



Product: [8106](#)

RS232/422 Low Cap, #24-6pr, 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) | 6 | 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) | 0.341 in (8.66 mm) |

Overall Cable Diameter (Nominal): 0.341 in (8.66 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% | 1.5 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. |
|-----------------|-------------------|
| 3.4 in (86 mm) | 3.4 in (86 mm) |

| | |
|--------------------|----------------|
| Max. Pull Tension: | 73 lbs (33 kg) |
| Bulk Cable Weight: | 54 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 2015/863/EU (RoHS 2 amendment), 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: | 88106 |

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

Part Numbers

Variants

| Item # | Color | Putup Type | Length | UPC/EAN | Footnote |
|--------------|--------|------------|----------|---------------|----------|
| 8106.0030 | Chrome | Reel | 30 m | 8719605017833 | |
| 8106 060100 | Chrome | Reel | 100 ft | 612825194927 | |
| 8106.01152 | Chrome | Reel | 152 m | 8719605017857 | |
| 8106.00305 | Chrome | Reel | 305 m | 8719605017840 | |
| 8106 060500 | Chrome | Reel | 500 ft | 612825194941 | C |
| 8106 0601000 | Chrome | Reel | 1,000 ft | 612825194934 | C |
| 8106 0605000 | Chrome | Reel | 5,000 ft | 612825194958 | |

© 2024 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.