

Differential pressure switch

With UL approval

Model A2G-42

WIKA data sheet PV 27.43



Approvals, see page 4

Applications

- Monitoring of air filters and fans, air dampers and industrial air cooling circuits
- Protection of heating coils from overheating

Special features

- UL and CSA approval
- Easy to install and assemble
- High accuracy
- Robust case and functional design: Reversible cable gland for flexible mounting (3 x 120°)
- Delivery incl. connection accessories



Differential pressure switch, model A2G-42

Description

The model A2G-42 differential pressure switch is used for monitoring the differential pressure, overpressure and vacuum of air and other non-flammable and non-aggressive gases. Possible application areas are the control of air flows and the monitoring of filter contamination in HVAC/R systems as well as the monitoring of industrial air circuits.

The setting of the switch point is made via an internal precision scale.

Specifications

The switching pressure can be adjusted using a scaled adjustment knob. Deviation $\leq \pm 15\%$, min. ± 10 Pa.

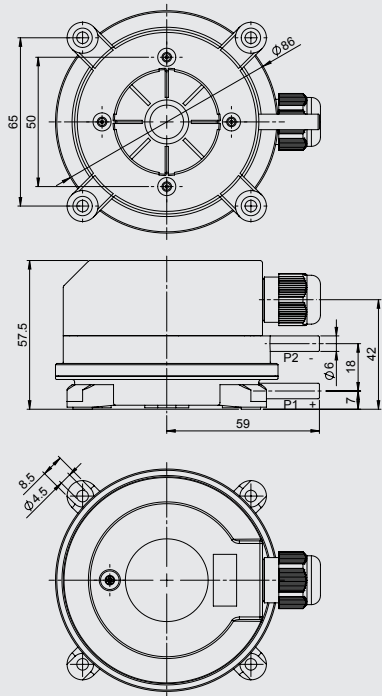
Switching pressure specifications apply to vertical installation which is also the recommended position with pressure-pipe connections pointing downwards. If the switches are installed horizontally with the electrical connections uppermost, the switching values are approx. 20 Pa [0.08 inWC] higher.

Differential pressure switch, model A2G-42			
Operating pressure range	Pressure range	Switch differential ¹⁾	Accuracy
	20 ... 200 Pa [0.08 ... 0.8 inWC]	10 Pa [0.04 inWC]	±5 %, min. ±5 Pa [0.02 inWC]
	20 ... 300 Pa [0.08 ... 1.2 inWC]	10 Pa [0.04 inWC]	±5 %, min. ±5 Pa [0.02 inWC]
	30 ... 400 Pa [0.12 ... 1.6 inWC]	15 Pa [0.06 inWC]	±5 %, min. ±5 Pa [0.02 inWC]
	50 ... 500 Pa [0.2 ... 2.0 inWC]	20 Pa [0.08 inWC]	±2.5 %, min. ±5 Pa [0.02 inWC]
	100 ... 1,000 Pa [0.4 ... 4.0 inWC]	50 Pa [0.2 inWC]	±2.5 %, min. ±5 Pa [0.02 inWC]
	200 ... 1,000 Pa [0.8 ... 4.0 inWC]	100 Pa [0.4 inWC]	±1 %, min. ±5 Pa [0.02 inWC]
	500 ... 2,500 Pa [2.0 ... 10.0 inWC]	150 Pa [0.6 inWC]	±1 %
	1,000 ... 4,000 Pa [4.0 ... 16.0 inWC]	250 Pa [1.0 inWC]	±1 %
	1,000 ... 5,000 Pa [4.0 ... 20.0 inWC]	250 Pa [1.0 inWC]	±1 %
Process connection	2 plastic pipe connection pieces (P1 and P2), external diameter 6.0 mm [0.23 in]: P1 for connection to higher pressure (marked +) P2 for connection to lower pressure (marked –)		
Maximum operating pressure	10 kPa for all pressure ranges		
Electrical connection	Up to max. 1.0 A (0.4) / AC 250 V, 50 ... 60 Hz with tab terminals 6.3 x 0.8 mm [0.24 x 0.03 in] and screw terminals separately enclosed Gold-plated for low voltages with tab terminals 6.3 x 0.8 mm [0.24 x 0.03 in] and screw terminals separately enclosed		
Switching power			
Standard	Max. 1.0 A (0.4 A) / AC 250 V / 50-60 Hz		
Low-voltage	Max. 0.1 A / DC 24 V		
Switching cycles	1,000,000		
Standard accessories	2 duct connectors 2 m PVC hose, Ø 6 mm [Ø 0.24 in] 4 self-tapping screws Ø 3 x 10 mm [0.39 in]		
Medium	Air, non-combustible and non-aggressive gases		
Medium temperature range	-20 ... +60 °C [-4 ... +140 °F]		
Ambient temperature range	-20 ... +60 °C [-4 ... +140 °F]		
Storage temperature range	-40 ... +85 °C [-40 ... +185 °F]		
Ingress protection	IP54 with cable gland M20x1.5 IP54 with cable conduit NPT1/2 IP54 with cap nut conduit AF20		
Case			
Diaphragm	Silicone, free of gas emissions		
	Other materials on request.		
Housing	Plastic		
Fitting method	Mounted directly Bracket 4201/4202/4281/4282		
Adjuement knob	Scale in Pascal and inWC Scale in mbar Scale in Pascal		
Weight	150 g [0.33 lb]		

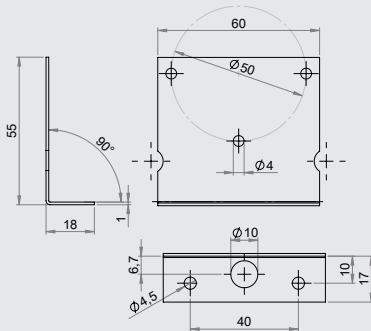
1) Typically at beginning of setting range

Dimensions in mm [in]

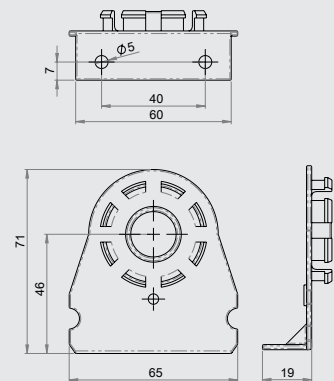
A2G-42



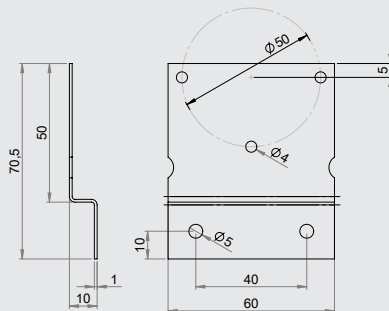
Mounting bracket 4201



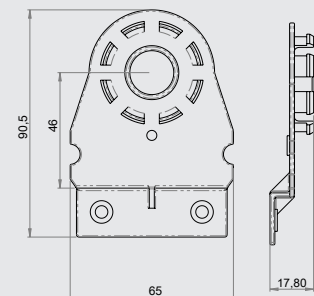
Mounting bracket 4281



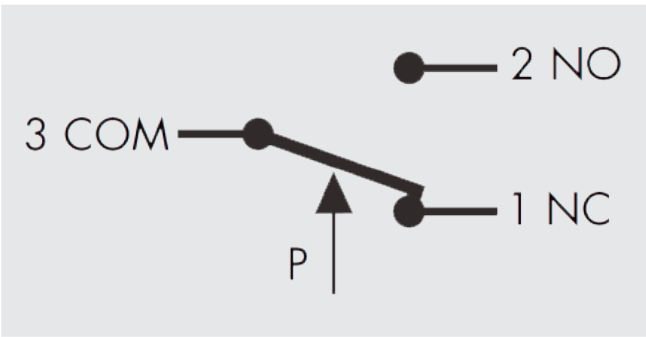
Mounting bracket 4202



Mounting bracket 4282



Electrical connection



- 1 Break contact
- 2 Operating contact
- 3 Current supply line

Approvals

Logo	Description	Region
	EU declaration of conformity	European Union
	Low Voltage Directive	
	REACH and RoHS directive	
	UL 508 and CSA C22.2 No.14 Industrial control equipment	USA and Canada

→ For approvals and certificates, see website

Scope of delivery

- Differential pressure switch incl. mounting screws
- 2 duct connectors
- 2 m [3.28 ft] PVC hose

Ordering information

Model / Pressure range / Switching contacts / Accessories

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