

TRB 3-Slot Plug to TRB 3-Lug Jack Non-Insulated Bulkhead  
1553 Cable 24" Using 124 Ohm TWC-124-2 Twinax



## LC3MSA00653-24

### Configuration

- Connector 1: TRB 3-Slot Plug
- Connector 2: TRB 3-Lug Jack Bulkhead
- Cable Type: TWC-124-2

### Features

- 124 ohms
- Twinaxial
- MIL-STD-1553B
- -40°C to +80°C
- Lead Free Solder
- Standard and Custom Lengths Available

### Applications

- MIL-STD-1553B Applications
- Data Transmission

### Description

L-com's LC3MSA00653-24 is a TRB 3-Slot plug to TRB 3-Lug jack non-insulated bulkhead 1553 cable 24" using 124 Ohm TWC-124-2 twinax and ships same-day. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com TRB 3-Slot to TRB 3-Lug cable assembly has a plug to jack gender configuration with 78 Ohm flexible TWC-124-2 series coax and operates to 500 MHz. L-com's RF cable assembly with TRB 3-Lug bulkhead interface enables system designers to have external connections on their product enclosures or to be used for other rack mount and panel mount applications.

Custom versions of this TRB 3-Slot plug to TRB 3-Slot jack cable, along with the rest of L-com's other RF assemblies, can also be built and shipped same day. Other available RF cable assembly value added services from L-com 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. Contact a sales representative for testing or custom RF cable quotes. Part number LC3MSA00653-24 L-com TRB 3-Slot Plug to TRB 3-Lug Jack Non-Insulated Bulkhead 1553 Cable 24" Using 124 Ohm TWC-124-2 Twinax data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		500	MHz
Capacitance		12.3 [40.35]		pF/ft [pF/m]
Operating Voltage (AC)			1,000	Vrms

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	10	50	100	200	500	MHz
Insertion Loss (Typ.)	0.234	0.272	0.302	0.344	0.428	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.

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## LC3MSA00653-24

### Mechanical Specifications

#### Cable Assembly

Length*	24 in [609.6 mm]
Weight	0.22 lbs [99.79 g]

#### Cable

Cable Type	TWC-124-2
Impedance	124 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	1.25 in [31.75 mm]
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### Connectors

Description	Connector 1	Connector 2
Type	TRB 3-Slot Plug	TRB 3-Lug Jack Bulkhead
Specification	MIL-STD-1553	MIL-STD-1553
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
Seal Gasket Material	Rubber	

### Environmental Specifications

#### Temperature

Operating Range	-40 to +80 deg C
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**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

TRB 3-Slot Plug to TRB 3-Lug Jack Non-Insulated Bulkhead  
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### LC3MSA00653-24

#### How to Order

Part Number Configuration:	<b>LC3MSA00653</b>	- <b>xx</b>	<b>uu</b>	
				Unit of Measure:
				cm = Centimeters
				<blank> = Inches
				Length
				Base Number

Example: LC3MSA00653-12 = 12 inches long cable  
 LC3MSA00653-100cm = 100 cm long cable

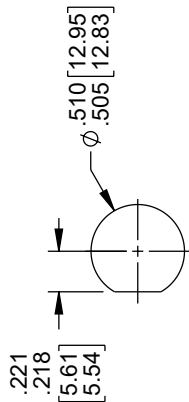
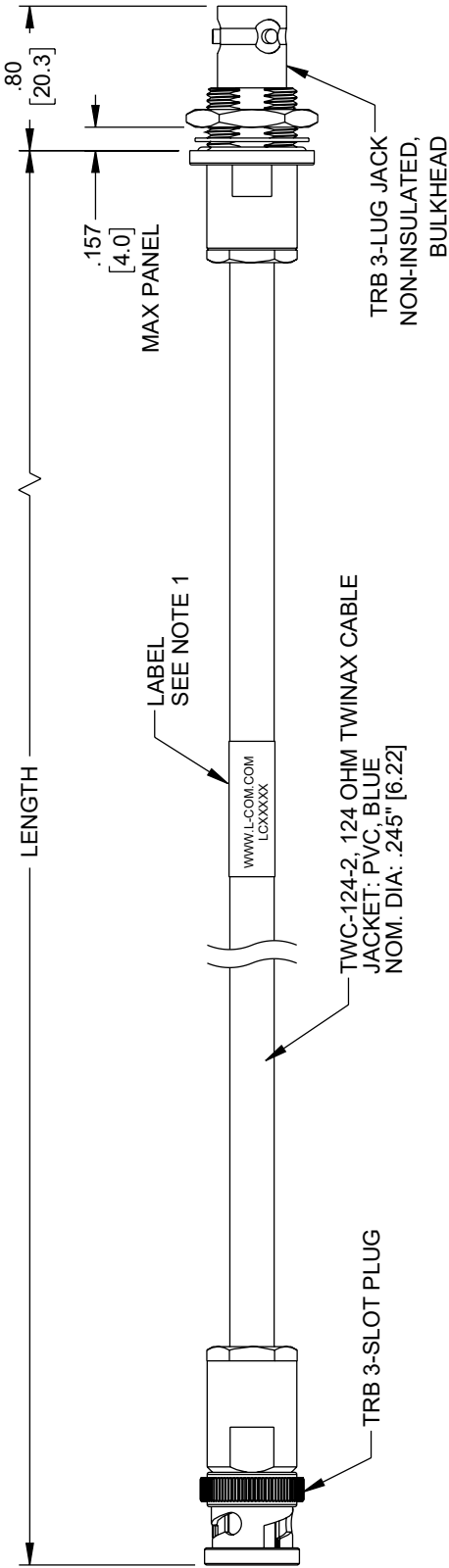
TRB 3-Slot Plug to TRB 3-Lug Jack Non-Insulated Bulkhead 1553 Cable 24" Using 124 Ohm TWC-124-2 Twinax from L-com has same day shipment for domestic and International orders. L-com is a leading manufacturer of wired and wireless connectivity products and committed to in-stock availability and same day shipping. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained within 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. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document contained within 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. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

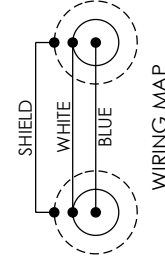
TRB 3-Slot Plug to TRB 3-Lug Jack Non-Insulated Bulkhead  
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L-com CAD Drawing

ZONE		REVISION		DATE		CHANGED BY		APPROVED	
A	REV	DESCRIPTION	INITIAL RELEASE	08/24/2023	HBAKKE		EKIM		



RECOMMENDED  
 PANEL CUTOFF



WIRING MAP

NOTES:

- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCH OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCH, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
- CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
- CABLE ASSEMBLY LENGTH DETERMINED BY ITEM NUMBER AS SHOWN: LC3MSA00653-XX (-XX = OAL IN INCHES).

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS, DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

<p><b>L-com</b>                  an INFINITE brand                  Website: www.L-com.com                  Phone: 1.800.341.5266   1.978.682.6936</p>		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1	
UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, UNLESS OTHERWISE SPECIFIED IN PARENTHESIS. TOLERANCES: .X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13] FRACTIONS: ± 1/32 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		DESCRIPTION: TRB 3-SLOT PLUG TO TRB 3-LUG JACK NON-INSULATED BULKHEAD USING 124 OHM TWC-124-2 TWINAX	
SIZE: A	CAGE CODE: 43321	DRAWN BY: HBAKKE	ITEM NO.: LC3MSA00653