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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), Flam arrest® jacket.

Physical Characteristics (Overall)

Conductor

AWG:

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

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (mm)
Teflon®	FFEP - Foam Fluorinated Ethylene Propylene	3.556

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
Flam arrest®	LS PVC - Low Smoke Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter: 5.131 mm

Mechanical Characteristics (Overall)

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

Non-UL Temperature Rating: 75°C

Bulk Cable Weight: 47.622 Kg/Km

Max. Recommended Pulling Tension: 444.820 N

Min. Bend Radius/Minor Axis: 50.800 mm

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

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

75

Nom. Inductance:

Inductance (µH/m)

0.29529

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

54.1365

Nominal Velocity of Propagation:

VP (%)

82

Nominal Delay:

Delay (ns/m)

4.06844

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

85.306

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

8.5306

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
10	2.6248
50	5.9058
100	8.5306
200	12.1397
400	17.7174
700	23.9513
900	27.5604
1000	29.2009

Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
10	3.01852
50	6.8901
100	9.5149
200	13.7802
400	19.3579

METRIC MEASUREMENT VERSION

82108 Coax - CATV Cable

700	25.9199
900	29.529
1000	30.8414

Max. Operating Voltage - UL:

Voltage
300 V RMS

Other Electrical Characteristic 1: Max Attenuation 10 MHz and above = $0.2856 * \text{Freq}(\text{MHz})^{0.5065}$

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.

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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