

# Air Differential Pressure Switch(Variable)

(AAPS-3V) (AAPS-5V) (AAPS-10V) – PNAL

PRODUCT SPECIFICATION SHEET



## FEATURES

- This switch operates by a positive pressure and negative pressure, a differential pressure.
- This switch is operated to low pressure of 0 to 100mbar and a user is able to request necessary pressure point.
- This switch has a various models according to pressure setup.

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## APPLICATION

This switch is used in monitoring flowing of air by differential pressure in HVAC or Gas burner.

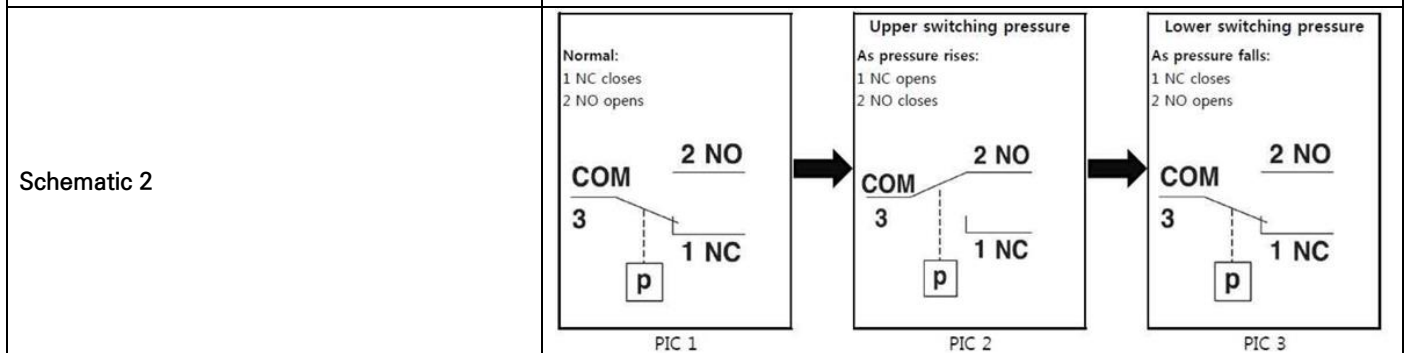
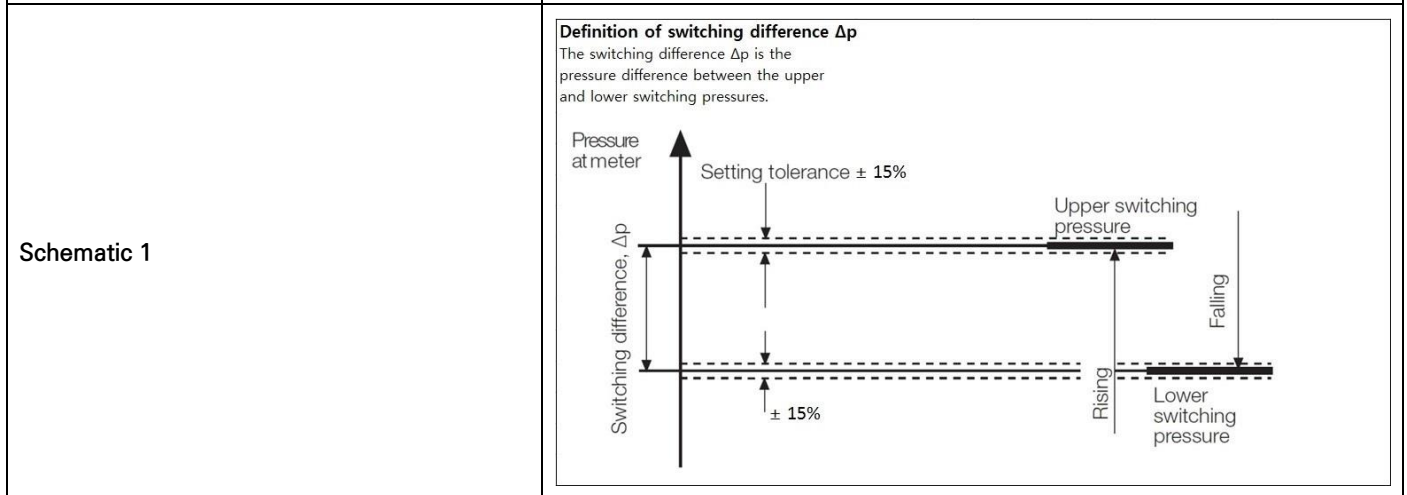
This switch has application to sensing of exhaust gas in oil, gas boiler and fan heater.

## SPECIFICATIONS

Type	: Differential pressure type	
Sensing fluid	: Air	
Electrical ratings	: Switching Voltage	AC eff. min. 24V max. 250V DC min. 24V max. 48V
	: Nominal current	AC eff. max. 6A
	: Switching current	AC eff. max. 4 A at cos $\phi$ 1 AC eff. max. 2 A at cos $\phi$ 0,6 AC eff. min. 20 mA DC min. 20 mA, DC max. 100mA DC
Allowable temperature	: -15 ~ 60°C	
Max. Permissible pressure	: 500 mbar (In rush pressure)	
Mounting	: 3 locating holes 4.2 for M4 locating screws.	
Material	: Body	Aluminium die casting
	: Diaphragm	H-NBR
	: Switching contact	Ag ( Standard),
	Switch part	Polyamide

# SPECIFICATIONS

Model	AAPS-3V	AAPS-5V	AAPS-10V
Operating pressure range	: 0.4 ~ 3 mbar	: 0.5 ~ 5 mbar	: 2 ~ 10 mbar
( $\Delta P$ )	: $\leq 0.3$ mbar	: $\leq 0.4$ mbar	: $\leq 0.7$ mbar
Leak tightness	: 120 cm <sup>3</sup> /h (Pressure condition 100mbar))		
Humidity	: RH 0 ~ 80%		
Shock	: 5G		
Constant resistance	: Initial, 150 m $\Omega$ (Max)		
Insulation resistance	: 100 M $\Omega$ , Min. DC500V Megger		
Dielectric strength	Terminal – Terminal	: 800 VAC/1 min	
	Terminal – Earth	: 1500 VAC/1 min	
Mechanical life cycle	: 200,000 Cycle		
Electrical life cycle	: 100,000 Cycle		
IEC-529 Standard	: IP 54		
Air connection	: HIGH : PF1/4" , LOW : PT1/8"		
Electrical connection	: Screw terminals via M18X1 conduit connection		



## AIR PRESSURE SWITCH(VARIABLE)

Installation	: Standard diaphragm vertical (factory setting) It has a little different value according to installation angle. In the case of horizontal installation, it has higher operating pressure than vertical.
Warranty	: 1 year
Weight	: 187g

### Notice

In case of following circumstance, we recommend to discuss with us before using.

1. Only use silicone tube which have been sufficiently cured.
2. Vapours containing silicone can adversely affect the functioning of electrical contacts. In the case of low switching capacities such as 24V, less than 20mA, for example, we recommend using RC module or electronic switch(no-contact switch) in air containing silicone or oil.

In case of high humidity or aggressive gas components (H<sub>2</sub>S), we recommend using a pressure switch with gold contact.

Closed-circuit current monitoring is recommended under difficult operating conditions.

## DIMENSIONS

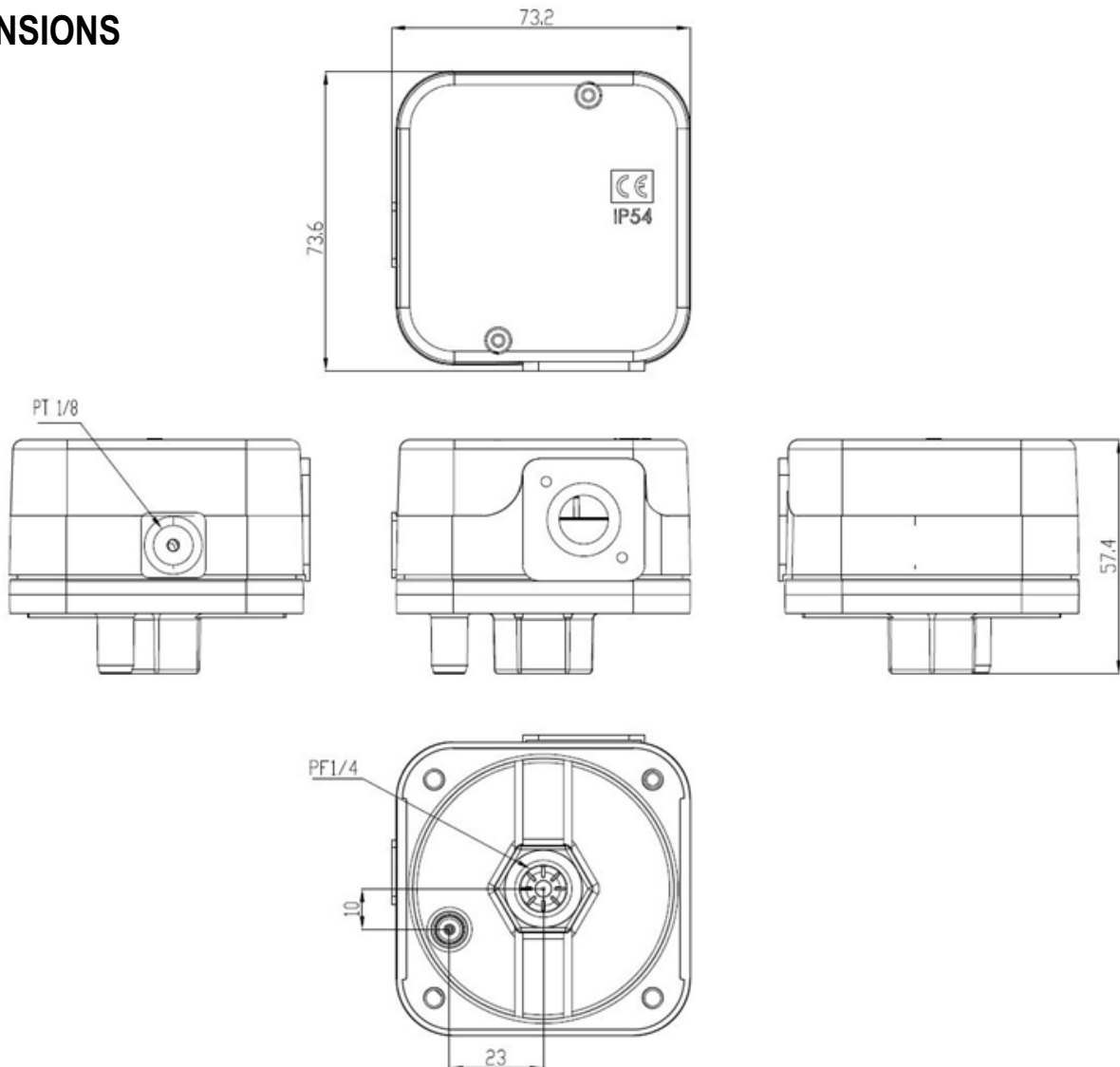


Fig 1. Air pressure switch(SAPS...V)

**The specifications and dimensions can be changed without warning**