



Product: [3083A](#)

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

Request Sample

### 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	Nom. Insulation Diameter	Color Code	Notes
Power Pair(s)	PVC - Polyvinyl Chloride	0.021 in (0.53 mm)	0.109 in (2.77 mm)	Red & Black	
Data Pair(s)	PE - Polyethylene (Foam)	0.053 in (1.3 mm)	0.150 in (3.81 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)

Table Notes:	Jacket OD +/- 0.015
Overall Cable Diameter (Nominal):	0.476 in (12.1 mm)

#### Electrical Characteristics

##### Electricals

Element	Nom. Conductor DCR	Nom. Inner Shield DCR	Nom. Capacitance Cond-to-Cond	Nom. Characteristic Impedance	Nom. Velocity of Prop.	Max. Current
Power Pair(s)	3.58 Ohm/1000ft	5.75 Ohm/1000ft (18.9 Ohm/km)				24 Amps per Conductor at 30°C
Data Pair(s)	7.2 Ohm/1000ft (24 Ohm/km)	3.58 Ohm/1000ft (11.7 Ohm/km)	12 pF/ft (39 pF/m)	120 Ohm	75%	14 Amps per Conductor at 30°C
Nom. Outer Shield DCR:		7.29 Ohm/1000ft (23.9 Ohm/km)				

## High Frequency

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

## Voltage

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

## Mechanical Characteristics

### Temperature

UL Temperature	Operating
105°C	-20°C to +105°C

### Bend Radius

Stationary Min.	Installation Min.
5.712 in (145.1 mm)	5.712 in (145.1 mm)

Max. Pull Tension:	192.6 lbs (87.36 kg)
Bulk Cable Weight:	127 lbs/1000ft

## Standards and Compliance

Environmental Suitability:	Indoor, Sunlight Resistance, Burial
Flammability / Reaction to Fire:	UL 1685 FT4 Loading, IEEE 1202 FT4
CPR Compliance:	CPR Euroclass: Fca
NEC / UL Compliance:	Article 725, Article 800, CMG, PLTC
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 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: 0.525 Revision Date: 04-14-2023
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## Part Numbers

### Variants

Item #	Color	Putup Type	Length	UPC
3083A 5601000	Yellow, Bright	Reel	1,000 ft	612825140856
3083A 5602000	Yellow, Bright	Reel	2,000 ft	612825140863

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