



For more Information  
please call

1-800-Belden1



## General 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: SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080p, SDI/HDTV Digital Video, High Definition (HD), Standard Definition (SDI)

## Physical Characteristics (Overall)

### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
3	18	Solid	BC - Bare Copper	1.016

Total Number of Conductors: 3

### Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	4.572

### 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. (mm)
PVC - Polyvinyl Chloride	6.985

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: 18.948 mm

## 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: 361.633 Kg/Km

Max. Recommended Pulling Tension: 920.777 N

Min. Bend Radius/Minor Axis: 203.200 mm

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMR

CEC/(UL) Specification: CMG

AWM Specification:	UL Style 1354 (each coax); UL Style 2688 (overall)
EU Directive 2011/65/EU (ROHS II):	Yes
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 - Black only.
Suitability - Burial:	No

**Plenum/Non-Plenum**

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

**Electrical Characteristics (Overall)**

**Nom. Characteristic Impedance:**

Impedance (Ohm)
75

**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/m)
53.1522

**Nominal Velocity of Propagation:**

VP (%)
82

**Nominal Delay:**

Delay (ns/m)
4.06844

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/km)
20.9984

**Nom. Inner Shield DC Resistance:**

DCR @ 20°C (Ohm/km)
9.843

**Nom. Attenuation:**

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.787
3.580	1.444
5.000	1.706
7.000	2.001
10.000	2.330
67.500	5.414
71.500	5.545
88.500	6.103
100.000	6.398
135.000	7.349
143.000	7.546
180.000	8.432
270.000	10.401
360.000	12.107
540.000	15.093
720.000	17.652
750.000	18.046
1000.000	21.064

# Detailed Specifications & Technical Data



## METRIC MEASUREMENT VERSION

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

1500.000	26.215
2000.000	30.743
2250.000	32.843
3000.000	38.650
4500.000	48.231
6000.000	58.074

### Max. Operating Voltage - UL:

<b>Voltage</b>
300 V RMS

### Other Electrical Characteristic 1:

Return Loss: Fixed bridge and termination.

### Minimum Structural Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
5.000	1600.000	23.000
1600.000	4500.000	21.000
4500.000	6000.000	15.000

### Sweep Test

#### Sweep Testing:

Sweep tested 5 MHz to 6 GHz.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7710A B591000	1,000 FT	268.000 LB	BLACK, MATTE	C	3 #18 PE SH PVC FRTPE
7710A B59500	500 FT	140.500 LB	BLACK, MATTE	C	3 #18 PE SH PVC FRTPE

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 6 Revision Date: 04-14-2017

© 2017 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 herein 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 "AS IS" 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.