

## 9100 Coax - 75 Ohm Coax

For more Information  
please call

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. (in.) |
|--------|-----|-----------|----------------------------------|------------|
| 1      | 20  | Solid     | BCCS - Bare Copper Covered Steel | .032       |

Total Number of Conductors: 1

**Insulation**

Insulation Material:

| Insulation Material                  | Dia. (in.) |
|--------------------------------------|------------|
| Gas-injected FPE - Foam Polyethylene | .144       |

**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: 0.237 in.

**Mechanical Characteristics (Overall)**

|                                   |                 |
|-----------------------------------|-----------------|
| Operating Temperature Range:      | -40°C To +80°C  |
| UL Temperature Rating:            | 80°C            |
| Bulk Cable Weight:                | 21 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 80 lbs.         |
| Min. Bend Radius/Minor Axis:      | 2.500 in.       |

**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/ft)

.097

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

16.2

### Nominal Velocity of Propagation:

VP (%)

83

### Nominal Delay:

Delay (ns/ft)

1.2

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

44.5

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

17

### Max. Attenuation:

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

|      |      |
|------|------|
| 5    | 0.89 |
| 55   | 1.95 |
| 211  | 3.59 |
| 270  | 4.05 |
| 300  | 4.27 |
| 350  | 4.64 |
| 400  | 4.88 |
| 450  | 5.30 |
| 550  | 5.90 |
| 750  | 6.96 |
| 870  | 7.54 |
| 1000 | 8.09 |

### 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 | 24.000 LB   | BLACK |       | #20 GIFHDLDPPE SH FRPVC |

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