

# Product: 9813

RS232/422 Low Cap, #28-13pr, PP, O/A Foil+Braid, PVC Jkt, CL2, 100Ω

## Product Description

Computer EIA RS-232/422 Cable, 13-Pair, 28 AWG stranded (7x36) tinned copper conductors, polypropylene insulation, overall Beldfoil® (100% coverage) + tinned copper braid shield (90% coverage), 28 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) | 13 | 28 AWG | 7x36 | TC - Tinned Copper |

**Insulation**

| Element | Material | Nom. Thickness | Nom. Insulation Diameter | Color Code |
|---|---|---|---|---|
| Pair(s) | PP - Polypropylene | 0.009 in (0.23 mm) | 0.033 in (0.84 mm) | Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown, Black & Orange, Red & White, Red & Green, Red & Blue, Red & Yellow, Red & Brown, Red & Orange |

**Outer Shield**

| Shield Type | Material | Coverage | Drainwire Type |
|---|---|---|---|
| Tape | Bi-Laminate (Alum+Poly) | 100% | 28 AWG (7x36) TC |
| Braid | Tinned Copper (TC) | 90% | |

**Outer Jacket**

| Material | Nom. Thickness | Nom. Diameter |
|---|---|---|
| PVC - Polyvinyl Chloride | 0.035 in (0.89 mm) | 0.336 in (8.53 mm) |

| | |
|---|---|
| Overall Cable Diameter (Nominal): | 0.336 in (8.53 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) | 73.5 Ohm/1000ft | 16.5 pF/ft (54.1 pF/m) | 27.5 pF/ft (90.2 pF/m) | 100 Ohm | 66% | 0.65 Amps per Conductor at 25ºC |

**Voltage**

| UL Voltage Rating |
|---|
| 30 V |

### Mechanical Characteristics

**Temperature**

| UL Temperature | Operating |
|---|---|

| | |
|---|---|
| 60°C | -30°C to +60°C |

**Bend Radius**

| Stationary Min. | Installation Min. |
|---|---|
| 3.3 in (84 mm) | 3.3 in (84 mm) |

| | |
|---|---|
| Max. Pull Tension: | 116 lbs (52.6 kg) |
| Bulk Cable Weight: | 62 lbs/1000ft |

## Standards and Compliance

| | |
|---|---|
| Environmental Suitability: | Indoor |
| Flammability / Reaction to Fire: | UL 1685 FT4 Loading, IEC 60332-1-2 |
| CPR Compliance: | CPR Euroclass: Eca |
| NEC / UL Compliance: | Article 725, CL2 |
| AWM Compliance: | AWM 2960 |
| 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) |

## History

| | |
|---|---|
| Update and Revision: | Revision Number: 0.481 Revision Date: 12-22-2023 |

## Part Numbers

**Variants**

| Item # | Color | Putup Type | Length | UPC | Footnote |
|---|---|---|---|---|---|
| 9813 060100 | Chrome | Reel | 100 ft | 612825258995 | |
| 9813 060500 | Chrome | Reel | 500 ft | 612825259015 | C |
| 9813 0601000 | Chrome | Reel | 1,000 ft | 612825259008 | C |

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