

8281 Coax - Double Braided RG-59/U Type

For more Information
please call

1-800-Belden1

**General Description:**

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

Physical Characteristics (Overall)**Conductor**

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	20	Solid	BC - Bare Copper	0.7874

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
PE - Polyethylene	5.0292

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
PE - Polyethylene

Overall Cable

Overall Nominal Diameter: 7.747 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-55°C To +80°C
Non-UL Temperature Rating:	80°C
Bulk Cable Weight:	102.686 Kg/Km
Max. Recommended Pulling Tension:	747.298 N
Min. Bend Radius/Minor Axis:	76.200 mm

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

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):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes

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EU Directive 2003/11/EC (BFR):	Yes
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CA Prop 65 (CJ for Wire & Cable):	Yes
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MII Order #39 (China RoHS):	Yes
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RG Type:	59/U
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Plenum/Non-Plenum

Plenum (Y/N):	No
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Plenum Number:	88281
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Electrical Characteristics (Overall)**Nom. Characteristic Impedance:**

Impedance (Ohm)
75

Nom. Inductance:

Inductance (μH/m)
0.429811

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
68.901

Nominal Velocity of Propagation:

VP (%)
66

Nominal Delay:

Delay (ns/m)
5.05274

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
32.4819

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
3.6091

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1	0.9843
3.6	1.6405
10.0	2.6248
71.5	6.8901
135	9.843
270	14.1083
360	16.7331
540	20.6703
720	24.2794
750	24.9356
1000	30.1852

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 Structural Return Loss:

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

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217	850	23
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Sweep Test

Sweep Testing:

100% Sweep tested 5MHz to 850MHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8281 0021000	1,000 FT	73.000 LB	RED	C	75 OHM VIDEO COAX
8281 002500	500 FT	37.500 LB	RED	C	75 OHM VIDEO COAX
8281 0031000	1,000 FT	73.000 LB	ORANGE	C	75 OHM VIDEO COAX
8281 0041000	1,000 FT	73.000 LB	YELLOW	C	75 OHM VIDEO COAX
8281 0051000	1,000 FT	73.000 LB	GREEN, DARK	C	75 OHM VIDEO COAX
8281 0061000	1,000 FT	73.000 LB	BLUE, LIGHT	C	75 OHM VIDEO COAX
8281 006500	500 FT	37.500 LB	BLUE, LIGHT		75 OHM VIDEO COAX
8281 0091000	1,000 FT	73.000 LB	WHITE	C	75 OHM VIDEO COAX
8281 0101000	1,000 FT	73.000 LB	BLACK	C	75 OHM VIDEO COAX
8281 010500	500 FT	37.500 LB	BLACK	C	75 OHM VIDEO COAX
8281 0105000	5,000 FT	380.000 LB	BLACK	C Z	75 OHM VIDEO COAX

Notes:

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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