# **Detailed Specifications & Technical Data**

#### **ENGLISH MEASUREMENT VERSION**



## 123092A Coax - ControlNet™ Quad Shielded Coax



For more Information please call

1-800-Belden1



## **General 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:

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

#### Overall Cable

Overall Nominal Diameter: 0.591 in.

## **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-40°C To +75°C
Bulk Cable Weight:	142 lbs/1000 ft.
Max. Recommended Pulling Tension:	200 lbs.
Min. Bend Radius/Minor Axis:	7.100 in.

## **Applicable Specifications and Agency Compliance (Overall)**

#### **Applicable Standards & Environmental Programs**

NEC/(UL) Specification:	CL2, CM		
EU Directive 2011/65/EU (ROHS II):	Yes		
EU Directive 2000/53/EC (ELV):	Yes		

Page 1 of 3 11-05-2015

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	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
Fla	me Test	
	UL Flame Test:	UL1685 Vertical Tray Flame Test
	UL Flame Test: CSA Flame Test:	UL1685 Vertical Tray Flame Test FT4
Sui		·
Sui	CSA Flame Test:	·
Sui	CSA Flame Test:	FT4
Sui	CSA Flame Test: tability Suitability - Indoor:	FT4 Yes
	CSA Flame Test: tability Suitability - Indoor: Suitability - Outdoor:	Yes Yes
	CSA Flame Test:  tability  Suitability - Indoor:  Suitability - Outdoor:  Sunlight Resistance:	Yes Yes

## **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Inductance:



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)

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	.35
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)

Page 2 of 3 11-05-2015

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Notes: ControlNet is a ControlNet International trademark.

#### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
123092A J221000	1,000 FT	153.000 LB	BLUE, STRONG		3092A ALUM ARMOR PVC
123092A J225000	5,000 FT	810.000 LB	BLUE, STRONG		3092A ALUM ARMOR PVC
123092A 0101000	1,000 FT	153.000 LB	BLACK		3092A ALUM ARMOR PVC
123092A 0102000	2,000 FT	316.000 LB	BLACK		3092A ALUM ARMOR PVC

Revision Number: 3 Revision Date: 08-16-2012

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Page 3 of 3 11-05-2015