



Product: [3083A](#)

DeviceBus®, 2 Pr #15+18 Str TC, PVC+FPE Ins, IS+OA TC Brd, CPE Jkt, CMG PLTC

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Product Description

DeviceBus® for ODVA DeviceNet™, 2 Pair 15+18AWG (19x27+19x30) Tinned Copper, PVC+Foam PE Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, CPE Outer Jacket, CMG PLTC

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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Construction Details

Conductor

Element	Number of Element	Size	Stranding	Material
Power Pair(s)	1	15 AWG	19x27	TC - Tinned Copper
Data Pair(s)	1	18 AWG	19x30	TC - Tinned Copper

Insulation

Element	Material	Nom. Thickness	Color Code	Notes
Power Pair(s)	PVC - Polyvinyl Chloride	0.021 in (0.53 mm)	Red & Black	
Data Pair(s)	PE - Polyethylene (Foam)	0.053 in (1.3 mm)	Blue & White	HDPE

Inner Shield

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

Shield Type	Material	Coverage	Drainwire Type
Braid	Tinned Copper (TC)	65%	18 AWG (19x30) TC

Outer Jacket

Material	Nom. Thickness	Nom. Diameter
CPE - Chlorinated Polyethylene	0.058 in (1.5 mm)	0.476 in (12.1 mm)

Overall Cable Diameter (Nominal):	0.476 in
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Electrical Characteristics

Electricals

Element	Nom. Conductor DCR	Nom. Capacitance Cond-to-Cond	Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Power Pair(s)	3.6 Ohm/1000ft				8 Amps per Conductor
Data Pair(s)	6.9 Ohm/1000ft	12 pF/ft	120 Ohm	75%	5 Amps per Conductor

Nom. Outer Shield DCR:	1.8 Ohm/1000ft
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High Frequency

Element	Frequency [MHz]	Max. Insertion Loss (Attenuation)	Max./Min. Input Impedance (unFitted)
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Data Pair(s)	0.125 MHz	0.13 dB/100ft	120 Ohm
	0.5 MHz	0.25 dB/100ft	
	1 MHz	0.36 dB/100ft	

Voltage

UL Voltage Rating
300 V (CMG, PLTC-ER)

Mechanical Characteristics

Temperature

Operating
-30°C to +105°C

Bend Radius

Stationary Min.	Installation Min.
4.8 in (120 mm)	4.8 in

Standards and Compliance

Environmental Suitability:	Indoor, Sunlight Resistance, Burial
Flammability / Reaction to Fire:	UL1685 UL Loading, FT4, 1202
NEC / UL Compliance:	Article 725, Article 800, CMG, PLTC
CEC / C(UL) Compliance:	CMG
CPR Euroclass:	Fca
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 Thick

Product Notes

Notes:	Thick. Meter marks on jacket to aid users in installation. ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark. Jacket printed ""1PR16"" instead of ""1PR15"" due to UL requirements for CMG Listing.
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History

Update and Revision:	Revision Number: 0.420 Revision Date: 10-13-2021
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