

3084A Paired - DeviceBus® for ODVA DeviceNet™

 	For more information please call 1-800-Belden1 <u>See Put-ups and Colors</u>
--	---

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:

CONDUCTOR:

Number of Pairs	2
Number of Conductors	4

AWG :

Number of Pairs	AWG	Stranding	Conductor Material	Conductor Diameter (in.)
1	22	19x34	TC - Tinned Copper	
1	24	19x36	TC - Tinned Copper	

Stranding	19x34, 19x36
Conductor Material	TC - Tinned Copper

INSULATION:

Insulation Material	PVC - Polyvinyl Chloride, FPE - Foam Polyethylene
---------------------	---

Insulation Material (Multi-AWG) :

AWG	Layer Number	Material Trade Name	Material	Wall Thickness (in.)	Diameter (in.)
22			PVC - Polyvinyl Chloride		
24			FPE - Foam Polyethylene		

Pair Color Code Chart :

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

INNER SHIELD:

Inner Shield Type	Tape/Tape
-------------------	-----------

Inner Shield Material :

Layer Number/Description	Material Trade Name	Type	Material	% Coverage (%)	Stranding	Diameter (in.)	Conductor Material
22 AWG Pair		Tape	Aluminum Foil-Polyester Tape	100			
24 AWG Pair		Tape	Aluminum Foil-Polyester Tape	100			

3084A Paired - DeviceBus® for ODVA DeviceNet™

Inner Shield % Coverage	100 %
Inner Shield Drain Wire AWG	22
Inner Shield Drain Wire Stranding	19x34
Inner Shield Drain Wire Conductor Material	TC - Tinned Copper

OUTER SHIELD:

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

OUTER JACKET:

Outer Jacket Material	PVC - Polyvinyl Chloride
-----------------------	--------------------------

OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.280 in.
--------------------------	----------

MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-20°C To +75°C
UL Temperature Rating	75°C
Bulk Cable Weight	41 lbs/1000 ft.
Max. Recommended Pulling Tension	65 lbs.
Min. Bend Radius (Install)	2.75 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	CMG, CL2
CEC/C(UL) Specification	CMG
CSA Specification	I/II A
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
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)	N
--------------	---

ELECTRICAL CHARACTERISTICS:

3084A Paired - DeviceBus® for ODVA DeviceNet™

Nom. Characteristic Impedance :

Description	Nom. Characteristic Impedance (Ohms)
24 AWG Pair	120

Nom. Inductance :

Description	Nom. Inductance (µH/ft)
22 AWG Pair	.221
24 AWG Pair	.251

Nom. Capacitance Conductor to Conductor @ 1 KHz 24 AWG pair 12.0 pF/ft

Nom. Capacitance Conductor to Conductor :

Description	Frequency (kHz)	Start Frequency (kHz)	Stop Frequency (kHz)	Nom. Capacitance Conductor to Conductor (pF/ft)
24 AWG Pair	1			12.0

Nominal Velocity of Propagation :

Description	Nominal Velocity of Propagation (%)
24 AWG Pair	75

Maximum Delay :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Maximum Delay (ns/ft)
24 AWG Pair				1.36

Maximum Conductor DC Resistance :

Description	Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000 ft)
22 AWG	17.5
24 AWG	28.0

Nominal Outer Shield DC Resistance @ 20 Deg. C 3.2 Ohms/1000 ft

Max. Attenuation (dB/100 ft.) :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. Attenuation (dB/100 ft.)
24 AWG Pair Only	.125			.29
	.500			.50
	1.000			.70

Max. Operating Voltage - UL :

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

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

NOTES:

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:

3084A Paired - DeviceBus® for ODVA DeviceNet™

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
3084A 0021000	2 #22, 2 #24 SH PVC	1000	47	RED	C
3084A T5U1000	2 #22, 2 #24 SHLD PVC	1000	47	GRAY T5U	C
3084A T5U2000	2 #22, 2 #24 SHLD PVC	2000	96	GRAY T5U	C Z
3084A T5U500	2 #22, 2 #24 SHLD PVC	500	22	GRAY T5U	C

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: 08-31-2006

© Copyright 2006 Belden, Inc
All Rights Reserved.

Although Belden ("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 the following environmental regulations: California Proposition 65 Consent Judgment For Wire & Cable Mfgs.(San Francisco Superior Court Nos. 312962 And 320342); EU RoHS (Directive 2002/95/EC, 27-Jan-2003);Material manufactured prior to the compliance date may still be in stock at Belden facilities and in our Distributor's inventory. EU ELV (Directive 2000/53/EC, 18-Sept-2000); EU WEEE (Directive 2002/96/EC, 27-Jan-2003); And EU BFR (Directive 2003/11/EC, 6-Feb-2003). 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 the 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.