

## Bus system cable - SAC-5P-10,0-923/MINFS DN - 1418442

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Bus system cable, DeviceNet™, 5-position, PUR halogen-free, gray RAL 7001, shielded, free cable end, on Socket straight 7/8"-16UNF, Cable length: 10 m



### Key Commercial Data

|                      |          |
|----------------------|----------|
| Packing unit         | 1 pc     |
| Custom tariff number | 85444290 |
| Country of origin    | Germany  |

### Technical data

#### Environmental Product Compliance

|            |                |
|------------|----------------|
| REACH SVHC | DOT 15571-58-1 |
|------------|----------------|

#### Dimensions

|                                            |       |
|--------------------------------------------|-------|
| Length of cable                            | 10 m  |
| Stripping length of the free conductor end | 50 mm |

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -40 °C ... 80 °C (Plug / socket) |
| Degree of protection            | IP65                             |
|                                 | IP67                             |

#### General

|                       |              |
|-----------------------|--------------|
| Rated current at 40°C | 5.2 A        |
| Rated voltage         | 30 V         |
| Number of positions   | 5            |
| Coding                | A - standard |
| Signal type/category  | DeviceNet™   |
| Status display        | No           |

# Bus system cable - SAC-5P-10,0-923/MINFS DN - 1418442

## Technical data

### General

|                      |                          |
|----------------------|--------------------------|
| Overvoltage category | II                       |
| Degree of pollution  | 3                        |
| Torque               | 0.8 Nm (7/8" connectors) |

### Material

|                                        |                 |
|----------------------------------------|-----------------|
| Flammability rating according to UL 94 | HB              |
| Contact material                       | CuZn            |
| Contact surface material               | Au              |
| Contact carrier material               | PA 66           |
| Material of grip body                  | TPU             |
| Material, knurls                       | Stainless steel |
| Sealing material                       | TPU             |

### Pin assignment

|                                                      |                          |
|------------------------------------------------------|--------------------------|
| Position = wire color (signal) = position (optional) | 1 (Socket) = SR (shield) |
|                                                      | 2 (Socket) = RD (V+)     |
|                                                      | 3 (Socket) = BK (V-)     |
|                                                      | 4 (Socket) = WH (CAN_H)  |
|                                                      | 5 (Socket) = BU (CAN_L)  |

### Standards and Regulations

|                                        |    |
|----------------------------------------|----|
| Flammability rating according to UL 94 | HB |
|----------------------------------------|----|

### Cable

|                                     |                                        |
|-------------------------------------|----------------------------------------|
| Cable type                          | CAN Bus/DeviceNet drop cable           |
| Cable type (abbreviation)           | 923                                    |
| UL AWM style                        | 21198 (80°C/300 V)                     |
| Cable structure                     | 2xAWG24/19+2xAWG22/19                  |
| Conductor cross section             | 2x 0.25 mm <sup>2</sup> (Data cable)   |
|                                     | 2x 0.34 mm <sup>2</sup> (Power supply) |
|                                     | 1x 0.34 mm <sup>2</sup> (Drain wire)   |
| AWG signal line                     | 24                                     |
| AWG power supply                    | 22                                     |
| Conductor structure signal line     | 19x 0.13 mm                            |
| Conductor structure, voltage supply | 19x 0.15 mm                            |
| Core diameter including insulation  | 1.95 mm ±0.05 mm (Data cable)          |
|                                     | 1.4 mm ±0.05 mm (Power supply)         |
| Wire colors                         | Red-black, blue-white                  |
| Twisted pairs                       | 2 cores to the pair                    |

## Bus system cable - SAC-5P-10,0-923/MINFS DN - 1418442

### Technical data

#### Cable

|                                               |                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------|
| Type of pair shielding                        | Plastic-coated aluminum foil, aluminum side outside                |
| Overall twist                                 | 2 pairs around a drain wire in the center to the core              |
| Shielding                                     | Tinned copper braided shield                                       |
| Optical shield covering                       | 80 %                                                               |
| External sheath, color                        | Silver-gray RAL 7001                                               |
| External cable diameter D                     | 6.7 mm $\pm$ 0,3 mm                                                |
| Minimum bending radius, flexible installation | 10 x D                                                             |
| Number of bending cycles                      | 5000000                                                            |
| Bending radius                                | 70 mm                                                              |
| Traversing path                               | 4.5 m                                                              |
| Traversing rate                               | 3 m/s                                                              |
| Acceleration                                  | 3 m/s <sup>2</sup>                                                 |
| Outer sheath, material                        | PUR                                                                |
| Material conductor insulation                 | Foamed PE (Data cable)                                             |
|                                               | PE (Power supply)                                                  |
| Conductor material                            | Tin-plated Cu litz wires                                           |
| Insulation resistance                         | $\geq 5 \text{ G}\Omega\cdot\text{km}$ (Data cable)                |
|                                               | $\geq 5 \text{ G}\Omega\cdot\text{km}$ (Power supply)              |
| Loop resistance                               | $\leq 181.8 \text{ }\Omega$ (Data cable)                           |
|                                               | $\leq 114.8 \text{ }\Omega$ (Power supply)                         |
| Working capacitance                           | nom. 40 nF (Data cable)                                            |
| Wave impedance                                | 120 $\Omega \pm 12 \text{ }\Omega$ (f = 1 MHz)                     |
| Shield attenuation                            | $\leq 0.95 \text{ dB}$ (f = 125 kHz)                               |
|                                               | $\leq 1.64 \text{ dB}$ (f = 500 kHz)                               |
|                                               | $\leq 2.29 \text{ dB}$ (f = 1 MHz)                                 |
| Nominal voltage, cable                        | $\leq 300 \text{ V}$ (Peak value, not for high-power applications) |
| Test voltage Core/Core                        | 2000 V (50 Hz, 1 min.)                                             |
| Test voltage Core/Shield                      | 2000 V (50 Hz, 1 min.)                                             |
| Flame resistance                              | UL 1581, Sec. 1060 (FT-1)                                          |
|                                               | IEC 60332-1                                                        |
| Other resistance                              | Low adhesion                                                       |
| Ambient temperature (operation)               | -40 °C ... 80 °C (cable, fixed installation)                       |
|                                               | -20 °C ... 70 °C (cable, flexible installation)                    |

## Bus system cable - SAC-5P-10,0-923/MINFS DN - 1418442

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060307 |
| eCl@ss 4.1 | 27060307 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27060307 |
| eCl@ss 6.0 | 27061801 |
| eCl@ss 7.0 | 27061801 |
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060311 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000830 |
| ETIM 3.0 | EC000830 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 26121616 |
| UNSPSC 7.0901 | 26121616 |
| UNSPSC 11     | 26121604 |
| UNSPSC 12.01  | 26121616 |
| UNSPSC 13.2   | 26121616 |

### Approvals

#### Approvals

---

##### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

---

##### Ex Approvals

---

##### Approvals submitted

---

##### Approval details

## Bus system cable - SAC-5P-10,0-923/MINFS DN - 1418442

### Approvals

|                                                                                             |       |
|---------------------------------------------------------------------------------------------|-------|
| UL Listed  |       |
| Nominal current I <sub>N</sub>                                                              | 4 A   |
| Nominal voltage U <sub>N</sub>                                                              | 300 V |

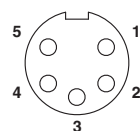
|                                                                                              |       |
|----------------------------------------------------------------------------------------------|-------|
| cUL Listed  |       |
| Nominal current I <sub>N</sub>                                                               | 4 A   |
| Nominal voltage U <sub>N</sub>                                                               | 300 V |

|     |
|-----|
| EAC |
|-----|

|                                                                                                  |
|--------------------------------------------------------------------------------------------------|
| cULus Listed  |
|--------------------------------------------------------------------------------------------------|

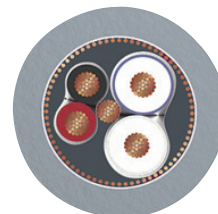
### Drawings

Schematic diagram



Pin assignment, socket, 7/8"-16UNF, 5-pos., view of female side

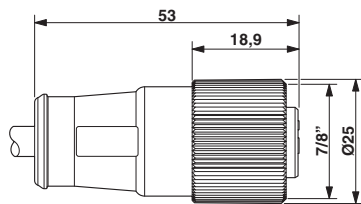
Cable cross section



CAN Bus/DeviceNet [923]

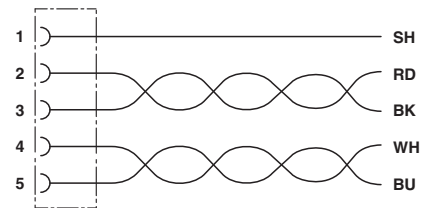
## Bus system cable - SAC-5P-10,0-923/MINFS DN - 1418442

Dimensional drawing



7/8"-16UNF socket, straight

Circuit diagram



Contact assignment of 7/8" socket

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Phoenix Contact:

1418442