

## **BELDEN**Cable<sup>\*\*</sup>

## 3085A Paired - DeviceBus® for ODVA DeviceNet<sup>TM</sup>





Metric Version
For more information please call
1-800-Belden1

See Put-ups and Colors

#### **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:

#### **CONDUCTOR:**

Number of Pairs	2	
Number of Conductors	4	

#### AWG:

Number of Pairs	AWG	Stranding		Conductor Diameter (mm)
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 (mm)	Diameter (mm)
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:		



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Outer Shield Materia Outer Shield %Cove	Wire AWG Wire Stranding Wire Conducto		Aluminum Foil-Polyester Tape Aluminum Foil-Polyester Tape  100 % 22 19x34	100		
Inner Shield % Cove Inner Shield Drain W Inner Shield Drain W Inner Shield Drain W OUTER SHIELD: Outer Shield Type Outer Shield Materia Outer Shield %Cove OUTER JACKET:	Wire AWG Wire Stranding Wire Conducto		Polyester Tape 100 % 22	100		
Inner Shield Drain W Inner Shield Drain W Inner Shield Drain W OUTER SHIELD: Outer Shield Type Outer Shield Materia Outer Shield %Cove OUTER JACKET:	Wire AWG Wire Stranding Wire Conducto		22			
Inner Shield Drain W Inner Shield Drain W OUTER SHIELD: Outer Shield Type Outer Shield Materia Outer Shield %Cove OUTER JACKET:	Wire Stranding Wire Conducto					
Inner Shield Drain W OUTER SHIELD: Outer Shield Type Outer Shield Materia Outer Shield %Cove OUTER JACKET:	Wire Conducto		19x34			
OUTER SHIELD: Outer Shield Type Outer Shield Materia Outer Shield %Cove		r Material				
Outer Shield Type Outer Shield Materia Outer Shield %Cove	:		TC - Tinned (	Copper		
Outer Shield Materia Outer Shield %Cove						
Outer Shield %Cove			Braid			
OUTER JACKET:	al		TC - Tinned (	Copper		
	erage		65 %			
Outer Jacket Materia	' <b>:</b>					
	al		CPE - Chlorin	nated Polyethyle	ne	
OVERALL NOMI	INAL DIAMI	ETER:				
Overall Nominal Dia	ameter		7.112 mm			
MECHANICAL C	CHARACTER	RISTICS:				
Operating Temperatu	ture Range		-20°C To +75	5°C		
UL Temperature Rat	ting		75°C			
Bulk Cable Weight			68.457 Kg/Kı	m		
Max. Recommended	d Pulling Tens	ion	289.133 N			
Min. Bend Radius (In	Install)		69.85 mm			

#### **APPLICABLE STANDARDS:**

NEC/(UL) Specification	CMG, CL2
CEC/C(UL) Specification	CMG
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	10/13/2005
Other Specification	ODVA Class 2 Thin

#### FLAME TEST:

UL Flame Test	UL1685 FT4 Loading
CSA Flame Test	FT4

#### PLENUM/NON-PLENUM:

Plenum (Y/N)	N



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#### **ELECTRICAL CHARACTERISTICS:**

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

Nom. Capacitance Conductor to Conductor @ 1 KHz 39.372 pF/m

Nom. Capacitance Conductor to Conductor:

Description	Frequency (kHz)	Start Frequency (kHz)	I	Nom. Capacitance Conductor to Conductor (pF/m)
24 AWG Pair	1			39.372

#### 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/m)
24 AWG Pair				4.462

#### Maximum Conductor DC Resistance:

Description	Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/km)		
22 AWG	57.417		
24 AWG	91.868		

Nominal Outer Shield DC Resistance @ 20 Deg. C 10.499 Ohms/km

Max. Attenuation (dB/100 ft.):

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. Attenuation (dB/100m)
24 AWG Pair Only	0.125			0.951
	0.5			1.64
	1			2.297

Max. Operating Voltage - UL 300 V RMS

Max. Recommended Current 1.7 Amps per conductor @ 25°C (24 AWG), 5 Amps per conductor @ 25°C (22 AWG)

NOTES:

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	Description	Put-Up (M)	Ship Weight (kgs.)	Jacket Color	Notes
3085A 5601000	2 #22, 2 #24 SHLD CPE	304.8	21.338	YELLOW, BRIGHT	С
3085A 5602000	2 #22, 2 #24 SHLD CPE	609.6	43.584	YELLOW, BRIGHT	С
3085A 560500	2 #22, 2 #24 SHLD CPE	152.4	9.988	YELLOW, BRIGHT	С

### Detailed Specifications & Technical Data



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C = CRATE REEL PUT-UP.

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