Part Number: 3084A

DeviceBus® for ODVA DeviceNet™, (1 pr) 22 AWG (19x34) TC & (1 pr) 24 AWG (19x36) TC, PVC/PVC & FPE/PVC, Foil+TC Braid Shld, CL2, CMG

Product Description

One 22 AWG pair stranded (19x34) tinned copper conductors and one 24 AWG pair stranded (19x36) 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 Conductors	No. of Pairs
22	19x34	TC - Tinned Copper	4	1
24	19x36	TC - Tinned Copper		1

Total Number of Conductors:	4

Insulation

Element	Material	Nominal Wall Thickness
22	PVC - Polyvinyl Chloride	0.021 in
24	FPE - Foam Polyethylene	0.026 in

Color Chart

Number	Color
22 AWG Pair	Red & Black
24 AWG Pair	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	22	19x34 mm

Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.28 in	0.032 in

Electrical Characteristics

Capacitance

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

Construction and Dimensions

Stranding

Lay Length
1 MHz

Conductor DCR

Element	Max. Conductor DCR	Nominal Conductor DCR	Nominal Outer Shield DCR
22 AWG	17.5 Ohm/1000ft	17.5 Ohm/1000ft	3.2 Ohm/1000ft
24 AWG	28 Ohm/100m	28.0 Ohm/1000ft	

Impedance

Nominal Characteristic Impedance	Nominal Characteristic Impedance Description
	24 AWG Pair
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	24 AWG Pair			24 AWG Pair
		1.36 ns/ft	0.75 %	

High Freq

Element	Frequency [MHz]
24 AWG Pair Only	0.125 MHz
	0.5 MHz
	1 MHz

Current

Max. Recommended Current [A]
4.0 Amps per conductor @ 25°C (Power Pair)
4 Amps per conductor @ 24 V per NEC CL2 (Power Pair)

Inductance

Element	Nominal Inductance
22 AWG Pair	0.221 µH/ft
24 AWG Pair	0.251 µH/ft

Voltage

UL Voltage Rating
300 V RMS
600 V RMS
600 V RMS (UL AWM Style 20201)

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 Thin

Standards

CSA AWM Specification:	AWM I/II A
NEC Articles:	800
NEC/(UL) Specification:	CL2, CMG
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:	41(lbs/1000ft)
Max Recommended Pulling Tension:	65(lbs)
Min Bend Radius/Minor Axis:	2.75(in)

Temperature Range

UL Temp Rating:	75°C

Plenum/Non-Plenum

Plenum (Y/N):	No

History

Variants

Item #	Color
3084A T5U1000	GRAY T5U
3084A T5U2000	GRAY T5U
3084A T5U500	GRAY T5U
3084A T5U5000	GRAY T5U
3084A 0021000	RED