



Part Number: 3085A

DeviceNet[™], (1 pr) 22 AWG (155x44) TC, (1 pr) 24 AWG (105x44) TC, PVC-FPE/CPE, Foil Shld, CMG

Product Description

One 22 AWG stranded (155x44) tinned copper conductors, one 24 AWG stranded (105x44) tinned copper conductors, PVC insulation (power), foam polyethylene (FPE) insulation (data), individual foil shield (100% coverage), CPE jacket.

Technical Specifications

Construction and Dimensions

Conductor:

| AWG | Stranding | Material | No. of Conductors | No. of Pairs |
|-----|-----------|--------------------|-------------------|--------------|
| 22 | 19×34 | TC - Tinned Copper | 4 | 1 |
| 24 | 19x36 | TC - Tinned Copper | | 1 |

Insulation:

| Element | Material |
|---------|--------------------------|
| 22 | PVC - Polyvinyl Chloride |
| 24 | FPE - Foam Polyethylene |

Color Chart 1:

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

Stranding:

| Lay Length | | | |
|------------|--|--|--|
| 1 MHz | | | |

Innershield:

| Туре | Layer | Material | Coverage [%] | Drainwire AWG | Drainwire Construction n x D |
|------|-------------|------------------------------|--------------|--------------------|------------------------------|
| Таре | 22 AWG Pair | Aluminum Foil-Polyester Tape | 100 % | 22 | 19x34 mm |
| Таре | 24 AWG Pair | Aluminum Foil-Polyester Tape | 100 % | TC - Tinned Copper | |

Outershield 1:

| Туре | Material | Coverage [%] |
|-------|--------------------|--------------|
| Braid | TC - Tinned Copper | 65 % |

Outerjacket 1:

| Material | Nominal Diameter |
|--------------------------------|------------------|
| CPE - Chlorinated Polyethylene | 0.28 in |

Electrical Characteristics

Conductor DCR:

| Element | Max. Conductor DCR | Nominal Outer Shield DCR |
|---------|--------------------|--------------------------|
| 22 AWG | 17.5 Ohm/1000ft | 3.2 Ohm/1000ft |
| 24 AW G | 28 Ohm/100m | |

Capacitance:

| Element | Nom. Capacitance Conductor to Conductor |
|-------------|---|
| 24 AWG Pair | 12 pF/ft |

Impedance:

| Nominal Characteristic Impedance | Nominal Characteristic Impedance Description |
|----------------------------------|--|
| 120 Ohm | 24 AWG Pair |

Delay:

| Max. Delay | Max. Delay Description | Nominal Velocity of Propagation (VP) [%] | Nominal Velocity of Propagation (VP) Description |
|------------|------------------------|--|--|
| 1.36 ns/ft | 24 AWG Pair | 75 % | 24 AWG Pair |

High Freq:

| Element | Frequency [MHz] |
|------------------|-----------------|
| 24 AWG Pair Only | 0.125 MHz |
| | 0.5 MHz |
| | 1 MHz |

Current:

| Max. R | Recommended Current [A] |
|---------|---|
| 1.7 Amp | ps per conductor @ 25°C (24 AWG) |
| 4 Amps | s per conductor @ 24 V per NEC CL2 (Power Pair) |

Voltage:

| UL Voltage Rating | |
|-------------------|--|
| 300 V RMS | |

Use

| Max Recommended Pulling Tension: | 65 lbs | |
|----------------------------------|--------|--|

Safety

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

Temperature Range

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

Mechanical Characteristics

| Min Bend Radius/Minor Axis: | 2.75 in |
|-----------------------------|---------|

Part Number

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

Standards

| CA Prop 65 (CJ for Wire & Cable): | CA Prop 65 (CJ for Wire & Cable) |
|-----------------------------------|----------------------------------|
| CEC/C(UL) Specification: | CEC/C(UL) Specification |
| MII Order #39 (China RoHS): | MII Order #39 (China RoHS) |
| NEC/(UL) Specification: | NEC/(UL) Specification |
| Other Specification: | Other Specification |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |

History

| Notes: | Thin. Meter marks on jacket to aid users in installation. ODVA Devicenet is an Open DeviceNet Vendor Association, Inc. trademark. |
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Product Variants

| Part Number | Color | Put-Up Type | Length |
|---------------|----------------|-------------|---------|
| 3085A 5601000 | YELLOW, BRIGHT | Reel | 1000 ft |
| 3085A 5602000 | YELLOW, BRIGHT | Reel | 2000 ft |
| 3085A 5605000 | YELLOW, BRIGHT | Reel | 5000 ft |
| 3085A 560500 | YELLOW, BRIGHT | Reel | 500 ft |

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