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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)
5	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

### Outer Jacket

#### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

### Overall Cabling

Overall Nominal Diameter: 13.691 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: 194.954 Kg/Km

Max. Recommended Pulling Tension: 800.676 N

Min. Bend Radius (Install)/Minor Axis: 139.700 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
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### 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)

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	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
7789A B591000	305 MT	66.225 KG	BLACK, MATTE	C	5 #23 PE/GIFHDPE SH PVC PVC
7789A B59500	152 MT	33.112 KG	BLACK, MATTE	C	5 #23 PE/GIFHDPE SH PVC PVC

**Notes:**

C = CRATE REEL PUT-UP.

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