Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION

7895A Multi-Conductor - DeviceBus® for ODVA DeviceNet™

For more Information please call

1-800-Belden1

General Description:

20 and 18 AWG stranded tinned copper conductors, PVC insulation (power), FPE insulation (Data), individually foil shielded (100% coverage) and an overall tinned copper braid (65% coverage), sunlight/oil-resistant PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	# Pairs	AWG	Stranding	Conductor Material
4	1	18	19x30	TC - Tinned Copper
	1	20	19x32	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material	AWG
PVC - Polyvinyl Chloride	18
FPE - Foam Polyethylene	20

Inner Shield

Inner Shield Material:

Layer #	Type	Inner Shield Material	Coverage (%)
18 AWG Pair	Tape	Aluminum Foil-Polyester Tape	100
20 AWG Pair	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG
20

Inner Shield Drain Wire Stranding:	19x32
Inner Shield Drain Wire Conductor Material:	TC - Tinned Copper

Outer Shield

Outer Shield Material:

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

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cable

Overall Nominal Diameter:	9.601 mm

Pair

Pair Color Code Chart:

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

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +75°C
UL Temperature Rating:	75°C (UL AWM Style 20201)
Bulk Cable Weight:	101.198 Kg/Km
Max. Recommended Pulling Tension:	289.133 N
Min. Bend Radius/Minor Axis:	96.520 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMG, PLTC
CEC/C(UL) Specification:	CMG
AWM Specification:	UL Style 20201 (600 V 75°C)
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):	04/01/2005
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 III

Flame Test

UL Flame Test:	UL1685 FT4 Loading
CSA Flame Test:	FT4

Suitability

Sunlight Resistance:	Yes
Oil Resistance:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Description	Impedance (Ohm)
20 AWG Pair	120

Nom. Capacitance Conductor to Conductor:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Capacitance (pF/m)
20 AWG Pair	1			39.372

Nominal Velocity of Propagation:

Description	VP (%)
20 AWG Pair	75

Maximum Delay:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Delay (ns/m)
20 AWG Pair				4.46216

Maximum Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/100 m)
18 AWG	22.6389
20 AWG	35.7629

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
10.4992

Max. Attenuation:

()	Description	Freq. (MHz)
0.95149	20 AWG Pair Only	.125
1.6405		.500
2.2967		1.000

Max. Operating Voltage - UL:

Voltage	Description
300 V RMS	PLTC, CMG
600 V RMS	UL AWM

Notes (Overall)

Notes: Mid. 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

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7895A T5U1000	1,000 FT	84.000 LB	GRAY T5U	C	2#18 PVC, 2#20 FHDPE SH PVC
7895A T5U500	500 FT	41.000 LB	GRAY T5U		2#18 PVC, 2#20 FHDPE SH PVC
7895A T5U5000	5,000 FT	440.000 LB	GRAY T5U	C Z	2#18 PVC, 2#20 FHDPE SH PVC

Notes:
C = CRATE REEL PUT-UP.
Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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