Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



3084A Multi-Conductor - DeviceBus® for ODVA DeviceNet™



For more Information please call

1-800-Belden1



General Description:

22 and 24 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	22	19x34	TC - Tinned Copper
	1	24	19x36	TC - Tinned Copper

Insulation

Insulation Material:

Insulation Material	AWG
PVC - Polyvinyl Chloride	22
FPE - Foam Polyethylene	24

Inner Shield

Inner Shield Material:

Layer #	Type	Inner Shield Material	Coverage (%)
22 AWG Pair	Таре	Aluminum Foil-Polyester Tape	100
24 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
22	19x34	TC - Tinned Copper

Outer Jacket

Outer Jacket Material:

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	0.813

Overall Cable

Overall Nominal Diameter: 7.112 mm

Pair

Pair Color Code Chart:

Number	Color
22 AWG Pair	Red & Black
24 AWG Pair	Blue & White

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +75°C
UL Temperature Rating:	75°C
Bulk Cable Weight:	61.016 Kg/Km
Max. Recommended Pulling Tension:	289.133 N
Min. Bend Radius/Minor Axis:	69.850 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CL2, CMG
CEC/C(UL) Specification:	CMG

Page 1 of 3 11-05-2015

Detailed Specifications & Technical Data





3084A Multi-Conductor - DeviceBus® for ODVA DeviceNet™

	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 Class 2 Thin
Fla	me Test	
	UL Flame Test:	UL1685 FT4 Loading
	CSA Flame Test:	FT4
Sui	tability	
	Sunlight Resistance:	Yes
	Oil Resistance:	Yes
Ple	num/Non-Plenum	
	Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Description	Impedance (Ohm)
24 AWG Pair	120

Nom. Inductance:

Description Inductance (µH/m		
22 AWG Pair	0.725101	
24 AWG Pair	0.823531	

Nom. Capacitance Conductor to Conductor:

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

Nominal Velocity of Propagation:

	,	,
Description	VP	(%)
24 AWG Pair	75	

Maximum Delay:

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

Maximum Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/100 m)
22 AWG	57.4175
24 AWG	91.868

Nominal Outer Shield DC Resistance:

DCR @ 20°C	(Ohm/km)
10.4992	

Max. Attenuation:

0	Description	Freq. (MHz)
0.95149	24 AWG Pair Only	.125
1.6405		.500
2.2967		1.000

Max. Operating Voltage - UL:

Voltage
300 V RMS (CL2, CMG)
300 V RMS (C(UL) AWM)
600 V RMS (UL AWM Style 20201)

Max. Recommended Current:

Current
1.7 Amps per conductor @ 25°C (24 AWG)
4 Amps per conductor @ 24 V per NEC CL2 (Power Pair)

Page 2 of 3 11-05-2015

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



3084A Multi-Conductor - DeviceBus® for ODVA DeviceNet™

Notes (Overall)

Notes: Flex Life: +/- 90 Degree Flex Test, 2" Diameter, 2 lbs. tension: 2000 Cycles minimum. Meter marks on jacket to aid users in installation. ODVA DevaiceNet is an Open DeviceNet Vendor Association, Inc. trademark.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3084A T5U1000	1,000 FT	47.000 LB	GRAY T5U	С	2 #22, 2 #24 SHLD PVC
3084A T5U2000	2,000 FT	96.000 LB	GRAY T5U	CZ	2 #22, 2 #24 SHLD PVC
3084A T5U500	500 FT	23.500 LB	GRAY T5U	С	2 #22, 2 #24 SHLD PVC
3084A T5U5000	5,000 FT	235.000 LB	GRAY T5U	С	2 #22, 2 #24 SHLD PVC
3084A 0021000	1,000 FT	47.000 LB	RED	С	2 #22, 2 #24 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.

Revision Number: 3 Revision Date: 08-01-2013

© 2015 Belden, Inc

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 sales 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 bublication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.

Page 3 of 3 11-05-2015