# **Detailed Specifications & Technical Data**

### METRIC MEASUREMENT VERSION



7795A Coax - RG-59/U

For more Information please call

1-800-Belden1



### **General Description:**

RG-59/U type, 20 AWG solid .032" bare copper conductors, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), overall PVC jacket.

# **Physical Characteristics (Overall)**

### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
4	20	Solid	BC - Bare Copper	0.8128

Total Number of Conductors:

#### Insulation

### Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	3.683

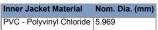
### **Inner Shield**

### 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 Color Code Chart:

Number	Color
1	Red
2	Green
3	Blue
4	White

### **Outer Jacket**

### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

### **Overall Cable**

Overall Nominal Diameter: 17.932 mm

# Mechanical Characteristics (Overall)

Operating Temperature Range:	-35°C To +75°C
UL Temperature Rating:	60°C
Non-UL Temperature Rating:	75°C
Bulk Cable Weight:	319.963 Kg/Km
Max. Recommended Pulling Tension:	1281.080 N
Min. Bend Radius/Minor Axis:	177.800 mm

# **Applicable Specifications and Agency Compliance (Overall)**

### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes

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### **METRIC MEASUREMENT VERSION**



## 7795A Coax - RG-59/U

EU Directive 2002/95/EC (RoHS):  EU RoHS Compliance Date (mm/dd/yyyy):  EU Directive 2002/96/EC (WEEE):  Yes  EU Directive 2003/11/EC (BFR):  Yes  CA Prop 65 (CJ for Wire & Cable):  MII Order #39 (China RoHS):  RG Type:  Flame Test UL Flame Test: UL Flame Test: UL flame Tost: VES  Suitability Suitability - Indoor: Yes	EU Direct	ive 2000/53/EC (ELV):	Yes
EU Directive 2002/96/EC (WEEE):  EU Directive 2003/11/EC (BFR):  Yes  CA Prop 65 (CJ for Wire & Cable):  MII Order #39 (China RoHS):  RG Type:  Flame Test  UL Flame Test:  UL Flame Test:  UL 1666 Vertical Shaft	EU Direct	ive 2002/95/EC (RoHS):	Yes
EU Directive 2003/11/EC (BFR):  CA Prop 65 (CJ for Wire & Cable):  MII Order #39 (China RoHS):  RG Type:  Flame Test UL Flame Test: UL Flame	EU RoHS	Compliance Date (mm/dd/yyyy):	01/01/2004
CA Prop 65 (CJ for Wire & Cable):  MII Order #39 (China RoHS):  RG Type:  59/U  Flame Test UL Flame Test: UL Fl	EU Direct	ive 2002/96/EC (WEEE):	Yes
MII Order #39 (China RoHS):  RG Type: 59/U  Flame Test UL Flame Test: UL1666 Vertical Shaft  Suitability	EU Direct	ive 2003/11/EC (BFR):	Yes
RG Type: 59/U  Flame Test UL Flame Test: UL1666 Vertical Shaft  Suitability	CA Prop	65 (CJ for Wire & Cable):	Yes
Flame Test UL Flame Test: UL 1666 Vertical Shaft  Suitability	MII Order	#39 (China RoHS):	Yes
UL Flame Test: UL1666 Vertical Shaft Suitability	RG Type:		59/U
Suitability	Flame Test		
·	UL Flame	Test:	UL1666 Vertical Shaft
Suitability - Indoor: Yes	Suitability		
	Suitability	- Indoor:	Yes
Suitability - Outdoor: Yes	Suitability	- Outdoor:	Yes
Plenum/Non-Plenum	Plenum/Non	-Plenum	
Plenum (Y/N): No	Plenum (	//N):	No

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (µH/m) 0.351067

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m) 53.1522

Nominal Velocity of Propagation:

**VP (%)** 83

Nominal Delay:

Delay (ns/m) 4.00282

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 32.81

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/km) 12.4678

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.984
3.600	1.969
10.000	2.953
71.500	6.890
135.000	8.859
270.000	12.468
360.000	14.436
540.000	18.046
720.000	20.998
750.000	21.327
1000.000	24.936
1500.000	30.841
2500.000	40.684
3000.000	45.278
4500.000	59.058

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.

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# **Detailed Specifications & Technical Data**

### **METRIC MEASUREMENT VERSION**



### 7795A Coax - RG-59/U

Other Electrical Characteristic 2:

Return Loss Tested in Accordance With ASTM D-4566 Paragraph 45.3, Using a 75 Ohm Fixed Bridge and

### Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	1600.000	23.000
1600.000	4500.000	21.000

### **Sweep Test**

Sweep Testing:

Sweep tested 5 MHz to 4.5 GHz.

### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7795A B591000	1,000 FT	230.000 LB	BLACK, MATTE	С	4 #20 PE/GIFHDPE SH FRPVC PVC

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 05-01-2013

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product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

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