

## 7710A Coax - RG-6/U Type

For more Information  
please call

1-800-Belden1



### Description:

RG-6/U type, 18 AWG solid .040" bare copper conductors, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), overall PVC jacket.

### Usage (Overall)

**Suitable Applications:** Video Mult.

### Physical Characteristics (Overall)

#### Conductor

**AWG:**

| # Coax | AWG | Stranding | Conductor Material | Dia. (in.) |
|--------|-----|-----------|--------------------|------------|
| 3      | 18  | Solid     | BC - Bare Copper   | .040       |

#### Insulation

**Insulation Material:**

| Insulation Material                                 | Dia. (in.) |
|---|------------|
| Gas-injected FHDPE - Foam High Density Polyethylene | .180       |

#### Inner Shield

**Inner Shield Material:**

| Layer # | Inner Shield Trade Name | Type  | Inner Shield Material                      | Coverage (%) |
|---------|-------------------------|-------|--|--------------|
| 1       | Duofoil®                | Tape  | Aluminum Foil-Polyester Tape-Aluminum Foil | 100          |
| 2       |                         | Braid | TC - Tinned Copper                         | 95           |

#### Inner Jacket

**Inner Jacket Material:**

| Inner Jacket Material    | Nom. Dia. (in.) |
|--------------------------|-----------------|
| PVC - Polyvinyl Chloride | .275            |

**Inner Jacket Color Code Chart:**

| Number | Color |
|--------|-------|
| 1      | Red   |
| 2      | Green |
| 3      | Blue  |

#### Outer Jacket

**Outer Jacket Material:**

| Outer Jacket Material    |
|--------------------------|
| PVC - Polyvinyl Chloride |

#### Overall Cable

**Overall Nominal Diameter:** 0.746 in.

### Mechanical Characteristics (Overall)

**Operating Temperature Range:** -40°C To +75°C

**UL Temperature Rating:** 60°C

**Non-UL Temperature Rating:** 75°C

**Bulk Cable Weight:** 243 lbs/1000 ft.

**Max. Recommended Pulling Tension:** 207 lbs.

|  |       |
|--|-------|
| Min. Bend Radius (Install)/Minor Axis: | 8 in. |
|--|-------|

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

|                                       |  |
|---------------------------------------|--|
| NEC/(UL) Specification:               | CMR  |
| CEC/C(UL) Specification:              | CMG  |
| AWM Specification:                    | UL Style 1354 (each coax); UL Style 2688 (overall) |
| EU CE Mark:                           | No   |
| EU Directive 2000/53/EC (ELV):        | Yes  |
| EU Directive 2002/95/EC (RoHS):       | Yes  |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004   |
| EU Directive 2002/96/EC (WEEE):       | Yes  |
| EU Directive 2003/11/EC (BFR):        | Yes  |
| CA Prop 65 (CJ for Wire & Cable):     | Yes  |
| MII Order #39 (China RoHS):           | Yes  |
| RG Type:                              | 6/U  |

### Flame Test

|                |                       |
|----------------|-----------------------|
| UL Flame Test: | UL1666 Vertical Shaft |
|----------------|-----------------------|

### Suitability

|                        |     |
|------------------------|-----|
| Suitability - Indoor:  | Yes |
| Suitability - Outdoor: | Yes |

### Plenum/Non-Plenum

|               |    |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

75

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

16.2

### Nominal Velocity of Propagation:

VP (%)

82

### Nominal Delay:

Delay (ns/ft)

1.24

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

6.4

### Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

3.0

### Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.)

|       |       |
|-------|-------|
| 1.000 | 0.240 |
| 3.580 | 0.440 |
| 5.000 | 0.520 |
| 7.000 | 0.610 |

|          |        |
|----------|--------|
| 10.000   | 0.710  |
| 67.500   | 1.650  |
| 71.500   | 1.690  |
| 88.500   | 1.860  |
| 100.000  | 1.950  |
| 135.000  | 2.240  |
| 143.000  | 2.300  |
| 180.000  | 2.570  |
| 270.000  | 3.170  |
| 360.000  | 3.690  |
| 540.000  | 4.600  |
| 720.000  | 5.380  |
| 750.000  | 5.500  |
| 1000.000 | 6.420  |
| 1500.000 | 7.990  |
| 2000.000 | 9.370  |
| 2250.000 | 10.010 |
| 3000.000 | 11.780 |

**Max. Operating Voltage - UL:**

|                |
|----------------|
| <b>Voltage</b> |
| 300 V RMS      |

**Other Electrical Characteristic 1:** Impedance tested in accordance with ASTM D-4566 paragraph 48.2, option 2 using a 75 Ohm fixed bridge and termination.

**Other Electrical Characteristic 2:** Return Loss tested in accordance with ASTM D-4566 paragraph 50.3, using a 75 Ohm fixed bridge and termination.

**Minimum Structural Return Loss:**

| Start Freq. (MHz) | Stop Freq. (MHz) | Min. SRL (dB) |
|-------------------|------------------|---------------|
| 5                 | 580              | 23            |
| 580               | 680              | 15            |
| 680               | 850              | 23            |
| 850               | 3000             | 15            |

**Sweep Test**

**Sweep Testing:** Sweep tested 5 MHz to 3 GHz.

**Related Documents:**

No related documents are available for this product

**Put Ups and Colors:**

| Item #        | Putup    | Ship Weight | Color        | Notes | Item Desc             |
|---------------|----------|-------------|--------------|-------|-----------------------|
| 7710A B591000 | 1,000 FT | 259.000 LB  | BLACK, MATTE | C     | 3 #18 PE SH PVC FRTPE |
| 7710A B59500  | 500 FT   | 137.500 LB  | BLACK, MATTE | C     | 3 #18 PE SH PVC FRTPE |

**Notes:**  
C = CRATE REEL PUT-UP.

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