PS - Differential pressure switch



PS differential pressure switches are designed for monitoring over and under pressures and pressure differences in systems that handle air and other non-aggressive gases. PS switches offer a cost-effective solution for filter, fan and duct pressure monitoring for building automation systems. The switching point can be adjusted manually.

Differential pressure switches can be used for monitoring filters, fans and dampers, for example.

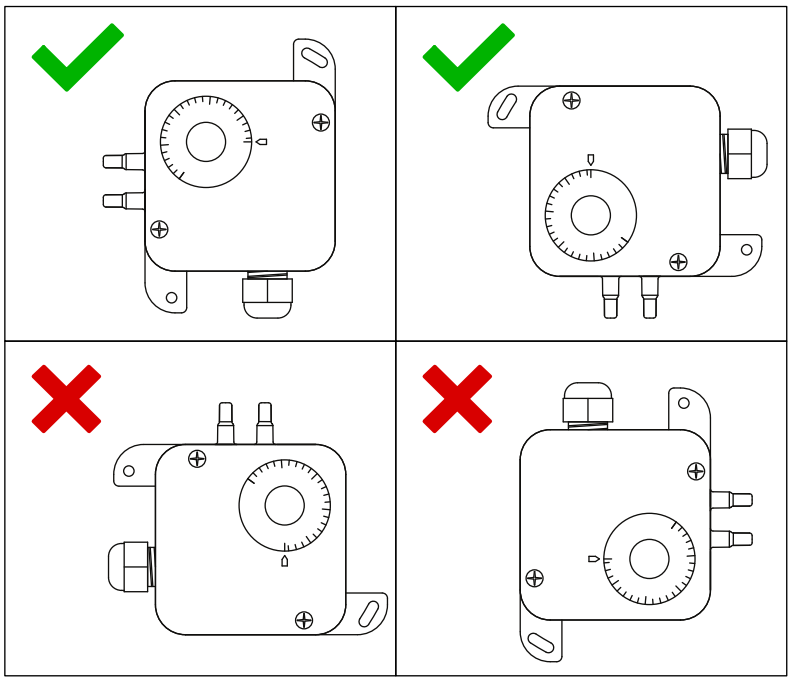
Technical specifications

Property	Value
Measuring 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
Measurement accuracy	
PS200 / PS300 / PS500 / PS600	±8 Pa at low limit, ±15 % at high limit
PS1500	±20 Pa at low limit, ±15 % at high limit
PS4500	±100 Pa at low limit, ±15 % at high limit
Switching difference	
PS200	20 Pa
PS300	25 Pa
PS500	25 Pa
PS600	35 Pa
PS1500	80 Pa
PS4500	250 Pa
Maximum pressure	50 kPa
Pressure connections	Ø5 mm
Output	NO/NC, change-over contact
PS200	250 Vac, 0.1 A, res.

Property	Value
PS300 / PS500 / PS600 / PS1500 / PS4500	250 Vac, 3 A (res.), 2 A (ind.)
Cable entry	M16
Operating conditions	
Ambient temperature	-20...60 °C
Ambient humidity	0...95 %rH (non-condensing)
Storage temperature	-20...85 °C
Wiring terminals	1.5 mm^2, screw terminals
Mounting	on the wall by screws
Protection class	IP54
Materials	
Cover	PC plastic
Bottom	ABS plastic
Membrane	silicone
Hose	PVC plastic
Duct connector	ABS plastic
Dimensions (w x h x d)	90 x 105 x 63 mm
Weight	150 g

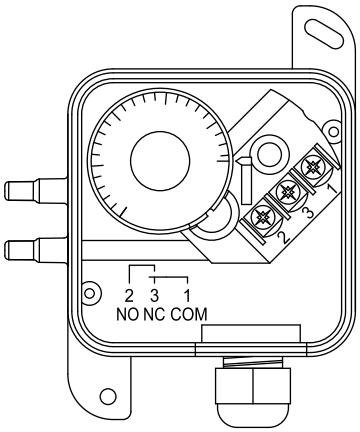
Mounting the device

The device can be mounted in vertical position either the pressure inlets or the cable entry downwards. Select a location that provides as much protection from water splashes (e.g. rain) as possible.



Wiring

CAUTION **CAUTION:** Device wiring and commissioning can only be carried out by qualified professionals. Always make the wirings while the power is switched off.



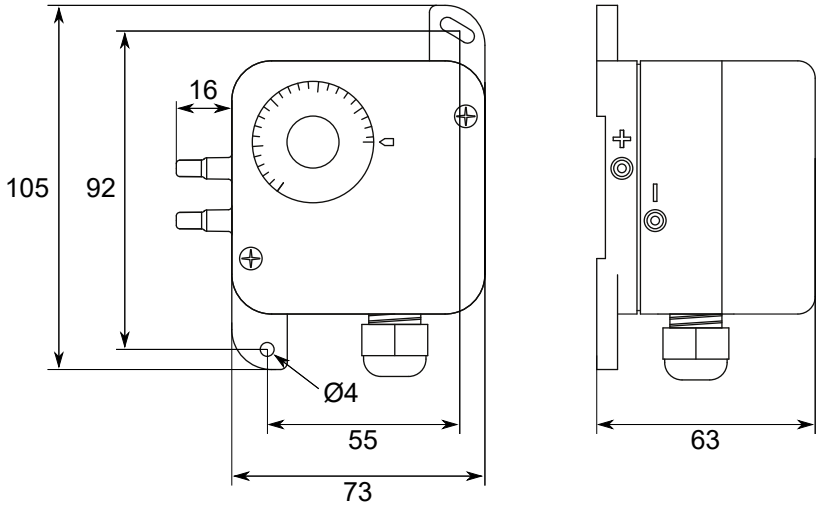
1	COM	250 Vac relay output.
3	NC	
2	NO	

Ordering information

NOTE **Note:** PVC hose (2 m), duct connectors (2 pcs) and screws (M4 x 20 mm, 2 pcs) are included in the product delivery.

	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

Dimensions



Supported standards and directives

Standard	Description
2014/30/EU	Electromagnetic Compatibility (EMC).
2014/35/EU	Low Voltage Directive (LVD).
2011/65/EU	Restriction of Hazardous Substances (RoHS2) Directive.
(EU) 2015/863	Commission Delegated Directive, amending Annex II to Directive 2011/65/EU.
EN 61010-1:2010	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements
EN 61326-1:2006	Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements
EN 50581:2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances
S.I. 2016 No. 1091	Electromagnetic compatibility regulations
S.I. 2016 No. 1101	The electrical equipment (safety) regulations
S.I. 2012 No. 3032	The restriction of the use of certain hazardous substances in electrical and electronic equipment regulations