

## 3083A Paired - DeviceBus® for ODVA DeviceNet<sup>TM</sup>





For more information please call
1-800-Belden1

See Put-ups and Colors

### **Description:**

15 and 18 AWG stranded tinned copper conductors, PVC insulation (power), FPE insulation (data), individually foil shielded (100% coverage) plus an overall tinned copper braid (65% coverage), CPE jacket.

#### PHYSICAL CHARACTERISTICS:

#### **CONDUCTOR:**

Number of Pairs 2
Total Number of Conductors 4

AWG:

Number of Pairs	AWG	Stranding	Conductor Material	Conductor Diameter (in.)
1	15	19x28	TC - Tinned Copper	
1	18	19x30	TC - Tinned Copper	

Stranding19x28, 19x30Conductor MaterialTC - Tinned Copper

## **INSULATION:**

Insulation Material PVC - Polyvinyl Chloride, FPE - Foam Polyethylene

Insulation Material (Multi-AWG):

AWG	Layer Number	Material Trade Name	Material	Wall Thickness (in.)	Diameter (in.)
15			PVC - Polyvinyl Chloride		
18			FPE - Foam Polyethylene		

### Pair Color Code Chart:

Number	Color	Number	Color
1 (15 AWG)	Red & Black	2 (18 AWG)	Blue & White

### **INNER SHIELD:**

Inner Shield Type Tape/Tape

Inner Shield Material:

Layer Number/Descri ption	Material Trade Name	Туре	Material	% Coverage (%)	Stranding	Conductor Material
15 AWG Pair		Tape	Aluminum Foil- Polyester Tape	100		
18 AWG Pair		1	Aluminum Foil- Polyester Tape	100		



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Inner Shield % Coverage 100 %

**OUTER SHIELD:** 

Outer Shield Type Braid

Outer Shield Material TC - Tinned Copper

Outer Shield %Coverage 65 %

**OUTER SHIELD DRAIN WIRE:** 

Outer Shield Drain Wire AWG

Outer Shield Drain Wire Stranding

19x30

Outer Shield Drain Wire Conductor Material TC - Tinned Copper

**OUTER JACKET:** 

Outer Jacket Material CPE - Chlorinated Polyethylene

**OVERALL NOMINAL DIAMETER:** 

Overall Nominal Diameter .475 in.

MECHANICAL CHARACTERISTICS:

Operating Temperature Range -30°C To +75°C

Non-UL Temperature Rating 75°C

Bulk Cable Weight 119 lbs/1000 ft.

Min. Bend Radius (Install) 4.8 in.

### APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

#### APPLICABLE STANDARDS:

Max. Recommended Pulling Tension

NEC/(UL) Specification
CEC/C(UL) Specification
CMG
EU RoHS Compliant (Y/N)
Yes
EU RoHS Compliance Date (mm/dd/yyyy): 10/13/2005
Other Specification
ODVA Class 2 Thick

190 lbs.

FLAME TEST:

UL Flame Test

UL1685 FT4 Loading

CSA Flame Test FT4

SUITABILITY:

Sunlight Resistance Yes

### **ELECTRICAL CHARACTERISTICS:**

Unaveraged Impedance:

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Unaveraged Impedance (Ohms)
18 AWG Pair Only				120



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Description	Frequency (kHz)	Start Frequency (kHz)	Nom. Capacitance Conductor to Conductor (pF/ft)
18 AWG Pair Only	1		12.0

Nominal Velocity of Propagation:

Description	Nominal Velocity of Propagation (%)
18 AWG Pair Only	75

Maximum Delay:

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Maximum Delay (ns/ft)
18 AWG Pair Only				1.36

Nom. Conductor DC Resistance @ 20 Deg. C:

Description	Nom. Conductor DC Resistance @ 20 Deg. C (Ohms/1000 ft)
15 AWG	3.6
18 AWG	6.9

Nominal Outer Shield DC Resistance @ 20 Deg. C 1.8 Ohms/1000 ft

Max. Attenuation (dB/100 ft.):

Description	Frequency (MHz)	Start Frequency (MHz)	Max. Attenuation (dB/100 ft.)
18 AWG Pair Only	.125		.13
	.500		.26
	1.00		.40

Max. Operating Voltage - UL 300 V RMS (PLTC, CMG)

Max. Recommended Current:

Description	Max. Recommended Current
15 AWG	8.0 Amps
18 AWG	5.0 Amps

#### NOTES:

Notes	Thick. Meter marks on jacket to aid users in installation. ODVA DeviceNet is an
	Open DeviceNet Vendor Association, Inc. trademark.

### **PUT-UPS AND COLORS:**

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
3083A 5601000	2 #15, 2 #18 SH CPE	1000	137	YELLOW, BRIGHT	С
3083A 5602000	2 #15, 2 #18 SH CPE	2000	278	YELLOW, BRIGHT	С

C = CRATE REEL PUT-UP.

Revision Number: 1 Revision Date: 10-09-2006

# Detailed Specifications & Technical Data



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