

## 7790A Coax - Bundled Miniature

For more Information  
please call

1-800-Belden1

**General Description:**

Miniature, 23 AWG solid .023" bare copper conductors, solid copper, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), overall PVC jacket.

**Physical Characteristics (Overall)****Conductor****AWG:**

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
6	23	Solid	BC - Bare Copper	0.5842

Total Number of Conductors: 6

**Insulation****Insulation Material:**

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	2.5908

**Inner Shield****Inner Shield Material:**

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

**Inner Jacket****Inner Jacket Material:**

Inner Jacket Material	Nom. Dia. (mm)
PVC - Polyvinyl Chloride	4.0386

**Inner Jacket Color Code Chart:**

Number	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow
6	Brown

**Outer Jacket****Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

**Overall Cable**

Overall Nominal Diameter: 15.164 mm

**Mechanical Characteristics (Overall)**

Operating Temperature Range: -35°C To +75°C

UL Temperature Rating: 60°C

Non-UL Temperature Rating: 75°C

Bulk Cable Weight: 241.088 Kg/Km

Max. Recommended Pulling Tension:	960.811 N
Min. Bend Radius/Minor Axis:	152.400 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
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
RG Type:	Mini

#### Flame Test

UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4

#### Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

#### Plenum/Non-Plenum

Plenum (Y/N):	No
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### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)
75

#### Nom. Inductance:

Inductance (μH/m)
0.347786

#### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
54.1365

#### Nominal Velocity of Propagation:

VP (%)
83

#### Nominal Delay:

Delay (ns/m)
4.06844

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
65.9481

#### Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/km)
24.9356

#### Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100m)
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1	1.3124
3.6	2.6248
10	3.9372
71.5	10.1711
135	12.4678
270	17.7174
360	20.3422
540	25.2637
720	29.8571
750	31.1695
1000	34.4505
1500	42.653
2500	55.4489
3000	60.6985

**Max. Operating Voltage - UL:**

<b>Voltage</b>
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	650	23
650	725	15
725	850	23
850	3000	15

**Sweep Test****Sweep Testing:**

Sweep tested 5 MHz to 3 GHz.

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7790A B591000	305 MT	80.740 KG	BLACK, MATTE	C	6 #23 PE/GIFHDPE SH PVC PVC
7790A B59500	152 MT	40.824 KG	BLACK, MATTE	C	6 #23 PE/GIFHDPE SH PVC PVC

**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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