



**Product:** [3083A](#)

DeviceBus®, 2 Pr #15+18 Str TC, PVC&PO Ins, IS+OA TC Brd, CPE Jkt, Chemical Res

[Request Sample](#)

## Product Description

DeviceBus® for ODVA DeviceNet™, 2 Pair, 15 (19x28)+18 (19x30) AWG Tinned Copper, PVC&PO Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, CPE Outer Jacket, Chemical Res CMG

## Technical Specifications

### Physical Characteristics (Overall)

#### Conductor

| AWG | Stranding | Material           | No. of Pairs |
|-----|-----------|--------------------|--------------|
| 15  | 19x27     | TC - Tinned Copper | 1            |
| 18  | 19x30     | TC - Tinned Copper | 1            |

Conductor Count: 4

#### Insulation

| Element | Material                  | Nominal Wall Thickness |
|---------|---------------------------|------------------------|
| 15      | PVC - Polyvinyl Chloride  | 0.021 in               |
| 18      | FPE - Foamed Polyethylene | 0.053 in               |

#### Color Chart

| Number     | Color        |
|------------|--------------|
| 1 (15 AWG) | Red & Black  |
| 2 (18 AWG) | Blue & White |

#### Inner Shield Material

| Type | Material                     | Coverage [%] | Drainwire Material | Drainwire AWG |
|------|------------------------------|--------------|--------------------|---------------|
| Tape | Aluminum Foil-Polyester Tape | 100 %        | TC - Tinned Copper | 18            |

#### Outer Shield Material

| Type  | Material           | Coverage [%] | Drainwire Construction n x D |
|-------|--------------------|--------------|------------------------------|
| Braid | TC - Tinned Copper | 65 %         | 19x30                        |

#### Outer Jacket Material

| Material                       | Nominal Diameter | Nominal Wall Thickness |
|--------------------------------|------------------|------------------------|
| CPE - Chlorinated Polyethylene | 0.449 in         | 0.053 in               |

### Electrical Characteristics

#### Conductor DCR

| Element | Nominal Conductor DCR | Nominal Outer Shield DCR |
|---------|-----------------------|--------------------------|
| 15 AWG  | 3.6 Ohm/1000ft        | 1.8 Ohm/1000ft           |
| 18 AWG  | 6.9 Ohm/1000ft        |                          |

#### Capacitance

| Element          | Nom. Capacitance Conductor to Conductor |
|------------------|---|
| 18 AWG Pair Only |   |
|                  | 12.0 pF/ft                              |

## Impedance

### Nominal Characteristic Impedance

120 Ohm

## Delay

| Max. Delay | Max. Delay Description | Nominal Velocity of Propagation (VP) [%] |
|------------|------------------------|--|
| 1.36 ns/ft | 18 AWG Pair Only       | 75 %                                     |

## High Freq

| Element          | Frequency [MHz] | Max./Min. Input Impedance (unFitted) |
|------------------|-----------------|--------------------------------------|
| 18 AWG Pair Only | 0.125 MHz       | 120 Ohm                              |
|                  | 0.5 MHz         |                                      |
|                  | 1 MHz           |                                      |

## Current

| Element | Max. Recommended Current [A] |
|---------|------------------------------|
| 15 AWG  | 8.0 Amps                     |
| 18 AWG  | 5.0 Amps                     |

## Voltage

### UL Voltage Rating

300 V RMS

## Temperature Range

|                       |                 |
|-----------------------|-----------------|
| Non-UL Temp Rating:   | 105°C           |
| UL Temp Rating:       | 75°C            |
| Operating Temp Range: | -30°C To +105°C |

## Mechanical Characteristics

|                                  |                |
|----------------------------------|----------------|
| Bulk Cable Weight:               | 119 lbs/1000ft |
| Max Recommended Pulling Tension: | 190 lbs        |
| Min Bend Radius/Minor Axis:      | 4.8 in         |

## Standards

|                          |                    |
|--------------------------|--------------------|
| NEC Articles:            | 800                |
| NEC/(UL) Specification:  | CMG, ITC, PLTC-ER  |
| CEC/C(UL) Specification: | CMG                |
| UL AWM Style:            | 2464               |
| CPR Euroclass:           | Fca                |
| Other Specification:     | ODVA Class 2 Thick |

## 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 RoHS Compliance Date (yyyy-mm-dd): | 2005-10-13                    |
| CA Prop 65 (CJ for Wire & Cable):     | Yes                           |
| MII Order #39 (China RoHS):           | Yes                           |

## Suitability

|                                    |     |
|------------------------------------|-----|
| Suitability - Burial:              | Yes |
| Suitability - Sunlight Resistance: | Yes |

## Flammability, LSOH, Toxicity Testing

|                   |                   |
|-------------------|-------------------|
| UL Flammability:  | UL1685 UL Loading |
| CSA Flammability: | FT4               |

|                    |           |
|--------------------|-----------|
| IEEE Flammability: | 1202      |
| UL voltage rating: | 300 V RMS |

## Part Number

### Variants

| Item #        | Color          | UPC          | Length   | Footnote |
|---------------|----------------|--------------|----------|----------|
| 3083A 5601000 | Yellow, Bright | 612825140856 | 1,000 ft | C        |
| 3083A 5602000 | Yellow, Bright | 612825140863 | 2,000 ft | C        |

Footnote: C - CRATE REEL PUT-UP.

## 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.

## History

Update and Revision: Revision Number: 0.348 Revision Date: 12-19-2019

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