

# Mechanical pressure switch Miniature

## S4110, S4111

**NC or NO contact  
for applications with limited space**



S4110



S4111

### Description

The small hexagon and minimal height make these switches particularly attractive for applications where space is limited. The minimal space requirements and light-weight nature of this product doesn't even come with a high price tag. In fact, the advantages offered by these pressure switches make them an excellent value when costs are given priority.

The miniature pressure switches are used for the control and monitoring of pressurized mediums in machine and plant construction. The switch can be used with many gaseous and liquid media.

These diaphragm type pressure switches in brass or zinc plated steel housings are available off-the-shelf as break contacts or make contacts. An adjustment screw makes it easy to adjust the switching points on-site. Gold-plated contacts are also available as an option for low switching currents.

### Features

- Small size ( 42 and 44 mm )
- Low weight ( 20 and 34 g )
- Low priced
- Low hysteresis

### Applications

- Mechanical engineering
- Plant construction

#### Model S4110

| Adjustment ranges (bar) | Overload limit (bar) | Repeatability <sup>1)</sup> (bar) | Hysteresis (%) | Measuring principle | Switching function |              |
|-------------------------|----------------------|-----------------------------------|----------------|---------------------|--------------------|--------------|
|                         |                      |                                   |                |                     | NC                 | NO           |
| 0,5 ... 2               | 2                    | ± 0.2                             | < 10           | Diaphragm           | S4110B071001       | S4110B071002 |
| 1 ... 10                | 10                   | ± 0.5                             |                |                     | S4110B075001       | S4110B075002 |

#### Model S4111

| Adjustment ranges (bar) | Overload limit (bar) | Repeatability <sup>1)</sup> (bar) | Hysteresis (%) | Measuring principle | Switching function |              |
|-------------------------|----------------------|-----------------------------------|----------------|---------------------|--------------------|--------------|
|                         |                      |                                   |                |                     | NC                 | NO           |
| 0.5 ... 2               | 2                    | ± 0.2                             | < 10           | Diaphragm           | S4111B071001       | S4111B071101 |
| 1 ... 8                 | 8                    | ± 0.5                             |                |                     | S4111B144001       | S4111B144101 |

The repeatability refers to 20 °C.

### Technical data

|                                  |  |   |
|----------------------------------|--|---|
|                                  | <b>Mechanical pressure switch Miniature</b>    |   |
| <b>Model</b>                     | S4110  | S4111                                     |
| <b>Execution</b>                 | positive gauge pressure                        |   |
| <b>Media</b>                     | compressed air, neutral fluid                  |   |
| <b>Process connection</b>        | G 1/8  |   |
| <b>Measuring principle</b>       | spring loaded diaphragm                        |   |
| <b>Materials</b>                 |  |   |
| Measuring element                |  |   |
| standard                         | NBR diaphragm                                  | NBR diaphragm                             |
| optional                         | EPDM, FPM, others on request                   | EPDM, FPM, others on request              |
| Thread                           |  |   |
| standard                         | brass  | plastic                                   |
| optional                         | stainless steel, zinc plated steel             |   |
| Housing                          |  |   |
| standard                         | brass, contact insert plastic                  | zinc plated steel, contact insert plastic |
| optional                         | stainless steel, zinc plated steel             | stainless steel                           |
| <b>Switching outputs</b>         |  |   |
| Number                           | 1  |   |
| Sw itching function              | NC (plastic top black)<br>NO (plastic top red) |   |
| Sw itching element               |  |   |
| standard                         | silver plated contacts                         |   |
| option                           | gold plated contacts                           |   |
| Adjustment                       |  |   |
| standard                         | in site, w ith adjustment screw                |   |
| option                           | factory adjusted                               |   |
| <b>Hysteresis</b>                | < 10 % of full scale                           |   |
| <b>Power rating<sup>1)</sup></b> |  |   |
| DC up to 42 V                    | max. 2 A                                       |   |
| AC up to 42 V                    | max. 2 A                                       |   |
| <b>Load cycles</b>               | max. 200/min.                                  |   |
| <b>Temperature ranges</b>        | -25 ... +85°C                                  | -20 ... +75 °C                            |
| <b>Electrical connection</b>     | spade terminals 2 x 6.3 x 0.8                  |   |
| <b>Protection type</b>           | IP00   |   |
| <b>Mounting position</b>         | any  |   |
| <b>Weight</b>                    | 0.03 kg  | 0.02 kg                                   |

<sup>1)</sup> All specification for ohmic load.

| Dimensions ( in mm ) |       | Electrical connection |    |
|----------------------|-------|-----------------------|----|
| S4110                | S4111 | NC                    | NO |
|                      |       |                       |    |

Subject to technical alternations