# **Detailed Specifications & Technical Data**

### **ENGLISH MEASUREMENT VERSION**



# 7710A Coax - RG-6/U Type

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.

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# 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:



**Total Number of Conductors:** 

## 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 (%)
ı	1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
ı	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/Minor Axis:	8 in.

# Applicable Specifications and Agency Compliance (Overall)

#### **Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG

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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		
ne Test			
UL Flame Test:	UL1666 Vertical Shaft		
ability			
Suitability - Indoor:	Yes		
Suitability - Outdoor:	Yes - Black only.		
Suitability - Burial:	No		
um/Non-Plenum			
Plenum (Y/N):	No		
	AWM Specification:  EU Directive 2011/65/EU (ROHS II):  EU CE Mark:  EU Directive 2000/53/EC (ELV):  EU Directive 2002/95/EC (RoHS):  EU RoHS Compliance Date (mm/dd/yyyy):  EU Directive 2002/96/EC (WEEE):  EU Directive 2003/11/EC (BFR):  CA Prop 65 (CJ for Wire & Cable):  MII Order #39 (China RoHS):  RG Type:  ne Test  UL Flame Test:  ability  Suitability - Outdoor:  Suitability - Outdoor:  Suitability - Burial:  num/Non-Plenum  Plenum (Y/N):		

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



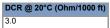
Nominal Delay:



Nom. Conductor DC Resistance:



Nom. Inner Shield DC Resistance:



## 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

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1500.000	7.990
2000.000	9.370
2250.000	10.010
3000.000	11.780
4500.000	14.700
6000.000	17.700

Max. Operating Voltage - UL:

Voltage 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	С	3 #18 PE SH PVC FRTPE
7710A B59500	500 FT	140.500 LB	BLACK, MATTE	С	3 #18 PE SH PVC FRTPE

Notes: C = CRATE REEL PUT-UP.

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