

1553 TRB 3-Slot Plug to TRB 3-Slot Plug Cable Assembly using 30-02003-LC Coax, 4 FT with Bend Relief , LF Solder



## LC3MSA00475-48

### Configuration

- Connector 1: TRB 3-Slot Plug
- Connector 2: TRB 3-Slot Plug
- Cable Type: 30-02003-LC

### Features

- MIL-STD-1553
- -20°C to +75°C
- 78 ohms
- Lab rated
- Lead Free
- Bend Relief

### Applications

- MIL-STD-1553
- Data
- Lab applications

### Description

L-com's LC3MSA00475-48 is a 1553 TRB 3-Slot plug to TRB 3-Slot plug cable assembly using 30-02003-LC coax, 4 FT with bend relief , 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-Slot cable assembly has a plug to plug gender configuration with 78 Ohm flexible 30-02003-LC series coax and operates to 500 MHz. The LC3MSA00475 it's a Lead Free assembly consisting of a Bend Relief 3-slot solder/clamp TRB plug to Bend Relief 3-slot solder/clamp TRB plug for FMBC-30-02003, that is a standard lab-rated PVC cable for MIL-STD-1553 applications, with an O.D. 0.150". These cable assemblies come with a 1.700" steel spring-style bend relief that helps to minimize cable damage when exceeding the cables minimum bend radius. These assemblies are built to withstand severe shocks and vibrations.

Custom versions of this TRB 3-Slot plug to TRB 3-Slot plug 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 LC3MSA00475-48 L-com 1553 TRB 3-Slot Plug to TRB 3-Slot Plug Cable Assembly using 30-02003-LC Coax, 4 FT with Bend Relief , 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      |             | 500     | MHz          |
| Capacitance            |         | 20.3 [66.6] |         | pF/ft [pF/m] |
| Operating Voltage (AC) |         |             | 300     | Vrms         |

### Specifications by Frequency

| Description           | F1   | F2   | F3   | F4   | F5  | Units |
|-----------------------|------|------|------|------|-----|-------|
| Frequency             | 10   | 50   | 100  | 200  | 500 | MHz   |
| Insertion Loss (Typ.) | 0.42 | 0.68 | 0.88 | 1.15 | 1.7 | dB    |

Electrical Specification Notes:

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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.

### Mechanical Specifications

#### Cable Assembly

|         |                    |
|---------|--------------------|
| Length* | 48 in [121.92 cm]  |
| Weight  | 0.4 lbs [181.44 g] |

#### Cable

|                                      |                      |
|--------------------------------------|----------------------|
| Cable Type                           | 30-02003-LC          |
| 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                      | PVC, Blue            |

|                              |                  |
|------------------------------|------------------|
| One Time Minimum Bend Radius | 1.5 in [38.1 mm] |
|------------------------------|------------------|

### Connectors

| Description                           | Connector 1                  | Connector 2                  |
|---------------------------------------|------------------------------|------------------------------|
| Type                                  | TRB 3-Slot Plug              | TRB 3-Slot Plug              |
| 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 | -20 to +75 deg C |
|-----------------|------------------|

1553 TRB 3-Slot Plug to TRB 3-Slot Plug Cable Assembly using 30-02003-LC Coax, 4 FT with Bend Relief , LF Solder



## LC3MSA00475-48

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

### Plotted and Other Data

Notes:

### How to Order

Part Number Configuration:

**LC3MSA00475**

- **xx**

**uu**

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

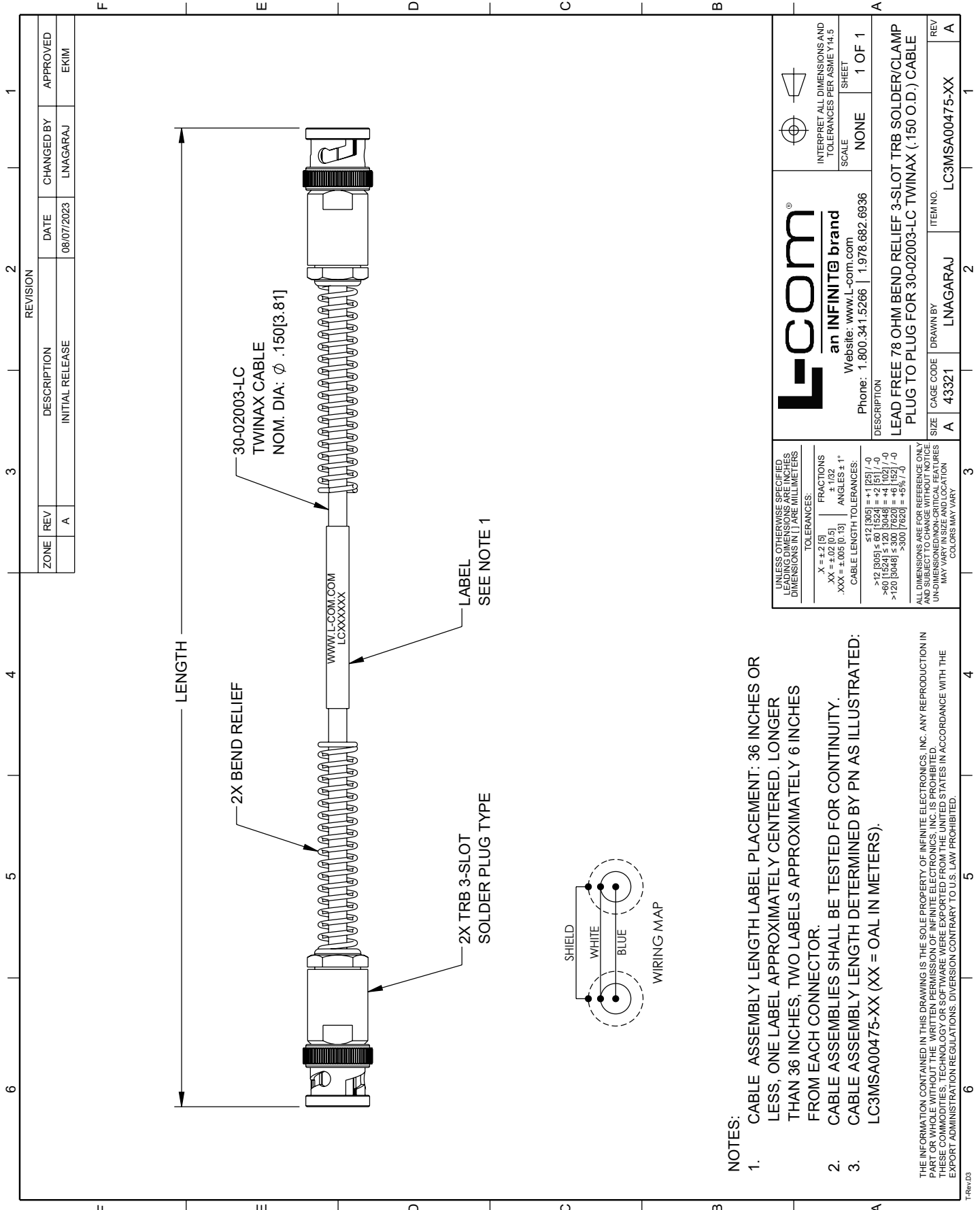
Example: LC3MSA00475-12 = 12 inches long cable  
LC3MSA00475-100cm = 100 cm long cable

1553 TRB 3-Slot Plug to TRB 3-Slot Plug Cable Assembly using 30-02003-LC Coax, 4 FT with Bend Relief , 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 implement 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 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 implement 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.

1553 TRB 3-Slot Plug to TRB 3-Slot Plug Cable Assembly using 30-02003-LC Coax, 4 FT with Bend Relief, LF Solder

L-com CAD Drawing



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

|   |                         |   |                  |                  |             |                     |  |            |           |                        |           |                          |            |              |             |   |
|---|-------------------------|---|------------------|------------------|-------------|---------------------|--|------------|-----------|------------------------|-----------|--------------------------|------------|--------------|-------------|---|
| <p><b>L-com</b><br/>an INFINITE brand<br/>Website: <a href="http://www.l-com.com">www.l-com.com</a><br/>Phone: 1.800.341.5266   1.978.682.6936</p>  |                         | <p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> |                  |                  |             |                     |  |            |           |                        |           |                          |            |              |             |   |
| <p>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS.</p> <p>TOLERANCES:</p> <table border="0"> <tr> <td>X = ±.2 [5]</td> <td>FRACTIONS ± 1/32</td> </tr> <tr> <td>.XX = ±.02 [0.5]</td> <td>ANGLES ± 1°</td> </tr> <tr> <td>.XXX = ±.005 [0.13]</td> <td></td> </tr> </table> <p>CABLE LENGTH TOLERANCES:</p> <table border="0"> <tr> <td>≤ 12 [305]</td> <td>± .1 [25]</td> </tr> <tr> <td>&gt; 12 [305] ≤ 60 [1524]</td> <td>± .2 [51]</td> </tr> <tr> <td>&gt; 60 [1524] ≤ 300 [7620]</td> <td>± .4 [102]</td> </tr> <tr> <td>&gt; 300 [7620]</td> <td>± .5 [12.7]</td> </tr> </table> |                         | X = ±.2 [5]   | FRACTIONS ± 1/32 | .XX = ±.02 [0.5] | ANGLES ± 1° | .XXX = ±.005 [0.13] |  | ≤ 12 [305] | ± .1 [25] | > 12 [305] ≤ 60 [1524] | ± .2 [51] | > 60 [1524] ≤ 300 [7620] | ± .4 [102] | > 300 [7620] | ± .5 [12.7] | <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p> |
| X = ±.2 [5]   | FRACTIONS ± 1/32        |   |                  |                  |             |                     |  |            |           |                        |           |                          |            |              |             |   |
| .XX = ±.02 [0.5]  | ANGLES ± 1°             |   |                  |                  |             |                     |  |            |           |                        |           |                          |            |              |             |   |
| .XXX = ±.005 [0.13]   |                         |   |                  |                  |             |                     |  |            |           |                        |           |                          |            |              |             |   |
| ≤ 12 [305]  | ± .1 [25]               |   |                  |                  |             |                     |  |            |           |                        |           |                          |            |              |             |   |
| > 12 [305] ≤ 60 [1524]  | ± .2 [51]               |   |                  |                  |             |                     |  |            |           |                        |           |                          |            |              |             |   |
| > 60 [1524] ≤ 300 [7620]  | ± .4 [102]              |   |                  |                  |             |                     |  |            |           |                        |           |                          |            |              |             |   |
| > 300 [7620]  | ± .5 [12.7]             |   |                  |                  |             |                     |  |            |           |                        |           |                          |            |              |             |   |
| <p>DESCRIPTION: LEAD FREE 78 OHM BEND RELIEF 3-SLOT TRB SOLDER/CLAMP PLUG TO PLUG FOR 30-02003-LC TWINAX (.150 O.D.) CABLE</p>  |                         |   |                  |                  |             |                     |  |            |           |                        |           |                          |            |              |             |   |
| <p>SIZE: A</p>  | <p>CAGE CODE: 43321</p> | <p>ITEM NO.: LC3MSA00475-XX</p>                               |                  |                  |             |                     |  |            |           |                        |           |                          |            |              |             |   |
| <p>DRAWN BY: LNAGARAJ</p>   |                         | <p>REV: A</p>   |                  |                  |             |                     |  |            |           |                        |           |                          |            |              |             |   |

- NOTES:
- 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.
  - CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
  - CABLE ASSEMBLY LENGTH DETERMINED BY PN AS ILLUSTRATED: LC3MSA00475-XX (XX = OAL IN METERS).
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