



## 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 Cabling

Overall Nominal Diameter: 0.770 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: 234 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	0.24
3.58	.45
5	.54
7	.63

10	.72
67.5	1.57
71.5	1.60
88.5	1.75
100	1.84
135	2.10
143	2.16
180	2.42
270	2.97
360	3.43
540	4.25
720	4.95
750	5.00
1000	5.89
1500	7.33
2000	8.57
2250	9.14
3000	10.67

**Max. Operating Voltage - UL:**

Voltage
300 V RMS

**Other Electrical Characteristic 1:** Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 Ohm fixed bridge and termination.

**Other Electrical Characteristic 2:** Return Loss tested in accordance with ASTM D-4566 paragraph 45.3, 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.

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7710A B591000	1,000 FT	285.000 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.

# Brilliance VideoFLEX® Snake Cable for Precision Analog and Digital Video

RG-6/U Type



Description	Part No.	UL NEC/ C(UL) CEC Type	No. of Cond.	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
				Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m

**RG-59/U • 20 AWG** Solid .032" Bare Copper Conductors • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

**Plenum • Foam FEP Insulation • Plenum-Grade PVC Jackets** (Color Code: See chart below) • **Center Spine • No Overall Jacket**

	300V RMS	<b>1283S3</b> <small>new</small>	NEC:	3	250	76.2	26.3	11.9	20 AWG	.133	3.38	Duofoil (95%)	.422	10.72	75	83%	16.2	53.1	1	.3	1.0	
			CMP:		500	152.4	54.0	24.5	(solid)			+ TC Braid							3.6	.6	2.0	
			CEC:		1000	304.8	103.0	46.7	.032"			3.8Ω/M'								10	.9	2.9
			CMP:						10.0Ω/M'			12.5Ω/km								71.5	2.1	6.9
								32.8Ω/km												135	2.7	8.9
																				270	3.8	12.5
																				360	4.4	14.4
																				540	5.5	18.0
																				720	6.4	21.0
																				750	6.5	21.3
																				1000	7.6	24.9
																				1500	9.4	30.8
																				2500	12.4	40.7
																				3000	13.8	45.3

Sweep tested. 5 MHz to 3 GHz.  
U.S. Patent 7,049,523

Suitable for Indoor and Outdoor applications.

**RG-6/U Type • 18 AWG** Solid .040" Bare Copper Conductors • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

**Gas-injected Foam HDPE Insulation • Overall Matte Black PVC Jacket** (Color Code: See chart below)

	SDI/HDTV	<b>7710A</b>	NEC:	3	500	152.4	137.5	62.4	18 AWG	.180	4.57	Duofoil	.770	19.56	75	82%	16.2	53.1	1	.2	.8	
	Digital Video		CMR:		1000	304.8	285.0	129.3	(solid)			+ 95%								3.6	.5	1.5
	75°C		CEC:						.040"	.275	6.99	TC Braid								10	.7	2.4
	(1694A Bundled)		CMG FT4						BC			3.0Ω/M'								71.5	1.6	5.2
								6.4Ω/M'			9.8Ω/km									135	2.1	6.9
								21.0Ω/km												270	3.0	9.7
																				360	3.4	11.3
																				540	4.3	13.9
																				720	4.9	16.1
																				750	5.0	16.4
																				1000	5.9	19.3
																				1500	7.3	24.0
																				2500	9.1	31.8
																				3000	10.6	35.0

Sweep tested 5 MHz to 3 GHz.

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • HDPE = High-density Polyethylene • TC = Tinned Copper

See Connector Reference Guide at [www.belden.com](http://www.belden.com) for connector recommendations.

### Color Code Chart

Cond.	Color	Cond.	Color
1	Red	6	Brown
2	Green	7	Orange
3	Blue	8	Gray
4	White	9	Purple
5	Yellow	10	Black