Pressure and vacuum sensor Type SDE1

With the modular SDE1 system for pressure measurement, monitoring and sensing, you have all pressure values under control at all times. For more productivity and faster commissioning of your installation.

**Intelligent pressure measurement**
The modular SDE1 system – intelligent pressure sensors with a freely-programmable hysteresis/comparator mode. Choice of relative or differential pressure. Plus very quick and easy programming.

**Easy to use**
With a clear LCD display and simple 3-button menu guidance: fast commissioning without the need for operating instructions. Highly flexible in terms of electrical connections, thanks to a choice of M8 or M12 plug connectors.

**Attractive pricing**
The SDE1 is winning customers over with its highly attractive price-performance ratio.

**Universal mounting**
Simply click or slide into place, and the modular SDE1 is soon installed. This saves time and requires no additional hardware.

**Robust design**
Degree of protection IP65 allows installation in harsh environments.
Pressure and vacuum sensor Type SDE1

Dimensions

SDE1 modular system: general technical data

<table>
<thead>
<tr>
<th>Measuring method</th>
<th>Piezoresistive pressure sensor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting position</td>
<td>Any</td>
</tr>
<tr>
<td>Media compatibility</td>
<td>Filtered compressed air/vacuum (40 µm), lubricated or unlubricated (no aggressive gases)</td>
</tr>
<tr>
<td>Switching output accuracy</td>
<td>±2 % FS</td>
</tr>
<tr>
<td>Repeatability</td>
<td>±0.3 % FS</td>
</tr>
<tr>
<td>Rated operating current</td>
<td>Max. 150 mA</td>
</tr>
<tr>
<td>Nominal temperature range</td>
<td>0 to 50 °C</td>
</tr>
<tr>
<td>Operating voltage range</td>
<td>15 to 30 V DC</td>
</tr>
<tr>
<td>No-load current</td>
<td>Max. 35 mA</td>
</tr>
<tr>
<td>Display type</td>
<td>3½-place LCD/illuminated LCD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Measuring range [bar]</th>
<th>Overload capacity [bar]</th>
<th>Threshold value setting range [bar]</th>
<th>Hysteresis setting range [bar]</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDE1-V1-...</td>
<td>0...-1</td>
<td>max. 5</td>
<td>-0.02...-0.998</td>
<td>0.00 ... 0.90</td>
</tr>
<tr>
<td>SDE1-B2-...</td>
<td>-1...1</td>
<td>max. 5</td>
<td>-0.999 ... +0.996</td>
<td>0.000 ... 1.800</td>
</tr>
<tr>
<td>SDE1-D2-...</td>
<td>0...2</td>
<td>max. 6</td>
<td>0.04 ... +1.996</td>
<td>0.000 ... 1.800</td>
</tr>
<tr>
<td>SDE1-D6-...</td>
<td>0...6</td>
<td>max. 16</td>
<td>0.12 ... +5.99</td>
<td>0.00 ... 5.40</td>
</tr>
<tr>
<td>SDE1-D10</td>
<td>0...10</td>
<td>max. 20</td>
<td>0.20 ... 9.98</td>
<td>0.00 ... 9.00</td>
</tr>
</tbody>
</table>

SDE1 modular system: overview of features and variants

Pressure measuring range
- 0... -1 bar
- -1 ... 1 bar
- 0 ... 2 bar
- 0 ... 6 bar
- 0...10 bar

Display types
- LCD
- Illuminated LCD

Pneumatic connections and assembly
- R1/8” (for M and D series)
- R1/4” (for M and D series)
- G1/8” for H rail (relative pressure)
- G1/8” for wall and surface mounting (relative pressure)
- QS4 connectors for H rail (differential pressure)
- QS4 connectors for wall and surface mounting (differential pressure)
- QS4 connectors for front panel mounting

Electrical outputs
- 1 switch, PNP
- 2 switches, PNP
- 1 switch, PNP, and 0 to 10 V analogue
- 1 switch, PNP, and 4 to 20 mA analogue
- 1 switch, NPN
- 2 switches, NPN
- 1 switch, NPN, and 0 to 10 V analogue
- 1 switch, NPN, and 4 to 20 mA analogue

Electrical connections
- M8 plug
- M12 plug

Connector cable (accessory)
- Straight socket, 2.5 m
- Angled socket, 2.5 m
- Straight socket, 5 m
- Angled socket, 5 m

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