

Lead Free 1553 TRB 2-Slot Plug to TRB 3-Lug Jack Cable Assembly using M17/176-00002 Coax, 2 FT



LC3MSA00464-24

Configuration

- Connector 1: TRB 2-Slot Plug
- Connector 2: TRB 3-Lug Jack
- 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 LC3MSA00464-24 is a lead free 1553 TRB 2-Slot plug to TRB 3-Lug jack cable assembly using M17/176-00002 coax, 2 FT and ships same-day. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com TRB 2-Slot to TRB 3-Lug cable assembly has a plug to jack gender configuration with 78 Ohm flexible M17/176-00002 series coax and operates to 10 MHz.

Custom versions of this TRB 2-Slot plug to TRB 2-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 LC3MSA00464-24 L-com Lead Free 1553 TRB 2-Slot Plug to TRB 3-Lug Jack Cable Assembly using M17/176-00002 Coax, 2 FT 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.) | 0.228 | 0.242 | 0.256 | 0.27 | 0.29 | 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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LC3MSA00464-24

Mechanical Specifications

Cable Assembly

| | |
|---------|--------------------|
| Length* | 24 in [609.6 mm] |
| Weight | 0.112 lbs [50.8 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] |
|------------------------------|------------------|

Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------------------|------------------------------|------------------------------|
| Type | TRB 2-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 |
|-----------------|-------------------|

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

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LC3MSA00464-24

How to Order

Part Number Configuration:

LC3MSA00464

- xx

uu

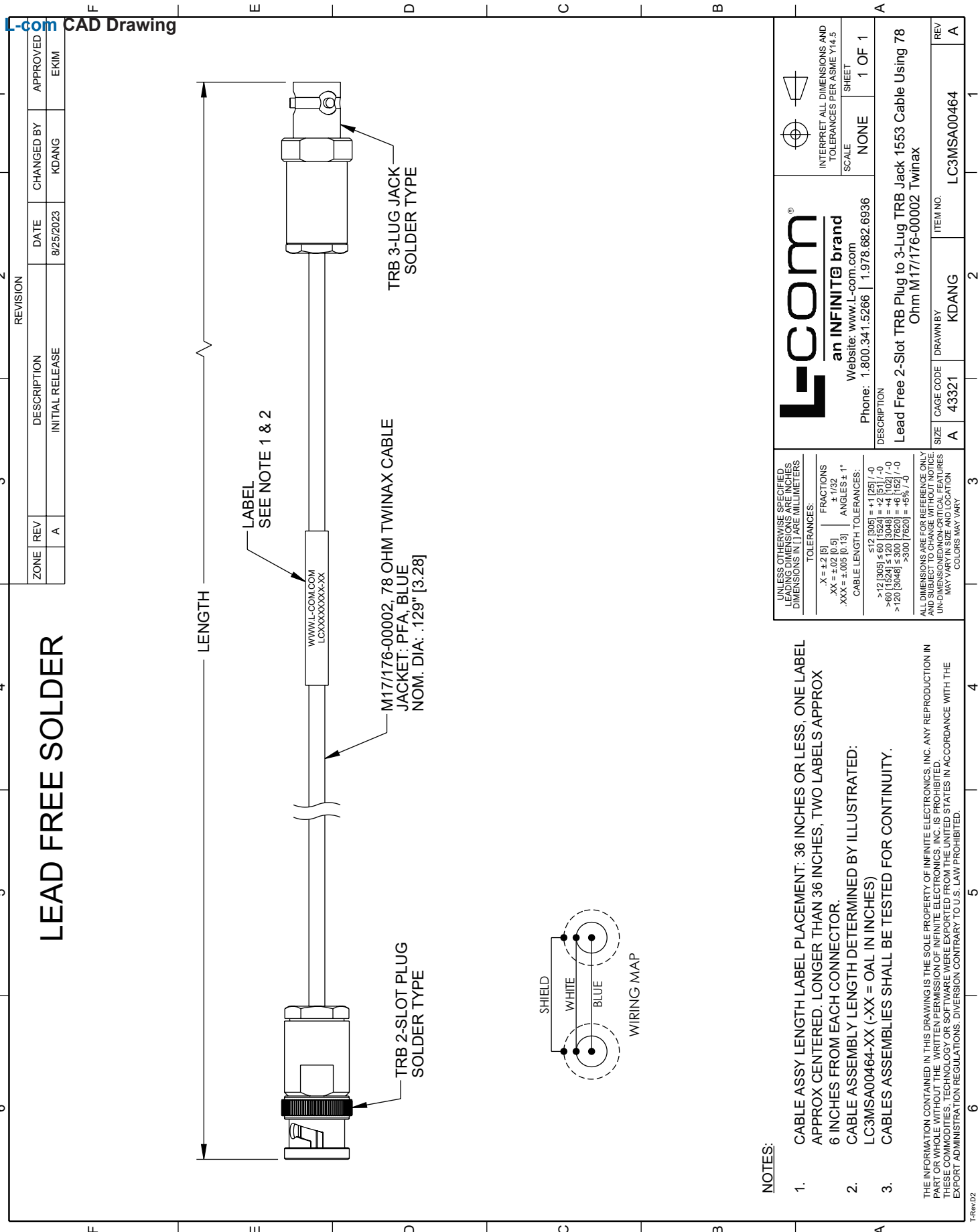
Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: LC3MSA00464-12 = 12 inches long cable
LC3MSA00464-100cm = 100 cm long cable

Lead Free 1553 TRB 2-Slot Plug to TRB 3-Lug Jack Cable Assembly using M17/176-00002 Coax, 2 FT 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

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

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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN PARETHESES ARE IN MILLIMETERS.

TOLERANCES:

| | |
|---------------------|------------------|
| X = ±.2 [5] | FRACTIONS ± 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] | ±.5 [-0] |
| >120 [3048] < 300 [7620] | ±.75 [-0] |
| >300 [7620] | ±1.0 [-0] |

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS OTHERWISE SPECIFIED. DIMENSIONS MAY VARY. COLORS MAY VARY.

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE

SHEET: 1 OF 1

DESCRIPTION: Lead Free 2-Slot TRB Plug to 3-Lug TRB Jack 1553 Cable Using 78 Ohm M17/176-00002 Twinax

| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
|------|-----------|----------|-------------|
| A | 43321 | KDANG | LC3MSA00464 |

- 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: LC3MSA00464-XX (+XX = OAL IN INCHES)
 - CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
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