

9231 Coax - RG-59/U Type

For more Information
please call

1-800-Belden1

**General Description:**

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

Physical Characteristics (Overall)**Conductor**

AWG:

| # Coax | AWG | Stranding | Conductor Material | Dia. (in.) |
|--------|-----|-----------|--------------------|------------|
| 1 | 20 | Solid | BC - Bare Copper | .031 |

Total Number of Conductors: 1

Insulation

Insulation Material:

| Insulation Material | Dia. (in.) |
|---------------------|------------|
| PE - Polyethylene | .198 |

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 |
|--|
| PVCNC - Polyvinyl Chloride Non-Contaminating |

Overall Cable

Overall Nominal Diameter: 0.305 in.

Mechanical Characteristics (Overall)

| | |
|--|-----------------|
| Operating Temperature Range: | -40°C To +60°C |
| UL Temperature Rating: | 60°C |
| Bulk Cable Weight: | 71 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 168 lbs. |
| Min. Bend Radius/Minor Axis: | 3 in. |
| Min. Bend Radius (Continuous Flexing): | 6 in. |

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

| | |
|---------------------------------------|------------|
| NEC/(UL) Specification: | CMH |
| CEC/C(UL) Specification: | CMH |
| 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): | 10/01/2005 |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MIL Order #39 (China RoHS): | Yes |
| RG Type: | 59/U |

Flame Test

UL Flame Test: UL1685 UL Loading, VW-1

Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes

Suitability - Aerial: Yes - When supported by a messenger wire

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)**Nom. Characteristic Impedance:**

Impedance (Ohm)

75

Nom. Inductance:

Inductance (µH/ft)

0.118

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

21

Nominal Velocity of Propagation:

VP (%)

66

Nominal Delay:

Delay (ns/ft)

1.54

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

9.9

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

1.1

Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100 ft.) |
|-------------|--------------------------|
| 1 | 0.3 |
| 3.6 | 0.5 |
| 10 | 0.8 |
| 71.5 | 2.0 |
| 135 | 3.5 |
| 270 | 4.3 |
| 360 | 5.0 |
| 540 | 6.2 |
| 720 | 7.2 |
| 750 | 7.4 |
| 1000 | 9.1 |

Max. Operating Voltage - UL:

Voltage

300 V RMS

Max. Operating Voltage - Non-UL:

Voltage

1700 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. 720A Series is available by special request.

Minimum Return Loss:

| Start Freq. (MHz) | Stop Freq. (MHz) | Min. RL (dB) |
|-------------------|------------------|--------------|
| 5 | 216 | 27 |
| 217 | 850 | 23 |

Sweep Test

Sweep Testing: 100% sweep tested. 5 Mhz to 850 MHz.

Notes (Overall)

Notes: Non-Plenum versions comply with Telcordia Specification GR-139-CORE.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|--------------|----------|-------------|-------|-------|---------------------|
| 9231 | 1 EA | 5.773 LB | | | 0985 S4742 104/70 M |
| 9231 0081000 | 1,000 FT | 76.000 LB | GRAY | C | #20 PE DBL BRD PVC |
| 9231 008500 | 500 FT | 39.000 LB | GRAY | | #20 PE DBL BRD PVC |

Notes:

C = CRATE REEL PUT-UP.

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