

## 7731A Coax - Low Loss Serial Digital Coax



For more Information  
please call

1-800-Belden1

**General Description:**

RG-11/U type, 14 AWG solid .064" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), PVC jacket.

**Physical Characteristics (Overall)****Conductor****AWG:**

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	14	Solid	BC - Bare Copper	.064

Total Number of Conductors: 1

**Insulation****Insulation Material:**

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.280

**Outer Shield****Outer Shield Material:**

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

**Outer Jacket****Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

**Overall Cable**

Overall Nominal Diameter: 0.400 in.

**Mechanical Characteristics (Overall)**

Operating Temperature Range:	-30°C To +75°C
UL Temperature Rating:	75°C
Bulk Cable Weight:	87 lbs/1000 ft.
Max. Recommended Pulling Tension:	145 lbs.
Min. Bend Radius/Minor Axis:	4 in.

**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

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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: 11/U

### Flame Test

UL Flame Test: UL1666 Vertical Shaft

CSA Flame Test: FT4

### Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes - Black only.

### Plenum/Non-Plenum

Plenum (Y/N): No

Plenum Number: 7732A

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

75

### Nom. Inductance:

Inductance (μH/ft)

0.097

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

16.0

### Nominal Velocity of Propagation:

VP (%)

85

### Nominal Delay:

Delay (ns/ft)

1.21

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

2.5

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

1.5

### Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.)

1	0.16
3.58	0.29
5	0.34
7	0.39
10	0.46
67.5	1.05
71.5	1.09
88.5	1.21
100	1.28
135	1.47
143	1.51

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180	1.69
270	2.09
360	2.45
540	3.06
720	3.58
750	3.66
1000	4.30
1500	5.50
2000	6.40
2250	6.90
3000	8.20
4500	10.40

**Max. Operating Voltage - UL:**

<b>Voltage</b>
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)
5.000	1600.000	23.000
1601.000	4500.000	21.000

**Sweep Test****Sweep Testing:**

100% Sweep tested 5 MHz to 4.5 GHz.

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7731A N3U1000	1,000 FT	92.000 LB	GREEN, MIL	C	#14 PE/GIFHDLDP SH FRPVC
7731A N3U4000	4,000 FT	376.000 LB	GREEN, MIL	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0011000	1,000 FT	92.000 LB	BROWN		#14 PE/GIFHDLDP SH FRPVC
7731A 0014000	4,000 FT	376.000 LB	BROWN	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0021000	1,000 FT	92.000 LB	RED	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0024000	4,000 FT	376.000 LB	RED	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0031000	1,000 FT	92.000 LB	ORANGE		#14 PE/GIFHDLDP SH FRPVC
7731A 0034000	4,000 FT	376.000 LB	ORANGE	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0041000	1,000 FT	92.000 LB	YELLOW		#14 PE/GIFHDLDP SH FRPVC
7731A 0044000	4,000 FT	376.000 LB	YELLOW	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0061000	1,000 FT	92.000 LB	BLUE, LIGHT		#14 PE/GIFHDLDP SH FRPVC
7731A 0064000	4,000 FT	376.000 LB	BLUE, LIGHT	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0071000	1,000 FT	92.000 LB	VIOLET	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0074000	4,000 FT	376.000 LB	VIOLET	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0081000	1,000 FT	92.000 LB	GRAY		#14 PE/GIFHDLDP SH FRPVC
7731A 0084000	4,000 FT	376.000 LB	GRAY	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0091000	1,000 FT	92.000 LB	WHITE		#14 PE/GIFHDLDP SH FRPVC
7731A 0094000	4,000 FT	376.000 LB	WHITE	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0101000	1,000 FT	92.000 LB	BLACK	C	#14 PE/GIFHDLDP SH FRPVC
7731A 0104000	4,000 FT	376.000 LB	BLACK	C	#14 PE/GIFHDLDP SH FRPVC
7731A 010500	500 FT	46.500 LB	BLACK	C	#14 PE/GIFHDLDP SH FRPVC

**Notes:**

C = CRATE REEL PUT-UP.

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