

7731A Coax - Precision Video Cable for Analog and Digital

Metric Version

	For more information please call 1-800-Belden1 <u>See Put-ups and Colors</u>
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Description:

14 AWG solid .064" bare copper conductor, gas-injected foam HDPE insulation, Duofoil® and a 95% tinned copper braid shield, PVC jacket.

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Coax	1
Total Number of Conductors	1
RG Type	11/U
AWG	14
Stranding	Solid
Conductor Diameter	1.626 mm
Conductor Material	BC - Bare Copper

INSULATION:

Insulation Material	Gas-injected FHDPE - Foam High Density Polyethylene
Insulation Diameter	7.112 mm

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	10.16 mm
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MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-30°C To +75°C
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UL Temperature Rating	75°C
Bulk Cable Weight	148.82 Kg/Km
Max. Recommended Pulling Tension	644.989 N
Min. Bend Radius (Install)	10.16 cm

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

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

FLAME TEST:

UL Flame Test	UL1666 Vertical Shaft
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SWEEP TEST:

Sweep Testing	100% Sweep tested 5 MHz to 3 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	0.318 μ H/m
Nom. Capacitance Conductor to Shield	52.496 pF/m
Nominal Velocity of Propagation	85 %
Nominal Delay	3.97 ns/m
Nom. Conductor DC Resistance @ 20 Deg. C	8.202 Ohms/km
Nominal Outer Shield DC Resistance @ 20°C	4.922 Ohms/km

Minimum Structural Return Loss :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Minimum Structural Return Loss (dB)
		5	850	23
		851	3000	21

Nom. Attenuation :

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Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100m)
	1			0.525
	3.58			0.951
	5			1.116
	7			1.28
	10			1.509
	67.5			3.445
	71.5			3.576
	88.5			3.97
	100			4.2
	135			4.823
	143			4.954
	180			5.545
	270			6.857
	360			8.038
	540			10.04
	720			11.746
	750			12.008
	1000			14.108
	1500			18.045
	2000			20.998
	2250			22.639
	3000			26.904

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 (M)	Ship Weight (kgs.)	Jacket Color	Notes
7731A 0011000	#14 PE/GIFHDLDP SH FRPVC	304.8	43.13	BROWN	
7731A 0014000	#14 PE/GIFHDLDP SH FRPVC	1219.2	176.152	BROWN	C N
7731A 0021000	#14 PE/GIFHDLDP SH FRPVC	304.8	43.13	RED	C
7731A 0024000	#14 PE/GIFHDLDP SH FRPVC	1219.2	176.152	RED	C N
7731A 002500	#14 PE/GIFHDLDP SH FRPVC	152.4	21.792	RED	
7731A 0031000	#14 PE/GIFHDLDP SH FRPVC	304.8	43.13	ORANGE	
7731A 0034000	#14 PE/GIFHDLDP SH FRPVC	1219.2	176.152	ORANGE	C N
7731A 0041000	#14 PE/GIFHDLDP SH FRPVC	304.8	43.13	YELLOW	

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7731A 0044000	#14 PE/GIFHDLDPE SH FRPVC	1219.2	176.152	YELLOW	C N
7731A 0061000	#14 PE/GIFHDLDPE SH FRPVC	304.8	43.13	BLUE, LIGHT	
7731A 0064000	#14 PE/GIFHDLDPE SH FRPVC	1219.2	176.152	BLUE, LIGHT	C N
7731A 0071000	#14 PE/GIFHDLDPE SH FRPVC	304.8	43.13	VIOLET	C
7731A 0074000	#14 PE/GIFHDLDPE SH FRPVC	1219.2	176.152	VIOLET	C N
7731A 0081000	#14 PE/GIFHDLDPE SH FRPVC	304.8	43.13	GRAY	
7731A 0084000	#14 PE/GIFHDLDPE SH FRPVC	1219.2	176.152	GRAY	C N
7731A 0091000	#14 PE/GIFHDLDPE SH FRPVC	304.8	43.13	WHITE	
7731A 0094000	#14 PE/GIFHDLDPE SH FRPVC	1219.2	176.152	WHITE	C N
7731A 0101000	#14 PE/GIFHDLDPE SH FRPVC	304.8	43.13	BLACK	C
7731A 0104000	#14 PE/GIFHDLDPE SH FRPVC	1219.2	176.152	BLACK	C N
7731A 010500	#14 PE/GIFHDLDPE SH FRPVC	152.4	21.792	BLACK	C
7731A N3U1000	#14 PE/GIFHDLDPE SH FRPVC	304.8	43.13	GREEN, MIL	C
7731A N3U4000	#14 PE/GIFHDLDPE SH FRPVC	1219.2	176.152	GREEN, MIL	C N

C = CRATE REEL PUT-UP.

N = FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.

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