

Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

7731A Coax - Low Loss Serial Digital Coax

For more Information
please call

1-800-Belden1



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

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 Cabling

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 (Install)/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

EU Directive 2002/96/EC (WEEE): Yes

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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

Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes - Black only.

Suitability - Aerial: Yes - Black only, when supported by a messenger wire

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
360	8.03845

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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	850	23
850	3000	21

Sweep Test

Sweep Testing: 100% Sweep tested 5 MHz to 3 GHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7731A N3U1000	305 MT	43.091 KG	GREEN, MIL	C	#14 PE/GIFHDL DPE SH FRPVC
7731A N3U4000	1,219 MT	175.995 KG	GREEN, MIL	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0011000	305 MT	43.091 KG	BROWN		#14 PE/GIFHDL DPE SH FRPVC
7731A 0014000	1,219 MT	175.995 KG	BROWN	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0021000	305 MT	43.091 KG	RED	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0024000	1,219 MT	175.995 KG	RED	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0031000	305 MT	43.091 KG	ORANGE		#14 PE/GIFHDL DPE SH FRPVC
7731A 0034000	1,219 MT	175.995 KG	ORANGE	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0041000	305 MT	43.091 KG	YELLOW		#14 PE/GIFHDL DPE SH FRPVC
7731A 0044000	1,219 MT	175.995 KG	YELLOW	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0061000	305 MT	43.091 KG	BLUE, LIGHT		#14 PE/GIFHDL DPE SH FRPVC
7731A 0064000	1,219 MT	175.995 KG	BLUE, LIGHT	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0071000	305 MT	43.091 KG	VIOLET	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0074000	1,219 MT	175.995 KG	VIOLET	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0081000	305 MT	43.091 KG	GRAY		#14 PE/GIFHDL DPE SH FRPVC
7731A 0084000	1,219 MT	175.995 KG	GRAY	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0091000	305 MT	43.091 KG	WHITE		#14 PE/GIFHDL DPE SH FRPVC
7731A 0094000	1,219 MT	175.995 KG	WHITE	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0101000	305 MT	43.091 KG	BLACK	C	#14 PE/GIFHDL DPE SH FRPVC
7731A 0104000	1,219 MT	175.995 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.

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