



Part Number: 3084A

DeviceNet<sup>™</sup>, (1 pr) 22 AWG (19x34) TC, (1 pr) 24 AWG (19x36) TC, PVC-FPE/PVC, Foil+TC Braid Shld, CL2, CMG

# **Product Description**

One 22 AWG stranded (19x34) tinned copper conductors, one 24 AWG stranded (19x36) tinned copper conductors, PVC insulation (power), foam polyethylene (FPE) insulation (data), individual foil shield (100% coverage) plus an overall tinned copper braid (65% coverage), PVC jacket.

# **Technical Specifications**

## **Construction and Dimensions**

### Conductor:

AWG	Stranding	Material	No. of Conductors	No. of Pairs
22	19×34	TC - Tinned Copper	4	1
24	19x36	TC - Tinned Copper		1

### Insulation:

Element	Material
22	PVC - Polyvinyl Chloride
24	FPE - Foam Polyethylene

### Color Chart 1:

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

### Stranding:

Lay Length	
1 MHz	

## Innershield:

Туре	Layer	Material	Coverage [%]
Таре	22 AWG Pair	Aluminum Foil-Polyester Tape	100 %
Таре	24 AWG Pair	Aluminum Foil-Polyester Tape	100 %

### Outershield 1:

Туре	Material	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Braid	TC - Tinned Copper	65 %	TC - Tinned Copper	22	19x34 mm

## Outerjacket 1:

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.28 in	0.032 in

# **Electrical Characteristics**

## Conductor DCR:

Element	Max. Conductor DCR	Nominal Outer Shield DCR
22 AWG	17.5 Ohm/1000ft	3.2 Ohm/1000ft
24 AWG	28 Ohm/100m	

## Capacitance:

Element	Nom. Capacitance Conductor to Conductor
24 AWG Pair	12 pF/ft

### Impedance:

Nominal Characteristic Impedance	Nominal Characteristic Impedance Description
120 Ohm	24 AWG Pair

## Delay:

Max. Delay	Max. Delay Description	Nominal Velocity of Propagation (VP) [%]	Nominal Velocity of Propagation (VP) Description
1.36 ns/ft	24 AWG Pair	75 %	24 AWG Pair

# High Freq:

Element	Frequency [MHz]
24 AWG Pair Only	0.125 MHz
	0.5 MHz
	1 MHz

### Current:

M	Max. Recommended Current [A]	
1.7	7 Amps per conductor @ 25°C (24 AWG)	
4	Amps per conductor @ 24 V per NEC CL2 (Power Pair)	

### Inductance:

Element	Nominal Inductance
22 AWG Pair	0.221 µH/ft
24 AWG Pair	0.251 µH/ft

## Voltage:

UL Voltage Rating	
300 V RMS (CL2, CMG)	
300 V RMS (C(UL) AWM)	
600 V RMS (UL AWM Style 20201)	

## Use

Suitability - Oil Resistance:	Yes	
Suitability - Sunlight Resistance:	Yes	
Max Recommended Pulling Tension:	65 lbs	

## Safety

CSA Flammability:	FT4
UL Flammability:	UL1685 FT4 Loading

# Temperature Range

Operating Temp Range:	-20°C To +75°C
UL Temp Rating:	75°C

# Mechanical Characteristics

Min Bend Radius/Minor Axis:	2.75 in

# Part Number

Plenum (Y/N):	No

## Standards

CA Prop 65 (CJ for Wire & Cable):	CA Prop 65 (CJ for Wire & Cable)

CEC/C(UL) Specification:	CEC/C(UL) Specification	
MII Order #39 (China RoHS):	MII Order #39 (China RoHS)	
NEC/(UL) Specification:	NEC/(UL) Specification	
Other Specification:	Other Specification	
UL AWM Style:	AWM Specification	
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)	
EU CE Mark:	EU CE Mark	

## **History**

Notes:	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.

## **Product Variants**

Part Number	Color	Put-Up Type	Length
3084A 0021000	RED	Reel	1000 ft
3084A T5U1000	GRAY T5U	Reel	1000 ft
3084A			
3084A T5U2000	GRAY T5U	Reel	2000 ft
3084A T5U5000	GRAY T5U	Reel	5000 ft
3084A T5U500	GRAY T5U	Reel	500 ft

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