



## Water Blue FAKRA Plug to FAKRA Jack Cable 48 Inch Length Using RG316-DS Coax

### RF Cable Assemblies Technical Data Sheet

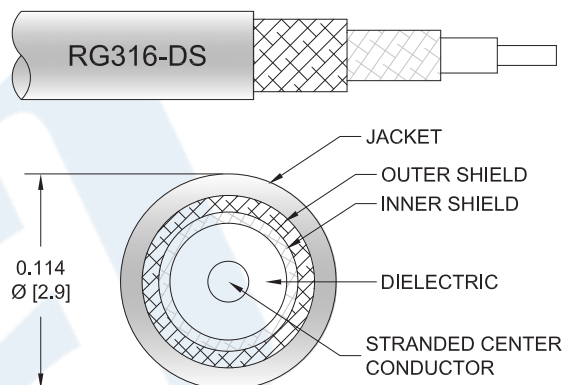
PE3C6042-48

#### Configuration

- Connector 1: FAKRA Plug
- Connector 2: FAKRA Jack
- Cable Type: RG316-DS

#### Features

- Max Frequency 3 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C6042-48 water blue FAKRA plug to FAKRA jack 48 inch cable using RG316-DS 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 FAKRA to FAKRA cable assembly has a plug to jack gender configuration with 50 ohm flexible RG316-DS coax. The PE3C6042-48 FAKRA plug to FAKRA jack cable assembly operates to 3 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

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: [Water Blue FAKRA Plug to FAKRA Jack Cable 48 Inch Length Using RG316-DS Coax PE3C6042-48](#)



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#### Electrical Specifications

| Description             | Minimum | Typical      | Maximum | Units        |
|-------------------------|---------|--------------|---------|--------------|
| Frequency Range         | DC      |              | 3       | GHz          |
| VSWR                    |         |              | 1.4:1   |              |
| Velocity of Propagation |         | 70           |         | %            |
| Capacitance             |         | 29.4 [96.46] |         | pF/ft [pF/m] |

#### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4  | F5   | Units |
|-----------------------|------|------|------|-----|------|-------|
| Frequency             | 0.1  | 0.25 | 0.5  | 1   | 3    | GHz   |
| Insertion Loss (Max.) | 0.68 | 0.76 | 0.88 | 1.4 | 2.24 | dB    |

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. Insertion Loss is estimated as 0.1 dB per connector.

#### Mechanical Specifications

##### Cable Assembly

|          |                   |
|----------|-------------------|
| Length*  | 48 in [121.92 cm] |
| Diameter | 0.37 in [9.4 mm]  |

##### Cable

|                                      |                            |
|--------------------------------------|----------------------------|
| Cable Type                           | RG316-DS                   |
| Impedance                            | 50 Ohms                    |
| Inner Conductor Type                 | Stranded                   |
| Inner Conductor Material and Plating | Copper Clad Steel, Silver  |
| Dielectric Type                      | PTFE                       |
| Number of Shields                    | 2                          |
| Shield Layer 1                       | Silver Plated Copper Braid |
| Shield Layer 2                       | Silver Plated Copper Braid |
| Jacket Material                      | FEP, Tan                   |
| Jacket Diameter                      | 0.114 in [2.9 mm]          |
| Repeated Minimum Bend Radius         | 0.6 in [15.24 mm]          |

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### Connectors

| Description                          | Connector 1           | Connector 2           |
|--------------------------------------|-----------------------|-----------------------|
| Type                                 | FAKRA Plug            | FAKRA Jack            |
| Impedance                            | 50 Ohms               | 50 Ohms               |
| Configuration                        | Straight              | Straight              |
| Contact Material and Plating         | Phosphor Bronze, Gold | Phosphor Bronze, Gold |
| Dielectric Type                      | PTFE                  | Teflon                |
| Outer Conductor Material and Plating | Brass, Nickel         | Brass, Nickel         |
| Body Material and Plating            | Plastic               | Plastic, Paint        |

### Environmental Specifications

#### Temperature

Operating Range

-40 to +85 deg C

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

### Plotted and Other Data

Notes:

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## Water Blue FAKRA Plug to FAKRA Jack Cable 48 Inch Length Using RG316-DS Coax

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PE3C6042-48

#### How to Order

Part Number Configuration:

**PE3C6042**

- **xx**

**uu**

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

Example: PE3C6042-12 = 12 inches long cable  
PE3C6042-100cm = 100 cm long cable

Water Blue FAKRA Plug to FAKRA Jack Cable 48 Inch Length Using RG316-DS 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.

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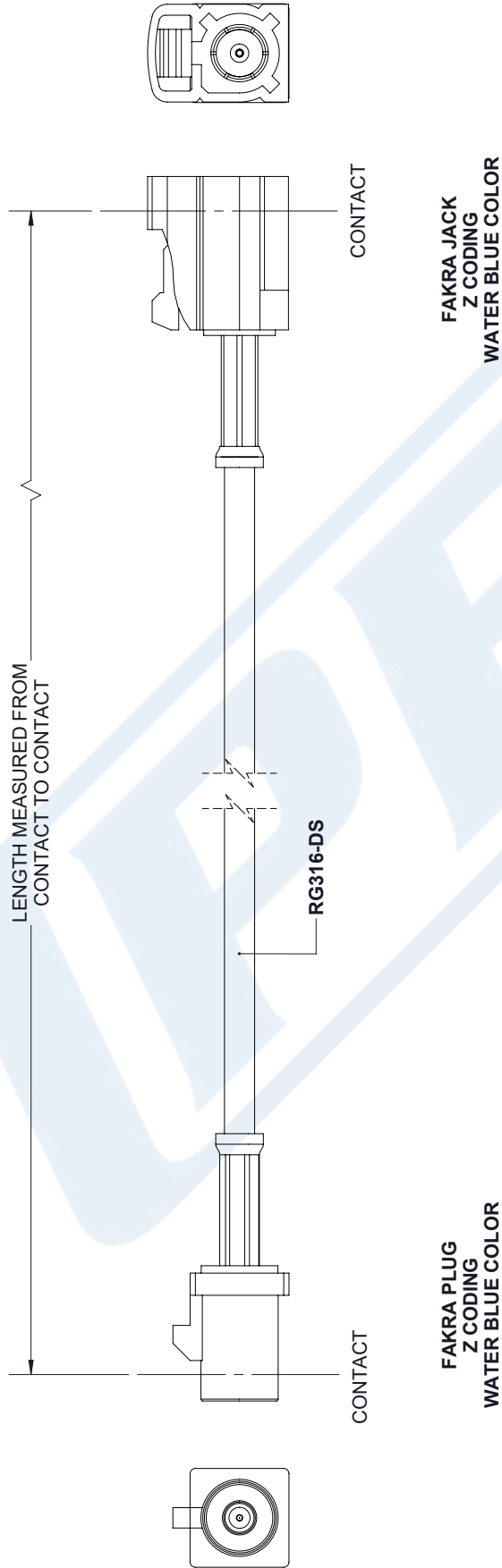
URL:

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

# PE3C6042-48 CAD Drawing

Water Blue FAKRA Plug to FAKRA Jack Cable 48 Inch Length Using RG316-DS Coax

| REVISIONS |                 |           |          |
|-----------|-----------------|-----------|----------|
| REV.      | DESCRIPTION     | DATE      | APPROVED |
| A         | INITIAL RELEASE | 8/20/2020 | S.ELLIS  |



|                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| UNLESS OTHERWISE SPECIFIED<br>LEADING DIMENSIONS ARE INCHES<br>DIMENSIONS IN [ ] ARE MILLIMETERS                                                                                                                                                                                                                                                                                                                                           |  |  |  | THIRD-ANGLE PROJECTION                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
| TOLERANCES:<br><br>X = ± .2 [5.08]<br>.XX = ± .02 [.51]<br>XXX = ± .005 [.13]<br><br>ANGLES ± 1°<br><br>CABLE LENGTH (L) TOLERANCES:<br><br>L ≤ 12 [305] = ± .1 [25] / -0<br>12 [305] < L ≤ 60 [1524] = ± .2 [51] / -0<br>60 [1524] < L ≤ 120 [3048] = ± .4 [102] / -0<br>120 [3048] < L ≤ 300 [7620] = ± .6 [152] / -0<br>300 [7620] < L = +5% L / -0                                                                                     |  |  |  | <div><div></div><div></div></div> <div>THE INFORMATION AND<br/>DESIGN IN THIS DOCUMENT<br/>IS THE PROPERTY OF<br/>PASTERNAK CORPORATION<br/>ALL RIGHTS RESERVED.</div> <div>SHEET 1 OF 1</div> <div>SCALE N/A</div> |  |  |  |
| <div><div></div><div>an INFINITI® brand</div></div> <div>Pasternack Enterprises, Inc.<br/>P.O. Box 16759, Irvine, CA 92623.<br/>Phone: 1.949.261.1920   1.866.727.8376<br/>Fax: 1.949.261.7451<br/>Website: <a href="http://www.pasternack.com">www.pasternack.com</a><br/>E-mail: <a href="mailto:sales@pasternack.com">sales@pasternack.com</a></div> |  |  |  | <div>ITEM NO. PE3C6042</div> <div>REV A</div>                                                                                                                                                                                                                                                                                                                                             |  |  |  |
| SIZE A CAGE CODE A 53919 DRAWN BY K.DANG                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  | ITEM NO. PE3C6042                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |
| ALL DIMENSIONS SHOWN<br>ARE FOR REFERENCE ONLY.                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |

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