

## N Male to N Male Low PIM Cable 24 Inch Length Using SPO-500 Coax

### PE3W10019-24

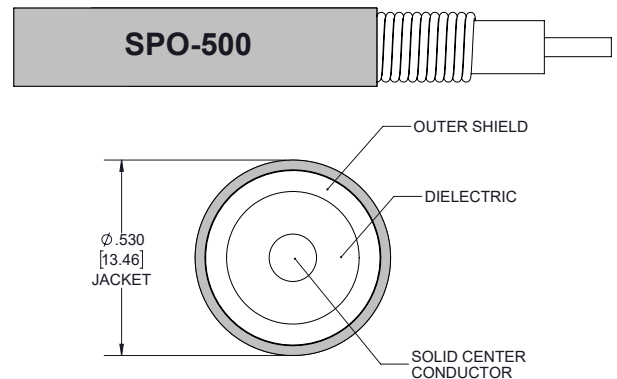


#### Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: SPO-500
- Coax Flex Type: Corrugated

#### Features

- Max Frequency 6 GHz
- Low PIM: -158 dBc Max
- 83% Phase Velocity
- PE Jacket
- 500 Mating Cycles



#### Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

#### Description

Pasternack's PE3W10019-24 type N male to type N male cable using SPO-500 coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack type N to type N cable assembly has a male to male gender configuration with 50 ohm corrugated SPO-500 coax. The PE3W10019-24 type N male to type N male cable assembly operates to 6 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -158 dBc.

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                                               |         | 83         |         | %            |
| Passive Intermodulation<br>IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz |         |            | -158    | dBc          |
| Capacitance                                                           |         | 24 [78.74] |         | pF/ft [pF/m] |

#### Specifications by Frequency

| Description | F1  | F2 | F3  | F4 | F5 | Units |
|-------------|-----|----|-----|----|----|-------|
| Frequency   | 0.5 | 1  | 2.5 | 6  |    | GHz   |

## N Male to N Male Low PIM Cable 24 Inch Length Using SPO-500 Coax

### PE3W10019-24



#### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5 | Units |
|-----------------------|------|------|------|------|----|-------|
| Insertion Loss (Max.) | 0.25 | 0.27 | 0.31 | 0.39 |    | dB/ft |
|                       | 0.82 | 0.89 | 1.02 | 1.28 |    | dB/m  |

#### Electrical Specification Notes:

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

#### Mechanical Specifications

##### Cable Assembly

Weight 0.415 lbs [188.24 g]

##### Cable

Cable Type SPO-500  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper Clad Aluminum  
 Dielectric Type Foam PE  
 Number of Shields 1  
 Outer Conductor 1 Material and Plating Copper  
 Jacket Material PE, Black  
 Jacket Diameter 0.53 in [13.46 mm]  
 One Time Minimum Bend Radius 2.25 in [57.15 mm]

#### Connectors

| Description                        | Connector 1      | Connector 2      |
|------------------------------------|------------------|------------------|
| Type                               | N Male           | N Male           |
| Impedance                          | 50 Ohms          | 50 Ohms          |
| Configuration                      | Straight         | Straight         |
| Mating Cycles                      | 500              | 500              |
| Contact Material and Plating       | Brass, Silver    | Brass, Silver    |
| Contact Plating Specification      | 200 µin          | 200 µin          |
| Dielectric Type                    | PTFE             | PTFE             |
| Body Material and Plating          | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification         | 80 µin           | 80 µin           |
| Coupling Nut Material and Plating  | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Plating Specification | 80 µin           | 80 µin           |
| Torque                             | 6 in-lbs 0.68 Nm | 6 in-lbs 0.68 Nm |

#### Environmental Specifications

Operating Range Temperature -40 to +85 deg C

## N Male to N Male Low PIM Cable 24 Inch Length Using SPO-500 Coax



### PE3W10019-24

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

#### Plotted and Other Data

Notes:

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3W10019**

**- xx**

**uu**

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

Example: PE3W10019-12 = 12 inches long cable  
PE3W10019-100cm = 100 cm long cable

N Male to N Male Low PIM Cable 24 Inch Length Using SPO-500 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 Male Low PIM Cable 24 Inch Length Using SPO-500 Coax PE3W10019-24](#)

URL: <https://www.pasternack.com/n-male-n-male-spo500-cable-assembly-pe3w10019-24-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3W10019-24 CAD Drawing

N Male to N Male Low PIM Cable 24 Inch Length Using SPO-500 Coax

