



Product: [8102](#)

RS232/422 Low Cap, #24-2pr, FPO, O/A Foil+Braid, PVC Jkt, CM, 100Ω

Product Description

Computer EIA RS-232/422 Cable, 24 AWG stranded (7x32) tinned copper conductors, Datalene® insulation, twisted pairs, overall Beldfoil® (100% coverage) + tinned copper braid shield (65% coverage), 24 AWG stranded 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 | No. of Elements | Size | Stranding | Material |
|---------|-----------------|--------|-----------|--------------------|
| Pair(s) | 2 | 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 |

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) | 0.270 in (6.86 mm) |

Overall Cable Diameter (Nominal): 0.270 in (6.86 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 | 12.5 pF/ft (41.0 pF/m) | 22 pF/ft (72 pF/m) | 100 Ohm | 78% | 1.8 Amps per Conductor at 25°C |

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. |
|-----------------|-------------------|
| 2.7 in (69 mm) | 2.7 in (69 mm) |

| | |
|--------------------|----------------|
| Max. Pull Tension: | 36 lbs (16 kg) |
| Bulk Cable Weight: | 34 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; CPR UKCA Class: Eca |
| NEC / UL Compliance: | Article 800, CM |
| AWM Compliance: | AWM 2919 |
| CEC / C(UL) Compliance: | CM |
| European Directive Compliance: | EU CE Mark, 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: | 88102 |

Product Notes

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| 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. |
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History

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| Update and Revision: | Revision Number: 0.499 Revision Date: 01-20-2023 |
|----------------------|--|

Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC/EAN | Footnote |
|---------------|--------|------------|-----------|---------------|----------|
| 8102.0030 | Chrome | Reel | 30 m | 8719605017680 | |
| 8102 060100 | Chrome | Reel | 100 ft | 612825194743 | |
| 8102.01152 | Chrome | Reel | 152 m | 8719605017703 | |
| 8102.00305 | Chrome | Reel | 305 m | 8719605017697 | |
| 8102 060500 | Chrome | Reel | 500 ft | 612825194774 | C |
| 8102 0601000 | Chrome | Reel | 1,000 ft | 612825194750 | C |
| 8102.001000 | Chrome | Reel | 1,000 m | 8719605017673 | |
| 8102 0605000 | Chrome | Reel | 5,000 ft | 612825194781 | C |
| 8102 06010000 | Chrome | Reel | 10,000 ft | 612825194767 | C Y |

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