

1550915

<https://www.phoenixcontact.com/us/products/1550915>

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Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded (Tinned copper braided shield), free cable end, on Socket angled M8, coding: A, cable length: 5 m

Your advantages

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

Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1550915             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | BF02                |
| Product key                          | BF1BJB              |
| Catalog page                         | Page 200 (C-6-2019) |
| GTIN                                 | 4046356151443       |
| Weight per piece (including packing) | 217.72 g            |
| Weight per piece (excluding packing) | 217.72 g            |
| Customs tariff number                | 85444290            |
| Country of origin                    | PL                  |

# SAC-4P- 5,0-950/M 8FR - Bus system cable



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## Technical data

### Product properties

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

### Insulation characteristics

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

### Interfaces

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

### 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                        |
| Test voltage          | 800 V                      |
| Transmission medium   | Copper                     |

### Material specifications

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

### Connection data

#### Pin assignment

|                                                           |                                         |
|-----------------------------------------------------------|-----------------------------------------|
| Contact   Color (signal designation)   Contact (optional) | 1 (Socket)   RD (0.34 mm <sup>2</sup> ) |
|                                                           | 3 (Socket)   BU (0.34 mm <sup>2</sup> ) |

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|  |                                         |
|--|-----------------------------------------|
|  | 2 (Socket)   YE (0.14 mm <sup>2</sup> ) |
|  | 4 (Socket)   GN (0.14 mm <sup>2</sup> ) |

## Connector

### Connection 1

|      |                |
|------|----------------|
| Type | free cable end |
|------|----------------|

### Connection 2

|      |                |
|------|----------------|
| Type | free cable end |
|------|----------------|

## Cable/line

|              |     |
|--------------|-----|
| Cable length | 5 m |
|--------------|-----|

### INTERBUS [950]

|                                 |                                                       |
|---------------------------------|-------------------------------------------------------|
| 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             | 2xAWG26/19+2xAWG22/19                                 |
| Conductor structure signal line | 19x 0.10 mm                                           |
| AWG signal line                 | 26                                                    |
| 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)                  |
| Wire diameter incl. insulation  | 0.97 mm (Signal line)                                 |
|                                 | 1.25 mm (Power supply)                                |
| External cable diameter         | 5.20 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                      | 1000.00 V (50 Hz, 1 min.)                       |
| Minimum bending radius, fixed installation    | 5 x D                                           |
| Minimum bending radius, flexible installation | 7.5 x D                                         |
| Smallest bending radius, fixed installation   | 26 mm                                           |
| Smallest bending radius, movable installation | 39 mm                                           |
| Max. bending cycles                           | 1000000                                         |
| Ambient temperature (operation)               | -40 °C ... 80 °C (cable, fixed installation)    |
|                                               | -40 °C ... 80 °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) |

# SAC-4P- 5,0-950/M 8FR - Bus system cable

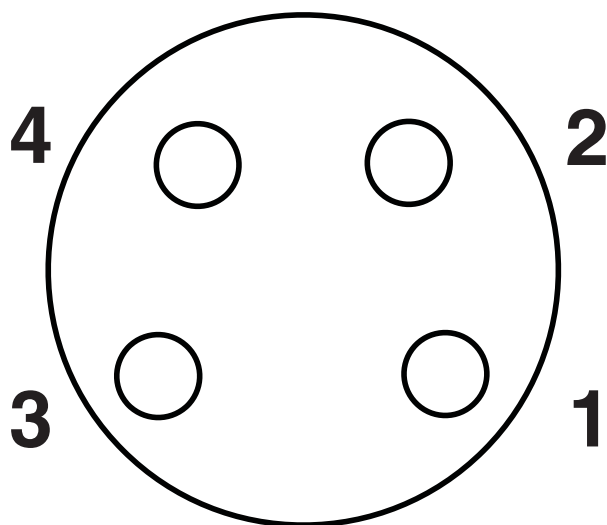
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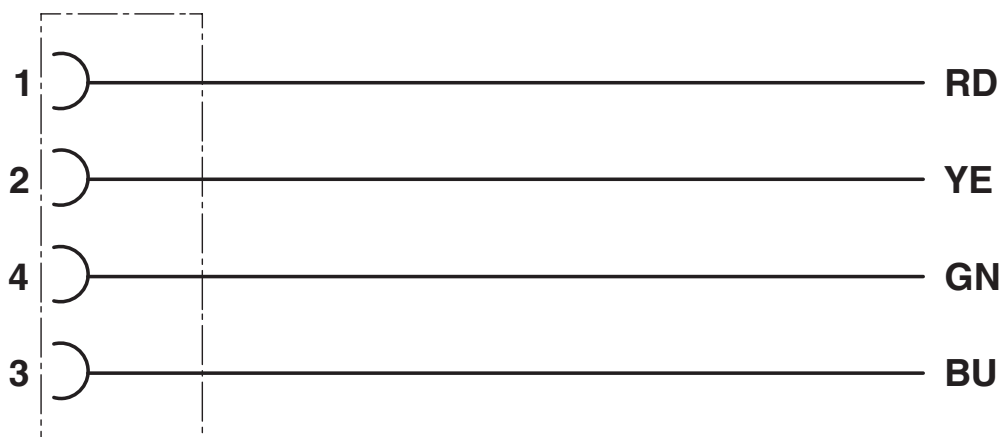
## Drawings

Schematic diagram



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

Circuit diagram



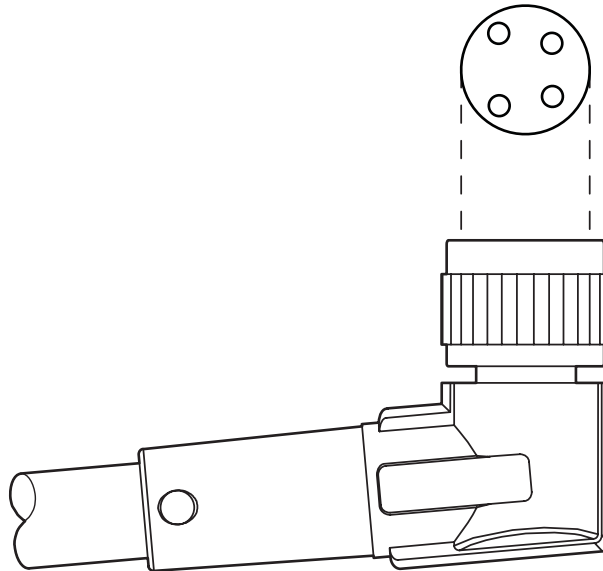
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Schematic diagram



Layout of connector pin assignments

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## Approvals

📄 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1550915>



**EAC-RoHS**

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



**cULus Listed**

Approval ID: E221474

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27060307 |
| ECLASS-12.0 | 27060307 |
| ECLASS-13.0 | 27060307 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | 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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