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1-800-Belden1



## General Description:

Surveillance & CCTV Cable, RG59, Rated-CMG, 20 AWG solid bare copper, foamed polyolefin core, 90% bare copper braid, PVC jacket

## Usage (Overall)

**Suitable Applications:** Analog Video/CCTV Coax.

## Physical Characteristics (Overall)

### Conductor

**AWG:**

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	20	Solid	BC - Bare Copper	0.8128

### Insulation

**Insulation Material:**

Insulation Material	Dia. (mm)
Gas-injected FPE - Foam Polyethylene	3.683

### Outer Shield

**Outer Shield Material:**

Type	Outer Shield Material	Coverage (%)
Braid	BC - Bare Copper	95.000

### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

### Overall Cable

**Overall Nominal Diameter:** 5.893 mm

## Mechanical Characteristics (Overall)

**Operating Temperature Range:** -30°C To +75°C

**UL Temperature Rating:** 75°C

**Bulk Cable Weight:** 43.158 Kg/Km

**Max. Recommended Pulling Tension:** 253.547 N

**Min. Bend Radius/Minor Axis:** 63.500 mm

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

**NEC/(UL) Specification:** CMG

**NEC Articles:** 800

**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:	59/U
Series Type:	Series 59

### Flame Test

UL Flame Test:	UL1685 FT4/IEEE 1202 Vertical Tray Flame Test
C(UL) Flame Test:	FT4

### Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only.
Suitability - Aerial:	Yes - Black only.

### 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)

0.318257

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

53.4803

### Nominal Velocity of Propagation:

VP (%)

83

### Nominal Delay:

Delay (ns/m)

4.036

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

32.81

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

10.827

### Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100m)

1	0.9843
5	2.13265
10	2.9529
50	6.2339
100	8.5306
200	11.8116
400	16.405
700	22.967

METRIC MEASUREMENT VERSION

## 543945 Coax - Surveillance and CCTV Applications

900	26.248
1000	27.8885

**Max. Attenuation:**

Freq. (MHz)	Attenuation (dB/100m)
5.000	2.461
50.000	7.054

**Max. Operating Voltage - UL:**

Voltage
300 V RMS

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
543945 009U1000	305 MT	14.061 KG	WHITE		RG-59/U COAX
543945 009U500	152 MT	7.258 KG	WHITE		RG-59/U COAX
543945 0091000	305 MT	14.969 KG	WHITE	C	RG-59/U COAX
543945 009500	152 MT	7.258 KG	WHITE		RG-59/U COAX
543945 010U1000	305 MT	14.061 KG	BLACK		RG-59/U COAX
543945 010U500	152 MT	7.258 KG	BLACK		RG-59/U COAX
543945 0101000	305 MT	14.969 KG	BLACK	C	RG-59/U COAX
543945 010500	152 MT	7.258 KG	BLACK	C	RG-59/U COAX

**Notes:**

C = CRATE REEL PUT-UP.

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