

# Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



## 123092A Coax - ControlNet™ Quad Shielded Coax

For more Information  
please call

1-800-Belden1



### Description:

18 AWG solid bare copper-covered steel conductor, foam polyethylene insulation, Duobond IV® quad shield (100% coverage), PVC inner jacket, aluminum interlocked armor, PVC sunlight-resistant outer jacket.

### Usage (Overall)

**Suitable Applications:** ControlNet™, Modbus II, Industrial Coax

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	Solid	BCCS - Bare Copper Covered Steel	.040

#### Insulation

##### Insulation Material:

Insulation Material	Dia. (in.)
FPE - Foam Polyethylene	.180

#### Inner Jacket

##### Inner Jacket Material:

Inner Jacket Material
PVC - Polyvinyl Chloride

#### Outer Shield

##### Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	AL - Aluminum	60
3	Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100
4		Braid	AL - Aluminum	40

#### Outer Jacket

##### Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

#### Armor

**Armor Type:** Interlocking

**Armor Material:** Aluminum

**Diameter over Armor:** .49

#### Overall Cable

**Overall Nominal Diameter:** 0.600 in.

### Mechanical Characteristics (Overall)

**Operating Temperature Range:** -40°C To +75°C

**Bulk Cable Weight:** 142 lbs/1000 ft.

**Max. Recommended Pulling Tension:** 162 lbs.

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Min. Bend Radius (Install)/Minor Axis: 7.300 in.

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
CEC/C(UL) Specification:	CMG, HL
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
RG Type:	6/U

#### Flame Test

UL Flame Test:	UL1685 FT4 Loading
CSA Flame Test:	FT4

#### Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

#### Plenum/Non-Plenum

Plenum (Y/N):	No
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### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)
75

#### Nom. Inductance:

Inductance (µH/ft)
.097

#### Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.2

#### Nominal Velocity of Propagation:

VP (%)
82

#### Nominal Delay:

Delay (ns/ft)
1.28

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
28.0

#### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
3.6

#### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	.35
2	.38
5	.45

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10	.59
20	.86
50	1.37
100	1.97
200	2.82
300	3.48
400	4.04

### Max. Operating Voltage - UL:

<b>Voltage</b>
300 V RMS

### Minimum Structural Return Loss:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
		5	50	23

### Notes (Overall)

**Notes:** ControlNet is a ControlNet International trademark.

### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
123092A J221000	1,000 FT	150.000 LB	BLUE, STRONG		3092A ALUM ARMOR PVC
123092A J225000	5,000 FT	795.000 LB	BLUE, STRONG		3092A ALUM ARMOR PVC
123092A 0101000	1,000 FT	150.000 LB	BLACK		3092A ALUM ARMOR PVC
123092A 0102000	2,000 FT	310.000 LB	BLACK		3092A ALUM ARMOR PVC

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