Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



7900A Multi-Conductor - DeviceBus® for ODVA DeviceNet™



For more Information please call

1-800-Belden1



General Description:

16 and 18 AWG stranded tinned copper conductors, PVC/Nylon insulation (power), F-R Polypropylene insulation (data), unshielded, 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

Outer Shield

Outer Shield Material:



Outer Jacket

Outer Jacket Material:



Overall Cable

Overall Cabling Separator Material:	Polyester Tape
Overall Nominal Diameter:	0.430 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
UL Temperature Rating:	75°C
Bulk Cable Weight:	100 lbs/1000 ft.
Max. Recommended Pulling Tension:	110 lbs.
Min. Bend Radius/Minor Axis:	4.300 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	TC-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

Page 1 of 3 01-05-2017

Detailed Specifications & Technical Data





7900A Multi-Conductor - DeviceBus® for ODVA DeviceNet™

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
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

Surface Printing (Overall)

Electrical Characteristics (Overall)

Fitted Impedance:

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

0	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

Notes (Overall)

Notes: Drop. 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
7900A T5U1000	1,000 FT	102.000 LB	GRAY T5U	С	2 #16 PVC/NYL, 2 #18 PP PVC
7900A T5U500	500 FT	51.000 LB	GRAY T5U	С	2 #16 PVC/NYL, 2 #18 PP PVC

Notes: C = CRATE REEL PUT-UP.

Page 2 of 3

Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



7900A Multi-Conductor - DeviceBus® for ODVA DeviceNet™

Revision Number: 1 Revision Date: 05-14-2007

© 2017 Belden, Inc All Rights Reserved

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product

product. Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).

Page 3 of 3