

# Detailed Specifications & Technical Data



ENGLISH MEASUREMENT VERSION

82108 Coax - CATV Cable



For more Information  
please call

1-800-Belden1



## General Description:

Series 59, 20 AWG solid .032" bare copper-covered steel conductor, plenum, foam FEP insulation, Duofoil® (100% coverage) + TC braid shield (95% coverage), Flamarrest® jacket.

## Physical Characteristics (Overall)

### Conductor

AWG:

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

Total Number of Conductors: 1

### Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Teflon®	FFEP - Foam Fluorinated Ethylene Propylene	.140

### Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Duofoil®	Tape	Aluminum Foil-Polyester Tape	100.000
2		Braid	TC - Tinned Copper	95.000

### Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Flamarrest®	LS PVC - Low Smoke Polyvinyl Chloride

### Overall Cable

Overall Nominal Diameter: 0.202 in.

## Mechanical Characteristics (Overall)

Operating Temperature Range: 0°C To +75°C

Non-UL Temperature Rating: 75°C

Bulk Cable Weight: 32 lbs/1000 ft.

Max. Recommended Pulling Tension: 100 lbs.

Min. Bend Radius/Minor Axis: 2 in.

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

NEC(UL) Specification: CMP, CATVP

CEC/C(UL) Specification: CMP, CXC

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

Series Type: Series 59

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## Flame Test

UL Flame Test: NFPA 262

CSA Flame Test: FT4, FT6

## Plenum/Non-Plenum

Plenum (Y/N): Yes

## Electrical Characteristics (Overall)

### Nom. Characteristic Impedance:

Impedance (Ohm)

75

### Nom. Inductance:

Inductance (µH/ft)

.09

### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

16.5

### Nominal Velocity of Propagation:

VP (%)

82

### Nominal Delay:

Delay (ns/ft)

1.24

### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

26.0

### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

2.6

### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
10	.8
50	1.8
100	2.6
200	3.7
400	5.4
700	7.3
900	8.4
1000	8.9

### Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
10	.92
50	2.1
100	2.9
200	4.2
400	5.9
700	7.9
900	9.0
1000	9.4

### Max. Operating Voltage - UL:

Voltage

300 V RMS

Other Electrical Characteristic 1:

Max Attenuation 10 MHz and above =  $0.2856 \cdot \text{Freq}(\text{MHz})^{0.5065}$

### Minimum Structural Return Loss:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
		10	400	20

## Sweep Test

Sweep Testing: 10 - 400 MHz

## Misc. Information (Overall)

### Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

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## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
82108 877U1000	1,000 FT	34.000 LB	NATURAL		#20 FFEP RG 59/U FLRST
82108 8771000	1,000 FT	34.000 LB	NATURAL	C	#20 FFEP RG-59/U FLRST

**Notes:**

C = CRATE REEL PUT-UP.

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