

Features & Benefits

- Close switching differential
- Duct fixing kit included
- Switching point easily adjusted with scale in Pascals
- Conduit entry can be rotated in steps of 120°
- One screw needed for housing cover

Technical Overview


The PA-DPS-8x range of air differential pressure switches are suitable for low differential pressure switching applications, and are ideal for providing indication of fan status or 'filter dirty' conditions in air, non-combustible, non-aggressive gases in air conditioning and ventilating installations.

The switching knob is mounted under the cover to avoid tampering.

Product Codes	Specification
PA-DPS-88 20 to 300Pa Air DP switch	Measurement ranges: PA-DPS-88 20 to 300Pa PA-DPS-83 50 to 500Pa PA-DPS-85 200 to 1000Pa
PA-DPS-83 50 to 500Pa Air DP switch	Differential: PA-DPS-88 10Pa PA-DPS-83 20Pa PA-DPS-85 100Pa
PA-DPS-85 200 to 1000Pa Air DP switch	Maximum pressure 5000Pa Pressure connections 6mm ID push-on tubing Electrical rating 1.5A (0.4) @ 250Vac Approvals Switch according to VDE0630 UG1652 Connections Via 6.3mm crimp-type sockets Cable entry PG11 Material Plastic moulding Dimension 130 x 130 x 99mm Ambient: Temp -20 to +85°C°C RH 0 to 95% non-condensing Protection IP54 Country of origin Germany
<i>Accessories</i>	
PA-DPS-B Right Angle Mounting Bracket	
DFK Duct Fixing Kit	
TEE Tee-Piece (pack of 10)	
PA-TUBE-8MM PVC Tube 8mm o/d x 1.5mm Wall, 30m Reel	

A 'duct fixing kit' is supplied with the PA-DPS, consisting of 2m of 6mm i/d plastic tubing, 2 x pitot tubes and 4 x fixing screws.

WEEE Directive:



At the end of the products useful life please dispose as per the local regulations.
Do not dispose of with normal household waste.
Do not burn.



The products referred to in this data sheet meet the requirements of 2014/35/EU

Installation

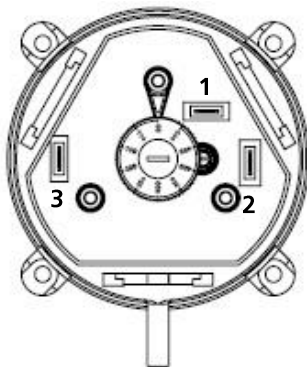
1. The PA-DPS should only be installed by a competent, suitably trained technician, experienced in installation with hazardous voltages. (>50Vac & <1000Vac or >75Vdc & 1500Vdc)
2. Ensure that all power is disconnected before carrying out any work on the PA-DPS.
3. Fix the switch to a suitable flat surface, maximum diameter of the screws must not be bigger than 8mm. Do not over tighten the screws, in order to avoid deformation of the devices base.
Mount the pressure switch with the pressure connections pointing downwards, to drain condensation moisture which might occur. Mount the pressure switch horizontally (electrical connectors pointing upwards) only, if no condensate can form. In this position, the switching values are approximately 20Pa higher as indicated on the scale.
4. Remove the cover by unscrewing the single screw and terminate at the crimp-type sockets as required and set the desired switching pressure on the setting knob using a screwdriver.
5. Replace the cover and tighten the single screw, it is possible to move the cable entry in steps of 120°.
6. Push the pressure tubing onto the pressure ports on the unit. Ensure that the Hi and Lo ports have been correctly identified.
 - P1 (+) Over pressure measurement
 - P2 (-) Vacuum Measurement
 - P1 & P2 Differential pressure measurement



CAUTION

The PA-DPS will be damaged if subjected to excessive pressure. Do NOT test the unit by blowing into the inlet ports.

Connections



- | | |
|---|-------------|
| 1 | N/C Contact |
| 2 | N/O Contact |
| 3 | Common |

Applications

If the switch is to be used for filter status monitoring, the pitot tube ends should be cut square. If the switch is to be used for fan status monitoring, the ends of the pitot tube should be cut at an angle of 45°

Fan status monitoring:

The switch can be used across a fan to provide proof of air flow and hence fan status. Fig. 1 shows how to connect the High and Low pressure ports:

Filter status monitoring:

The switch can be used across a filter to provide dirty filter status. Fig. 2 shows the connections for this application.

Fig. 1

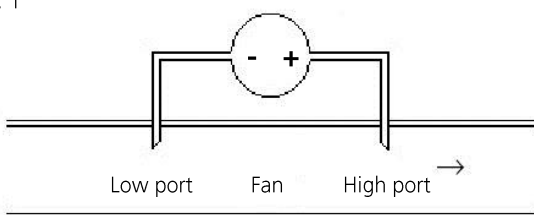
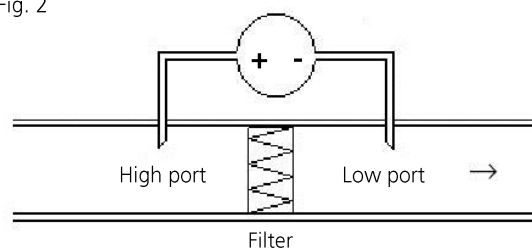


Fig. 2

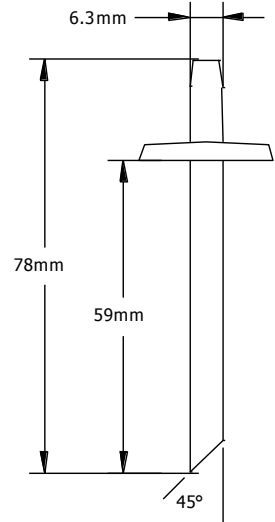
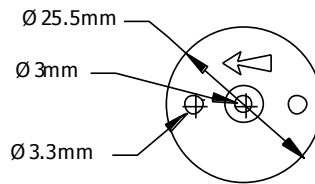


Duct Fixing Kit

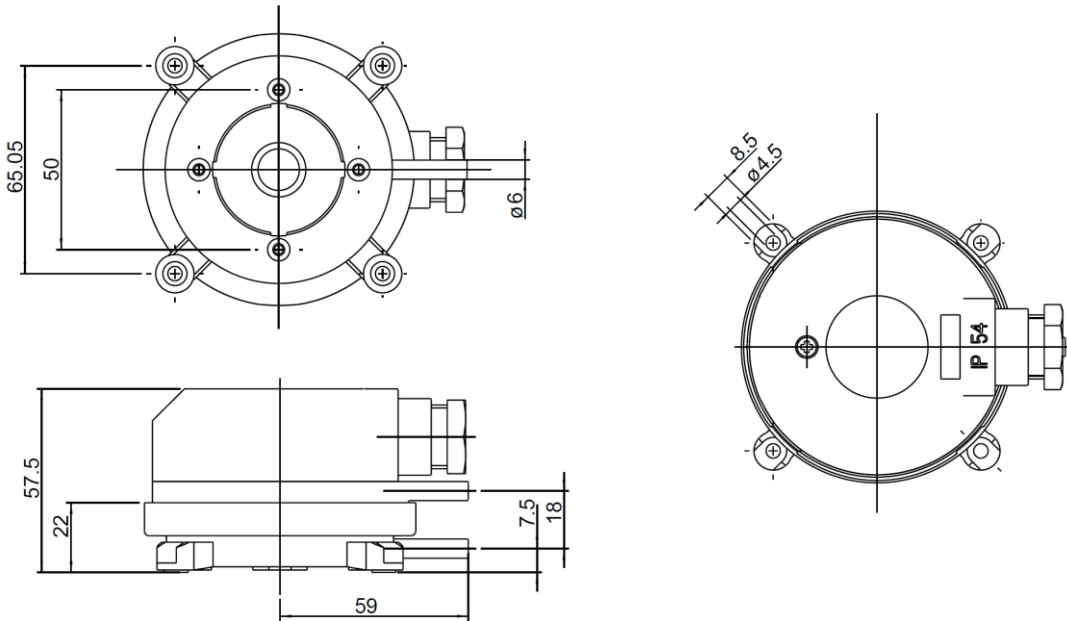
A 'duct fixing kit' is supplied with the PA-DPS, consisting of 2m of 5mm i/d plastic tubing, 2 x pitot tubes and 4 x fixing screws.



Pitot tube dimensions;



Dimensions



Whilst every effort has been made to ensure the accuracy of this specification, Sontay cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

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