

## Bus system cable - SAC-4P-20,0-950/M 8FR - 1550944

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

### Why buy this product

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

RoHS

### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 STK                                                                                                   |
| GTIN         | <br>4 046356 151474 |
| GTIN         | 4046356151474                                                                                           |

### Technical data

#### Dimensions

|                                            |       |
|--------------------------------------------|-------|
| Length of cable                            | 20 m  |
| Stripping length of the free conductor end | 50 mm |

#### Ambient conditions

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

#### General

|                       |          |
|-----------------------|----------|
| Rated current at 40°C | 4 A      |
| Rated voltage         | 48 V AC  |
|                       | 60 V DC  |
| Number of positions   | 4        |
| Color handle area     | black    |
| Insulation resistance | ≥ 100 MΩ |

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## Technical data

### General

|                      |                        |
|----------------------|------------------------|
| Coding               | A - standard           |
| Signal type/category | INTERBUS               |
| Status display       | No                     |
| Overvoltage category | II                     |
| Degree of pollution  | 3                      |
| Test voltage         | 800 V                  |
| Torque               | 0.2 Nm (M8 connectors) |

### Material

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

### Pin assignment

|                                                      |                            |
|------------------------------------------------------|----------------------------|
| Position = wire color (signal) = position (optional) | 1 (Socket)   RD (0.34 mm²) |
|                                                      | 3 (Socket)   BU (0.34 mm²) |
|                                                      | 2 (Socket)   YE (0.14 mm²) |
|                                                      | 4 (Socket)   GN (0.14 mm²) |

### Standards and Regulations

|                                        |    |
|----------------------------------------|----|
| Flammability rating according to UL 94 | HB |
|----------------------------------------|----|

### Cable

|                                     |                                                |
|-------------------------------------|------------------------------------------------|
| Cable type                          | INTERBUS                                       |
| Cable type (abbreviation)           | 950                                            |
| UL AWM style                        | 20963 (80°C/30 V)                              |
| Cable structure                     | 2xAWG26/19+2xAWG22/19                          |
| Conductor cross section             | 2x 0.14 mm² (Signal line)                      |
|                                     | 2x 0.34 mm² (Power supply)                     |
|                                     | 1x 0.38 mm² (Drain wire)                       |
| AWG signal line                     | 26                                             |
| AWG power supply                    | 22                                             |
| Conductor structure signal line     | 19x 0.10 mm                                    |
| Conductor structure, voltage supply | 19x 0.15 mm                                    |
| Core diameter including insulation  | 0.97 mm (Signal line)                          |
|                                     | 1.25 mm (Power supply)                         |
| Thickness, insulation               | 0.24 mm (Conductor insulation, signal line)    |
|                                     | 0.25 mm (Conductor insulation, voltage supply) |
| Wire colors                         | red-blue, green-yellow                         |

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### Technical data

#### Cable

|                                               |                                                       |
|-----------------------------------------------|-------------------------------------------------------|
| 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 |
| Shielding                                     | Tinned copper braided shield                          |
| Optical shield covering                       | 85 %                                                  |
| External sheath, color                        | black RAL 9005                                        |
| Outer sheath thickness                        | approx. 0.75 mm                                       |
| External cable diameter D                     | 5.2 mm ±0.2 mm                                        |
| Smallest bending radius, fixed installation   | 26 mm                                                 |
| Smallest bending radius, movable installation | 37 mm                                                 |
| Number of bending cycles                      | 1000000                                               |
| Bending radius                                | 110 mm                                                |
| Traversing path                               | 6 m                                                   |
| Traversing rate                               | 4 m/s                                                 |
| Acceleration                                  | 4 m/s <sup>2</sup>                                    |
| Cable weight                                  | 41 kg/km                                              |
| Outer sheath, material                        | PUR                                                   |
| Material conductor insulation                 | PP                                                    |
| Conductor material                            | Tin-plated Cu litz wires                              |
| Insulation resistance                         | ≥ 20 MΩ*km                                            |
| Conductor resistance                          | ≤ 155 Ω/km (Signal line)                              |
|                                               | ≤ 58 Ω/km (Power supply)                              |
| Nominal voltage, cable                        | ≤ 100 V                                               |
| Test voltage Core/Core                        | 1000 V                                                |
| Test voltage Core/Shield                      | 1000 V                                                |
| Ambient temperature (operation)               | -40 °C ... 80 °C (cable, fixed installation)          |
|                                               | -40 °C ... 80 °C (cable, flexible installation)       |

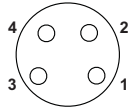
#### Environmental Product Compliance

|            |                |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

#### Drawings

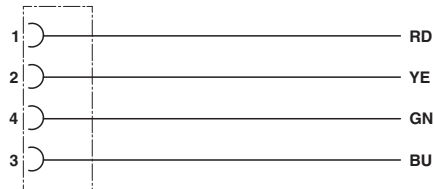
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Schematic diagram



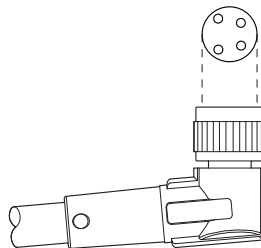
Pin assignment M8 socket, 4-pos., view female side

Circuit diagram



Contact assignment of M8 socket

Schematic diagram



Layout of connector pin assignments

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