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

Conductor Count:	4
AWG Size:	15

Insulation

Element	Material	Nominal Wall Thickness
15	PVC - Polyvinyl Chloride	0.021 in
18	FPE - Foamed 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

Construction and Dimensions

Stranding

Lay Length
1 MHz

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 pF/ft

Inductance

Element	Nominal Inductance
15 AWG Pair Only	0.174 µH/ft

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	75 %	

High Freq

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

Current

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

Voltage

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

Temperature Range

UL Temp Rating:	75°C
Operating Temp Range:	-20°C To +75°C

Mechanical Characteristics

Oil Resistance:	Yes
Bulk Cable Weight:	108 lbs/1000ft
Max Recommended Pulling Tension:	190 lbs
Min Bend Radius/Minor Axis:	4.8 in

Standards

NEC Articles:	800
NEC/(UL) Specification:	CMG, PLTC-ER
CEC/C(UL) Specification:	CMG
UL AWM Style:	20201
CSA AWM Specification:	AWM I/II A
CPR Euroclass:	Eca
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 CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Suitability

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

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 FT4 Loading
CSA Flammability:	FT4

Part Number

Plenum (Y/N):	No

Variants

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

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 Associatio, Inc. Trademark. Jacket printed ""1PR16"" instead of ""1PR15"" due to UL requirements for CMG Listing.