



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	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
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

Flame Test

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	VP (%)
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:

()	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

300 V RMS

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	C	2 #22, 2 #24 SHLD CPE
3085A 5602000	610 MT	43.545 KG	YELLOW, BRIGHT	C	2 #22, 2 #24 SHLD CPE
3085A 560500	152 MT	10.659 KG	YELLOW, BRIGHT	C	2 #22, 2 #24 SHLD CPE

Notes:

C = CRATE REEL PUT-UP.

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