# **PASXX SERIES**

Monitor Air Ducts, Filters and Fans



PASxx differential air flow switches are intended for use in air handling systems for the monitoring of air ducts, filters and fans.

The enclosure is plastic with a rating of IP54. A set-point adjustment is provided under the clip-on clear plastic cover.

Supplied complete with mounting adaptor ring, two straight duct probes and a 6-foot length of clear tubing.

### **SPECIFICATIONS**

SPECIFICATIO	113		
Medium		Air and neutral gases	
Pressure range		See Ordering Information table	
Set-point scale		Inches WC	
Tolerable overload on one side		20 in. WC at -22 to +185 °F	
Repeatability	PAS01	±2.5 (0.01 in. WC)	
	PAS02	±5 (0.02 in. WC)	
	PAS03	±5 (0.02 in. WC)	
	PAS04	±5 (0.02 in. WC)	
Switching load	Resistive load	5 A at 250 Vac 4 A at 30 Vdc	
	Inductive	0.8 A at 250 Vac 0.7 A at 30 Vdc	
Materials in contact with the medium		Case: PC 10% GF Cover: PC Diaphragm: Silicone LSR tempered 200 °C, free of gas emissions	
Operating temperature	Medium/ ambient	-22 to +185 °F (-30 to +85 °C)	
	Storage	-40 to +185 °F (-40 to +85 °C)	
Service life		Mechanical > 10 <sup>6</sup> = 1,000,000 switching cycles	
Electrical connection		Screw terminals Cable gland type PG11 (DIN 40430) complete with cable strain relief	
Switch contact type		SPDT (change-over)	
Protection standard	Without cover	IPOO	
	With cover	IP54	
Pressure connections		Pipe Ø 6.2 mm	

# Easy cable lead-in Integrated cable

Case geometry allows easy cable lead-in

# strain relief

Cable strain relief integrated in PG11 (DIN 40430)

Snap cover

User-friendly snap cover

# High accuracy

High adjustment accuracy through individual laser etched scale

# Stable switching points

Long-term stability of switching points through trapezoidal bead diaphragm

## **APPLICATIONS**

- High pressure monitoring
- Vacuum pressure monitoring
- Filter monitoring
- Fan monitoring

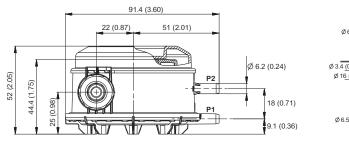
Tests/admissions	EU Conformity, Electromagnetic Compatibility: CE <sup>1</sup> conformity according to EN 60730-2-6:2008 Low Voltage Directive: 2014/35/EU Gas Appliance Directive: 2009/142/EC Pressure Sensing Devices for Gas Burners and Gas Burning Appliances: EN 1854:2010 EU Directive on RoHS: 2011/65/EU
WARRANTY	
Limited Warranty	5 years

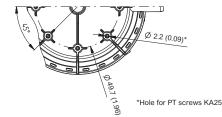
CE

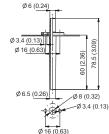
AGENCY APPROVALS

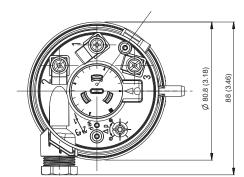


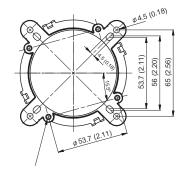
#### **DIMENSIONAL DRAWING**











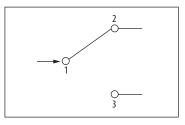
4 x hole PT - screw d<sub>1</sub> = 3.0 mm (0.12 in.)

## **INSTALLATION**

Mounting:

- · Vertical with pressure connections facing downward (factory recommended)
- · Horizontal with cover facing downward (switching setpoint 0.4" WC lower than scale)
- Horizontal with cover facing upward (switching setpoint 0.4" WC higher than scale)

## WIRING



1 = COM (Common)

- 2 = NC Contact (Normally Closed)
- 3 = NO Contact (Normally Open)

# **FUNCTIONALITY**

The pressure switch has two separate pressure chambers, each with its own connection. The switch operates when the setpoint is either exceeded or not reached.

#### Vacuum Monitoring

Connect the pressure switch via P2. Do not connect P1. Leave P1 open. Make sure that debris cannot get into P1.

#### **High Pressure Monitoring**

Connect the pressure switch via Pa. Do not Connect P2. Leave P2 open. Make sure that debris cannot get into P2.

#### **Filter Monitoring**

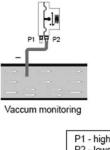
Connect P1 before the filter and P2 after it.

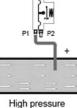
#### Fan Monitoring

Connect P1 after the fan (in blowing direction) and P2 before the fan.

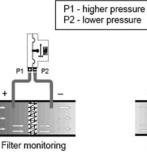
## **ORDERING INFORMATION**

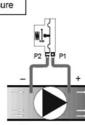
PART NUMBER	DESCRIPTION	PRESSURE RANGE
PAS01		0.08 to 1.2 in. WC (20 to 300 Pa)
PAS02	Differential Air	0.2 to 2.0 in. WC (50 to 500 Pa)
PAS03	Pressure Switch	0.4 to 4.0 in. WC (100 to 1000 Pa)
PAS04		2.0 to 8.0 in. WC (500 to 2000 Pa)











Fan monitoring







**ACCESSORIES** 

Pickup Probe (AA06)

Pickup Probe) (AA07)

Static-04 Pick-up - 4" Duct Static

Static-08 Pick up - 8" Duct Static

AA06