Product: 3082A

DeviceBus®, 2 Pr #15+18 Str TC, PVC+PO Ins, IS+OA TC Brd, PVC Jkt, CMG PLTC

Request Sample

Product Description

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

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 [%]
Tape	Alum / Poly	100%

Outer Shield Material

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

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.48 in	0.06 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 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 Amps per Conductor
18 AWG	5 Amps per Conductor

Voltage

UL Voltage Rating
300 V RMS (PLTC, CMG)
600 V RMS (UL AWM Style 20201)
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. Pull Tension:	190 lbs
Min Bend Radius/Minor Axis:	4.8 in

Standards

NEC Articles:	Article 800
NEC/(UL) Compliance:	CMG, PLTC-ER
CEC/C(UL) Compliance:	CMG
UL AWM Style Compliance:	20201
CSA AWM Compliance:	AWM I/II A
CPR Euroclass:	Eca
Other Compliance:	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
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
IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No

Part Number

Variants

Item #	Color	Putup Type	Length	UPC
3082A T5U500	Gray T5U	Reel	500 ft	612825140788
3082A T5U2000	Gray T5U	Reel	2,000 ft	612825140764
3082A T5U3000	Gray T5U	Reel	3,000 ft	612825140771

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.

History

Update and Revision:	Revision Number: 0.349 Revision Date: 06-08-2020