

SPD910 Differential Air Pressure Switch



Features

- Easy to install
- User friendly snap cover
- Case geometry allows easy cable lead-in
- Cable strain relief integrated in PG11 (DIN 40430)
- High adjustment accuracy through individual laser etched scale
- Long-term stability of switching points through trapezoidal bead diaphragm
- Multi-layer gold plated contact

Product Description

This series of four SPD910 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 2 metre (6.56 feet) length clear tubing.

Available Products

Part Number	Model Number	Description	Pressure Range
004701060	SPD910-300Pa	Air Differential Pressure Switch	20 ... 300 Pa (0.08 ... 0.12 in. W.C)
004701070	SPD910-500Pa	Air Differential Pressure Switch	50 ... 500 Pa (0.2 ... 2.0 in. W.C)
004701080	SPD910-1000Pa	Air Differential Pressure Switch	100 ... 1000 Pa (0.4 ... 4.0 in. W.C)
004701090	SPD910-2000Pa	Air Differential Pressure Switch	500 ... 2000 Pa (2.0 ... 8.0 in. W.C)

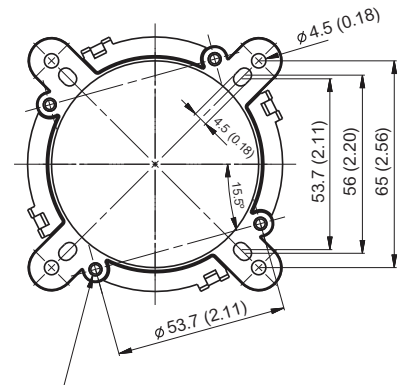
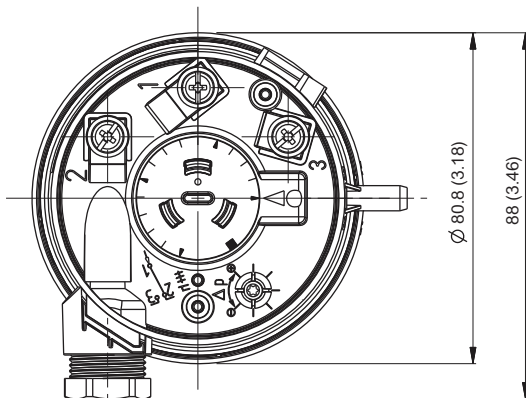
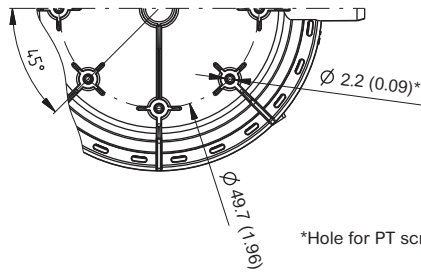
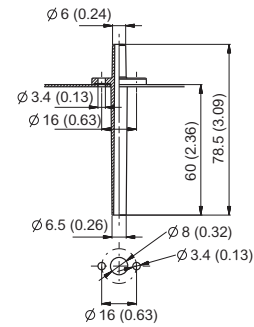
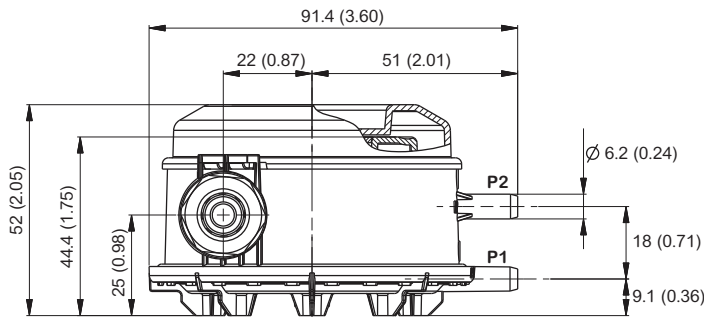
Specifications

Medium	Air and neutral gases	
Pressure range	See Available Products table	
Set-point scale	Pa	
Tolerable overload on one side	5000 Pa at -30 ... +85 °C 20 in. W.C at -22 ... +185 °F	
Repeatability	SPD910-300Pa	±2.5 Pa (0.01 in. W.C)
	SPD910-500Pa	±5 Pa (0.02 in. W.C)
	SPD910-1000Pa	±5 Pa (0.02 in. W.C)
	SPD910-2000Pa	±5 Pa (0.02 in. W.C)
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	-30 ... +85 °C (-22 ... +185 °F)
	Storage	-40 ... +85 °C (-40 ... +185 °F)
Service life	Mechanical > 10 ⁶ 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	IP 00
	With cover	IP 54
Pressure connections	Pipe Ø 6.2 mm	
Tests/admissions	Electromagnetic compatibility: CE conformity according to EN 60730-2-6: 2008 ¹ EU conformity: 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	

1. The CE mark indicates RoHS2 compliance. Please refer to the CE Declaration of Conformity for additional details.

Dimensions mm (in.)



Functions

The pressure switch has two separate pressure chambers, each with its own connection. The change-over switch operates according to the user defined set-point and type of monitoring application required. Normally closed, the switch contact is made across terminals 1 and 2, whilst normally open the switch contact is made across terminals 1 and 3.

Vacuum Monitoring

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

High Pressure Monitoring

Connect the pressure switch via P1. Do not Connect P2. Leave P2 open. Make sure that dirt can not get into P2.

Filter Monitoring

Connect P1 before the filter and P2 after it.

Fan Monitoring

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

