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1-800-Belden1



## General Description:

20 AWG solid .031" bare copper conductor, polyethylene insulation, tinned copper/bare copper double braid shield (95% coverage), polyethylene jacket.

## Physical Characteristics (Overall)

### Conductor

#### AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	20	Solid	BC - Bare Copper	0.7874

Total Number of Conductors: 1

### Insulation

#### Insulation Material:

Insulation Material	Dia. (mm)
PE - Polyethylene	5.0292

### Outer Shield

#### Outer Shield Material:

Layer #	Type	Outer Shield Material	Coverage (%)
1	Braid	TC - Tinned Copper	95.000
2	Braid	TC - Tinned Copper	95.000

### Outer Jacket

#### Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

### Overall Cable

Overall Nominal Diameter: 7.747 mm

## Mechanical Characteristics (Overall)

Operating Temperature Range: -55°C To +80°C

Non-UL Temperature Rating: 80°C

Bulk Cable Weight: 102.686 Kg/Km

Max. Recommended Pulling Tension: 747.298 N

Min. Bend Radius/Minor Axis: 76.200 mm

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

EU Directive 2011/65/EU (ROHS II): Yes

EU CE Mark: No

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:	59/U

**Plenum/Non-Plenum**

Plenum (Y/N):	No
Plenum Number:	88281

**Electrical Characteristics (Overall)**

**Nom. Characteristic Impedance:**

Impedance (Ohm)
75

**Nom. Inductance:**

Inductance (µH/m)
0.429811

**Nom. Capacitance Conductor to Shield:**

Capacitance (pF/m)
68.901

**Nominal Velocity of Propagation:**

VP (%)
66

**Nominal Delay:**

Delay (ns/m)
5.05274

**Nom. Conductor DC Resistance:**

DCR @ 20°C (Ohm/km)
32.4819

**Nominal Outer Shield DC Resistance:**

DCR @ 20°C (Ohm/km)
3.6091

**Nom. Attenuation:**

Freq. (MHz)	Attenuation (dB/100m)
1	0.9843
3.6	1.6405
10.0	2.6248
71.5	6.8901
135	9.843
270	14.1083
360	16.7331
540	20.6703
720	24.2794
750	24.9356
1000	30.1852

**Max. Operating Voltage - Non-UL:**

Voltage
2900 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. 75 +/- 1.5 Ohms

**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 Structural Return Loss:**

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
5	216	27

217	850	23
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**Sweep Test**

**Sweep Testing:** 100% Sweep tested 5MHz to 850MHz.

**Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8281 0021000	305 MT	33.112 KG	RED	C	75 OHM VIDEO COAX
8281 002500	152 MT	17.010 KG	RED	C	75 OHM VIDEO COAX
8281 0031000	305 MT	33.112 KG	ORANGE	C	75 OHM VIDEO COAX
8281 0041000	305 MT	33.112 KG	YELLOW	C	75 OHM VIDEO COAX
8281 004500	152 MT	17.010 KG	YELLOW		75 OHM VIDEO COAX
8281 0051000	305 MT	33.112 KG	GREEN, DARK	C	75 OHM VIDEO COAX
8281 005500	152 MT	17.010 KG	GREEN, DARK	C	75 OHM VIDEO COAX
8281 0061000	305 MT	33.112 KG	BLUE, LIGHT	C	75 OHM VIDEO COAX
8281 006500	152 MT	17.010 KG	BLUE, LIGHT		75 OHM VIDEO COAX
8281 0091000	305 MT	33.112 KG	WHITE	C	75 OHM VIDEO COAX
8281 0101000	305 MT	33.112 KG	BLACK	C	75 OHM VIDEO COAX
8281 010500	152 MT	17.010 KG	BLACK	C	75 OHM VIDEO COAX
8281 0105000	1,524 MT	172.366 KG	BLACK	C Z	75 OHM VIDEO COAX

**Notes:**

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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