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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

### Flame Test

UL Flame Test:	NFPA 262
CSA Flame Test:	FT4, FT6

### Plenum/Non-Plenum

Plenum (Y/N):	Yes
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### 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
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### 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.

**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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