

# OEM compact pressure switch Case in block design Model PSM03

WIKA data sheet PV 34.83

## Applications

- Hydraulics and mobile hydraulics
- Pneumatics
- Plastics injection moulding machines
- General machine building and plant construction
- Media: Compressed air, neutral and self-lubricating fluids, neutral gases

## Special features

- High reproducibility
- High vibration and shock resistance
- Setting ranges -0.85 ... -0.15 bar and from 0.2 ... 2 bar to 40 ... 400 bar
- Long service life due to high-quality micro switch
- Precise switch point setting with adjustment knob



**OEM compact pressure switch, case in block design,  
model PSM03**

## Description

Model PSM03 mechanical pressure switches in a diaphragm or piston variant open or close a circuit, depending on whether the pressure is dropping or rising. An adjustment knob enables easy, convenient and continuous setting of the required switch point. Optionally, WIKA offers its customers the factory setting of the switch point.

Model PSM03 mechanical pressure switches are employed wherever compressed air, neutral and self-lubricating fluids or neutral gases are used and customers, due to their spatial conditions, have special requirements regarding the installation of the pressure switch.

The high reproducibility of  $\pm 2\%$  of the switch point and the setting via the adjustment knob is interesting for customers for whom precision plays an important part. In addition, the individual orientation of the pressure switch makes the model PSM03 attractive for customers who set value on the adaptation of the switch to their specific space conditions.

## Standard version

### Case

Zinc diecast, block design

### Reproducibility

±2 % of full scale value

### Permissible temperature

Ambient: -20 ... +80 °C

Medium: -20 ... +80 °C

### Process connection

Zinc diecast or steel, galvanised

- Vertical flange ISO 16873

- Horizontal flange

- G 1/4 (female)

- G 1/4 (male)

### Measuring element

Diaphragm or piston with compression spring

### Sealing

Diaphragm: NBR or EPDM

Piston: PTFE (dynamic) and NBR, EPDM or Viton® (static)

Viton® fluoroelastomer is a registered trademark of DuPont Performance Elastomers.

### Switch contacts

High-quality snap-action switch, self-cleaning

### Switching function

Selectable: Normally open, normally closed, change-over contact

### Electrical rating

Current utilization <sup>1)</sup>	AC voltage, current		DC voltage, current
	Winkelstecker	M12 x 1	
Resistive load AC-12, DC 12	AC 250 V, 4 A	AC 48 V, 4 A	DC 24 V, 3 A
Inductive load AC-14, DC 14	AC 250 V, 1 A	AC 48 V, 1 A	DC 24 V, 1 A

1) per DIN EN 60947-1

### Electrical connection

Angular connector DIN 175301-803 A or M12 x 1

### Switching frequency

max. 100/min

### Service life

> 5 x 10<sup>6</sup> switching cycles

### Ingress protection <sup>2)</sup>

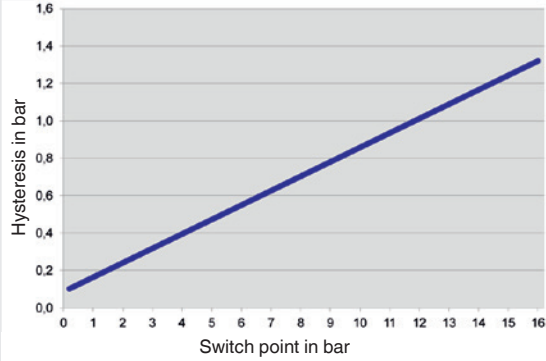
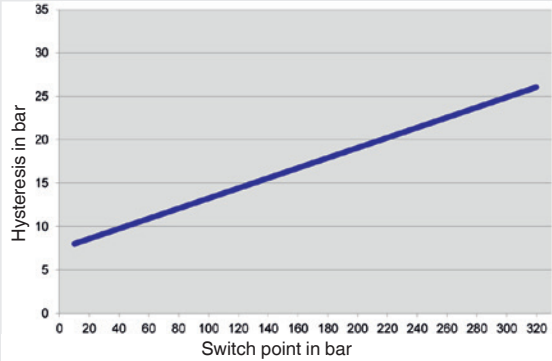
IP65 (IP67 with electrical connection M12 x 1)

2) The stated ingress protection (per IEC/EN 60529) only applies when plugged in using mating connectors that have the appropriate ingress protection.

## Options

- Factory setting of the switch point
- Other process connection
- Other materials
- Permissible ambient and medium temperature  
-30 ... +100 °C

Setting ranges, max. working pressure, measuring principle, hysteresis

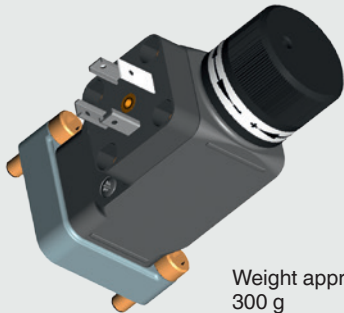
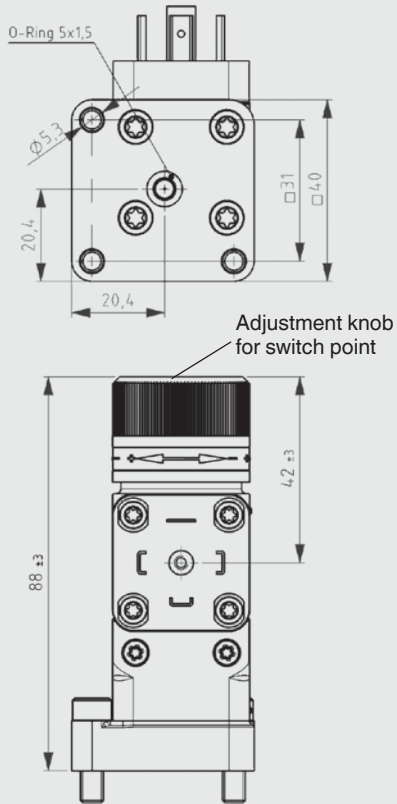
Setting range in bar	Max. working pressure in bar	Measuring principle	Hysteresis
0,2 ... 2	60	Diaphragm	 <p>Example: At a switch point of 4 bar the hysteresis is 0.4 bar.</p>
0,5 ... 8			
1 ... 16			
10 ... 30	350	Piston	 <p>Example: At a switch point of 100 bar the hysteresis is 12 bar.</p>
10 ... 80			
10 ... 160			
20 ... 250			
30 ... 320			
40 ... 400	420		

# Dimensions in mm

## Standard version

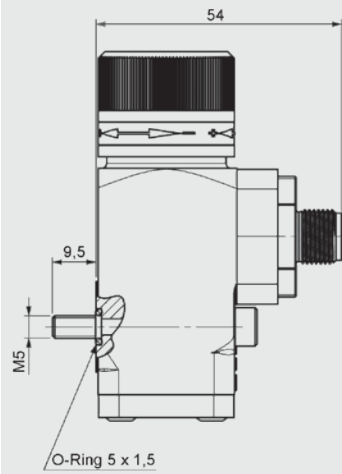
### Process connection vertical flange ISO 16873

Electrical connection angular connector  
DIN 175301-803 A



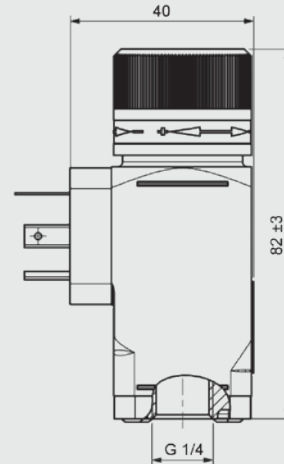
### Process connection horizontal flange

Electrical connection M12 x 1



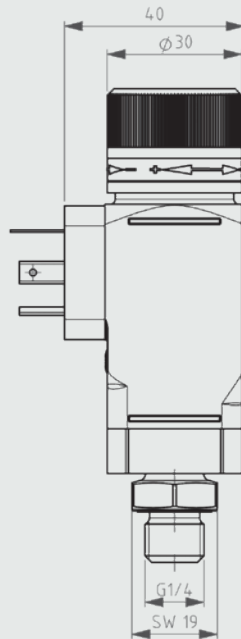
### Process connection G 1/4 (female)

Electrical connection angular connector  
DIN 175301-803 A



### Process connection G 1/4 (male)

Electrical connection angular connector  
DIN 175301-803 A



## Ordering information

Model / Setting range / Switching function / Process connection / Sealing / Electrical connection / Options

© 2012 WIKA Alexander Wiegand SE & Co. KG, all rights reserved.  
The specifications given in this document represent the state of engineering at the time of publishing.  
We reserve the right to make modifications to the specifications and materials.

