

SAC-5P-MINMS/10,0-928/MINFS DN - Bus system cable



1417702  
<https://www.phoenixcontact.com/us/products/1417702>

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Bus system cable, DeviceNet™, 5-position, PVC, gray RAL 7001, Plug straight 7/8"-16UNF, coding: A, on Socket straight 7/8"-16UNF, cable length: 10 m, Connector unshielded

Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1417702                        |
| Packing unit                         | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | BF14                           |
| Product key                          | BF1FDD                         |
| Catalog page                         | Page 419 (C-4-2015)            |
| GTIN                                 | 4046356540025                  |
| Weight per piece (including packing) | 2,169.4 g                      |
| Weight per piece (excluding packing) | 2,169.4 g                      |
| Customs tariff number                | 85444290                       |
| Country of origin                    | DE                             |

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## Technical data

### Product properties

|                      |                         |
|----------------------|-------------------------|
| Product type         | Data cable preassembled |
| Application          | Standard                |
| Sensor type          | DeviceNet™              |
| Number of positions  | 5                       |
| No. of cable outlets | 1                       |
| Shielded             | yes                     |
| Coding               | A                       |

### Insulation characteristics

|                      |    |
|----------------------|----|
| Overvoltage category | II |
| Degree of pollution  | 3  |

### Interfaces

|                      |            |
|----------------------|------------|
| Bus system           | DeviceNet™ |
| Signal type/category | DeviceNet™ |

### Signaling

|                        |    |
|------------------------|----|
| Status display         | no |
| Status display present | No |

### Electrical properties

|                       |        |
|-----------------------|--------|
| Nominal voltage $U_N$ | 30 V   |
| Nominal current $I_N$ | 5.2 A  |
| Transmission medium   | Copper |

### Material specifications

|                                        |                 |
|----------------------------------------|-----------------|
| Flammability rating according to UL 94 | HB              |
| Seal material                          | TPU             |
| Material of grip body                  | TPU             |
| Contact material                       | CuZn            |
| Contact surface material               | Au              |
| Contact carrier material               | PA 6.6          |
| Material for screw connection          | Stainless steel |

### Connection data

#### Pin assignment

|                                                           |                                     |
|-----------------------------------------------------------|-------------------------------------|
| Contact   Color (signal designation)   Contact (optional) | 1 (Plug)   SR (shield)   1 (Socket) |
|                                                           | 2 (Plug)   RD (V+)   2 (Socket)     |
|                                                           | 3 (Plug)   BK (V-)   3 (Socket)     |
|                                                           | 4 (Plug)   WH (CAN_H)   4 (Socket)  |
|                                                           | 5 (Plug)   BU (CAN_L)   5 (Socket)  |

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## Connector

### Connection 1

|                     |                          |
|---------------------|--------------------------|
| Type                | Plug straight 7/8"-16UNF |
| Number of positions | 5                        |
| Coding type         | A (Standard)             |

### Connection 2

|                     |                            |
|---------------------|----------------------------|
| Type                | Socket straight 7/8"-16UNF |
| Number of positions | 5                          |

## Cable/line

|              |      |
|--------------|------|
| Cable length | 10 m |
|--------------|------|

### DeviceNet trunk cable [928]

|                                            |                                                       |
|--------------------------------------------|-------------------------------------------------------|
| UL AWM Style                               | 20201 (60 °C / 600 V)                                 |
| Number of positions                        | 4                                                     |
| Shielded                                   | yes                                                   |
| Cable type                                 | DeviceNet trunk cable [928]                           |
| Conductor structure                        | 2xAWG18 (Signal) + 2xAWG15 (Power)                    |
| Conductor structure signal line            | 19x 0.26 mm                                           |
| AWG signal line                            | 18                                                    |
| Conductor cross section                    | 2x 1 mm <sup>2</sup> (Data pair)                      |
|                                            | 2x 1.7 mm <sup>2</sup> (Power supply)                 |
|                                            | 1x 1 mm <sup>2</sup> (Drain wire)                     |
| Wire diameter incl. insulation             | approx. 3.8 mm (Data pair)                            |
|                                            | approx. 2.7 mm (Power supply)                         |
| External cable diameter                    | 12.20 mm ±0.3 mm                                      |
| Outer sheath, material                     | PVC                                                   |
| External sheath, color                     | gray RAL 7001                                         |
| Conductor material                         | Tin-plated Cu litz wires                              |
| Material wire insulation                   | Foamed PE (Data pair)                                 |
|                                            | PVC (Power supply)                                    |
| Single wire, color                         | red-black, blue-white                                 |
| Twisted pairs                              | 2 cores to the pair                                   |
| Type of pair shielding                     | Plastic-coated aluminum foil, aluminum side outside   |
| Overall twist                              | 2 pairs and one drain wire to the core                |
| Optical shield covering                    | 70 %                                                  |
| Insulation resistance                      | > 5 GΩ*km                                             |
| Wave impedance                             | 120 Ω ±12 Ω (f = 1 MHz)                               |
| Working capacitance                        | nom. 40 nF                                            |
| Nominal voltage, cable                     | < 600 V (Peak value, not for high-power applications) |
| Test voltage Core/Core                     | 2000 V (50 Hz, 1 min.)                                |
| Test voltage Core/Shield                   | 2000.00 V (50 Hz, 1 min.)                             |
| Minimum bending radius, fixed installation | 5 x D                                                 |

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|                                             |                                                   |
|---------------------------------------------|---------------------------------------------------|
| Smallest bending radius, fixed installation | 61 mm                                             |
| Flame resistance                            | according to UL 1685 (CSA FT 4)                   |
|                                             | According to UL 1581 (Cable Flame)                |
|                                             | According to IEC 60332-3-24                       |
| Resistance to oil                           | UL 1581                                           |
| Other resistance                            | UV resistant (according to UL 1581, Section 1200) |
| Ambient temperature (operation)             | -40 °C ... 80 °C (cable, fixed installation)      |

## Environmental and real-life conditions

### Ambient conditions

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

# SAC-5P-MINMS/10,0-928/MINFS DN - Bus system cable

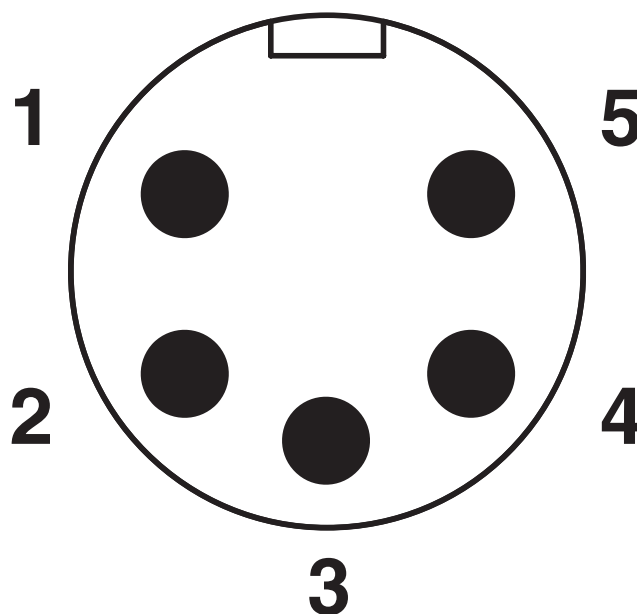


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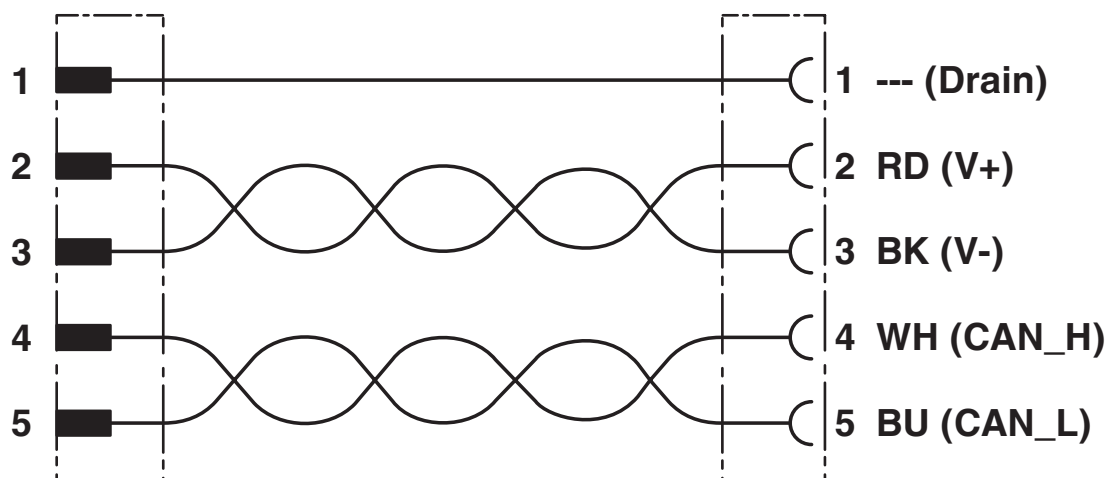
## Drawings

Schematic diagram



Plug pin assignment for 7/8"-16UNF plug, 5-pos.

Circuit diagram



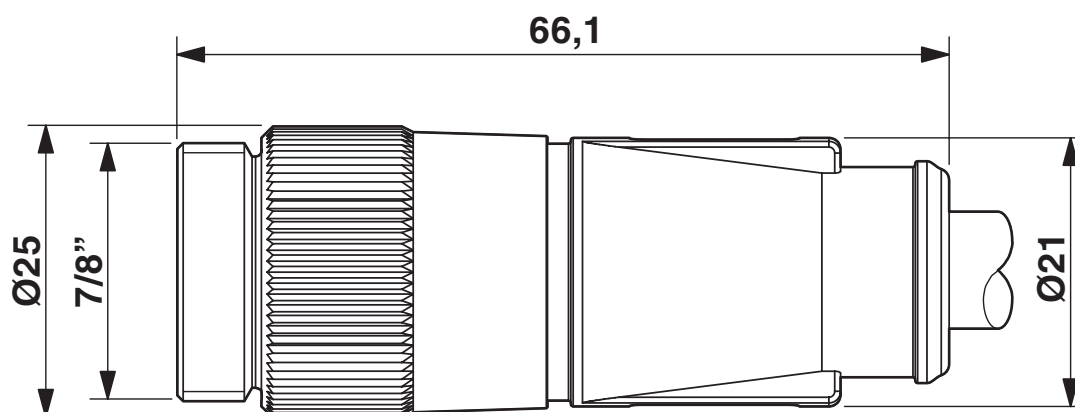
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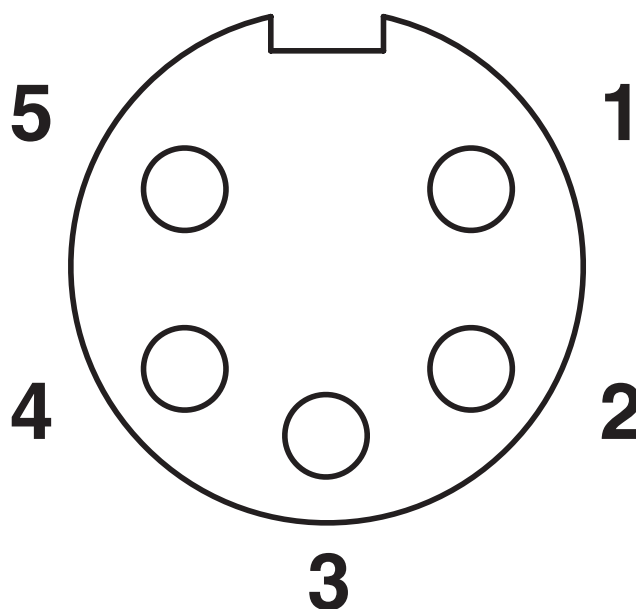
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Dimensional drawing



7/8"-16UNF plug, straight

Schematic diagram



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

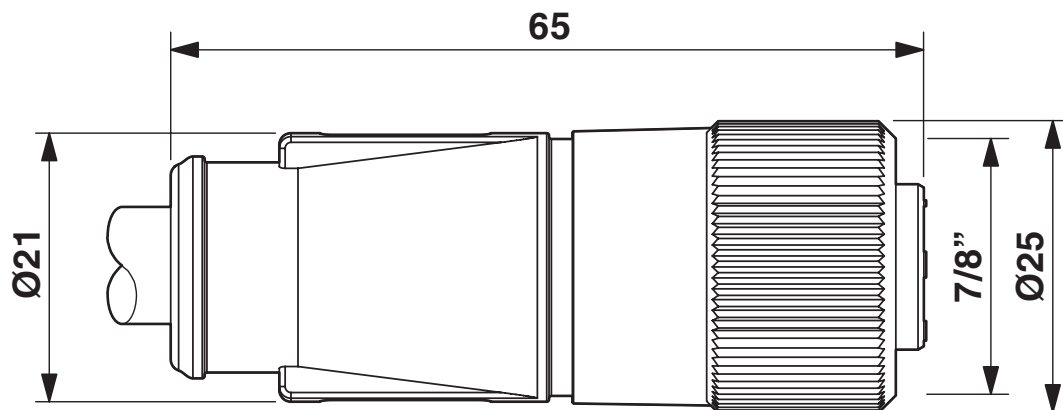
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Dimensional drawing



7/8"-16UNF socket, straight

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27060307 |
| ECLASS-13.0 | 27060307 |

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