

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
-------------	-------

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
---------------	----

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.
-----------	------------------------

History

Update and Revision:	Revision Number: 0.315 Revision Date: 09-10-2021
----------------------	--

© 2021 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.