

## NEX10 Male Right Angle to NEX10 Female Bulkhead Low PIM Cable Using SPO-250 Coax

**PE3W17871**

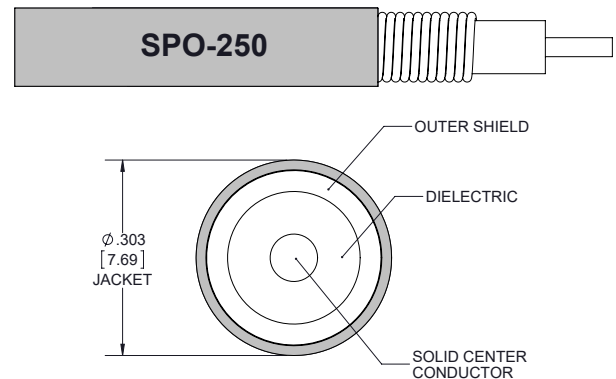


### Configuration

- Connector 1: NEX10 Male Right Angle
- Connector 2: NEX10 Female Bulkhead
- Cable Type: SPO-250
- Coax Flex Type: Corrugated

### Features

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- 83% Phase Velocity
- PE Jacket



### Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

### Description

Pasternack's PE3W17871 NEX10 male right angle to NEX10 female bulkhead cable using SPO-250 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 NEX10 to NEX10 cable assembly has a male to female gender configuration with 50 ohm corrugated SPO-250 coax. The PE3W17871 NEX10 male to NEX10 female cable assembly operates to 5.8 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -160 dBc. The right angle NEX10 interface on the SPO-250 cable allows for easier connections in tight spaces. Our RF cable assembly with NEX10 bulkhead 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.

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      |              | 5.8     | GHz          |
| VSWR                    |         |              | 1.4:1   |              |
| Velocity of Propagation |         | 83           |         | %            |
| Passive Intermodulation |         |              | -160    | dBc          |
| Capacitance             |         | 24 [78.74]   |         | pF/ft [pF/m] |
| Inductance              |         | 0.054 [0.18] |         | uH/ft [uH/m] |

### Specifications by Frequency

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### PE3W17871

| Part Number    | Length                   | Description           | F1   | F2   | F3   | F4    | F5    | Units | Weight (lbs) |
|----------------|--------------------------|-----------------------|------|------|------|-------|-------|-------|--------------|
|                |                          | Frequency             | 450  | 500  | 1000 | 2500  | 5800  | MHz   |              |
| PE3W17871      | Custom Lengths Available | Insertion Loss (Typ.) | 0.04 | 0.04 | 0.06 | 0.103 | 0.167 | dB/ft |              |
|                |                          |                       | 0.14 | 0.14 | 0.2  | 0.34  | 0.55  | dB/m  |              |
| PE3W17871-12   | 12 inch                  | Insertion Loss (Typ.) | 0.35 | 0.35 | 0.36 | 0.41  | 0.47  | dB    | 0.097        |
| PE3W17871-24   | 24 inch                  | Insertion Loss (Typ.) | 0.39 | 0.39 | 0.42 | 0.51  | 0.64  | dB    | 0.145        |
| PE3W17871-36   | 36 inch                  | Insertion Loss (Typ.) | 0.43 | 0.43 | 0.48 | 0.61  | 0.8   | dB    | 0.192        |
| PE3W17871-60   | 60 inch                  | Insertion Loss (Typ.) | 0.51 | 0.51 | 0.6  | 0.82  | 1.14  | dB    | 0.286        |
| PE3W17871-50CM | 50 CM                    | Insertion Loss (Typ.) | 0.37 | 0.37 | 0.4  | 0.47  | 0.58  | dB    | 0.128        |

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

|                             |                |
|-----------------------------|----------------|
| Loss due to Connector 1:    | 0.2 dB         |
| Loss due to Connector 2:    | 0.1 dB         |
| Base Weight:                | 0.097 pounds   |
| Additional Weight per Inch: | 0.00392 pounds |

### Mechanical Specifications

#### Cable Assembly

|                |                  |
|----------------|------------------|
| Width/Diameter | 0.5 in [12.7 mm] |
| Weight         | 0.097 lbs [44 g] |

#### Cable

|                                        |                       |
|----------------------------------------|-----------------------|
| Cable Type                             | SPO-250               |
| 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                        | 0.303 in [7.7 mm]     |
| One Time Minimum Bend Radius           | 1.25 in [31.75 mm]    |
| Bending Moment                         | 0.5 lbs-ft [0.68 N-m] |

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**Connectors**

| Description                          | Connector 1            | Connector 2           |
|--------------------------------------|------------------------|-----------------------|
| Type                                 | NEX10 Male Right Angle | NEX10 Female Bulkhead |
| Impedance                            | 50 Ohms                | 50 Ohms               |
| Configuration                        | Right Angle            | Straight              |
| Contact Material and Plating         | Brass, Silver          | Bronze, Silver        |
| Dielectric Type                      | PTFE                   | PTFE                  |
| Outer Conductor Material and Plating |                        | Brass, Tri-Metal      |
| Body Material and Plating            | Brass, Tri-Metal       | Brass, Tri-Metal      |
| Coupling Nut Material and Plating    | Brass, Tri-Metal       |                       |

**Environmental Specifications**

Operating Range Temperature -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

## NEX10 Male Right Angle to NEX10 Female Bulkhead Low PIM Cable Using SPO-250 Coax



### PE3W17871

#### Typical Performance Data

#### How to Order

Part Number Configuration: **PE3W17871 - xx uu**

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

Example: PE3W17871-12 = 12 inches long cable  
PE3W17871-100cm = 100 cm long cable

NEX10 Male Right Angle to NEX10 Female Bulkhead Low PIM Cable Using SPO-250 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: [NEX10 Male Right Angle to NEX10 Female Bulkhead Low PIM Cable Using SPO-250 Coax PE3W17871](#)

URL: <https://www.pasternack.com/nex10-male-right-angle-to-nex10-female-bulkhead-low-pim-cable-using-spo-250-pe3w17871-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.

PE3W17871 CAD Drawing
NEX10 Male Right Angle to NEX10 Female Bulkhead Low PIM Cable Using SPO-250 Coax

