


Product: [9231](#) 

Precision Video Coax, RG59, #20 Solid BC, Double 98% TC/BC Braid



Product Description

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

Technical Specifications

Physical Characteristics (Overall)

Conductor				
AWG	Stranding	Material	Nominal Diameter	No. of Coax
20	Solid	BC - Bare Copper	0.031 in	1
Conductor Count:				1

Insulation	
Material	Nominal Diameter
PE - Polyethylene	0.198 in

Outer Shield			
Type	Layer	Material	Coverage [%]
Braid	1	Tinned Copper (TC)	95%
Braid	2	Tinned Copper (TC)	95%

Outer Jacket	
Material	Nominal Diameter
PVC - Polyvinyl Chloride (Non-Contaminating)	0.305 in

Electrical Characteristics

Conductor DCR				
Nominal Conductor DCR	Nominal Conductor DCR	Conductor Resistance	Nominal Outer Shield DCR	Outer Conductor DCR
9.9 Ohm/1000ft	9.9 Ohm/1000ft		1.1 Ohm/1000ft	1.1 Ohm/1000ft

Capacitance	
Nom. Capacitance Conductor to Shield	
21 pF/ft	

Inductance	
Nominal Inductance	
0.118 µH/ft	

Impedance	
Nominal Characteristic Impedance	
75 Ohm	

Return Loss (RL)	
Frequency [MHz]	Minimum Return (RL)
5-216 MHz	27 dB

217-850 MHz	23 dB
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High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.3 dB/100ft
3.6 MHz	0.5 dB/100ft
10 MHz	0.8 dB/100ft
71.5 MHz	2 dB/100ft
135 MHz	3.5 dB/100ft
270 MHz	4.3 dB/100ft
360 MHz	5 dB/100ft
540 MHz	6.2 dB/100ft
720 MHz	7.2 dB/100ft
750 MHz	7.4 dB/100ft
1000 MHz	9.1 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.54 ns/ft	66%

Voltage

Non-UL Voltage Rating	UL Voltage Rating
1700 V RMS	300 V RMS

Temperature Range

UL Temp Rating:	60°C
Operating Temp Range:	-40°C To +60°C

Mechanical Characteristics

Bulk Cable Weight:	71 lbs/1000ft
Max. Pull Tension:	168 lbs
Min. Bend Radius (Continuous Flexing):	6 in
Min. Bend Radius/Minor Axis:	3 in

Standards

NEC/(UL) Compliance:	CMH
CEC/C(UL) Compliance:	CMH
RG Type:	59
Series Type:	59

Applicable Environmental and Other Programs

Environmental Space:	Indoor/Outdoor
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Suitability

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

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 UL Loading, VW-1
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Put-Up Type	Length	UPC
9231 008500	Gray	Reel	500 ft	612825356059
9231 0081000	Gray	Reel	1,000 ft	612825356066

Footnote:	C - CRATE REEL PUT-UP.
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History

Update and Revision:	Revision Number: 0.316 Revision Date: 12-15-2021
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