



**Product:** [8175](#) 

RS232/422 Low Cap, #24-15pr, 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, 15 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) | 15                | 24  | 7x32      | TC - Tinned Copper |

#### Insulation

| Element | Material                 | Thickness          | Color Code                                                                                                                                                                                                         |
|---------|--------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pair(s) | PE - Polyethylene (Foam) | 0.019 in (0.48 mm) | Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown, Black & Orange, Red & White, Red & Green, Red & Blue, Red & Yellow, Red & Brown, Red & Orange, Green & White, Green & 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 + Braid | Bi-Laminate (Alum+Poly) + Tinned Copper (TC) | 100% + 65% |

#### Outer Jacket

| Material                 | Thickness         | Nom. Diameter |
|--------------------------|-------------------|---------------|
| PVC - Polyvinyl Chloride | 0.065 in (1.7 mm) | 0.665 in      |

Cable Diameter (Nominal): 0.665 in (16.9 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%                    | 1.1 Amps per Conductor at 25°C |

Nom. Outer Shield DCR: 2.5 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. |
|-----------------|-------------------|
| 6.7 in (170 mm) | 6.7 in (170 mm)   |

|                    |                            |
|--------------------|----------------------------|
| Max. Pull Tension: | 322 lbs (146 kg)           |
| Bulk Cable Weight: | 194 lbs/1000ft (289 kg/km) |

Standards and Compliance

|                                 |                                                                              |
|---------------------------------|------------------------------------------------------------------------------|
| Environmental Suitability:      | Indoor                                                                       |
| Flammability / Fire Resistance: | UL1685 UL Loading                                                            |
| NEC / UL Compliance:            | Article 800, CM                                                              |
| AWM Compliance:                 | 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: 0.325 Revision Date: 06-08-2021 |
|----------------------|--------------------------------------------------|

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