

Differential pressure switch

For monitoring overpressure, vacuum and differential pressure of air or other non-combustible, non-aggressive gases for both HVAC and energy management applications. With setpoint adjustment and automatic reset.


Type Overview

Type	Measuring range pressure [Pa]	Repeating accuracy	Switching differential (pressure)	Burst pressure
01APS-10R	20...300	±5%, min. ±5 Pa	10 Pa	10 kPa
01APS-10U	50...500	±2.5%, min. ±5 Pa	20 Pa	10 kPa
01APS-101	200...1000	±1%, min. ±5 Pa	100 Pa	10 kPa
01APS-104	500...2500	±1%, min. ±5 Pa	150 Pa	10 kPa
01APS-105	1000...5000	±1%, min. ±5 Pa	250 Pa	10 kPa

Technical data

Electrical data	Electrical connection	Terminals for wire 0.5...1.5 mm ²
	Cable entry	Cable gland with strain relief ø5...10 mm
Functional data	Application	Air
	Output signal pressure switch note	Contact current max. 1.0 A (0.4) / AC 250 V
	Service life	Min. 1'000'000 switching operations
Measuring data	Measured values	Differential pressure
	Measuring fluid	Air, non-combustible and non-aggressive gases
	Long-term stability	≤±15% deviation over 250'000 operations/ cycles acc. EN1854
Materials	Housing	Bottom Part: PA 6.6 Top Cover: PS
	Safety data	Degree of protection IEC/EN
Degree of protection NEMA/UL		NEMA 13
Low voltage directive		CE according to 2014/35/EU
EU Conformity		CE Marking
Certification IEC/EN		IEC/EN 60730-1
Quality Standard		ISO 9001
Ambient humidity		Max. 95% RH, non-condensing
Ambient temperature		-20...85°C [-5...185°F]
Fluid temperature		-20...85°C [-5...185°F]

Safety notes



This device has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application. Unauthorised modifications are prohibited. The product must not be used in relation with any equipment that in case of a failure may threaten humans, animals or assets.

Ensure all power is disconnected before installing. Do not connect to live/operating equipment.

Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.

The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Installation notes

Recommended installation positions The specifications for the switching pressure refer to a vertical installation position, which is also recommended with downward pressure connections. For horizontal installation position with upwards directed AMP connecting lugs, the switching point is approx. 20 Pa higher.

It is not permitted to mount the pressure switch upside down!

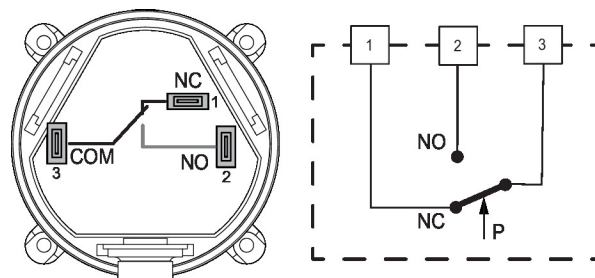
Parts included

- PVC tube 2 m
- 2 x Pitot tubes (plastic)
- Screws

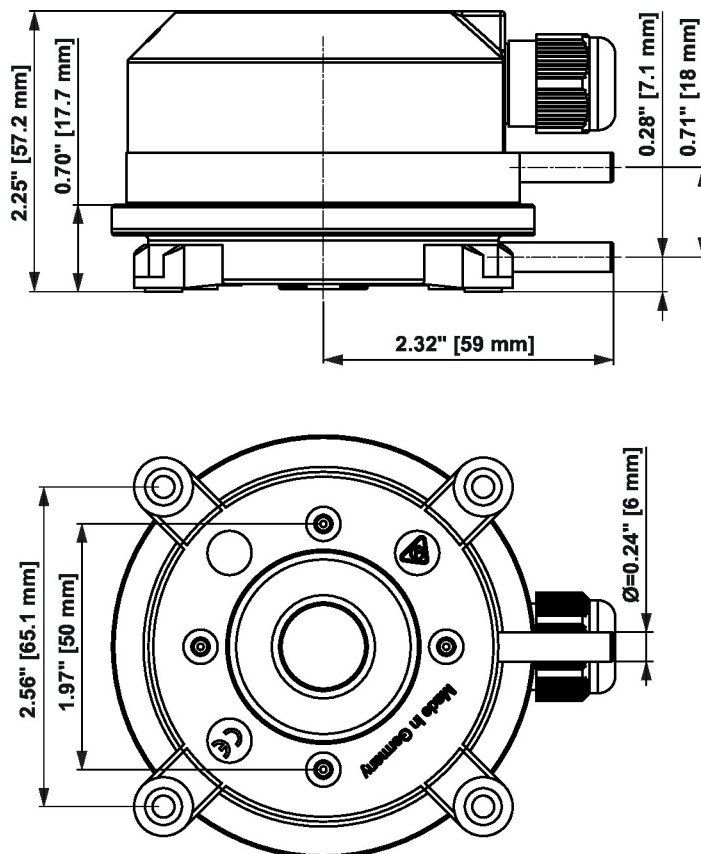
Accessories

Optional accessories	Description	Type
	Mounting bracket L form for 01APS-.., Metal	A-22AP-A06
	Mounting bracket S form for 01APS-.., Metal	A-22AP-A07
	Cable entry, M20x1.5, for 01APS-.., Multipack 10 pcs.	A-22AP-A11.1
	Duct connector kit for 01APS-.., PVC tube 2 m, 2 connection elements (Plastic), Multipack 50 pcs.	A-22AP-A05.1
	Pitot tube, Plastic, L 80 mm, Tube connection 6 mm for 01APS-.., Multipack 90 pcs.	A-22AP-A09.1

Wiring diagram



Dimensions



Type	Weight
01APS-10R	0.12 kg
01APS-10U	0.12 kg
01APS-101	0.12 kg
01APS-104	0.12 kg
01APS-105	0.12 kg

Further documentation

- Installation instructions