

## N Male to N Male Right Angle Precision Cable 12 Inch Length Using 160 Series Coax, LF Solder

### PE303-12



#### Configuration

- Connector 1: N Male
- Connector 2: N Male Right Angle
- Cable Type: 160 Series
- Coax Flex Type: Flexible

#### Features

- Max Frequency 18 GHz
- Shielding Effectivity > 100 dB
- 69.5% Phase Velocity
- Triple Shielded
- FEP Jacket

#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE303-12 type N male to type N male right angle 12 inch cable using 160 series 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 160 series coax. The PE303-12 type N male to type N male cable assembly operates to 18 GHz. The right angle type N interface on the 160 series cable allows for easier connections in tight spaces. The triple shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 100 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      |              | 18      | GHz          |
| VSWR                    |         |              | 1.4:1   |              |
| Velocity of Propagation |         | 69.5         |         | %            |
| RF Shielding            | 100     |              |         | dB           |
| Capacitance             |         | 29.4 [96.46] |         | pF/ft [pF/m] |
| Operating Voltage (AC)  |         |              | 1,200   | Vrms         |

#### Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-------------|----|----|----|----|----|-------|
| Frequency   | 2  | 6  | 10 | 14 | 16 | GHz   |

## N Male to N Male Right Angle Precision Cable 12 Inch Length Using 160 Series Coax, LF Solder

### PE303-12



#### Specifications by Frequency

| Description | F1     | F2     | F3     | F4     | F5     | Units |
|-------------|--------|--------|--------|--------|--------|-------|
| VSWR (Max.) | 1.05:1 | 1.14:1 | 1.24:1 | 1.32:1 | 1.33:1 |       |

#### Specifications by Frequency

| Description | F1     | F2 | F3 | F4 | F5 | Units |
|-------------|--------|----|----|----|----|-------|
| VSWR (Max.) | 1.34:1 |    |    |    |    |       |

#### Electrical Specification Notes:

Short lengths up to 24" long may exhibit VSWR measurements up to 9% higher.

Amplitude Variation not to exceed 10% in a coiled vs uncoiled, a coil is defined as a 4% loop.

#### Mechanical Specifications

##### Cable Assembly

|                |                     |
|----------------|---------------------|
| Width/Diameter | 0.17 in [4.32 mm]   |
| Weight         | 0.045 lbs [20.41 g] |

##### Cable

|                                      |                            |
|--------------------------------------|----------------------------|
| Cable Type                           | 160 Series                 |
| Impedance                            | 50 Ohms                    |
| Inner Conductor Type                 | Solid                      |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver  |
| Dielectric Type                      | PTFE                       |
| Number of Shields                    | 3                          |
| Shield Layer 1                       | Silver Plated Copper Tape  |
| Shield Layer 2                       | Mylar Tape                 |
| Shield Layer 3                       | Silver Plated Copper Braid |
| Jacket Material                      | FEP, Blue                  |
| Jacket Diameter                      | 0.163 in [4.14 mm]         |
| One Time Minimum Bend Radius         | 1 in [25.4 mm]             |

#### Connectors

| Description                       | Connector 1                | Connector 2                |
|-----------------------------------|----------------------------|----------------------------|
| Type                              | N Male                     | N Male Right Angle         |
| Impedance                         | 50 Ohms                    | 50 Ohms                    |
| Configuration                     | Straight                   | Right Angle                |
| Contact Material and Plating      | Gold                       | Gold                       |
| Dielectric Type                   | PTFE                       | PTFE                       |
| Body Material and Plating         | Passivated Stainless Steel | Passivated Stainless Steel |
| Coupling Nut Material and Plating | Passivated Stainless Steel | Passivated Stainless Steel |
| Hex Size                          | 13/16 in.                  | 13/16 in.                  |
| Torque                            | 15 in-lbs 1.7 Nm           | 15 in-lbs 1.7 Nm           |

## N Male to N Male Right Angle Precision Cable 12 Inch Length Using 160 Series Coax, LF Solder



### PE303-12

#### Environmental Specifications

Operating Range Temperature

-48 to +204 deg C

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

#### Plotted and Other Data

Notes:

Values at 25°C, sea level.

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE303**      **- xx**      **uu**

└──────────┘      └──────────┘      └──────────┘

Unit of Measure:  
cm = Centimeters  
<blank> = Inches

Length

Base Number

Example: PE303-12 = 12 inches long cable  
PE303-100cm = 100 cm long cable

N Male to N Male Right Angle Precision Cable 12 Inch Length Using 160 Series Coax, LF Solder 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 Right Angle Precision Cable 12 Inch Length Using 160 Series Coax, LF Solder PE303-12](#)

URL: <https://www.pasternack.com/n-male-n-male-300-series-cable-assembly-pe303-12-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.

PE303-12 CAD Drawing

N Male to N Male Right Angle Precision Cable 12 Inch Length Using 160 Series Coax, LF Solder

