OEM compact pressure switch
With settable hysteresis
Model PSM02

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
- Compact design
- 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
- Settable hysteresis

OEM compact pressure switch, with settable hysteresis, model PSM02

Description

Model PSM02 screw-in pressure switches in a diaphragm or piston variant open or close a circuit, depending on whether the pressure is dropping or rising. Two adjustment screws enable easy and convenient on-site setting of the required switch point and hysteresis. Optionally, WIKA offers its customers the factory setting of switch point and hysteresis.

Model PSM02 mechanical pressure switches are employed wherever compressed air, neutral and self-lubricating fluids or neutral gases are used and a precisely set hysteresis is needed.

The high reproducibility of the switch point of ±2 % and the settability of the hysteresis makes the model PSM02 pressure switches interesting for all customers who place a value on precision as well as an attractive price.

Standard version

Case
Steel, galvanised

Reproducibility
±2 % of full scale value

Permissible temperature
Ambient: -20 … +80 °C
Medium: -20 … +80 °C

Process connection
Steel, galvanised
G 1/8, G 1/4, 1/8 NPT, 1/4 NPT, R 1/8 or M10 x 1

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]	Voltage			Current
	Angular connector	M 12 x 1, cable	All	
Resistive load AC-12, DC 12	AC 250 V	AC 48 V	DC 24 V	4 A
Inductive load AC-14, DC 14	AC 250 V	AC 48 V	DC 24 V	2 A

1) per DIN EN 60947-1

Electrical connection
Angular connector DIN 175301-803 A

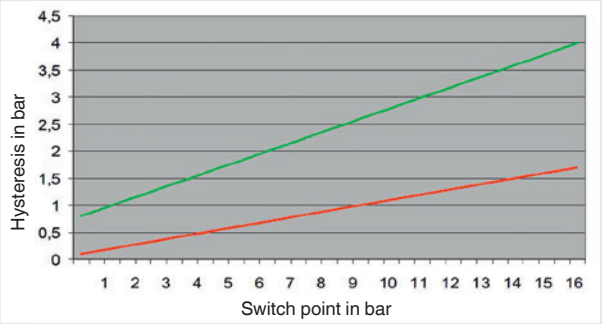
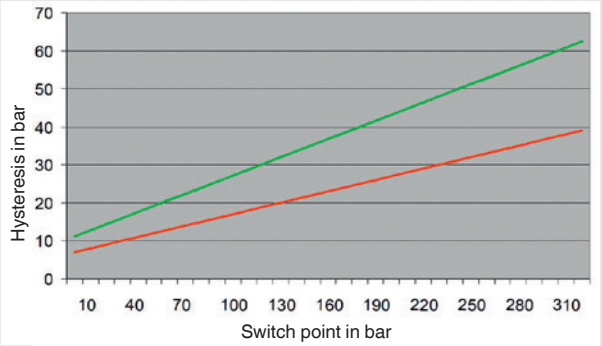
Switching frequency
max. 100/min

Service life
> 2 x 10^6 switching cycles

Ingress protection
IP65 (IP67 with electrical connection M12 x 1 [2] or cable)

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	 Example: With a switch point of 4 bar, a switch-back difference (hysteresis) of a minimum 0.5 bar to a maximum of 1.5 bar can be set.
0,5 ... 8			
1 ... 16			
10 ... 30	350	Piston	 Example: With a switch point of 100 bar, a switch-back difference (hysteresis) of a minimum 18 bar to a maximum of 28 bar can be set.
10 ... 80			
10 ... 160			
20 ... 250			
30 ... 320			
40 ... 400	420		

Options

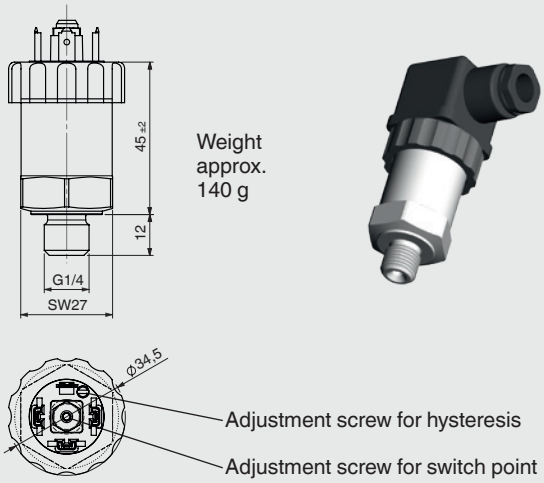
- Factory setting of switch point and hysteresis
- Case and process connection from stainless steel
- Other process connection
- Other materials on request
- Electrical connection M12 x 1 or cable
- Permissible ambient and medium temperature
  -30 ... +100 °C

Dimensions in mm

Standard version

Electrical connection

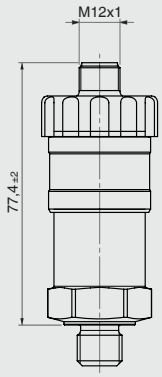
Angular connector DIN 175301-803 A



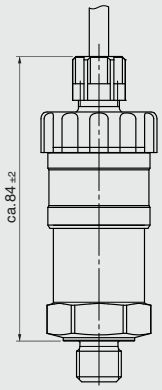
Option

Electrical connection

M12 x 1



Cable



Ordering information

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