

## 7731A Coax - Low Loss Serial Digital Coax

		<p style="text-align: center;"><b>For more information please call</b>  <b>1-800-Belden1</b></p> <p style="text-align: center;"><u>See Put-ups and Colors</u></p>
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### 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:

#### CONDUCTOR:

Number of Coax	1
Total Number of Conductors	1
RG Type	11/U
AWG	14
Stranding	Solid
Conductor Diameter	.064 in.
Conductor Material	BC - Bare Copper

#### INSULATION:

Insulation Material	Gas-injected FHDPE - Foam High Density Polyethylene
Insulation Diameter	.280 in.

#### OUTER SHIELD:

Outer Shield Material Trade Name	Duofoil®
Outer Shield Type	Tape/Braid

#### Outer Shield Material :

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

Outer Shield % Coverage	100 %
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#### OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride
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#### OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.400 in.
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#### MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-30°C To +75°C
UL Temperature Rating	75°C

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Bulk Cable Weight	100 lbs/1000 ft.
Max. Recommended Pulling Tension	145 lbs.
Min. Bend Radius (Install)	4 in.

### APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

#### APPLICABLE STANDARDS:

NEC/(UL) Specification	CMR
CEC/C(UL) Specification	CMG
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004

#### FLAME TEST:

UL Flame Test	UL1666 Vertical Shaft
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#### SWEEP TEST:

Sweep Testing	100% Sweep tested 5 MHz to 4.5 GHz.
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#### SUITABILITY:

Suitability - Indoor	Yes
Suitability - Outdoor	Yes - Black only.
Suitability - Aerial	Yes - Black only, when supported by a messenger wire
Suggested Connectors	King 2065-8-9; Trompeter UPL2000-D5; Canare BCP-C71A; Amphenol 31-4411

#### PLENUM/NON-PLENUM:

Plenum (Y/N)	N
Plenum Number	7732A

#### ELECTRICAL CHARACTERISTICS:

Nom. Characteristic Impedance	75 Ohms
Nom. Inductance	0.097 $\mu$ H/ft
Nom. Capacitance Conductor to Shield	16.0 pF/ft
Nominal Velocity of Propagation	85 %
Nominal Delay	1.21 ns/ft
Nom. Conductor DC Resistance @ 20 Deg. C	2.5 Ohms/1000 ft
Nominal Outer Shield DC Resistance @ 20 Deg.C	1.5 Ohms/1000 ft

#### Minimum Return Loss :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Minimum Return Loss (dB)
		5	850	23
		850	3000	21

#### Nom. Attenuation :

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Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. 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
	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	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.

**PUT-UPS AND COLORS:**

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
7731A 002500	#14 PE/GIFHDL DPE SH FRPVC	500	46.5	RED	
7731A N3U1000	#14 PE/GIFHDL DPE SH FRPVC	1000	95	GREEN, MIL	C
7731A 0011000	#14 PE/GIFHDL DPE SH FRPVC	1000	95	BROWN	
7731A 0021000	#14 PE/GIFHDL DPE SH FRPVC	1000	95	RED	C
7731A 0031000	#14 PE/GIFHDL DPE SH FRPVC	1000	95	ORANGE	
7731A 0041000	#14 PE/GIFHDL DPE SH FRPVC	1000	95	YELLOW	
7731A 0061000	#14 PE/GIFHDL DPE SH FRPVC	1000	95	BLUE, LIGHT	
7731A 0071000	#14 PE/GIFHDL DPE SH FRPVC	1000	95	VIOLET	C

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7731A 0081000	#14 PE/GIFHDL DPE SH FRPVC	1000	95	GRAY	
7731A 0091000	#14 PE/GIFHDL DPE SH FRPVC	1000	95	WHITE	
7731A 0101000	#14 PE/GIFHDL DPE SH FRPVC	1000	95	BLACK	C
7731A 010500	#14 PE/GIFHDL DPE SH FRPVC	500	46.5	BLACK	C
7731A N3U4000	#14 PE/GIFHDL DPE SH FRPVC	4000	388	GREEN, MIL	C
7731A 0014000	#14 PE/GIFHDL DPE SH FRPVC	4000	388	BROWN	C
7731A 0024000	#14 PE/GIFHDL DPE SH FRPVC	4000	388	RED	C
7731A 0034000	#14 PE/GIFHDL DPE SH FRPVC	4000	388	ORANGE	C
7731A 0044000	#14 PE/GIFHDL DPE SH FRPVC	4000	388	YELLOW	C
7731A 0064000	#14 PE/GIFHDL DPE SH FRPVC	4000	388	BLUE, LIGHT	C
7731A 0074000	#14 PE/GIFHDL DPE SH FRPVC	4000	388	VIOLET	C
7731A 0084000	#14 PE/GIFHDL DPE SH FRPVC	4000	388	GRAY	C
7731A 0094000	#14 PE/GIFHDL DPE SH FRPVC	4000	388	WHITE	C
7731A 0104000	#14 PE/GIFHDL DPE SH FRPVC	4000	388	BLACK	C

C = CRATE REEL PUT-UP.

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