

1553 TRB 3-Slot Plug to TRB 3-Lug Jack Cable Assembly  
using M17/176-00002-LC Coax, 4 FT , LF Solder



## LC3MSA00438-48

### Configuration

- Connector 1: TRB 3-Slot Plug
- Connector 2: TRB 3-Lug Jack
- Cable Type: M17-176-00002-LC

### Features

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

### Applications

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

### Description

L-com's LC3MSA00438-48 is a 1553 TRB 3-Slot plug to TRB 3-Lug jack cable assembly using M17/176-00002-LC coax, 4 FT , LF solder 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 M17-176-00002-LC series coax and operates to 10 MHz.

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 LC3MSA00438-48 L-com 1553 TRB 3-Slot Plug to TRB 3-Lug Jack Cable Assembly using M17/176-00002-LC Coax, 4 FT , LF Solder 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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### Mechanical Specifications

#### Cable Assembly

Length*	48 in [121.92 cm]
Weight	0.333 lbs [151.05 g]

#### Cable

Cable Type	M17-176-00002-LC
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-Slot Plug	TRB 3-Lug Jack
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

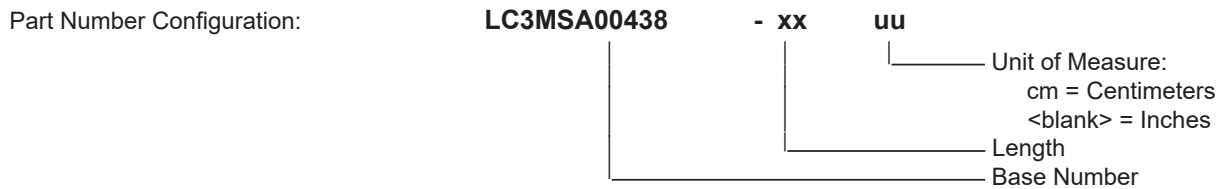
Notes:

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**LC3MSA00438-48**

**How to Order**



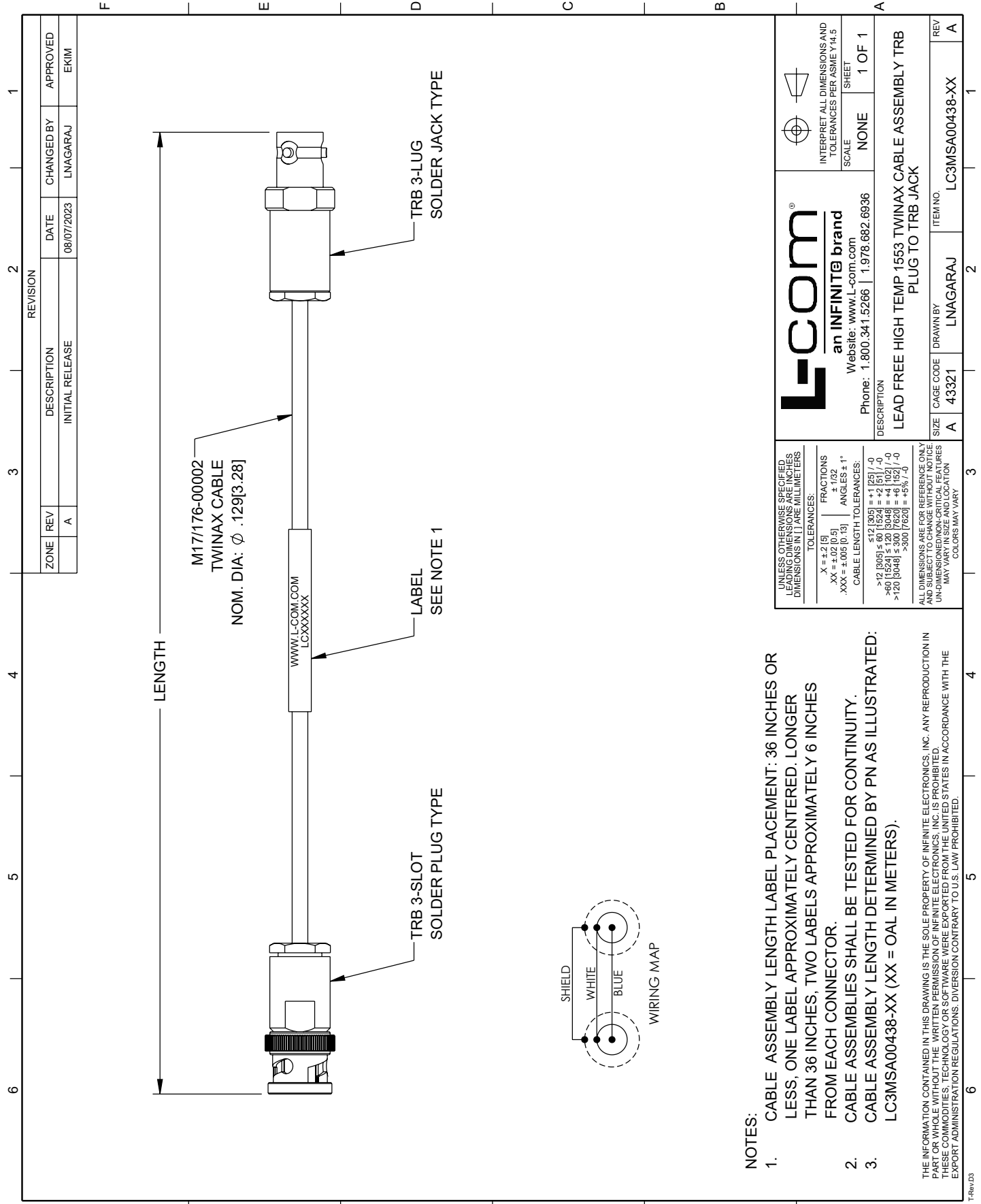
Example:    LC3MSA00438-12 = 12 inches long cable  
              LC3MSA00438-100cm = 100 cm long cable

1553 TRB 3-Slot Plug to TRB 3-Lug Jack Cable Assembly using M17/176-00002-LC Coax, 4 FT , LF Solder 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.

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L-com CAD Drawing



NOTES:

1. 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.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY PN AS ILLUSTRATED: LC3MSA00438-XX (XX = OAL IN METERS).

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F-REV:03

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	08/07/2023	LNAGARAJ	EKIM

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<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE IN MILLIMETERS</p> <p>TOLERANCES:</p> <p>.X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13]</p> <p>FRACTIONS ± 1/32</p> <p>ANGLES ± 1°</p> <p>CABLE LENGTH TOLERANCES:</p> <p>&lt;math&gt;\le 12 [305]&lt;/math&gt; = +1 [25] / -0 &lt;math&gt;&gt; 12 [305]&lt;/math&gt; ≤ 60 [1524] = +2 [51] / -0 &lt;math&gt;&gt; 60 [1524]&lt;/math&gt; ≤ 120 [3048] = +4 [102] / -0 &lt;math&gt;&gt; 120 [3048]&lt;/math&gt; ≤ 300 [7620] = +8 [203] / -0 &lt;math&gt;&gt; 300 [7620]&lt;/math&gt; = +5% / -0</p> <p>ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>		<p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
DESCRIPTION	CAGE CODE	ITEM NO.
LEAD FREE HIGH TEMP 1553 TWINAX CABLE ASSEMBLY TRB PLUG TO TRB JACK	43321	LC3MSA00438-XX
DRAWN BY	LNAGARAJ	