

High Temperature 3-Slot Full Crimp Plug to Plug,  
48 inch M17/176-00002-LC Twinax Cable

## LC3CA2001-48



### Configuration

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

### Features

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

### Applications

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

### Description

L-com's LC3CA2001-48 is a high temperature 3-Slot full crimp plug to plug, 48 inch M17/176-00002-LC twinax cable 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 M17/176-00002-LC series coax and operates to 10 MHz.

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 LC3CA2001-48 L-com High Temperature 3-Slot Full Crimp Plug to Plug, 48 inch M17/176-00002-LC Twinax Cable 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.) | 0.26 | 0.29 | 0.32 | 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.

High Temperature 3-Slot Full Crimp Plug to Plug,  
48 inch M17/176-00002-LC Twinax Cable



## LC3CA2001-48

### Mechanical Specifications

#### Cable Assembly

|         |                    |
|---------|--------------------|
| Length* | 48 in [121.92 cm]  |
| Weight  | 0.17 lbs [77.11 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] |
|------------------------------|------------------|

### 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 | -55 to +200 deg C |
|-----------------|-------------------|

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

### Plotted and Other Data

Notes:

High Temperature 3-Slot Full Crimp Plug to Plug,  
48 inch M17/176-00002-LC Twinax Cable

## LC3CA2001-48



### How to Order

Part Number Configuration:

**LC3CA2001**

- **xx**

**uu**

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

Example: LC3CA2001-12 = 12 inches long cable  
LC3CA2001-100cm = 100 cm long cable

High Temperature 3-Slot Full Crimp Plug to Plug, 48 inch M17/176-00002-LC Twinax Cable 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.

High Temperature 3-Slot Full Crimp Plug to Plug, 48 inch M17/176-00002-LC Twinax Cable

