

## Fire Rated N Male to N Male Low Loss Cable Using LMR-600-FR Coax



### PE3W12875

#### Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: LMR-600-FR
- Coax Flex Type: Flexible

#### Features

- Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- PE Jacket

#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W12875 type N male to type N male cable using LMR-600-FR 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-600-FR coax. The PE3W12875 type N male to type N male cable assembly operates to 8 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		8	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Group Delay		1.17 [3.84]		ns/ft [ns/m]
Capacitance		23.4 [76.77]		pF/ft [pF/m]
Inductance		0.058 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor		0.53 [1.74]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.2 [3.94]		Ohms/1000ft [Ohms/Km]
Jacket Spark			8,000	Vrms

#### Specifications by Frequency

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**PE3W12875**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency		250	500	1000	2500	
PE3W12875	Custom Lengths Available	Insertion Loss (Typ.)	0.012	0.017	0.026	0.044	0.073	dB/ft	
			0.04	0.06	0.09	0.15	0.24	dB/m	
PE3W12875-12	12 inch	Insertion Loss (Typ.)	0.32	0.32	0.33	0.35	0.38	dB	0.463
PE3W12875-36	36 inch	Insertion Loss (Typ.)	0.34	0.24	0.26	0.28	0.34	dB	0.793
PE3W12875-48	48 inch	Insertion Loss (Typ.)	0.42	0.25	0.27	0.31	0.38	dB	0.958
PE3W12875-180	180 inch	Insertion Loss (Typ.)	0.38	0.46	0.59	0.86	1.3	dB	2.773
PE3W12875-240	240 inch	Insertion Loss (Typ.)	0.44	0.54	0.72	1.08	1.66	dB	3.598

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: 0.1 dB  
 Loss due to Connector 2: 0.1 dB  
 Base Weight: 0.463 pounds  
 Additional Weight per Inch: 0.01375 pounds

**Mechanical Specifications**

**Cable Assembly**

Width/Diameter 0.5 in [12.7 mm]  
 Weight 0.463 lbs [210.01 g]

**Cable**

Cable Type LMR-600-FR  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper  
 Dielectric Type Foam PE  
 Number of Shields 2  
 Shield Layer 1 Aluminum Tape  
 Shield Layer 2 Tinned Copper  
 Jacket Material PE, Black  
 Jacket Diameter 0.59 in [14.99 mm]  
 One Time Minimum Bend Radius 1.5 in [38.1 mm]  
 Repeated Minimum Bend Radius 6 in [152.4 mm]  
 Bending Moment 2.75 lbs-ft [3.73 N-m]  
 Flat Plate Crush 60 lbs/in [1.07 Kg/mm]  
 Tensile Strength 350 lbs [158.76 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	Brass, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal

**Environmental Specifications**

Operating Range Temperature -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

## Fire Rated N Male to N Male Low Loss Cable Using LMR-600-FR Coax



### PE3W12875

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3W12875**

**- xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W12875-12 = 12 inches long cable  
PE3W12875-100cm = 100 cm long cable

Fire Rated N Male to N Male Low Loss Cable Using LMR-600-FR 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.

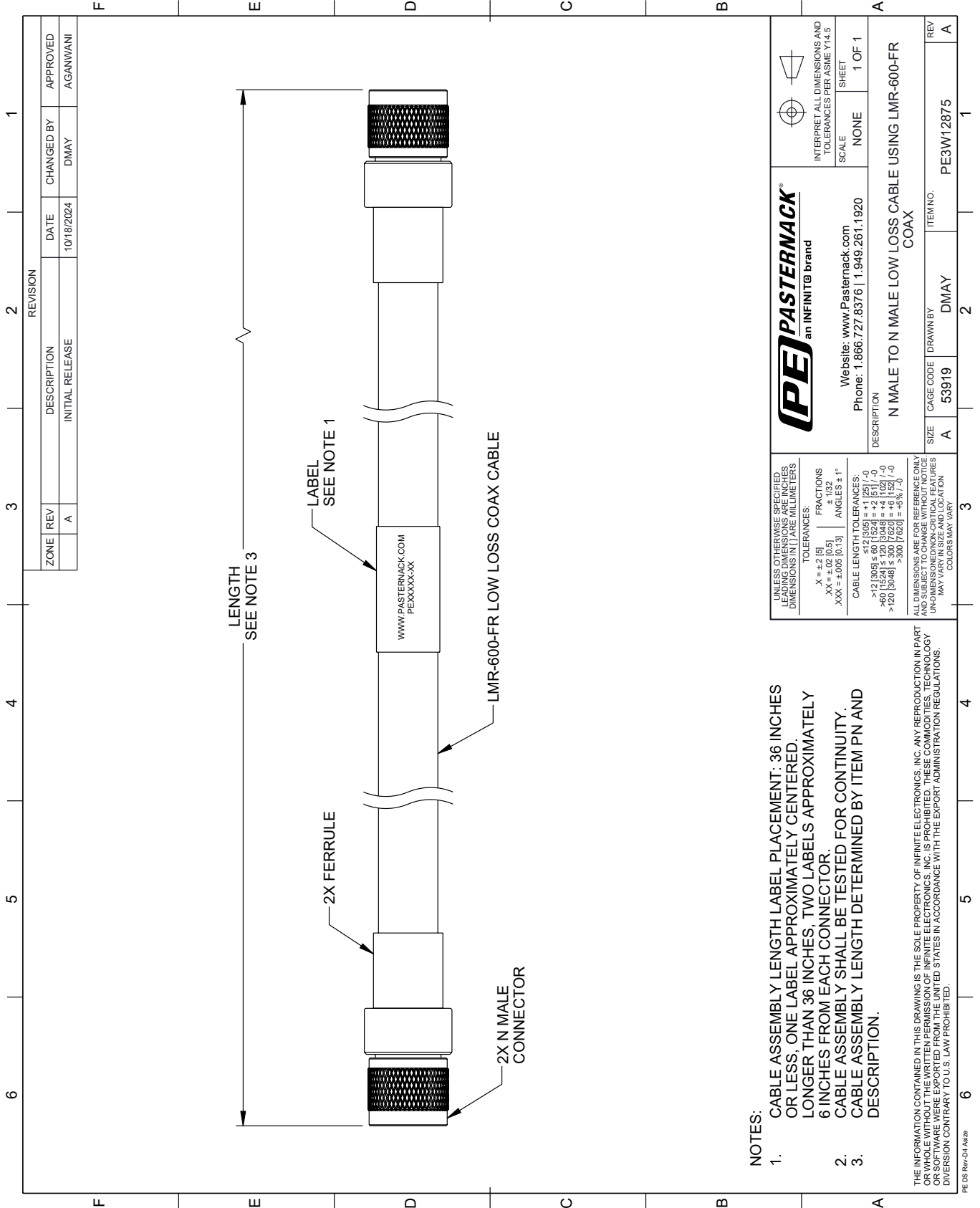
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Fire Rated N Male to N Male Low Loss Cable Using LMR-600-FR Coax PE3W12875](#)

URL: <https://www.pasternack.com/fire-rated-n-male-to-n-male-low-loss-cable-using-lmr-600-fr-pe3w12875-p.aspx>

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# PE3W12875 CAD Drawing

Fire Rated N Male to N Male Low Loss Cable Using LMR-600-FR Coax



**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.

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PE DS Rev-D4 Add2

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

		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1	
Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920			
DESCRIPTION			
N MALE TO N MALE LOW LOSS CABLE USING LMR-600-FR COAX			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	DMAY	PE3W12875
REV			A

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

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

FRACTIONS: ± 1/32  
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
 <12 [305] ≤ 60 [1524] = ±.1 [25] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0  
 >300 [7620] = ±.6 [152] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE NON-CRITICAL FEATURES. MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.