

Description



Air differential pressure switch serie PA for monitoring overpressure, vacuum and differential pressure of air or other non-combustible, non-aggressive gases. The switching pressure can be adjusted without a manometer at the adjustment knob with the guide value scale. Various versions are available for this with overlapping adjustment ranges of between 20 and 5000 Pa (0,2 and 50 mbar). Possible fields of application are monitoring air filters and ventilators, industrial cooling-air circuits, flows in ventilation ducts, overheating protection for fan heaters, controlling air and fire-protection flaps, frost protection for heat exchangers.

Technical specifications

Medium	Air, non-combustible and non-aggressive gases
Measurement range	20...300 Pa (0,2...3 mbar), 30...400 Pa (0,3...4 mbar), 50...500 Pa (0,5...5 mbar), 200...1000 Pa (2...10 mbar), 500...2500 Pa (5...25 mbar), 1000...5000 Pa (10...50 mbar), 100...1000 Pa (1...10 mbar)
Accuracy	±15%
Mechanical working life	Over 10 ⁶ switching operations
Electrical rating	Max 1.0 (0.4) A / 250 V AC (low voltage version max. 0,1 A, 24 V DC on request)
Electrical connection	AMP flat plug 6.3 x 0.8 mm, acc. DIN 46244 or push-on screw terminals
Max. operating pressure	10 kPa (100 mbar) for all pressure ranges
Housing material	Switch body made of PA 6.6, cover made of PS
Cable conduit	M16x1,5 connection made of polyamide
Diaphragm material	Silicone, tempered at 200°C, free of gas emissions
Housing	approx. Ø 85 x 58 mm
Weight	150 g
Protection type	IP54 (IP65 in version G)
Working humidity	0...95% RH, non-condensing
Working temperature	-20...+85°C
Storage temperature	-40...+85°C
Accessories (optionally)	Connection set (PVC-hose 2 m Ø 6 with 2 ABS nipples and 4 screws) and snap-on plastic brackets
Installation	Screw fastening
Installation position	Preferred vertical
Standards	CE-conformity, RoHS, EN1854 class A. Models available on request with UL508, CSA, ATEX approvals.
Optional	suffix M for multiply packing (45 pcs/cardboard) suffix B for models with range in mbar suffix UL for UL approval (not available for IP65 models) suffix G for IP65 protection suffix X for ATEX directive



Models	Measuring range	Tolerance	Differential
PA1	20...300 Pa (0,2...3 mbar)	±15%	10 Pa (0,1 mbar)
PA2	30...400 Pa (0,3...4 mbar)	±15%	15 Pa (0,15 mbar)
PA3	50...500 Pa (0,5...5 mbar)	±15%	20 Pa (0,2 mbar)
PA4	200...1000 Pa (2...10 mbar)	±15%	100 Pa (1 mbar)
PA5	500...2500 Pa (5...25 mbar)	±15%	150 Pa (1,5 mbar)
PA6	1000...5000 Pa (10...50 mbar)	±15%	250 Pa (2,5mbar)
PA7	100...1000 Pa (1...10 mbar)	±15%	50 Pa (0,5 mbar)
Accessories:	APA1 Snap-on plastic bracket, L-shaped APA2 Snap-on plastic bracket, S-shaped APA3 PVC-hose 2 m Ø 6 with 2 ABS nipples and 4 screws		

Order matrix

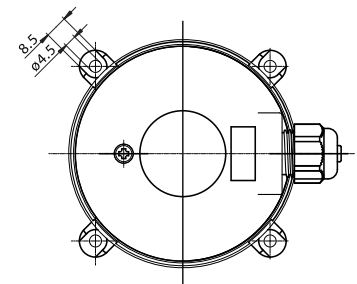
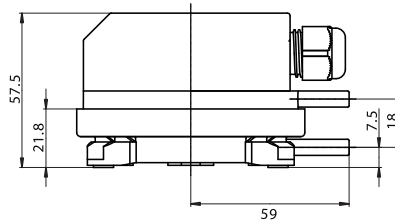
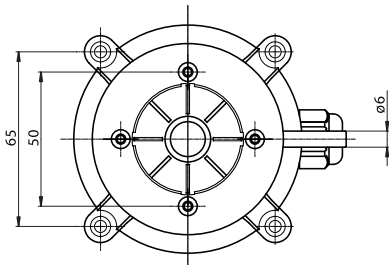
Configurable pressure ranges	20...300 Pa	(0,2...3 mbar)	PA	1					
	30...400 Pa	(0,3...4 mbar)		2					
	50...500 Pa	(0,5...5,0 mbar)		3					
	200...1000 Pa	(2...10 mbar)		4					
	500...2,5 kPa	(5...25 mbar)		5					
	1...5 kPa	(10...50 mbar)		6					
	0,1... 1 kPa	(1...10 mbar)		7					
Unit of measure	Pascal								
	Millibar			B					
Protection	IP54								
	IP65				G				
Approval	Standard								
	UL					UL			
Directive	ATEX (II 2G Ex ia IIB T4 Gb / 2D Ex ia IIIB T135°C Db)*							X	
Packaging	Unit								
	45 pcs packaging							M	

* Electrical rating: 2G: max 60 mA / 30 V DC or 100 mA 24 V DC
2D: max 60 mA / 30 V DC 0,6 W

Electrical wirings



Dimensions (mm)



APA1 Snap-on plastic bracket, L-shaped

APA2 Snap-on plastic bracket, S-shaped

ABS nipple (part of APA3)

