# **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

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# **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

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

Total Number of Conductors:

#### Insulation

### **Insulation Material:**

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

## **Inner Jacket**

# Inner Jacket Material:

Inner Jacket Material	Nom. Dia. (in.)
PVC - Polyvinyl Chloride	0.298

### **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	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	0.045

#### **Armor**

	Armor Type:	Interlocking
	Armor Material:	Aluminum
	Diameter over Armor:	.501
Ov	erall Cable	

0.591 in.

# **Mechanical Characteristics (Overall)**

**Overall Nominal Diameter:** 

Operating Temperature Range:	-40°C To +75°C	
Bulk Cable Weight:	142 lbs/1000 ft.	

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Max. Recommended Pulling Tension:	200 lbs.					
Min. Bend Radius/Minor Axis:	7.100 in.					
Applicable Specifications and Agency Compliance (Overall)						
Applicable Standards & Environmental Progr	Applicable Standards & Environmental Programs					
NEC/(UL) Specification:	CL2, CM					
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 Vertical Tray Flame Test					
CSA Flame Test:	FT4					
Suitability						
Suitability - Indoor:	Yes					
Suitability - Outdoor:	Yes					
Sunlight Resistance:	Yes					
Plenum/Non-Plenum						
Plenum (Y/N):	No					

# **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

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2	.38
5	.45
10	.59
20	.86
50	1.37
100	1.97
200	2.82
300	3.48
400	4.04

## Max. Operating Voltage - UL:

Voltage 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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