



**Product:** <u>7895A</u> ☑

DeviceBus®, 2 Pr #18+20 Str TC, PVC+FPE Ins, IS+OA TC Brd, PVC Jkt, CMG, PLTC

# **Product Description**

DeviceBus® for ODVA DeviceNet™, 2 Pair 18+20AWG (19x30+19x32) Tinned Copper, PVC+Foam PE 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.

#### **Construction Details**

#### Conductor

Element	No. of Elements	Size	Stranding	Material
Power Pair(s)	1	18 AWG	19x30	TC - Tinned Copper
Data Pair(s)	1	20 AWG	19x32	TC - Tinned Copper

#### Insulation

Element	Material	Nom. Thickness	Nom. Insulation Diameter	Color Code
Power Pair(s)	PVC - Polyvinyl Chloride	0.018 in (0.46 mm)	0.080 in (2.0 mm)	Red & Black
Data Pair(s)	PE - Polyethylene (Foam)	0.040 in (1.0 mm)	0.129 in (3.28 mm)	Blue & White

### Inner Shield

Element	Shield Type	Material	Coverage
Power Pair(s)	Таре	Bi-Laminate (Alum+Poly)	100%
Data Pair(s)	Таре	Bi-Laminate (Alum+Poly)	100%

### **Outer Shield**

Shield Type	Material	Coverage	Drainwire Type
Braid	Tinned Copper (TC)	65%	20 AWG (19x32) TC

## Outer Jacket

Material	Nom. Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.045 in (1.1 mm)	0.378 in (9.60 mm)
Table Notes:	Jacket OD +/- 0.	010
Overall Cable Diameter (Nominal):	0.378 in (9.60 m	m)

### **Electrical Characteristics**

### Electricals

Element	Nom. Conductor DCR	Max. Conductor DCR	Nom. Capacitance Cond-to-Cond	Nom. Characteristic Impedence	Nom. Velocity of Prop.	Max. Current
Power Pair(s)	6.9 Ohm/1000ft	6.9 Ohm/1000ft				4 Amps Per Conductor at 24 V (per NEC CL2) (Power Pair)
Data Pair(s) 10.9 Ohm/1000ft (35.8 Ohm/km)		10.9 Ohm/100m	12 pF/ft (39 pF/m)	120 Ohm	75%	
Nom. Outer S	Nom. Outer Shield DCR: 3.2 Ohm/1000ft (10 Ohm/km)					

#### **High Frequency**

Element	Frequency [MHz]	Max. Insertion Loss (Attenuation)
Data Pair(s)	0.125	.29 dB/100ft
	0.5	0.5 dB/100ft
	1	0.7 dB/100ft

#### Voltage

UL Voltage Rating
300 V (CMG, PLTC), 600 V (UL AWM 20201)

#### **Mechanical Characteristics**

#### Temperature

UL Temperature	Operating
75°C	-20°C to +75°C

#### **Bend Radius**

Stationary Min.	Installation Min.	
3.8 in (97 mm)	3.8 in (97 mm)	

Max. Pull Tension:	65 lbs (29 kg)	
Bulk Cable Weight:	76 lbs/1000ft	

#### **Standards and Compliance**

Environmental Suitability:	Indoor, Sunlight Resistance, Oil Resistance	
Flammability / Reaction to Fire:	UL 1685 FT4 Loading, FT4, IEEE 1202, IEC 60332-1-2	
CPR Compliance:	R Euroclass: Eca	
NEC / UL Compliance:	Article 725, Article 800, CMG, PLTC	
AWM Compliance:	AWM 20201	
CEC / C(UL) Compliance:	CMG	
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)	
UK Regulation Compliance:	UKCA Mark	
Other Standard Compliance(s):	ODVA Cable III	

### **Product Notes**

Notes:	Mid. Meter marks on jacket to aid users in installation. ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark.
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#### History

Update and Revision:	Revision Number: 0.511 Revision Date: 04-14-2023

## **Part Numbers**

# Variants

Item #	Color	Putup Type	Length	UPC	Footnote
7895A T5U500	Gray T5U	Reel	500 ft	612825190806	
7895A T5U1000	Gray T5U	Reel	1,000 ft	612825190790	С
7895A T5U5000	Gray T5U	Reel	5,000 ft	612825190813	CZ

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