# **Detailed Specifications & Technical Data**

### **ENGLISH 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 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: -30°C To +75°C

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UL Temperature Rating:	75°C
Bulk Cable Weight:	46 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**

plicable 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		
UL Flame Test:	UL1685 FT4 Loading	
CSA Flamo Tost:	ETA	

### 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:

	Impedance (Ohm)
24 AWG Pair	120

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

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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	1,000 FT	47.000 LB	YELLOW, BRIGHT	С	2 #22, 2 #24 SHLD CPE
3085A 5602000	2,000 FT	96.000 LB	YELLOW, BRIGHT	С	2 #22, 2 #24 SHLD CPE
3085A 560500	500 FT	22.000 LB	YELLOW, BRIGHT	С	2 #22, 2 #24 SHLD CPE

Notes:

C = CRATE REEL PUT-UP.

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