

Relative and differential pressure switch type 604

Pressure range
0.2 ... 3 – 50 mbar



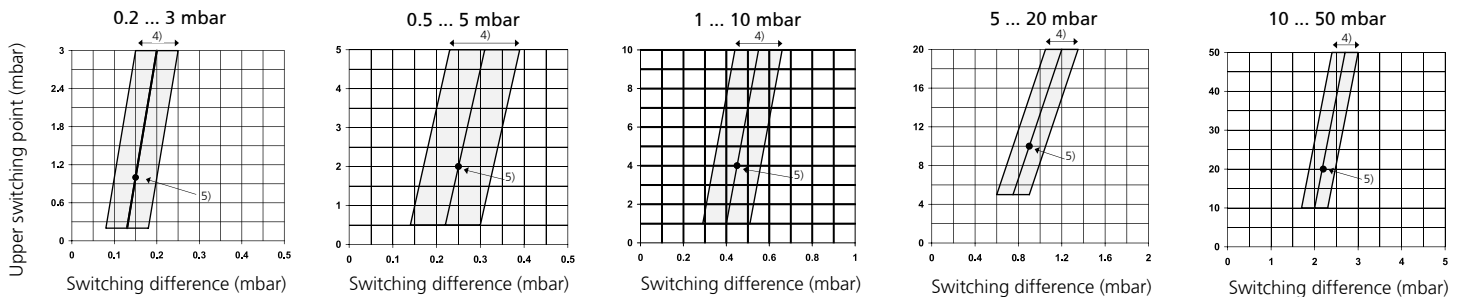
The type 604 pressure switch is used as a Δp flow switch in ventilation ducts for the control of filters and fans, and in primary and secondary control systems for the control of air dampers. The 604 pressure monitoring switches are also ideally suited to protect heating coils from overheating and for monitoring industrial air cooling circuits.

- Easy to install
- Combi-bracket for vertical or horizontal installation
- User friendly snap cover
- Case geometry allows easy cable lead-in
- Cable strain relief integrated in PG11
- High adjustment accuracy through individual laser etched scale
- Long-term stability of switching points through trapezoidal bead diaphragm
- Multi-layer gold plated contact

Technical overview

Pressure range			
Relative and differential		0.2 ... 3 – 50 mbar	
Operating conditions			
Medium		Air and neutral gases	
Temperature	Medium / ambient	-30 ... +85 °C	
	Storage	-40 ... +85 °C	
Tolerable overload on one side	-30 ... +75 °C	75 mbar	
	-30 ... +85 °C	50 mbar	
Materials in contact with the medium			
Sensor		Silicon LSR ¹⁾	
Case		PC 10% GF	
Cover		PC	
Electrical overview			
Switching load ²⁾	Resistive load	5 A at 250 VAC	
		4 A at 30 VDC	
	Inductive ³⁾	0.8 A at 250 VAC	
		0.7 A at 30 VDC	
Contact system	Changeover switch		
Service life	mechanical		
		> 10 ⁶ switching cycles	
Protection standard			
Without 3		IP 00	
With cover		IP 54 / IP 65	
Repeatability			
Setting range	0.2 ... 3 mbar	between	± 0.025 mbar
	0.5 ... 5 mbar		± 0.05 mbar
	1 ... 10 mbar		± 0.05 mbar
	5 ... 20 mbar		± 0.05 mbar
	10 ... 50 mbar		± 0.15 mbar
Electrical connection			
Screw terminals			
AMP connectors	6.3 mm		
	4.8 mm		
Pressure connections			
Pipe		Ø 6.2 mm	
Inside thread		G 1/8	
Installation arrangement			
Recommendation (Factory set)		Vertical, pressure connections facing downwards	
		Horizontal, cover facing downwards – Switching points approx. 11 Pa lower than on scale	
		Horizontal, cover facing upwards – Switching points approx. 11 Pa higher than on scale	
Tests / Admissions			
UL		MFHX2/8 or XAAK2/8	
DVGW		acc. to DIN EN 1854	
Low voltage directive		2014/35/EU	
Gas appliance directive		2009/142/EC	
Weight			
Without bracket		~ 93 g	
With combi-bracket type C		~ 143 g	
Packaging (Please state on order)			
Single packaging in cardboard			
Multiple packaging in cardboard		20 / 30 / 40 / 50 / 60 / 100 / 320 pcs	

Setting ranges



¹⁾ at 200 °C tempered, free of gas emissions
⁴⁾ Tolerance switching difference

²⁾ Multi-layer contact (suitable for DDC)
⁵⁾ Factory-setting

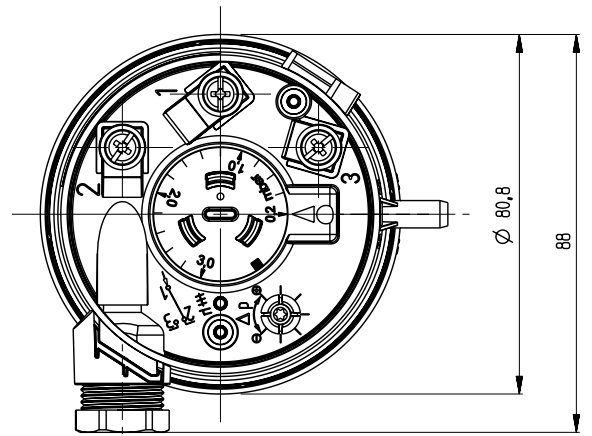
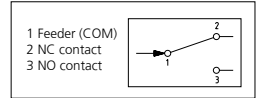
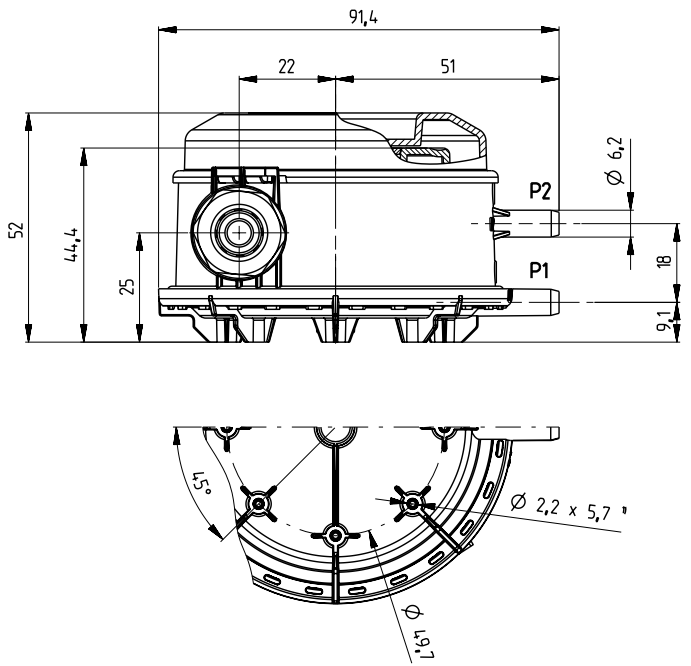
³⁾ 6-fold starting current $\cos \varphi 0.6$

Compact A/C set (standard)	Setting range (mbar)	Connection set	Order number
Consisting of switch with hose connection Ø 6.2 mm, scale in mbar, screw terminals, multi-layer contact up to 5 A (suitable for DDC), combi-bracket type C and hose connection set, single packaging.	0.2 ... 3 mbar	Fig. 1 (Metal)	604.900001
	0.5 ... 5 mbar	Fig. 1 (Metal)	604.910001
	1 ... 10 mbar	Fig. 1 (Metal)	604.920001
	0.2 ... 3 mbar	Fig. 2 (Plastic)	604.900002
	0.5 ... 5 mbar	Fig. 2 (Plastic)	604.910002
	1 ... 10 mbar	Fig. 2 (Plastic)	604.920002
	10 ... 50 mbar	Fig. 2 (Plastic)	604.950002

Order code selection table				1	2	3	4	5	6	7	8
				604.	X	X	X	X	X	X	X
Version	Standard version			9							
	UL version			S							
Setting range	0.2 ... 3 mbar	20 ... 300 Pa	0.08 ... 1.2 inH ₂ O	0.08 ... 1.2 inWC	0						
	0.5 ... 5 mbar	50 ... 500 Pa	0.2 ... 2 inH ₂ O	0.2 ... 2 inWC	1						
	1 ... 10 mbar	100 ... 1000 Pa	0.4 ... 4 inH ₂ O	0.4 ... 4 inWC	2						
	5 ... 20 mbar	500 ... 2000 Pa	2 ... 8 inH ₂ O	2 ... 8 inWC	4						
	10 ... 50 mbar	1000 ... 5000 Pa	4 ... 20 inH ₂ O	4 ... 20 inWC	5						
Scale ¹⁾	Scale in mbar				0						
	Scale in Pa				1						
	Scale in inH ₂ O				2						
	Scale in inWC				6						
	Without Scale	(rating plate in mbar)			3						
	Without Scale	(rating plate in Pa)			4						
	Without Scale	(rating plate in inH ₂ O)			5						
Pressure connections	Pipe Ø 6.2 mm	without pressure tip orifice						0			
	Pipe Ø 6.2 mm	with pressure tip orifice on P2						1			
	Inside thread G ¼	without pressure tip orifice						2			
	Inside thread G ¼	with pressure tip orifice on P2						3			
Electronical connection	Screw terminals							0			
	AMP connector 6.3 mm							1			
	AMP connector 4.8 mm							2			
Cover / Bracket	With cover	combi bracket type C	IP 54							0	
	With cover	bracket type A	IP 54							1	
	With cover	bracket type B	IP 54							2	
	With cover	without bracket	IP 54							3	
	Without cover	combi bracket type C								5	
	Without cover	bracket type A								6	
	Without cover	bracket type B								7	
	Without cover	without bracket								8	
	With cover	combi bracket type C	IP 65	9						A	
	With cover	bracket type A	IP 65	9						B	
	With cover	bracket type B	IP 65	9						C	
	With cover	without bracket	IP 65	9						D	
Connection kit	Without									0	
	With connection set (metal), 90° angled		incl. tube 2 m long (Fig. 1)							1	
	With connection set (plastic), straight		incl. tube 2 m long (Fig. 2)							2	
Switching points (optional)	Two factory set switching points		(please specify on order)								W
	One factory set switching point high		(please specify on order)								R
	One factory set switching point low		(please specify on order)								U

Accessories	Order number	
Connection kit for vent duct (metal), 90° angled	including tube 2 m long (Fig. 1)	104312
Connection kit for vent duct (plastic), straight	including tube 2 m long (Fig. 2)	100064
Bracket type A		100295
Bracket type B		100098
Combi-bracket type C		100106
Attachment ring		110005
Attachment ring close		110006
Special screws for fastening bracket to switch	(2 screws per switch required)	102976
Fastening clip for bracket A, B, C or direct mounting	for wall thickness 0.8 ... 1.1 mm	100294
	for wall thickness 1.8 ... 2.1 mm	100293
Calibration certificate (at factory set switching points)		104551

¹⁾ For customer specific calibration without scale and with fixed scale

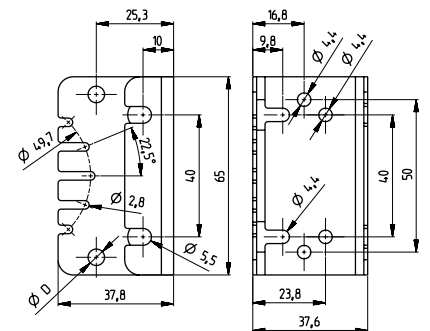
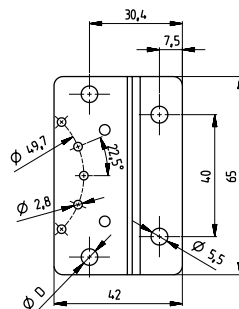
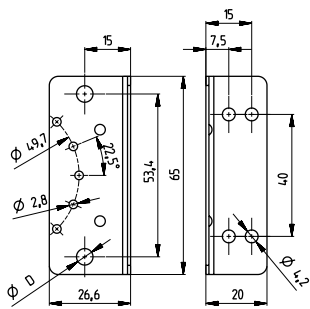
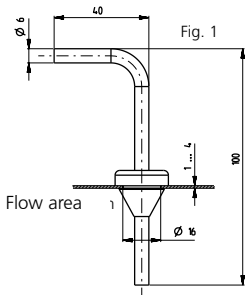


¹⁾ Hole for PT screws KA25

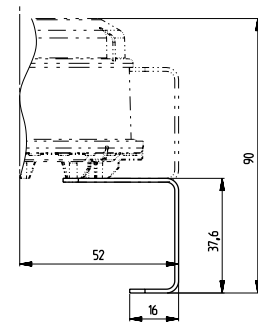
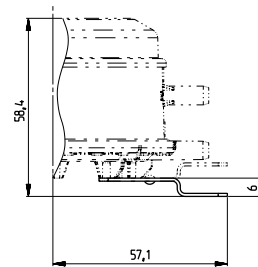
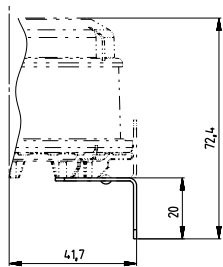
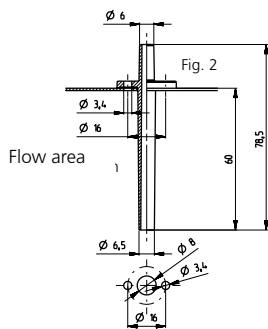
Bracket type A

Bracket type B

Combi-bracket type C



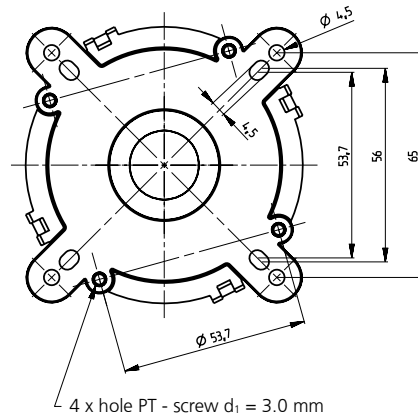
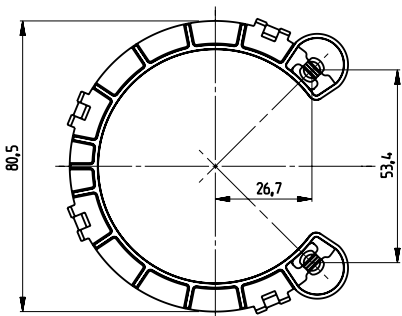
$\varnothing D = 5.1 + 0.1$ Holes for fastening clip



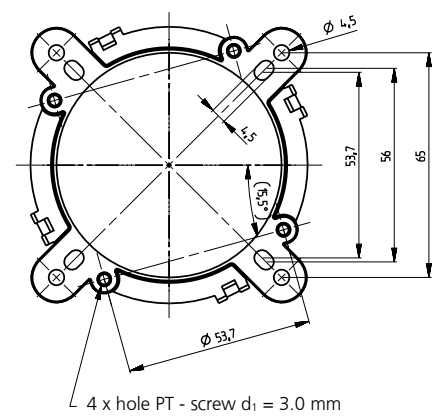
Fastening clip (mounted)

Mounting adaptor ring close (mounted)

Mounting adaptor ring (mounted)



4 x hole PT - screw $d_1 = 3.0$ mm



4 x hole PT - screw $d_1 = 3.0$ mm

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