

8281F Coax - Double Braided RG-59/U Type

For more Information
please call

1-800-Belden1

**General Description:**

22 AWG stranded (7x29) .031" bare compacted copper conductor, polyethylene insulation, tinned copper/bare copper double braid shield (95% coverage), PVC jacket.

Physical Characteristics (Overall)**Conductor**

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	22	7x29	BCC - Bare Compacted Copper	0.7874

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
PE - Polyethylene	4.9022

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
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 7.722 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +60°C
Non-UL Temperature Rating:	60°C
Bulk Cable Weight:	93.757 Kg/Km
Max. Recommended Pulling Tension:	480.406 N
Min. Bend Radius/Minor Axis:	76.200 mm
Min. Flexing Radius:	11.430 cm

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
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

Suitability

Suitability - Indoor: Yes

8281F Coax - Double Braided RG-59/U Type

Plenum/Non-Plenum

Plenum (Y/N):

No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

75

Nom. Inductance:

Inductance (µH/m)

0.387158

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)

40.0282

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

5.5777

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1	0.9843
3.6	1.6405
10.0	2.9529
71.5	8.2025
135	11.8116
270	16.7331
360	19.686
540	24.2794
720	28.5447
750	29.2009
1000	34.4505

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.

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
217	830	23

Sweep Test

Sweep Testing:

100% sweep tested. 5 MHz to 850 MHz.

Notes (Overall)

Notes: Compacted copper combines the Impedance uniformity of solid conductors and the "nick-resistance" of stranded conductors.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8281F G7V1000	305 MT	29.484 KG	RED, MATTE	C	#21H PE DBLB PVC
8281F G7W1000	305 MT	29.484 KG	GREEN, MATTE	C	#21H PE DBLB PVC
8281F G7X1000	305 MT	29.484 KG	BLUE, MATTE	C	#21H PE DBLB PVC
8281F J5C1000	305 MT	29.484 KG	BLACK, VIVID MATTE	C	#21H PE DBLB PVC
8281F J5C500	152 MT	15.876 KG	BLACK, VIVID MATTE		#21H PE DBLB PVC

METRIC MEASUREMENT VERSION

8281F Coax - Double Braided RG-59/U Type

8281F U901000	305 MT	29.484 KG	GRAY, MATTE	C	#21H PE DBLB PVC
---------------	--------	-----------	-------------	---	------------------

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 04-30-2013

© 2014 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.