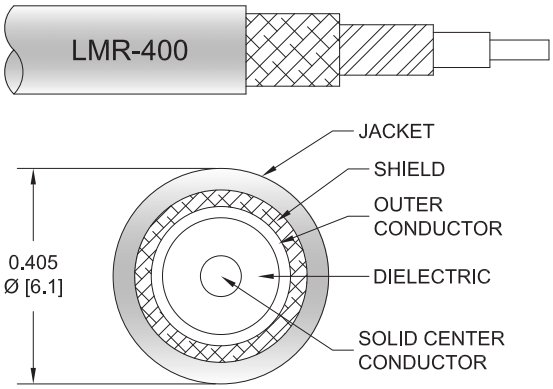
7/16 DIN Male Right Angle to N Male Low Loss Cable Using LMR-400 Coax

PE3W12646

Configuration

- Connector 1: 7/16 DIN Male Right Angle
- Connector 2: N Male
- Cable Type: LMR-400
- Coax Flex Type: Flexible



Features

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

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W12646 7/16 DIN male right angle to type N 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 7/16 DIN to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400 coax. The PE3W12646 7/16 DIN male to type N male cable assembly operates to 3 GHz. The right angle 7/16 DIN 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.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	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]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
PE3W12646	Custom Lengths Available	Insertion Loss (Typ.)	0.012	0.02	0.028	0.041	0.073	dB/ft	
			0.04	0.07	0.1	0.14	0.24	dB/m	
PE3W12646-12	12 In	Insertion Loss (Typ.)	0.32	0.32	0.33	0.35	0.38	dB	0.509
PE3W12646-24	24 In	Insertion Loss (Typ.)	0.33	0.34	0.36	0.39	0.45	dB	0.577
PE3W12646-36	36 In	Insertion Loss (Typ.)	0.34	0.36	0.39	0.43	0.52	dB	0.644
PE3W12646-48	48 In	Insertion Loss (Typ.)	0.35	0.38	0.42	0.47	0.6	dB	0.711
PE3W12646-60	60 In	Insertion Loss (Typ.)	0.36	0.4	0.44	0.51	0.67	dB	0.778

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.2	dB
Loss due to Connector 2:	0.1	dB
Base Weight:	0.509	pounds
Additional Weight per Inch:	0.00559	pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.509 lbs [230.88 g]

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
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]

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Connectors

Description	Connector 1	Connector 2
Type	7/16 DIN Male Right Angle	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Spring Copper, Silver	Brass, Gold
Contact Plating Specification	200 µin minimum	15 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	150 µin minimum	
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	150 µin minimum	
Hex Size		18 mm

Environmental Specifications

Operating Range Temperature	-40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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PE3W12646

Typical Performance Data

How to Order

Part Number Configuration: **PE3W12646 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3W12646 — Base Number

Example: PE3W12646-12 = 12 inches long cable
PE3W12646-100cm = 100 cm long cable

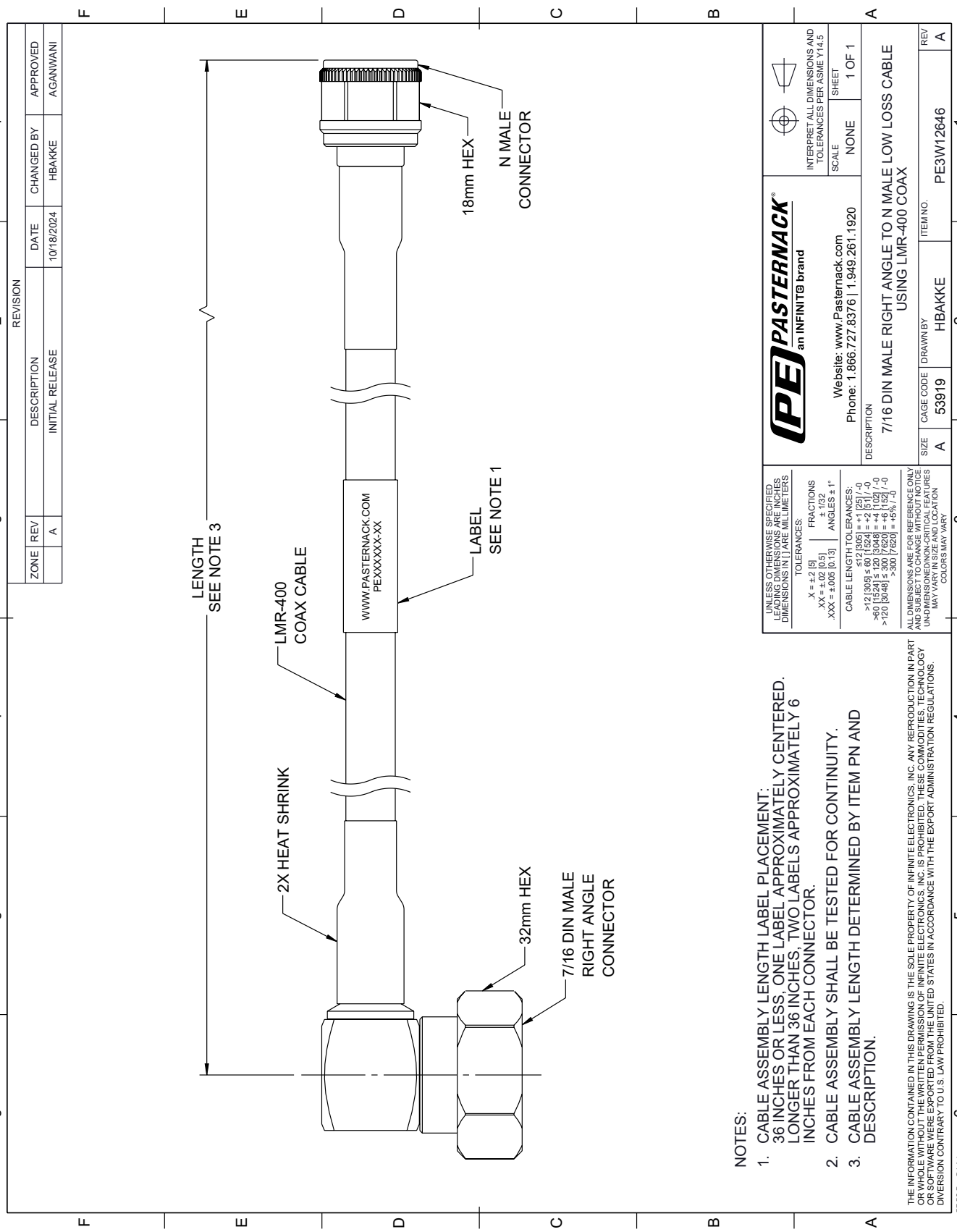
7/16 DIN Male Right Angle to N Male Low Loss Cable Using LMR-400 Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: 7/16 DIN Male Right Angle to N Male Low Loss Cable Using LMR-400 Coax PE3W12646

URL: https://www.pasternack.com/7-16-din-male-right-angle-to-n-male-low-loss-cable-using-lmr-400-pe3w12646-p.aspx

PE3W12646 CAD Drawing

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



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	10/18/2024	HBAKKE	AGANWANI

NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT:
   36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED.
   LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6
   INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

UNLESS OTHERWISE SPECIFIED,
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

FRACTIONS	ANGLES
± 1/32	± 1°

.X = ±.2 [5]
.XX = ± .02 [0.5]
.XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:
≤12 [305] = +1 [25] / -0
>12 [305] ≤ 60 [1524] = +2 [51] / -0
>60 [1524] ≤ 120 [3048] = +4 [102] / -0
>120 [3048] ≤ 300 [7620] = +6 [152] / -0
>300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY
AND SUBJECT TO CHANGE WITHOUT NOTICE
UN-DIMENSIONED/NON-CRITICAL FEATURES
MAY VARY IN SIZE AND LOCATION
COLORS MAY VARY

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

DESCRIPTION: 7/16 DIN MALE RIGHT ANGLE TO N MALE LOW LOSS CABLE USING LMR-400 COAX

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	HBAKKE	PE3W12646	A

SCALE: NONE | SHEET: 1 OF 1

PE DS Rev-D4 A4.tte