



## Product: <u>8163</u> ☑

RS-232/422 Low Cap, #24-3pr, FPO, Indiv.& O/A Foils+Braid, PVC Jkt, CM,  $100\Omega$ 

## **Product Description**

Computer EIA RS-232/422, Digital Audio Cable, 24 AWG stranded (7x32) tinned copper conductors, Datalene® insulation, 3 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) | 3                 | 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 |

#### Inner Shield

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

### Outer Shield

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

#### Outer Jacket

| Material                          | Nom. Thickness    | Nom. Diameter      |
|-----------------------------------|-------------------|--------------------|
| PVC - Polyvinyl Chloride          | 0.048 in (1.2 mm) | 0.359 in (9.12 mm) |
| Overall Cable Diameter (Nominal): | 0.359 in (9       | 0.12 mm)           |

## **Electrical Characteristics**

#### Electricals

| Element | Nom. Conductor DCR           | Nom. Capacitance<br>Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds +<br>Shield) | Nom. Characteristic<br>Impedence | Nom. Velocity of<br>Prop. | Max. Current                   |
|---------|------------------------------|----------------------------------|--|----------------------------------|---------------------------|--------------------------------|
| Pair(s) | 24 Ohm/1000ft (79<br>Ohm/km) | 12.5 pF/ft (41.0 pF/m)           | 22 pF/ft (72 pF/m)                                 | 100 Ohm                          | 78%                       | 1.6 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 M3.6 in (91 mm)3.6 in (91 mm) |                          |
|---|--------------------------|
| Max. Pull Tension:  | 84 lbs                   |
| Bulk Cable Weight:  | 62 lbs/1000ft (92 kg/km) |

## **Standards and Compliance**

| Environmental Suitability:       | 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:                  | 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**

|  |  | 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: 0.396 Revision Date: 12-15-2021

#### Variants

| Item #       | Color  | Putup Type | Length   | UPC/EAN       |
|--------------|--------|------------|----------|---------------|
| 8163.0030    | Chrome | Reel       | 30 m     | 8719605017932 |
| 8163 060100  | Chrome | Reel       | 100 ft   | 612825195597  |
| 8163.01152   | Chrome | Reel       | 152 m    | 8719605017956 |
| 8163.00305   | Chrome | Reel       | 305 m    | 8719605017949 |
| 8163 060500  | Chrome | Reel       | 500 ft   | 612825195610  |
| 8163 0601000 | Chrome | Reel       | 1,000 ft | 612825195603  |
| 8163 0605000 | Chrome | Reel       | 5,000 ft | 612825195627  |

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