



**Product:** [3084F](#)

DeviceBus®, 2 Pr #22+24 Str TC, PVC&PO Ins, IS+OA TC Brd, PVC Jkt, High Flex

[Request Sample](#)

## Product Description

DeviceBus® for ODVA DeviceNet™, 2 Pair 22+24AWG (154x44+105x44) Tinned Copper, PVC&PO Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, PVC Outer Jacket, High Flex

## Technical Specifications

### Product Overview

Suitable Applications:	harsh environment, ODVA device-level communication, used with CIP (common Industrial Protocol) for control, configuration, and data collection between devices, such as sensors and actuators, and higher level devices such as PLC, and PC in industrial automation, bus topology, etc.
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### Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	No. of Pairs
22	155x44	TC - Tinned Copper	1
24	105x44	TC - Tinned Copper	1

Conductor Count:	4
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#### Insulation

Element	Material	Nominal Wall Thickness
22	PVC - Polyvinyl Chloride	0.016 in
24	PE - Polyethylene (Foam)	0.026 in

#### Color Chart

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

#### Inner Shield Material

Type	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Tape	Alum / Poly	Beldfoil®	100%	TC - Tinned Copper	22	26x36

#### Outer Shield Material

Type	Material	Coverage [%]
Braid	Tinned Copper (TC)	65%

#### Outer Jacket Material

Material	Nominal Diameter	Nominal Wall Thickness
PVC - Polyvinyl Chloride	0.275 in	0.036 in

### Electrical Characteristics

#### Conductor DCR

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

## Capacitance

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

## Impedance

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

## Delay

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

## High Freq

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

## Current

Max. Recommended Current [A]
4 Amps Per Conductor at 24 V (per NEC CL2) (Power Pair)
4 Amps Per Conductor at 24 V (per NEC CL2) (Power Pair)

## Voltage

UL Description	UL Voltage Rating
CL2, CMG	300 V RMS
C(UL) AWM	

## Temperature Range

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

## Mechanical Characteristics

Oil Resistance:	Yes
Bulk Cable Weight:	41 lbs/1000ft
Max. Pull Tension:	65 lbs
Min Bend Radius/Minor Axis:	2.75 in

## Standards

NEC Articles:	Article 800
NEC/(UL) Compliance:	CL2, CMG
CEC/C(UL) Compliance:	CMG
CSA AWM Compliance:	AWM I/II A
Other Compliance:	ODVA Class 2 Thin

## Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01

MII Order #39 (China RoHS):	Yes
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## Suitability

Suitability - Oil Resistance:	Yes
Suitability - Sunlight Resistance:	Yes

## Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 FT4 Loading
CSA Flammability:	FT4
UL voltage rating:	300 V RMS

## Plenum/Non-Plenum

Plenum (Y/N):	No
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## Part Number

### Variants

Item #	Color	Putup Type	Length	UPC
3084F T5U500	Gray T5U	Reel	500 ft	612825140955
3084F T5U1000	Gray T5U	Reel	1,000 ft	612825140931
3084F T5U2000	Gray T5U	Reel	2,000 ft	612825140948
3084F T5U5000	Gray T5U	Reel	5,000 ft	612825140962

Footnote:	C - CRATE REEL PUT-UP.
Footnote:	N - FINAL PUT-UP LENGTH MAY VARY -0% TO +10% FROM LENGTH SHOWN.
Footnote:	Z - FINAL PUT-UP MAY VARY (= OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

## Product Notes

Notes:	Hi-Flex. Thin. Flex Test Results: ""S-Bend"" Flex Test - 4"" Diameter Wheels, 2 lbs. tension: 150,000 Cycles Averaged. +/-90 Degree Flex Test: 2"" Diameter, 2 lbs. tension - 8500 Cycles Averaged. Flex tests were conducted at less than the recommended cable minimum bend radius. Actual cable performance will depend on the individual application. Meter marks on jacket to aid users in installation.
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## History

Update and Revision:	Revision Number: 0.346 Revision Date: 06-08-2020
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