

Detailed Specifications & Technical Data



123092A Coax - ControlBus®

	<p>For more information please call 1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p>
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Description:

18 AWG solid bare copper-covered steel conductor, foam polyethylene insulation, Duobond® IV quad shield, inner PVC jacket, aluminum interlocked armor, outer PVC jacket.

SUITABLE APPLICATIONS:

Suitable Applications: ControlNet™, Modbus II, Industrial Coax

PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Coax	1
Total Number of Conductors	1
RG Type	6/U
AWG	18
Stranding	Solid
Conductor Diameter	.040 in.
Conductor Material	BCCS - Bare Copper Covered Steel

INSULATION:

Insulation Material	FPE - Foam Polyethylene
Insulation Diameter	.180 in.

INNER JACKET:

Inner Jacket Material	PVC - Polyvinyl Chloride
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OUTER SHIELD:

Outer Shield Material Trade Name	Duobond® IV Quad Shield
Outer Shield Type	Tape/Braid/Tape/Braid

Outer Shield Material :

Layer Number	Trade Name	Type	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

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Outer Shield % Coverage	100 %
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OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride
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ARMORING/OUTER JACKET:

ARMORING :

Armor Type	Interlocking
Armor Material	AL - Aluminum
Diameter over Armor	.51 in.

OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.62 in.
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MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-30°C To +75°C
Bulk Cable Weight	142 lbs/1000 ft.
Max. Recommended Pulling Tension	162 lbs.
Min. Bend Radius (Install)	7.3 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	CM
CEC/C(UL) Specification	CMG, HL

FLAME TEST:

UL Flame Test	UL1581 Vertical Tray
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SUITABILITY:

Suitability - Indoor	Yes
Suitability - Outdoor	Yes

PLENUM/NON-PLENUM:

Plenum (Y/N)	N
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ELECTRICAL CHARACTERISTICS:

Nom. Characteristic Impedance	75 Ohms
Nom. Inductance	.097 µH/ft
Nom. Capacitance Conductor to Shield	16.2 pF/ft
Nominal Velocity of Propagation	82 %
Nominal Delay	1.28 ns/ft
Nom. Conductor DC Resistance @ 20 Deg. C	28.0 Ohms/1000 ft
Nominal Outer Shield DC Resistance @ 20°C	3.6 Ohms/1000 ft
Minimum Structural Return Loss :	

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Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Minimum Structural Return Loss (dB)
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Nom. Attenuation :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. 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 300 V RMS

NOTES:

Notes ControlNet is a ControlNet International trademark.

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
123092A 0101000	3092A AIA PVC 300V	1000	180	BLACK	C 9

C = CRATE REEL PUT-UP.

9 = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 5% FROM LENGTH SHOWN.

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