



## Lead Free TRS Subminiature Plug to 3-Slot TRB Plug for PE-30-02003, 48" Cable

### RF Cable Assemblies Technical Data Sheet

**PE3MSA00490-48**

#### Configuration

- Connector 1: TRS SUBMINIATURE Plug
- Connector 2: TRB Plug
- Cable Type: 30-02003
- Coax Flex Type: Flexible

#### Features

- Max Frequency 500 MHz
- PVC Jacket
- MIL-STD-1553
- -20°C to +75°C
- 78 ohms

#### Applications

- General Purpose
- Laboratory Use
- MIL-STD-1553
- Data

#### Description

Pasternack's PE3MSA00490-48 78 ohm TRS Subminiature plug to 78 ohm TRB plug 48 inch cable using 78 ohm PE-30-02003 twinax 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 TRS Subminiature to TRB cable assembly has a plug to plug gender configuration with 78 ohm flexible 30-02003 twinax. The PE3MSA00490-48 TRS Subminiature plug to TRB plug cable assembly operates to 500 MHz.

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		500	MHz
Capacitance		20.3 [66.6]		pF/ft [pF/m]
Operating Voltage (AC)			300	Vrms

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	10	50	100	200	500	MHz
Insertion Loss (Typ.)	0.42	0.68	0.88	1.15	1.7	dB

Electrical Specification Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Lead Free TRS Subminiature Plug to 3-Slot TRB Plug for PE-30-02003, 48" Cable PE3MSA00490-48](#)



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The Insertion Loss data above is based on the performance specifications of the coax 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]  
Weight 0.173 lbs [78.47 g]

**Cable**

Cable Type 30-02003  
Impedance 78 Ohms  
Inner Conductor Type Stranded  
Inner Conductor Material and Plating Copper, Silver  
Dielectric Type PE  
Shield Layer 1 Silver Plated Copper  
Jacket Material PVC, Blue

One Time Minimum Bend Radius 1.5 in [38.1 mm]

**Connectors**

Description	Connector 1	Connector 2
Type	TRS SUBMINIATURE Plug Bayonet	TRB Plug Bayonet
Impedance	78 Ohms	78 Ohms
Contact Material and Plating	Bronze, Gold 30 micro inches	Bronze, Gold 30 micro inches
Contact Plating Specification	ASTM-B-488	ASTM-B-488
Dielectric Type	Teflon	Teflon
Outer Conductor Material and Plating	Phosphor Bronze, Gold	Phosphor Bronze, Gold
Outer Conductor Plating Specification	30 micro inches	30 micro inches
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	ASTM-B-733	ASTM-B-733

**Environmental Specifications**

**Temperature**

Operating Range -20 to +75 deg C

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

**Plotted and Other Data**

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Lead Free TRS Subminiature Plug to 3-Slot TRB Plug for PE-30-02003, 48" Cable PE3MSA00490-48](#)



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**PE3MSA00490-48**

**How to Order**

Part Number Configuration:

**PE3MSA00490**

- **xx**

**uu**

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

Example: PE3MSA00490-12 = 12 inches long cable  
PE3MSA00490-100cm = 100 cm long cable

Lead Free TRS Subminiature Plug to 3-Slot TRB Plug for PE-30-02003, 48" Cable 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.

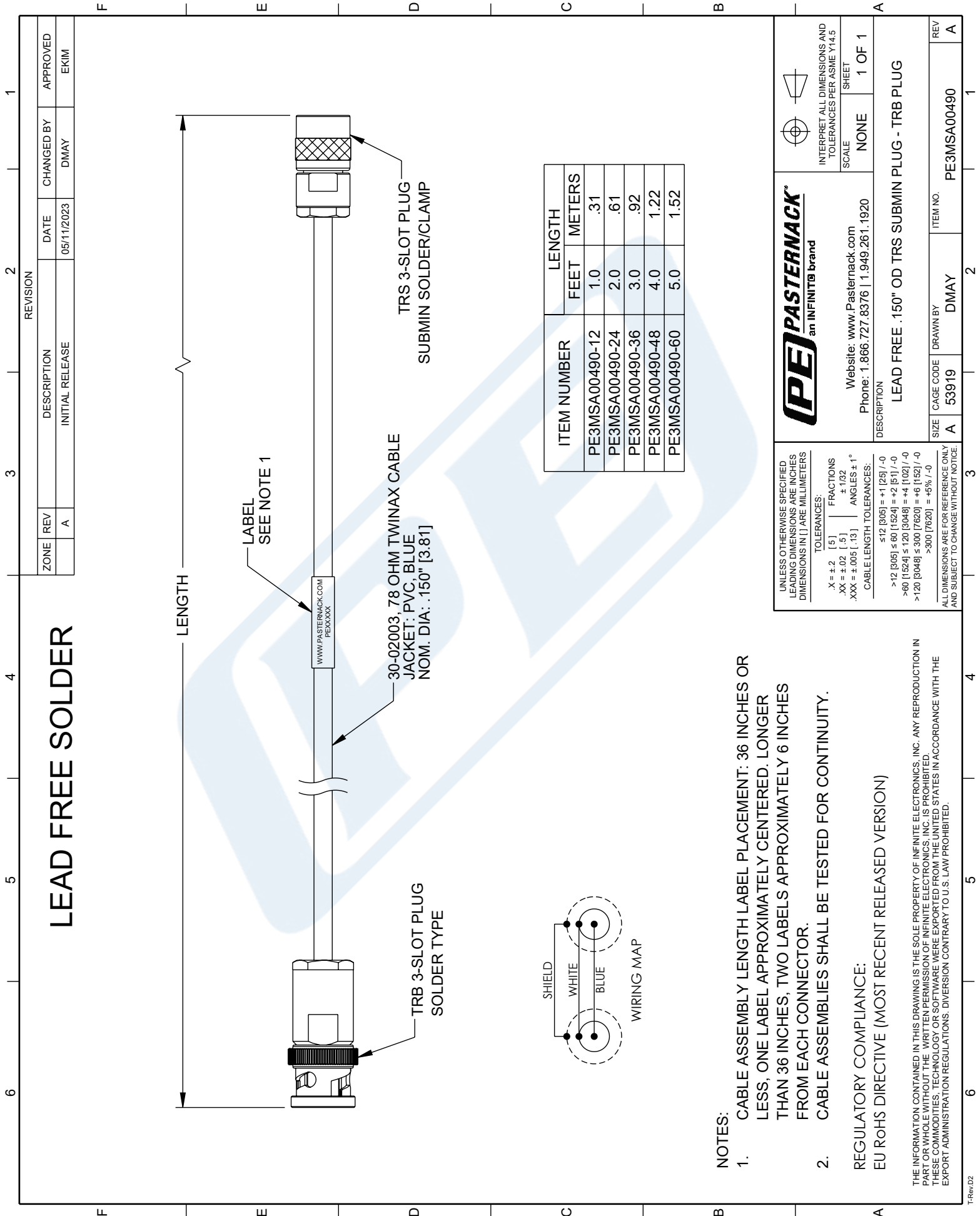
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Lead Free TRS Subminiature Plug to 3-Slot TRB Plug for PE-30-02003, 48" Cable PE3MSA00490-48](#)

URL: <https://www.pasternack.com/lead-free-trs-subminiature-plug-to-trb-plug-1553-cable-48-inch-length-using-pe-30-02003-pe3msa00490-48-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.

# PE3MSA00490-48 CAD Drawing

Lead Free TRS Subminiature Plug to 3-Slot TRB Plug for PE-30-02003, 48" Cable



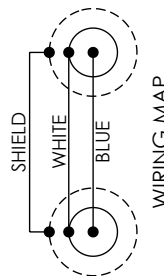
## LEAD FREE SOLDER

LABEL  
SEE NOTE 1

30-02003, 78 OHM TWINAX CABLE  
JACKET: PVC, BLUE  
NOM. DIA.: 150" [3.81]

TRS 3-SLOT PLUG  
SUBMIN SOLDER/CLAMP

TRB 3-SLOT PLUG  
SOLDER TYPE



ITEM NUMBER	LENGTH	
	FEET	METERS
PE3MSA00490-12	1.0	.31
PE3MSA00490-24	2.0	.61
PE3MSA00490-36	3.0	.92
PE3MSA00490-48	4.0	1.22
PE3MSA00490-60	5.0	1.52

### NOTES:

- 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.
- CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

### REGULATORY COMPLIANCE:

EU RoHS DIRECTIVE (MOST RECENT RELEASED VERSION)

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

DESCRIPTION:  
LEAD FREE .150" OD TRS SUBMIN PLUG - TRB PLUG

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE SHEET: 1 OF 1

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	TOLERANCES:	FRACTIONS	ANGLES ± 1°		
.X = ±.2	[.5]	±.102			
.XX = ±.02	[.5]	±.102			
.XXX = ±.005	[.13]				
CABLE LENGTH TOLERANCES:					
≤12 [305]		±.125 / -0			
>12 [305] ≤ 60 [1524]		±.25 / -0			
>60 [1524] ≤ 120 [3048]		±.5 / -0			
>120 [3048] ≤ 300 [7620]		±.75 / -0			
>300 [7620]		±.125 / -0			

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SIZE	DRAWN BY	ITEM NO.	REV
A	DMAY	PE3MSA00490	A