Product: 123092A

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

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 Inner Jacket, Aluminum Interlock Armor, PVC Outer Jacket, CM

Technical Specifications

Product Overview

Suitable Applications:	Exposure to rodent, crush, or cut through force, 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

Construction Details

RG Type:	6

Conductor

Element	Size	Stranding	Nom. Diameter	Material
Coax(es)	18 AWG	Solid	0.0403 in	BCCS - Bare Copper Covered Steel

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	0.178 in (4.52 mm)	White

Inner Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.298 in (7.57 mm)

Outer Shield

Layer	Outer Shield Type	Material	Material Trade Name	Coverage
1	Tape	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
2	Braid	Aluminum		60%
3	Tape	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
4	Braid	Aluminum		40%

Armor

Armor Type & Material	Armor Thickness	Diameter Over Armor
AIA - Aluminum Interlock Armor	0.025 in (0.64 mm)	0.501 in (12.7 mm)

Outer Jacket

Material	Nom. Diameter
PVC - Polyvinyl Chloride	0.591 in (15.0 mm)

Overall Cable Diameter (Nominal):	0.591 in (15.0 mm)

Electrical Characteristics

Return Loss (RL)

Frequency	Min. Structural Return Loss
5 MHz - 50 MHz	23 dB

Attenuation

Frequency	Nom. Attenuation
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	1.97 dB/100ft
200 MHz	2.82 dB/100ft
300 MHz	3.48 dB/100ft
400 MHz	4.04 dB/100ft

Electricals

Nom. Conductor DCR	Nom. Outer Shield DCR	Nom. Capacitance Cond-to-Shield	Nom. Characteristic Impedance	Nom. Velocity of Prop.
28 Ohm/1000ft (92 Ohm/km)	3.6 Ohm/1000ft (12 Ohm/km)	16.2 pF/ft (53.1 pF/m)	75 Ohm	82%

Voltage

UL Voltage Rating
300 V

Electrical Characteristics Notes:	SRL Minimum 23dB (5MHz - 50MHz)

Mechanical Characteristics

Temperature

UL Temperature	Operating
75°C	-40°C To +75°C

Bend Radius

Stationary Min.	Installation Min.
4 in (100 mm)	2.5 in (64 mm)

Max. Pull Tension:	200 lbs (91 kg)
Bulk Cable Weight:	142 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor (Not Riser or Plenum), Indoor, Outdoor, Sunlight Resistance
Flammability / Reaction to Fire:	UL1685 UL Loading, FT4, 1202
CPR Compliance:	CPR Euroclass: Eca
NEC / UL Compliance:	Article 800, CL2, CM
CEC / C(UL) Compliance:	CMG, HL
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
UK Regulation Compliance:	UKCA Mark
APAC Compliance:	China RoHS II (GB/T 26572-2011)

Product Notes

Notes:	ControlNet is a ControlNet International trademark.

History

Update and Revision:	Revision Number: 0.269 Revision Date: 04-29-2024

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