



Product: [8103](#)

RS-232/422 Low Cap, #24-3pr, 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) | 3               | 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) | 0.283 in (7.19 mm) |

|                                   |                    |
|-----------------------------------|--------------------|
| Overall Cable Diameter (Nominal): | 0.283 in (7.19 mm) |
|-----------------------------------|--------------------|

Electrical Characteristics

Electricals

| Element | Nom. Conductor DCR | Nom. Capacitance Cond-to-Cond | Nom. Capacitance Cond-to-Other (Conds + Shield) | Nom. Characteristic Impedence | 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%                    | 1.5 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. |
|-----------------|-------------------|
| 2.8 in (71 mm)  | 2.8 in (71 mm)    |

|                    |                |
|--------------------|----------------|
| Max. Pull Tension: | 52 lbs (24 kg) |
| Bulk Cable Weight: | 39 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:                   | 88103                                                                        |

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: 0.549 Revision Date: 12-22-2023 |
|----------------------|--------------------------------------------------|

Part Numbers

Variants

| Item #        | Color  | Putup Type | Length    | UPC/EAN       | Footnote |
|---------------|--------|------------|-----------|---------------|----------|
| 8103.0030     | Chrome | Reel       | 30 m      | 8719605017727 |          |
| 8103 060100   | Chrome | Reel       | 100 ft    | 612825194798  |          |
| 8103.01152    | Chrome | Reel       | 152 m     | 8719605017741 |          |
| 8103.00305    | Chrome | Reel       | 305 m     | 8719605017734 |          |
| 8103 060500   | Chrome | Reel       | 500 ft    | 612825194828  | C        |
| 8103 0601000  | Chrome | Reel       | 1,000 ft  | 612825194804  | C        |
| 8103.013048   | Chrome | Reel       | 3,048 m   | 8719605017758 |          |
| 8103 0605000  | Chrome | Reel       | 5,000 ft  | 612825194835  | C        |
| 8103 06010000 | Chrome | Reel       | 10,000 ft | 612825194811  | C Y      |

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