



### RF Cable Assemblies Technical Data Sheet

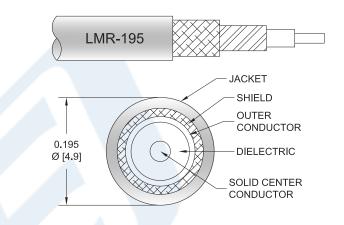
### PE3W02012-36

### 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 PE3W02012-36 type N male to type N female 4 hole flange low loss 36 inch 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 PE3W02012-36 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 36 Inch Length Using LMR-195 Coax PE3W02012-36

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623 **Phone:** (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451





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### **Electrical Specifications**

| Description                   | Minimum | Typical      | Maximum | Units           |
|-------------------------------|---------|--------------|---------|-----------------|
| Frequency Range               | DC      |              | 4       | GHz             |
| VSWR                          |         | / All        | 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.) | 0.35 | 0.45 | 0.56 | 0.77 | 0.92 | 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\* 36 in [914.4 mm]
Diameter 1 in [25.4 mm]

#### Cable

Cable TypeLMR-195Impedance50 OhmsInner Conductor TypeSolidInner Conductor Material and PlatingCopperDielectric TypePE (F)Number of Shields2

Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid

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Jacket Material

Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius Bending Moment

Flat Plate Crush Tensile Strength PE, Black

0.195 in [4.95 mm]

0.5 in [12.7 mm] 2 in [50.8 mm] 0.2 lbs-ft [0.27 N-m] 15 lbs/in [0.27 Kg/mm] 40 lbs [18.14 Kg]

#### Connectors

| Description                       | Connector 1      | Connector 2            |  |
|-----------------------------------|------------------|------------------------|--|
| Туре                              | 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:

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

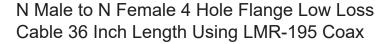
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<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.



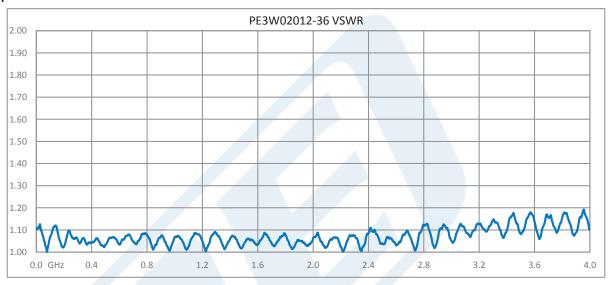




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#### **Typical Performance Data**



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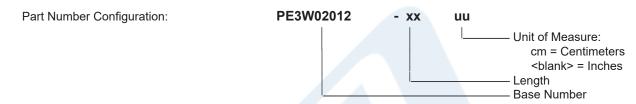




### **RF Cable Assemblies Technical Data Sheet**

PE3W02012-36

#### **How to Order**



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

N Male to N Female 4 Hole Flange Low Loss Cable 36 Inch 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 36 Inch Length Using LMR-195 Coax PE3W02012-36

URL: https://www.pasternack.com/n-male-n-female-lmr195-cable-assembly-pe3w02012-36-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.

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**PE3W02012-36 CAD Drawing**N Male to N Female 4 Hole Flange Low Loss Cable 36 Inch Length Using LMR-195 Coax

