

## 3083A Multi-Conductor - DeviceBus® for ODVA DeviceNet™



For more Information please call

1-800-Belden1



#### **General 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.

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Physical Characteristics (Overall)	
Conductor	
AWG:	
# Pairs         AWG         Stranding         Conductor         Material           1         15         19x28         TC - Tinned Copper	
1 18 19x20 TC - Tinned Copper	
Total Number of Conductors:	4
Insulation	
Insulation Material AWG	
PVC - Polyvinyl Chloride 15	
FPE - Foam Polyethylene 18	
Inner Shield Inner Shield Material:	
Layer # Type Inner Shield Material Coverage (%	
15 AWG Pair   Tape   Aluminum Foil-Polyester Tape   100	
18 AWG Pair Tape Aluminum Foil-Polyester Tape 100	-
Outer Shield Outer Shield Material:	
Type Outer Shield Material Coverage (%)	
Braid TC - Tinned Copper 65	
Outer Shield Drain Wire AWG: AWG Stranding Drain Wire Conductor Material	
18 19x30 TC - Tinned Copper	
Outer Jacket Outer Jacket Material:	
Outer Jacket Material	
CPE - Chlorinated Polyethylene	
Overall Cable	
Overall Nominal Diameter:	12.065 mm
Pair	
Pair Color Code Chart:	
Number         Color           1 (15 AWG)         Red & Black	
2 (18 AWG) Blue & White	
Mechanical Characteristics (Overall)	
Operating Temperature Range:	-30°C To +75°C
Non-UL Temperature Rating:	75°C
Bulk Cable Weight:	177.096 Kg/Km
Max. Recommended Pulling Tension:	845.158 N
Min. Bend Radius/Minor Axis:	121.920 mm
Applicable Specifications and Agency Compliance	(Overall)
Applicable Standards & Environmental Programs	
NEC/(UL) Specification:	CMG, PLTC
CEC/C(UL) Specification:	CMG
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# **Detailed Specifications & Technical Data**



#### METRIC MEASUREMENT VERSION

## 3083A Multi-Conductor - DeviceBus® for ODVA DeviceNet™

EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/13/2005
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
Other Specification:	ODVA Class 2 Thick
Flame Test	
UL Flame Test:	UL1685 FT4 Loading
CSA Flame Test:	FT4
Suitability	
Sunlight Resistance:	Yes
lectrical Characteristics (Overall)	
Unaveraged Impedance:	
Description         Freq. (MHz)         Start Freq. (MHz)         Stop Freq. (MHz)           18 AWG Pair Only	IHz) Impedance (Ohm) 120
Nom. Capacitance Conductor to Conductor:	
Description Freq. (MHz) Start Freq. (MHz) Stop Freq. (M	IHz) Capacitance (pF/m)
18 AWG Pair Only 1	39.372
Nominal Velocity of Propagation:	
Description VP (%)	
18 AWG Pair Only 75	
Maximum Delay:	
Description         Freq. (MHz)         Start Freq. (MHz)         Stop Freq. (MHz)           18 AWG Pair Only	IHz) Delay (ns/m) 4.46216
Nom. Conductor DC Resistance:	1.402.10
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116	
Description DCR @ 20°C (Ohm/km)	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:           DCR @ 20°C (Ohm/km)	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:           DCR @ 20°C (Ohm/km)           5.9058           Max. Attenuation:	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:           DCR @ 20°C (Ohm/km)           5.9058           Max. Attenuation:           ()         Description   Freq. (MHz)	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:           DCR @ 20°C (Ohm/km)           5.9058           Max. Attenuation:           ()         Description           Freq. (MHz)           0.42653         18 AWG Pair Only	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:           DCR @ 20°C (Ohm/km)           5.9058           Max. Attenuation:           0.42653         18 AWG Pair Only           0.42653         18 AWG Pair Only           0.85306         .500	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:           DCR @ 20°C (Ohm/km)           5.9058           Wax. Attenuation:           ()         Description           0.42653         18 AWG Pair Only           0.455306         .500           1.3124         1.00	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:           DCR @ 20°C (Ohm/km)           5.9058           Wax. Attenuation:           0         Description           9.8306         .500           1.3124         1.00           Wax. Operating Voltage - UL:	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:           DCR @ 20°C (Ohm/km)           5.9058           Wax. Attenuation:           0.42653         18 AWG Pair Only           0.42653         18 AWG Pair Only           1.3124         1.00           Wax. Operating Voltage - UL:           Voltage	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:           DCR @ 20°C (Ohm/km)           5.9058           Wax. Attenuation:           0         Description           0.42653         18 AWG Pair Only           0.42653         18 AWG Pair Only           1.3124         1.00           Wax. Operating Voltage - UL:           Voltage           300 V RMS (PLTC	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:         DCR @ 20°C (Ohm/km)           5.9058         5.9058           Wax. Attenuation:         Freq. (MHz)           0.42653         18 AWG Pair Only         .125           0.85306         .500         .500           1.3124         1.00         Max. Operating Voltage - UL:           Voltage         300 V RMS (PLTC CMG)         CMS	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:         DCR @ 20°C (Ohm/km)           5.9058         5.9058           Wax. Attenuation:         Preq. (MHz)           0.42653         18 AWG Pair Only         .125           0.85306         .500         .13124         1.00           Wax. Operating Voltage - UL:         Voltage         300 V RMS (PLTC CMG)           300 V RMS (PLTC CMG)         .         .           Wax. Recommended Current:         Max. Recommended Current:         Max. Recommended Current:	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:           DCR @ 20°C (Ohm/km)           5.9058           Wax. Attenuation:           Ø.         Description         Freq. (MHz)           0.42653         18 AWG Pair Only         .125           0.85306         .500         .13124         1.00           Wax. Operating Voltage - UL:         Voltage         300 V RMS (PLTC CMG)           300 V RMS (PLTC CMG)         .         .           Wax. Recommended Current:         Description Current         Current	
Description         DCR @ 20°C (Ohm/km)           15 AWG         11.8116           18 AWG         22.6389           Nominal Outer Shield DC Resistance:         DCR @ 20°C (Ohm/km)           5.9058         5.9058           Wax. Attenuation:         Preq. (MHz)           0.42653         18 AWG Pair Only         .125           0.85306         .500         .13124         1.00           Wax. Operating Voltage - UL:         Voltage         300 V RMS (PLTC CMG)           300 V RMS (PLTC CMG)         .         .           Wax. Recommended Current:         Max. Recommended Current:         Max. Recommended Current:	

#### Notes (Overall)

Notes: Thick. Meter marks on jacket to aid users in installation. ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark. Jacket printed "1PR16" instead of "1PR15" due to UL requirements for CMG Listing.

### Put Ups and Colors:

## **Detailed Specifications & Technical Data**



#### METRIC MEASUREMENT VERSION

### 3083A Multi-Conductor - DeviceBus® for ODVA DeviceNet™

No put ups and colors are available for this product

Revision Number: 3 Revision Date: 04-06-2010

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