

# SAC-3P-M 8MS/20,0-PVC BK VA - Sensor/actuator cable



1002004

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Sensor/actuator cable, 3-position, PVC, black RAL 9005, Plug straight M8, coding: A, on free cable end, cable length: 20 m, High-grade steel knurl

As shown in the illustration but with a black handle

## Your advantages

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

## Commercial data

Item number	1002004
Packing unit	1 pc
Minimum order quantity	25 pc
Note	Made to order (non-returnable)
Product key	AF1BBA
GTIN	4055626463629
Weight per piece (including packing)	500.2 g
Weight per piece (excluding packing)	500.2 g
Country of origin	PL

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## Technical data

### Product properties

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

### 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	Stainless steel

### 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	$\geq 100$
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### Signaling

Status display	no
Status display present	no

### Connector

#### Connection 1

Type	Plug straight M8
Number of positions	3
Coding type	A

#### Connection 2

Type	free cable end
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### Cable/line

Cable length	20 m
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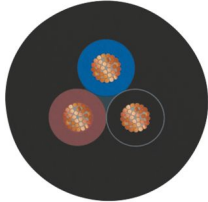
PVC black [PVC]

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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 <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.05 mm
External cable diameter	4.20 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)

## Environmental and real-life conditions

### Ambient conditions

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

## Standards and regulations

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M8

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

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## Drawings

Dimensional drawing



M8 x 1 male plug, straight version

Schematic diagram



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

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Circuit diagram



Contact assignment of the M8 plug

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1002004>

 <b>UL Listed</b> Approval ID: FILE E 221474				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	60 V	4 A	-	-

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## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

### ETIM

ETIM 10.0	EC001855
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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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