



7/16 DIN Male to N Male Low Loss Cable
48 Inch Length Using LMR-400-UF Coax

RF Cable Assemblies Technical Data Sheet

PE3W03271-48

Configuration

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

Features

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

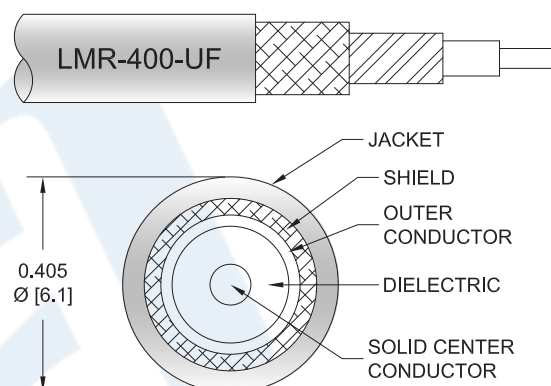
Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W03271-48 7/16 DIN male to type N male 48 inch cable using LMR-400-UF 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 7/16 DIN to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400-UF coax. The PE3W03271-48 7/16 DIN male to type N 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: [7/16 DIN Male to N Male Low Loss Cable 48 Inch Length Using LMR-400-UF Coax PE3W03271-48](#)



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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|--------------|---------|--------------------|
| Frequency Range | DC | | 3 | GHz |
| VSWR | | | 1.5:1 | |
| 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 Km] | | 1.07 [3.51] | | Ohms/1000ft [Ohms/ |
| DC Resistance Outer Conductor Km] | | 1.65 [5.41] | | Ohms/1000ft [Ohms/ |
| Jacket Spark | | | 8,000 | Vrms |

Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|-----|------|------|-------|
| Frequency | 0.25 | 0.5 | 1 | 2.5 | 3 | GHz |
| Insertion Loss (Max.) | 0.3 | 0.34 | 0.4 | 0.53 | 0.56 | dB |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax use in this assembly. The Insertion Loss includes an estimated insertion loss of 0.2dB of connector Loss

Mechanical Specifications

Cable Assembly

| | |
|----------|--------------------|
| Length* | 48 in [121.92 cm] |
| Diameter | 1.25 in [31.75 mm] |

Cable

| | |
|--------------------------------------|---------------------|
| Cable Type | LMR-400-UF |
| Impedance | 50 Ohms |
| Inner Conductor Type | Stranded |
| Inner Conductor Material and Plating | Copper |
| 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 | TPE, 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 | 0.38 lbs-ft [0.52 N-m] |
| Flat Plate Crush | 20 lbs/in [0.36 Kg/mm] |
| Tensile Strength | 160 lbs [72.57 Kg] |

Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|------------------|-------------------|
| Type | 7/16 DIN Male | N Male |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Silver | Brass, Gold |
| Contact Plating Specification | | 50 µ in. minimum |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification | | 150 µ in. minimum |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Plating Specification | | 150 µ in. minimum |
| Hex Size | 1 1/4 inch | 13/16 inch |

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 -40 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:

PE3W03271

- **xx**

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

Example: PE3W03271-12 = 12 inches long cable
PE3W03271-100cm = 100 cm long cable

7/16 DIN Male to N Male Low Loss Cable 48 Inch Length Using LMR-400-UF 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: [7/16 DIN Male to N Male Low Loss Cable 48 Inch Length Using LMR-400-UF Coax PE3W03271-48](https://www.pasternack.com/7-16-din-male-n-male-lmr400uf-cable-assembly-pe3w03271-48-p.aspx)

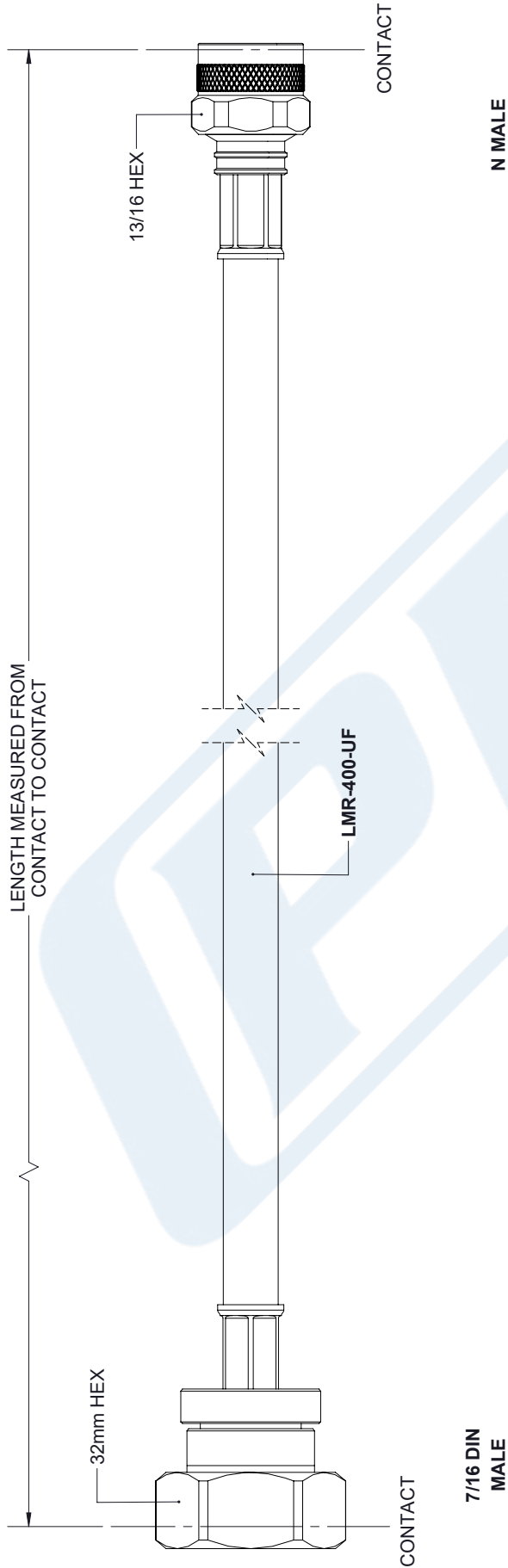
URL: <https://www.pasternack.com/7-16-din-male-n-male-lmr400uf-cable-assembly-pe3w03271-48-p.aspx>

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PE3W03271-48 CAD Drawing

7/16 DIN Male to N Male Low Loss Cable 48 Inch Length Using LMR-400-UF Coax

| REVISIONS | | | |
|-----------|-----------------|----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| A | INITIAL RELEASE | 04/30/19 | SELLIS |



| | | | |
|---|--|--|-------|
| PE PASTERNAK an INFINITO brand Pasternack Enterprises, Inc. P.O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920 1.866.727.8376 Fax: 1.949.261.7451 www.pasternack.com e-mail: sales@pasternack.com | | THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED. | |
| SIZE A CAGE 53919 DRAWN BY K.DANG PART NUMBER PE3W03271 | | SHEET 1 OF 1 SCALE N/A | REV A |
| UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS TOLERANCES: X±.2 [5.08] XX±.01 [.25] XXX±.005 [.13] FRACTIONS ±.132 ANGLES ± 1° ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. THIRD-ANGLE PROJECTION | | | |

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