

75 Ohm 12G SDI HD-BNC Male to HD-BNC Male Cable  
Assembly using 4694R-BK Coax, 25 FT



**LCCA30728/BK-FT25**

**Configuration**

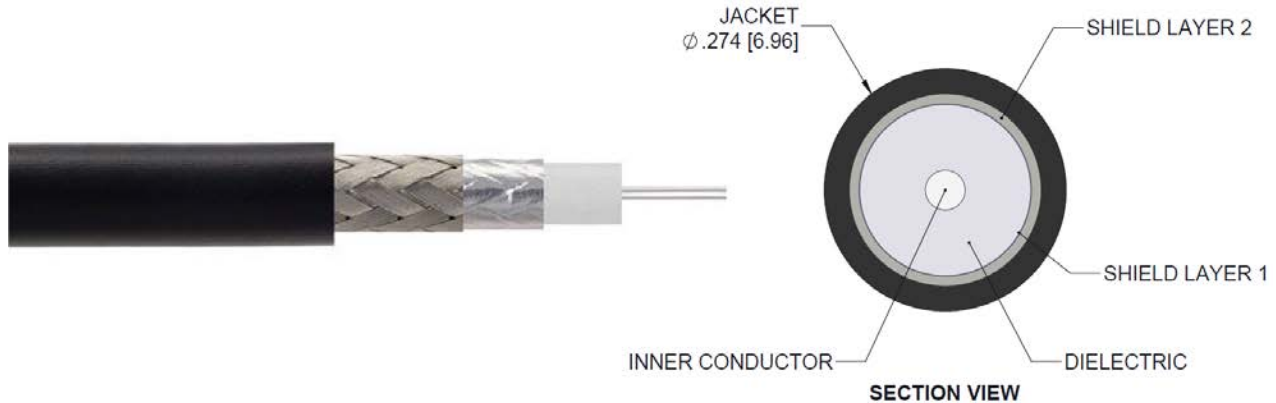
- Connector 1: HD-BNC Male
- Connector 2: HD-BNC Male
- Cable Type: Belden 4694R-BK

**Features**

- Meets SMPTE ST 2082-1
- Backwards Compatible with 2081-1
- 12Gb/s Transmission
- Cost Effective

**Applications**

- 12G-SDI, Video, and Broadband UHDTV
- Broadband Internet Delivery
- Broadcast A/V
- 4K/8K Video Equipment
- Medical Equipment Requiring High Speed Video
- HD Cameras



**Description**

L-com's LCCA30728/BK-FT25 is a 75 Ohm 12G SDI HD-BNC male to HD-BNC male cable assembly using 4694R-BK coax, 25 FT and ships same-day. These flexible RF cable assemblies are ideal for applications where flexure is required. Our L-com HD-BNC to HD-BNC cable assembly has a male to male gender configuration with 75 Ohm flexible Belden 4694R-BK series coax and operates to 12 GHz and enables 12Gb/s data transfer rates for high resolution uncompressed video signal transmission. These products offer 4K and Ultra-HD quality signals that meet SMPTE Standard 2082-1. The shielding of this HD-BNC cable is comprised of aluminum polyester.

Custom versions of this HD-BNC male to HD-BNC male 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 LCCA30728/BK-FT25 L-com 75 Ohm 12G SDI HD-BNC Male to HD-BNC Male Cable Assembly using 4694R-BK Coax, 25 FT data sheet PDF includes details of the RF product specifications, CAD drawing(s) and dimensions below.

**Electrical Specifications**

| Description | Minimum | Typical | Maximum | Units |
|-------------|---------|---------|---------|-------|
|-------------|---------|---------|---------|-------|

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## LCCA30728/BK-FT25

|                               |    |              |                       |
|-------------------------------|----|--------------|-----------------------|
| Frequency Range               | DC | 12           | GHz                   |
| VSWR                          |    | 1.5:1        |                       |
| Velocity of Propagation       |    | 84.5         | %                     |
| Group Delay                   |    | 1.2 [3.94]   | ns/ft [ns/m]          |
| Capacitance                   |    | 15.9 [52.17] | pF/ft [pF/m]          |
| Inductance                    |    | 0.106 [0.35] | uH/ft [uH/m]          |
| DC Resistance Inner Conductor |    | 6.4 [21]     | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor |    | 2.8 [9.19]   | Ohms/1000ft [Ohms/Km] |
| Operating Voltage (AC)        |    | 300          | Vrms                  |

### Specifications by Frequency

| Description           | F1   | F2   | F3  | F4   | F5   | Units |
|-----------------------|------|------|-----|------|------|-------|
| Frequency             | 0.5  | 1    | 2.5 | 5    | 12   | GHz   |
| Insertion Loss (Typ.) | 1.23 | 1.68 | 2.6 | 3.68 | 5.95 | 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.

### Mechanical Specifications

#### Cable Assembly

|          |                    |
|----------|--------------------|
| Length   | 300 in [762 cm]    |
| Diameter | 0.5 in [12.7 mm]   |
| Weight   | 0.6 lbs [272.16 g] |

#### Cable

|                                      |                    |
|--------------------------------------|--------------------|
| Cable Type                           | Belden 4694R-BK    |
| Impedance                            | 75 Ohms            |
| Inner Conductor Type                 | Solid              |
| Inner Conductor Material and Plating | Copper, Silver     |
| Dielectric Type                      | HDPE               |
| Number of Shields                    | 1                  |
| Shield Layer 1                       | Aluminum Polyester |
| Shield Layer 2                       | Tinned Copper      |
| Jacket Material                      | PVC, Black         |
| Jacket Diameter                      | 0.274 in [6.96 mm] |

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## LCCA30728/BK-FT25

### Connectors

| Description                           | Connector 1     | Connector 2     |
|---------------------------------------|-----------------|-----------------|
| Type                                  | HD-BNC Male     | HD-BNC Male     |
| Impedance                             | 75 Ohms         | 75 Ohms         |
| Contact Material and Plating          | Brass, Gold     | Brass, Gold     |
| Contact Plating Specification         | 10 µin minimum  | 10 µin minimum  |
| Dielectric Type                       | PTFE            | PTFE            |
| Outer Conductor Material and Plating  | Brass, Nickel   | Brass, Nickel   |
| Outer Conductor Plating Specification | 50 µin minimum  | 50 µin minimum  |
| Body Material and Plating             | Brass, Nickel   | Brass, Nickel   |
| Body Plating Specification            | 100 µin minimum | 100 µin minimum |
| Seal Gasket Material                  | Silicone        |                 |

### Environmental Specifications

#### Temperature

Operating Range -30 to +75 deg C

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

### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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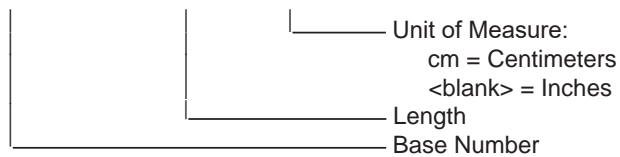


**LCCA30728/BK-FT25**

**How to Order**

Part Number Configuration:

**LCCA30728/BK - xx uu**



Example: LCCA30728/BK-12 = 12 inches long cable  
LCCA30728/BK-100cm = 100 cm long cable

75 Ohm 12G SDI HD-BNC Male to HD-BNC Male Cable Assembly using 4694R-BK Coax, 25 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.

L-com CAD Drawing

| REVISIONS |                 |                      |
|-----------|-----------------|----------------------|
| REV.      | DESCRIPTION     | DATE                 |
| A         | INITIAL RELEASE | 5/2/22               |
|           |                 | APPROVED<br>AGANWANI |

| LCCA30728/ZZ<br>(ZZ = CABLE COLOR DESIGNATION) | COAX CABLE COLOR |
|--|------------------|
| LCCA30728/BK                                   | BLACK            |
| LCCA30728/BL                                   | BLUE             |
| LCCA30728/GR                                   | GREEN            |
| LCCA30728/OR                                   | ORANGE           |
| LCCA30728/RD                                   | RED              |
| LCCA30728/ML                                   | VIOLET           |
| LCCA30728/WH                                   | WHITE            |
| LCCA30728/YW                                   | YELLOW           |

|  |                  |             |           |             |        |        |               |        |             |              |                 |                          |                 |                            |                  |                             |                  |                |               |   |
|--|------------------|-------------|-----------|-------------|--------|--------|---------------|--------|-------------|--------------|-----------------|--------------------------|-----------------|----------------------------|------------------|-----------------------------|------------------|----------------|---------------|---|
| <p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p><b>TOLERANCES:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">.X = ± .2</td> <td style="border: none;">[ 5.08]</td> <td style="border: none;">FRACTIONS</td> </tr> <tr> <td style="border: none;">.XX = ± .02</td> <td style="border: none;">[ .51]</td> <td style="border: none;">± 1/32</td> </tr> <tr> <td style="border: none;">.XXX = ± .005</td> <td style="border: none;">[ .13]</td> <td style="border: none;">ANGLES ± 1°</td> </tr> </table> <p><b>CABLE LENGTH (L) TOLERANCES:</b></p> <table style="width: 100%; border: none;"> <tr> <td style="border: none;">L ≤ 12 [305]</td> <td style="border: none;">= ± 1 [25] / -0</td> </tr> <tr> <td style="border: none;">12 [305] &lt; L ≤ 60 [1524]</td> <td style="border: none;">= ± 2 [61] / -0</td> </tr> <tr> <td style="border: none;">60 [1524] &lt; L ≤ 120 [3048]</td> <td style="border: none;">= ± 4 [102] / -0</td> </tr> <tr> <td style="border: none;">120 [3048] &lt; L ≤ 300 [7620]</td> <td style="border: none;">= ± 6 [152] / -0</td> </tr> <tr> <td style="border: none;">300 [7620] &lt; L</td> <td style="border: none;">= ± 9% L / -0</td> </tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p> | .X = ± .2        | [ 5.08]     | FRACTIONS | .XX = ± .02 | [ .51] | ± 1/32 | .XXX = ± .005 | [ .13] | ANGLES ± 1° | L ≤ 12 [305] | = ± 1 [25] / -0 | 12 [305] < L ≤ 60 [1524] | = ± 2 [61] / -0 | 60 [1524] < L ≤ 120 [3048] | = ± 4 [102] / -0 | 120 [3048] < L ≤ 300 [7620] | = ± 6 [152] / -0 | 300 [7620] < L | = ± 9% L / -0 | <p style="text-align: center;"><b>L-com™</b><br/>an INFINITE brand</p> <p>50 High Street, West Mill, 3rd Floor, Suite #30<br/>North Andover, MA 01845 USA.<br/>Phone: 1.800.341.5266   1.978.682.6936<br/>Fax: 1.978.689.9484<br/>Website: www.L-com.com<br/>E-mail: CustomerService@L-com.com</p> <p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF L-COM GLOBAL CONNECTIVITY. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p> |
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| .XX = ± .02  | [ .51]           | ± 1/32      |           |             |        |        |               |        |             |              |                 |                          |                 |                            |                  |                             |                  |                |               |   |
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| 300 [7620] < L   | = ± 9% L / -0    |             |           |             |        |        |               |        |             |              |                 |                          |                 |                            |                  |                             |                  |                |               |   |

|      |           |          |              |     |
|------|-----------|----------|--------------|-----|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO.     | REV |
| A    | 43321     | HBAKKE   | LCCA30728/ZZ | A   |

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