

N Male to N Male Low Loss Cable Using LMR-400-DB Coax with HeatShrink, LF Solder



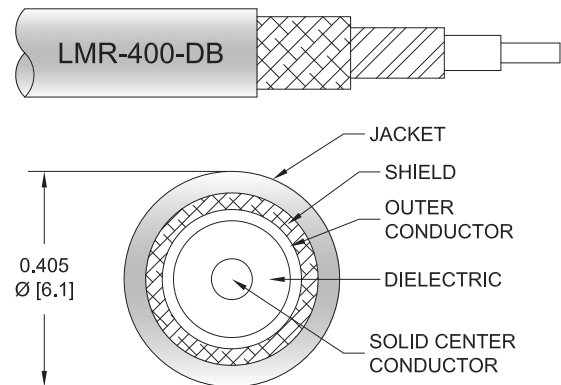
PE3C0291LF/HS

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: LMR-400-DB
- Coax Flex Type: Flexible

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C0291LF/HS type N male 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 PE3C0291LF/HS type N male to type N male cable assembly operates to 6 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.

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]		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					MHz	
PE3C0291LF/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.028	0.041	0.068	0.093	dB/ft	
			0.07	0.1	0.14	0.23	0.31	dB/m	
PE3C0291LF/HS-12	12 inch	Insertion Loss (Typ.)	0.12	0.13	0.15	0.17	0.2	dB	0.287
PE3C0291LF/HS-24	24 inch	Insertion Loss (Typ.)	0.14	0.16	0.19	0.24	0.29	dB	0.355
PE3C0291LF/HS-36	36 inch	Insertion Loss (Typ.)	0.16	0.19	0.23	0.31	0.38	dB	0.422
PE3C0291LF/HS-48	48 inch	Insertion Loss (Typ.)	0.18	0.22	0.27	0.38	0.48	dB	0.489
PE3C0291LF/HS-60	60 inch	Insertion Loss (Typ.)	0.2	0.24	0.31	0.44	0.57	dB	0.556

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:	0.05 dB
Loss due to Connector 2:	0.05 dB
Base Weight:	0.287 pounds
Additional Weight per Inch:	0.00584 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.192 lbs [87.09 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
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	N Male	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Bronze, Gold	Beryllium Bronze, Gold
Contact Plating Specification	50µ in. minimum	50µ in. minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	100µ in. minimum	100µ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	100µ in. minimum	100µ in. minimum
Hex Size	20.57 mm	20.57 mm
Torque	18.417 ft-lbs 24.97 Nm	18.417 ft-lbs 24.97 Nm

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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PE3C0291LF/HS

Typical Performance Data

How to Order

Part Number Configuration:

PE3C0291LF/HS - xx uu



Example: PE3C0291LF/HS-12 = 12 inches long cable
PE3C0291LF/HS-100cm = 100 cm long cable

N Male to N Male Low Loss Cable Using LMR-400-DB Coax with HeatShrink, LF Solder 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.

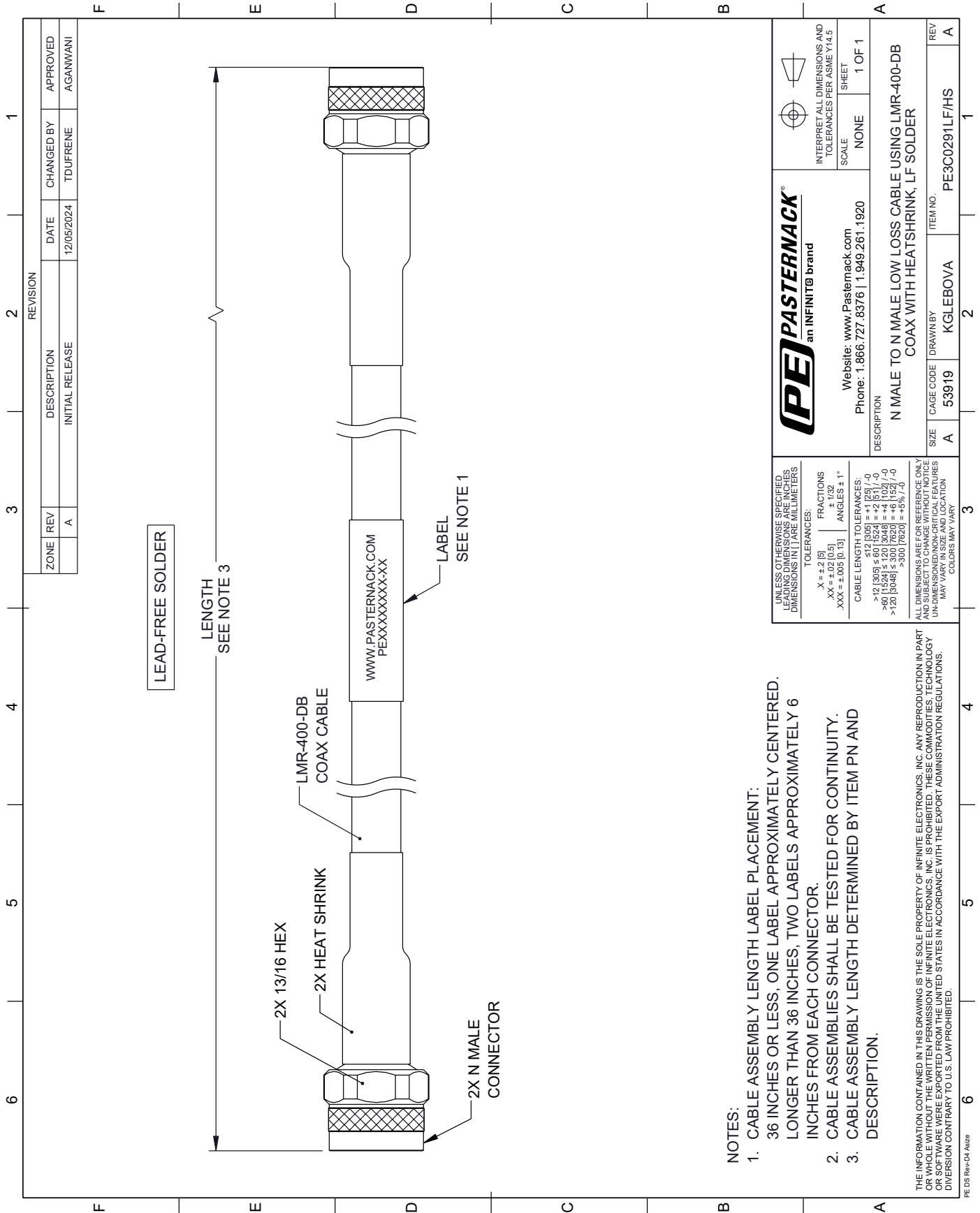
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to N Male Low Loss Cable Using LMR-400-DB Coax with HeatShrink, LF Solder PE3C0291LF/HS](#)

URL: <https://www.pasternack.com/n-male-to-n-male-low-loss-cable-using-lmr-400-db-with-heatshrink-lf-solder-pe3c0291lf-hs-p.aspx>

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PE3C0291LF/HS CAD Drawing

N Male to N Male Low Loss Cable Using LMR-400-DB Coax with HeatShrink, LF Solder



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.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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PE DS Rev-04 A1822

<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN PAREMILLIMETERS</p> <p>TOLERANCES:</p> <p>X = ±.2 [5] FRACTIONS ± 1/32</p> <p>.XX = ±.02 [0.5] ANGLES ± 1°</p> <p>.XXX = ±.005 [0.13]</p> <p>CABLE LENGTH TOLERANCES:</p> <p>>12 [305] ≤ 60 [1524] = +.2 [5] / -0</p> <p>>60 [1524] ≤ 120 [3048] = +.4 [102] / -0</p> <p>>120 [3048] ≤ 360 [9144] = +.8 [203] / -0</p> <p>>360 [9144] = +.8 [203] / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY DIMENSIONS ON CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION COLORS MAY VARY</p>		<p>PE PASTERNAK an INFINIT[®] brand</p> <p>Website: www.Pasternack.com</p> <p>Phone: 1.866.727.8376 1.949.261.1920</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE NONE</p> <p>SHEET 1 OF 1</p>											
<p>REVISION</p> <table border="1"> <tr> <th>ZONE</th> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>CHANGED BY</th> <th>APPROVED</th> </tr> <tr> <td></td> <td>A</td> <td>INITIAL RELEASE</td> <td>12/05/2024</td> <td>TDUFRENE</td> <td>AGANWANI</td> </tr> </table>	ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED		A	INITIAL RELEASE	12/05/2024	TDUFRENE	AGANWANI	<p>DESCRIPTION</p> <p>N MALE TO N MALE LOW LOSS CABLE USING LMR-400-DB COAX WITH HEATSHRINK, LF SOLDER</p>		
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED										
	A	INITIAL RELEASE	12/05/2024	TDUFRENE	AGANWANI										
<p>SIZE A</p> <p>CAGE CODE 53919</p> <p>DRAWN BY KGLEBOVA</p> <p>ITEM NO. PE3C0291LF/HS</p>	<p>REV A</p>														