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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)
5	23	Solid	BC - Bare Copper	0.5842

**Total Number of Conductors:** 5

### 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 Cable

**Overall Nominal Diameter:** 13.691 mm

## Mechanical Characteristics (Overall)

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

**Bulk Cable Weight:** 202.395 Kg/Km

Max. Recommended Pulling Tension:	800.676 N
Min. Bend Radius/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 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
CSA Flame Test:	FT4

### 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
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:**

Voltage
300 V RMS

Other Electrical Characteristic 1:

TDR Impedance: 75 +/- 3 Ohms

**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
7789A B591000	1,000 FT	151.000 LB	BLACK, MATTE	C	5 #23 PE/GIFHDPE SH PVC PVC
7789A B59500	500 FT	75.500 LB	BLACK, MATTE	C	5 #23 PE/GIFHDPE SH PVC PVC

**Notes:**

C = CRATE REEL PUT-UP.

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