akribis

DATA SHEET

PS

Produal

Distributed by AKRIBIS



PS differential pressure switch



The PS differential pressure switches are designed for monitoring overpressure, underpressure or pressure differences in systems that handle air and other non-aggressive gases. These mechanical switches provide a cost-effective solution to monitor pressure for filters, fans, blowers, ventilation ducts and ventilation heat recovery systems.

These differential pressure switches are easy to commission. You can set the switching point manually using the selection wheel.

The PS differential pressure switches are typically used in building automation systems for:

- fan, blower or filter monitoring
- pressure or flow monitoring
- valve or damper monitoring

Technical specifications

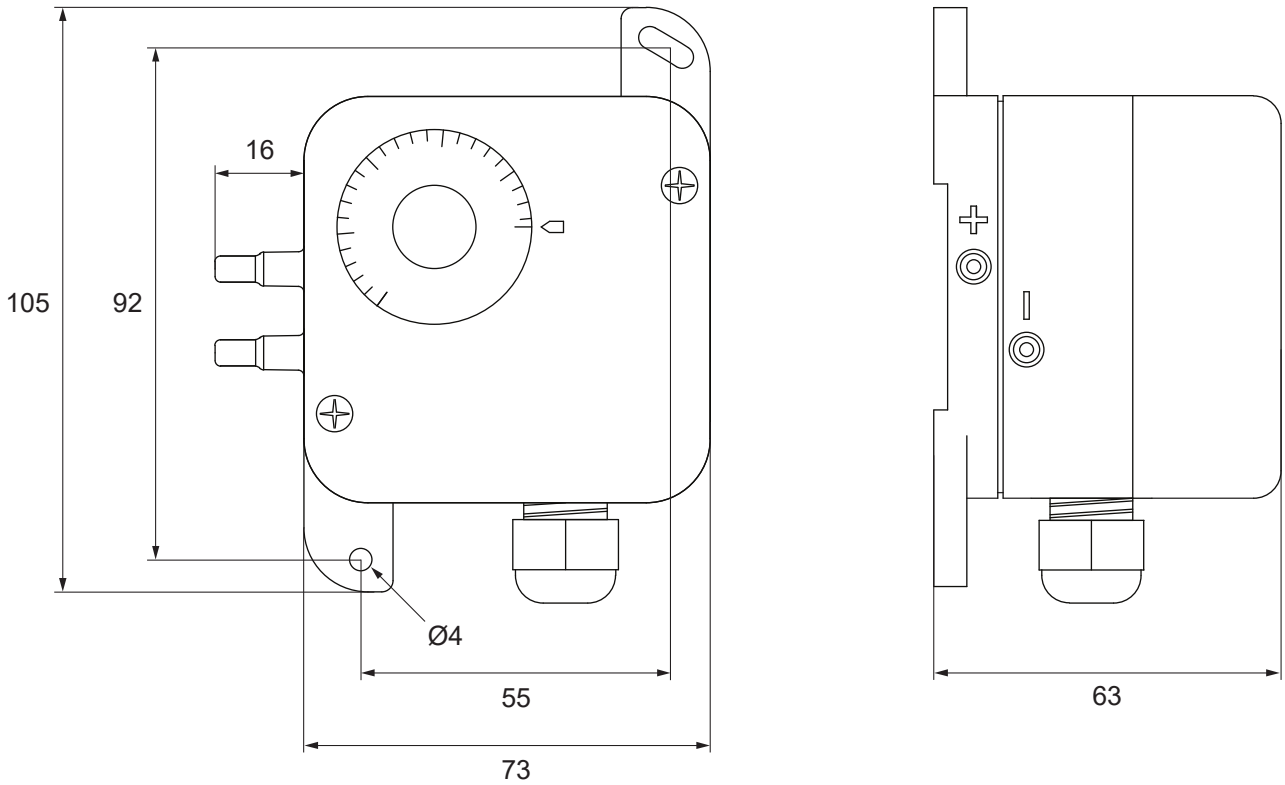
Property	Value
Pressure	
Switching range	
PS200	20...200 Pa
PS300	30...300 Pa
PS500	30...500 Pa
PS600	40...600 Pa
PS1500	100...1500 Pa
PS4500	500...4500 Pa

AKRIBIS · www.akribis.info · contacto@akribis.info

Property	Value
Accuracy of the switching pressure at 20 °C	
PS200 / PS300 / PS500 / PS600	±15 % from the selected switching point, minimum ±8 Pa
PS1500	±15 % from the selected switching point, minimum ±20 Pa
PS4500	±15 % from the selected switching point, minimum ±100 Pa
Switching difference (= hysteresis, typical difference between switching on and switching off)	
PS200	20 Pa
PS300	25 Pa
PS500	25 Pa
PS600	35 Pa
PS1500	80 Pa
PS4500	250 Pa
Overpressure	
Proof pressure	25 kPa
Burst pressure	50 kPa
Measurement units	Pa
Pressure fittings	
Type	male
Size	Ø5.0 mm
Material	ABS plastic
Switch output	1 x NO/NC, change-over contact
PS200	250 Vac, 0.1 A, (res.) / 30 Vdc, 0.1 A (res.)
PS300 / PS500 / PS600 / PS1500 / PS4500	250 Vac, 3 A (res.), 2 A (ind.) / 30 Vdc, 3 A (res.), 2 A (ind.). Time constant < 7 ms. For DC inductive loads.
Wiring terminals	
Type	screw terminals
Wire	0.2...1.5 mm^2 (24...16 AWG)
Tightening torque	1.5 Nm
Appliance class (IEC 60664-1)	III
Operating conditions	
Ambient temperature	-20...60 °C
Ambient humidity	0...95 %rH (non-condensing)
Storage conditions	
Temperature	-20...85 °C
Humidity	0...95 %rH (non-condensing)
Housing	
Protection class	IP54

Property	Value
Cable gland	M16
Materials	ABS and PC plastic
Other materials	
Membrane	silicone
Mounting	on the wall with screws
Dimensions (w x h x d)	90 x 105 x 63 mm
Weight	150 g
Warranty	5 years
CE UKCA	Refer to the EU Declaration of Conformity or the UK Declaration of Conformity for compliance information. You can find the declarations on this product's page at www.produal.com.
Company certificates	
Quality management	ISO 9001
Environmental management	ISO 14001

Dimensions



Wiring

WARNING: Device wiring and commissioning can only be carried out by qualified professionals. Always make the device wirings in de-energised electricity network.

CAUTION: Connect the device only to overvoltage category II electricity network according to IEC 60664-1.

AKRIBIS · www.akribis.info · contacto@akribis.info

CAUTION: Make sure that all covers are closed before you connect the supply voltage to the device. Do not open the covers when the supply voltage is connected.

PS200

WARNING: Add an external fuse to the common connector (COM) of the switch output. Use a time-lag fuse (max. 0.1 A) that is in accordance with the standard IEC 60127-2. This device does not have an internal fuse.

WARNING: Check the switch circuit protection and install a fuse if needed. Switch maximum load is 250 Vac, 0.1 A res.

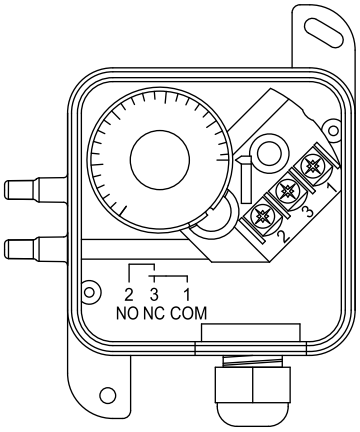
PS300, PS500, PS600, PS1500, PS4500

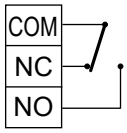
WARNING: Add an external fuse to the common connector (COM) of the switch output. Use a time-lag fuse (max. 3 A) that is in accordance with the standard IEC 60127-2. This device does not have an internal fuse.

WARNING: Check the switch circuit protection and install a fuse if needed. Switch maximum load is 250 Vac, 3 A res.

Connect the wires for all models as follows:

1. Open the cover.
2. Unscrew the strain relief on the cable gland.
3. Route the cable through the strain relief and the cable gland.
4. Connect the wires to the screw terminal block according to the table below.



1	*COM*		Switch output **PS200:** 250 Vac, 0.1 A (res.) / 30 Vdc, 0.1 A (res.) **PS300, PS500, PS600, PS1500, PS4500:** 250 Vac, 3 A (res.), 2 A (ind.) / 30 Vdc, 3 A (res.), 2 A (ind.). Time constant < 7 ms. For DC inductive loads.
3	*NC*		
2	*NO*		

The nominal tightening torque for wiring terminal screws is 1.5 Nm.

Important: Do not use excessive force when you tighten the wiring terminal screws.

5. Tighten the strain relief.
6. Close the cover.

7. Install the cover locking screws.
   Make sure that the cover does not open without tools.

Ordering information

	Type	Product number	Description
	PS200	105.001.061	Differential pressure switch, 20...200 Pa
	PS300	105.002.065	Differential pressure switch, 30...300 Pa
	PS500	105.003.070	Differential pressure switch, 30...500 Pa
	PS600	105.004.063	Differential pressure switch, 40...600 Pa
	PS1500	105.005.068	Differential pressure switch, 100...1500 Pa
	PS4500	105.006.050	Differential pressure switch, 500...4500 Pa
	DP-AK	1241000001	Accessory kit for differential pressure devices. Includes pressure measurement hose (2 m), duct connectors (2 pcs) and connector mounting screws (4 pcs).
	WS-1	9000520	Weather shield for protecting devices from rain

AKRIBIS · www.akribis.info · contacto@akribis.info