

N Female Bulkhead to N Female Bulkhead Low Loss Cable Using LMR-400 Coax with Double HeatShrink



RF Cable Assemblies Technical Data Sheet

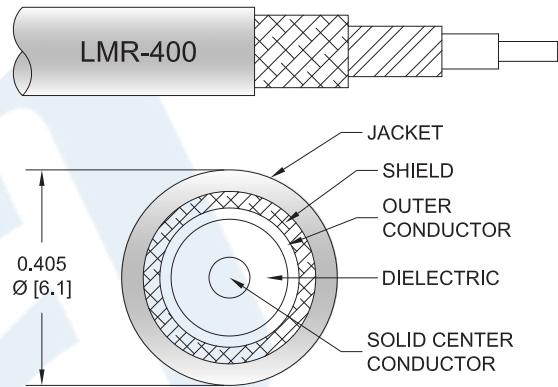
PE3W00029/HS2

Configuration

- Connector 1: N Female Bulkhead
- Connector 2: N Female Bulkhead
- Cable Type: LMR-400

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W00029/HS2 type N female bulkhead to type N female bulkhead 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 female to female gender configuration with 50 ohm flexible LMR-400 coax. The PE3W00029/HS2 type N female to type N female cable assembly operates to 6 GHz. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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 Female Bulkhead to N Female Bulkhead Low Loss Cable Using LMR-400 Coax with Double HeatShrink PE3W00029/HS2](#)



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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]
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.)	0.2	0.028	0.041	0.068	0.111	dB/ft
	0.66	0.09	0.13	0.22	0.36	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

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]

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Bending Moment
Flat Plate Crush
Tensile Strength

0.5 lbs-ft [0.68 N-m]
40 lbs/in [0.71 Kg/mm]
160 lbs [72.57 Kg]

Connectors

Description	Connector 1	Connector 2
Type	N Female Bulkhead	N Female Bulkhead
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 μ in minimum	30 μ in minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal

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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PE3W00029/HS2

How to Order

Part Number Configuration:

PE3W00029/HS2

- **xx**

uu

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

Example: PE3W00029/HS2-12 = 12 inches long cable
PE3W00029/HS2-100cm = 100 cm long cable

N Female Bulkhead to N Female Bulkhead Low Loss Cable Using LMR-400 Coax with Double 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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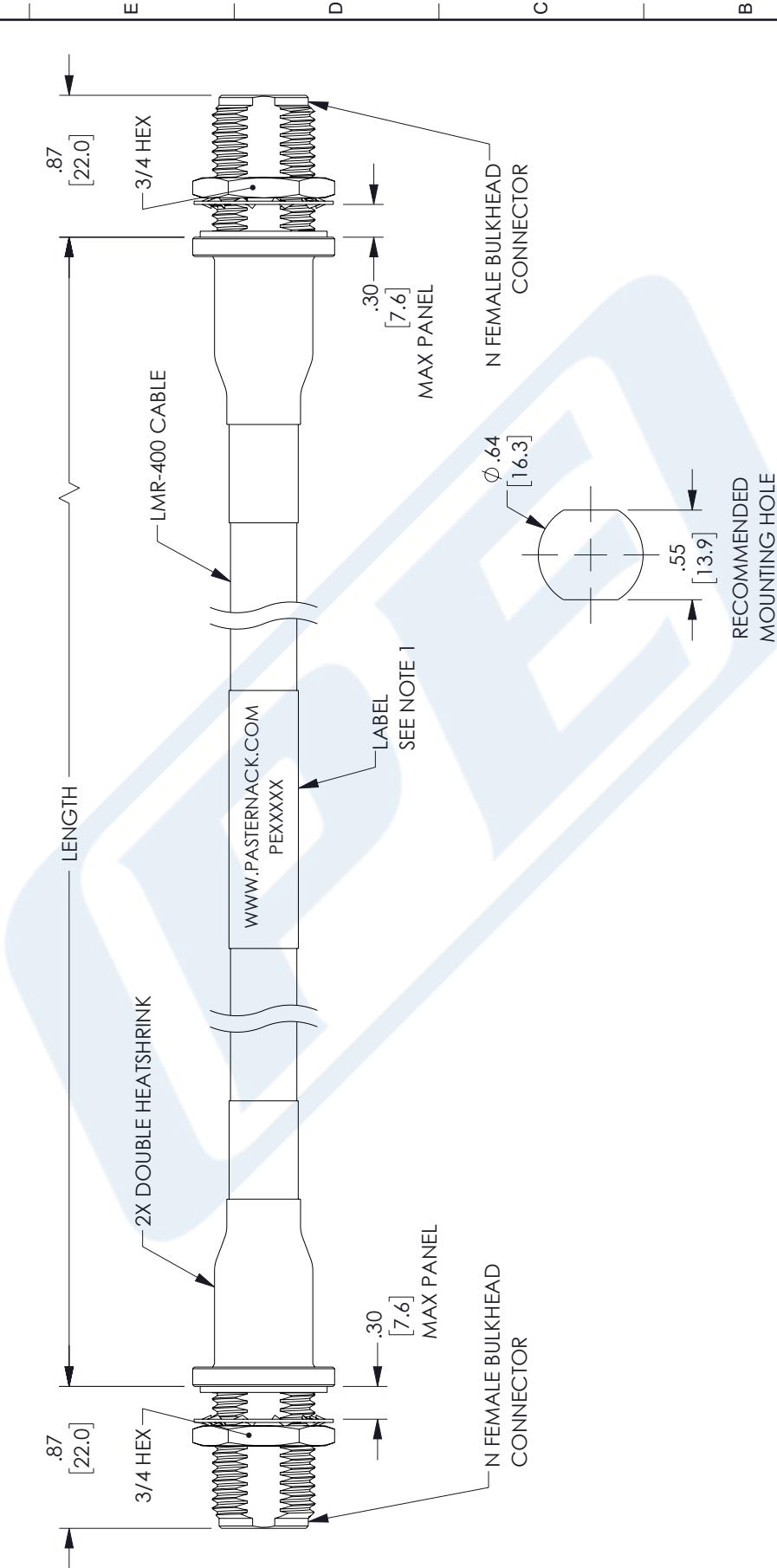
URL: <https://www.pasternack.com/n-female-bulkhead-to-n-female-bulkhead-low-loss-cable-using-lmr-400-with-double-heatshrink-pe3w00029-hs2-p.aspx>

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.

PE3W00029/HS2 CAD Drawing

N Female Bulkhead to N Female Bulkhead Low Loss Cable Using LMR-400 Coax with Double HeatShrink

ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	12/23/2022		SRAUTUS



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 ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

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 PASTERNACK® an INFINITI® brand				INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		FRACTIONS: $X = \pm .2 [5]$ $XX = \pm .02 [5]$ $XXX = \pm .005 [13]$		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE	
CABLE LENGTH TOLERANCES: $>12 [305] = +1 [25] -0$ $>12 [305] \leq 60 [1524] \leq 12 [305] = +4 [102] -0$ $>60 [1524] \leq 120 [3048] = +6 [152] -0$ $>120 [3048] \leq 300 [7620] = +5% [-0]$		WEBSITE: www.Pasternack.com PHONE: 1.866.727.8376 1.949.261.1920		SHET	
DESCRIPTION N FEMALE BULKHEAD TO N FEMALE BULKHEAD LOW LOSS CABLE USING LMR-400 COAX WITH DOUBLE HEATSHRINK		ITEM NO. PE3W00029/HS2		REV A	
SIZE A		CAGE CODE 53919		DRAWN BY DMAY	
ALL DIMENSIONS ARE IN INCHES AND SUBJECT TO CHANGE WITHOUT NOTICE.					