



**Product:** [4794R](#)

4K UHD Coax for 12G-SDI, 75 Ohm, Series 7, 16 AWG Solid SC, Tri-Shield, PVC Jkt, CMR

**Product Description**

75 Ohm SDI Coax, Series 7, 16 AWG Solid Silvered Copper Conductor, PE Insulation, Foil + 95% Tinned Copper Braid + Foil Shield, PVC Jacket, CMR

**Technical Specifications**

**Product Overview**

|                        |                                                                                                                  |
|------------------------|------------------------------------------------------------------------------------------------------------------|
| Suitable Applications: | Ultra-High Definition Digital Video, 4K Single-link 12 Gb/s UHDTV, 4K D-Cinema, 8K Quad-link UHDTV, HD-SDI 1080p |
|------------------------|------------------------------------------------------------------------------------------------------------------|

**Construction Details**

|              |   |
|--------------|---|
| Series Type: | 7 |
|--------------|---|

**Conductor**

| Size   | Stranding | Nom. Diameter | Material             |
|--------|-----------|---------------|----------------------|
| 16 AWG | Solid     | 0.051 in      | SC - Silvered Copper |

**Insulation**

| Material                 | Nom. Insulation Diameter | Color Code | Notes        |
|--------------------------|--------------------------|------------|--------------|
| PE - Polyethylene (Foam) | 0.225 in (5.72 mm)       | White      | Gas Injected |

**Outer Shield**

| Layer | Outer Shield Type | Material                      | Material Trade Name | Coverage | Notes                                                                  |
|-------|-------------------|-------------------------------|---------------------|----------|------------------------------------------------------------------------|
| 1     | Tape              | Tri-Laminate (Alum+Poly+Alum) | Duobond® II         | 100%     |                                                                        |
| 2     | Braid             | Tinned Copper (TC)            |                     | 95%      |                                                                        |
| 3     | Tape              | Bi-Laminate (Alum+Poly)       | Beldfoil®           | 100%     | With Shorting Fold and Bonded to inside of jacket for easy preparation |

**Outer Jacket**

| Material                 | Nom. Diameter      |
|--------------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.320 in (8.13 mm) |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.320 in (8.13 mm) |
|-----------------------------------|--------------------|

**Electrical Characteristics**

**Return Loss (RL)**

| Frequency        | Min. Return Loss |
|------------------|------------------|
| 5 - 1600 MHz     | 23 dB            |
| 1600 - 4500 MHz  | 21 dB            |
| 4500 - 12000 MHz | 15 dB            |

**Attenuation**

| Frequency | Nom. Attenuation |
|-----------|------------------|
| 1 MHz     | 0.26 dB/100ft    |
| 3.58 MHz  | 0.43 dB/100ft    |
| 5 MHz     | 0.50 dB/100ft    |
| 6 MHz     | 0.52 dB/100ft    |
| 7 MHz     | 0.55 dB/100ft    |
| 10 MHz    | 0.63 dB/100ft    |

|           |                |
|-----------|----------------|
| 12 MHz    | 0.66 dB/100ft  |
| 25 MHz    | 0.88 dB/100ft  |
| 55 MHz    | 1.21 dB/100ft  |
| 67.5 MHz  | 1.31 dB/100ft  |
| 71.5 MHz  | 1.34 dB/100ft  |
| 88.5 MHz  | 1.47 dB/100ft  |
| 100 MHz   | 1.54 dB/100ft  |
| 135 MHz   | 1.75 dB/100ft  |
| 143 MHz   | 1.79 dB/100ft  |
| 180 MHz   | 1.98 dB/100ft  |
| 270 MHz   | 2.40 dB/100ft  |
| 360 MHz   | 2.76 dB/100ft  |
| 540 MHz   | 3.41 dB/100ft  |
| 720 MHz   | 3.96 dB/100ft  |
| 750 MHz   | 4.05 dB/100ft  |
| 1000 MHz  | 4.70 dB/100ft  |
| 1500 MHz  | 5.83 dB/100ft  |
| 2000 MHz  | 6.80 dB/100ft  |
| 2250 MHz  | 7.25 dB/100ft  |
| 3000 MHz  | 8.48 dB/100ft  |
| 4500 MHz  | 10.66 dB/100ft |
| 6000 MHz  | 12.47 dB/100ft |
| 12000 MHz | 19.45 dB/100ft |

Electricals

| Nom. Conductor DCR | Nom. Outer Shield DCR       | Nom. Capacitance Cond-to-Shield | Nom. Characteristic Impedance | Nom. Velocity of Prop. |
|--------------------|-----------------------------|---------------------------------|-------------------------------|------------------------|
| 4.0 Ohm/1000ft     | 1.8 Ohm/1000ft (5.9 Ohm/km) | 16.0 pF/ft (52.5 pF/m)          | 75 Ohm                        | 85%                    |

Voltage

| UL Voltage Rating |
|-------------------|
| 300 V (CMR, CMG)  |

Mechanical Characteristics

Temperature

| UL Temperature | Operating      |
|----------------|----------------|
| 60°C           | -20°C to +75°C |

Bend Radius

| Installation Min. |
|-------------------|
| 3.2 in (81 mm)    |

|                    |                |
|--------------------|----------------|
| Max. Pull Tension: | 84 lbs (38 kg) |
| Bulk Cable Weight: | 55 lbs/1000ft  |

Standards and Compliance

|                                  |                                                                                                                                  |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability:       | Indoor - Riser, Indoor, Aerial - Black only, When supported by messenger wire                                                    |
| Sustainability:                  | CA Prop 65                                                                                                                       |
| Flammability / Reaction to Fire: | UL1666 Vertical Shaft                                                                                                            |
| CPR Compliance:                  | CPR Euroclass: Eca; CPR UKCA Class: Eca                                                                                          |
| NEC / UL Compliance:             | CMR                                                                                                                              |
| CEC / C(UL) Compliance:          | CMG                                                                                                                              |
| European Directive Compliance:   | EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), REACH, EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| UK Regulation Compliance:        | UKCA Mark                                                                                                                        |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)                                                                                                  |
| Plenum Number:                   | 4794P                                                                                                                            |

History

|                      |                                                  |
|----------------------|--------------------------------------------------|
| Update and Revision: | Revision Number: 0.403 Revision Date: 04-29-2024 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item #        | Color       | Putup Type | Length   | UPC          | Footnote |
|---------------|-------------|------------|----------|--------------|----------|
| 4794R 0101000 | Black       | Reel       | 1,000 ft | 612825379201 | C        |
| 4794R 0102500 | Black       | Reel       | 2,500 ft | 612825379218 | C Z      |
| 4794R 0061000 | Blue, Light | Reel       | 1,000 ft | 612825395331 |          |
| 4794R N3U1000 | Mil Green   | Reel       | 1,000 ft | 612825395324 |          |
| 4794R 0031000 | Orange      | Reel       | 1,000 ft | 612825395201 |          |
| 4794R 0071000 | Purple      | Reel       | 1,000 ft | 612825395225 |          |
| 4794R 0021000 | Red         | Reel       | 1,000 ft | 612825395195 |          |
| 4794R 0091000 | White       | Reel       | 1,000 ft |              |          |
| 4794R 0041000 | Yellow      | Reel       | 1,000 ft | 612825395218 |          |

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.