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please call

1-800-Belden1



### General 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

Total Number of Conductors:

4

#### 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)

Installation Temperature Range:	-25°C To +75°C
Operating Temperature Range:	-40°C To +75°C
Non-UL Temperature Rating:	75°C
Bulk Cable Weight:	135 lbs/1000 ft.
Max. Recommended Pulling Tension:	190 lbs.
Min. Bend Radius/Minor Axis:	5 in.

### Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

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

NEC/(UL) Specification:	IC-ER
CSA Specification:	AWM I/II A/B
EU Directive 2011/65/EU (ROHS II):	Yes
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
MIL 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
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## 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
.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.

## Put Ups and Colors:

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

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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