

2.92mm Female Bulkhead to 2.92mm Female Bulkhead Low Loss Space Cable 12 Inch Length Using PE-R135LL Coax



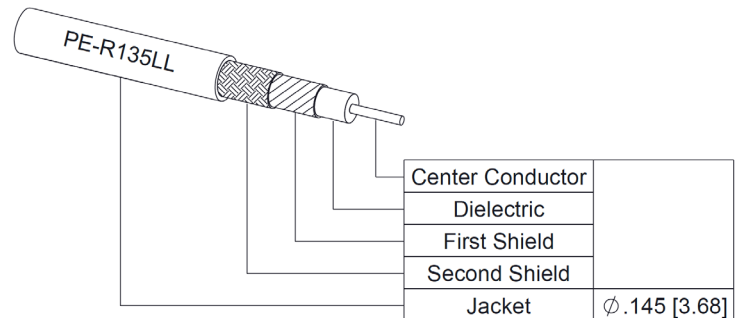
PE3C100019-12

Configuration

- Connector 1: 2.92mm Female Bulkhead
- Connector 2: 2.92mm Female Bulkhead
- Cable Type: PE-R135LL
- Coax Flex Type: Flexible

Features

- Max Frequency 40 GHz
- Shielding Effectivity > 100 dB
- 82% Phase Velocity
- Double Shielded
- ETFE Jacket
- Up to 300 Mrad of Radiation Resistance
- Low Outgassing (TML <1%, CVCM <1%) per ASTM E-595
- Operating Temperature -65 to +150 Deg C
- Built in a Facility with < 100,000 Particles/sq ft
- Built to IPC-A-620 Class 3



Applications

- General Purpose
- Laboratory Use
- Vacuum Environments
- Low Earth Orbit (LEO)
- Space (Exploration, Launches, Maintenance, Stations)
- Ground Systems
- Satellites

Description

Pasternack's PE3C100019-12 2.92mm female bulkhead to 2.92mm female bulkhead 12 inch cable using PE-R135LL 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 female to female gender configuration with 50 ohm flexible PE-R135LL coax. The PE3C100019-12 2.92mm female to 2.92mm female cable assembly operates to 40 GHz. Our RF cable assembly with 2.92mm 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. The double 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 | | 40 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 82 | | % |
| RF Shielding | 100 | | | dB |

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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------|---------|------------|---------|--------------|
| Capacitance | | 25 [82.02] | | pF/ft [pF/m] |

Specifications by Frequency

| Part Number | Length | Description | F1 | F2 | F3 | F4 | F5 | Units | Weight (lbs) |
|------------------|--------------------------|-----------------------|-----------|-------|------|-------|-------|-------|--------------|
| | | | Frequency | | | | | MHz | |
| PE3C100019 | Custom Lengths Available | Insertion Loss (Typ.) | 0.161 | 0.237 | 0.35 | 0.528 | 0.808 | dB/ft | |
| | | | 0.53 | 0.78 | 1.15 | 1.74 | 2.66 | dB/m | |
| PE3C100019-12 | 12 Inch | Insertion Loss (Typ.) | 0.37 | 0.44 | 0.55 | 0.73 | 1.01 | dB | 0.076 |
| PE3C100019-18 | 18 Inch | Insertion Loss (Typ.) | 0.45 | 0.56 | 0.73 | 1 | 1.42 | dB | 0.09 |
| PE3C100019-24 | 24 Inch | Insertion Loss (Typ.) | 0.53 | 0.68 | 0.9 | 1.26 | 1.82 | dB | 0.103 |
| PE3C100019-100CM | 100 CM | Insertion Loss (Typ.) | 0.73 | 0.98 | 1.35 | 1.94 | 2.86 | dB | 0.136 |
| PE3C100019-200CM | 200 CM | Insertion Loss (Typ.) | 1.26 | 1.76 | 2.5 | 3.67 | 5.51 | dB | 0.221 |

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: | 0.1 dB |
| Loss due to Connector 2: | 0.1 dB |
| Base Weight: | 0.076 pounds |
| Additional Weight per Inch: | 0.00217 pounds |

Mechanical Specifications

Cable Assembly

| | |
|----------------|---------------------|
| Length | 12 in [304.8 mm] |
| Width/Diameter | 0.437 in [11.1 mm] |
| Weight | 0.076 lbs [34.47 g] |

Cable

| | |
|--------------------------------------|----------------------|
| Cable Type | PE-R135LL |
| Impedance | 50 Ohms |
| Inner Conductor Type | Solid |
| Inner Conductor Material and Plating | Copper, Silver |
| Dielectric Type | PTFE |
| Number of Shields | 2 |
| Shield Layer 1 | Silver plated copper |
| Shield Layer 2 | Silver plated copper |
| Jacket Material | ETFE, Black |
| Jacket Diameter | 0.145 in [3.68 mm] |
| One Time Minimum Bend Radius | 1.08 in [27.43 mm] |

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Connectors

| Description | Connector 1 | Connector 2 |
|-------------------------------|-----------------------------|-----------------------------|
| Type | 2.92mm Female Bulkhead | 2.92mm Female Bulkhead |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Contact Material and Plating | Beryllium Copper, Gold | Beryllium Copper, Gold |
| Contact Plating Specification | 30 µin minimum | 30 µin minimum |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Stainless Steel, Passivated | Stainless Steel, Passivated |

Environmental Specifications

Operating Range Temperature -65 to +150 deg C

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

2.92mm Female Bulkhead to 2.92mm Female Bulkhead Low Loss Space Cable 12 Inch Length Using PE-R135LL Coax



PE3C100019-12

Typical Performance Data

How to Order

Part Number Configuration:

PE3C100019

- **xx**

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C100019-12 = 12 inches long cable
PE3C100019-100cm = 100 cm long cable

2.92mm Female Bulkhead to 2.92mm Female Bulkhead Low Loss Space Cable 12 Inch Length Using PE-R135LL 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.

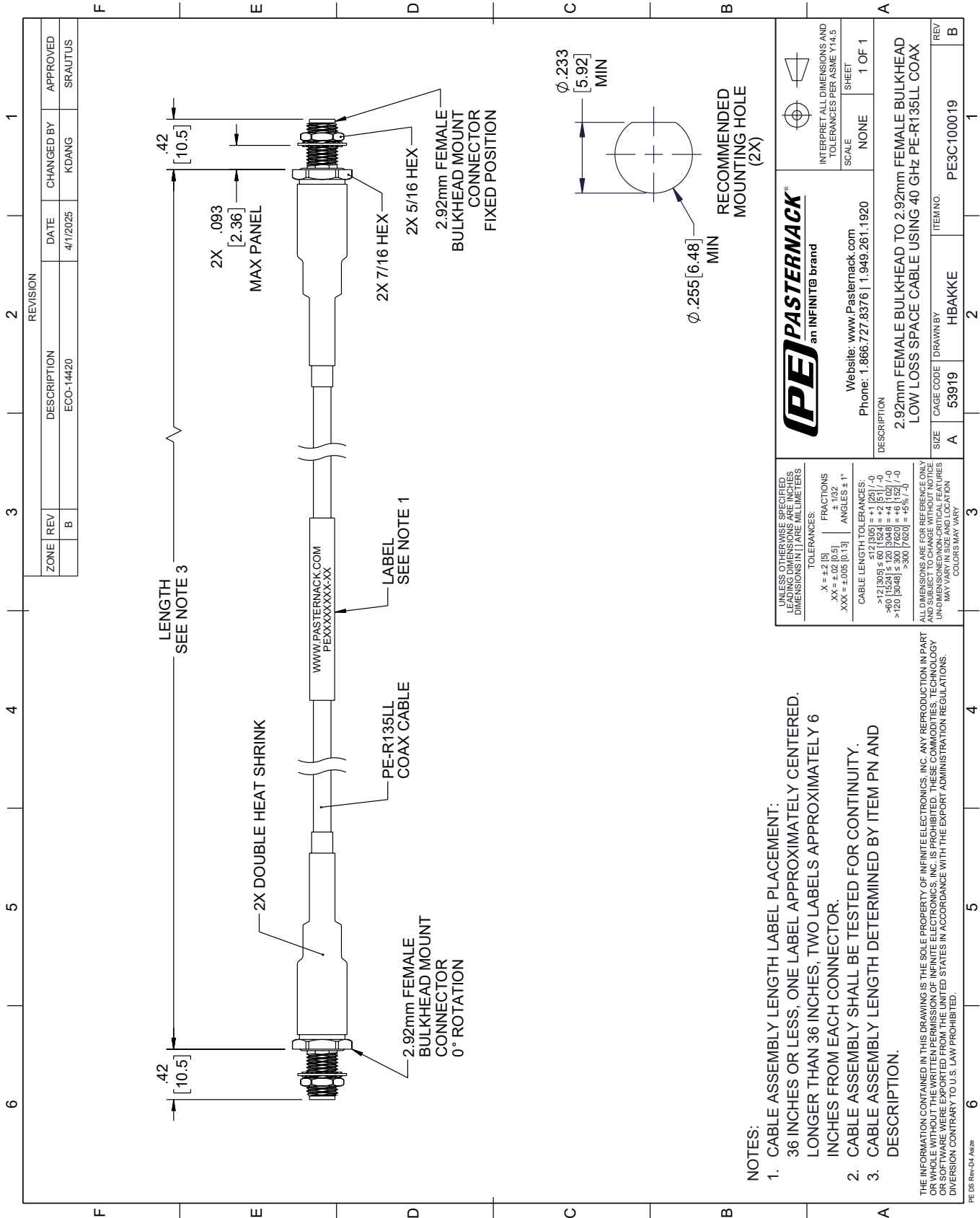
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [2.92mm Female Bulkhead to 2.92mm Female Bulkhead Low Loss Space Cable 12 Inch Length Using PE-R135LL Coax PE3C100019-12](https://www.pasternack.com/2.92mm-female-bulkhead-to-2.92mm-female-bulkhead-low-loss-space-cable-12-inch-length-using-pe-r135ll-pe3c100019-12)

URL: <https://www.pasternack.com/2.92mm-female-bulkhead-to-2.92mm-female-bulkhead-low-loss-space-cable-12-inch-length-using-pe-r135ll-pe3c100019-12-p.aspx>

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PE3C100019-12 CAD Drawing

2.92mm Female Bulkhead to 2.92mm Female Bulkhead Low Loss Space Cable 12 Inch Length Using PE-R135LL Coax



NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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PE DS Rev-04 Add2

| ZONE | REV | DESCRIPTION | DATE | CHANGED BY | APPROVED |
|------|-----|-------------|-----------|------------|----------|
| B | | ECO-14420 | 4/11/2025 | KDANG | SRAUTUS |

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Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION: 2.92mm FEMALE BULKHEAD TO 2.92mm FEMALE BULKHEAD LOW LOSS SPACE CABLE USING 40 GHz PE-R135LL COAX

| | | | | | | | |
|-------|------|-----------|--------|--|--------|----------|------------|
| SIZE | A | CAGE CODE | 53919 | DRAWN BY | HBAKKE | ITEM NO. | PE3C100019 |
| SCALE | NONE | SHEET | 1 OF 1 | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 | | | |