



UHF Male to N Male Low Loss Cable 48 Inch  
Length Using LMR-195 Coax

RF Cable Assemblies Technical Data Sheet

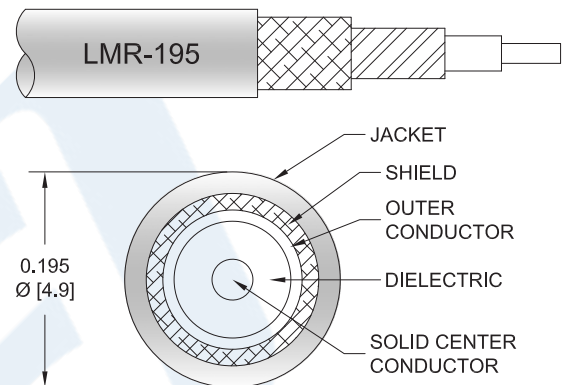
PE3W10069-48

**Configuration**

- Connector 1: UHF Male
- Connector 2: N Male
- Cable Type: LMR-195

**Features**

- Max Frequency 300 MHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



**Applications**

- General Purpose
- Laboratory Use

**Description**

Pasternack's PE3W10069-48 UHF male to type N male 48 inch cable using LMR-195 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 UHF to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-195 coax. The PE3W10069-48 UHF male to type N male cable assembly operates to 300 MHz. 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: [UHF Male to N Male Low Loss Cable 48 Inch Length Using LMR-195 Coax PE3W10069-48](#)



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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		300	MHz
VSWR			1.4:1	
Velocity of Propagation		80		%
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	50	100	250	300		MHz
Insertion Loss (Typ.)	0.3	0.34	0.42	0.44		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 includes an estimated insertion loss of 0.1 dB per connector.

**Mechanical Specifications**

**Cable Assembly**

Length\* 48 in [121.92 cm]  
 Diameter 0.83 in [21.08 mm]

**Cable**

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

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One Time Minimum Bend Radius	0.5 in [12.7 mm]
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	UHF Male	N Male
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum

**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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**How to Order**

Part Number Configuration:

**PE3W10069**

- **xx**

**uu**

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

Example: PE3W10069-12 = 12 inches long cable  
PE3W10069-100cm = 100 cm long cable

UHF Male to N Male Low Loss Cable 48 Inch Length Using LMR-195 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: [UHF Male to N Male Low Loss Cable 48 Inch Length Using LMR-195 Coax PE3W10069-48](#)

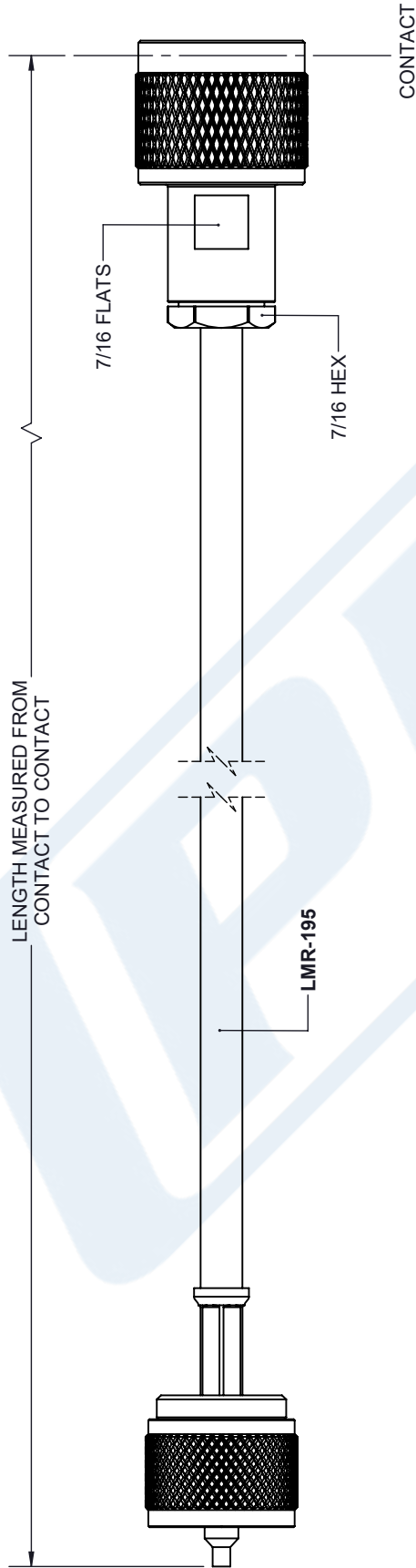
URL: <https://www.pasternack.com/uhf-male-n-male-lmr195-cable-assembly-pe3w10069-48-p.aspx>

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.

# PE3W10069-48 CAD Drawing

UHF Male to N Male Low Loss Cable 48 Inch Length Using LMR-195 Coax

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



UHF MALE

N MALE

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

**TOLERANCES:**

.X = ±.2 [ .008 ]    FRACTIONS    ± 1/32  
.XX = ±.02 [ .51 ]    ± 1/32  
.XXX = ±.005 [ .13 ]    ANGLES ± 1°

**CABLE LENGTH (L) TOLERANCES:**

L ≤ 12 [305] = +1 [25] / -0  
12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.



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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

ITEM NO. PE3W10069

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