



Lead Free 78 Ohm Bend Relief 3-Slot TRB Solder/
Clamp Plug to Plug for PE-30-02003 48" Cable

RF Cable Assemblies Technical Data Sheet

PE3MSA00475-48

Configuration

- Connector 1: TRB Plug
- Connector 2: TRB Plug
- Cable Type: 30-02003

Features

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

Applications

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

Description

Pasternack's PE3MSA00475-48 78 ohm TRB 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 TRB to TRB cable assembly has a plug to plug gender configuration with 78 ohm flexible 30-02003 twinax. The PE3MSA00475-48 TRB plug to TRB plug cable assembly operates to 500 MHz. The PE3MSA00475 it's a Lead Free assembly consisting of a Bend Relief 3-slot solder/clamp TRB plug to Bend Relief 3-slot solder/clamp TRB plug for PE-30-02003, that is a standard lab-rated PVC cable for MIL-STD-1553 applications, with an O.D. 0.150". These cable assemblies come with a 1.700" steel spring-style bend relief that helps to minimize cable damage when exceeding the cables minimum bend radius. These assemblies are built to withstand severe shocks and vibrations.

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: [Lead Free 78 Ohm Bend Relief 3-Slot TRB Solder/Clamp Plug to Plug for PE-30-02003 Twinax \(.150 O.D.\) 48" Cable PE3MSA00475-48](#)



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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:

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	0.399 lbs [180.98 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]
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Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Lead Free 78 Ohm Bend Relief 3-Slot TRB Solder/Clamp Plug to Plug for PE-30-02003 Twi-nax \(.150 O.D.\) 48" Cable PE3MSA00475-48](#)



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Connectors

Description	Connector 1	Connector 2
Type	TRB Plug	TRB Plug
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:

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PE3MSA00475-48

How to Order

Part Number Configuration:

PE3MSA00475

- **xx**

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

Example: PE3MSA00475-12 = 12 inches long cable
PE3MSA00475-100cm = 100 cm long cable

Lead Free 78 Ohm Bend Relief 3-Slot TRB Solder/Clamp Plug to 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 78 Ohm Bend Relief 3-Slot TRB Solder/Clamp Plug to Plug for PE-30-02003 Twinax \(.150 O.D.\) 48" Cable PE3MSA00475-48](#)

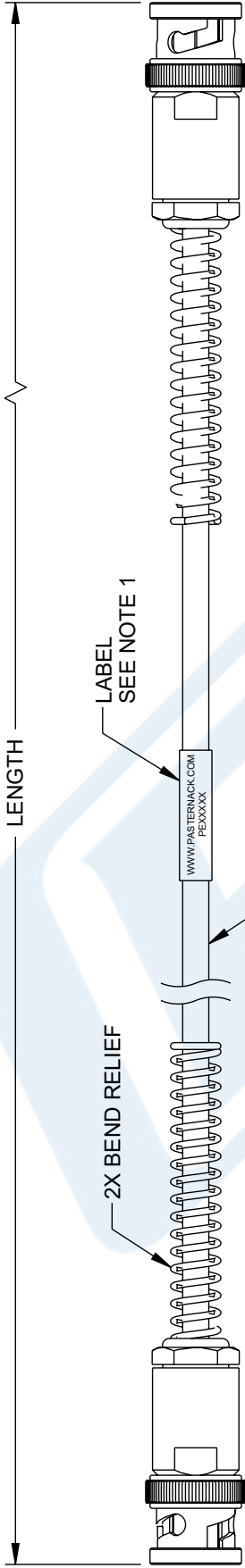
URL: <https://www.pasternack.com/trb-plug-to-trb-plug-1553-cable-48-inch-length-using-pe-30-02003-lf-solder-pe3msa00475-48-p.aspx>

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.

PE3MSA00475-48 CAD Drawing

Lead Free 78 Ohm Bend Relief 3-Slot TRB Solder/
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LEAD FREE SOLDER

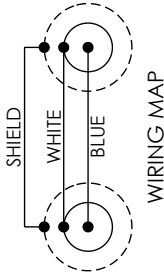


30-02003 78 OHM TWINAX CABLE
JACKET: PVC, BLUE
NOM. DIA: .150" [3.81]

2X TRB 3-SLOT PLUG
WITH BEND RELIEF

2X BEND RELIEF

LABEL
SEE NOTE 1

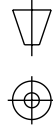


ITEM NUMBER	LENGTH	
	FEET	METERS
PE3MSA00475-12	1.0	.31
PE3MSA00475-24	2.0	.61
PE3MSA00475-36	3.0	.92
PE3MSA00475-48	4.0	1.22
PE3MSA00475-60	5.0	1.52

- 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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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
SCALE NONE
SHEET 1 OF 1



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

DESCRIPTION

LEAD FREE LAB 0.150" O.D. 1553 TWNX PBR-PBR

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

TOLERANCES:
X = ±.2 [5] FRACTIONS
.XX = ±.02 [.5] ±.1/32
.XXX = ±.005 [.13] ANGLES ± 1°
CABLE LENGTH TOLERANCES:
≤12 [305] = ±1 [25] / -0
>12 [305] ≤ 60 [1524] = ±2 [51] / -0
>60 [1524] ≤ 120 [3048] = ±4 [102] / -0
>120 [3048] ≤ 300 [7620] = ±6 [152] / -0
>300 [7620] = ±5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY
AND SUBJECT TO CHANGE WITHOUT NOTICE.

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	DMAY	PE3MSA00475	A