



3084A

Multi-conductor DeviceBus®
for ODVA DeviceNet®



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.

Put Ups and Colours

Item #	Putup	Ship Weight	Jacket Colour	Notes	Item Description
3084A 00212000	1,000 ft	47.000 lbs	Red	C	2 #22, 2 #24 SH PVC RED
3084A T5U1000	1,000 ft	47.000 lbs	Gray T5U	C	2 #22, 2 #24 SHLD PVC GRYT5U
3084A T5U2000	2,000 ft	96.000 lbs	Gray T5U	C Z	2 #22, 2 #24 SHLD PVC GRYT5U
3084A T5U500	500 ft	22.000 lbs	Gray T5U	C	2 #22, 2 #24 SH PVC GRYT5U

Notes:

C = Create 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

Physical Characteristics (overall)

Conductor – AWG

# Conductors	# Pairs	AWG	Stranding	Conductor Material	Dia (m)
4	1.000	22	19x34	TC – Tinned Copper	
	1.000	24	19x36	TC – Tinned Copper	

Insulation – Insulation Material

Layer #	Ins Trade Name	Ins Material	Wall Thickness (m)	Diam. (in.)	AWG
		PVC – Polyvinylchloride			22
		FPE – Foam Polyethylene			24

Inner Shield – Inner Shield Material

Layer #	Inner Shield Trade Name	Type	Inner Shield Material	% Coverage (%)	Standing	Dia (m)	Conductor Material
22 AWG Pair		Tape	Aluminium Foil-Polyester Tape	100			
24 AWG Pair		Tape	Aluminium Foil-Polyester Tape	100			

Inner Shield Drain Wire 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 – Polyvinylchloride

Overall Cabling – Overall Nominal Diameter: 0.280 in.

Pair – Pair Colour Code Chart

Number	Colour
22 AWG Pair	Red & Black
24 AWG Pair	Blue & White

Mechanical Characteristics (overall)

Operating Temperature Range	-20°C to +75°C
UL Temperature Range	75°C
Bulk Cable Weight	41 lbs/1000ft
Max. Recommended Pulling Tension	65 lbs
Min. Bend Radius (Install)/Minor Axis	2.750 In.

Applicable Specifications and Agency Compliance (overall)

Application

NEC (UL) Specification	CMG, CL2
CEC/C (UL) Specification	CMG
CSA Specification	I/II A
EU CE Mark	
EU RoHS Compliant (commence date: dd/mm/yyyy)	(01/04/2005)
Other Specification	ODVS Class 2 Thin

Flame Test

UL Flame Test	UL 1685 FT4 Loading
CSA Flame Test	FT4

Electrical Characteristics (overall)

Nom. Characteristics Impedance

Description	Impedance (Ohm)
24 AWG Pair	120.000

Nom. Inductance

Description	Inductance (µH/ft)
22 AWG Pair	0.221
24 AWG Pair	0.251

Nom. Capacitance Conductor to Conductor

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Capacitance (pF/ft)
24 AWG Pair	1.000			12.000

Nominal Velocity of Propagation

Description	VP (%)
24 AWG Pair Only	75

Maximum Delay

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Delay (ns/ft)
24 AWG Pair				1.360

Nom. Conductor DC Resistance

Description	DCR @ 20°C (Ohm/1000 ft)
22 AWG	17.500
24 AWG	28.000

Nom. Outer Shield DC Resistance

DCR @ 20°C (Ohm/1000 ft)
3.200

Max. Attenuation

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)
24 AWG Pair Only	0.125		
	0.500		
	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)

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.