Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



88281 Coax - Double Braided RG-59/U Type

For more Information please call

1-800-Belden1



General Description:

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

1

Physical Characteristics (Overall)

Conductor

AWG:

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

Total Number of Conductors:

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

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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:



Nom. Inductance:



Nom. Capacitance Conductor to Shield:



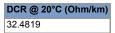
Nominal Velocity of Propagation:



Nominal Delay:



Nom. Conductor DC Resistance:



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

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1000 40.3563

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:

DescriptionFreq. (MHz)Start Freq. (MHz)Stop Freq. (MHz)Min. RL (dB)521627

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	С	#20 FEP BRD BRD SLF COAX
88281 010500	152 MT	20.185 KG	BLACK	С	#20 FEP BRD BRD SLF COAX

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 09-20-2012

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