



Part Number: 3084A

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

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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

Conductor Count:	4
Conductor Size:	22 AWG

Insulation

Element	Material	Nominal Wall Thickness
22	PVC - Polyvinyl Chloride	0.021 in
24	FPE - Foamed 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 %

Inner Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.280 in	0.032 in

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	0.573 in	0.045 in

Construction and Dimensions

Armor

Type of Armor	Material
Interlocked Armor	Aluminum

Electrical Characteristics

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	

Capacitance

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

Inductance

Element	Nominal Inductance
22 AWG Pair	0.221 μ H/ft
24 AWG Pair	0.251 μ H/ft

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	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)

Voltage

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

Temperature Range

UL Temp Rating:	60°C
Operating Temp Range:	-20°C To +60°C

Mechanical Characteristics

Oil Resistance:	Yes
Bulk Cable Weight:	155 lbs/1000ft
Max Recommended Pulling Tension:	65 lbs
Min Bend Radius/Minor Axis:	5.75 in

Standards

NEC Articles:	725, 800
NEC/(UL) Specification:	CL2, CM
CEC/C(UL) Specification:	CMG
UL AWM Style:	20201
CSA AWM Specification:	HLBCD
CPR Euroclass:	Eca

Other Specification:	ODVA Class 2 Thin
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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 - Hazardous Locations:	Yes
Suitability - Indoor:	Yes
Suitability - Oil Resistance:	Yes
Suitability - Sunlight Resistance:	Yes

Flammability, LSOH, Toxicity Testing

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

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Footnote
3084A T5U1000	Gray T5U	C
3084A T5U2000	Gray T5U	C Z
3084A T5U500	Gray T5U	C
3084A T5U5000	Gray T5U	C

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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