



Product: [8104ELW](#) 

Life Cycle Status: Capability

RS-232/422 Low Cap, #24-4pr, FPO, O/A Foil+Braid, LSZH Jkt, 100Ω, Cca

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, LSZH jacket, Cca.

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 |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Product Life Cycle

| | |
|-------------|---------------------------------------------------------------------------------------------|
| Life Cycle: | Capability - the product is not yet standardly available for orders but can be manufactured |
|-------------|---------------------------------------------------------------------------------------------|

Construction Details

Conductor

| Element | No. of Elements | Size | Stranding | Material |
|---------|-----------------|--------|-----------|--------------------|
| Pair(s) | 4 | 24 AWG | 7x32 | TC - Tinned Copper |

Insulation

| Element | Material | Nom. Thickness | Nom. Insulation Diameter |
|---------|--------------------------|--------------------|--------------------------|
| Pair(s) | PE - Polyethylene (Foam) | 0.013 in (0.33 mm) | 0.049 in (1.2 mm) |

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 |
|-------------------------------------------------|-------------------|------------------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 1.1 mm (0.043 in) | 8.0 mm (0.31 in) |

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|-----------------------------------|------------------|
| Overall Cable Diameter (Nominal): | 8.0 mm (0.31 in) |
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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 (79 Ohm/km) | 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 |
| Nom Outer Shield DCR: | 4.1 Ohm/1000ft (13 Ohm/km) | | | | | |

Voltage

| Voltage Rating |
|----------------|
| 300 V |

Mechanical Characteristics

Temperature

| Operating | Storage |
|----------------|----------------|
| -30°C to +70°C | -15°C to +70°C |

Bend Radius

| Stationary Min. | Installation Min. |
|-----------------|-------------------|
| 80 mm (3.1 in) | 80 mm (3.1 in) |

Max. Pull Tension: 57 lbs (26 kg)

Standards and Compliance

| | |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental Suitability: | Indoor/Outdoor - Euroclass Cca, Indoor, Outdoor, Non-Halogenated, Sunlight Resistance - UL 1581 sec 1200 Black Only, Oil Resistance - IEC 60811-404 |
| Flammability / Reaction to Fire: | IEC 60332-1-2 |
| CPR Compliance: | CPR Euroclass: Cca-s1,d2,a1 |
| CENELEC Compliance: | EN 50290-2-20 |
| European Halogen Free Standards: | IEC 62821-1 Halogen Free Compliance = Yes, IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3 |
| European Directive Compliance: | EU CE Mark |
| UK Regulation Compliance: | UKCA Mark |

Product Notes

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| Notes: | "This is a preliminary Technical Design Specification (TDS) which is subject to modification throughout the prototyping phase. The minimum business quantity to offer is 6km for the first order. This product will have Chrome as standard color and 305mt or 500mt as standard put-ups. Additional options for colors and put-ups are available on special request. The estimated production lead time for the first order will be similar to the production lead time of 9842LV plus extra 6-7 weeks. Please liaise with your Belden representative for confirmation." |
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History

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| Update and Revision: | Revision Number: 0.4 Revision Date: 06-02-2026 |
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