



## SMA Male to BNC Male Low Loss Cable Using LMR-195-FR Coax

### RF Cable Assemblies Technical Data Sheet

PE3W09930

#### Configuration

- Connector 1: SMA Male
- Connector 2: BNC Male
- Cable Type: LMR-195-FR

#### Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Double Shielded
- FRPE Jacket

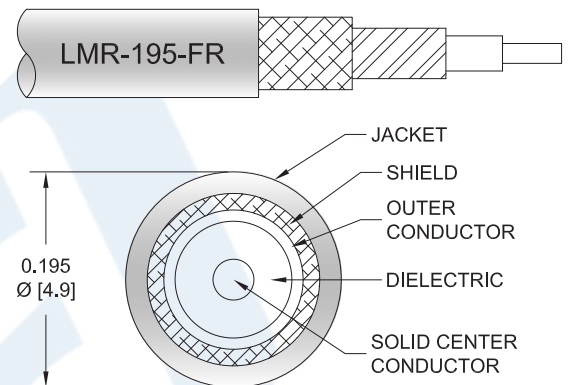
#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W09930 SMA male to BNC male cable using LMR-195-FR 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 SMA to BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-195-FR coax. The PE3W09930 SMA male to BNC male cable assembly operates to 4 GHz. The double 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: [SMA Male to BNC Male Low Loss Cable Using LMR-195-FR Coax PE3W09930](#)



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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR			1.45:1	
Velocity of Propagation		76		%
RF Shielding	90			dB
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		7.6 [24.93]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		4.9 [16.08]		$\Omega$ /1000ft [ $\Omega$ /Km]
Jacket Spark			3,000	Vrms

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Typ.)	0.03	0.05	0.07	0.11	0.24	dB/ft
	0.1	0.16	0.23	0.36	0.79	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

#### Mechanical Specifications

##### Cable Assembly

Diameter 0.571 in [14.5 mm]

##### Cable

Cable Type LMR-195-FR  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper  
 Dielectric Type PE  
 Number of Shields 2  
 Shield Layer 1 Aluminum Tape  
 Shield Layer 2 Tinned Copper Braid  
 Jacket Material FRPE, Black  
 Jacket Diameter 0.195 in [4.95 mm]

One Time Minimum Bend Radius 0.5 in [12.7 mm]

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Repeated Minimum Bend Radius	2 in [50.8 mm]
Bending Moment	0.2 lbs-ft [0.27 N-m]
Flat Plate Crush	15 lbs/in [0.27 Kg/mm]
Tensile Strength	40 lbs [18.14 Kg]

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	BNC Male
Specification	MIL-STD-348	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	MIL-G-45204	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	QQ-N-290	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	QQ-N-290	100 µin minimum
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	

**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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## SMA Male to BNC Male Low Loss Cable Using LMR-195-FR Coax

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#### How to Order

Part Number Configuration:

**PE3W09930**

- **xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W09930-12 = 12 inches long cable  
PE3W09930-100cm = 100 cm long cable

SMA Male to BNC Male Low Loss Cable Using LMR-195-FR 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: [SMA Male to BNC Male Low Loss Cable Using LMR-195-FR Coax PE3W09930](#)

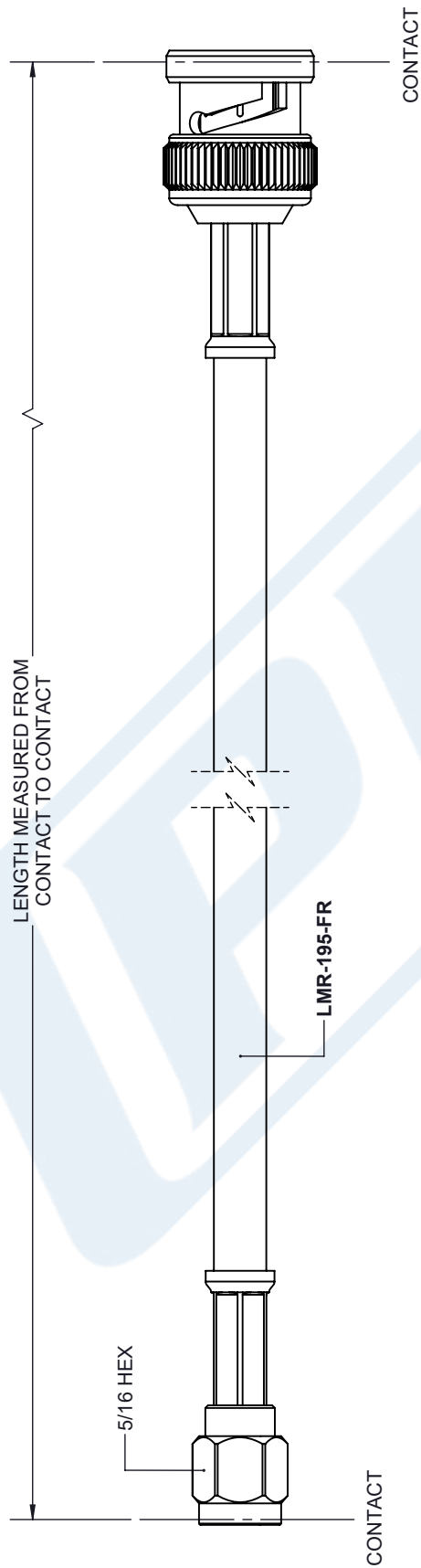
URL: <https://www.pasternack.com/sma-male-bnc-male-lmr195fr-cable-assembly-pe3w09930-p.aspx>

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.

# PE3W09930 CAD Drawing

SMA Male to BNC Male Low Loss Cable Using LMR-195-FR Coax

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	10/16/2020	S. ELLIS



<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <p>.X = ±.2 [ .08]     FRACTIONS ± 1/32          .XX = ±.02 [ .51]     ANGLES ± 1°          .XXX = ±.005 [ .13]</p> <p>CABLE LENGTH (L), TOLERANCES:          L ≤ 12 [305] = +1 [25] / -0          12 [305] &lt; L ≤ 60 [1524] = +2 [51] / -0          60 [1524] &lt; L ≤ 120 [3048] = +4 [102] / -0          120 [3048] &lt; L ≤ 300 [7620] = +6 [152] / -0          300 [7620] &lt; L = +5% / -0</p> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>
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<p>SIZE A</p> <p>CAGE CODE 53919</p> <p>DRAWN BY K.DANG</p>	

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