

# SAC-2P-M12MSB/ 6,0-915/M12FSB - Bus system cable



1421859

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Bus system cable, PROFIBUS, 2-position, PUR/PVC, blue, shielded, Plug straight M12, coding: B, on Socket straight M12, coding: B, cable length: 6 m

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 1421859                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 50 pc                          |
| Note                                 | Made to order (non-returnable) |
| Product key                          | AF1CJC                         |
| GTIN                                 | 4055626285726                  |
| Weight per piece (including packing) | 481.3 g                        |
| Weight per piece (excluding packing) | 481 g                          |
| Country of origin                    | PL                             |

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## Technical data

### Product properties

|                      |                         |
|----------------------|-------------------------|
| Product type         | Data cable preassembled |
| Number of positions  | 2                       |
| No. of cable outlets | 1                       |
| Shielded             | yes                     |
| Coding               | B                       |

### Insulation characteristics

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

### Interfaces

|                      |          |
|----------------------|----------|
| Bus system           | PROFIBUS |
| Signal type/category | PROFIBUS |

### Signaling

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

### Electrical properties

|                       |                            |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage $U_N$ | 48 V AC                    |
|                       | 60 V DC                    |
| Nominal current $I_N$ | 4 A                        |
| Transmission medium   | Copper                     |

### Mechanical properties

#### Mechanical data

|                             |            |
|-----------------------------|------------|
| Insertion/withdrawal cycles | $\geq 100$ |
|-----------------------------|------------|

### 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

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|                     |                   |
|---------------------|-------------------|
| Type                | Plug straight M12 |
| Number of positions | 2                 |
| Coding type         | B (inverse)       |


## Connection 2

|                     |                     |
|---------------------|---------------------|
| Type                | Socket straight M12 |
| Number of positions | 2                   |
| Coding type         | B                   |

## Cable/line

|              |     |
|--------------|-----|
| Cable length | 6 m |
|--------------|-----|

## PROFIBUS [915]

|   |   |
|---|---|
| Dimensional drawing                           |  |
| Cable weight                                  | 74 kg/km  |
| Number of positions                           | 2   |
| Shielded                                      | yes   |
| Cable type                                    | PROFIBUS [915]  |
| Conductor structure                           | 1x2xAWG24/19  |
| Conductor structure signal line               | 19x 0.14 mm   |
| AWG signal line                               | 24  |
| Conductor cross-section                       | 2x 0.25 mm <sup>2</sup>   |
| Wire diameter incl. insulation                | 2.56 mm   |
| External cable diameter                       | 8.00 mm ±0.4 mm   |
| Outer sheath, material                        | PUR   |
| External sheath, color                        | blue  |
| Conductor material                            | Bare Cu litz wires  |
| Material wire insulation                      | Foamed PE   |
| Single wire, color                            | red, green  |
| Thickness, outer sheath                       | approx. 0.80 mm   |
| Overall twist                                 | 2 wires, twisted  |
| Optical shield covering                       | 70 %  |
| Insulation resistance                         | ≥ 16 GΩ*km  |
| Working capacitance                           | 28 nF (at 1 kHz)  |
| Nominal voltage, cable                        | ≤ 100 V   |
| Test voltage Core/Core                        | 3600 V DC   |
| Minimum bending radius, flexible installation | 5 x D   |
| Smallest bending radius, movable installation | 40 mm   |

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|                                 |   |
|---------------------------------|---|
| Dynamic load capacity (bending) | Max. bending cycles: 3000000, Bending radius: 60 mm, Acceleration: 4 m/s <sup>2</sup> |
| Tensile strength                | ≤ 100 N   |
| Flame resistance                | according to IEC 60332-1  |
| Resistance to oil               | Resistant to mineral oils and grease  |
| Ambient temperature (operation) | -40 °C ... 80 °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) |

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## Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



M12 x 1 socket, straight, shielded

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Schematic diagram



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

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Schematic diagram



Pin assignment M12 socket, 5-pos., B-coded, female side

Circuit diagram



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## Classifications

### ECLASS

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

### ETIM

|           |          |
|-----------|----------|
| ETIM 10.0 | EC001855 |
|-----------|----------|

### UNSPSC

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

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

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