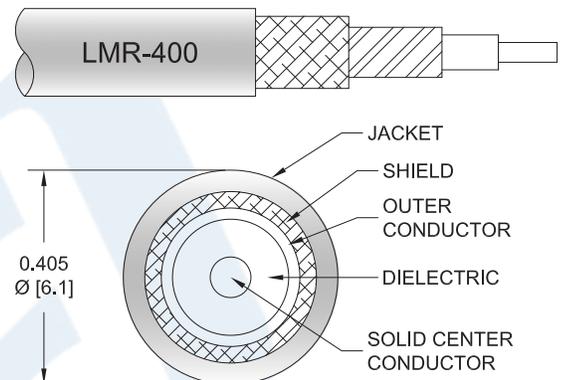
PE3W03803

#### Configuration

- Connector 1: N Male
- Connector 2: 7/16 DIN Male
- Cable Type: LMR-400

#### Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W03803 type N male to 7/16 DIN male 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 7/16 DIN cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. The PE3W03803 type N male to 7/16 DIN male cable assembly operates to 3 GHz. 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 7/16 DIN Male Low Loss Cable Using LMR-400 Coax PE3W03803](#)



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#### Electrical Specifications

| Description                   | Minimum | Typical      | Maximum | Units                            |
|-------------------------------|---------|--------------|---------|----------------------------------|
| Frequency Range               | DC      |              | 3       | GHz                              |
| VSWR                          |         |              | 1.4:1   |                                  |
| Return Loss                   |         |              | -15.56  | dB                               |
| 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]  |         | $\Omega$ /1000ft [ $\Omega$ /Km] |
| DC Resistance Outer Conductor |         | 1.65 [5.41]  |         | $\Omega$ /1000ft [ $\Omega$ /Km] |
| Jacket Spark                  |         |              | 8,000   | Vrms                             |

#### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 0.1  | 0.25 | 0.5  | 1    | 3    | GHz   |
| Insertion Loss (Max.) | 0.01 | 0.02 | 0.03 | 0.04 | 0.07 | dB/ft |
|                       | 0.03 | 0.07 | 0.1  | 0.13 | 0.23 | dB/m  |

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2dB of connector loss.

#### Mechanical Specifications

##### Cable Assembly

Diameter 1.25 in [31.75 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)  
 Number of Shields 2  
 Shield Layer 1 Aluminum Tape  
 Shield Layer 2 Tinned Copper Braid

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 7/16 DIN Male Low Loss Cable Using LMR-400 Coax PE3W03803](#)



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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                 | 7/16 DIN Male         |
| Impedance                          | 50 Ohms                | 50 Ohms               |
| Contact Material and Plating       | Beryllium Copper, Gold | Spring Copper, Silver |
| Contact Plating Specification      | 1.27 µm minimum        | 200µ in. minimum      |
| Dielectric Type                    | PTFE                   | PTFE                  |
| Body Material and Plating          | Brass, Tri-Metal       | Brass, Tri-Metal      |
| Body Plating Specification         | 2 µm minimum           | 150µ in. minimum      |
| Coupling Nut Material and Plating  | Brass, Tri-Metal       | Brass, Tri-Metal      |
| Coupling Nut Plating Specification | 2 µm minimum           | 150µ in. minimum      |
| Hex Size                           | 20.57 mm               |                       |
| Torque                             | 44 in-lbs [4.97 Nm]    |                       |

#### Mechanical Specification Notes:

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

#### Environmental Specifications

##### Temperature

Operating Range -40 to +85 deg C

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

#### Plotted and Other Data

Notes:

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 7/16 DIN Male Low Loss Cable Using LMR-400 Coax PE3W03803](#)

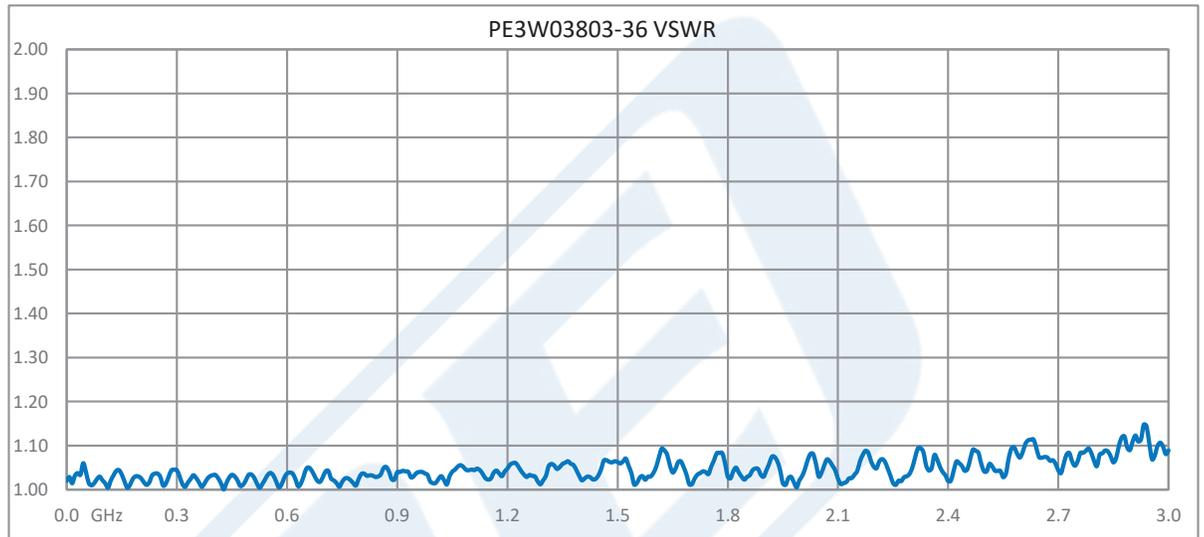


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Typical Performance Data



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## N Male to 7/16 DIN Male Low Loss Cable Using LMR-400 Coax

### RF Cable Assemblies Technical Data Sheet

PE3W03803

#### How to Order

Part Number Configuration:

**PE3W03803**

- **xx**

**uu**

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

Example: PE3W03803-12 = 12 inches long cable  
PE3W03803-100cm = 100 cm long cable

N Male to 7/16 DIN Male Low Loss Cable Using LMR-400 Coax 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.

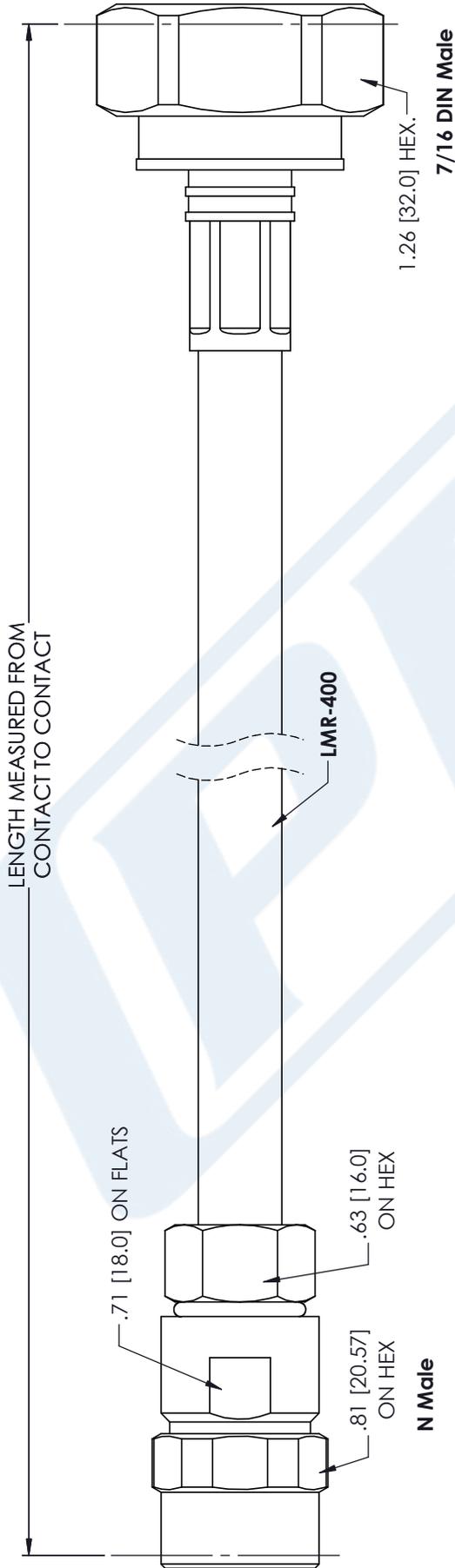
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to 7/16 DIN Male Low Loss Cable Using LMR-400 Coax PE3W03803](https://www.pasternack.com/n-male-7-16-din-male-lmr400-cable-assembly-pe3w03803-p.aspx)

URL: <https://www.pasternack.com/n-male-7-16-din-male-lmr400-cable-assembly-pe3w03803-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.

# PE3W03803 CAD Drawing

N Male to 7/16 DIN Male Low Loss Cable Using LMR-400 Coax



| STANDARD TOLERANCES |        |
|---------------------|--------|
| .X                  | ±0.2   |
| .XX                 | ±0.01  |
| .XXX                | ±0.005 |

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

**PE 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

|           |           |
|-----------|-----------|
| DWG TITLE | PE3W03803 |
| CAGE CODE | 53919     |

|   |          |       |      |
|---|----------|-------|------|
| NOTES:<br>1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.<br>2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.<br>3. DIMENSIONS ARE IN INCHES [mm]. |          |       |      |
| CAD FILE  | 09/26/18 | SCALE | N/A  |
| SIZE  | A        | CN    | 2379 |