

**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:

#### Insulation

Material	Nominal Diameter
FEP - Fluorinated Ethylene Propylene	0.185 in

#### Outer Shield Material

Type	Layer	Material	Coverage [%]
Braid	1	Tinned Copper (TC)	95%
Braid	2	Tinned Copper (TC)	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. Pull Tension:	168 lbs
Min Bend Radius/Minor Axis:	2.75 in

## Standards

NEC/(UL) Compliance:	CMP
CEC/C(UL) Compliance:	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

Plenum (Y/N): Yes

**Part Number**

Non-Plenum Number: 8281

**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.

**History**

Update and Revision: Revision Number: 0.309 Revision Date: 09-30-2020

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