

HUBA

**604 Series Differential Pressure Switch**

Switch Points From 0.05” w.c. to 20” w.c.

**DESCRIPTION**

The 604 differential pressure switch is typically used for system interlock and alarm in ventilation ducts for monitoring of filter and fan pressures. They are also used to protect heating coils from overheating and for monitoring liquid level, laboratory and clean room pressures, fume hood and paint spray booth pressures and other commercial and industrial differential pressure relationships.

They are for use with air and non-corrosive gases.

**FEATURES**

- 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

**MAIN APPLICATIONS**

- Industrial Machinery
- HVAC Systems
- Automotive Industry
- Medical Devices
- Water Treatment
- Aerospace
- Oil and Gas
- Food and Beverage
- Renewable Energy
- Laboratory Equipment



- 1) Mounting Bracket Types A, B, C
- 2) Mounting Clip
- 3) Plastic Duct Mount Static Tips

\*\* Contact sales representative

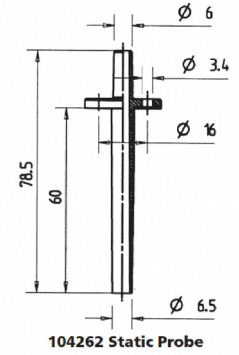
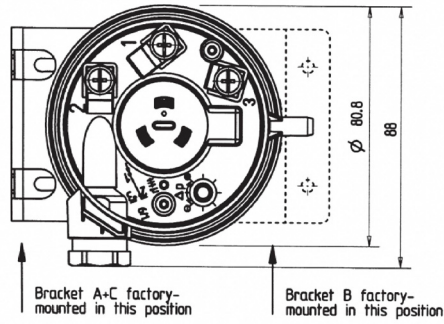
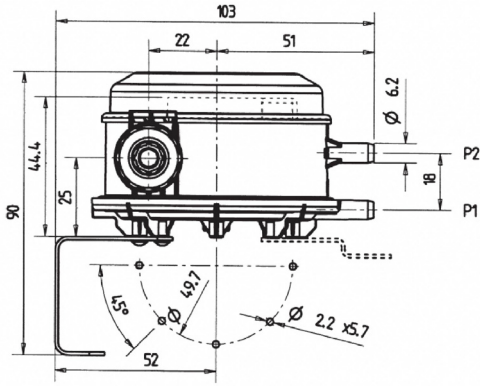


**SPECIFICATIONS**

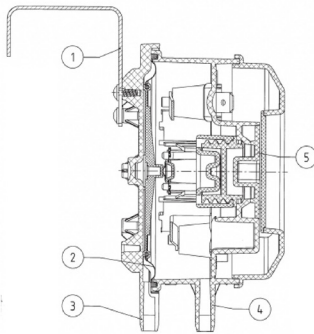
**GENERAL**

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	
Dead Band	Factory set		
Lowest Actuation Pressure	0.08 inches w.c.		
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 <sup>1/8</sup>		
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 regulation	2016/426/EU		
Weight			
Without bracket	~ 93 g		
With combi-bracket type C	~ 143 g		

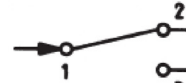
## DIMENSIONS (MM)



## PRODUCT DESCRIPTION



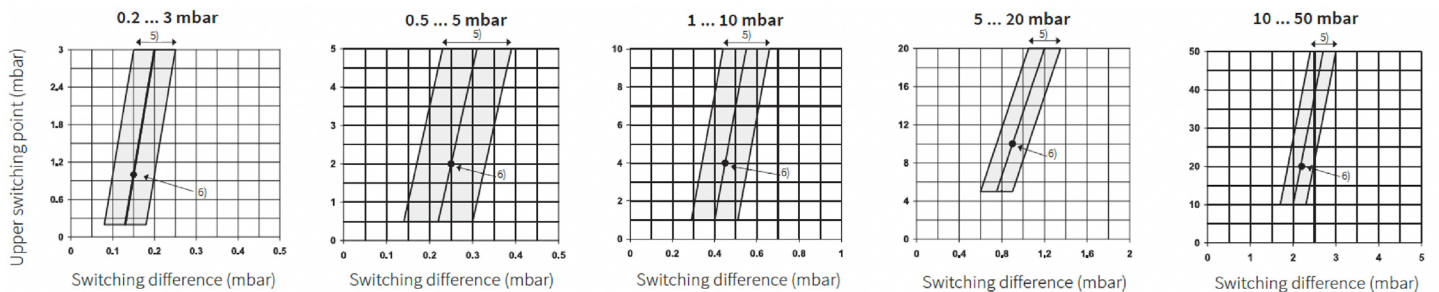
## ELECTRICAL CONNECTIONS



- 1 Feeder
- 2 NC contact
- 3 NO contact

- 1) Mounting Bracket
- 2) Diaphragm
- 3) P1 Connection of Higher Pressure or Lower Vacuum
- 4) P2 Connection of Lower Pressure or Higher Vacuum
- 5) Scale (Switch Point Setting)

## SETTING RANGES



## ORDERING INFORMATION

					1	2	3	4	5	6	7	8
<b>Order code selection table</b>					<b>604.</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Version	Standard version				9							
	UL version				S							
Setting range	0.2 ... 3 mbar	20 ... 300 Pa	0.08 ... 1.2 inH <sub>2</sub> O	0.08 ... 1.2 inWC		0						
	0.5 ... 5 mbar	50 ... 500 Pa	0.2 ... 2 inH <sub>2</sub> O	0.2 ... 2 inWC		1						
	1 ... 10 mbar	100 ... 1000 Pa	0.4 ... 4 inH <sub>2</sub> O	0.4 ... 4 inWC		2						
	5 ... 20 mbar	500 ... 2000 Pa	2 ... 8 inH <sub>2</sub> O	2 ... 8 inWC		4						
	10 ... 50 mbar	1000 ... 5000 Pa	4 ... 20 inH <sub>2</sub> O	4 ... 20 inWC		5						
Scale <sup>1)</sup>	Scale in mbar						0					
	Scale in Pa						1					
	Scale in inH <sub>2</sub> 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 <sub>2</sub> 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 ½	without pressure tip orifice						2				
	Inside thread G ½	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							1		
	With cover	bracket type B	IP 54 2							2		
	With cover	without bracket	IP 54 3							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		
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 (supplied loose)	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
Calibration certificate (at factory set switching points)	104551