# **Detailed Specifications & Technical Data**

## **ENGLISH MEASUREMENT VERSION**



## 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.

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## **Physical Characteristics (Overall)**

## Conductor

AWG:

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

**Total Number of Conductors:** 

#### 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
MII 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:	
<b>VP (%)</b>	

Nominal Delay: Delay (ns/ft)

1.43
Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

Nominal Outer Shield DC Resistance:
DCR @ 20°C (Ohm/1000 ft)

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:

ı	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	С	#20 FEP BRD BRD SLF COAX
88281 010500	500 FT	44.500 LB	BLACK	С	#20 FEP BRD BRD SLF COAX

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 09-20-2012

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