

## Bus system cable - SAC-4P-20,0-950/M 8FS - 1543333

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Bus system cable, INTERBUS, INTERBUS, 4-position, PUR halogen-free, Black RAL 9005, shielded, Free cable end, on Socket straight M8, Cable length: 20 m

### Product Features

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



### Key commercial data

|                                      |           |
|--------------------------------------|-----------|
| Packing unit                         | 1 1       |
| Weight per Piece (excluding packing) | 812.2 GRM |
| Custom tariff number                 | 85444290  |
| Country of origin                    | Poland    |

### 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         | 30 V     |
| Number of positions   | 4        |
| Contact resistance    | ≤ 5 mΩ   |
| Insulation resistance | ≥ 100 MΩ |

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### Technical data

#### General

|                        |                        |
|------------------------|------------------------|
| Coding                 | A - standard           |
| Signal type/category   | INTERBUS               |
| Status display         | No                     |
| Surge voltage category | II                     |
| Pollution degree       | 3                      |
| Test voltage           | 800 V                  |
| Torque                 | 0.2 Nm (M8 connectors) |

#### Material

|   |   |
|---|---|
| Inflammability class 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 mm <sup>2</sup> ) |
|  | 3 (Socket) = BU (0.34 mm <sup>2</sup> ) |
|  | 2 (Socket) = YE (0.14 mm <sup>2</sup> ) |
|  | 4 (Socket) = GN (0.14 mm <sup>2</sup> ) |

#### Cable

|                                     |  |
|-------------------------------------|--|
| Cable type                          | INTERBUS                                       |
| Cable type (abbreviation)           | 950  |
| UL AWM style                        | 20963 (80°C/30 V)                              |
| Conductor cross section             | 2x 0.14 mm <sup>2</sup> (signal line)          |
|                                     | 2x 0.34 mm <sup>2</sup> (Power supply)         |
|                                     | 1x 0.38 mm <sup>2</sup> (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)<br>≤ 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)<br>-40 °C ... 80 °C (cable, flexible installation) |

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27060306 |
| eCl@ss 4.1 | 27060306 |
| eCl@ss 5.0 | 27061801 |
| eCl@ss 5.1 | 27061801 |
| eCl@ss 6.0 | 27279218 |
| eCl@ss 7.0 | 27279218 |

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## Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 8.0 | 27279218 |
|------------|----------|

## ETIM

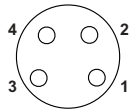
|          |          |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC001855 |

## UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11     | 31251501 |
| UNSPSC 12.01  | 31251501 |
| UNSPSC 13.2   | 31251501 |

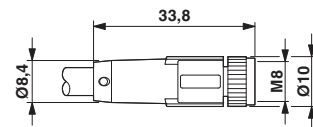
## Drawings

Schematic diagram



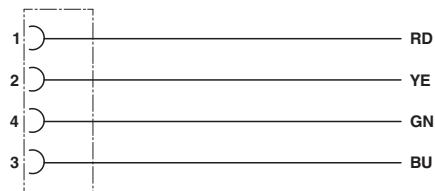
Pin assignment M8 socket, 4-pos., view female side

Dimensioned drawing



Socket M8 x 1, straight, shielded

Circuit diagram



Contact assignment of M8 socket

