

1415550

<https://www.phoenixcontact.com/us/products/1415550>

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Sensor/actuator cable, 4-position, PVC, black RAL 9005, free cable end, on Socket straight M8, coding: A, cable length: 1.5 m

Your advantages

- Easy and safe: 100 % electrically tested plug-in components

Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 1415550             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | BF01                |
| Product key                          | BF1BCA              |
| Catalog page                         | Page 196 (C-2-2019) |
| GTIN                                 | 4055626049342       |
| Weight per piece (including packing) | 49.48 g             |
| Weight per piece (excluding packing) | 49.48 g             |
| Customs tariff number                | 85444290            |
| Country of origin                    | DE                  |

# SAC-4P- 1,5-PVC/M 8FS - Sensor/actuator cable



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## Technical data

### Product properties

|                      |                       |
|----------------------|-----------------------|
| Product type         | Sensor/actuator cable |
| Application          | Standard              |
| Number of positions  | 4                     |
| No. of cable outlets | 1                     |
| Shielded             | no                    |
| Coding               | A                     |

### Insulation characteristics

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

### 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                |

### 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                        |

### Mechanical properties

#### Mechanical data

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

### Signaling

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

### Connector

#### Connection 1

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

#### Connection 2

|                     |                    |
|---------------------|--------------------|
| Type                | Socket straight M8 |
| Number of positions | 4                  |

# SAC-4P- 1,5-PVC/M 8FS - Sensor/actuator cable



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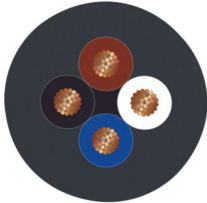
<https://www.phoenixcontact.com/us/products/1415550>

|             |   |
|-------------|---|
| Coding type | A |
|-------------|---|

## Cable/line

|              |       |
|--------------|-------|
| Cable length | 1.5 m |
|--------------|-------|

## PVC black [PVC]

|                                             |                                                                                                 |
|---------------------------------------------|-------------------------------------------------------------------------------------------------|
| Dimensional drawing                         |               |
| Cable weight                                | 33 kg/km                                                                                        |
| UL AWM Style                                | 2464 / 1729 (80°C/300 V)                                                                        |
| Number of positions                         | 4                                                                                               |
| Shielded                                    | no                                                                                              |
| Cable type                                  | PVC black [PVC]                                                                                 |
| Conductor structure signal line             | 14x 0.15 mm                                                                                     |
| AWG signal line                             | 24                                                                                              |
| Conductor cross section                     | 4x 0.25 mm² (Signal line)                                                                       |
| Wire diameter incl. insulation              | 1.17 mm ±0.05 mm                                                                                |
| External cable diameter                     | 4.40 mm ±0.15 mm                                                                                |
| Outer sheath, material                      | PVC                                                                                             |
| External sheath, color                      | black RAL 9005                                                                                  |
| Conductor material                          | Bare Cu litz wires                                                                              |
| Material wire insulation                    | PVC                                                                                             |
| Single wire, color                          | brown, white, blue, black                                                                       |
| Thickness, insulation                       | ≥ 0.23 mm (Core insulation)<br>≥ 0.76 mm (Outer cable sheath)                                   |
| Overall twist                               | 4 wires, twisted                                                                                |
| Max. conductor resistance                   | max. 79 Ω/km (at 20 °C)                                                                         |
| Insulation resistance                       | ≥ 100 MΩ*km (at 20 °C)                                                                          |
| Nominal voltage, cable                      | ≤ 300 V                                                                                         |
| Test voltage                                | ≥ 3000 V                                                                                        |
| Minimum bending radius, fixed installation  | 5 x D                                                                                           |
| Smallest bending radius, fixed installation | 22 mm                                                                                           |
| Flame resistance                            | As per UL-Style 2464                                                                            |
| Resistance to oil                           | EN 60811-2-1                                                                                    |
| Ambient temperature (operation)             | -25 °C ... 80 °C (cable, fixed installation)<br>-10 °C ... 80 °C (Cable, flexible installation) |

## Environmental and real-life conditions

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## Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Degree of protection            | IP65                             |
|                                 | IP67                             |
|                                 | IP68                             |
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |

## Standards and regulations

### M8

|                          |                 |
|--------------------------|-----------------|
| Standard designation     | M8 connector    |
| Standards/specifications | IEC 61076-2-104 |

# SAC-4P- 1,5-PVC/M 8FS - Sensor/actuator cable

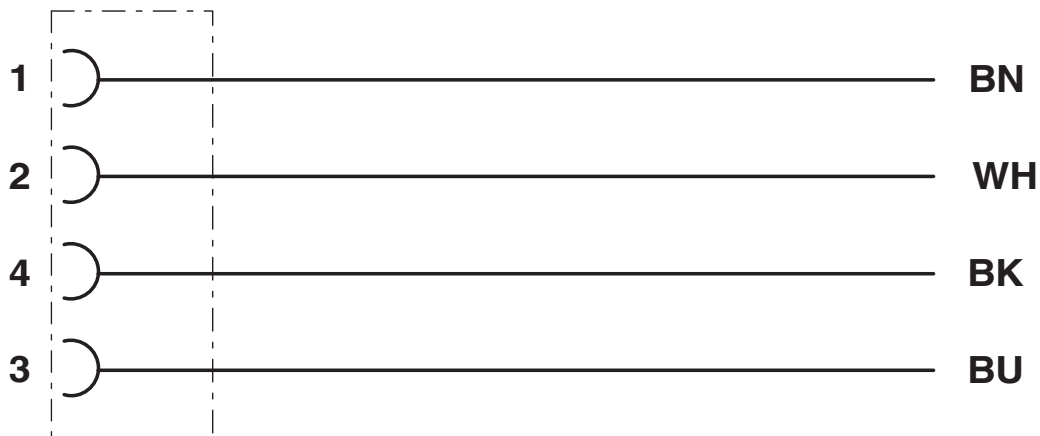
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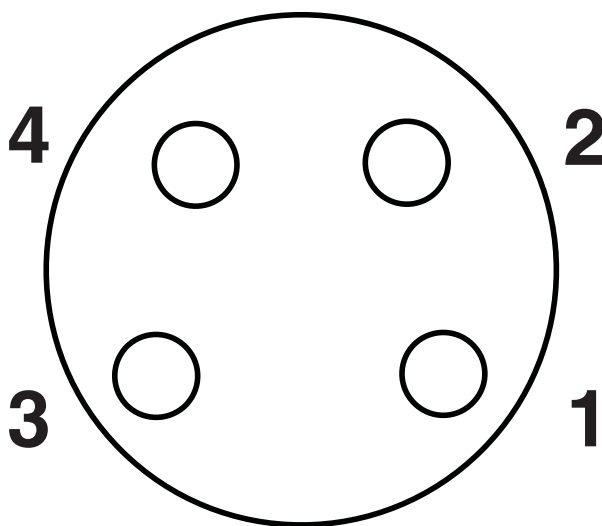


## Drawings

Circuit diagram



Schematic diagram



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

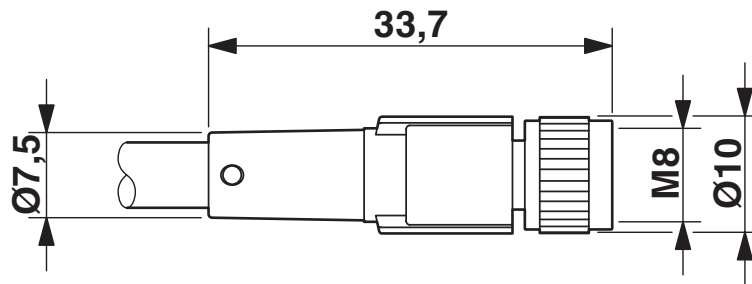
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Dimensional drawing



Socket M8 x 1, straight

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1415550>

|  |                                                |                                |                   |                               |
|--|------------------------------------------------|--------------------------------|-------------------|-------------------------------|
|  | <b>UL Listed</b><br>Approval ID: FILE E 221474 |                                |                   |                               |
|  | Nominal voltage U <sub>N</sub>                 | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
|  | 30 V                                           | 4 A                            | -                 | -                             |

|  |                                                 |                                |                   |                               |
|--|-------------------------------------------------|--------------------------------|-------------------|-------------------------------|
|  | <b>cUL Listed</b><br>Approval ID: FILE E 221474 |                                |                   |                               |
|  | Nominal voltage U <sub>N</sub>                  | Nominal current I <sub>N</sub> | Cross section AWG | Cross section mm <sup>2</sup> |
|  | 30 V                                            | 4 A                            | -                 | -                             |

|  |                                                      |  |  |  |
|--|------------------------------------------------------|--|--|--|
|  | <b>EAC-RoHS</b><br>Approval ID: RU D-DE.HB35.B.00387 |  |  |  |
|  |                                                      |  |  |  |

|                     |
|---------------------|
| <b>cULus Listed</b> |
|---------------------|

# SAC-4P- 1,5-PVC/M 8FS - Sensor/actuator cable



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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27060311 |
| ECLASS-12.0 | 27060311 |
| ECLASS-13.0 | 27060311 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC001855 |
|----------|----------|

### UNSPSC

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

# SAC-4P- 1,5-PVC/M 8FS - Sensor/actuator cable



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## Environmental product compliance

|            |                                                         |
|------------|---------------------------------------------------------|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

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## Accessories

### UCT-WMT (23X4) - Conductor marker

0801453

<https://www.phoenixcontact.com/us/products/0801453>



Conductor marker, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 30

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### UC-WMT (23X4) - Conductor marker

0819411

<https://www.phoenixcontact.com/us/products/0819411>



Conductor marker, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 24

# SAC-4P- 1,5-PVC/M 8FS - Sensor/actuator cable



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## US-WMT (23X4) - Cable marker

0828769

<https://www.phoenixcontact.com/us/products/0828769>



Cable marker, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 56

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## WMTW (23X4)R - Cable marker

0831004

<https://www.phoenixcontact.com/us/products/0831004>



Cable marker, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMaster 300/600, THERMOMARK X1.2, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 3000

## SAC-4P- 1,5-PVC/M 8FS - Sensor/actuator cable

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## WP-CTA POM 13,0 BK - Protective hose adapter

1422884

<https://www.phoenixcontact.com/us/products/1422884>



Protective hose adapter, for corrugated hoses with a nominal size of 13 (10 x 13), corrugated in parallel

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## WP-PA HF 13,0 BK - Protective hose

3240681

<https://www.phoenixcontact.com/us/products/3240681>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: V0, inner diameter: 10 mm, Total length: 50 m

## SAC-4P- 1,5-PVC/M 8FS - Sensor/actuator cable

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## WP-PA HF-HB 13,0 BK - Protective hose

3240839

<https://www.phoenixcontact.com/us/products/3240839>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: HB, inner diameter: 10 mm, Total length: 50 m

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## PROT-M 8 MS-PA-CHAIN - Screw plug

1430860

<https://www.phoenixcontact.com/us/products/1430860>

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets



## SAC-4P- 1,5-PVC/M 8FS - Sensor/actuator cable

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## B-STIFT - Marker pen

1051993

<https://www.phoenixcontact.com/us/products/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

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## CUTFOX-S VDE - Diagonal cutter

1212207

<https://www.phoenixcontact.com/us/products/1212207>



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

# SAC-4P- 1,5-PVC/M 8FS - Sensor/actuator cable



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## WIREFOX SAC-1 - Stripping tool

1212757

<https://www.phoenixcontact.com/us/products/1212757>



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 3.2 to 4.4 mm, any stripping length

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## WIREFOX SAC - Stripping tool

1212623

<https://www.phoenixcontact.com/us/products/1212623>



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 4.4 to 7 mm, any stripping length

## SAC-4P- 1,5-PVC/M 8FS - Sensor/actuator cable



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## WIREFOX 10 - Stripping tool

1212150

<https://www.phoenixcontact.com/us/products/1212150>



Stripping tool, for cables and conductors from 0.02 - 10 mm<sup>2</sup>, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid, replaceable stripping blade

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## TSD 02 SAC - Torque screwdriver

1208487

<https://www.phoenixcontact.com/us/products/1208487>



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors

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## SAC BIT M8-D10 - Tool

1208461

<https://www.phoenixcontact.com/us/products/1208461>



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

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