



Part Number: 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

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | No. of Pairs |
|-----|-----------|--------------------|--------------|
| 24 | 7x32 | TC - Tinned Copper | 2 |

| | |
|------------------|--------|
| Conductor Count: | 4 |
| Conductor Size: | 24 AWG |

Insulation

| Material | Material Trade Name | Nominal Wall Thickness |
|---------------------------|---------------------|------------------------|
| FPE - Foamed Polyethylene | Datalene® | 0.013 in |

Color Chart

| Number | Color |
|--------|-----------------------------|
| 1 | White/Blue & Blue/White |
| 2 | White/Orange & Orange/White |

Outer Shield Material

| Type | Layer | Material | Material Trade Name | Coverage [%] | Drainwire Material | Drainwire AWG | Drainwire Construction n x D |
|-------|-------|--------------------|---------------------|--------------|--------------------|---------------|------------------------------|
| Tape | 1 | Aluminum/Polyester | Beldfoil® | 100 % | TC - Tinned Copper | 24 | 7x32 mm |
| Braid | 2 | TC - Tinned Copper | | 65 % | | | |

Outer Jacket Material

| Material | Nominal Diameter | Nominal Wall Thickness |
|--------------------------|------------------|------------------------|
| PVC - Polyvinyl Chloride | 0.27 in | 0.035 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR |
|-----------------------|--------------------------|
| 24 Ohm/1000ft | 4.6 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Conductor | Nom. Capacitance Conductor to Other Conductor to Shield |
|---|---|
| 12.5 pF/ft | 22 pF/ft |

Inductance

| Nominal Inductance |
|--------------------|
| 0.201 μH/ft |

Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 100 Ω |

100 Ohm

Delay

| Max. Delay Skew | Nominal Velocity of Propagation (VP) [%] |
|-----------------|--|
| 78 ns/100m | 78 % |

Current

| Max. Recommended Current [A] |
|---------------------------------|
| 1.8 Amps per conductor @ 25°C A |

Voltage

| UL Description | UL Voltage Rating |
|-------------------|------------------------------|
| UL AWM Style 2919 | 30 V RMS (UL AWM Style 2919) |
| CM | 300 V RMS (CM) |

Temperature Range

| | |
|-----------------------|--------------------------|
| UL Temp Rating: | 80°C (UL AWM Style 2919) |
| Operating Temp Range: | -30°C To +80°C |

Mechanical Characteristics

| | |
|----------------------------------|---------------|
| Bulk Cable Weight: | 34 lbs/1000ft |
| Max Recommended Pulling Tension: | 27.5 lbs |
| Min Bend Radius/Minor Axis: | 2.75 in |

Standards

| | |
|--------------------------|------------------|
| NEC/(UL) Specification: | CM |
| CEC/C(UL) Specification: | CM |
| UL AWM Style: | 2919 (30 V 80°C) |
| CPR Euroclass: | Eca |

Applicable Environmental and Other Programs

| | |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/96/EC (BFR): | Yes |
| EU Directive 2011/65/EU (ROHS II): | Yes |
| EU Directive 2012/19/EU (WEEE): | Yes |
| EU Directive Compliance: | EU Directive 2003/11/EC (BFR) |
| EU CE Mark: | Yes |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2004-01-01 |
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MII Order #39 (China RoHS): | Yes |

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|------------------------------|
| UL Flammability: | UL1685 UL Loading |
| UL voltage rating: | 30 V RMS (UL AWM Style 2919) |

Plenum/Non-Plenum

| | |
|----------------|-------|
| Plenum (Y/N): | No |
| Plenum Number: | 88102 |

Part Number

Variants

| Item # | Color | Footnote |
|---------------|--------|----------|
| 8102.001000 | Chrome | |
| 8102.0030 | Chrome | |
| 8102.00305 | Chrome | |
| 8102.01152 | Chrome | |
| 8102 060100 | Chrome | |
| 8102 0601000 | Chrome | C |
| 8102 06010000 | Chrome | C Y |

| | | |
|--------------|--------|---|
| 8102 060500 | Chrome | C |
| 8102 0605000 | Chrome | C |

| | |
|-----------|---|
| Footnote: | C - CRATE REEL PUT-UP. |
| Footnote: | Y - FINAL PUT-UP LENGTH MAY VAR -10% TO +20% FROM LENGTH SHOWN. MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'. |

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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