Belden

Product: 84303



50 Ohm Coax, RG303, 19 AWG Solid SCCCS, SCC Braid, FEP Jacket, CL2P

Product Description

RG-303/U, 19 AWG solid .037" silver-coated copper-covered steel conductor, plenum, TFE insulation, silver-coated copper braid shield (95% coverage), FEP jacket, commercial non-QPL product.

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
19	Solid	SCCS - Silvered Copper Covered Steel	0.037 in	1

Conductor Count:	1

Insulation

Material	Material Trade Name	Nominal Diameter
PTFE - Polytetrafluoroethylene	Teflon®	0.116 in

Outer Shield

Type	Layer	Material	Coverage [%]
Braid	1	Silvered Copper (SC)	95%

Outer Jacket

Material	Nominal Diameter
FEP - Fluorinated Ethylene Propylene	0.17 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Conductor DCR Conductor Resistance	Nominal Outer Shield DCR	Outer Conductor DCR
16.3 Ohm/1000ft	16.3 Ohm/1000ft	4.3 Ohm/1000ft	4.3 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
29 pF/ft

Inductance

Nominal Inductance
0.067 µH/ft

Impedance

Nominal Characteristic Impedance
50 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.3 dB/100ft
10 MHz	1.1 dB/100ft
50 MHz	2.7 dB/100ft

100 MHz	3.9 dB/100ft
200 MHz	5.6 dB/100ft
400 MHz	8.2 dB/100ft
700 MHz	11 dB/100ft
900 MHz	12.5 dB/100ft
1000 MHz	13.5 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.46 ns/ft	70%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)
50 MHz	2.7 dB/100ft
400 MHz	8.6 dB/100ft
1000 MHz	15 dB/100ft
3000 MHz	28 dB/100ft

Voltage

Description	UL Voltage Rating	Voltage Rating [V]
MIL	150 V RMS	1400 V RMS (Mil Spec)

VSWR

Frequency [MHz]	Max. VSWR
50 MHz - 1000 MHz	per M17/111-RG303

Temperature Range

UL Temperature Rating:	200°C
Operating Temperature Range:	-70°C To +200°C

Mechanical Characteristics

Bulk Cable Weight:	30 lbs/1000ft
Maximum Recommended Pulling Tension:	112 lbs
Minimum Minor Axis Bend Radius:	2 in

Standards

NEC/(UL) Compliance:	CL2P
RG Type:	303
Military Compliance:	Commercial, non-QPL product (M17/111-RG303)
Qualified Products List:	No

Applicable Environmental and Other Programs

Environmental Space:	Outdoor - Aerial
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	Yes - When supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	No

Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
UL voltage rating:	150 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
84303 0011000	Brown	Reel	1,000 ft	612825206996

Footnote:	C - CRATE REEL PUT-UP., E - MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'.

History

Update and Revision:	Revision Number: 0.363 Revision Date: 02-20-2026

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