



Product: <u>8163</u> ☑

RS-232/422 Low Cap, #24-3pr, FPO, Indiv.& 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, 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 | AWG | Stranding | Material |
|---------|-------------------|-----|-----------|--------------------|
| Pair(s) | 3 | 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 |

Inner Shield Material

| 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 Material

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

Outer Jacket Material

| Material | Thic | kness | Nom. Diameter |
|----------------------------------|------|-------|---------------|
| PVC - Polyvinyl Chloride 0.048 i | | 3 in | 0.359 in |
| Cable Diameter (Nominal): | | 0.359 | in |

Electrical Characteristics

Electricals

| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Characteristic Impedence | Nom. Velocity of Prop. | Max. Current |
|--------------------------------------|-----------------------|----------------------------------|--|-----------------------------|---------------------------|----------------------------------|
| Pair(s) | 24 Ohm/1000ft | 12.5 pF/ft | 22 pF/ft | 100 Ohm | 78% | 1.6 Amps per Conductor at 25℃ |
| Nom Outer Shield DCR: 4.4 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 |
|-------------------|------------------|
| 3.75 in | 3.6 in |
| Max. Pull Tensior | n: 84 lt |
| Bulk Cable Weigh | nt: 62 lt |

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: | СМ |
| 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.

History

| Update and Revision: | Revision Number: 0.384 Revision Date: 09-30-2020 |
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