



Product: [3092A](#)

ControlBus™, Coax RG6, #18 Sol BCCS, PO Ins, QUAD AL Shld, PVC Jkt, CMR

[Request Sample](#)

Product Description

ControlBus™, Coax RG6 18AWG (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
18	Solid	BCCS - Bare Copper Covered Steel	0.04 in	1

Conductor Count:	1
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Insulation

Material	Nominal Diameter
PE - Polyethylene (Foam)	0.18 in

Table Notes:	Gas Injected
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Outer Shield Material

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Alum / Poly / Alum	Bonded Duofoil®	100%
Braid	2	Aluminum		60%
Tape	3	Alum / Poly / Alum	Duofoil®	100%
Braid	4	Aluminum		40%

Outer Jacket Material

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.298 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR
28 Ohm/1000ft	3.6 Ohm/1000ft	3.6 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
16.2 pF/ft

Inductance

Nominal Inductance
0.097 μH/ft

Impedance

Nominal Characteristic Impedance

75 Ohm

Return Loss (RL)

Frequency [MHz] | Min. Structural Return Loss (SRL)

5 - 50 MHz | 23 dB

High Frequency (Nominal/Typical)

Frequency [MHz] | Nom. Insertion Loss

1 MHz | 0.35 dB/100ft

2 MHz | 0.38 dB/100ft

5 MHz | 0.45 dB/100ft

10 MHz | 0.59 dB/100ft

20 MHz | 0.86 dB/100ft

50 MHz | 1.37 dB/100ft

100 Mhz MHz | 1.97 dB/100ft

200 Mhz MHz | 2.82 dB/100ft

300 MHz MHz | 3.48 dB/100ft

400 Mhz MHz | 4.04 dB/100ft

Delay

Nominal Delay | Nominal Velocity of Propagation (VP) [%]

1.22 ns/ft | 83.0%

High Freq

Min. SRL (Structural Return Loss)

23 dB

Voltage

UL Voltage Rating

300 V RMS

Temperature Range

UL Temp Rating: 75°C

Operating Temp Range: -30°C To +75°C

Mechanical Characteristics

Bulk Cable Weight: 34 lbs/1000ft

Max. Pull Tension: 117 lbs

Min Bend Radius/Minor Axis: 3 in

Standards

NEC/(UL) Compliance: CMR, CL2R, CMG

CEC/C(UL) Compliance: CMG

CPR Euroclass: Eca

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2003/96/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 CE Mark: Yes

EU RoHS Compliance Date (yyyy-mm-dd): 2004-01-01

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, LSOH, Toxicity Testing

UL Flammability:	UL 1666 Vertical Shaft
IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	3093A

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
3092A 010500	Black	Reel	500 ft	612825141372
3092A 0101000	Black	Reel	1,000 ft	612825141334
3092A 0102000	Black	Reel	2,000 ft	612825141358
3092A 0105000	Black	Reel	5,000 ft	612825141389
3092A 01010000	Black	Reel	10,000 ft	612825141341
3092A X7E500	Blue X7E	Reel	500 ft	612825141303
3092A X7E1000	Blue X7E	Reel	1,000 ft	612825141280
3092A X7E5000	Blue X7E	Reel	5,000 ft	612825141310

Footnote:	C - CRATE REEL PUT-UP.
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History

Update and Revision:	Revision Number: 0.314 Revision Date: 04-28-2020
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