



Fire Rated N Male to N Female Low Loss
Cable Using LMR-195-FR Coax

RF Cable Assemblies Technical Data Sheet

PE3W12570

Configuration

- Connector 1: N Male
- Connector 2: N Female
- Cable Type: LMR-195-FR

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Double Shielded
- FRPE Jacket

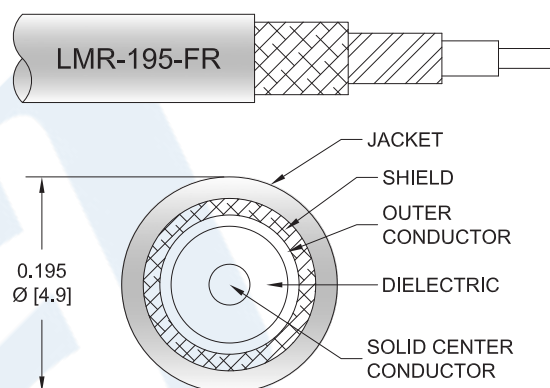
Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W12570 type N male to type N female cable using LMR-195-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 female gender configuration with 50 ohm flexible LMR-195-FR coax. The PE3W12570 type N male to type N female cable assembly operates to 5.8 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.



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 Female Low Loss Cable Using LMR-195-FR Coax PE3W12570](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	90			dB
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		7.6 [24.93]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ω/1000ft [Ω/Km]
Jacket Spark			3,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.057	0.081	0.116	0.19	0.299	dB/ft
	0.19	0.27	0.38	0.62	0.98	dB/m

Electrical Specification Notes:

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

Mechanical Specifications

Cable Assembly

Weight 0.164 lbs [74.39 g]

Cable

Cable Type	LMR-195-FR
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	FRPE, Black
Jacket Diameter	0.195 in [4.95 mm]

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One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	2 in [50.8 mm]
Bending Moment	0.2 lbs-ft [0.27 N-m]
Flat Plate Crush	15 lbs/in [0.27 Kg/mm]
Tensile Strength	40 lbs [18.14 Kg]

Connectors

Description	Connector 1	Connector 2
Type	N Male	N Female
Specification	MIL-STD-348	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Brass, Gold
Contact Plating Specification		30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification		100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3W12570

- **xx**

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

Example: PE3W12570-12 = 12 inches long cable
PE3W12570-100cm = 100 cm long cable

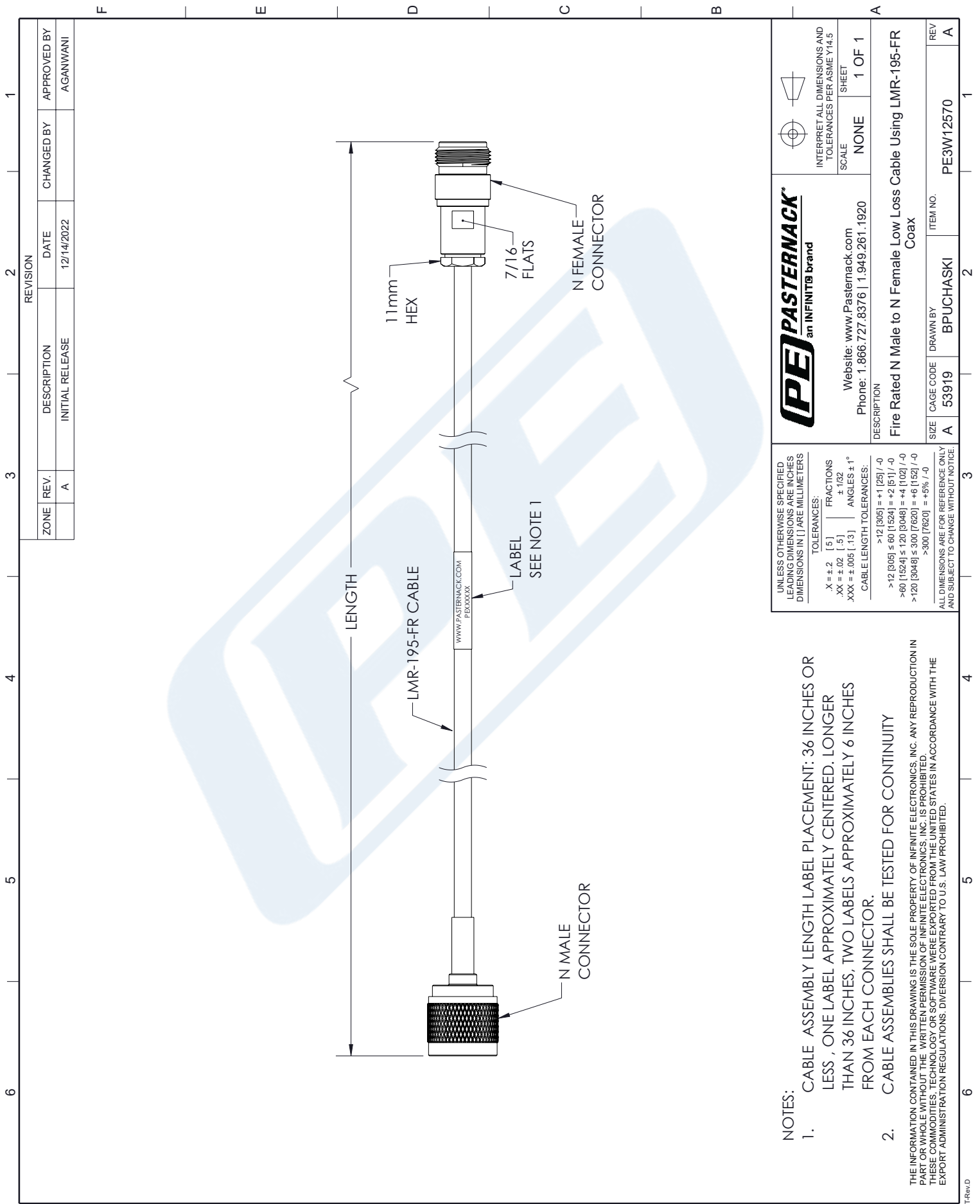
Fire Rated N Male to N Female Low Loss Cable Using LMR-195-FR Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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 Female Low Loss Cable Using LMR-195-FR Coax PE3W12570](https://www.pasternack.com/fire-rated-n-male-to-n-female-low-loss-cable-using-lmr-195-fr-pe3w12570-p.aspx)

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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.

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

TOI FRANCES:

FRACTIONS	
$X = \pm 2$	$[5]$
$XX = \pm .02$	$[.5]$
	$\pm 1/32$

XXX = ±.005 [.13] | ANGLES ± 1°

CABLE LENGTH TOLERANCES:

$$\begin{aligned} &>_{12} [305] = +1 [25] / -0 \\ &>_{12} [305] \leq 60 [1524] = +2 [51] / -0 \\ &>_{60} [1524] \leq 120 [3048] = +4 [102] / -0 \\ &>_{120} [3048] \leq 300 [7620] = +6 [152] / -0 \\ &>_{300} [7620] = +5\% / -0 \end{aligned}$$

ALL DIMENSIONS ARE FOR REFERENCE ONLY
AND SUBJECT TO CHANGE WITHOUT NOTICE

PE PASTERNAK®
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Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION

Fire Rated N Male to N Female Low Loss Cable Using LMR-195-FR Coax

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	BPUCHASKI	PE3W12570	A

SCALE	SHEET
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SCALE	SHEET
NONE	1 OF 1

able Using LMR-195-FR

REV A