

3084A Multi-Conductor - DeviceBus® for ODVA DeviceNet™



For more Information
please call

1-800-Belden1



Description:

22 and 24 AWG stranded tinned copper conductors, PVC insulation (power), FPE insulation (Data), individually foil shielded (100% coverage) and an overall tinned copper braid (65% coverage), sunlight/oil-resistant PVC jacket.

Physical Characteristics (Overall)

Conductor

AWG:

| # Conductors | # Pairs | AWG | Stranding | Conductor Material |
|--------------|---------|-----|-----------|--------------------|
| 4 | 1 | 22 | 19x34 | TC - Tinned Copper |
| | 1 | 24 | 19x36 | TC - Tinned Copper |

Insulation

Insulation Material:

| Insulation Material | AWG |
|--------------------------|-----|
| PVC - Polyvinyl Chloride | 22 |
| FPE - Foam Polyethylene | 24 |

Inner Shield

Inner Shield Material:

| Layer # | Type | Inner Shield Material | Coverage (%) |
|-------------|------|------------------------------|--------------|
| 22 AWG Pair | Tape | Aluminum Foil-Polyester Tape | 100 |
| 24 AWG Pair | Tape | Aluminum Foil-Polyester Tape | 100 |

Inner Shield Drain Wire AWG:

| AWG |
|-----|
| 22 |

Inner Shield Drain Wire Stranding: 19x34

Inner Shield Drain Wire Conductor Material: TC - Tinned Copper

Outer Shield

Outer Shield Material:

| Type | Outer Shield Material | Coverage (%) |
|-------|-----------------------|--------------|
| Braid | TC - Tinned Copper | 65 |

Outer Jacket

Outer Jacket Material:

| Outer Jacket Material |
|--------------------------|
| PVC - Polyvinyl Chloride |

Overall Cabling

Overall Nominal Diameter: 0.280 in.

Pair

Pair Color Code Chart:

| Number | Color |
|-------------|--------------|
| 22 AWG Pair | Red & Black |
| 24 AWG Pair | Blue & White |

Mechanical Characteristics (Overall)

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| | |
|--|-----------------|
| Operating Temperature Range: | -20°C To +75°C |
| UL Temperature Rating: | 75°C |
| Bulk Cable Weight: | 41 lbs/1000 ft. |
| Max. Recommended Pulling Tension: | 65 lbs. |
| Min. Bend Radius (Install)/Minor Axis: | 2.750 in. |

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

| | |
|---------------------------------------|-------------------|
| NEC/(UL) Specification: | CMG, CL2 |
| CEC/C(UL) Specification: | CMG |
| CSA Specification: | I/II A |
| EU CE Mark: | Yes |
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2002/95/EC (RoHS): | Yes |
| EU RoHS Compliance Date (mm/dd/yyyy): | 04/01/2005 |
| EU Directive 2002/96/EC (WEEE): | Yes |
| EU Directive 2003/11/EC (BFR): | Yes |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |
| Other Specification: | ODVA Class 2 Thin |

Flame Test

| | |
|-----------------|--------------------|
| UL Flame Test: | UL1685 FT4 Loading |
| CSA Flame Test: | FT4 |

Suitability

| | |
|----------------------|-----|
| Sunlight Resistance: | Yes |
| Oil Resistance: | Yes |

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

| Description | Impedance (Ohm) |
|-------------|-----------------|
| 24 AWG Pair | 120 |

Nom. Inductance:

| Description | Inductance (µH/ft) |
|-------------|--------------------|
| 22 AWG Pair | .221 |
| 24 AWG Pair | .251 |

Nom. Capacitance Conductor to Conductor:

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Capacitance (pF/ft) |
|-------------|-------------|-------------------|------------------|---------------------|
| 24 AWG Pair | 1 | | | 12.0 |

Nominal Velocity of Propagation:

| Description | VP (%) |
|-------------|--------|
| 24 AWG Pair | 75 |

Maximum Delay:

| Description | Freq. (MHz) | Start Freq. (MHz) | Stop Freq. (MHz) | Delay (ns/ft) |
|-------------|-------------|-------------------|------------------|---------------|
| 24 AWG Pair | | | | 1.36 |

Maximum Conductor DC Resistance:

| Description | DCR @ 20°C (Ohm/100 m) |
|-------------|------------------------|
|-------------|------------------------|

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| | |
|--------|------|
| 22 AWG | 17.5 |
| 24 AWG | 28.0 |

Nominal Outer Shield DC Resistance:

| DCR @ 20°C (Ohm/1000 ft) |
|--------------------------|
| 3.2 |

Max. Attenuation:

| () | Description | Freq. (MHz) |
|-----|------------------|-------------|
| .29 | 24 AWG Pair Only | .125 |
| .50 | | .500 |
| .70 | | 1.000 |

Max. Operating Voltage - UL:

| Voltage | Description |
|-----------|-------------|
| 300 V RMS | CL2, CMG |
| 300 V RMS | C(UL) AWM |
| 600 V RMS | UL AWM |

Max. Recommended Current:

| Current |
|--|
| 1.7 Amps per conductor @ 25°C (24 AWG) |
| 4 Amps per conductor @ 24 V per NEC CL2 (Power Pair) |

Notes (Overall)

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.

Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---------------|----------|-------------|----------|-------|-----------------------|
| 3084A T5U1000 | 1,000 FT | 47.000 LB | GRAY T5U | C | 2 #22, 2 #24 SHLD PVC |
| 3084A T5U2000 | 2,000 FT | 96.000 LB | GRAY T5U | C Z | 2 #22, 2 #24 SHLD PVC |
| 3084A T5U500 | 500 FT | 22.000 LB | GRAY T5U | C | 2 #22, 2 #24 SHLD PVC |
| 3084A 0021000 | 1,000 FT | 47.000 LB | RED | C | 2 #22, 2 #24 SH PVC |

Notes:

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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