



Model DAP



Supplied with pitot tubes & hose

Applications & Features

Air proving switch for air flow detection

Optional Low range model: DAP-20

Pressure connection: \varnothing 1/4in [6.0mm] plastic tube,
P1 for positive pressure
P2 for negative pressure

Electrical connection: screw terminals

Materials: housing PC, cover PC, diaphragm silicone and contact silver

Weight: 0.2lb [90g]

Ingress Protection: IP54

Specifications

Adjustable range:

standard range: 50 to 500Pa

[0.2 to 2.0in w.c.] [0.007 to 0.07PSI]

Low range (model DAP-20): 20 to 300Pa

[0.08 to 1.2in w.c.] [0.003 to 0.043PSI]

Pressure limit: 7500Pa [1.08PSI]

between -22 & 167°F [-30 to 75°C]

Working temperature: -22 to 167°F [-30 to 75°C]

Storage temperature: -22 to 167°F [-30 to 75°C]

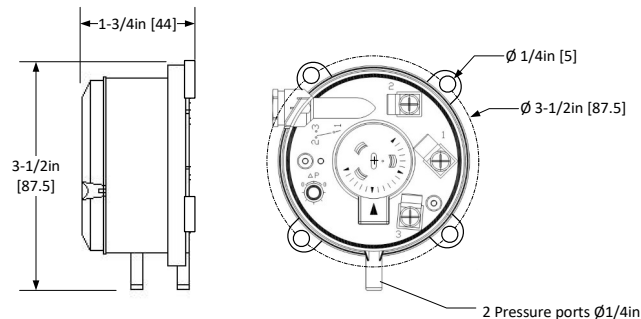
Service life: over 10 millions switching cycles

Electrical Contact: SPDT, 2A/250VAC, 1A/30VDC

Max. switching frequency: 6 switching cycles/min

Repeatability: \pm 2%

Dimensions



All dimensions in inch [mm]

Installation

Caution: Risk of malfunction. Do not install DAP body on surface or element that is subject to vibration.

DAP should be easily accessible for setting and verification.

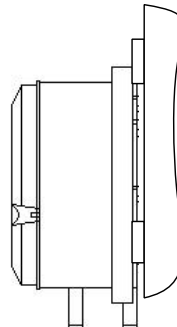
DAP should be installed as closed as possible to pitot tube(s) inserted into ventilation duct.

Preferred position for DAP body is vertical with P1 & P2 down, please refer to Position 1 from beside schematic.

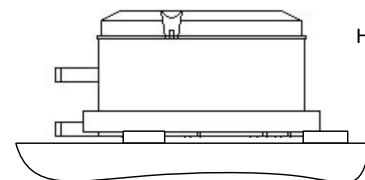
It is also acceptable to install DAP body horizontally with body up.

If DAP is installed upside down (as per position 3) the switching pressure will be lower (up to 10Pa [0.04in w.c.]).

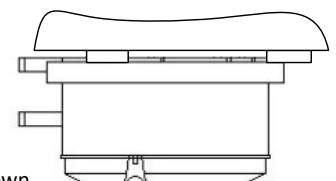
Position 1
Vertical down



Position 2
Horizontal up



Position 3
Horizontal down



Installation positions

Secure DAP body with the 3 supplied screws (#4). Do not over-tight the screws.

Pitot tubes installation & air connection

Pitot tube(s) should be installed so it is inserted into the ventilation duct. In case there is insulation lining inside air duct surface, make sure that the pitot tube is extending out of this inner surface and that it is free from dust or debris that might block the air and/or damage DAP switching membrane.

For Air proof switch function:

Installation of one (1) pitot tube only is required.

For positive pressure air duct connect pitot tube with the supplied hose to port P1 of DAP. P2 port will no be connected and remains open to atmosphere)

For negative pressure air duct, connect pitot tube with the supplied hose to port P2 of DAP. P1 port will not be connected and remains open to atmosphere.

For Differential pressure switch function:

Connect the two pitot tubes supplied on each side of the equipment (i.e. filters) you intend to control in the air duct. The pitot tube with lower pressure should be connected to P2 and the one with higher pressure to P1 port of DAP.

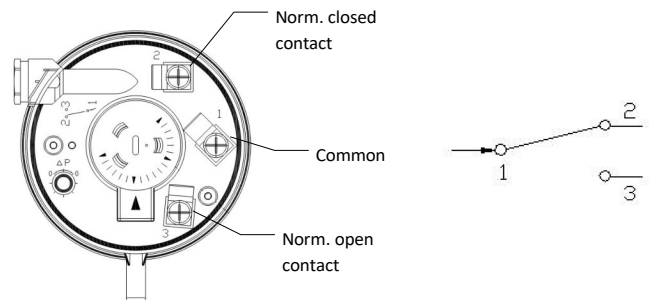
Electrical connection

Caution: Risk of electric shock. Disconnect power supply before to proceed to electrical connection

Electrical Contact rating: SPDT, 2A/250VAC, 1A/30VDC

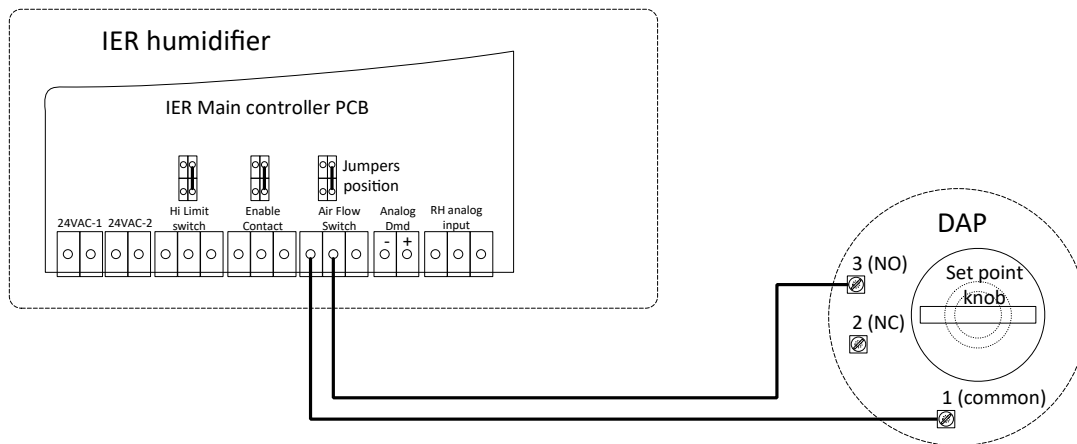
Connect 2 wires between terminals 1 & 2 for normally closed contact or between 1 & 3 for normally open contact.

Do not set below minimum range value



Electrical connection

DAP connection to IER humidifier as Air proving switch



Electrical connection to IER humidifier

Operation test

Caution: Risk of malfunction. Do not blow compressed air or human air inside DAP pressure port.

Do not set the knob below minimum range value

DAP operation should be tested as per following steps:

1. Adjust DAP knob to a pressure set point lower than the expected current air pressure (if know) or to the minimum range value. Then slowly turn the knob to increase DAP set point until contact is made, you should hear the contact clicking ON or OFF.
2. Ensure that electrical connection is enabled (or disabled) as expected.