



Product: [3084A](#)

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

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Product Description

DeviceBus® for ODVA DeviceNet™, 2 Pair 22+24AWG (19x34+19x36) Tinned Copper, PVC+Foam PE Insulation, Individual Beldfoil® & OA Tinned Copper Braid(65%) Shield, PVC Outer Jacket, 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 | Size | Stranding | Material |
|---------------|-------------------|--------|-----------|--------------------|
| Power Pair(s) | 1 | 22 AWG | 19x34 | TC - Tinned Copper |
| Data Pair(s) | 1 | 24 AWG | 19x36 | TC - Tinned Copper |

Insulation

| Element | Material | Nom. Thickness | Color Code |
|---------------|--------------------------|--------------------|--------------|
| Power Pair(s) | PVC - Polyvinyl Chloride | 0.021 in (0.53 mm) | Red & Black |
| Data Pair(s) | PE - Polyethylene (Foam) | 0.026 in (0.66 mm) | Blue & White |

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% | 22 AWG (19x34) TC |

Outer Jacket

| Material | Nom. Thickness | Nom. Diameter |
|--------------------------|--------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.032 in (0.81 mm) | 0.280 in (7.11 mm) |

| | |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.280 in (7.11 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Electricals

| Element | Nom. Conductor DCR | Max. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Characteristic Impedance | Nom. Velocity of Prop. | Max. Current |
|---------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|------------------------|---|
| Power Pair(s) | 17.5 Ohm/1000ft (57.4 Ohm/km) | 17.5 Ohm/1000ft (57.4 Ohm/km) | | | | 4 Amps per Conductor at 25°C (Power Pair) |
| Data Pair(s) | 28.0 Ohm/1000ft (91.9 Ohm/km) | 28 Ohm/100m | 12 pF/ft (39 pF/m) | 120 Ohm | 75% | 4 Amps Per Conductor at 24 V (per NEC CL2) (Power Pair) |

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| Nom. Outer Shield DCR: | 3.2 Ohm/1000ft (10 Ohm/km) |
|------------------------|----------------------------|

High Frequency

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

Voltage

| UL Voltage Rating |
|-----------------------------------|
| 300 V (CMG), 600 V (UL AWM 20201) |

Mechanical Characteristics

Temperature

| UL Temperature | Operating |
|----------------|----------------|
| 75°C | -20°C to +60°C |

Bend Radius

| Stationary Min. | Installation Min. |
|-------------------|-------------------|
| 3.36 in (85.3 mm) | 3.36 in |

| | |
|--------------------|----------------------------|
| Max. Pull Tension: | 65 lbs (29 kg) |
| Bulk Cable Weight: | 155 lbs/1000ft (231 kg/km) |

Standards and Compliance

| | |
|----------------------------------|---|
| Environmental Suitability: | Indoor, Sunlight Resistance, Oil Resistance |
| Flammability / Reaction to Fire: | UL1685 FT4 Loading, IEEE 1202 FT4, IEC 60332-1-2 |
| CPR Compliance: | CPR Euroclass: Eca |
| NEC / UL Compliance: | Article 725, Article 800, CL2, CMG |
| AWM Compliance: | AWM 20201, AWM 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

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| Notes: | Flex Life: +/- 90 Degree Flex Test, 2" Diameter, 2 lbs. tension: 2000 Cycles minimum. Meter marks on jacket to aid users in installation. ODVA DeviceNet is an Open DeviceNet Vendor Association, Inc. trademark. |
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History

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| Update and Revision: | Revision Number: 0.414 Revision Date: 12-15-2021 |
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Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC |
|---------------|----------|------------|----------|--------------|
| 3084A T5U500 | Gray T5U | Reel | 500 ft | 612825140900 |
| 3084A T5U1000 | Gray T5U | Reel | 1,000 ft | 612825140887 |
| 3084A T5U2000 | Gray T5U | Reel | 2,000 ft | 612825140894 |
| 3084A T5U5000 | Gray T5U | Reel | 5,000 ft | 612825140917 |

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