

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. (mm)
1	14	Solid	BC - Bare Copper	1.6256

Total Number of Conductors: 1

Insulation**Insulation Material:**

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	7.112

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: 10.160 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-30°C To +75°C
UL Temperature Rating:	75°C
Bulk Cable Weight:	129.473 Kg/Km
Max. Recommended Pulling Tension:	644.989 N
Min. Bend Radius/Minor Axis:	101.600 mm

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

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

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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/m)
0.318257

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
52.496

Nominal Velocity of Propagation:

VP (%)
85

Nominal Delay:

Delay (ns/m)
3.97001

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
8.2025

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
4.9215

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1	0.52496
3.58	0.95149
5	1.11554
7	1.27959
10	1.50926
67.5	3.44505
71.5	3.57629
88.5	3.97001
100	4.19968
135	4.82307
143	4.95431
180	5.54489
270	6.85729

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360	8.03845
540	10.0399
720	11.746
750	12.0085
1000	14.1083
1500	18.0455
2000	20.9984
2250	22.6389
3000	26.9042
4500	34.1224

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)
5.000	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	305 MT	41.731 KG	GREEN, MIL	C	#14 PE/GIFHDL DPE SH FRPVC
7731A N3U4000	1,219 MT	170.552 KG	GREEN, MIL	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0011000	305 MT	41.731 KG	BROWN		#14 PE/GIFHDL DPE SH FRPVC
7731A 0014000	1,219 MT	170.552 KG	BROWN	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0021000	305 MT	41.731 KG	RED	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0024000	1,219 MT	170.552 KG	RED	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0031000	305 MT	41.731 KG	ORANGE		#14 PE/GIFHDL DPE SH FRPVC
7731A 0034000	1,219 MT	170.552 KG	ORANGE	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0041000	305 MT	41.731 KG	YELLOW		#14 PE/GIFHDL DPE SH FRPVC
7731A 0044000	1,219 MT	170.552 KG	YELLOW	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0061000	305 MT	41.731 KG	BLUE, LIGHT		#14 PE/GIFHDL DPE SH FRPVC
7731A 0064000	1,219 MT	170.552 KG	BLUE, LIGHT	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0071000	305 MT	41.731 KG	VIOLET	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0074000	1,219 MT	170.552 KG	VIOLET	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0081000	305 MT	41.731 KG	GRAY		#14 PE/GIFHDL DPE SH FRPVC
7731A 0084000	1,219 MT	170.552 KG	GRAY	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0091000	305 MT	41.731 KG	WHITE		#14 PE/GIFHDL DPE SH FRPVC
7731A 0094000	1,219 MT	170.552 KG	WHITE	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0101000	305 MT	41.731 KG	BLACK	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0104000	1,219 MT	170.552 KG	BLACK	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 010500	152 MT	21.092 KG	BLACK	C	#14 PE/GIFHDL DPE SH FRPVC

Notes:

C = CRATE REEL PUT-UP.

Test Reports

a) UL

- i) UL Test Reports are available on-line through the UL Client Document Access web portal.
- ii) UL Inspection Reports are also available through the UL Client Document Access web portal.

b) CSA

- i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.
- ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

* other test data may be available if requested at time of order.

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