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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.

### Usage (Overall)

Suitable Applications: SMPTE 2081-1 6 Gb/s UHD TV, SMPTE 424M 3 Gb/s HD-SDI 1080p, SDI/HDTV Digital Video, High Definition (HD), Standard Definition (SDI)

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
10	23	Solid	BC - Bare Copper	0.5842

Total Number of Conductors: 10

#### 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
7	Orange
8	Gray
9	Purple
10	Black

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

#### Overall Cable

Overall Nominal Diameter: 20.218 mm

### Mechanical Characteristics (Overall)

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

Bulk Cable Weight: 415.208 Kg/Km

Max. Recommended Pulling Tension: 1601.352 N

Min. Bend Radius/Minor Axis: 203.200 mm

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
EU Directive 2011/65/EU (ROHS II):	Yes
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
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### Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only.
Suitability - Burial:	No

### 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)
1.000	1.312
3.600	2.625
10.000	3.937
71.500	10.171
135.000	12.468
270.000	17.717
360.000	20.342
540.000	25.264
720.000	29.857
750.000	31.170

# Detailed Specifications & Technical Data



## METRIC MEASUREMENT VERSION

## 7791A Coax - Bundled Miniature

1000.000	34.451
1500.000	42.653
2500.000	55.449
3000.000	60.699
4500.000	80.713
6000.000	95.051

### Max. Operating Voltage - UL:

<b>Voltage</b>
300 V RMS

### Other Electrical Characteristic 1:

Return Loss: Fixed bridge and termination

### Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	1600.000	23.000
1600.000	4500.000	21.000
4500.000	6000.000	15.000

### Sweep Test

#### Sweep Testing:

Sweep tested 5 MHz to 6 GHz.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7791A B591000	1,000 FT	321.000 LB	BLACK, MATTE	C	10 #23 PE/GIFHDPE SH PVC PVC
7791A B59500	500 FT	154.500 LB	BLACK, MATTE	C	10 #23 PE/GIFHDPE SH PVC PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 3    Revision Date: 04-14-2017

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