



Lead Free 3-Lug TRB Jack to Jack for 78 Ohm M17/176-00002, 12" Cable

RF Cable Assemblies Technical Data Sheet

PE3MSA00452-12

Configuration

- Connector 1: TRB Jack
- Connector 2: TRB Jack
- Cable Type: M17/176-00002
- Coax Flex Type: Flexible

Features

- Max Frequency 10 GHz
- PFA Jacket
- MIL-STD-1553
- -55°C to +200°C
- 78 ohms

Applications

- General Purpose
- Laboratory Use
- Vehicle High Temperature
- Data
- MIL-STD-1553

Description

Pasternack's PE3MSA00452-12 78 ohm TRB jack to 78 ohm TRB jack 12 inch cable using 78 ohm M17/176-00002 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 jack to jack gender configuration with 78 ohm flexible M17/176-00002 twinax. The PE3MSA00452-12 TRB jack to TRB jack cable assembly operates to 10 GHz.

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		10	GHz
Capacitance		24 [78.74]		pF/ft [pF/m]
Operating Voltage (AC)			750,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	3	5	7	10	MHz
Insertion Loss (Typ.)	0.214	0.221	0.228	0.235	0.245	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 3-Lug TRB Jack to Jack for 78 Ohm M17/176-00002, 12" Cable PE3MSA00452-12](#)



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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*	12 in [304.8 mm]
Weight	0.13 lbs [58.97 g]

Cable

Cable Type	M17/176-00002
Impedance	78 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Shield Layer 1	Silver Plated Copper
Jacket Material	PFA, Blue

One Time Minimum Bend Radius	1.5 in [38.1 mm]
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Connectors

Description	Connector 1	Connector 2
Type	TRB Jack Bayonet	TRB Jack Bayonet
Option	Bend Relief Spring	Bend Relief Spring
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	-55 to +200 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3MSA00452

- **xx**

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

Example: PE3MSA00452-12 = 12 inches long cable
PE3MSA00452-100cm = 100 cm long cable

Lead Free 3-Lug TRB Jack to Jack for 78 Ohm M17/176-00002, 12" 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.

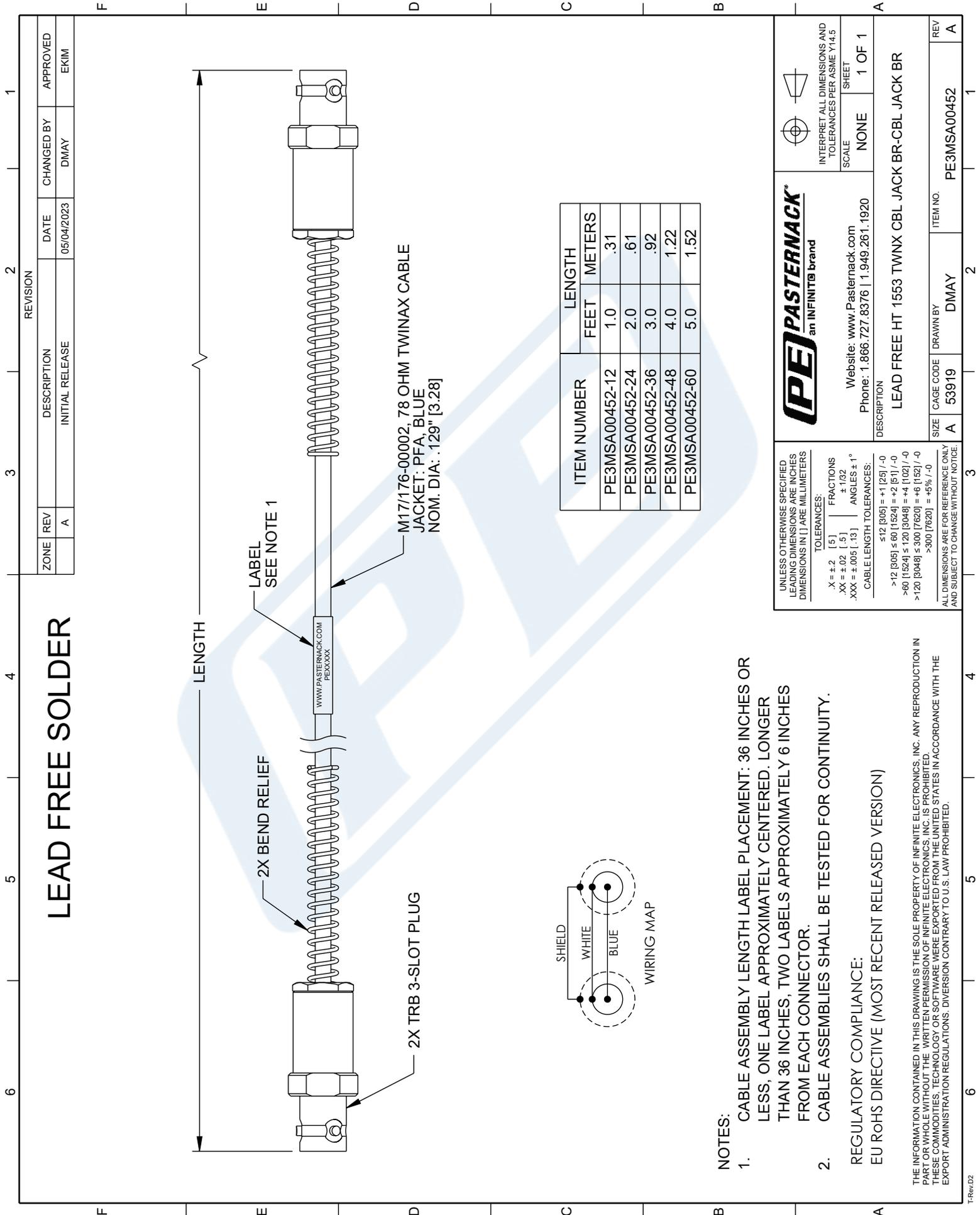
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Lead Free 3-Lug TRB Jack to Jack for 78 Ohm M17/176-00002, 12" Cable PE3MSA00452-12](https://www.pasternack.com/trb-jack-to-trb-jack-1553-cable-12-inch-length-using-m17-176-00002-pe3msa00452-12-p.aspx)

URL: <https://www.pasternack.com/trb-jack-to-trb-jack-1553-cable-12-inch-length-using-m17-176-00002-pe3msa00452-12-p.aspx>

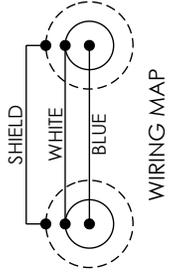
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PE3MSA00452-12 CAD Drawing

Lead Free 3-Lug TRB Jack to Jack for 78 Ohm M17/176-00002, 12" Cable



ITEM NUMBER	LENGTH	
	FEET	METERS
PE3MSA00452-12	1.0	.31
PE3MSA00452-24	2.0	.61
PE3MSA00452-36	3.0	.92
PE3MSA00452-48	4.0	1.22
PE3MSA00452-60	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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ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	05/04/2023	DMAY	EKIM

PE PASTERNAK
an INFINIT[®] brand

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

DESCRIPTION:
LEAD FREE HT 1553 TWINX CBL JACK BR-CBL JACK BR

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
SHEET: 1 OF 1

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	DMAY	PE3MSA00452

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

TOLERANCES:
 .X = ±.2 [.5] FRACTIONS ±.102 [.25]
 .XX = ±.02 [.5] ANGLES ± 1°
 .XXX = ±.005 [.13]

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.