

# SAC-3P-20,0-PUR/A-1L-Z - Sensor/actuator cable



1439188

<https://www.phoenixcontact.com/us/products/1439188>

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Valve connector A, with 1 LED, Wiring: Z diode, cable length: 20 m

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Convenient: increased machine availability thanks to quick and easy diagnostics
- Our standard: robust halogen-free PUR cable

## Commercial data

Item number	1439188
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	AF1DAA
GTIN	4046356489188
Weight per piece (including packing)	650 g
Weight per piece (excluding packing)	559.5 g
Country of origin	PL

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## Technical data

### Product properties

Product type	Sensor/actuator cable with valve connector
Application	Standard
Number of positions	3
No. of cable outlets	1
Shielded	no

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Connection data

#### Conductor connection

Tightening torque	0.6 Nm (Valve connector)
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#### Connection assignment

Contact   Color (signal designation)   Contact (optional)	1 (Valve connector)   BK1
	2 (Valve connector)   BK2
	PE (Valve connector)   GNYE

### Material specifications

Flammability rating according to UL 94	V0
Seal material	TPU
Material housing valve plug	TPU
Contact material	CuSn
Valve plug contact insert material	PA 6.6
Contact surface material	Sn

### Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage $U_N$	24 V AC
	24 V DC
Nominal current $I_N$	4 A

#### Valve connector characteristics

Fixing screws	M3 x 29
Pulse power	40 W (at 100 μs square-wave pulse)
Terminal voltage	70 V (at 2 mA constant current)
Reverse voltage	50 V

### Signaling

Status display	1 LED
Status display present	yes

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## Connector

### Connection 1

Type	free cable end
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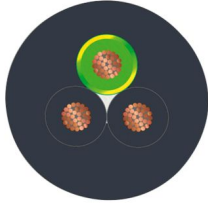
### Connection 2

Type	Valve connector A
Number of positions	3
Material	CuSn (Contact)
	Sn (Contact surface)
	PA 6.6 (Contact carrier)
	TPU (Housing)
Protective circuit	Z diode

## Cable/line

Cable length	20 m
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### PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	30 kg/km
UL AWM Style	20549
Number of positions	3
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	28x 0.15 mm
AWG signal line	20
Conductor cross-section	3x 0.5 mm <sup>2</sup>
Wire diameter incl. insulation	1.5 mm ±0.05 mm (Signal line)
External cable diameter	4.50 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	black 1, black 2, green/yellow
Overall twist	3 wires, twisted
Max. conductor resistance	39 Ω/km (at 20 °C)
Insulation resistance	min. 20 MΩ*km

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Nominal voltage, cable	≤ 300 V
Test voltage	≥ 1200 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	22.5 mm
Smallest bending radius, movable installation	45 mm
Dynamic load capacity (bending)	Max. bending cycles: 15000000, Bending radius: 50 mm, Traversing path: 0.9 m, Traversing rate: 5 m/s, Acceleration: 30 m/s <sup>2</sup>
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	according to DIN VDE 0482 According to DIN EN 50265-2-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	largely oil-resistant partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -20 °C ... 80 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65 IP67
Ambient temperature (operation)	-20 °C ... 85 °C (Valve connector)

## Standards and regulations

Standard designation	Valve connector
Standards/specifications	EN 175301-803

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## Drawings

Dimensional drawing



Valve connector, type A, side view

Dimensional drawing



Valve connector, type A, side view

Schematic diagram



Valve connector pin assignment, type A

Circuit diagram



Contact assignment of the valve plug

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## Approvals

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 <b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	24 V	4 A	-	-

 <b>EAC-RoHS</b> Approval ID: RU D-DE.HB35.B.00387				
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 <b>CSAus</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	24 V	4 A	-	-

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## Classifications

### ECLASS

ECLASS-13.0	27060312
ECLASS-15.0	27060312

### ETIM

ETIM 10.0	EC001855
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### UNSPSC

UNSPSC 21.0	31251500
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(c)-I

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Diboron trioxide(CAS: 1303-86-2)
	Lead monoxide (lead oxide)(CAS: 1317-36-8)

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