OEM compact pressure switch  
Case in block design  
Model PSM03

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

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 ±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**

<table>
<thead>
<tr>
<th>Current utilization</th>
<th>AC voltage, current</th>
<th>DC voltage, current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resistive load AC-12, DC 12</td>
<td>AC 250 V, 4 A</td>
<td>AC 48 V, 4 A</td>
</tr>
<tr>
<td>Inductive load AC-14, DC 14</td>
<td>AC 250 V, 1 A</td>
<td>AC 48 V, 1 A</td>
</tr>
</tbody>
</table>

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**
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.
<table>
<thead>
<tr>
<th>Setting range in bar</th>
<th>Max. working pressure in bar</th>
<th>Measuring principle</th>
<th>Hysteresis</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,2 ... 2</td>
<td>60</td>
<td>Diaphragm</td>
<td></td>
</tr>
<tr>
<td>0,5 ... 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ... 16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 ... 30</td>
<td>350</td>
<td>Piston</td>
<td></td>
</tr>
<tr>
<td>10 ... 80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 ... 160</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>20 ... 250</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>30 ... 320</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>40 ... 400</td>
<td>420</td>
<td></td>
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</tr>
</tbody>
</table>

**Example:**
At a switch point of 4 bar the hysteresis is 0.4 bar.

At a switch point of 100 bar the hysteresis is 12 bar.
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

Adjustment knob for switch point

Weight approx.
300 g

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

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