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# Pressure and differential pressure switch for air, smoke and flue gases

Adjustment range from 0.4 to 150 mbar

## Brief description

Pressure and differential pressure switches Type 4 ADS are used to measure vacuum, pressure or differential pressure in HVAC and filter technology, for example. Pressure and differential pressure switches consist essentially of base, diaphragm, intermediate disc, case and protective cover. When used as pressure or vacuum switch, the base and diaphragm with disc form the pressure chamber.

When used as a differential pressure switch, the base and a second diaphragm with intermediate disc form the two pressure chambers. A pressure change in the pressure chamber causes an axial displacement of a pin linked to the diaphragm. When the selected switching point is reached, a spring-loaded contact is activated.



Type 4 ADS-82

## Technical data

### Case

Polycarbonate

### Parts in contact with medium

Polycarbonate

### Diaphragm

NBR

### Pressure connection

2× tubing nipple 4.6 mm dia.

### Cable entry

Pg11

### Electrical connection

screw terminals for up to 2.5 mm<sup>2</sup> conductor cross-section

### Type of contact

single-pole as changeover switch

fine silver (Ag)

### Protection

IP54

### Adjustment ranges, differential

Adjustment range mbar	Differential $\Delta p$ in mbar
0.4 to 3	$\leq 0.3$
1 to 10	$\leq 0.5$
2.5 to 50	$\leq 1.5$
30 to 150	$\leq 5$

### Max. operating pressure

0 to 500 mbar

### Switching point accuracy

The setpoint indicated on the scale conforms to the actual value with a tolerance of  $\pm 15\%$ .

### Rating

AC 50 to 60 Hz, 250 V, 6 A,  $\varphi = 1$

AC 50 to 60 Hz, 250 V, 3 A,  $\varphi = 0.6$

### Permissible ambient temperature and temperature of medium

-15 to +60 °C

### Switching function with rising pressure

1 n.c. opening, 2 n.o. closing

### Switching function with falling pressure

1 n.c. closing, 2 n.o. opening

### Operating position

The standard operating position is with the diaphragm standing vertically; with horizontal face-up mounting, the pressure monitor switches when the pressure is about 0.5 mbar higher.

With horizontal face-down mounting, the pressure monitor switches when the pressure is about 0.5 mbar lower.

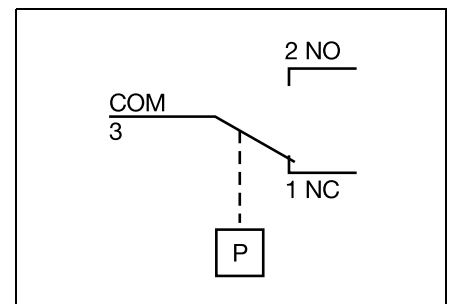
In an intermediate position, the pressure monitor will switch at a pressure that deviates by a maximum of  $\pm 0.5$  mbar from the selected setpoint.

## Accessories

HVAC installation kit, consisting of:

- 2 tube connections
- 6 self-tapping screws
- 2 extension tubes
- 1 jig
- 1 fixing bracket

## Electrical connection



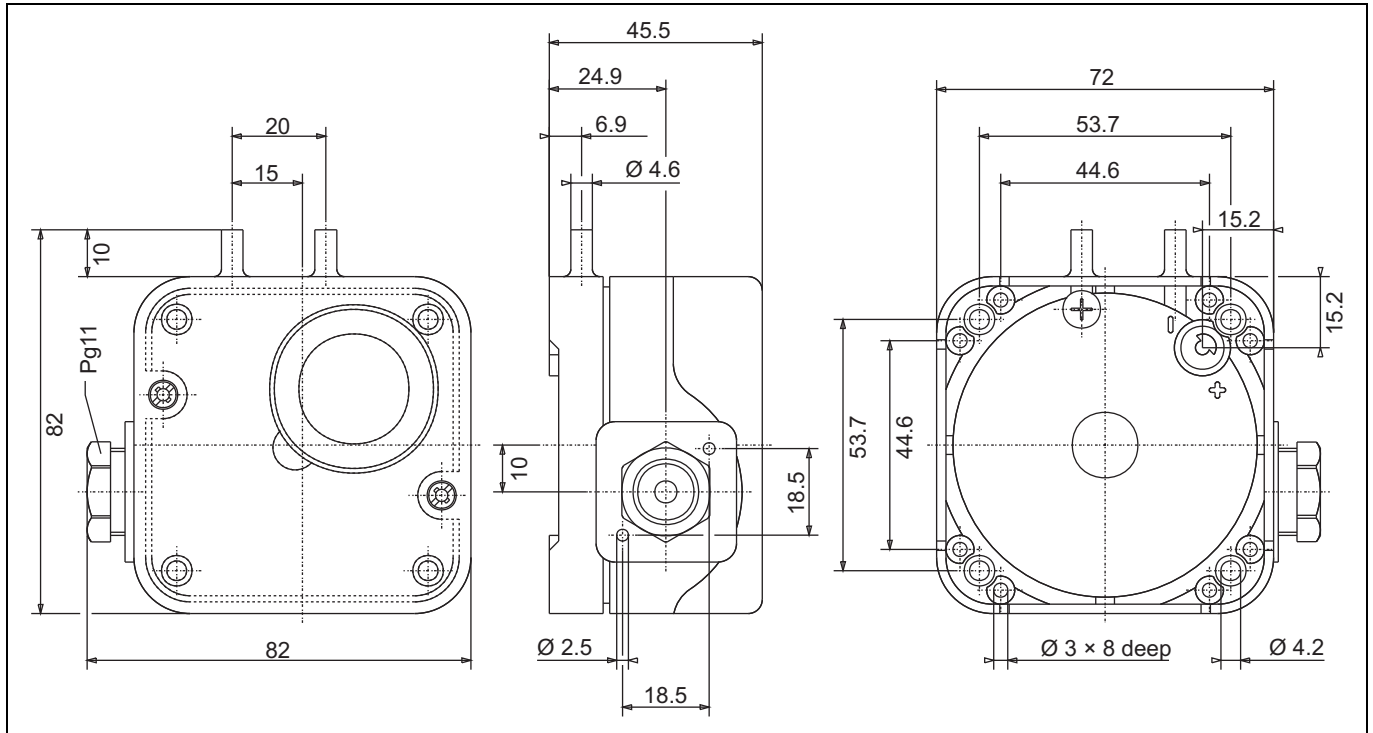
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## Dimensions



## Order details

(1) <b>Basic version</b>	
4 ADS-82	Pressure and differential pressure switch for air, smoke and flue gases in surface-mounted case 82 mm × 82 mm

Order code (1)  
 Order example 4 ADS-82

## Accessories

Designation	Part no.
HVAC installation kit: Pressure and differential pressure switch for air and smoke	00381238