

7796A 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. (in.)
5	20	Solid	BC - Bare Copper	.032

Total Number of Conductors: 5

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.145

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	0.233

Inner Jacket Color Code Chart:

Number	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 0.790 in.

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: 274 lbs/1000 ft.

Max. Recommended Pulling Tension: 360 lbs.

Min. Bend Radius/Minor Axis:	8 in.
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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
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:	59/U

Flame Test

UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (μH/ft)
0.107

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.2

Nominal Velocity of Propagation:

VP (%)
83

Nominal Delay:

Delay (ns/ft)
1.22

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
10.0

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
3.8

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	0.3
3.6	0.6
10	0.9
71.5	2.1
135	2.7
270	3.8
360	4.4
540	5.5
720	6.4
750	6.5
1000	7.6
1500	9.4
2500	12.4
3000	13.8

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 Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5	560	23
560	645	15
645	850	23
851	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
7796A B591000	1,000 FT	299.000 LB	BLACK, MATTE	C	5 #20 PE/GIFHDPE SH FRPVC PVC
7796A B59500	500 FT	156.000 LB	BLACK, MATTE	C	5 #20 PE/GIFHDPE SH FRPVC PVC

Notes:

C = CRATE REEL PUT-UP.

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