



**Product:** [8112](#)

RS-232/422 Low Cap, #24-12.5pr, FPO, O/A Foil+Braid, PVC Jkt, CMG, 100Ω

### Product Description

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

### Technical Specifications

#### Product Overview

|                        |  |
|------------------------|--|
| Suitable Applications: | rs-232 extended distance applications; rs-422 applications; computer communications; low voltage analog signals (4-20ma, 0-10v, ...); low voltage digital control (24v, ...); line level audio; panel wiring |
|------------------------|--|

#### Construction Details

##### Conductor

| Element      | Number of Element | Size   | Stranding | Material           |
|--------------|-------------------|--------|-----------|--------------------|
| Pair(s)      | 12                | 24 AWG | 7x32      | TC - Tinned Copper |
| Conductor(s) | 1                 | 24 AWG | 7x32      | TC - Tinned Copper |

##### Insulation

| Element      | Material                 | Nom. Thickness     | Nom. Insulation Diameter | Color Code                |
|--------------|--------------------------|--------------------|--------------------------|---------------------------|
| Pair(s)      | PE - Polyethylene (Foam) | 0.013 in (0.33 mm) | 0.049 in (1.2 mm)        | Western Electric Standard |
| Conductor(s) | PE - Polyethylene (Foam) | 0.013 in (0.33 mm) | 0.049 in (1.2 mm)        | Gray                      |

##### Outer Shield

| Shield Type | Material                | Coverage | Drainwire Type   |
|-------------|-------------------------|----------|------------------|
| Tape        | Bi-Laminate (Alum+Poly) | 100%     | 24 AWG (7x32) TC |
| Braid       | Tinned Copper (TC)      | 65%      |                  |

##### Outer Jacket

| Material                 | Nom. Thickness     | Nom. Diameter      |
|--------------------------|--------------------|--------------------|
| PVC - Polyvinyl Chloride | 0.035 in (0.89 mm) | 0.440 in (11.2 mm) |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.440 in (11.2 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             | 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 |
| Conductor(s) | 24 Ohm/1000ft (79 Ohm/km) |                               |   |                               |                        |                                |

##### Voltage

| UL Voltage Rating              |
|--------------------------------|
| 300 V (CM), 30 V (UL AWM 2919) |

#### Mechanical Characteristics

## Temperature

| UL Temperature | Operating      |
|----------------|----------------|
| 80°C           | -30°C to +80°C |

## Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 4.4 in (110 mm) | 4.4 in (110 mm)   |

|                    |                   |
|--------------------|-------------------|
| Max. Pull Tension: | 124 lbs (56.2 kg) |
| Bulk Cable Weight: | 92 lbs/1000ft     |

## Standards and Compliance

|                                  |  |
|----------------------------------|--|
| Environmental Suitability:       | Indoor (Not Riser or Plenum), Indoor                             |
| Flammability / Reaction to Fire: | UL 1685 FT4 Loading, IEC 60332-1-2                               |
| CPR Compliance:                  | CPR Euroclass: Eca   |
| NEC / UL Compliance:             | Article 800, CM  |
| AWM Compliance:                  | AWM 2919   |
| CEC / C(UL) Compliance:          | CM   |
| European Directive Compliance:   | EU Directive 2011/65/EU (RoHS 2), EU Directive 2012/19/EU (WEEE) |
| UK Regulation Compliance:        | UKCA Mark  |
| APAC Compliance:                 | China RoHS II (GB/T 26572-2011)                                  |
| Plenum Number:                   | 88112  |

## 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: 0.576 Revision Date: 01-20-2023 |
|----------------------|--|

## Part Numbers

### Variants

| Item #       | Color  | Putup Type | Length   | UPC          |
|--------------|--------|------------|----------|--------------|
| 8112 060100  | Chrome | Reel       | 100 ft   | 612825195078 |
| 8112 060500  | Chrome | Reel       | 500 ft   | 612825195092 |
| 8112 0601000 | Chrome | Reel       | 1,000 ft | 612825195085 |

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