# **Detailed Specifications & Technical Data**

## **ENGLISH MEASUREMENT VERSION**



## 9231 Coax - RG-59/U Type

For more Information please call

1-800-Belden1



# **General Description:**

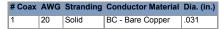
20 AWG solid .031" bare copper conductor, polyethylene insulation, tinned copper braid shields (95% coverage), PVC jacket.

1

# **Physical Characteristics (Overall)**

## Conductor

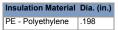
AWG:



Total Number of Conductors:

### Insulation

Insulation Material:



#### **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:	СМН
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 RoHS Compliance Date (mm/dd/yyyy):  EU Directive 2002/96/EC (WEEE):	10/01/2005 Yes
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2002/96/EC (WEEE): EU Directive 2003/11/EC (BFR):	Yes Yes

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Fla	me Test		
UL Flame Test: UL1685 UL Loading, \		UL1685 UL Loading, VW-1	
Sui	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 (%)** 

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  $\pm$ 1.5 Ohms

Other Electrical Characteristic 2: Return Loss tested in accorda

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.

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### 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 0081000	1,000 FT	76.000 LB	GRAY	С	#20 PE DBL BRD PVC
9231 008500	500 FT	39.000 LB	GRAY		#20 PE DBL BRD PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 08-24-2012

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Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

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