



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

Mechanical Characteristics

Bulk Cable Weight:	30 lbs/1000ft
Max. Pull Tension:	112 lbs
Min. Bend Radius/Minor Axis:	2 in

Standards

NEC/(UL) Compliance:	CL2P
RG Type:	303
Military Compliance:	Commercial, non-QPL product (M17/111-RG303)
Qualified Products List (QPL):	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
MIL 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 001500	Brown	Reel	500 ft	612825207009
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: 0.362 Revision Date: 02-03-2025
----------------------	--

© 2025 Belden, Inc
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.