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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	Conductor Material	Dia. (mm)
6	23	Solid	BC - Bare Copper	0.5842

### 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 Cabling

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: 242.577 Kg/Km

Max. Recommended Pulling Tension: 960.811 N

Min. Bend Radius (Install)/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

### Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes

### Plenum/Non-Plenum

Plenum (Y/N): No

## 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 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.

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