

1517916

<https://www.phoenixcontact.com/us/products/1517916>

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Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, may green RAL 6017, shielded, free cable end, on Socket straight M12 SPEEDCON, coding: B, cable length: 2 m

Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1517916             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | BF04                |
| Product key                          | BF1CKB              |
| Catalog page                         | Page 198 (C-6-2019) |
| GTIN                                 | 4017918968038       |
| Weight per piece (including packing) | 168.3 g             |
| Weight per piece (excluding packing) | 164.5 g             |
| Customs tariff number                | 85444290            |
| Country of origin                    | PL                  |

# SAC-5P- 2,0-900/FSB SCO - Bus system cable



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## Technical data

### Product properties

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

### Insulation characteristics

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

### Interfaces

|                      |                   |
|----------------------|-------------------|
| Bus system           | INTERBUS          |
| Signal type/category | INTERBUS, 16 Mbps |

### Signaling

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

### Electrical properties

|                       |          |
|-----------------------|----------|
| Insulation resistance | ≥ 100 MΩ |
| 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 | 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                |

### Connection data

#### Pin assignment

|   |                               |
|---|-------------------------------|
| Contact   Color (signal designation)   Contact (optional) | 1 (Socket)   YE ( <u>DQ</u> ) |
|   | 2 (Socket)   GN ( <u>DQ</u> ) |
|   | 3 (Socket)   GY (DI)          |

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|  |                       |
|--|-----------------------|
|  | 4 (Socket)   PK (DI)  |
|  | 5 (Socket)   BN (GND) |

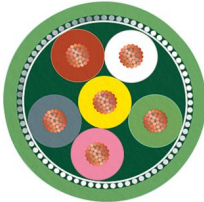
## Connector

|              |                |
|--------------|----------------|
| Connection 1 |                |
| Type         | free cable end |
| Connection 2 |                |
| Type         | free cable end |

## Cable/line

|              |     |
|--------------|-----|
| Cable length | 2 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 mm²                     |
| Signal speed  | 0.66 c                               |
| Conductor structure signal line   | 32x 0.10 mm                          |
| AWG signal line   | 24                                   |
| Conductor cross section   | 3x 2x 0.22 mm²                       |
| 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)              |
|   | 100 Ω ±15 % (with 1 MHz)             |

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|   |   |
|---|---|
| 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  |
| Max. bending cycles                           | 5000000   |
| 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) | -25 °C ... 90 °C (Plug / socket) |

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