

METRIC MEASUREMENT VERSION

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

For more Information
please call

1-800-Belden1



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	Tape	Aluminum Foil-Polyester Tape	100
24 AWG Pair	Tape	Aluminum Foil-Polyester Tape	100

Inner Shield Drain Wire AWG:

AWG
22

Inner Shield Drain Wire Stranding: 19x34

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: 7.112 mm

Pair

Pair Color Code Chart:

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

Mechanical Characteristics (Overall)

METRIC MEASUREMENT VERSION

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

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:	CMG, CL2
CEC/C(UL) Specification:	CMG
CSA Specification:	I/II A
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

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)
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)
-------------	------------------------

METRIC MEASUREMENT VERSION

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

22 AWG	57.4175
24 AWG	91.868

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
10.4992

Max. Attenuation:

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

Max. Operating Voltage - UL:

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

Max. Recommended Current:

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

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 DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
3084A T5U1000	305 MT	21.319 KG	GRAY T5U	C	2 #22, 2 #24 SHLD PVC
3084A T5U2000	610 MT	43.545 KG	GRAY T5U	C Z	2 #22, 2 #24 SHLD PVC
3084A T5U500	152 MT	10.659 KG	GRAY T5U	C	2 #22, 2 #24 SHLD PVC
3084A T5U5000	1,524 MT	106.595 KG	GRAY T5U	C	2 #22, 2 #24 SHLD PVC
3084A 0021000	305 MT	21.319 KG	RED	C	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: 1 Revision Date: 05-14-2007

© 2012 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, and the identification of materials listed as reportable or restricted within the 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 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.