

Halogen Free 1553 TRB 3-Lug Jack Bulkhead Non-Isolated to TRB 3-Lug Jack Bulkhead Non-Isolated Cable Assembly using TWCH-78-2 Coax, 1 FT



## LC3MSA00235-12

### Configuration

- Connector 1: TRB 3-Lug Jack Bulkhead Nonisolated
- Connector 2: TRB 3-Lug Jack Bulkhead Nonisolated
- Cable Type: TWCH-78-2

### Features

- MIL-STD-1553
- -30°C to +80°C
- 78 ohms
- Halogen Free
- Non-Toxic

### Applications

- Military Contractors
- MIL-STD-1553
- Data
- Safer Environments
- Ventilation critical areas

### Description

L-com's LC3MSA00235-12 is a halogen free 1553 TRB 3-Lug jack bulkhead non-isolated to TRB 3-Lug jack bulkhead non-isolated cable assembly using TWCH-78-2 coax, 1 FT 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 TWCH-78-2 series coax and operates to 500 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 LC3MSA00235-12 L-com Halogen Free 1553 TRB 3-Lug Jack Bulkhead Non-Isolated to TRB 3-Lug Jack Bulkhead Non-Isolated Cable Assembly using TWCH-78-2 Coax, 1 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		500	MHz
Capacitance		21.2 [69.55]		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.)	0.222	0.251	0.275	0.305	0.36	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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**LC3MSA00235-12**

**Mechanical Specifications**

**Cable Assembly**

Length\* 12 in [304.8 mm]  
Weight 0.134 lbs [60.78 g]

**Cable**

Cable Type TWCH-78-2  
Impedance 78 Ohms  
Inner Conductor Type Stranded  
Inner Conductor Material and Plating Copper, Silver  
Dielectric Type PE  
Shield Layer 1 Silver Plated Copper  
Jacket Material HF POF, Blue

One Time Minimum Bend Radius 1.25 in [31.75 mm]

**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 -30 to +80 deg C

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

**Plotted and Other Data**

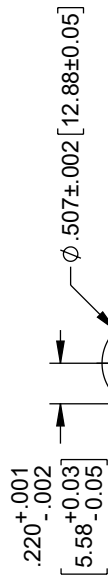
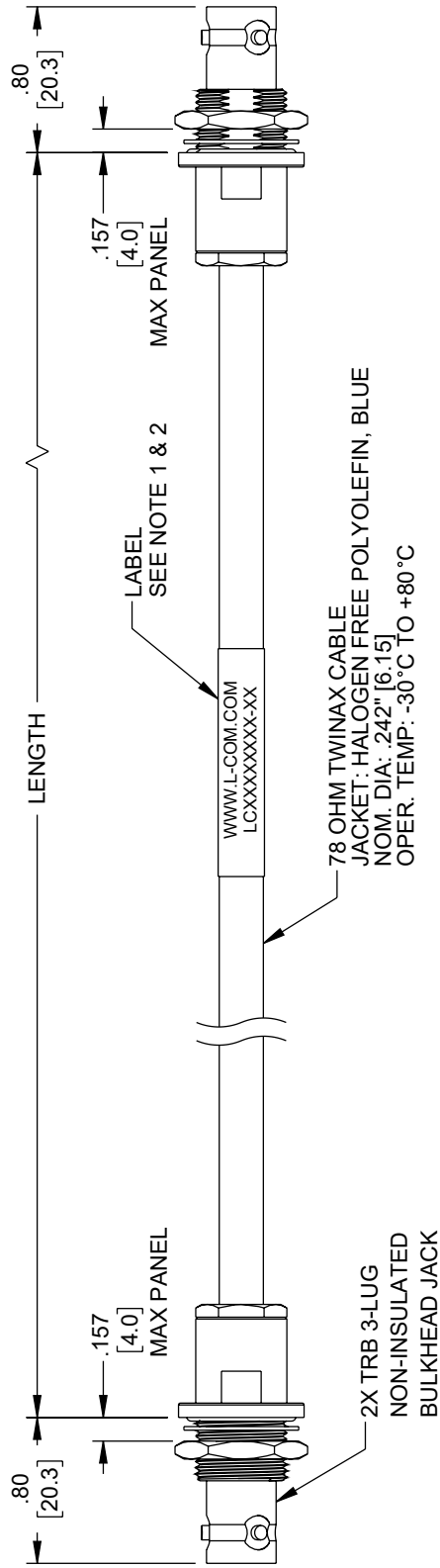
Notes:



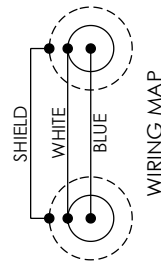
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L-com CAD Drawing

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
A	A	INITIAL RELEASE	8/28/2023	KDANG	EKIM



RECOMMENDED PANEL CUTOUT



WIRING MAP

NOTES:

1. 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.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ILLUSTRATED: LC3MSA00235-XX (-XX = OAL IN INCHES)
3. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [ ] ARE MILLIMETERS.	
TOLERANCES:	FRACTIONS
.X = ±.2 [5]	± 1/32
.XX = ±.02 [0.5]	± 1/64
.XXX = ±.005 [0.13]	ANGLES ± 1°
CABLE LENGTH TOLERANCES:	
<12 [305]	±.125 [-0]
>12 [305] < 60 [1524]	±.25 [-0]
>60 [1524] < 120 [3048]	±.5 [-0]
>120 [3048] < 300 [7620]	±1.0 [-0]
>300 [7620]	±2.0 [-0]
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS INDICATED OTHERWISE. DIMENSIONS MAY VARY.	

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DESCRIPTION  
Halogen Free 3-Lug TRB Non-Isolated Bulkhead Jack to Jack for 78 Ohm TWCH-78-2 Cable

SCALE	NONE	SHEET	1 OF 1
INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5			

SIZE	A	DESCRIPTION	LC3MSA00235
ITEM NO.	43321	DRAWN BY	KDANG
REV	A	ITEM NO.	LC3MSA00235