# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



### 3085A 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), CPE jacket.

# **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

# Conductors	# Pairs	AWG	Stranding	<b>Conductor Material</b>
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 #	Туре	Inner Shield Material	Coverage (%)
22 AWG Pair	Tape	Aluminum Foil-Polyester Tape	100
24 AWG Pair	Таре	Aluminum Foil-Polyester Tape	100

### Inner Shield Drain Wire AWG:



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
CPE - Chlorinated Polyethylene

#### **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: -30°C To +75°C

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UL Temperature Rating:	75°C
Bulk Cable Weight:	68.457 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
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/13/2005
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
ame Test	
III. Flama Toot:	LII 1695 ETA Looding

#### Fla

UL Flame Test:	UL1685 FT4 Loading
CSA Flame Test:	FT4

### Plenum/Non-Plenum

Plenum (Y/N):	No
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## **Electrical Characteristics (Overall)**

#### Nom. Characteristic Impedance:

Description	Impedance (Ohm)
24 AWG Pair	120

### 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	<b>VP</b> (%)		
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:

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Voltage

#### 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: Thin. 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
3085A 5601000	305 MT	21.319 KG	YELLOW, BRIGHT	С	2 #22, 2 #24 SHLD CPE
3085A 5602000	610 MT	43.545 KG	YELLOW, BRIGHT	С	2 #22, 2 #24 SHLD CPE
3085A 560500	152 MT	10.659 KG	YELLOW, BRIGHT	С	2 #22, 2 #24 SHLD CPE

#### Notes:

C = CRATE REEL PUT-UP.

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