

For more Information
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1-800-Belden1



General Description:

20 AWG solid .032" bare copper conductor, plenum, FEP insulation, tinned copper braid shields (95% coverage), fluorocopolymer jacket.

Physical Characteristics (Overall)

Conductor

AWG:

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

Total Number of Conductors: 1

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
FEP - Fluorinated Ethylene Propylene	4.699

Outer Shield

Outer Shield Material:

Layer #	Type	Outer Shield Material	Coverage (%)
1	Braid	TC - Tinned Copper	95.000
2	Braid	TC - Tinned Copper	95.000

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVDF - Fluorocopolymer

Overall Cable

Overall Nominal Diameter: 6.883 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +150°C

UL Temperature Rating: 150°C

Bulk Cable Weight: 122.032 Kg/Km

Max. Recommended Pulling Tension: 747.298 N

Min. Bend Radius/Minor Axis: 69.850 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

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

Flame Test

UL Flame Test: NFPA 262

Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes

Suitability - Aerial: Yes - When supported by a messenger wire

Suitability - Burial: Yes

Plenum/Non-Plenum

Plenum (Y/N): Yes

Non-Plenum Number: 8281

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

75

Nom. Inductance:

Inductance (µH/m)

0.410125

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)

62.339

Nominal Velocity of Propagation:

VP (%)

70

Nominal Delay:

Delay (ns/m)

4.69183

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

32.4819

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

3.6091

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100m)

1	0.6562
3.6	1.6405
10.0	2.6248
71.5	7.5463
135	10.8273
270	16.7331
360	20.0141
540	26.248
720	31.8257
750	32.81

METRIC MEASUREMENT VERSION

88281 Coax - Double Braided RG-59/U Type

1000	40.3563
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Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Operating Voltage - Non-UL:

Voltage
2900 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. 75 +/- 1.5 Ohms

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:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
		5	216	27

Sweep Test

Sweep Testing: 100% sweep tested 5 MHz to 216 MHz.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
88281 0101000	305 MT	39.009 KG	BLACK	C	#20 FEP BRD BRD SLF COAX
88281 010500	152 MT	20.185 KG	BLACK	C	#20 FEP BRD BRD SLF COAX

Notes:

C = CRATE REEL PUT-UP.

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