Detailed Specifications & Technical Data



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.

Physical Characteristics (Overall) Conductor	
AWG:	
# Pairs AWG Stranding Conductor Material	
1 15 19x28 TC - Tinned Copper	
1 18 19x30 TC - Tinned Copper	
Total Number of Conductors:	4
Insulation	
Insulation Material:	
Insulation Material AWG	
PVC - Polyvinyl Chloride 15	
FPE - Foam Polyethylene 18	
Inner Shield	
Inner Shield Material:	
Layer # Type Inner Shield Material Co	overage (%)
15 AWG Pair Tape Aluminum Foil-Polyester Tape 10	00
18 AWG Pair Tape Aluminum Foil-Polyester Tape 10	00
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

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METRIC MEASUREMENT VERSION

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Bulk Cable Weight:	177.096 Kg/Km		
Max. Recommended Pulling Tension:	845.158 N		
Min. Bend Radius/Minor Axis:	121.920 mm		
pplicable Specifications and Agency Co	ompliance (Overall)		
Applicable Standards & Environmental Progr	• • •		
NEC/(UL) Specification:	CMG, PLTC		
CEC/C(UL) Specification:	CMG		
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		
Jnaveraged Impedance: Description Freq. (MHz) Start Freq. (MHz) Stop F Control of the second			
18 AWG Pair Only	120		
Nom. Capacitance Conductor to Conductor: Description Freq. (MHz) Start Freq. (MHz) Stop F 18 AWC Pair Only 1	Freq. (MHz) Capacitance (pF/m) 39.372		
18 AWG Pair Only 1	39.372		
Nominal Velocity of Propagation:DescriptionVP (%)18 AWG Pair Only75			
Maximum Delay:			
Description Freq. (MHz) Start Freq. (MHz) Stop F			
18 AWG Pair Only	4.46216		
Nom. Conductor DC Resistance: Description DCR @ 20°C (Ohm/km)			
15 AWG 11.8116			
15 AWG 11.8116 18 AWG 22.6389 Nominal Outer Shield DC Resistance:			
15 AWG 11.8116 18 AWG 22.6389 Nominal Outer Shield DC Resistance: DCR @ 20°C (Ohm/km)			
15 AWG 11.8116 18 AWG 22.6389 Nominal Outer Shield DC Resistance:			
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)			
15 AWG 11.8116 18 AWG 22.6389 Nominal Outer Shield DC Resistance: DCR @ 20°C (Ohm/km) 5.9058 Max. Attenuation:			

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CMG)

Max. Recommended Current:

Description	Current
15 AWG	8.0 Amps
18 AWG	5.0 Amps

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:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3083A 5601000	305 MT	60.782 KG	YELLOW, BRIGHT	С	2 #15, 2 #18 SH CPE
3083A 5602000	610 MT	126.099 KG	YELLOW, BRIGHT	С	2 #15, 2 #18 SH CPE

Notes:

C = CRATE REEL PUT-UP.

Test Reports

a) UL

- i) UL Test Reports are available on-line through the UL Client Document Access web portal. ii) UL Inspection Reports are also available through the UL Client Document Access web portal.
- b) CŚA
 - i) CSA "Descriptive Report and Test Results" documents are available on the CSA Gateway Portal.
 - ii) CSA Inspection Reports are maintained on the CSA issued 'flash drive' at each manufacturing location.

* other test data may be available if requested at time of order.

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