

7731SB Coax - Low Loss Serial Digital Coax



For more Information
please call

1-800-Belden1



General Description:

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

Usage (Overall)

Suitable Applications:

HDTV, SDI, Shipboard, AES3, ABS Type Approved, CMG-LS, IEEE 45 clause 23, IEC 60092-376 clause 17, 60092-351, 60754-1, 60754-2, 61034, UL1685 FT4 Loading, Limited Smoke, IEC 60332-3-22 (Category A), 60332-1, IEEE 1202

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
LSZH - Low Smoke Zero Halogen

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:

93 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:

CMG-LS

CEC/C(UL) Specification:

CMG-LS

EU Directive 2011/65/EU (ROHS II):

Yes

IEEE Specification:

Std. 45 clause 23

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):

08/04/2006

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
Other Specification:	UL444, ABS Type Approval Certificate 06-HS184641A
RG Type:	11/U

Flame Test

UL Flame Test:	UL1685 FT4 Loading, Limited Smoke
CSA Flame Test:	FT4
IEC Flame Test:	60332-1, 60332-3-22 (Category A)
IEEE Flame Test:	1202

Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - Black only, when supported by messenger wire.

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.)
1.000	0.160
3.580	0.290
5.000	0.340
7.000	0.390
10.000	0.460
67.500	1.050
71.500	1.090
88.500	1.210
100.000	1.280
135.000	1.470
143.000	1.510
180.000	1.690
270.000	2.090
360.000	2.450
540.000	3.060
720.000	3.580
750.000	3.660
800.000	3.790
1000.000	4.300
1500.000	5.500
2000.000	6.400
2250.000	6.900

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3000.000	8.200
4500.000	10.400

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
7731SB 0101000	1,000 FT	98.000 LB	BLACK	C	#14 PE/GIFHDLPE SH FRNHPO

Notes:
C = CRATE REEL PUT-UP.

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