

## 9841 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-485 Applications

For more Information  
please call

1-800-Belden1



### General Description:

24 AWG stranded (7x32) TC conductors, polyethylene insulation, twisted pairs, overall Beldfoil® (100% coverage) + TC braid shield (90% coverage), 24 AWG stranded TC drain wire, PVC jacket.

### Physical Characteristics (Overall)

#### Conductor

##### AWG:

| # Pairs | AWG | Stranding | Conductor Material |
|---------|-----|-----------|--------------------|
| 1       | 24  | 7x32      | TC - Tinned Copper |

Total Number of Conductors: 2

#### Insulation

##### Insulation Material:

| Insulation Material | Wall Thickness (mm) |
|---------------------|---------------------|
| PE - Polyethylene   | 0.584               |

#### Outer Shield

##### Outer Shield Material:

| Layer # | Outer Shield Trade Name      | Type  | Outer Shield Material        | Coverage (%) |
|---------|------------------------------|-------|------------------------------|--------------|
| 1       | Beldfoil® (w/ shorting fold) | Tape  | Aluminum Foil-Polyester Tape | 100.000      |
| 2       |                              | Braid | TC - Tinned Copper           | 90.000       |

##### Outer Shield Drain Wire AWG:

| AWG | Stranding | Drain Wire Conductor Material |
|-----|-----------|-------------------------------|
| 24  | 7x#32     | TC - Tinned Copper            |

#### Outer Jacket

##### Outer Jacket Material:

| Outer Jacket Material    | Nom. Wall Thickness (mm) |
|--------------------------|--------------------------|
| PVC - Polyvinyl Chloride | 0.889                    |

#### Overall Cable

Overall Cabling Fillers: Fibrous Polypropylene

##### Overall Cabling Lay Length & Direction:

| Length (mm) | Direction | Twists (twist/m) |
|-------------|-----------|------------------|
| 63.500      | Left Hand | 15.749           |

Overall Nominal Diameter: 5.893 mm

#### Pair

##### Pair Color Code Chart:

| Color                     |
|---------------------------|
| White/Blue and Blue/White |

### Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +90°C

UL Temperature Rating: 80°C (UL AWM Style 2919)

Bulk Cable Weight: 53.575 Kg/Km

Max. Recommended Pulling Tension: 321.605 N

## 9841 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-485 Applications

Min. Bend Radius/Minor Axis: 63.500 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

|                                       |                           |
|---------------------------------------|---------------------------|
| NEC/(UL) Specification:               | CM                        |
| NEC Articles:                         | 800                       |
| CEC/C(UL) Specification:              | CM                        |
| AWM Specification:                    | UL Style 2919 (30 V 80°C) |
| EU Directive 2011/65/EU (ROHS II):    | Yes                       |
| EU CE Mark:                           | Yes                       |
| EU Directive 2000/53/EC (ELV):        | Yes                       |
| EU Directive 2002/95/EC (RoHS):       | Yes                       |
| EU RoHS Compliance Date (mm/dd/yyyy): | 01/01/2004                |
| EU Directive 2002/96/EC (WEEE):       | Yes                       |
| EU Directive 2003/11/EC (BFR):        | Yes                       |
| CA Prop 65 (CJ for Wire & Cable):     | Yes                       |
| MII Order #39 (China RoHS):           | Yes                       |

#### Flame Test

|                 |                   |
|-----------------|-------------------|
| UL Flame Test:  | UL1685 UL Loading |
| CSA Flame Test: | FT1               |

#### Suitability

|                       |     |
|-----------------------|-----|
| Suitability - Indoor: | Yes |
|-----------------------|-----|

#### Plenum/Non-Plenum

|                |              |
|----------------|--------------|
| Plenum (Y/N):  | No           |
| Plenum Number: | 82841, 89841 |

### Electrical Characteristics (Overall)

#### Nom. Characteristic Impedance:

Impedance (Ohm)

120

#### Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

41.9968

#### Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)

75.463

#### Nominal Velocity of Propagation:

VP (%)

66

#### Nominal Delay:

Delay (ns/m)

5.2496

#### Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

78.744

#### Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

11.1554

METRIC MEASUREMENT VERSION

## 9841 Multi-Conductor - Low Capacitance Computer Cable for EIA RS-485 Applications

### Nom. Attenuation:

| Freq. (MHz) | Attenuation (dB/100m) |
|-------------|-----------------------|
| 1.000       | 1.969                 |

### Max. Operating Voltage - UL:

| Voltage   | Description |
|-----------|-------------|
| 300 V RMS | Type CM     |
| 30 V RMS  | AWM2919     |

### Max. Recommended Current:

| Description          | Current                               |
|----------------------|---------------------------------------|
| 10C temperature rise | 2.1 Amps per conductor @ 25°C ambient |

### Put Ups and Colors:

| Item #        | Putup    | Ship Weight | Color  | Notes | Item Desc          |
|---------------|----------|-------------|--------|-------|--------------------|
| 9841 060100   | 30 MT    | 1.950 KG    | CHROME |       | 1 PR #24 PE SH PVC |
| 9841 0601000  | 305 MT   | 18.144 KG   | CHROME | C     | 1 PR #24 PE SH PVC |
| 9841 06010000 | 3,048 MT | 172.366 KG  | CHROME | C     | 1 PR #24 PE SH PVC |
| 9841 060500   | 152 MT   | 9.072 KG    | CHROME | C     | 1 PR #24 PE SH PVC |
| 9841 0605000  | 1,524 MT | 90.719 KG   | CHROME |       | 1 PR #24 PE SH PVC |

### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2    Revision Date: 08-02-2013

© 2013 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 herein 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 "AS IS" 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 EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure 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. This 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.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.