

EDPS / EPDS differential pressure switch

Product user manual | English edition

1. Description

Each pressure switch is tested and calibrated before delivery. It measures differential pressure or gauge (static) pressure and converts the pressure into an ON/OFF contact signal for circuit control. Turn the adjustment dial to select the required switching pressure.

2. Specifications

Parameter	Specification
Medium	Air and nonflammable, noncorrosive gases
Operating temperature	−40°C to 85°C
Maximum working pressure	10kPa
Electrical rating, AC	1.5A (0.4A) / 250VAC
Electrical rating, DC	Maximum 0.1A
Contact arrangement	SPDT: single-pole, double-throw
Enclosure protection	IP54
Service life	1,000,000 operations
Pressure ports	Two Ø6mm hose connections
Hose outside diameter	Ø8mm
Recommended hose inside diameter	Ø5mm
Recommended maximum hose length	15m, for the fastest response

3. Installation orientation

The factory calibration is performed with the switch mounted vertically and the pressure connections perpendicular to the horizontal plane. Horizontal mounting increases the switching pressure by 20Pa relative to the factory setting. Select the installation orientation before the factory sets the pressure.

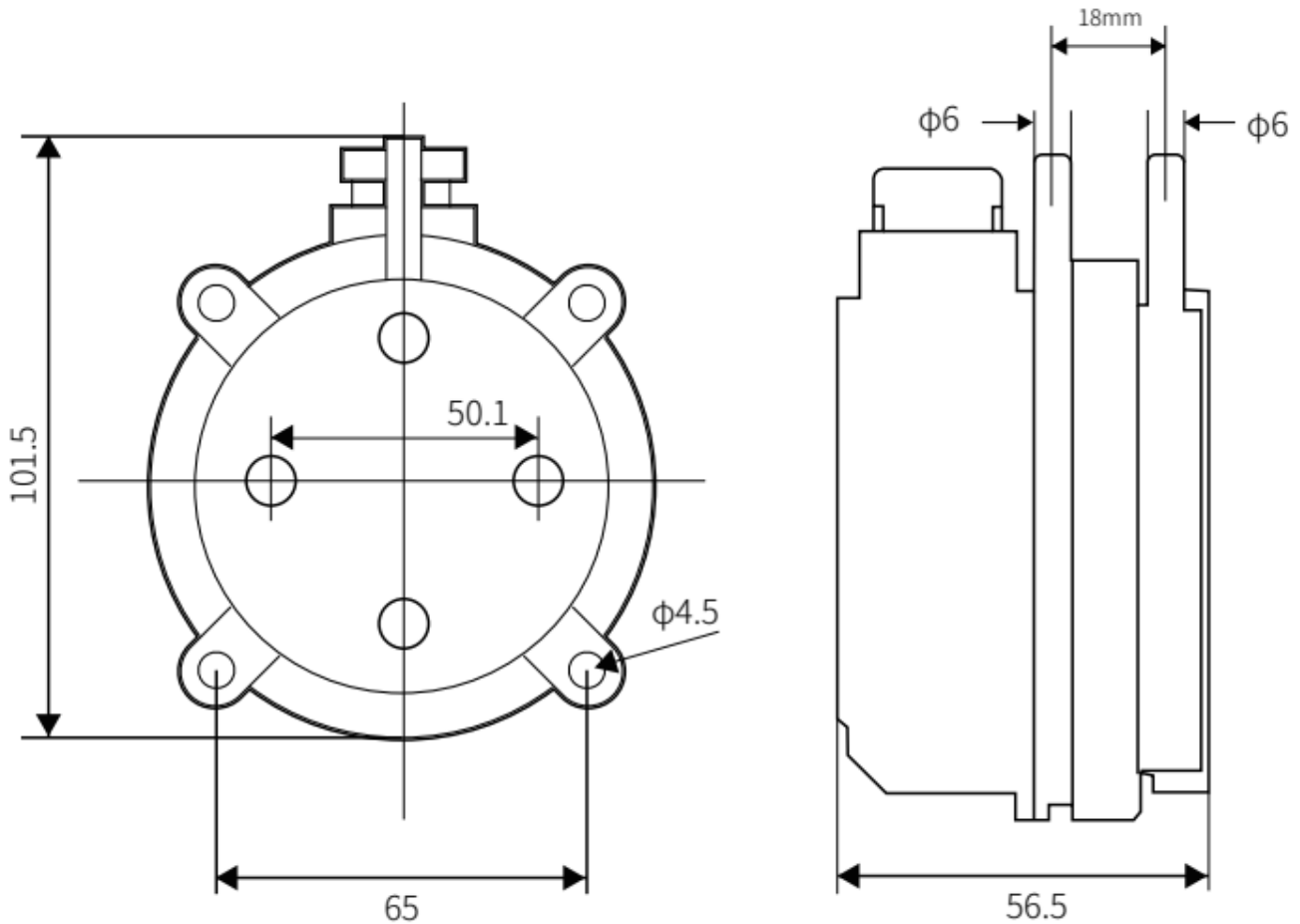
An optional mounting bracket can be used. Without the bracket, mount the switch through its Ø4.5mm mounting holes. For settings below 50Pa, do not install the switch upside down.

The source does not separately explain the parenthetical AC current value or specify a DC voltage rating; no additional load classification or voltage rating is assigned here.

Dimensions and pressure connections

4. Outline dimensions

Dimensions in mm. Original numeric drawing retained.



5. Connect the pressure tubing

Connect the higher pressure to P1 (+) and the lower pressure or vacuum to P2 (–). The housing provides two $\phi 6$ mm connections for flexible hose with an $\phi 8$ mm outside diameter. For the fastest response, use hose with an $\phi 5$ mm inside diameter and keep the hose length at or below 15m.

The cable enters through the waterproof cable gland. The pressure ports are identified on the housing as P1 (+), high pressure, and P2 (–), low pressure.

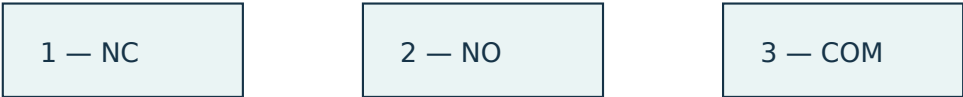
6. Accessories

Self-tapping screws, screw terminal blocks, plastic pressure taps and flexible pressure tubing are shown as accessories in the original manual.

Electrical connection and adjustment

7. Electrical wiring

Loosen the upper-cover screw and open the cover to expose the terminals. Pass the cable through the waterproof cable gland into the housing, then secure the conductors to the terminal block.



NC = normally closed; NO = normally open; COM = common

Terminal 1 is the normally closed contact, terminal 2 is the normally open contact, and terminal 3 is common. The switch uses an SPDT contact arrangement. In DC circuits, the current must not exceed 0.1A.

8. Set the switching pressure

The switch is calibrated before delivery. If an adjustment is needed for the application, turn the dial until the required scale value aligns with the arrow. Avoid changing the setting unnecessarily. Calibration is performed vertically; other mounting positions can introduce a small pressure shift.

Adjustment range	Hysteresis	Error
20-200Pa	10Pa	±15%
30-300Pa	10Pa	±15%
40-400Pa	20Pa	±15%
50-500Pa	20Pa	±15%
200-1000Pa	100Pa	±15%
50-2500Pa	150Pa	±15%
20-300Pa	10Pa	±15%
30-500Pa	20Pa	±15%
100-1000Pa	50Pa	±15%
1000-5000Pa	250Pa	±15%

The source gives the error as ±15% without identifying a full-scale or reading basis. The maximum working pressure is separate from the selectable switching range.

Source publisher and translation coverage

ELECALL is a trademark of Yueqing ELECALL Electric Co., Ltd., which authorizes the product. Manufactured by Yueqing Liangzi Electric Co., Ltd. Address: No. 246 Weishi Road, Yueqing Economic Development Zone, Zhejiang, China. Telephone: 0577-62792850. Website: www.elecall.cn. The source carries recycling and crossed-out wheeled-bin symbols.

This edition consolidates the complete Chinese EDPS and EPDS leaflets. Their pressure-switch specifications and range tables agree; both model spellings are retained. The EPDS leaflet supplies the more fully dimensioned outline shown here.