

7896A Multi-Conductor - DeviceBus® for ODVA DeviceNet™



For more Information
please call

1-800-Belden1

**Description:**

16 and 18 AWG stranded tinned copper conductors, PVC/Nylon insulation (power), F-R Polypropylene insulation (data), individually foil shielded (100% coverage) plus an overall tinned copper braid (65% coverage, sunlight/oil-resistant PVC jacket.

Physical Characteristics (Overall)**Conductor****AWG:**

# Pairs	AWG	Stranding	Conductor Material
1	16	19x29	TC - Tinned Copper
1	18	19x30	TC - Tinned Copper

Insulation**Insulation Material:**

Insulation Material	AWG
PVC/Nylon - Polyvinyl Chloride/Nylon	16
FRPP - Flame Retardant Polypropylene	18

Inner Shield**Inner Shield Material:**

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	Coverage (%)
16 AWG Pair	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
18 AWG Pair	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100

Outer Shield**Outer Shield Material:**

Type	Outer Shield Material	Coverage (%)
Braid	TC - Tinned Copper	65

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material
16	19x29	TC - Tinned Copper

Outer Jacket**Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (in.)
PVC - Polyvinyl Chloride	.060

Overall Cable

Overall Nominal Diameter: 0.525 in.

Pair**Pair Color Code Chart:**

Number	Color
1 (16 AWG)	Red & Black
2 (18 AWG)	Blue & White

Mechanical Characteristics (Overall)

Operating Temperature Range: -20°C To +75°C

Non-UL Temperature Rating: 75°C

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Bulk Cable Weight: 135 lbs/1000 ft.

Max. Recommended Pulling Tension: 190 lbs.

Min. Bend Radius (Install)/Minor Axis: 5 in.

Applicable Specifications and Agency Compliance (Overall)**Applicable Standards & Environmental Programs**

NEC/(UL) Specification: TC-ER

CSA Specification: I/II A/B

EU CE Mark: Yes

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 10/13/2005

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MII Order #39 (China RoHS): Yes

Other Specification: ODVA Cable V

Flame Test

UL Flame Test: UL1685 UL Loading

CSA Flame Test: FT1

Suitability

Sunlight Resistance: Yes

Oil Resistance: Yes

Plenum/Non-Plenum

Plenum (Y/N): No

Electrical Characteristics (Overall)**Unaveraged Impedance:**

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Impedance (Ohm)
18 AWG Pair Only	.5			120

Nom. Capacitance Conductor to Conductor:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Capacitance (pF/ft)
18 AWG Pair Only	1			14.7

Nominal Velocity of Propagation:

Description	VP (%)
18 AWG Pair Only	64

Maximum Delay:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Delay (ns/ft)
18 AWG Pair Only				1.6

Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/1000 ft)
16 AWG	4.9
18 AWG	6.9

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
1.8

Max. Attenuation:

()	Description	Freq. (MHz)
.13	18 AWG Pair Only	.125

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.25		.500
.40		1.00

Max. Operating Voltage - UL:

Voltage
600 V RMS

Max. Recommended Current:

Description	Current
15 AWG	8.0 Amps per conductor at 25°C

Notes (Overall)

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

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7896A T5U1000	1,000 FT	165.000 LB	GRAY T5U	C	2 #16 PVC/NYL,2#18 FRPP SH PVC
7896A T5U2000	2,000 FT	340.000 LB	GRAY T5U	C	2 #16 PVC/NYL,2#18 FRPP SH PVC
7896A T5U500	500 FT	89.000 LB	GRAY T5U	C	2 #16 PVC/NYL,2#18 FRPP SH PVC

Notes:

C = CRATE REEL PUT-UP.

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