

PK50

**The adjustable
differential pressure switches.**

Differential pressure switch PK50

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

Versions

With this pressure switch the switching pressure can be adjusted without a pressure gauge using a scaled adjustment knob.

| Type | Adjustment range from to | Switching differential* | Repeatability of the switching pressure |
|------|--------------------------|-------------------------|---|
| W | 20 200 Pa | 10 Pa | ±5 %, min. ±5 Pa |
| S | 20 300 Pa | 10 Pa | ±5 %, min. ±5 Pa |
| S1 | 30 400 Pa | 15 Pa | ±5 %, min. ±5 Pa |
| 0 | 50 500 Pa | 20 Pa | ±2.5 %, min. ±5 Pa |
| 1 | 200 1000 Pa | 100 Pa | ±1 %, min. ±5 Pa |
| 1B | 100 1000 Pa | 100 Pa | ±1 %, min. ±5 Pa |
| 2 | 500 2500 Pa | 150 Pa | ±1 %, min. ±5 Pa |
| 3 | 1000 4000 Pa | 250 Pa | ±1 %, min. ±5 Pa |
| 3B | 1000 5000 Pa | 250 Pa | ±1 %, min. ±5 Pa |

* 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 AMP connection 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, 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 and cover of plastic.

Weight

With cover 150 g, without cover 110 g.

Mechanical working life

Over 10⁶ switching operations.

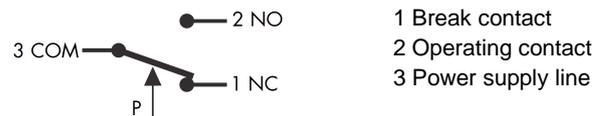
Electrical rating

Standard version: max. 1.5 A (0.4 A) / 250 VAC
Low-voltage version: max. 0.1 A / 24 VDC

Electrical connections

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

Arrangement of contacts



Protection category

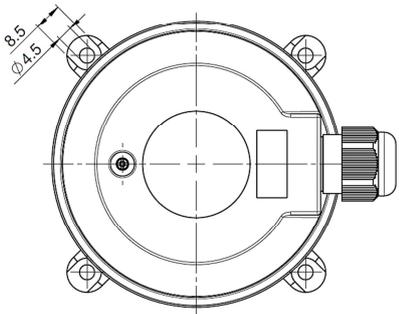
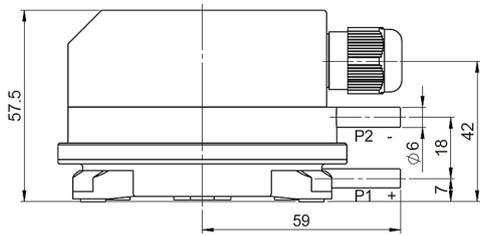
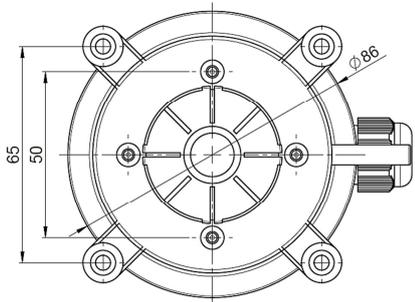
IP 54 with cover, IP 00 without cover.

Specifications according to EN1854

Class of control and regulation function: A
Deviation: $m \pm 15$ %, min. ± 10 Pa
Drift: $m \pm 15$ %

Accessories

See order matrix.



Mounting bracket 103102

