

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

88281 Coax - Double Braided RG-59/U Type

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
----------	------

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
-----	------

88281 Coax - Double Braided RG-59/U Type

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

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.

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

© 2013 Belden, Inc
 All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.