



Mechanical pressure switch

Huba Control

Relative and differential pressure switch

Type 604

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.



Pressure range
0.2 ... 3 – 50 mbar

- + 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
Contact system	Changeover switch	0.8 A at 250 VAC
		0.7 A at 30 VDC
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	2016/426/EU

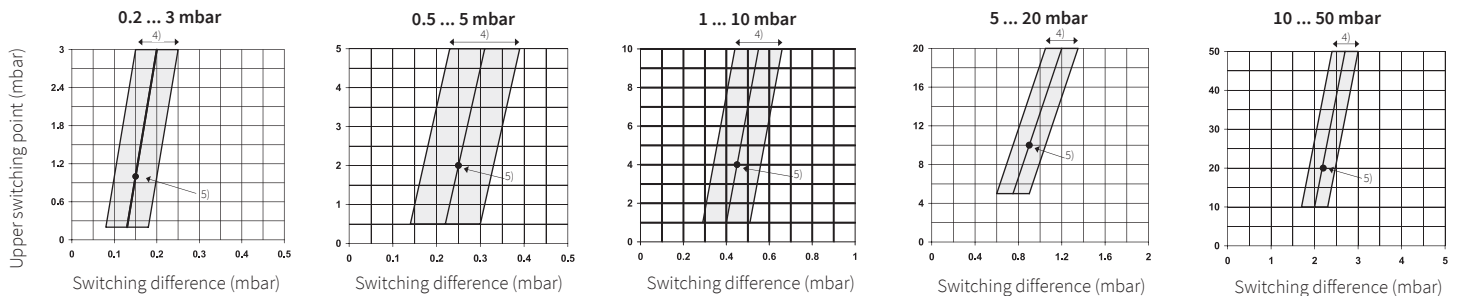
Weight

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

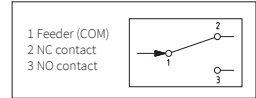
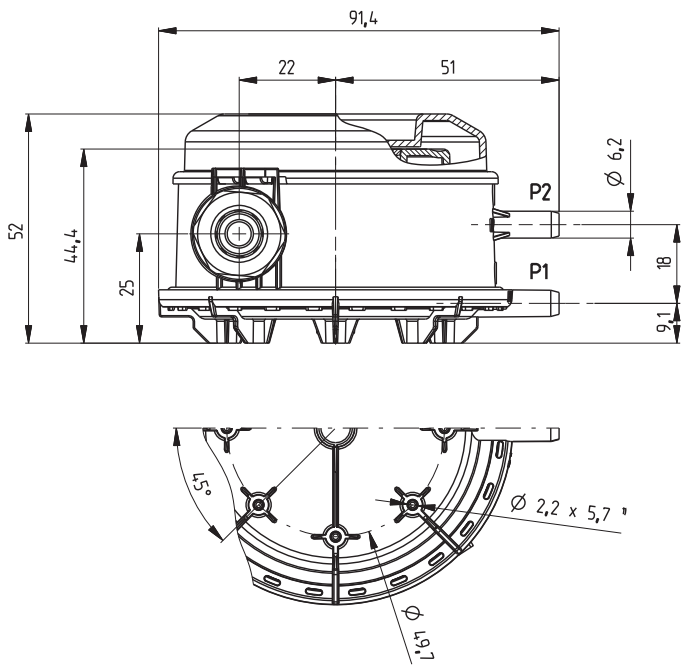
³⁾ 6-fold starting current cos φ 0.6

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)	604.9000001
	0.5 ... 5 mbar	Fig. 1 (Metal)	604.9100001
	1 ... 10 mbar	Fig. 1 (Metal)	604.9200001
	0.2 ... 3 mbar	Fig. 2 (Plastic)	604.9000002
	0.5 ... 5 mbar	Fig. 2 (Plastic)	604.9100002
	1 ... 10 mbar	Fig. 2 (Plastic)	604.9200002
	10 ... 50 mbar	Fig. 2 (Plastic)	604.9500002

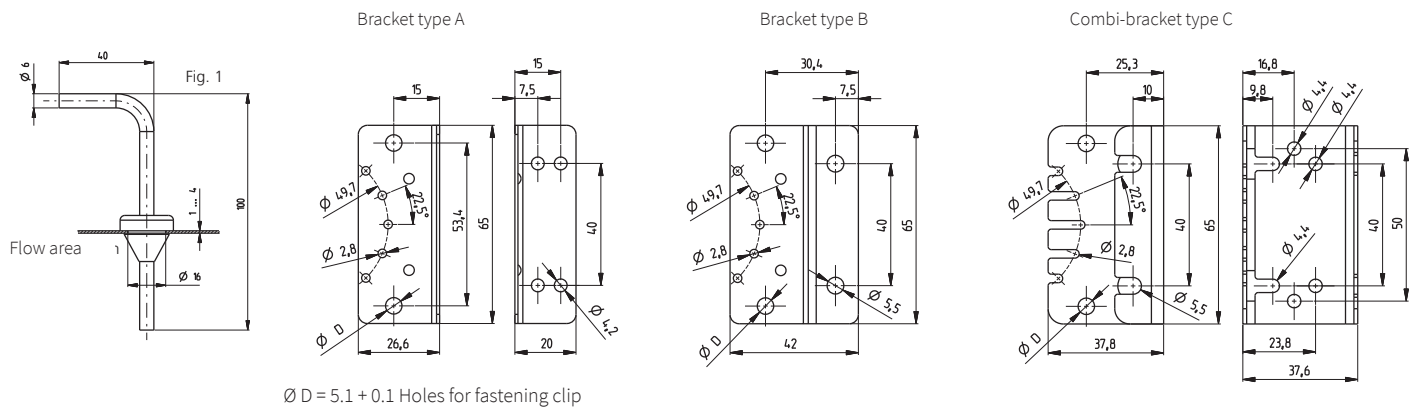
Order code selection table		1	2	3	4	5	6	7	8	
		604.	X	X	X	X	X	X	X	
Version	Standard version	9								
	UL version	S								
Setting range	0.2 ... 3 mbar	20 ... 300 Pa	0.08 ... 1.2 inH ₂ O	0.08 ... 1.2 inWC	0					
	0.5 ... 5 mbar	50 ... 500 Pa	0.2 ... 2 inH ₂ O	0.2 ... 2 inWC	1					
	1 ... 10 mbar	100 ... 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	Without Scale (rating plate in inWC)				7					
	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 1/8 without pressure tip orifice					2				
Electronical connection	Inside thread G 1/8 with pressure tip orifice on P2					3				
	Screw terminals						0			
	AMP connector 6.3 mm						1			
Cover / Bracket	AMP connector 4.8 mm						2			
	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	
Connection kit	With cover bracket type B IP 65				9				C	
	With cover without bracket IP 65				9				D	
	Without								0	
Switching points (optional)	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	
	Two factory set switching points (please specify on order)									
One factory set switching point high (please specify on order)									W	
One factory set switching point low (please specify on order)									R	
										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
Fastening clip for bracket A, B, C or direct mounting for wall thickness 1.8 ... 2.1 mm	100293
Calibration certificate (at factory set switching points)	104551

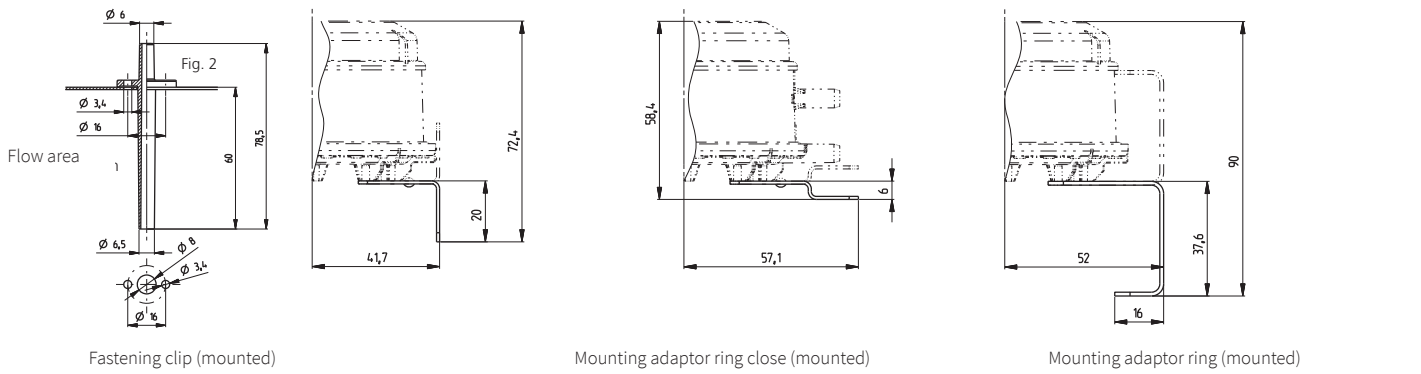
¹⁾ For customer specific calibration without scale and with fixed scale



¹⁾ Hole for PT screws KA25



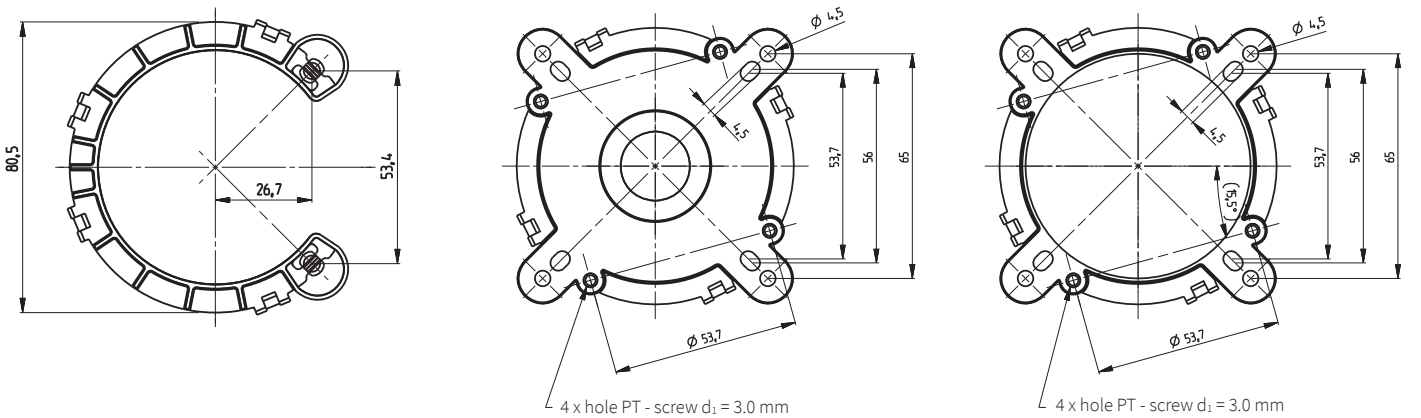
Ø D = 5.1 ± 0.1 Holes for fastening clip



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

Huba Control AG

Headquarters Schweiz
Industriestrasse 17
CH-5436 Würenlos
Telefon +41 56 436 82 00
Fax +41 56 436 82 82
info.ch@hubacontrol.com

Huba Control AG

Niederlassung Deutschland
Schlattgrabenstrasse 24
D-72141 Walddorfhäslach
Telefon +49 7127 2393 00
Fax +49 7127 2393 20
info.de@hubacontrol.com

Huba Control AG

Vestiging Nederland
Hamseweg 20A
NL-3828 AD-Hoogland
Telefoon +31 33 433 03 66
Telefax +31 33 433 03 77
info.nl@hubacontrol.com

Huba Control SA

Succursale France
Rue Lavoisier
Technopôle Forbach-Sud
F-57602 Forbach Cedex
Téléphone +33 3 87 84 73 00
Télécopieur +33 3 87 84 73 01
info.fr@hubacontrol.com

Huba Control AG

Branch Office United Kingdom
Unit 13 Berkshire House, County Park
Business Centre, Shivenham Road
Swindon - Wiltshire SN1 2NR
Phone +44 1993 77 66 67
Fax +44 1993 77 66 71
info.uk@hubacontrol.com

www.hubacontrol.com

