

# SAC-5P-M12MS/ 1,0-900/M12FS - Bus system cable



1061125

<https://www.phoenixcontact.com/us/products/1061125>

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 (16 Mbps), 5-position, PUR halogen-free, may green RAL 6017, shielded, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 1 m, Customer version

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1061125                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 50 pc                          |
| Note                                 | Made to order (non-returnable) |
| Product key                          | AF1CKB                         |
| GTIN                                 | 4055626713373                  |
| Weight per piece (including packing) | 102 g                          |
| Weight per piece (excluding packing) | 102 g                          |
| Country of origin                    | PL                             |

1061125

<https://www.phoenixcontact.com/us/products/1061125>

## Technical data

### Product properties

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

### Insulation characteristics

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

### 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  |
| Transmission speed    | 16 Mbps |

### Material specifications

|  |   |
|--|---|
| Flammability rating according to UL 94 | V0  |
| Seal material                          | NBR   |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Contact material                       | CuSn  |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | PA 6.6                                      |
| Material for screw connection          | Zinc die-cast, nickel-plated                |

### Connector

#### Connection 1

|                     |                   |
|---------------------|-------------------|
| Type                | Plug straight M12 |
| Number of positions | 5                 |
| Coding type         | A (Standard)      |

#### Connection 2

|                     |                     |
|---------------------|---------------------|
| Type                | Socket straight M12 |
| Number of positions | 5                   |
| Coding type         | A (Standard)        |

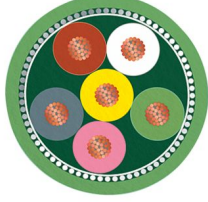
# SAC-5P-M12MS/ 1,0-900/M12FS - Bus system cable



1061125

<https://www.phoenixcontact.com/us/products/1061125>

## Cable/line

|   |  |
|---|--|
| Cable length                                  | 1 m  |
| INTERBUS [900]                                |  |
| Dimensional drawing                           |                                        |
| Cable weight                                  | 70 kg/km   |
| Number of positions                           | 6  |
| Shielded                                      | yes  |
| Cable type                                    | INTERBUS [900]   |
| Conductor structure                           | 3 x 2 x 0.22 mm <sup>2</sup>   |
| Signal speed                                  | 0.66 c   |
| Conductor structure signal line               | 32x 0.10 mm  |
| AWG signal line                               | 24   |
| Conductor cross-section                       | 3x 2x 0.22 mm <sup>2</sup>   |
| External cable diameter                       | 8.00 mm  |
| Outer sheath, material                        | PUR  |
| External sheath, color                        | may green RAL 6017   |
| Conductor material                            | Bare Cu litz wires   |
| Material wire insulation                      | PE   |
| Single wire, color                            | green-yellow, white-brown, gray-pink   |
| Twisted pairs                                 | 2 cores to the pair  |
| Overall twist                                 | 3 pairs to the core  |
| Insulation resistance                         | ≥ 5 GΩ*km  |
| Coupling resistance                           | < 250.00 mΩ/m (at 30 MHz)  |
| Loop resistance                               | ≤ 159.80 Ω/km  |
| Wave impedance                                | 120 Ω ±20 % (at 64 kHz)<br>100 Ω ±15 % (with 1 MHz)  |
| Cable capacity                                | ≤ 60 nF/km (At 800 Hz)   |
| Nominal voltage, cable                        | 250 V (Peak value, not for high-power applications)  |
| Test voltage Core/Core                        | 1500 V <sub>rms</sub>  |
| Test voltage Core/Shield                      | 1000.00 V <sub>rms</sub>   |
| Minimum bending radius, fixed installation    | 7.5 x D  |
| Minimum bending radius, flexible installation | 15 x D   |
| Smallest bending radius, fixed installation   | 60 mm  |
| Smallest bending radius, movable installation | 120 mm   |
| Dynamic load capacity (bending)               | Max. bending cycles: 5000000, Bending radius: 120 mm, Traversing path: 10 m, Traversing rate: 1.6 m/s, Acceleration: 3.2 |

# SAC-5P-M12MS/ 1,0-900/M12FS - Bus system cable



1061125

<https://www.phoenixcontact.com/us/products/1061125>

|                                       |   |
|---------------------------------------|---|
|                                       | m/s <sup>2</sup>                                |
| Near end crosstalk attenuation (NEXT) | ≥ 61 dB (at 772 kHz)                            |
|                                       | ≥ 59 dB (with 1 MHz)                            |
|                                       | ≥ 55 dB (at 2 MHz)                              |
|                                       | ≥ 50 dB (at 4 MHz)                              |
|                                       | ≥ 46 dB (at 8 MHz)                              |
|                                       | ≥ 44 dB (at 10 MHz)                             |
|                                       | ≥ 41 dB (at 16 MHz)                             |
|                                       | ≥ 40 dB (at 20 MHz)                             |
| Shield attenuation                    | ≤ 15 dB/km (at 256 kHz)                         |
|                                       | ≤ 24 dB/km (at 772 kHz)                         |
|                                       | ≤ 27 dB/km (with 1 MHz)                         |
|                                       | ≤ 52 dB/km (at 4 MHz)                           |
|                                       | ≤ 84 dB/km (at 10 MHz)                          |
|                                       | ≤ 112 dB/km (at 16 MHz)                         |
|                                       | ≤ 119 dB/km (at 20 MHz)                         |
| Flame resistance                      | according to VDE 0472, Part 4, test type B      |
|                                       | according to IEC 60332-1                        |
| Ambient temperature (operation)       | -40 °C ... 80 °C (cable, fixed installation)    |
|                                       | -30 °C ... 70 °C (Cable, flexible installation) |

## 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) |

Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight, shielded

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

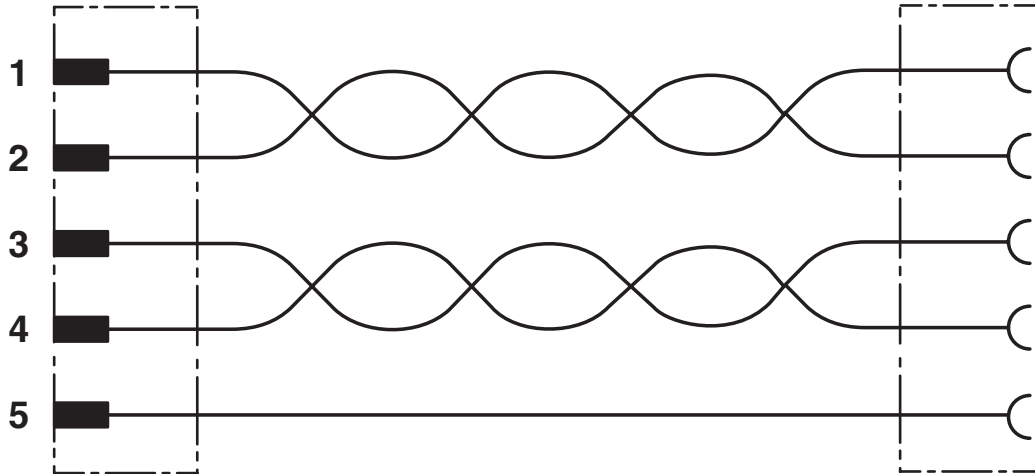
# SAC-5P-M12MS/ 1,0-900/M12FS - Bus system cable



1061125

<https://www.phoenixcontact.com/us/products/1061125>

Circuit diagram



Contact assignment of the M12 connector and the M12 socket

# SAC-5P-M12MS/ 1,0-900/M12FS - Bus system cable



1061125

<https://www.phoenixcontact.com/us/products/1061125>

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

# SAC-5P-M12MS/ 1,0-900/M12FS - Bus system cable



1061125

<https://www.phoenixcontact.com/us/products/1061125>

## 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% |
|-------------------------------------|----------------------------|

Phoenix Contact 2026 © - 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)