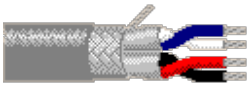
Detailed Specifications & Technical Data

ENGLISH 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 Cabling

Overall Nominal Diameter: 0.280 in.

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:	41 lbs/1000 ft.
Max. Recommended Pulling Tension:	65 lbs.
Min. Bend Radius (Install)/Minor Axis:	2.750 in.

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/ft)
22 AWG Pair	.221
24 AWG Pair	.251

Nom. Capacitance Conductor to Conductor:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Capacitance (pF/ft)
24 AWG Pair	1			12.0

Nominal Velocity of Propagation:

Description	VP (%)
24 AWG Pair	75

Maximum Delay:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Delay (ns/ft)
24 AWG Pair				1.36

Maximum Conductor DC Resistance:

Description	DCR @ 20°C (Ohm/100 m)

22 AWG	17.5
24 AWG	28.0

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
3.2

Max. Attenuation:

()	Description	Freq. (MHz)
.29	24 AWG Pair Only	.125
.50		.500
.70		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 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	C	2 #22, 2 #24 SHLD PVC
3084A T5U2000	2,000 FT	96.000 LB	GRAY T5U	C Z	2 #22, 2 #24 SHLD PVC
3084A T5U500	500 FT	22.000 LB	GRAY T5U	C	2 #22, 2 #24 SHLD PVC
3084A 0021000	1,000 FT	47.000 LB	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.

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