## Mechanical pressure switch S4250

## Accurate changeover switch with adjustable hysteresis

## Description

Mechanical pressure switch with a membrane or piston sensing element and one switched output as a changeover contact for converting pneumatic and hydraulic pressures into an electrical switching signal.

An adjustment screw allows setpoints to be easily adjusted, even in situ. The setpoint may optionally be factory preadjusted. The series S4250 switches also have adjustable hysteresis, which makes them attractive for a great variety of applications.

The switch with membrane is suitable for media such as compressed air, non-aggressive liquids or selflubricating fluids. The standard piston version can be used for self-lubricating fluids, other media on request. It is available as standard with a $1 / 4$ " thread galvanized steel process connection. Other threads and materials, including brass and stainless steel are optionally available. The switch can be installed in any desired mounting position.

## Features

- Adjustable hysteresis
- L-plug IP 65
- Change-over contact
- Many thread variants
- Membrane versions up 16 bar
- Pistontype up to 320 bar
- RoHS-conform


## Applications

- Mechanical engineering
- Plant construction
- Hydraulic
- Pneumatic

| Adjustment ranges (bar) ${ }^{3)}$ | Overload limit (bar) | Repeatability (bar) | Max. <br> hysteresis (\% FS) | Measuring principle | Switching function <br> SPDT |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 0,2..2 | $60^{2)}$ | $\pm 0,04$ | See diagramm, page 3 | Membrane | S4250B071001 |
| 0,5..8 |  | $\pm 0,16$ |  |  | S4250B144001 |
| $1 . .16$ |  | $\pm 0,32$ |  |  | S4250B076001 |
| $10 . .30$ | $350^{2)}$ | $\pm 0,6$ |  | Piston | S4250B133001 |
| 10.. 80 |  | $\pm$ +1,6 |  |  | S4250B153001 |
| 10..120 |  | $\pm 2,4$ |  |  | S4250B866001 |
| 10.. 160 |  | $\pm 3,2$ |  |  | S4250B082001 |
| $20 . .200$ |  | $\pm 4,0$ |  |  | S4250B083001 |
| $20 . .250$ |  | $\pm 5,0$ |  |  | S4250B084001 |
| $30 . .320$ |  | $\pm 6,4$ |  |  | S4250B085001 |

[^0]Technical data

|  | Mechanical pressure switch |  |
| :---: | :---: | :---: |
| Model | S4250 |  |
| Execution | positive gauge pressure |  |
| Media | compressed air, neutral fluid, self-lubricating fluid |  |
| Process connection standard optional | $\begin{aligned} & \text { G1/4 } \\ & \text { G1/8, M10x1, NPT1/8, NPT1/4 } \end{aligned}$ |  |
| Measuring principle | spring loaded membrane $\leq 16$ bar, spring loaded piston $>16 \mathrm{bar}$ |  |
| Materials <br> Measuring element standard <br> Thread standard optional Housing standard optional | Membrane type <br> NBR <br> zinc plated steel others on request <br> zinc plated steel, contact insert plastic others on request | Piston type <br> Steel, static: NBR, dynamic: PTFE |
| Switching outputs <br> Number <br> Switching function <br> Switching element standard <br> Adjustment standard option | 1 <br> SPDT <br> microswitch <br> silver plated contacts <br> in site, with adjustment screw factory adjusted |  |
| Hysteresis | Adjustable |  |
| Power rating ${ }^{17}$ <br> DC up to 28 V <br> AC up to 125 V <br> up to 250 V | $\begin{array}{\|l} \hline 2 \mathrm{~A} \\ 4 \mathrm{~A} \\ 4 \mathrm{~A} \\ \hline \end{array}$ |  |
| Load cycles | max. 100/min |  |
| Temperature ranges | $-20^{\circ} \mathrm{C} . .+80^{\circ} \mathrm{C}$ |  |
| Electrical connection | L-plug acc. to DIN EN 175301-803 |  |
| Protection type | IP65 |  |
| Mounting position | any |  |
| Weight | $\sim 0,1 \mathrm{~kg}$ |  |

${ }^{17}$ All specification for ohmic load. For voltages $>42 \mathrm{~V}$ regulation for protective means have to be regarded!

| Dimensions (in mm) | Electrical connection |
| :---: | :---: |
|  |  |

Adjustable Hysteresis (membrane type)


Adjustable Hysteresis (piston type)



[^0]:    ${ }^{\text {1) }}$ ) The repeatability refers to $20^{\circ} \mathrm{C}$
    ${ }^{2)}$ Higher pressures on request
    ${ }^{3)}$ Other ranges on request

