

Sensor/actuator cable - SAC-3P- 3,0-PUR/BI-1L-V



1443190

<https://www.phoenixcontact.com/pc/products/1443190>

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, free cable end, on Valve connector BI (11 mm), with 1 LED, connected with Varistor, cable length: 3 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	1443190
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1DDA
Catalog Page	Page 230 (C-2-2019)
GTIN	4046356531009
Weight per Piece (including packing)	109.7 g
Weight per Piece (excluding packing)	109.7 g
Customs tariff number	85444290
Country of origin	PL

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Technical Data

Product properties

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

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Material specifications

Color Handle area	black
Flammability rating according to UL 94	V0
Sealing material	TPU (Seal molded)
Material housing valve plug	TPU
Contact material	CuSn
Valve plug contact insert material	PA 6.6
Contact surface material	Sn

Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	24 V AC
	24 V DC
Nominal current I_N	4 A
Protective circuit	Varistor

Valve connector characteristics

Fixing screws	M3 x 29
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LED signaling

Status display	1 LED
Status display present	yes

Connector

Connection 1

Head design	free cable end
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Connection 2

Head design	Valve connector
Head thread type	BI (11 mm)
Status indicator head	1 LED


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Cable / line

Cable length	3 m
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 ²
Wire diameter incl. insulation	1.5 mm ±0.05 mm (Signal line)
External cable diameter	4.5 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
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
Max. bending cycles	15000000
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)

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	-20 °C ... 80 °C (Cable, flexible installation)
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Ambient conditions

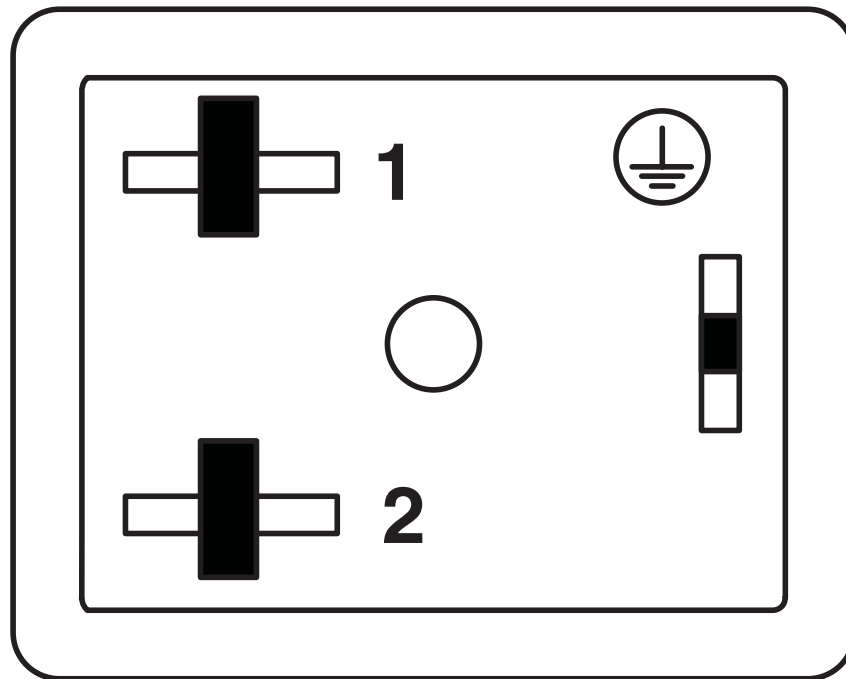
Degree of protection	IP65
	IP67
Ambient temperature (operation)	-20 °C ... 85 °C (valve plug)
	-40 °C ... 80 °C (cable, fixed installation)
	-15 °C ... 80 °C (Cable, flexible installation)

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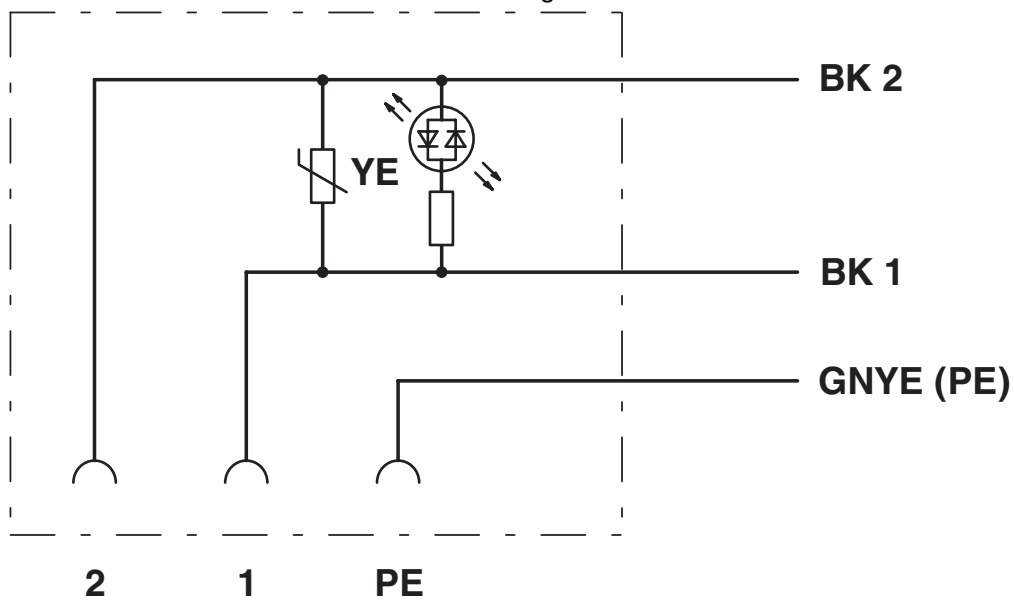
Drawings

Schematic diagram



Valve connector pin assignment, type BI

Circuit diagram



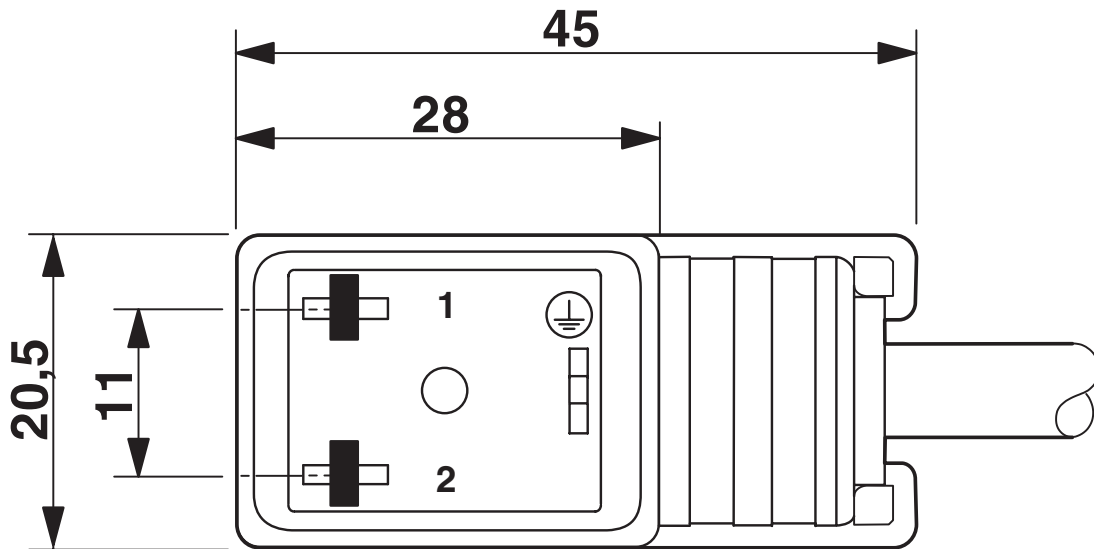
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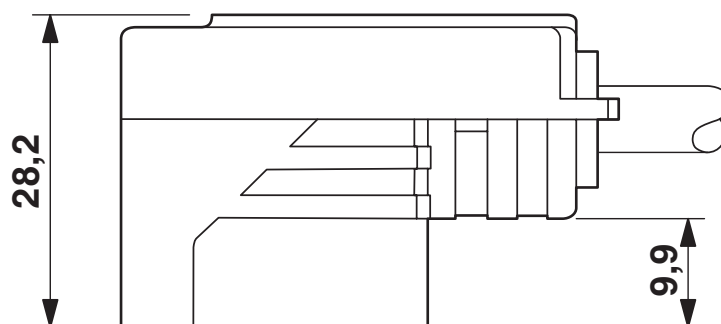
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Dimensional drawing



Valve connector, type BI

Dimensional drawing



Valve connector, type BI, side view

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Approvals



EAC

Approval ID: RU C-DE.BL08.B.00286



EAC

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



CSAus

Approval ID: 13631

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	24 V	6 A	-	-

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Classifications

ECLASS

ECLASS-9.0	27060312
ECLASS-10.0.1	27060312
ECLASS-11.0	27060312

ETIM

ETIM 8.0	EC001855
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UNSPSC

UNSPSC 21.0	31251500
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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

Screw

Screw - SAC-V-SCREW-M3-29 KNURL - 1403779

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Fillister head screw with plastic knurl, M3 x 40

Torque screwdriver

Torque screwdriver - TSD-M 1,2NM - 1212224

<https://www.phoenixcontact.com/pc/products/1212224>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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Screw insert

Screw insert - SF-BIT-PH 1-70 - 1212582

<https://www.phoenixcontact.com/pc/products/1212582>



Screw bit, PH crosshead, E6.3-1/4" drive, size: PH 1 x 70 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173

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

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