

Lead Free 1553 TRB 3-Lug Jack Bulkhead NI to TRB 3-Lug Jack Bulkhead NI Cable Assembly using M17/176-00002 Coax, 4 FT with Bend Relief



## LC3MSA00454-48

### Configuration

- Connector 1: TRB 3-Lug Jack Bulkhead Nonisolated
- Connector 2: TRB 3-Lug Jack Bulkhead Nonisolated
- Cable Type: M17/176-00002

### Features

- MIL-STD-1553
- -55°C to +200°C
- 78 ohms

### Applications

- Vehicle High Temperature
- Data
- MIL-STD-1553

### Description

L-com's LC3MSA00454-48 is a lead free 1553 TRB 3-Lug jack bulkhead NI to TRB 3-Lug jack bulkhead NI cable assembly using M17/176-00002 coax, 4 FT with bend relief and ships same-day. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com TRB 3-Lug to TRB 3-Lug cable assembly has a jack to jack gender configuration with 78 Ohm flexible M17/176-00002 series coax and operates to 10 MHz.

Custom versions of this TRB 3-Lug jack to TRB 3-Lug 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 LC3MSA00454-48 L-com Lead Free 1553 TRB 3-Lug Jack Bulkhead NI to TRB 3-Lug Jack Bulkhead NI Cable Assembly using M17/176-00002 Coax, 4 FT with Bend Relief 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		10	MHz
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.)	0.256	0.284	0.312	0.34	0.38	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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**LC3MSA00454-48**

**Mechanical Specifications**

**Cable Assembly**

Length*	48 in [121.92 cm]
Weight	0.19 lbs [86.18 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 3-Lug Jack Bulkhead Nonisolated	TRB 3-Lug Jack Bulkhead Nonisolated
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**

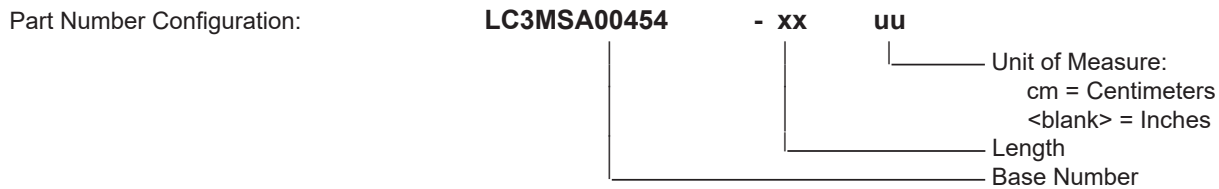
Notes:

Lead Free 1553 TRB 3-Lug Jack Bulkhead NI to TRB 3-Lug Jack Bulkhead NI Cable Assembly using M17/176-00002 Coax, 4 FT with Bend Relief



**LC3MSA00454-48**

**How to Order**



Example:    LC3MSA00454-12 = 12 inches long cable  
              LC3MSA00454-100cm = 100 cm long cable

Lead Free 1553 TRB 3-Lug Jack Bulkhead NI to TRB 3-Lug Jack Bulkhead NI Cable Assembly using M17/176-00002 Coax, 4 FT with Bend Relief 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 impliment 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.ontained 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 impliment 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.

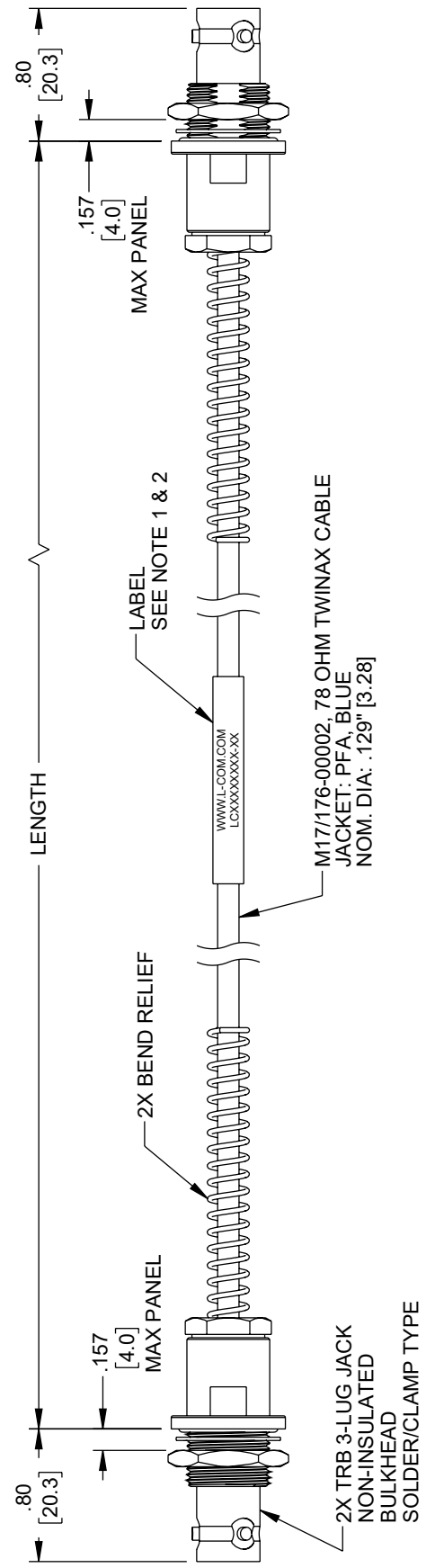
Lead Free 1553 TRB 3-Lug Jack Bulkhead NI to TRB 3-Lug Jack Bulkhead NI  
Cable Assembly using M17/176-00002 Coax, 4 FT with Bend Relief

L-com CAD Drawing

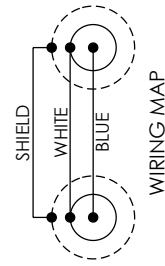
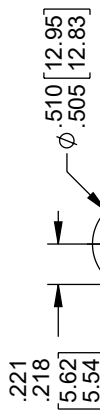
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
A	A	INITIAL RELEASE	8/25/2023	KDANG	EKIM

REVISION	
1	
2	
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4	
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6	

LEAD FREE SOLDER



M17/176-00002 78 OHM TWINAX CABLE  
JACKET: PFA, BLUE  
NOM. DIA: .129" [3.28]



NOTES:

- CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
- CABLE ASSEMBLY LENGTH DETERMINED BY ILLUSTRATED: LC3MSA00454-XX (-XX = OAL IN INCHES)
- CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES UNLESS INDICATED IN PAREMILLIMETERS	
TOLERANCES:	FRACTIONS
.X = ±.2 [5]	± 1/32
.XX = ±.02 [0.5]	ANGLES ± 1°
.XXX = ±.005 [0.13]	
CABLE LENGTH TOLERANCES:	
<12 [305]	±.125 [-0]
>12 [305] < 60 [1524]	±.25 [-0]
>60 [1524] < 120 [3048]	±.50 [-0]
>120 [3048] < 300 [7620]	±.75 [-0]
>300 [7620]	±.75 [-0]
ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE NOTED AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS DIMENSIONS/CRITICAL FEATURES MAY VARY. COLORS MAY VARY.	

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE SHEET: 1 OF 1

DESCRIPTION: Lead Free Bend Relief 3-Lug TRB Non-Insulated Bulkhead Jack to Jack for 78 Ohm M17/176-00002 Cable

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	43321	KDANG	LC3MSA00454