

Product: [88281](#) 

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



Product Description

20 AWG solid .032" bare copper conductor, plenum, FEP insulation, tinned copper braid shields (95% coverage), fluorocopolymer jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor				
AWG	Stranding	Material	Nominal Diameter	No. of Coax
20	Solid	BC - Bare Copper	0.032 in	1
Conductor Count:				1

Insulation	
Material	Nominal Diameter
FEP - Fluorinated Ethylene Propylene	0.185 in

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

Outer Jacket Material	
Material	Nominal Diameter
PVDF - Polyvinylidene Fluoride	0.271 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	
19 pF/ft	

Inductance	
Nominal Inductance	
0.125 µH/ft	

Impedance	
Nominal Characteristic Impedance	
75 Ohm	

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

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.2 dB/100ft
3.6 MHz	0.5 dB/100ft
10 MHz	0.8 dB/100ft
71.5 MHz	2.3 dB/100ft
135 MHz	3.3 dB/100ft
270 MHz	5.1 dB/100ft
360 MHz	6.1 dB/100ft
540 MHz	8 dB/100ft
720 MHz	9.7 dB/100ft
750 MHz	10 dB/100ft
1000 MHz	12.3 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.43 ns/ft	70 %

Voltage

Non-UL Voltage Rating	UL Voltage Rating
2900 V RMS	300 V RMS

Temperature Range

UL Temp Rating:	150°C
Operating Temp Range:	-20°C To +150°C

Mechanical Characteristics

Bulk Cable Weight:	82 lbs/1000ft
Max Recommended Pulling Tension:	168 lbs
Min Bend Radius/Minor Axis:	2.75 in

Standards

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
RG Type:	59/U Type

Applicable Environmental and Other Programs

Environmental Space:	Outdoor - Direct Burial
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
MII Order #39 (China RoHS):	Yes

Suitability

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

Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

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Plenum (Y/N):	Yes
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Part Number

Non-Plenum Number:	8281
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Variants

Item #	Color	Putup Type	Length	UPC
88281 010500	Black	Reel	500 ft	612825218302
88281 0101000	Black	Reel	1,000 ft	612825216964

Footnote:	C - CRATE REEL PUT-UP.
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History

Update and Revision:	Revision Number: 0.275 Revision Date: 04-28-2020
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