Product: 3083A

DeviceBus®, 2 Pr #15+18 Str TC, PVC&PO Ins, IS+OA TC Brd, CPE Jkt, Chemical Res

Request Sample

Product Description

DeviceBus® for ODVA DeviceNet™, 2 Pair, 15 (19x28)+18 (19x30) AWG Tinned Copper, PVC&PO Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, CPE Outer Jacket, Chemical Res CMG

Technical Specifications

Product Overview

Suitable Applications:	harsh environment, ODVA device-level communication, used with CIP (common Industrial Protocol) for control, configuration, and data collection between devices, such as sensors and actuators, and higher level devices such as PLC, and PC in industrial automation, bus topology, etc.

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
15	19x27	TC - Tinned Copper	1
18	19x30	TC - Tinned Copper	1

Conductor Count:	4

Insulation

Element	Material	Nominal Wall Thickness
15	PVC - Polyvinyl Chloride	0.021 in
18	PE - Polyethylene (Foam)	0.053 in

Color Chart

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

Inner Shield Material

Type	Material	Coverage [%]	Drainwire Material	Drainwire AWG
Tape	Alum / Poly	100 %	TC - Tinned Copper	18

Outer Shield Material

Type	Material	Coverage [%]	Drainwire Construction n x D
Braid	TC - Tinned Copper	65 %	19x30

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
CPE - Chlorinated Polyethylene	0.449 in	0.053 in

Electrical Characteristics

Conductor DCR

Element	Nominal Conductor DCR	Nominal Outer Shield DCR
15 AWG	3.6 Ohm/1000ft	1.8 Ohm/1000ft
18 AWG	6.9 Ohm/1000ft	

Capacitance

Element	Nom. Capacitance Conductor to Conductor
18 AWG Pair Only	
	12.0 pF/ft

Impedance

Nominal Characteristic Impedance
120 Ohm

Delay

Max. Delay	Max. Delay Description	Nominal Velocity of Propagation (VP) [%]
1.36 ns/ft	18 AWG Pair Only	75 %

High Freq

Element	Frequency [MHz]	Max./Min. Input Impedance (unFitted)
18 AWG Pair Only	0.125 MHz	120 Ohm
	0.5 MHz	
	1 MHz	

Current

Element	Max. Recommended Current [A]
15 AWG	8.0 Amps
18 AWG	5.0 Amps

Voltage

UL Voltage Rating
300 V RMS (PLTC, CMG)

Temperature Range

Non-UL Temp Rating:	105°C
UL Temp Rating:	75°C
Operating Temp Range:	-30°C To +105°C

Mechanical Characteristics

Bulk Cable Weight:	119 lbs/1000ft
Max Recommended Pulling Tension:	190 lbs
Min Bend Radius/Minor Axis:	4.8 in

Standards

NEC Articles:	800
NEC/(UL) Specification:	CMG, ITC, PLTC-ER
CEC/C(UL) Specification:	CMG
UL AWM Style:	2464
CPR Euroclass:	Fca
Other Specification:	ODVA Class 2 Thick

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU RoHS Compliance Date (yyyy-mm-dd):	2005-10-13
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Burial:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT4
IEEE Flammability:	1202
UL voltage rating:	300 V RMS

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
3083A 5601000	Yellow, Bright	Reel	1,000 ft	612825140856
3083A 5602000	Yellow, Bright	Reel	2,000 ft	612825140863

Footnote:	C - CRATE REEL PUT-UP.

Product Notes

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.

History

Update and Revision:	Revision Number: 0.359 Revision Date: 04-28-2020