

7897A Multi-Conductor - DeviceBus® for ODVA DeviceNet™



For more Information
please call

1-800-Belden1



Description:

15 and 18 AWG stranded tinned copper conductors, PVC/Nylon insulation (power), FEP 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	15	19x28	TC - Tinned Copper
1	18	19x30	TC - Tinned Copper

Insulation

Insulation Material:

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

Inner Shield

Inner Shield Material:

Layer #	Type	Inner Shield Material	Coverage (%)
15 AWG Pair	Tape	Aluminum Foil-Polyester Tape	100
18 AWG Pair	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
18	19x30	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

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

Overall Cabling

Overall Nominal Diameter: 0.460 in.

Pair

Pair Color Code Chart:

Number	Color
15 AWG Pair	Red & Black
18 AWG Pair	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:	4.400 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	TC-ER
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):	04/01/05
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 Class 1 Thick

Flame Test

UL Flame Test:	UL1685 UL Loading
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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			12.0

Nominal Velocity of Propagation:

Description	VP (%)
18 AWG Pair Only	75

Maximum Delay:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Delay (ns/ft)
18 AWG Pair Only				1.36

Nom. Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/1000 ft)
15 AWG	3.6
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		1.0

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Max. Operating Voltage - UL:

Voltage
600 V RMS

Max. Recommended Current:

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

Notes (Overall)

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

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7897A T5U1000	1,000 FT	135.000 LB	GRAY T5U	C	2 #15 PVC/NYL,2#18 FFEP SH PVC
7897A T5U2000	2,000 FT	274.000 LB	GRAY T5U	C	2 #15 PVC/NYL,2#18 FFEP SH PVC
7897A T5U500	500 FT	69.500 LB	GRAY T5U	C	2 #15 PVC/NYL,2#18 FFEP SH PVC

Notes:
C = CRATE REEL PUT-UP.

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