

TRB 3-Slot Plug to TRB 3-Lug Jack Non-Insulated Bulkhead
1553 Cable 48" Using 124 Ohm TWC-124-2 Twinax



LC3MSA00653-48

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 LC3MSA00653-48 is a TRB 3-Slot plug to TRB 3-Lug jack non-insulated bulkhead 1553 cable 48" 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 LC3MSA00653-48 L-com TRB 3-Slot Plug to TRB 3-Lug Jack Non-Insulated Bulkhead 1553 Cable 48" 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.)	0.27	0.35	0.41	0.49	0.66	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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Mechanical Specifications

Cable Assembly

Length*	48 in [121.92 cm]
Weight	0.2662 lbs [120.75 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)

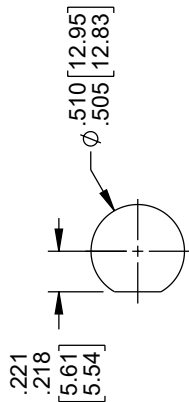
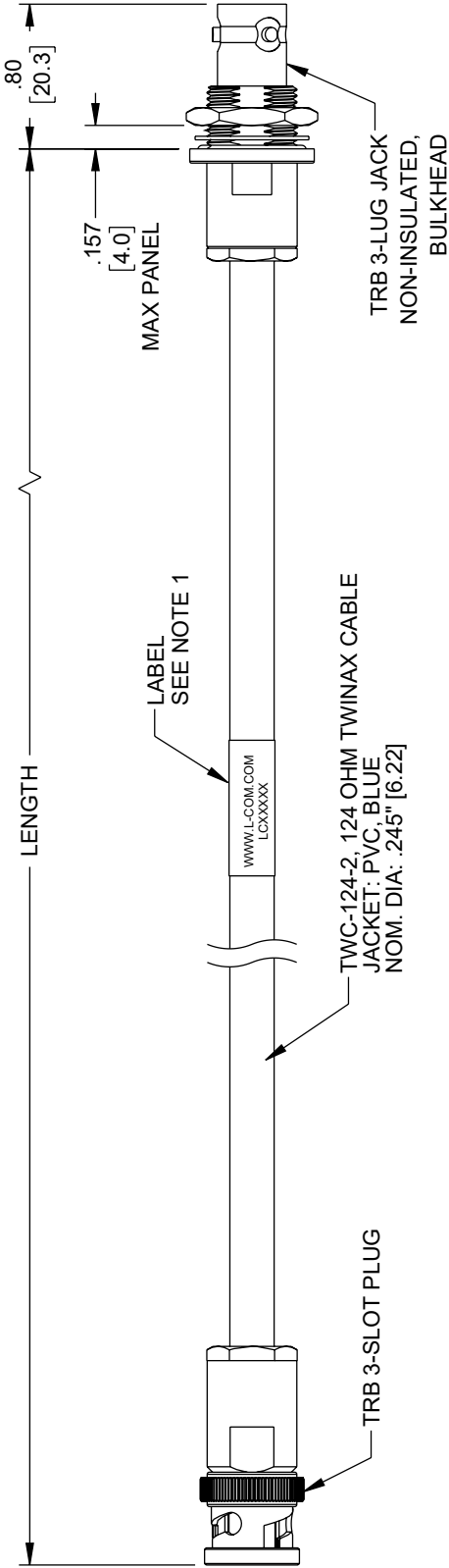
Plotted and Other Data

Notes:

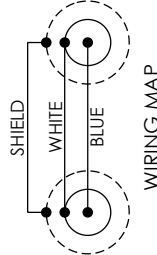
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L-com CAD Drawing

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



RECOMMENDED
 PANEL CUTOUT



WIRING MAP

NOTES:

1. 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.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM NUMBER AS SHOWN: LC3MSA00653-XX (-XX = OAL IN INCHES).

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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.	
TOLERANCES:	FRACTIONS
.X = ±.2 [5]	± 1/32
.XX = ±.02 [0.5]	ANGLES ± 1°
.XXX = ±.005 [0.13]	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 UNLESS INDICATED OTHERWISE. DIMENSIONS MAY VARY.	

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DESCRIPTION
 TRB 3-SLOT PLUG TO TRB 3-LUG JACK NON-INSULATED BULKHEAD 1553 CABLE USING 124 OHM TWC-124-2 TWINAX

SCALE NONE SHEET 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	43321	HBAKKE	LC3MSA00653