



**Product:** [8164](#)

RS232/422 Low Cap, #24-4pr, 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, 4 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 | Size   | Stranding | Material           |
|---------|-------------------|--------|-----------|--------------------|
| Pair(s) | 4                 | 24 AWG | 7x32      | TC - Tinned Copper |

#### Insulation

| Element | Material                 | Nom. Thickness     | Color Code  |
|---------|--------------------------|--------------------|---|
| Pair(s) | PE - Polyethylene (Foam) | 0.019 in (0.48 mm) | Black & Red, Black & White, Black & Green, Black & Blue |

#### Inner Shield

| 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

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

#### Outer Jacket

| Material                 | Nom. Thickness    | Nom. Diameter      | Ripcord |
|--------------------------|-------------------|--------------------|---------|
| PVC - Polyvinyl Chloride | 0.048 in (1.2 mm) | 0.388 in (9.86 mm) | Yes     |

Overall Cable Diameter (Nominal): 0.388 in (9.86 mm)

### Electrical Characteristics

#### Electricals

| Element | Nom. Conductor DCR        | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Nom. Characteristic Impedance | Nom. Velocity of Prop. | Max. Current                   |
|---------|---------------------------|-------------------------------|---|-------------------------------|------------------------|--------------------------------|
| Pair(s) | 24 Ohm/1000ft (79 Ohm/km) | 12.5 pF/ft (41.0 pF/m)        | 22 pF/ft (72 pF/m)                              | 100 Ohm                       | 78%                    | 2.5 Amps per Conductor at 25°C |

#### Voltage

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

### Mechanical Characteristics

## Temperature

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

## Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 3.9 in (99 mm)  | 3.9 in (99 mm)    |

|                    |                           |
|--------------------|---------------------------|
| Max. Pull Tension: | 106 lbs (48.1 kg)         |
| Bulk Cable Weight: | 72 lbs/1000ft (110 kg/km) |

## Standards and Compliance

|                                  |  |
|----------------------------------|--|
| Environmental Suitability:       | Indoor (Not Riser or Plenum), Indoor   |
| Flammability / Reaction to Fire: | UL1685 UL Loading, IEC 60332-1-2   |
| CPR Compliance:                  | CPR Euroclass: Eca   |
| NEC / UL Compliance:             | Article 800, CM  |
| AWM Compliance:                  | AWM 2493   |
| CEC / C(UL) Compliance:          | CM   |
| European Directive Compliance:   | EU CE Mark, EU Directive 2011/65/EU (RoHS 2), 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. |
|--------|--|

## History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.333 Revision Date: 04-08-2022 |
|----------------------|--|

## Part Numbers

### Variants

| Item #       | Color  | Putup Type | Length   | UPC/EAN       |
|--------------|--------|------------|----------|---------------|
| 8164.0030    | Chrome | Reel       | 30 m     | 8719605017970 |
| 8164 060100  | Chrome | Reel       | 100 ft   | 612825195634  |
| 8164.00152   | Chrome | Reel       | 152 m    | 8719605017963 |
| 8164.00305   | Chrome | Reel       | 305 m    | 8719605017987 |
| 8164 060500  | Chrome | Reel       | 500 ft   | 612825195658  |
| 8164 0601000 | Chrome | Reel       | 1,000 ft | 612825195641  |

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