

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 ¹⁾ | AC voltage, current | | DC voltage, current |
|--|---------------------|--------------|---------------------|
| | Winkel-stecker | 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 10⁶ switching cycles

Ingress protection ²⁾

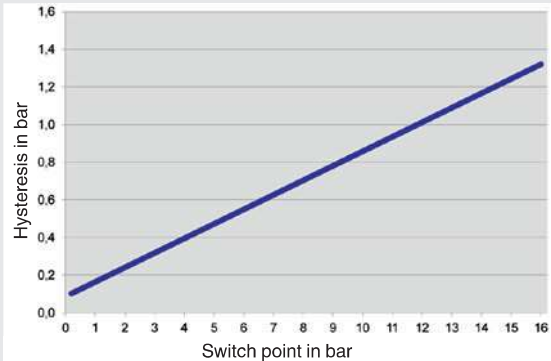
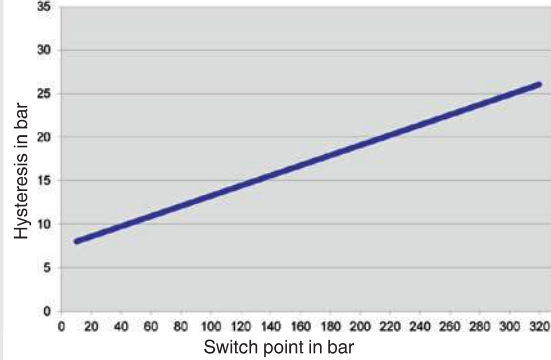
IP65 (IP67 with electrical connection M12 x 1)

Options

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

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

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

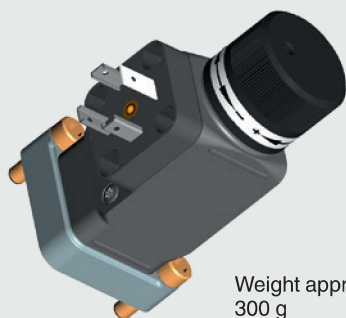
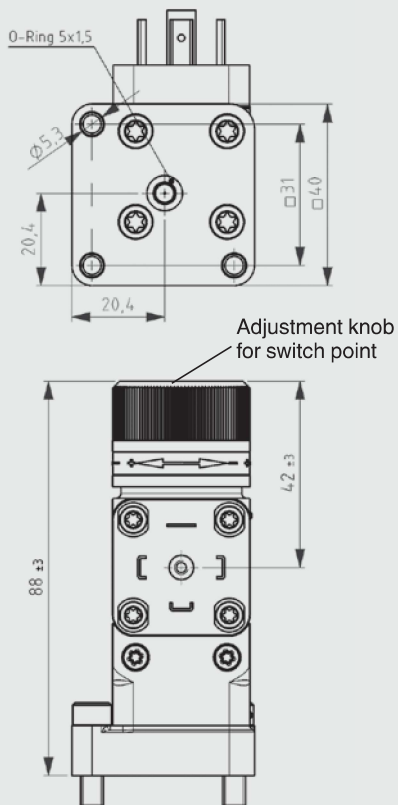
| Setting range in bar | Max. working pressure in bar | Measuring principle | Hysteresis |
|----------------------|------------------------------|---------------------|--|
| 0,2 ... 2 | 60 | Diaphragm |  <p>Example: At a switch point of 4 bar the hysteresis is 0.4 bar.</p> |
| 0,5 ... 8 | | | |
| 1 ... 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

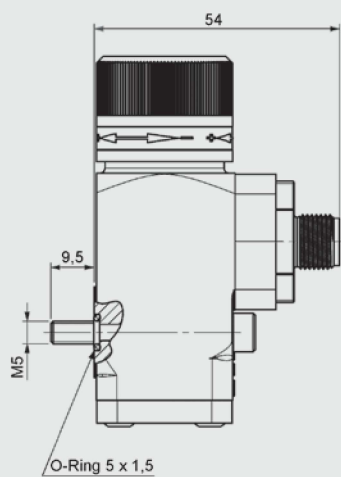
Electrical connection angular connector
DIN 175301-803 A



Weight approx.
300 g

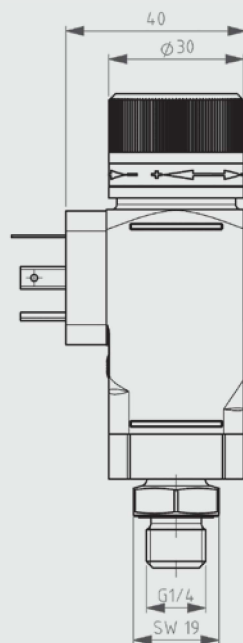
Process connection horizontal flange

Electrical connection M12 x 1



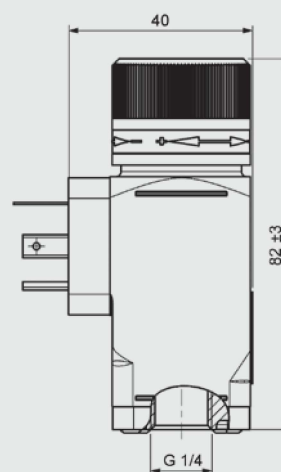
Process connection G 1/4 (male)

Electrical connection angular connector
DIN 175301-803 A



Process connection G 1/4 (female)

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.

