

# Bus system cable - SAC-5P-MINMR/10,0-923/MINFR DN - 1420090

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Bus system cable, DeviceNet, 5-position, PUR, Gray RAL 7001, Plug angled 7/8"-16UNF, on Socket angled 7/8"-16UNF, Cable length: 10 m



## Key commercial data

|                        |   |
|------------------------|---|
| Packing unit           | 0   |
| Minimum order quantity | 1   |
| Catalog page           | Page 398 (PC-2011)  |
| GTIN                   | <br>4 046356 539470 |
| Custom tariff number   | 85444290  |
| Country of origin      | GERMANY   |

## Technical data

### General data

|  |  |
|--|--|
| Rated current at 40°C                      | 5.2 A  |
| Rated voltage                              | 30 V   |
| Number of positions                        | 5  |
| Volume resistance                          | < 5 mΩ   |
| Length of cable                            | 10 m   |
| Stripping length of the free conductor end | 50 mm  |
| Ambient temperature (operation)            | -25 °C ... 80 °C (Male connector / female connector) |

### General characteristics

|                          |                 |
|--------------------------|-----------------|
| Coding                   | A - standard    |
| Surge voltage category   | II              |
| Pollution degree         | 3               |
| Degree of protection     | IP65/IP67/IP69K |
| Contact material         | CuZn            |
| Contact surface material | Au              |
| Contact carrier material | PA 66           |

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## Technical data

### General characteristics

|                       |                  |
|-----------------------|------------------|
| Material of grip body | TPU              |
| Material, knurls      | High-grade steel |
| Sealing material      | TPU              |
| Status display        | No               |

### Conductor data

|   |   |
|---|---|
| Cable type                                    | CAN Bus/DeviceNet                                     |
| Cable type (abbreviation)                     | 923   |
| Conductor cross section                       | 2x 0.2 mm <sup>2</sup> (signal line)                  |
| Conductor cross section                       | 2x 0.32 mm <sup>2</sup> (Power supply)                |
| Conductor cross section                       | 1x 0.32 mm <sup>2</sup> (Drain wire)                  |
| AWG signal line                               | 24  |
| AWG power supply                              | 22  |
| Conductor structure signal line               | 19x 0.12 mm   |
| Conductor structure, voltage supply           | 19x 0.15 mm   |
| Core diameter including insulation            | 2.05 mm ±0.1 mm (signal line)                         |
| Core diameter including insulation            | 1.4 mm ±0.05 mm (Power supply)                        |
| Wire colors                                   | Red-black, blue-white                                 |
| Twisted pairs                                 | 2 cores to the pair                                   |
| Type of pair shielding                        | Aluminum-lined polyester foil                         |
| Overall twist                                 | 2 pairs around a drain wire in the center to the core |
| Shielding                                     | Tinned copper braided shield                          |
| Optical shield covering                       | 70 %  |
| External sheath, color                        | Gray RAL 7001   |
| External cable diameter                       | 6.70 mm   |
| Smallest bending radius, fixed installation   | 67 mm   |
| Smallest bending radius, movable installation | 67 mm   |
| Number of bending cycles                      | 5000000   |
| Bending radius                                | 67 mm   |
| Traversing path                               | 10 m  |
| Traversing rate                               | 3 m/s   |
| Acceleration                                  | 7 m/s <sup>2</sup>                                    |
| Outer sheath, material                        | PUR   |
| Material conductor insulation                 | PE (Power supply)                                     |
| Material conductor insulation                 | Foamed PE (signal line)                               |
| Conductor material                            | Tin-plated Cu litz wires                              |
| Insulation resistance                         | ≥ 5 GΩ*km (signal line)                               |
| Insulation resistance                         | ≥ 100 MΩ*km (Power supply)                            |
| Conductor resistance                          | ≤ 78.4 Ω/km (signal line)                             |
| Conductor resistance                          | ≥ 51.6 Ω/km (Power supply)                            |
| Working capacitance                           | 39.3 pF (Signal line, Core-Core)                      |
| Working capacitance                           | 78.7 pF (Signal line, Core-Shield)                    |

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## Technical data

### Conductor data

|                                 |   |
|---------------------------------|---|
| Nominal voltage, conductor      | 30 V (signal line)                              |
| Nominal voltage, conductor      | 300 V (Power supply)                            |
| Test voltage, conductor         | 1500 V (signal line)                            |
| Test voltage, conductor         | 2000 V (Power supply)                           |
| Halogen-free                    | complying with IEC 60754-1/2                    |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)    |
| Ambient temperature (operation) | -20 °C ... 75 °C (cable, flexible installation) |

## Classifications

### eclass

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

### etim

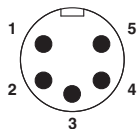
|          |          |
|----------|----------|
| ETIM 2.0 | EC000830 |
| ETIM 3.0 | EC000830 |
| ETIM 4.0 | EC001855 |

### unspsc

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

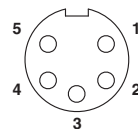
## Drawings

### Schematic diagram



Connector pin assignment for 7/8"-16UNF conn., 5-pos.

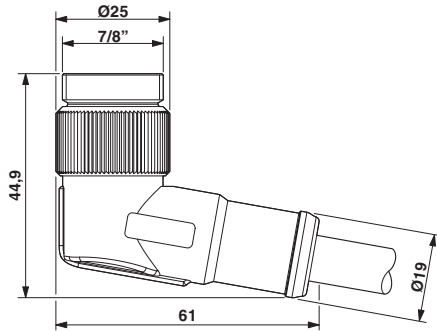
### Schematic diagram



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

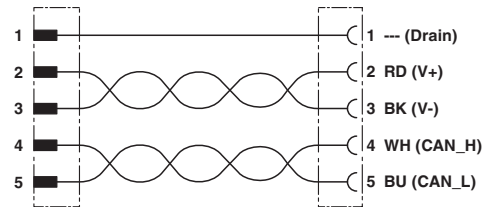
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## Dimensioned drawing



7/8"-16UNF connector, angled

## Circuit diagram



Contact assignment of the 7/8" connector and the 7/8" socket