



Product: [3094A](#)

ControlBus™, Coax RG11, #14 Sol BCCS, PO Ins, QUAD AL Shld, PVC Jkt, CMR

Request Sample

Product Description

ControlBus™, Coax RG11 14AWG (Solid) Bare Copper Covered Steel, PO Insulation, Overall Duofoil®+ Aluminum Braid(60%)+Overall Duofoil®+Aluminum Braid(40%) Shield, PVC Outer Jacket, CMR

Technical Specifications

Product Overview

Suitable Applications:	harsh environment, factory automation, ControlNet™, Modbus II, Industrial Coax, Belden ControlNet cables provide maximum signal integrity and run length exceeding the high-speed, time-critical requirements necessary for ControlNet factory floor applications
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
14	Solid	BCCS - Bare Copper Covered Steel	0.064 in	1

Conductor Count: 1

Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.28 in

Table Notes: Gas Injected

Color Chart

Number
Pair
Ground

Inner Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.407 in

Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly / Alum	Bonded Duofoil®	100.0%
Braid	2	Aluminum		60.0%
Tape	3	Alum / Poly / Alum	Duofoil®	100%
Braid	4	Aluminum		40%

Table Notes:	Tape is bonded to dielectric
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Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.0407 in
	0.407 in

Construction and Dimensions

A armor

Type of Armor	Material
Interlocked Armor	Aluminum

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR
11 Ohm/1000ft	1.5 Ohm/1000ft	1.5 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16.2 pF/ft

Inductance

Nominal Inductance
0.097 μ H/ft

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance
75 Ohm	$\pm$ 3 Ohm

Return Loss (RL)

Frequency [MHz]	Min. Structural Return Loss (SRL)
5-400 MHz	20 dB

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz MHz	0.16 dB/100ft
2 MHz MHz	0.18 dB/100ft
5 MHz MHz	0.26 dB/100ft
10 MHz MHz	0.38 dB/100ft
20 MHz MHz	0.55 dB/100ft
50 MHz MHz	0.83 dB/100ft
100 MHz MHz	1.17 dB/100ft
200 MHz MHz	1.60 dB/100ft
300 MHz MHz	1.99 dB/100ft
400 MHz MHz	2.30 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.24 ns/ft	82.0%

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)
1 MHz	0.33 dB/100ft
2 MHz	0.35 dB/100ft
5 MHz	0.44 dB/100ft
10 MHz	0.66 dB/100ft
20 MHz	0.78 dB/100ft
50 MHz	0.99 dB/100ft
100 MHz	1.32 dB/100ft
200 MHz	1.87 dB/100ft
300 MHz	2.29 dB/100ft
400 MHz	2.64 dB/100ft

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

UL Temp Rating:	75°C
Operating Temp Range:	-40°C To 75°C

Mechanical Characteristics

Bulk Cable Weight:	59 lbs/1000ft
Max. Pull Tension:	40 lbs
Min Bend Radius/Minor Axis:	4.25 in

Standards

NEC Articles:	Article 725, Article 800
NEC/(UL) Compliance:	CL2R, CMR
CEC/C(UL) Compliance:	CMG
RG Type:	11/U Type

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU RoHS Compliance Date (yyyy-mm-dd):	2012-01-01
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:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL 1666 Riser
CSA Flammability:	FT4
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	3095A

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
3094A F2V500	Gray, DEC	Reel	500 ft	612825141525
3094A F2V1000	Gray, DEC	Reel	1,000 ft	612825141501
3094A F2V2000	Gray, DEC	Reel	2,000 ft	612825141518

Footnote:	C - CRATE REEL PUT-UP.
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Product Notes

Notes:	Tap marks every 2.6 Meters to aid users in installation.
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History

Update and Revision:	Revision Number: 0.330 Revision Date: 06-01-2020
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