

Sensor/actuator cable - SAC-3P-M 8MS/10,0-PVC



1447280

<https://www.phoenixcontact.com/pc/products/1447280>

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Sensor/actuator cable, 3-position, PVC, black RAL 9005, Plug straight M8, on free cable end, cable length: 10 m

Your advantages

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

Commercial Data

| | |
|--------------------------------------|---------------------|
| Item number | 1447280 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Product Key | BF1BBA |
| Catalog Page | Page 190 (C-2-2019) |
| GTIN | 4046356673242 |
| Weight per Piece (including packing) | 255.8 g |
| Weight per Piece (excluding packing) | 243.5 g |
| Customs tariff number | 85444290 |
| Country of origin | DE |

Technical Data

Product properties

| | |
|----------------------|-----------------------|
| Product type | Sensor/actuator cable |
| Number of positions | 3 |
| Application | Standard |
| No. of cable outlets | 1 |
| Shielded | no |
| Coding | A - standard |

Material specifications

| | |
|-------------------------------|---|
| 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

| | |
|-----------------------|----------------------------|
| Contact resistance | $\leq 5 \text{ m}\Omega$ |
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage U_N | 48 V AC |
| | 60 V DC |
| Nominal current I_N | 4 A |
| Protective circuit | unwired |

Mechanical properties

Mechanical data

| | |
|-----------------------------|------------|
| Insertion/withdrawal cycles | ≥ 100 |
|-----------------------------|------------|

LED signaling

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

Connector

Connection 1

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

Connection 2

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


Cable / line

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| | |
|---|---|
| Cable length | 10 m |
| PVC black [PVC] | |
| Dimensional drawing |  |
| Cable weight | 29 kg/km |
| Number of positions | 3 |
| Shielded | no |
| Cable type | PVC black [PVC] |
| Conductor structure signal line | 14x 0.15 mm |
| AWG signal line | 24 |
| Conductor cross section | 3x 0.25 mm ² (Signal line) |
| Wire diameter incl. insulation | 1.17 mm ±0.05 mm |
| External cable diameter | 4.2 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, blue, black |
| Thickness, insulation | ≥ 0.23 mm (Core insulation) |
| Thickness, outer sheath | ≥ 0.76 mm |
| Overall twist | 3 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 |
| Smallest bending radius, fixed installation | 13 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) -10 °C ... 80 °C (Cable, flexible installation) |

Ambient conditions

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

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Standards and regulations

M8

| Standards/specifications |
|--------------------------|
| IEC 61076-2-104 |

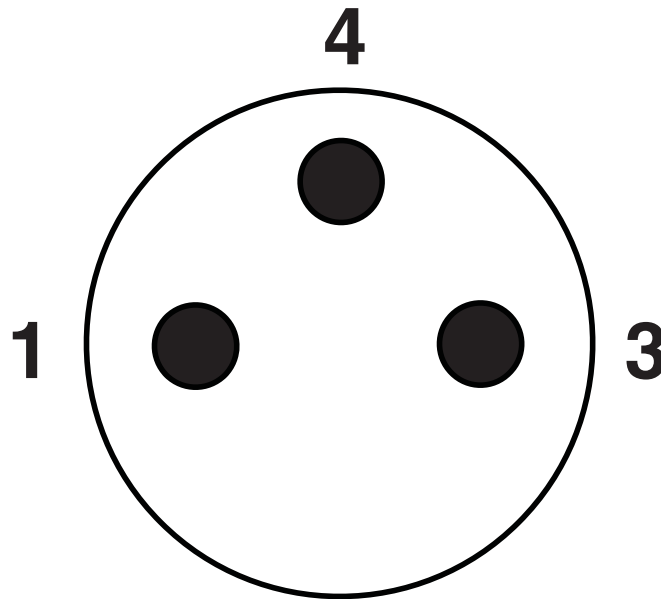
Sensor/actuator cable - SAC-3P-M 8MS/10,0-PVC

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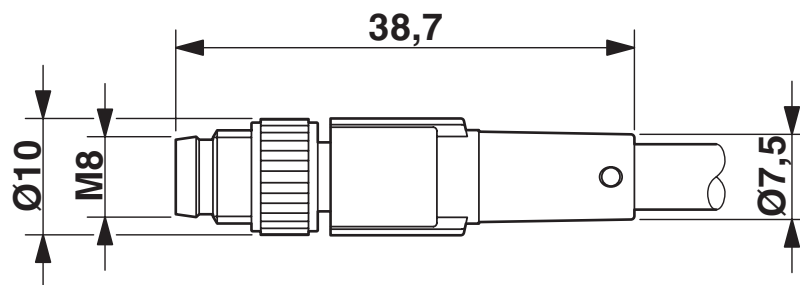
Drawings

Schematic diagram



Pin assignment M8 plug, 3-pos., view male side

Dimensional drawing



M8 x 1 male plug, straight version

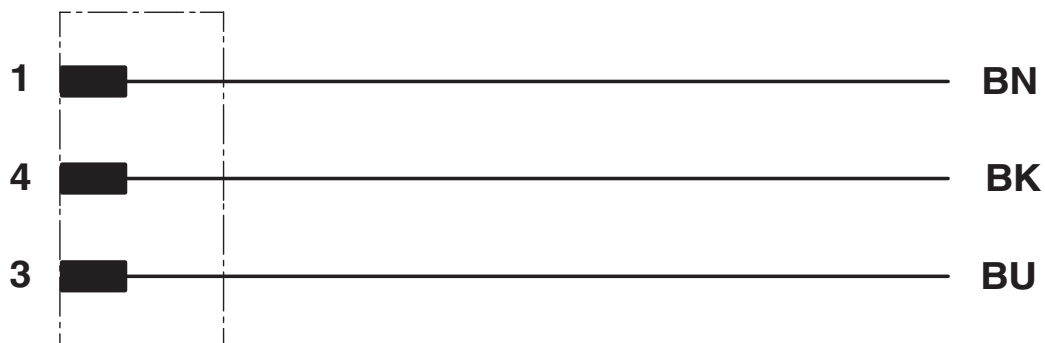
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Circuit diagram




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Approvals

|  UL Listed Approval ID: FILE E 221474 | | | | |
|--|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal Voltage U_N | Nominal Current I_N | Cross Section AWG | Cross Section mm^2 |
| | 60 V | 4 A | - | - |

|  cUL Listed Approval ID: FILE E 221474 | | | | |
|---|-----------------------|-----------------------|-------------------|-----------------------------|
| | Nominal Voltage U_N | Nominal Current I_N | Cross Section AWG | Cross Section mm^2 |
| | 60 V | 4 A | - | - |

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

| cULus Listed |
|---------------------|
|---------------------|

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Classifications

ECLASS

| | |
|---------------|----------|
| ECLASS-9.0 | 27060311 |
| ECLASS-10.0.1 | 27060311 |
| ECLASS-11.0 | 27060311 |

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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Accessories

Sealing cap

Sealing cap - PROT-M 8 FS-PA-CHAIN - 1430857

<https://www.phoenixcontact.com/pc/products/1430857>

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



Insert label

Insert label - PABA WH/23 - 1013779

<https://www.phoenixcontact.com/pc/products/1013779>

Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20



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Insert label

Insert label - PABA YE/23 - 1013782

<https://www.phoenixcontact.com/pc/products/1013782>



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

Marker pen

Marker pen - B-STIFT - 1051993

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



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

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Diagonal cutter

Diagonal cutter - CUTFOX-S VDE - 1212207

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



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

Stripping tool

Stripping tool - WIREFOX SAC-1 - 1212757

<https://www.phoenixcontact.com/pc/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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Stripping tool

Stripping tool - WIREFOX SAC - 1212623

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



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

Stripping tool

Stripping tool - WIREFOX 10 - 1212150

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



Stripping tool, for cables and conductors from 0.02 - 10 mm², self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm² stranded/1.5 mm² solid, replaceable stripping blade

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Protective hose adapter

Protective hose adapter - WP-CTA POM 13,0 BK - 1422884

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



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

Protective hose

Protective hose - WP-PA HF 13,0 BK - 3240681

<https://www.phoenixcontact.com/pc/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

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Protective hose

Protective hose - WP-PA HF-HB 13,0 BK - 3240839

<https://www.phoenixcontact.com/pc/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

Torque screwdriver

Torque screwdriver - TSD 02 SAC - 1208487

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



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

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Tool

Tool - SAC BIT M8-D10 - 1208461

<https://www.phoenixcontact.com/pc/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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