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1-800-Belden1



## General Description:

Series 59, 20 AWG solid .032" bare copper-covered steel conductor, gas-injected foam polyethylene insulation, Duobond® II (100% coverage) plus an aluminum braid (40% coverage), PVC jacket.

## Physical Characteristics (Overall)

### Conductor

AWG:

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

Total Number of Conductors: 1

### Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FPE - Foam Polyethylene	3.6576

### Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	AL - Aluminum	40

### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

### Overall Cable

Overall Nominal Diameter: 6.020 mm

## Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +80°C

UL Temperature Rating: 80°C

Bulk Cable Weight: 31.252 Kg/Km

Max. Recommended Pulling Tension: 355.856 N

Min. Bend Radius/Minor Axis: 63.500 mm

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CM, CATV

CEC/C(UL) Specification: CM

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

PMSHA Specification: P-MSHA-SC-182/4

Series Type: Series 59

### Flame Test

UL Flame Test: UL1685 UL Loading

### Plenum/Non-Plenum

Plenum (Y/N): No

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

75.000

### Nom. Inductance:

Inductance (µH/m)

0.318257

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

53.1522

### Nominal Velocity of Propagation:

VP (%)

83

### Nominal Delay:

Delay (ns/m)

3.9372

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

146.005

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

55.777

### Max. Attenuation:

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

5	2.92009
55	6.39795
211	11.7788
270	13.2881
300	14.0099
350	15.2238
400	16.0113
450	17.3893
550	19.3579
750	22.8358
870	24.7387
1000	26.5433

### Max. Operating Voltage - UL:

Voltage

300 V RMS

### Minimum Return Loss:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
		5	1000	20

## Notes (Overall)

**Notes:** Sweep tested 5 MHz to 1 GHz.

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9100 009U1000	1,000 FT	22.000 LB	WHITE		#20 GIFHDLDPPE SH FRPVC
9100 010U1000	1,000 FT	22.000 LB	BLACK		#20 GIFHDLDPPE SH FRPVC
9100 010U500	500 FT	12.000 LB	BLACK		#20 GIFHDLDPPE SH FRPVC
9100 0101000	1,000 FT	23.000 LB	BLACK		#20 GIFHDLDPPE SH FRPVC

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