



**Product:** [8168](#)

RS232/422 Low Cap, #24-8pr, FPO, Individ. & O/A Foils+Braid, PVC Jkt, CM, 100Ω

### Product Description

Computer EIA RS-232/422, Digital Audio Cable, 24 AWG stranded (7x32) tinned copper conductors, Datalene® insulation, 8 twisted pairs individually Beldfoil® shielded + overall 100% Beldfoil® + tinned copper braid shield (65% coverage), drain wire, PVC jacket.

### Technical Specifications

#### Product Overview

|                        |   |
|------------------------|---|
| Suitable Applications: | RS-232 Extended Distance & RS-422 Applications; Computer Communications; Low Voltage Analog signals (4-20ma, 0-10v, ...); Low Voltage Digital Control (24v, ...); Digital Audio; Panel Wiring |
|------------------------|---|

#### Construction Details

##### Conductor

| Element | Number of Element | AWG | Stranding | Material           |
|---------|-------------------|-----|-----------|--------------------|
| Pair(s) | 8                 | 24  | 7x32      | TC - Tinned Copper |

##### Insulation

| Element | Material                 | Thickness | Color Code  |
|---------|--------------------------|-----------|---|
| Pair(s) | PE - Polyethylene (Foam) | 0.019 in  | Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown, Black & Orange, Red & White |

##### Inner Shield Material

| Element | Shield Type | Material                | Coverage | Drainwire Type   | Notes                      |
|---------|-------------|-------------------------|----------|------------------|----------------------------|
| Pair(s) | Tape        | Bi-Laminate (Alum+Poly) | 100%     | 24 AWG (7x32) TC | each pair, Z-Fold® Foil-in |

##### Outer Shield Material

| Shield Type  | Material                                     | Coverage   |
|--------------|--|------------|
| Tape + Braid | Bi-Laminate (Alum+Poly) + Tinned Copper (TC) | 100% + 65% |

##### Outer Jacket Material

| Material                 | Thickness | Nom. Diameter |
|--------------------------|-----------|---------------|
| PVC - Polyvinyl Chloride | 0.048 in  | 0.479 in      |

Cable Diameter (Nominal): 0.479 in

#### Electrical Characteristics

##### Electricals

| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Characteristic Impedance | Nom. Velocity of Prop. | Max. Current                   |
|---------|--------------------|-------------------------------|---|--------------------------|------------------------|--------------------------------|
| Pair(s) | 24 Ohm/1000ft      | 12.5 pF/ft                    | 22 pF/ft  | 100 Ohm                  | 78%                    | 1.1 Amps per Conductor at 25°C |

Nom Outer Shield DCR: 3.0 Ohm/1000ft

##### Voltage

| UL Voltage Rating               |
|---------------------------------|
| 300 V (CM), 300 V (UL AWM 2493) |

#### Mechanical Characteristics

## Temperature

| UL Rating          | Operating      |
|--------------------|----------------|
| 60°C (UL AWM 2493) | -40°C to +60°C |

## Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 5 in            | 4.8 in            |

|                    |                |
|--------------------|----------------|
| Max. Pull Tension: | 184 lbs        |
| Bulk Cable Weight: | 108 lbs/1000ft |

## Standards and Compliance

|                                 |   |
|---------------------------------|---|
| Environmental Suitability:      | Indoor  |
| Flammability / Fire Resistance: | UL1685 UL Loading, IEC 60332-1-2  |
| NEC / UL Compliance:            | Article 800, CM   |
| AWM Compliance:                 | 2493  |
| CEC / C(UL) Compliance:         | CM  |
| CPR Euroclass:                  | Eca   |
| European Directive Compliance:  | EU CE Mark, EU Directive 2011/65/EU (ROHS II), EU Directive 2012/19/EU (WEEE) |
| APAC Compliance:                | China RoHS II (GB/T 26572-2011)   |

## Product Notes

|        |  |
|--------|--|
| Notes: | Datalene® insulation features include low dielectric constant and a dissipation factor for high-speed, low-distortion data handling. Physical properties include good crush resistance and light weight. |
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## History

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| Update and Revision: | Revision Number: 0.324 Revision Date: 09-30-2020 |
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