



For more Information  
please call

1-800-Belden1



## General Description:

RG-59/U type, 20 AWG solid .032" bare copper conductors, gas-injected foam HDPE insulation, Duofoil® + tinned copper braid shield (95% coverage), overall PVC jacket.

## Physical Characteristics (Overall)

### Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
10	20	Solid	BC - Bare Copper	0.8128

Total Number of Conductors: 10

### Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FHDPE - Foam High Density Polyethylene	3.683

### Inner Shield

Inner Shield Material:

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

### Inner Jacket

Inner Jacket Material:

Inner Jacket Material	Nom. Dia. (mm)
PVC - Polyvinyl Chloride	5.918

Inner Jacket Color Code Chart:

Number	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow
6	Brown
7	Orange
8	Gray
9	Purple
10	Black

### Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

### Overall Cable

Overall Nominal Diameter: 29.616 mm

## Mechanical Characteristics (Overall)

Operating Temperature Range:	-35°C To +75°C
UL Temperature Rating:	60°C
Non-UL Temperature Rating:	75°C
Bulk Cable Weight:	825.951 Kg/Km
Max. Recommended Pulling Tension:	3202.700 N
Min. Bend Radius/Minor Axis:	298.450 mm

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
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
MII Order #39 (China RoHS):	Yes
RG Type:	59/U

### Flame Test

UL Flame Test:	UL1666 Vertical Shaft
----------------	-----------------------

### Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

### Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

75

### Nom. Inductance:

Inductance (µH/m)

0.351067

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

53.1522

### Nominal Velocity of Propagation:

VP (%)

83

### Nominal Delay:

Delay (ns/m)

4.00282

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

32.81

### Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/km)

12.4678

### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
1.000	0.984
3.600	1.969
10.000	2.953
71.500	6.890
135.000	8.859
270.000	12.468
360.000	14.436
540.000	18.046
720.000	20.998
750.000	21.327
1000.000	24.936
1500.000	30.841

# Detailed Specifications & Technical Data



## METRIC MEASUREMENT VERSION

7798A Coax - RG-59/U

2500.000	40.684
3000.000	45.278
4500.000	59.058

### Max. Operating Voltage - UL:

Voltage
300 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 Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5.000	1600.000	23.000
1600.000	4500.000	21.000

### Sweep Test

#### Sweep Testing:

Sweep tested 5 MHz to 4.5 GHz.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7798A B591000	305 MT	283.497 KG	BLACK, MATTE	C	10 #20 PE/GIFHDPE SH FRPVC PVC
7798A B59500	152 MT	144.016 KG	BLACK, MATTE	C	10 #20 PE/GIFHDPE SH FRPVC PVC

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2    Revision Date: 05-06-2013

© 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. Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.