



2.92mm Male to 2.92mm Male Cable 24 Inch  
Length Using PE-P103 Coax

**TECHNICAL DATA SHEET**

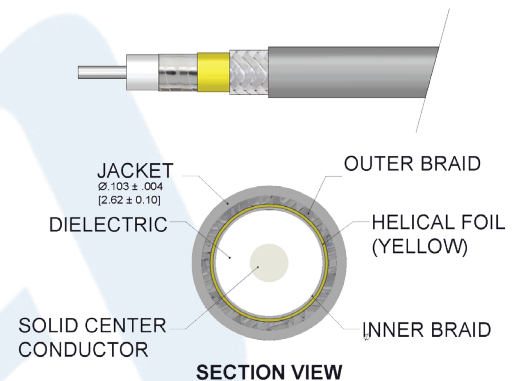
**PE3C6635-24**

**Configuration**

- Connector 1: 2.92mm Male
- Connector 2: 2.92mm Male
- Cable Type: PE-P103
- Coax Flex Type: Flexible

**Features**

- Max Frequency 45 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Triple Shielded
- ETFE Jacket



**Applications**

- General Purpose
- Laboratory Use

**Description**

Pasternack's PE3C6635-24 2.92mm male to 2.92mm male 24 inch cable using PE-P103 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 2.92mm to 2.92mm cable assembly has a male to male gender configuration with 50 ohm flexible PE-P103 coax. The PE3C6635-24 2.92mm male to 2.92mm male cable assembly operates to 45 GHz. The triple 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: [2.92mm Male to 2.92mm Male Cable 24 Inch Length Using PE-P103 Coax PE3C6635-24](#)



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**Electrical Specifications**

| Description             | Minimum | Typical     | Maximum | Units        |
|-------------------------|---------|-------------|---------|--------------|
| Frequency Range         | DC      |             | 45      | GHz          |
| VSWR                    |         |             | 1.4:1   |              |
| Velocity of Propagation |         | 76          |         | %            |
| RF Shielding            | 90      |             |         | dB           |
| Capacitance             |         | 26 [85.3]   |         | pF/ft [pF/m] |
| Inductance              |         | 65 [213.25] |         | uH/ft [uH/m] |
| Input Power (Peak)      |         |             | 550     | Watts        |

**Specifications by Frequency**

| Description           | F1   | F2   | F3   | F4   | F5   | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency             | 2.5  | 5    | 10   | 20   | 45   | GHz   |
| Insertion Loss (Max.) | 1.07 | 1.47 | 2.03 | 2.89 | 4.47 | dB    |

**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 is estimated as  $0.1 \times \text{SQRT}(\text{FGHz})$  dB per connector.

**Mechanical Specifications**

**Cable Assembly**

Weight 0.06 lbs [27.22 g]

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## 2.92mm Male to 2.92mm Male Cable 24 Inch Length Using PE-P103 Coax

### TECHNICAL DATA SHEET

**PE3C6635-24**

#### Cable

|                                      |                      |
|--------------------------------------|----------------------|
| Cable Type                           | PE-P103              |
| Impedance                            | 50 Ohms              |
| Inner Conductor Type                 | Stranded             |
| Inner Conductor Material and Plating | Copper, Silver       |
| Dielectric Type                      | PTFE                 |
| Number of Shields                    | 3                    |
| Shield Layer 1                       | Silver Plated Copper |
| Shield Layer 2                       | Conductive Tape      |
| Shield Layer 3                       | Silver Plated Copper |
| Jacket Material                      | ETFE, Gray           |
| Jacket Diameter                      | 0.103 in [2.62 mm]   |
| One Time Minimum Bend Radius         | 0.32 in [8.13 mm]    |
| Repeated Minimum Bend Radius         | 0.96 in [24.38 mm]   |
| Typical Flex Cycles                  | 500,000              |

#### Connectors

| Description                        | Connector 1                | Connector 2                |
|------------------------------------|----------------------------|----------------------------|
| Type                               | 2.92mm Male Threaded       | 2.92mm Male Threaded       |
| Impedance                          | 50 Ohms                    | 50 Ohms                    |
| Contact Material and Plating       | Beryllium Copper, Gold     | Beryllium Copper, Gold     |
| Contact Plating Specification      | ASTM-B488 50µ In. Min      | ASTM-B488 50µ In. Min      |
| Dielectric Type                    | PPO                        | PPO                        |
| Body Material and Plating          | Passivated Stainless Steel | Passivated Stainless Steel |
| Body Plating Specification         | SAE-AMS-2700               | SAE-AMS-2700               |
| Coupling Nut Material and Plating  | Passivated Stainless Steel | Passivated Stainless Steel |
| Coupling Nut Plating Specification | SAE-AMS-2700               | SAE-AMS-2700               |
| Hex Size                           | 5/16 Inch                  | 5/16 Inch                  |
| Torque                             | 8 in-lbs [0.9 Nm]          | 8 in-lbs [0.9 Nm]          |

#### Environmental Specifications

##### Temperature

Operating Range -45 to +125 deg C

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

#### Plotted and Other Data

##### Notes:

- Values at 25°C, sea level.

# PE3C6635-24 CAD Drawing

2.92mm Male to 2.92mm Male Cable 24 Inch Length Using PE-P103 Coax

F

E

D

C

B

A

F

E

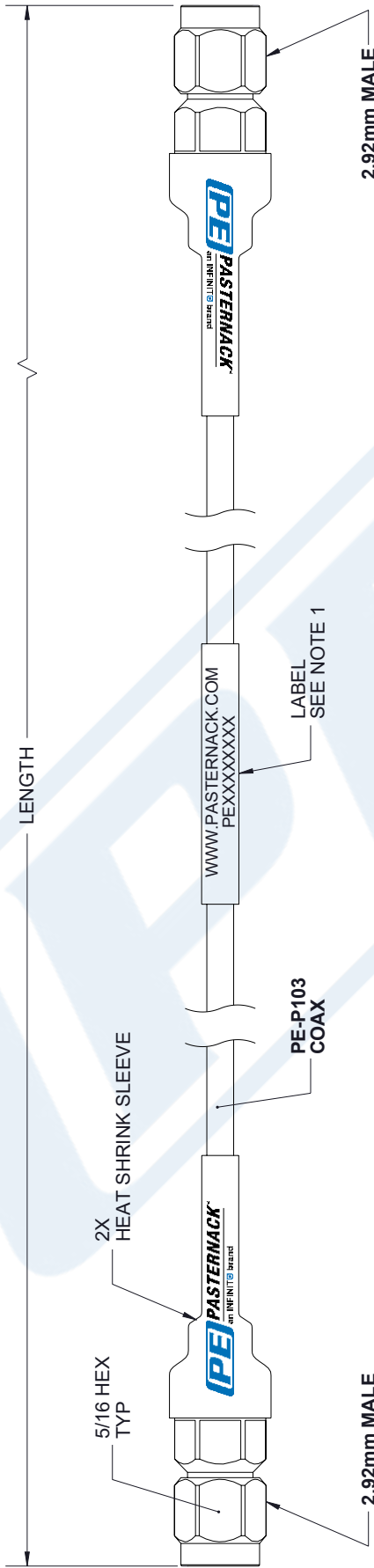
D

C

B

A

| REVISION |      |             |            |
|----------|------|-------------|------------|
| ZONE     | REV. | DESCRIPTION | CHANGED BY |
|          | B    | ECO-12354   | KDANG      |
|          |      | DATE        | APPROVED   |
|          |      | 01/03/2023  | AGANWANI   |



## NOTES:

- CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
- CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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UNLESS OTHERWISE SPECIFIED  
LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
X = ±.2 [ .5 ] FRACTIONS  
.XX = ±.02 [ .5 ] ±.132  
XXX = ±.005 [ .13 ] ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
>12 [305] = +1 [25] / -0  
>12 [305] ≤ 60 [1524] = +2 [51] / -0  
>60 [1524] ≤ 120 [3048] = +4 [102] / -0  
>120 [3048] ≤ 300 [7620] = +6 [152] / -0  
>300 [7620] = +5% / -0

## DESCRIPTION

2.92mm Male to 2.92mm Male Cable Using PE-P103 Coax



Website: [www.Pasternack.com](http://www.Pasternack.com)  
Phone: 1.866.727.8376 | 1.949.261.1920



SCALE NONE  
SHEET 1 OF 1

| SIZE | CAGE CODE | DRAWN BY | ITEM NO. | REV |
|------|-----------|----------|----------|-----|
| A    | 53919     | KDANG    | PE3C6635 | B   |

T-Rev.D