

Sensor/Actuator cable - SAC-3P- 3,0-PUR/BI-1L-Z - 1435247

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



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 Z diode, Cable length: 3 m

Why buy this product

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Robust valve connector with Zener diode as protective circuit
- ✓ Convenient: increased machine availability thanks to quick and easy diagnostics
- ✓ Our standard: robust halogen-free PUR cable



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 413572
Weight per Piece (excluding packing)	107.0 g
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	3 m
Stripping length of the free conductor end	50 mm

Ambient conditions

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

General

Rated current at 40°C	4 A
Rated voltage	24 V
Number of positions	3
Contact resistance	≤ 5 mΩ

Sensor/Actuator cable - SAC-3P- 3,0-PUR/BI-1L-Z - 1435247

Technical data

General

Insulation resistance	≥ 100 MΩ
Standards/regulations	Valve connector EN 175301-803
Status display	1 LED
Protective circuit/component	Z diode
Surge voltage category	III
Pollution degree	3
Torque	0.6 Nm (Valve connector)

Material

Inflammability class according to UL 94	V0
Valve plug contact material	CuSn
Valve plug contact surface material	Sn
Valve plug contact insert material	PA 66
Material housing valve plug	TPU
Sealing material	TPU (Seal molded)

Cable

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9Y11Y-HF
UL AWM style	20549
Conductor cross section	3x 0.5 mm ²
AWG signal line	20
Conductor structure signal line	28x 0.15 mm
Core diameter including insulation	1.5 mm ±0.05 mm (signal line)
Wire colors	black 1, black 2, green/yellow
Overall twist	3 wires, twisted
External sheath, color	black-gray RAL 7021
External cable diameter D	4.5 mm ±0.2 mm
Smallest bending radius, fixed installation	22.5 mm
Number of bending cycles	15000000
Bending radius	50 mm
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s ²
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	min. 20 MΩ*km
Conductor resistance	39 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 1200 V

Sensor/Actuator cable - SAC-3P- 3,0-PUR/BI-1L-Z - 1435247

Technical data

Cable

Flame resistance	According to DIN VDE 0482
	According to DIN EN 50265-2-1
Halogen-free	in accordance with DIN VDE 0472 part 815
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)

Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218

ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

Approvals

Approvals

Approvals

EAC

Ex Approvals

Sensor/Actuator cable - SAC-3P- 3,0-PUR/BI-1L-Z - 1435247

Approvals

Approvals submitted

Approval details

EAC

Accessories

Accessories

Conductor marking

Insert label - PABA WH/15 - 1013151



Insert label, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA YE/15 - 1013698



Insert label, Strip, yellow, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA RD/15 - 1013944



Insert label, Strip, red, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Cutting tools

Diagonal cutter - CUTFOX-S VDE - 1212207



Diagonal cutter for copper and aluminum conductors, VDE 1000 V AC/ 1500 V DC-tested

Sensor/Actuator cable - SAC-3P- 3,0-PUR/BI-1L-Z - 1435247

Accessories

Marker carrier cable

Conductor marker carrier - PATG 2/15 - 1013038



Conductor marker carrier, transparent, unlabeled, Mounting type: slide on, Cable diameter: 2-4 mm, Lettering field: 4 x 15 mm

Conductor marker carrier - PATG 3/15 - 1013041



Conductor marker carrier, transparent, unlabeled, Mounting type: slide on, Cable diameter: 4-7 mm, Lettering field: 4 x 15 mm

Conductor marker carrier - PATG 4/15 - 1013054



Conductor marker carrier, transparent, unlabeled, Mounting type: slide on, Cable diameter: 6-10 mm, Lettering field: 4 x 15 mm

Mounting material

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



Fillister head screw with plastic knurl, M3 x 40

Screwdriver tools

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

Stripping tool

Sensor/Actuator cable - SAC-3P- 3,0-PUR/BI-1L-Z - 1435247

Accessories

Stripping tool - WIREFOX SAC-1 - 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

Stripping tool - WIREFOX SAC - 1212623



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

Stripping tool - WIREFOX 10 - 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

Torque tool

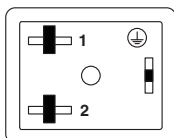
Torque screwdriver - TSD-M 1,2NM - 1212224



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

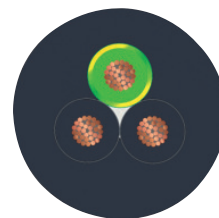
Drawings

Schematic diagram



Valve connector pin assignment, type BI

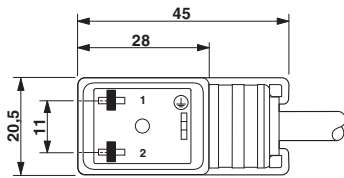
Cable cross section



PUR halogen-free black [PUR]

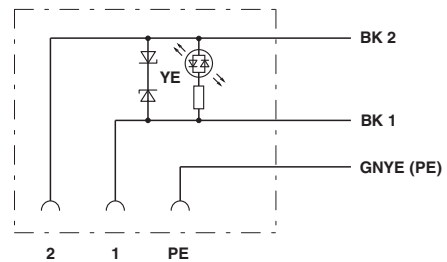
Sensor/Actuator cable - SAC-3P- 3,0-PUR/BI-1L-Z - 1435247

Dimensional drawing



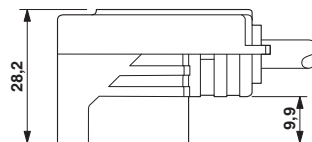
Valve connector, type BI

Circuit diagram



Contact assignment of the valve plug

Dimensional drawing



Valve connector, type BI, side view