Beck.
The adjustable differential pressure switches.
Differential pressure switch
930.8x Climair®
with adjustable switching pressure

Applications
Adjustable differential pressure switch for monitoring overpressure, vacuum and differential pressure of air or other non-combustible, non-aggressive gases. Possible fields of application include:
- Monitoring air filters and ventilators
- Monitoring industrial cooling-air circuits
- Overheating protection for fan heaters
- Monitoring flows in ventilation ducts
- Controlling air and fire-protection flaps
- Frost protection for heat exchangers

Diaphragm material
Silicone, tempered at 200°C, free of gas emissions. Other materials available on request.

Pressure connections
2 plastic pipe connection pieces (P1 and P2), external diameter 6.0 mm:
- P1 for connection to higher pressure (marked +)
- P2 for connection to lower pressure (marked –)

Housing materials
Switch body made of PA 6.6.
Cover made of PS.

Weight
With cover 150 g
Without cover 110 g

Mechanical working life
Over 10⁶ switching operations.

Electrical rating
Standard version max. 1.0 A (0.4 A) / 250 VAC
Low-voltage version max. 0.1 A / 24 VDC

Electrical connections
AMP flat plug 6.3 mm x 0.8 mm in accordance with DIN 46244 or push-on screw terminals.
Cable conduit PG-11 or M20x1.5 with cable strain relief.

Arrangement of contacts
3 COM  2 NO  1 Break contact
2 Operating contact 3 Power supply line

Protection category
IP 54 with cover
IP 00 without cover

Approvals
CE marking according to EC Low Voltage Directive 73/23/EEC.

Accessories
See order matrix.

Applications

Medium and ambient temperature from –20°C to +85°C.
Storage temperature from –40°C to +85°C.

Diaphragm material
Silicone, tempered at 200°C, free of gas emissions.
Other materials available on request.

Maximum operating pressure
10 kPa for all pressure ranges.

Medium
Air, non-combustible and non-aggressive gases.

Temperature range
Medium and ambient temperature from –20°C to +85°C.
Storage temperature from –40°C to +85°C.

Diaphragm material
Silicone, tempered at 200°C, free of gas emissions. Other materials available on request.

Pressure connections

Versions
With this pressure switch the switching pressure can be adjusted without a pressure gauge using a scaled adjustment knob. The switching differential can also be adjusted with a screwdriver.

<table>
<thead>
<tr>
<th>Type</th>
<th>Adjustment range for upper switching pressure</th>
<th>Switching differential</th>
<th>Tolerance for upper and lower switching pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>930.80</td>
<td>20 200 Pa</td>
<td>10 Pa</td>
<td>± 15%</td>
</tr>
<tr>
<td>930.84</td>
<td>30 400 Pa</td>
<td>15 Pa</td>
<td>± 15%</td>
</tr>
<tr>
<td>930.83</td>
<td>50 500 Pa</td>
<td>20 Pa</td>
<td>± 15%</td>
</tr>
<tr>
<td>930.85</td>
<td>100 1000 Pa</td>
<td>100 Pa</td>
<td>± 15%</td>
</tr>
<tr>
<td>930.86</td>
<td>200 2500 Pa</td>
<td>150 Pa</td>
<td>± 15%</td>
</tr>
<tr>
<td>930.87</td>
<td>1000 4000 Pa</td>
<td>250 Pa</td>
<td>± 15%</td>
</tr>
</tbody>
</table>

Switching pressure specifications apply to vertical installation which is also the recommended position with pressure-pipe connections pointing downwards. If the switches are installed horizontally with AMP connection terminals uppermost, the switching values are approx. 20 Pa higher.

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Accessories
See order matrix.
### Pressure ranges

<table>
<thead>
<tr>
<th>Pressure Range</th>
<th>0.2 to 2.0 mbar</th>
<th>0.3 to 4.0 mbar</th>
<th>0.5 to 5.0 mbar</th>
<th>2.0 to 10.0 mbar</th>
<th>5.0 to 25.0 mbar</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 to 200 Pascal</td>
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<tr>
<td>30 to 400 Pascal</td>
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<tr>
<td>50 to 500 Pascal</td>
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<tr>
<td>200 to 1000 Pascal</td>
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<tr>
<td>500 to 2500 Pascal</td>
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<tr>
<td>1000 to 4000 Pascal</td>
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</tbody>
</table>

### Switching contacts

- Gold-plated for low voltages, screw terminals enclosed up to maximum 1.0 A [0.4] / 250 VAC, screw terminals enclosed up to maximum 1.0 A [0.4] / 250 VAC with 6.3x0.8 mm flat plugs gold-plated for low voltages with 6.3x0.8 mm flat plugs

### Fitting method

- Mounted directly without bracket

### Adjustment knob

- Scale in mbar
- Scale in Pascal
- Scale in Pascal and in WC

### IP protection category

- IP 54 with cable conduit PG-11
- IP 54 with cable conduit M20x1.5
- IP 54 with cable conduit NPT1/2
- IP 00 without cover

### Packaging

- Bulk packed, 45 pcs. per carton
- Bulk packed, folding boxes included
- Individually boxed

### Accessories

- Metal mounting bracket S-shaped
- Metal mounting bracket L-shaped
- Snap-on plastic bracket S-shaped
- Snap-on plastic bracket L-shaped
- Climaset® consisting of 2 m PVC hose and 2 plastic tubes
- Climaset® consisting of 2 m Silicone hose and 2 plastic tubes
- Climaset® consisting of 2 m PVC hose and 2 angled metal pipes
- Climaset® consisting of 2 m Silicone hose and 2 angled metal pipes
- Set consisting of three push-on screw terminals
- Plastic tube for Climaset® 6555
- Angled metal pipe for Climaset® 6550
- Rubber grommet for Climaset® 6550
- Roll with 100 m PVC hose
- PG-11 cable conduit including sealing and counter screw
- M20x1.5 cable conduit including sealing and counter screw
- NPT1/2" cable conduit without counter parts
- Cardbox for single packing (without accessories)
- Cardbox for single packing (with accessories)
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