Part Number: 3082A

DeviceBus® for ODVA DeviceNet™, (1 pr) 15 AWG (19x28) TC & (1 pr) 18 AWG (19x30) TC, PVC/PVC & FPE/PVC, Foil+TC Braid Shld, CMG, PLTC-ER

Product Description

One 15 AWG pair stranded (19x28) tinned copper conductors and one 18 AWG pair stranded (19x30) tinned copper conductors, PVC insulation (power), foam polyethylene (FPE) insulation (data), individual foil shield (100% coverage) plus an overall tinned copper braid (65% coverage), oil- and UV-resistant PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

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

Total Number of Conductors:	4

Insulation

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

Color Chart

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

Inner Shield Material

Type	Material	Coverage [%]
Tape	Aluminum Foil-Polyester Tape	100 %

Outer Shield Material

Type	Material	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Braid	TC - Tinned Copper	65 %	TC - Tinned Copper	18	19x30 mm

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.48 in	0.06 in

Electrical Characteristics

Capacitance

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

Construction and Dimensions

Stranding

Lay Length
1 MHz

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	

Impedance

Nominal Characteristic Impedance
120 Ohm

Delay

Max. Delay	Max. Delay Description	Nominal Delay	Nominal Velocity of Propagation (VP) [%]	Nominal Velocity of Propagation (VP) Description
1.36 ns/ft	18 AWG Pair Only			18 AWG Pair Only
		1.36 ns/ft	0.75 %	

High Freq

Element	Frequency [MHz]	Max. Insertion Loss (Attenuation)	Max./Min. Input Impedance (unFitted)
18 AWG Pair Only		0.13 dB/100ft	120 Ohm
18 AWG Pair Only		0.25 dB/100ft	
		0.36 dB/100ft	
	0.125 MHz		
	0.5 MHz		
	1 MHz		

Current

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

Inductance

Element	Nominal Inductance
15 AWG Pair Only	0.174 µH/ft

Voltage

UL Voltage Rating
300 V RMS
600 V RMS
300 V RMS (C(UL) AWM)

Oil Resistance:	Yes

Applicable Standards & Environmental Programs

CEC/C(UL) Specification:	CMG
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 CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
CPR Euroclass:	Eca
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Other Specification:	ODVA Class 2 Thick

Standards

CSA AWM Specification:	AWM I/II A
NEC Articles:	800
NEC/(UL) Specification:	CMG, PLTC-ER
UL AWM Style:	20201

Flame Test

CSA Flammability:	FT4
UL Flammability:	UL1685 FT4 Loading

Safety

UL Voltage Rating:	300 V RMS (CL2, CMG)

Suitability

Suitability - Oil Resistance:	Yes
Suitability - Sunlight Resistance:	Yes

Mechanical Characteristics

Operating Temp Range:	-20°C To +75°C
Bulk Cable Weight:	108(lbs/1000ft)
Max Recommended Pulling Tension:	190(lbs)
Min Bend Radius/Minor Axis:	4.8(in)

Temperature Range

UL Temp Rating:	75°C

Plenum/Non-Plenum

Plenum (Y/N):	No

History

Variants

Item #	Color
3082A T5U1000	GRAY T5U
3082A T5U2000	GRAY T5U
3082A T5U3000	GRAY T5U
3082A T5U500	GRAY T5U