



N Male to N Female 4 Hole Flange Low Loss
Cable 50 cm Length Using LMR-195 Coax

RF Cable Assemblies Technical Data Sheet

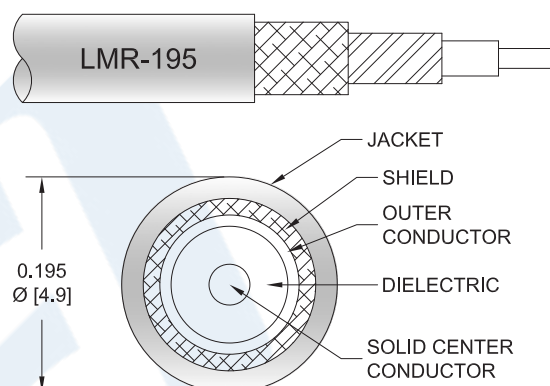
PE3W02012-50CM

Configuration

- Connector 1: N Male
- Connector 2: N Female 4 Hole Flange
- Cable Type: LMR-195

Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W02012-50CM type N male to type N female 4 hole flange low loss 50 cm cable using LMR-195 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 coax. The PE3W02012-50CM type N male to type N female cable assembly operates to 4 GHz. Our RF cable assembly with type N 4 hole flange 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 Male to N Female 4 Hole Flange Low Loss Cable 50 cm Length Using LMR-195 Coax PE3W02012-50CM](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR			1.35:1	
Velocity of Propagation		80		%
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	4	GHz
Insertion Loss (Max.)	0.28	0.33	0.4	0.5	0.58	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Length*	19.69 in [500.13 mm]
Diameter	1 in [25.4 mm]

Cable

Cable Type	LMR-195
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid

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Jacket Material	PE, Black
Jacket Diameter	0.195 in [4.95 mm]
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 4 Hole Flange
Specification	MIL-STD-348	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	ASTM B488	30μ in. minimum
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Nickel
Body Plating Specification		100μ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	
Hex Size	13/16 Inch	

Mechanical Specification Notes:

*All cable assemblies have a length tolerance of 1.5% or $\pm 3/8"$, whichever is greater.

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

Plotted and Other Data

Notes:

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 Female 4 Hole Flange Low Loss Cable 50 cm Length Using LMR-195 Coax PE3W02012-50CM](#)

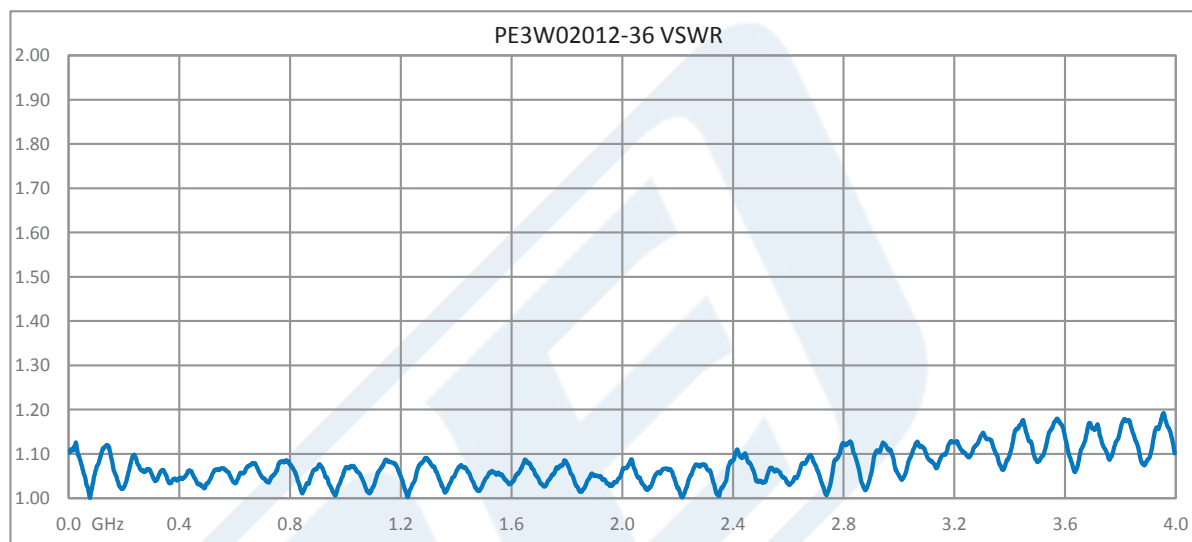


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Typical Performance Data



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PE3W02012-50CM

How to Order

Part Number Configuration:

PE3W02012

- xx

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

Example: PE3W02012-12 = 12 inches long cable
PE3W02012-100cm = 100 cm long cable

N Male to N Female 4 Hole Flange Low Loss Cable 50 cm Length Using LMR-195 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.

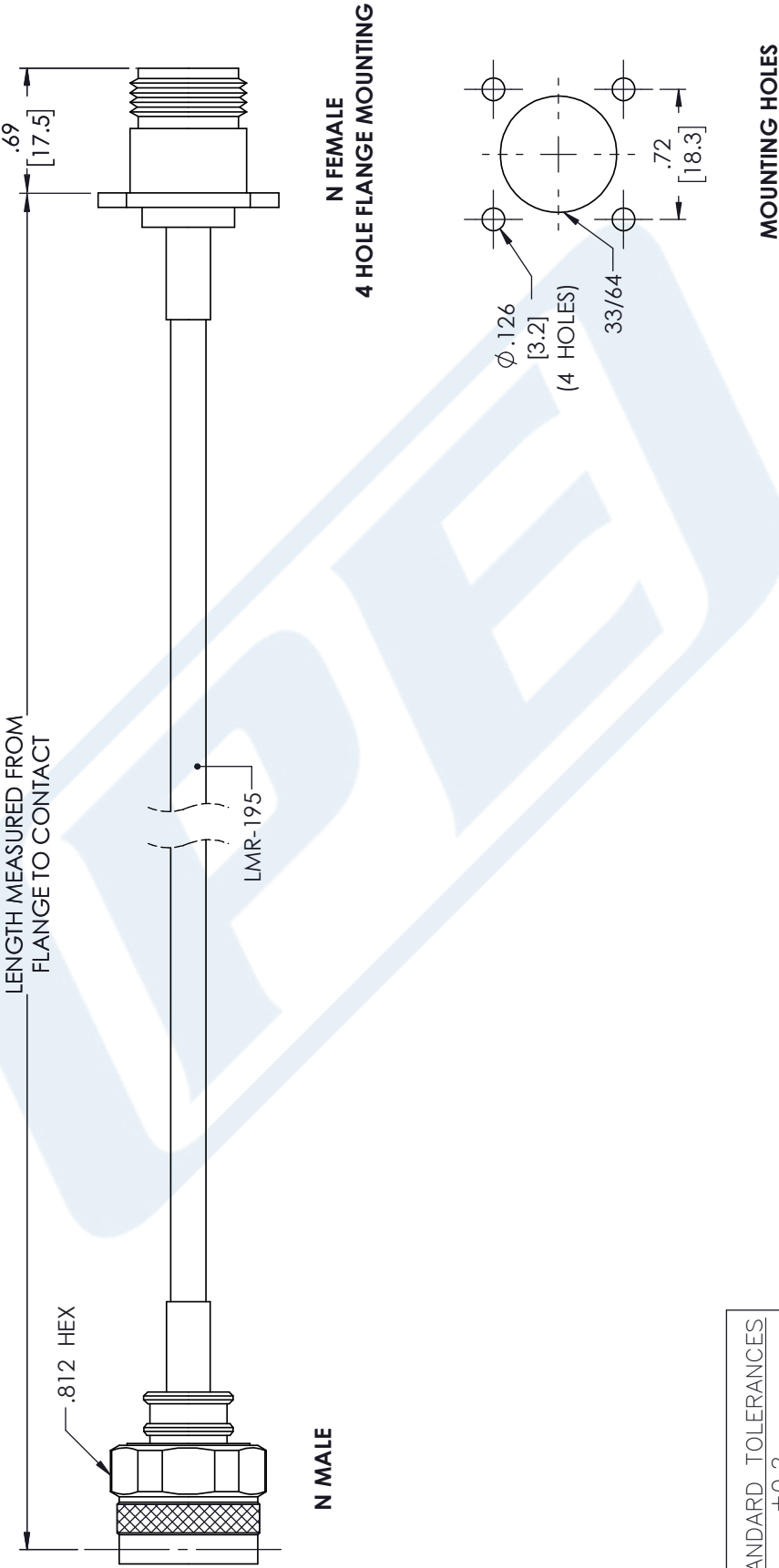
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to N Female 4 Hole Flange Low Loss Cable 50 cm Length Using LMR-195 Coax PE3W02012-50CM](https://www.pasternack.com/n-male-n-female-lmr195-cable-assembly-pe3w02012-50cm-p.aspx)

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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.

PE3W02012-50CM CAD Drawing

N Male to N Female 4 Hole Flange Low Loss Cable 50 cm Length Using LMR-195 Coax



STANDARD TOLERANCES
.X ±0.2
.XX ±0.01
.XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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THE ENGINEER'S RF SOURCE

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DWG TITLE	PE3W02012
CAGE CODE	53919

NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].	CAD FILE	05/09/18	SCALE	N/A	SIZE	A	CN2379
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