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# Bus system cable - SAC-4P-M 8MS/20,0-950

1543281

https://www.phoenixcontact.com/gb/products/1543281

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Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug straight M8, on free cable end, cable length: 20 m

## Your advantages

- Power cable for actuator voltage
- System cable for supply voltage and bus signal

## Commercial Data

| | |
|---|---|
| Item number | 1543281 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Note | Made to Order (non-returnable) |
| Sales Key | BF1BJA |
| Product Key | BF1BJB |
| Catalog Page | Page 200 (C-6-2019) |
| GTIN | 4046356097444 |
| Weight per Piece (including packing) | 845.21 g |
| Weight per Piece (excluding packing) | 812.6 g |
| Customs tariff number | 85444290 |
| Country of origin | PL |

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## Technical Data

### Product properties

| | |
|---|---|
| Product type | Data cable preassembled |
| Number of positions | 4 |
| Application | Standard |
| No. of cable outlets | 1 |
| Shielded | yes |
| Coding | A - standard |

Insulation characteristics

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

### Interfaces

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

### LED signaling

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

### Electrical properties

| | |
|---|---|
| Contact resistance | ≤ 5 mΩ |
| Insulation resistance | ≥ 100 MΩ |
| Nominal voltage $U_N$ | 48 V AC |
| | 60 V DC |
| Nominal current $I_N$ | 4 A |
| Test voltage | 800 V |
| Transmission medium | Copper |

### Material specifications

| | |
|---|---|
| Color Handle area | black |
| Flammability rating according to UL 94 | HB |
| Material of grip body | TPU, hardly inflammable, self-extinguishing |
| Contact material | CuSn |
| Contact surface material | Ni/Au |
| Contact carrier material | TPU GF |
| Cable gland material | Zinc die-cast, nickel-plated |

### Connection data

Pin assignment

| | |
|---|---|
| Contact \| Color (signal designation) \| Contact (optional) | 1 (Plug) = RD (0.34 mm²) |
| | 3 (Plug) = BU (0.34 mm²) |

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| | |
|---|---|
| | 2 (Plug) = YE (0.14 mm²) |
| | 4 (Plug) = GN (0.14 mm²) |

## Connector

### Header 1

| | |
|---|---|
| Head design | Plug |
| Head cable outlet | straight |
| Head thread type | M8 |

### Head 2

| | |
|---|---|
| Head design | free cable end |

## Cable / line

| | |
|---|---|
| Cable length | 20 m |
| Cable weight | 41 kg/km |
| UL AWM Style | 20963 (80°C/30 V) |
| Number of positions | 4 |
| Shielded | yes |
| Cable type | INTERBUS [950] |
| Conductor structure signal line | 19x 0.10 mm |
| AWG signal line | 26 |
| Conductor cross section | 2x 0.14 mm² (Signal line) |
| | 2x 0.34 mm² (Power supply) |
| | 1x 0.38 mm² (Drain wire) |
| Wire diameter incl. insulation | 0.97 mm (Signal line) |
| | 1.25 mm (Power supply) |
| External cable diameter | 5.2 mm ±0.2 mm |
| Outer sheath, material | PUR |
| External sheath, color | black RAL 9005 |
| Conductor material | Tin-plated Cu litz wires |
| Material wire insulation | PP |
| Single wire, color | red-blue, green-yellow |
| Thickness, insulation | 0.24 mm (Conductor insulation, signal line) |
| | 0.25 mm (Conductor insulation, voltage supply) |
| Thickness, outer sheath | approx. 0.75 mm |
| Twisted pairs | 2 cores to the pair |
| Type of pair shielding | Aluminum-lined polyester foil |
| Overall twist | 2 pairs around a drain wire in the center to the core |
| Optical shield covering | 85 % |
| Max. conductor resistance | ≤ 150 Ω/km (Signal line) |
| | ≤ 58 Ω/km (Power supply) |
| Insulation resistance | ≥ 20 MΩ*km |
| Wave impedance | 75 Ω ±10 Ω (Signal line) |
| | 55 Ω ±10 Ω (Power supply) |

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| | |
|---|---|
| Nominal voltage, cable | ≤ 100 V |
| Test voltage Core/Core | 1000 V (50 Hz, 1 min.) |
| Test voltage Core/Shield | 1000 V (50 Hz, 1 min.) |
| Minimum bending radius, fixed installation | 5 x D |
| Minimum bending radius, flexible installation | 7.5 x D |
| Max. bending cycles | 1000000 |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation) |
| | -40 °C ... 80 °C (Cable, flexible installation) |

Cable structure

| | |
|---|---|
| Cable type | INTERBUS M8 |
| Signal type/category | INTERBUS |
| Outer sheath, material | PUR |
| External sheath, color | black RAL 9005 |

## Ambient conditions

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

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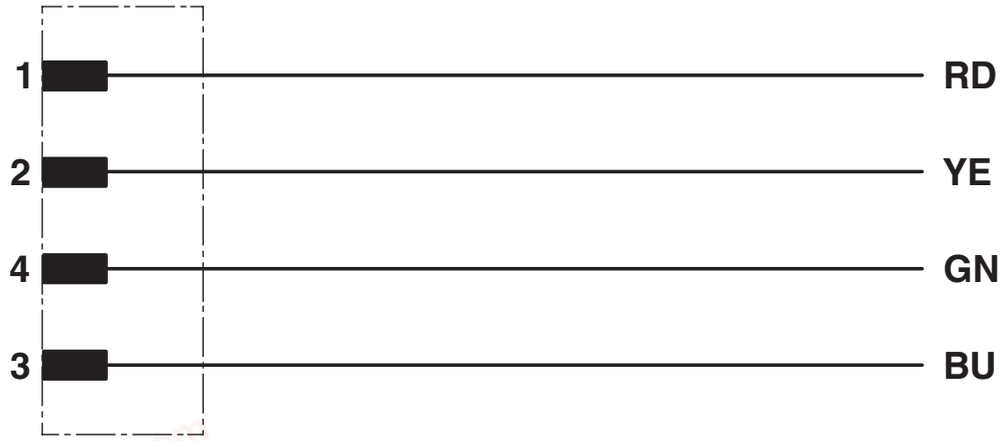
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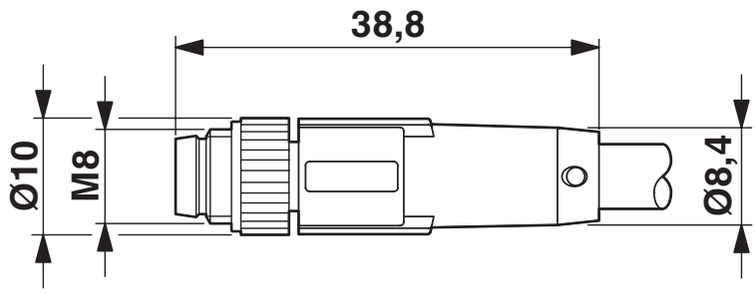
## Drawings

Circuit diagram




Contact assignment of the M8 plug

Dimensional drawing




Plug M8 x 1, straight, shielded

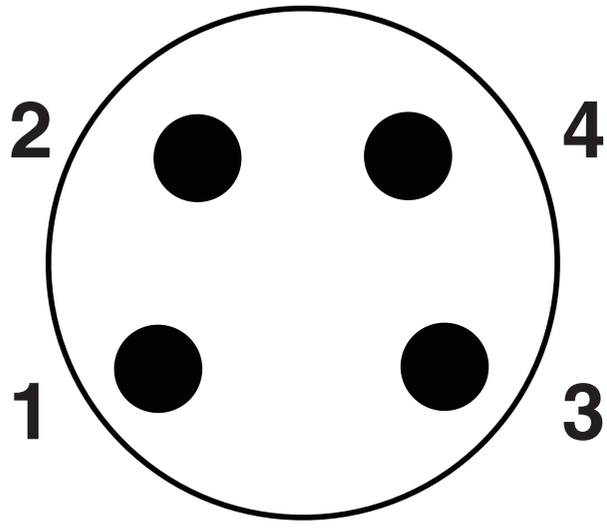
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Schematic diagram




Pin assignment M8 plug, 4-pos., view male side

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## Approvals

**EAC**
Approval ID: RU C-DE.BL08.B.00286

**EAC**
Approval ID: RU D-DE.HB35.B.00387

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## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-9.0 | 27060308 |
| ECLASS-10.0.1 | 27060308 |
| ECLASS-11.0 | 27060307 |

### ETIM

| | |
|---|---|
| ETIM 8.0 | EC001855 |

### UNSPSC

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

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## Environmental Product Compliance

| | |
|---|---|
| REACh SVHC | Lead 7439-92-1 |

| | |
|---|---|
| China RoHS | Environmentally Friendly Use Period = 50 years |
| | For information on hazardous substances, refer to the manufacturer’s declaration available under “Downloads” |

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