# **Detailed Specifications & Technical Data**

## **ENGLISH MEASUREMENT VERSION**



## 7791A Coax - Bundled Miniature

For more Information please call

1-800-Belden1



# **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	<b>Conductor Material</b>	Dia. (in.)
10	23	Solid	BC - Bare Copper	.023

#### Insulation

## Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	.102

## **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. (in.)
PVC - Polyvinyl Chloride	.159

# **Inner Jacket Color Code Chart:**

Number	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow
6	Brown
7	Orange
8	Gray
9	Purple
10	Black

## **Outer Jacket**

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

Outer Jacket Material
PVC - Polyvinyl Chloride

# **Overall Cabling**

Overall Nominal Diameter: 0.796 in.

Mech	Mechanical Characteristics (Overall)		
0	perating Temperature Range:	-35°C To +75°C	
U	L Temperature Rating:	60°C	

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Non-UL Temperature Rating:	75°C	
Bulk Cable Weight:	279 lbs/1000 ft.	
Max. Recommended Pulling Tension:	360 lbs.	
Min. Bend Radius (Install)/Minor Axis:	8 in.	

#### **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** Suitability Suitability - Indoor: Yes

Yes

No

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Suitability - Outdoor:

Plenum/Non-Plenum Plenum (Y/N):

impedance	(Onm)
75	

Nom. Inductance:



Nom. Capacitance Conductor to Shield:



Nominal Velocity of Propagation:



**Nominal Delay:** 



Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
20.1

Nom. Inner Shield DC Resistance:

DCR @ 20°C	(Ohm/1000 ft)
7.6	

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### 7791A Coax - Bundled Miniature

#### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	0.4
3.6	0.8
10	1.2
71.5	3.1
135	3.8
270	5.4
360	6.2
540	7.7
720	9.1
750	9.5
1000	10.5
1500	13.0
2500	16.9
3000	18.5

#### 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	570	23
570	645	15
645	850	23
851	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
7791A B591000	1,000 FT	321.000 LB	BLACK, MATTE	С	10 #23 PE/GIFHDPE SH PVC PVC
7791A B59500	500 FT	154.500 LB	BLACK, MATTE	С	10 #23 PE/GIFHDPE SH PVC PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 09-30-2009

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