



**Part Number: 7897A**

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

## Product Description

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

## Technical Specifications

### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	No. of Pairs
15	19x28	TC - Tinned Copper	1
18	19x30	TC - Tinned Copper	1

Conductor Count:	4
Total Number of Pairs:	2
AWG Size:	15

#### Insulation

Element	Material
15	PVC/Nylon - Polyvinyl Chloride/Nylon
18	FEP - Fluorinated Ethylene Propylene

#### Color Chart

Number	Color
15 AWG Pair	Red & Black
18 AWG Pair	Blue & White

#### Inner Shield Material

Type	Layer	Material	Coverage [%]
Tape	15 AWG Pair	Aluminum Foil-Polyester Tape	100 %
Tape	18 AWG Pair	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	0.46 in	0.06 in

### Construction and Dimensions

#### Stranding

Lay Length
1 MHz

### Electrical Characteristics

#### Conductor DCR

Element	Nominal Conductor DCR	Nominal Outer Shield DCR
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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

#### Impedance

Nominal Characteristic Impedance
100 Ohm

#### Delay

Max. Delay	Max. Delay Description	Nominal Velocity of Propagation (VP) [%]	Nominal Velocity of Propagation (VP) Description
1.36 ns/ft	18 AWG Pair Only	75 %	18 AWG Pair Only

#### High Freq

Element	Frequency [MHz]	Max./Min. Input Impedance (unFitted)
18 AWG Pair Only	0.125 MHz	120 Ohm
	0.5 MHz	

#### Current

Element	Max. Recommended Current [A]
15 AWG	8.0 Amps per conductor @ 25°C

#### Voltage

UL Voltage Rating
600V RMS (NEC Type TC)

### Temperature Range

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

### Mechanical Characteristics

Oil Resistance:	Yes
Bulk Cable Weight:	135 lbs/1000ft
Max Recommended Pulling Tension:	190 lbs
Min Bend Radius/Minor Axis:	4.4 in

### Standards

NEC/(UL) Specification:	TC-ER
Other Standards:	ODVA Class 1 Thick

### Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/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):	2004-04-01
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

### Suitability

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

## Flammability, LSOH, Toxicity Testing

UL Flammability: UL1685 UL Loading

## Part Number

Plenum (Y/N): No

### Variants

Item #	Color	Footnote
7897A T5U1000	GRAY T5U	C
7897A T5U2000	GRAY T5U	C
7897A T5U500	GRAY T5U	C

Footnote: C - CRATE REEL PUT-UP.

## Product Notes

Notes: High Velocity. Thick. Meter marks on jacket to aid users in installation. ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark. Jacket printed ""1PR16"" instead of ""1PR15"" due to UL requirements for CMG Listing.

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