

88281 Coax - Double Braided RG-59/U Type

For more Information
please call

1-800-Belden1

**General Description:**

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

Physical Characteristics (Overall)**Conductor**

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	20	Solid	BC - Bare Copper	.032

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
FEP - Fluorinated Ethylene Propylene	.185

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
PVDF - Fluorocopolymer

Overall Cable

Overall Nominal Diameter: 0.271 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +150°C
UL Temperature Rating:	150°C
Bulk Cable Weight:	82 lbs/1000 ft.
Max. Recommended Pulling Tension:	168 lbs.
Min. Bend Radius/Minor Axis:	2.750 in.

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
EU Directive 2011/65/EU (RoHS II):	Yes
EU CE Mark:	No
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MIL Order #39 (China RoHS):	Yes
RG Type:	59/U

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Flame Test

UL Flame Test: NFPA 262

Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes

Suitability - Aerial: Yes - When supported by a messenger wire

Suitability - Burial: Yes

Plenum/Non-Plenum

Plenum (Y/N): Yes

Non-Plenum Number: 8281

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

75

Nom. Inductance:

Inductance (µH/ft)

.125

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

19.0

Nominal Velocity of Propagation:

VP (%)

70

Nominal Delay:

Delay (ns/ft)

1.43

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	.2
3.6	.5
10.0	.8
71.5	2.3
135	3.3
270	5.1
360	6.1
540	8.0
720	9.7
750	10.0
1000	12.3

Max. Operating Voltage - UL:

Voltage

300 V RMS

Max. Operating Voltage - Non-UL:

Voltage

2900 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 +/- 1.5 Ohms

Other Electrical Characteristic 2: Return Loss Tested in Accordance with ASTM D-4566 Paragraph 45.3, using a 75 Ohm Fixed Bridge and Termination.

Minimum Return Loss:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
		5	216	27

Sweep Test



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Sweep Testing: 100% sweep tested 5 MHz to 216 MHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
88281 0101000	1,000 FT	86.000 LB	BLACK	C	#20 FEP BRD BRD SLF COAX
88281 010500	500 FT	44.500 LB	BLACK	C	#20 FEP BRD BRD SLF COAX

Notes:
C = CRATE REEL PUT-UP.

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