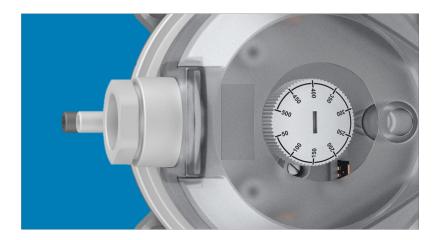
Beck. The adjustable differential pressure switches





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.

Class of control and regulation function: A

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

Versions

The switching pressure can be adjusted without a pressure gauge using a scaled adjustment knob.

| Туре | Adjust from | ment range to | Switching differential* | Repeatability of the switching pressure |
|---------|----------------|------------------|-------------------------|--|
| 930.80 | 20 | 200 Pa | 10 Pa | ±5 %, min. ±5 Pa |
| 930.80B | 20 | 300 Pa | 10 Pa | ±5 %, min. ±5 Pa |
| 930.84 | 30 | 400 Pa | 15 Pa | ±5 %, min. ±5 Pa |
| 930.83 | 50 | 500 Pa | 20 Pa | ±2.5 %, min. ±5 Pa |
| 930.85B | 100 | 1000 Pa | 50 Pa | ±2.5 %, min. ±5 Pa |
| 930.85 | 200 | 1000 Pa | 100 Pa | ±1 %, min. ±5 Pa |
| 930.86 | 500 | 2500 Pa | 150 Pa | ±1 % |
| 930.87 | 1000 | 4000 Pa | 250 Pa | ±1 % |
| 930.87B | 1000 | 5000 Pa | 250 Pa | ±1 % |

* typically, at beginning of setting range

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 the tab terminals uppermost, the switching values are approx. 20 Pa higher.

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, 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 and cover of plastic

Weight

With cover 150 g, without cover 110 g

Mechanical working life

Over 10⁶ switching operations

Electrical rating

Standard version: Low-voltage version:

Electrical connection

Tab terminals 6.3x0.8 mm in accordance with DIN 46244 or push-on screw terminals Cable conduit with cable strain relief

Arrangement of contacts



1 Break contact 2 Operating contact 3 Power supply line

max. 1.5 A (0.4 A) / 250 VAC

max. 0.1 A / 24 VDC

Protection

IP54 or IP65 with cover, IP00 without cover

Protection class

Protection class II (with cover)

The pressure switch without cover is provided for installation in equipment. The construction of the equipment and the type of installation determine the protection class.

CE Conformity

Each depending on technical specification: Low Voltage Directive; RoHS Directive; Gas Appliance Directive; ATEX Directive

Specifications according to EN1854

Deviation: m±15 %, min. ±10 Pa Drift: m±15 %

Accessories

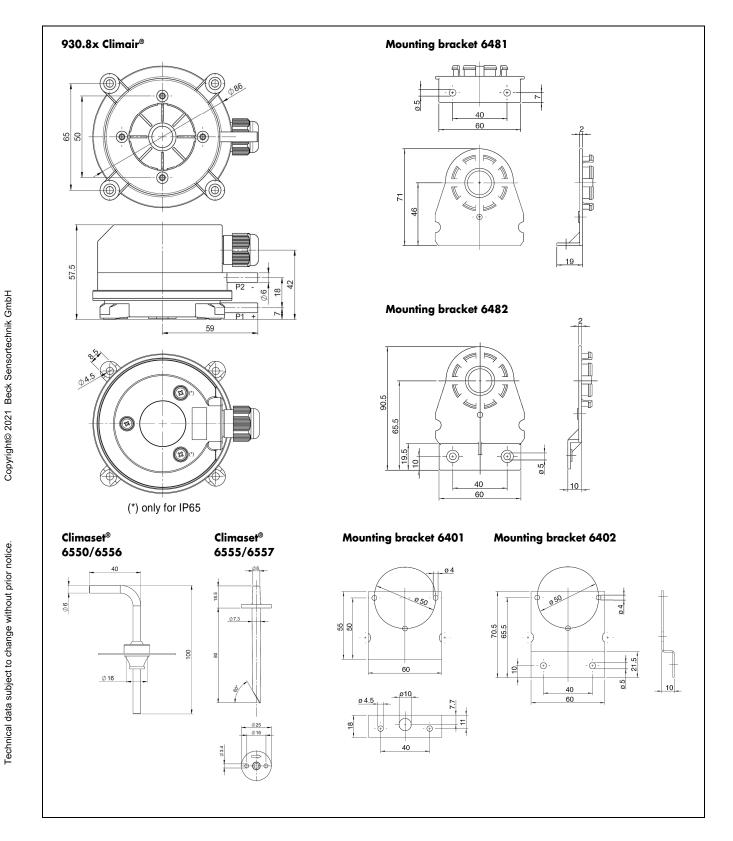
See order matrix

| Order matrix | | 930.8 | x | x | 2 | х | X | х | Х |
|-----------------------------------|--|-------|--|------------------|---|-------------|---------------------------------|-------------|-------------------------------|
| Pressure ranges | 20 to 200 Pascal (0.2 to 2.0 mbar) 20 to 300 Pascal (0.2 to 3.0 mbar) 30 to 400 Pascal (0.3 to 4.0 mbar) 50 to 500 Pascal (0.5 to 5.0 mbar) 100 to 1000 Pascal (1.0 to 10.0 mbar) 200 to 1000 Pascal (2.0 to 10.0 mbar) 500 to 2500 Pascal (5.0 to 25.0 mbar) 1000 to 4000 Pascal (10 to 40 mbar) 1000 to 5000 Pascal (10 to 50 mbar) | | 0 0B 4 3 5B 5 6 7 7B | | | | | | |
| Switching contacts | gold-plated for low voltages, screw terminals enclosed up to maximum 1.5 A (0.4) / 250 VAC, screw terminals enclosed up to maximum 1.5 A (0.4) / 250 VAC with tab terminals 6.3x0.8 mm gold-plated for low voltages with tab terminals 6.3x0.8 mm | | | 1 2 3 4 | | | | | |
| Fitting method Adjustment knob | mounted directly without bracket scale in mbar scale in Pascal scale in Pascal and inWC | | | | 2 | 1 2 3 | | | |
| IP protection category | IP54 with cable conduit M20x1.5 IP54 with cable conduit NPT1/2 IP00 without cover IP54 with cap nut conduit AF20 IP65 with cable conduit M20x1.5 IP65 with cap nut conduit AF20 IP65 with cable conduit NPT1/2 | | | | | | 2 3 4 5 6 7 8 | | |
| Packaging | bulk packed, 45 pcs. per carton bulk packed, folding boxes included individually boxed | | | | | | | 1 2 3 | |
| Accessories | without accessories with S-shaped metal mounting bracket 6402 with L-shaped metal mounting bracket 6401 with Climaset® 6555 with Climaset® 6550 with S-shaped metal mounting bracket 6402 and Climaset® 6555 with S-shaped metal mounting bracket 6402 and Climaset® 6555 with L-shaped metal mounting bracket 6401 and Climaset® 6555 with L-shaped metal mounting bracket 6401 Climaset® 6555 with L-shaped metal mounting bracket 6401 Climaset® 6550 with L-shaped metal mounting bracket 6481 with S-shaped snap-on plastic bracket 6482 with L-shaped snap-on plastic bracket 6482 and Climaset® 6555 with S-shaped snap-on plastic bracket 6481 and Climaset® 6555 with L-shaped snap-on plastic bracket 6481 and Climaset® 6555 with L-shaped snap-on plastic bracket 6481 and Climaset® 6555 | | | | | | | | 1 2 3 4 5 6 7 8 9 A B C D E F |

Accessories

| Metal mounting bracket, S-shaped | Article No. 6402 |
|--|------------------|
| Metal mounting bracket, L-shaped | Article No. 6401 |
| Snap-on plastic bracket, S-shaped | Article No. 6482 |
| Snap-on plastic bracket, L-shaped | Article No. 6481 |
| Climaset [®] consisting of 2 m PVC hose and two plastic tubes | Article No. 6555 |
| Climaset [®] consisting of 2 m silicone hose and two plastic tubes | Article No. 6557 |
| Climaset [®] consisting of 2 m PVC hose and two angled metal pipes | Article No. 6550 |
| Climaset [®] consisting of 2 m silicone hose and two angled metal pipes | Article No. 6556 |
| Set consisting of three push-on screw terminals, bagged | Article No. 6415 |
| Plastic tube for Climaset [®] 6555 | Article No. 6551 |
| Angled metal pipe for Climaset [®] 6550 | Article No. 6552 |
| Rubber grommet for Climaset [®] 6550 | Article No. 6553 |
| Roll with 100 m PVC hose | Article No. 6424 |
| Roll with 100 m silicone hose | Article No. 6425 |
| | |

Dimensional Drawings





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