

# Sensor/actuator cable - SAC-4P-M 8MR/3,0-PVC



1415547

<https://www.phoenixcontact.com/pc/products/1415547>

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Sensor/actuator cable, 4-position, PVC, black RAL 9005, Plug angled M8, on free cable end, cable length: 3 m

## Your advantages

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

## Commercial Data

Item number	1415547
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1BCA
Catalog Page	Page 196 (C-2-2019)
GTIN	4055626049311
Weight per Piece (including packing)	94.2 g
Weight per Piece (excluding packing)	81.63 g
Customs tariff number	85444290
Country of origin	DE

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## Technical Data

### Product properties

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

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

Flammability rating according to UL 94	HB
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	$\geq 100$
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### LED signaling

Status display	No
Status display present	No

### Connector

#### Connection 1

Head design	Plug
Head cable outlet	angled
Head thread type	M8

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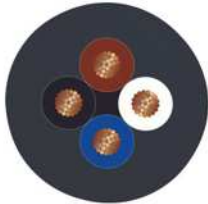
## Connection 2

Head design	free cable end
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## Cable / line

Cable length	3 m
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## 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 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.05 mm
External cable diameter	4.4 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) ≥ 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
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

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

## Standards and regulations

Standards/specifications	IEC 61076-2-104
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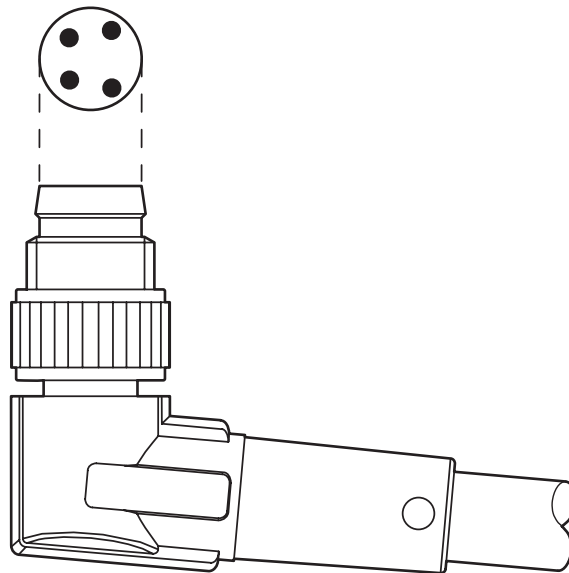
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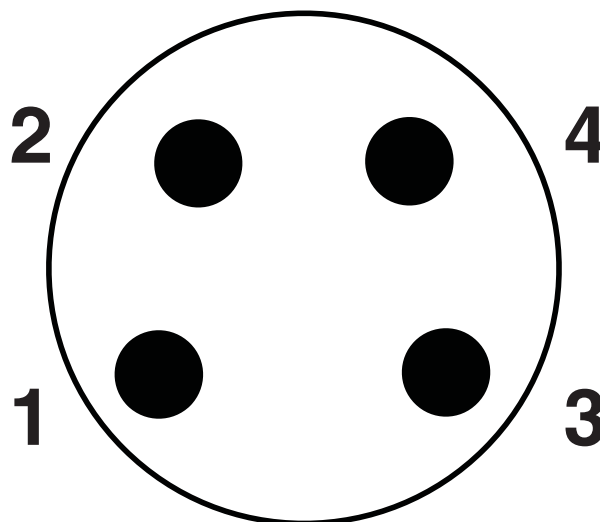
## Drawings

Schematic diagram



Layout of connector pin assignments

Schematic diagram



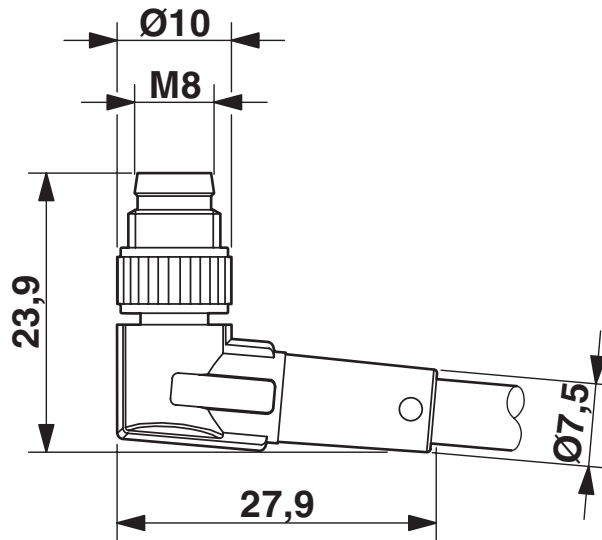
Pin assignment M8 plug, 4-pos., view male side

# Sensor/actuator cable - SAC-4P-M 8MR/3,0-PVC

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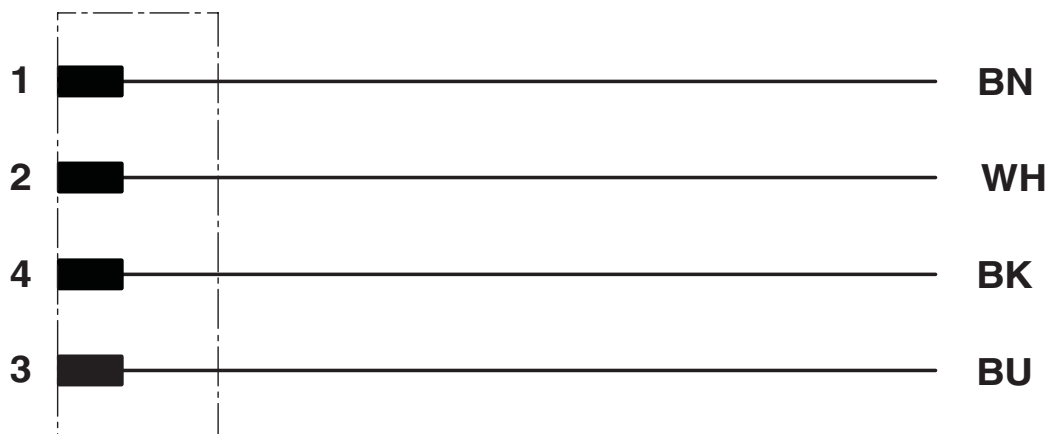
<https://www.phoenixcontact.com/pc/products/1415547>

Dimensional drawing



M8 x 1 male plug, angled version

Circuit diagram



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## Approvals

 <b>UL Listed</b> Approval ID: FILE E 221474				
	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	30 V	4 A	-	-

 <b>cUL Listed</b> Approval ID: FILE E 221474				
	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	30 V	4 A	-	-

 <b>EAC</b> Approval ID: RU D-DE.HB35.B.00387	
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<b>cULus Listed</b>
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# Sensor/actuator cable - SAC-4P-M 8MR/3,0-PVC



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## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	EC001855
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### 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



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### 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



# Sensor/actuator cable - SAC-4P-M 8MR/3,0-PVC

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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

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## 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

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## 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

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## Stripping tool

Stripping tool - WIREFOX 10 - 1212150

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

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## 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

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## 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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