

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

BELDEN
SENDING ALL THE RIGHT SIGNALS

9231 Coax - RG-59/U Type

For more Information
please call

1-800-Belden1



Description:

20 AWG solid .031" bare copper conductor, polyethylene insulation, tinned copper/bare copper braid shield (98% coverage), PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

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

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	98
2	Braid	TC - Tinned Copper	95

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 (Install)/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 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

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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

Flame Test

UL Flame Test:	UL1685 UL Loading, VW-1
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Suitability

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

Plenum/Non-Plenum

Plenum (Y/N):	No
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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

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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.

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
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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