

For more Information  
please call

1-800-Belden1



## Description:

Series 59, 20 AWG solid .032" bare copper-covered steel conductor, gas-injected foam polyethylene insulation, Duobond® II (100% coverage) plus an aluminum braid (40% coverage), PVC jacket.

## Physical Characteristics (Overall)

### Conductor

#### AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	20	Solid	BCCS - Bare Copper Covered Steel	0.8128

### Insulation

#### Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FPE - Foam Polyethylene	3.6576

### Outer Shield

#### Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	AL - Aluminum	40

### Outer Jacket

#### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

### Overall Cable

Overall Nominal Diameter: 6.020 mm

## Mechanical Characteristics (Overall)

Operating Temperature Range: -40°C To +80°C

UL Temperature Rating: 80°C

Bulk Cable Weight: 29.764 Kg/Km

Max. Recommended Pulling Tension: 355.856 N

Min. Bend Radius (Install)/Minor Axis: 63.500 mm

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC/(UL) Specification: CM, CATV

CEC/C(UL) Specification: CM

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

PMSHA Specification: P-MSHA-SC-182/4

Series Type: Series 59

## Flame Test

UL Flame Test: UL1685 UL Loading

## Plenum/Non-Plenum

Plenum (Y/N): No

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)	Tolerance (Ohms)
75	± 3

### Nom. Inductance:

Inductance (µH/m)
0.318257

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
53.1522

### Nominal Velocity of Propagation:

VP (%)
83

### Nominal Delay:

Delay (ns/m)
3.9372

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
146.005

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
55.777

### Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
5	2.92009
55	6.39795
211	11.7788
270	13.2881
300	14.0099
350	15.2238
400	16.0113
450	17.3893
550	19.3579
750	22.8358
870	24.7387
1000	26.5433

### Max. Operating Voltage - UL:

Voltage
300 V RMS

### Minimum Return Loss:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
		5	1000	20

## Notes (Overall)

**Notes:** Sweep tested 5 MHz to 1 GHz.

## Related Documents:

No related documents are available for this product

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9100 009U1000	305 MT	9.979 KG	WHITE		#20 GIFHDLDPPE SH FRPVC
9100 010U1000	305 MT	9.979 KG	BLACK		#20 GIFHDLDPPE SH FRPVC
9100 010U500	152 MT	5.443 KG	BLACK		#20 GIFHDLDPPE SH FRPVC
9100 0101000	305 MT	10.886 KG	BLACK		#20 GIFHDLDPPE SH FRPVC

Revision Number: 1    Revision Date: 04-25-2008

© 2012 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.