



Product: [3084F](#)

DeviceBus®, 2 Pr #22+24 Str TC, PVC+FPE Ins, IS+OA TC Brd, PVC Jkt, High Flex, CMG, CL2

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Product Description

DeviceBus® for ODVA DeviceNet™, 2 Pair 22+24AWG (154x44+105x44) Tinned Copper, PVC+Foam PE Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, PVC Outer Jacket, High Flex, CMG, CL2

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.

Construction Details

Conductor

Element	Number of Element	AWG	Stranding	Material
Power Pair(s)	1	22	154x44	TC - Tinned Copper
Data Pair(s)	1	24	105x44	TC - Tinned Copper

Insulation

Element	Material	Thickness	Color Code
Power Pair(s)	PVC - Polyvinyl Chloride	0.016 in	Red & Black
Data Pair(s)	PE - Polyethylene (Foam)	0.026 in	Blue & White

Inner Shield Material

Element	Shield Type	Material	Coverage
Power Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%
Data Pair(s)	Tape	Bi-Laminate (Alum+Poly)	100%

Outer Shield Material

Shield Type	Material	Coverage	Drainwire Type
Braid	Tinned Copper (TC)	65%	22 AWG (26x36) TC

Outer Jacket Material

Material	Thickness	Nom. Diameter
PVC - Polyvinyl Chloride	0.036 in	0.275 in

Cable Diameter (Nominal): 0.275 in

Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Power Pair(s)	17.5 Ohm/1000ft				4 Amps Per Conductor at 24 V (per NEC CL2) (Power Pair)
Data Pair(s)		12.0 pF/ft	120 Ohm	75%	4 Amps Per Conductor at 24 V (per NEC CL2) (Power Pair)

Nom Outer Shield DCR: 3.2 Ohm/1000ft

High Freq

Element	Frequency [MHz]	Max. Insertion Loss (Attenuation)
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Data Pair(s)	0.125 MHz	.95 dB/100ft
	0.5 MHz	1.64 dB/100ft
	1 MHz	2.3 dB/100ft

Voltage

UL Voltage Rating
300 V (CMG)

Mechanical Characteristics

Temperature

UL Rating	Operating
75°C	-20°C to +75°C

Bend Radius

Stationary Min.	Installation Min.
2.75 in	2.75 in

Max. Pull Tension:	65 lbs
Bulk Cable Weight:	41 lbs/1000ft

Standards and Compliance

Environmental Suitability:	Indoor, Sunlight Resistance, Oil Resistance
Flammability / Fire Resistance:	UL1685 FT4 Loading, FT4, 1202
NEC / UL Compliance:	Article 725, Article 800, CL2, CMG
AWM Compliance:	I/II A
CEC / C(UL) Compliance:	CMG
European Directive Compliance:	EU CE Mark, EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE)
APAC Compliance:	China RoHS II (GB/T 26572-2011)
Other Standard Compliance(s):	ODVA Class 2 Thin

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: 0.398 Revision Date: 03-16-2021
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