# Differential pressure switch TP33A-... series





- The differential pressure switch is used in center air conditioning auto-control and ventilation purification project
  Range ability: TP33A-30: 30Pa~300Pa; TP33A-100: 100Pa~500Pa. It can be set freely by knob, to fully meet
- Range ability: TP33A-30: 30Pa~300Pa; TP33A-100: 100Pa~500Pa. It can be set freely by knob, to fully meet the standard of differential pressure alarmfor AHU filter net
  Unique higher temperature resistance diaphragm material, is thin enough to guarantee sensitive reflection to
- Unique higher temperature resistance diaphragm material, is thin enough to guarantee sensitive reflection to micro differential pressure
- Contact of SPDT switch is made of Sterlings ilver (NO or NC node can be selected by the user)
- Air-tight chamber can prevent contact from oxidation to prolong its life
- Only one screw for fixing the cover is easy to install extremely
- Combi-bracket for vertical or horizontal installation

#### **Parameters**

Туре	TP33A-30, TP33A-100
Rang ability	30Pa~300Pa, 100Pa~500Pa
Degree of protection	IP54
Max. differential pressure	5000Pa
Rated current	< 5A/250VAC < 4A/30VDC
Storage temperature	-40~85
Installation direction	vertical(standard installation style)
Hose connection	pipeF6.2mm
Casing material	plastic PC diaphragm material: silicone LSR
Service life	mechanical period > 1000000 switching cycles
Weight	120 grams without bracket, 144 grams with bracket type C
Repeatability	< ±0.025mbar In the ranges 0.2 to 3mbar

#### Caution

Before you take the differential pressure switch into operation, make sure to read these operating instructions thoroughly. In the event of damages due to the non-observance of these instructions, improper operation or use of the switch for purposes for which it is not intended, the warranty becomes null and void. We shall not be held liable for resultant consequential damages. The switch is to be installed and removed by technicians only.

The applicable certified national safety regulations for the operation of pressure measuring devices shall be observed.

In the installed condition the respective device-specific requirements on the type of protection must be fulfilled.

- -Do not change adjustment of factory-adjusted and paint-sealed switches.
- -Screw C was adjusted in the factory, and the adjustment fixed with adhesive. This adjustment may not be changed. Change the switching point with dial only.
- -Adjust upper and lower switching points with the dial.
- -In case of vacuum: connect P2.
- Adjustments as indicated in the instructions, except pressure=vacuum.
- -Fasten bracket to switch with original factory-supplied screws only
- -P1(+): high pressure connecting end, P2(-): low pressure connecting end.

#### Note

With the safety cover removed, contact with terminals 1, 2 and 3 poses a lethal hazard (mains power voltage)!

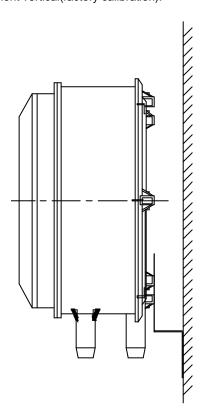
### Adjustment of upper/lower switching point

(Dial: for higher switching point [higher pressure] turn in clockwise direction.)

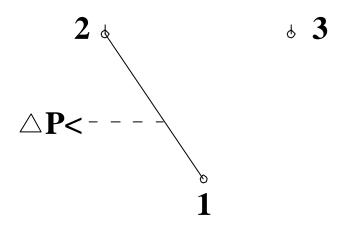
Allow pressure to increase gradually (do not exceed max. pressure limit), adjust desired switching point with dial). Check the upper or lower switching points by raising and lowering the pressure several times and make any necessary adjustments.

#### Installation direction

—Recommended installation arrangement vertical(factory calibration).



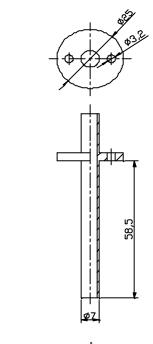
# **On-off principle**



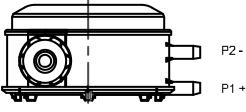
Differential pressure < setting value, 1-2 contacted Differential pressure > setting value, 1-3 contacted

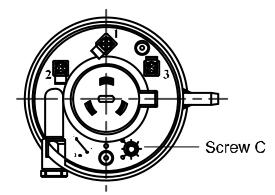
## **Accessories**

A 1.6m plastic pipe, two plastic pipe connecting fitting, a bracket type U and four screws.



# **Shape**





## Repair and replacement

Repair is not possible. In case of a defective or improper functioning control, please consult with your nearest supplier. When contacting the supplier for a replacement, you should state type of the switch. This number can be found on the side of the switch.