

# SAC-5P-MR/ 5,0-923/FR CAN SCO - Bus system cable



1419077

<https://www.phoenixcontact.com/us/products/1419077>

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 documentation. Our general terms of use for downloads are valid.



Bus system cable, CANopen®, DeviceNet™, 5-position, PUR halogen-free, silver-grey RAL 7001, shielded, Plug angled M12 SPEEDCON, coding: A, on Socket angled M12 SPEEDCON, coding: A, cable length: 5 m, Connector unshielded

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1419077                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | BF04                           |
| Product key                          | AF1CDD                         |
| GTIN                                 | 4046356543385                  |
| Weight per piece (including packing) | 327.5 g                        |
| Weight per piece (excluding packing) | 321.9 g                        |
| Customs tariff number                | 85444290                       |
| Country of origin                    | PL                             |

# SAC-5P-MR/ 5,0-923/FR CAN SCO - Bus system cable



1419077

<https://www.phoenixcontact.com/us/products/1419077>

## Technical data

### Product properties

|                      |                         |
|----------------------|-------------------------|
| Product type         | Data cable preassembled |
| Application          | Standard                |
| Sensor type          | CANopen®                |
| Number of positions  | 5                       |
| No. of cable outlets | 1                       |
| Coding               | A                       |

### Insulation characteristics

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

### Interfaces

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

### Signaling

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

### Electrical properties

|                       |         |
|-----------------------|---------|
| Nominal voltage $U_N$ | 48 V AC |
|                       | 60 V DC |
| Nominal current $I_N$ | 4 A     |
| Transmission medium   | Copper  |

### Material specifications

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Flammability rating according to UL 94 | HB                                          |
| Seal material                          | NBR                                         |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Contact material                       | CuSn                                        |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | TPU GF                                      |
| Material for screw connection          | Zinc die-cast, nickel-plated                |

### Connection data

#### Connection 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)  |

# SAC-5P-MR/ 5,0-923/FR CAN SCO - Bus system cable



1419077

<https://www.phoenixcontact.com/us/products/1419077>

5 (Plug) | BU (CAN\_L) | 5 (Socket)

## Connector

### Connection 1

|                                 |                          |
|---------------------------------|--------------------------|
| Type                            | Plug angled M12 SPEEDCON |
| Number of positions             | 5                        |
| Locking type                    | SPEEDCON                 |
| Coding type                     | A (Standard)             |
| Ambient temperature (operation) | -25 °C ... 90 °C         |

### Connection 2

|                                 |                            |
|---------------------------------|----------------------------|
| Type                            | Socket angled M12 SPEEDCON |
| Number of positions             | 5                          |
| Locking type                    | SPEEDCON                   |
| Coding type                     | A (Standard)               |
| Ambient temperature (operation) | -25 °C ... 90 °C           |

## Cable/line

|              |     |
|--------------|-----|
| Cable length | 5 m |
|--------------|-----|

### CANopen®/DeviceNet™, PUR, gray [923]

|                                |                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------|
| Dimensional drawing            |  |
| UL AWM Style                   | 21198 (80°C/300 V)                                                                   |
| Number of positions            | 4                                                                                    |
| Shielded                       | yes                                                                                  |
| Cable type                     | CANopen®/DeviceNet™, PUR, gray [923]                                                 |
| Conductor structure            | 2xAWG24/19+2xAWG22/19                                                                |
| AWG signal line                | 24                                                                                   |
| AWG power supply               | 22                                                                                   |
| Conductor cross section        | 2x 0.25 mm² (Data cable)<br>2x 0.34 mm² (Power supply)<br>1x 0.34 mm² (Drain wire)   |
| Wire diameter incl. insulation | 1.95 mm ±0.05 mm (Data cable)<br>1.4 mm ±0.05 mm (Power supply)                      |
| External cable diameter        | 6.70 mm ±0.3 mm                                                                      |
| Outer sheath, material         | PUR                                                                                  |
| External sheath, color         | silver-grey RAL 7001                                                                 |

# SAC-5P-MR/ 5,0-923/FR CAN SCO - Bus system cable



1419077

<https://www.phoenixcontact.com/us/products/1419077>

|                                               |                                                                                                                                                                                          |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conductor material                            | Tin-plated Cu litz wires                                                                                                                                                                 |
| Material wire insulation                      | Foamed PE (Data cable)                                                                                                                                                                   |
|                                               | PE (Power supply)                                                                                                                                                                        |
| Single wire, color                            | red-black, blue-white                                                                                                                                                                    |
| Twisted pairs                                 | 2 cores to the pair                                                                                                                                                                      |
| Overall twist                                 | 2 pairs around a drain wire in the center to the core                                                                                                                                    |
| Optical shield covering                       | 80 %                                                                                                                                                                                     |
| Insulation resistance                         | ≥ 5 GΩ*km (Data cable)                                                                                                                                                                   |
|                                               | ≥ 5 GΩ*km (Power supply)                                                                                                                                                                 |
| Wave impedance                                | 120 Ω ±10 % (with 1 MHz)                                                                                                                                                                 |
| Nominal voltage, cable                        | ≤ 300 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    | 4 x D                                                                                                                                                                                    |
| Minimum bending radius, flexible installation | 8 x D                                                                                                                                                                                    |
| Dynamic load capacity (bending)               | Max. bending cycles: 5000000, Bending radius: 70 mm, Bending radius: 15 x D, Traversing path: 4.5 m, Traversing rate: 3 m/s, Acceleration: 3 m/s², Ambient temperature: -20 °C ... 60 °C |
| Shield attenuation                            | ≤ 22.9 dB/km (with 1 MHz)                                                                                                                                                                |
|                                               | ≤ 16.4 dB/km (At 500 kHz)                                                                                                                                                                |
|                                               | ≤ 9.5 dB/km (At 125 kHz)                                                                                                                                                                 |
| Halogen-free                                  | in accordance with DIN VDE 0472 part 815                                                                                                                                                 |
|                                               | according to IEC 60754-1                                                                                                                                                                 |
| Flame resistance                              | UL 1581, Section 1060 and UL 2556, Section 9.3 (FT1)                                                                                                                                     |
|                                               | UL 1581, Section 1100 and UL 2556, Section 9.1 (HFT/FT2)                                                                                                                                 |
|                                               | IEC 60332-1-2                                                                                                                                                                            |
|                                               | in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)                                                                                                                                     |
| Ambient temperature (operation)               | -40 °C ... 80 °C (cable, fixed installation)                                                                                                                                             |
|                                               | -30 °C ... 70 °C (Cable, flexible installation)                                                                                                                                          |
|                                               | -20 °C ... 60 °C (for installation)                                                                                                                                                      |
|                                               | -20 °C ... 60 °C (cable, drag chain applications)                                                                                                                                        |

## Environmental and real-life conditions

### Ambient conditions

|                                                                   |                                  |
|-------------------------------------------------------------------|----------------------------------|
| Degree of protection                                              | IP65                             |
|                                                                   | IP67                             |
| Ambient temperature (operation) (male connector/female connector) | -25 °C ... 90 °C (Plug / socket) |

# SAC-5P-MR/ 5,0-923/FR CAN SCO - Bus system cable

1419077

<https://www.phoenixcontact.com/us/products/1419077>

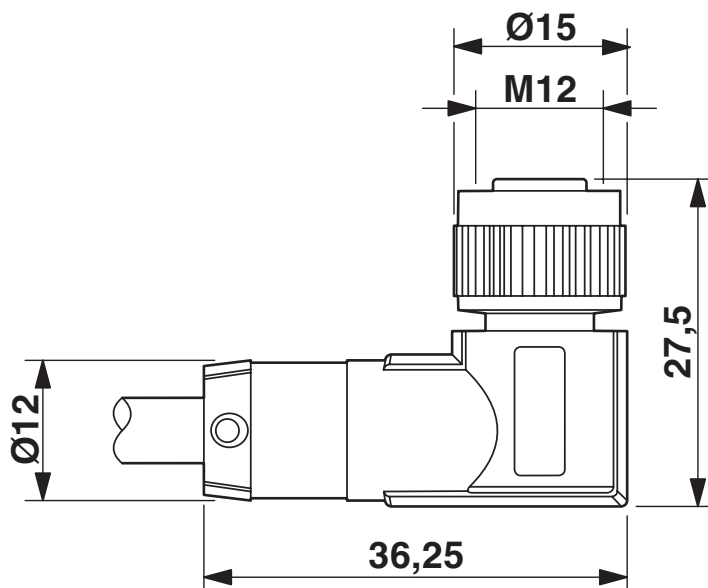
## Drawings

Dimensional drawing



M12 x 1 male plug, angled

Dimensional drawing



M12 x 1 socket, angled

# SAC-5P-MR/ 5,0-923/FR CAN SCO - Bus system cable

1419077

<https://www.phoenixcontact.com/us/products/1419077>

Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



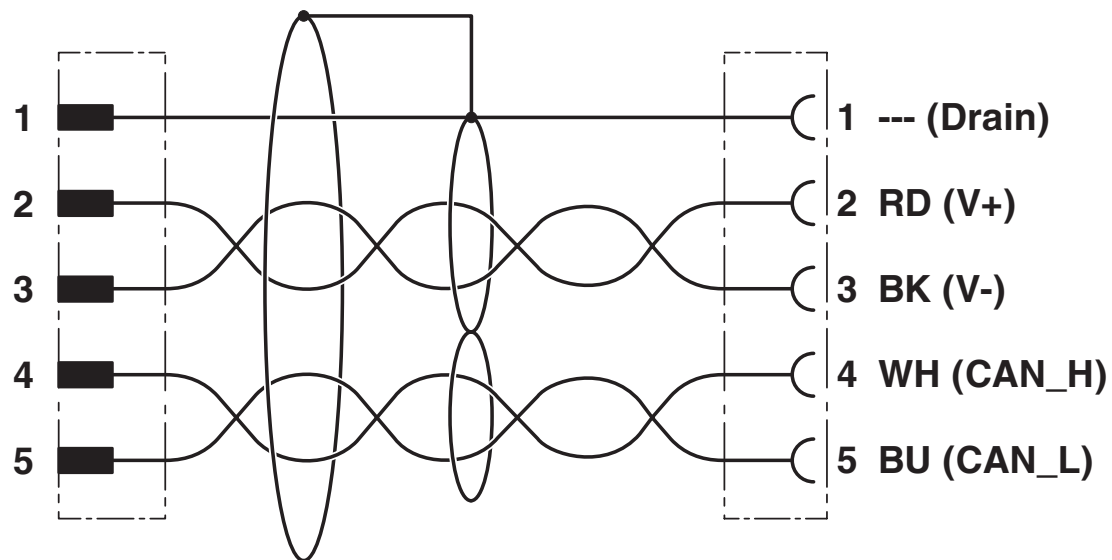
Pin assignment M12 socket, 5-pos., A-coded, socket side view

# SAC-5P-MR/ 5,0-923/FR CAN SCO - Bus system cable

1419077

<https://www.phoenixcontact.com/us/products/1419077>

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

# SAC-5P-MR/ 5,0-923/FR CAN SCO - Bus system cable



1419077  
<https://www.phoenixcontact.com/us/products/1419077>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1419077>

|                                                                                                                                             |                                |                                |                   |                               |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| <div><b>UL Listed</b><br/>Approval ID: FILE E 221474</div> |                                |                                |                   |                               |
|                                                                                                                                             | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
| keine                                                                                                                                       |                                |                                |                   |                               |
|                                                                                                                                             | 125 V                          | 4 A                            | -                 | -                             |

|                                                                                                                                              |                                |                                |                   |                               |
|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| <div><b>cUL Listed</b><br/>Approval ID: FILE E 221474</div> |                                |                                |                   |                               |
|                                                                                                                                              | Nominal voltage U <sub>N</sub> | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
| keine                                                                                                                                        |                                |                                |                   |                               |
|                                                                                                                                              | 125 V                          | 4 A                            | -                 | -                             |

|                                                                                                                                                     |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| <div><b>EAC-RoHS</b><br/>Approval ID: RU D-DE.HB35.B.00387</div> |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|

# SAC-5P-MR/ 5,0-923/FR CAN SCO - Bus system cable



1419077

<https://www.phoenixcontact.com/us/products/1419077>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27060307 |
| ECLASS-15.0 | 27060307 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC001855 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 26121600 |
|-------------|----------|

# SAC-5P-MR/ 5,0-923/FR CAN SCO - Bus system cable



1419077  
<https://www.phoenixcontact.com/us/products/1419077>

## Environmental product compliance

|                                         |                                          |
|-----------------------------------------|------------------------------------------|
| EU RoHS                                 |                                          |
| Fulfills EU RoHS substance requirements | Yes, No exemptions                       |
| China RoHS                              |                                          |
| Environment friendly use period (EFUP)  | EFUP-E                                   |
|                                         | No hazardous substances above the limits |
| EU REACH SVHC                           |                                          |
| REACH candidate substance (CAS No.)     | No substance above 0.1 wt%               |
| EF3.0 Climate Change                    |                                          |
| CO2e kg                                 | 3.239 kg CO2e                            |

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)