

Pressure Switch PH1



- Adjustable switch point
- Adjustable hysteresis
- Change over contact
- Plug DIN 43650-A
- Lateral cable exit

Characteristics

Mechanical pressure controller in which a membrane or piston is pre tensioned by a spring. Two adjustment screws permits the setting of the switch point and the hysteresis.

Technical data

Switch	Mechanical switch	
Connection type	For vacuum switch pressure range -0,85..-0,15 bar gauge	G ¹ / ₈ B; G ¹ / ₄ B
	For diaphragm, piston and press switches Switching range 0,2..2 bar rel. to 30...320 bar gauge	R ¹ / ₄ ; G ¹ / ₄ B; G ¹ / ₈ B; 1/4NPT; 1/8NPT; M10x1
Switching range	-0,85..320 bar	for details see table "Ranges"
Pressure resistance	PS 20 bar/60 bar/ 350 bar	
Tolerance	Switching range -0,85..-0,15 bar gauge	Reference value ±0,05 bar at +20°C
	Switching range 0,2..320 bar gauge	Max. ±2% regarded to final range value at 20°C
Hysteresis	Switching range -0,85..-0,15 bar gauge (vacuum switch)	Reference value 150..350 mbar (adjustable)
	Switching range 0,2..+16 bar gauge (membran, press switch)	Reference value 0,1 bar +5..20 % vom Switching point (adjustable)
	Switching range 10..320 bar gauge (piston switch)	Reference value 5 bar +5..15 % from Switching point (adjustable)

Media temperature Ambient temperature	Seal: NBR Low temperature NBR Viton EPDM FVMQ	-20..+80 °C -40..+80 °C 0..+100 °C -40..+100 °C -40..+100 °C
Media	water, oils, gases	
Wiring	Change over Nr. 0.467	
Switching voltage	Max. 250 VAC	
Switching current	Max. 4 A (2 A inductive)	
Protection class	1 - PE connection	
Ingress protection	IP 65	
Elect. connection	Plug DIN 43650-A/ ISO 4400 with screw clamp in the plug	
Materials medium-contact	Diaphragm type: steel, zinc coated or stainless steel (1.4305) Seal NBR NBR or EPDM or FKM, FVMQ	Piston type: steel, zinc coated or stainless steel (1.4305) Seal NBR NBR or EPDM or FKM Piston PTFE
Non-medium- contact materials	PA 6.6, NBR	
Weight	0,15kg	
Installation location	installation location as desired	

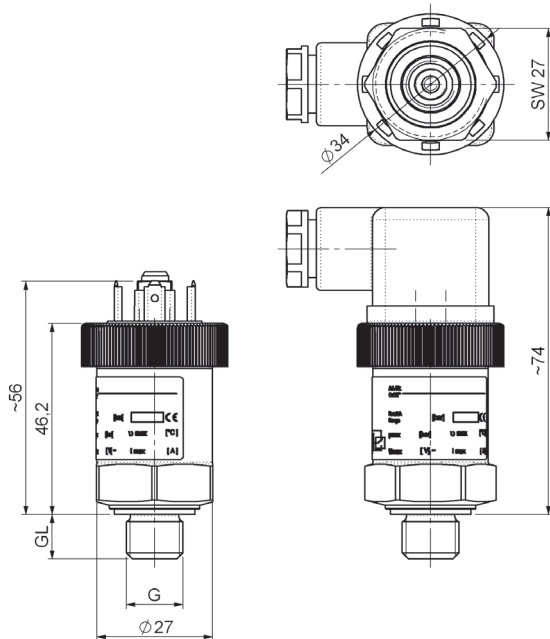
Ranges

Switching Range bar (gauge)	Type	Pressure resistance PS bar	Functional principle
-0,85..-0,15	001	20	Diaphragm
0,2..2	002	60	
0,5..8	008		
1..16	016		
10..30	030	350	Piston
10..80	080		
10..120	120		
10..160	160		
20..200	200		
20..250	250		
30..320	320		

Male thread

Male thread G ¹ / ₈ B; G ¹ / ₄ B Optional: G ¹ / ₂ B Female thread: G ¹ / ₄	ISO228-1
Optional: 7/16-20 UNF BOSS	SAEJ514 E ANSI/ASME B1.1
R ¹ / ₈ ; R ¹ / ₄ ; R ³ / ₈	ISO7
1/8 NPT; 1/4 NPT	ANSI/ASME B1.20.1
M10x1	DIN13-5

Dimensions



Ordering code

PH1 - 1. 2. 3. 4. 5. 6.

1. Switching range	
001	- 0,85..-0,15 bar
002	0,2..2 bar
008	0,5..8 bar
016	1..16 bar
030	10..30 bar
080	10..80 bar
120	10..120 bar
160	10..160 bar
200	20..200 bar
250	20..250 bar
320	30..320 bar
2. Connection material	
K	Stainless steel
S	Steel
3. Connection size	
004A	G 1/8B
008H	R 1/4
008A	G 1/4B
009H	NPT 1/8 no stainless steel
011A	M10x1 no stainless steel
012H	NPT 1/4
4. Rotatable	
0	Fixed
5. Electrical connection	
B	Plug DIN 43650-A
6. Sealing / diaphragm	
N	NBR
T	Low temperature NBR
E	EPDM
V	Viton (only piston design)
F	FVMQ

Handling and operation

Hinweise

- If the medium is dirty, install a filter
- It must be ensured that the values given for voltage, current, and power are not exceeded.
- Check resistance to aggressive media, no DI water.
- Supplied with mating plug.

Torques and thread lengths of the fluid connections:

R 1/4, G 1/4, 1/4NPT	20-25 Nm	12 mm
G 1/8, 1/8NPT, M10x1	15-20 Nm	10 mm

Adjustment

- Loosen the plug and set the desired switching value using a hex wrench (size 2, screw centered). Then adjust the hysteresis using a longitudinal slot screwdriver 2,5x0,4 (screw laterally). Turn to right increases the value. Then attach the plug back onto the device and tighten the screw



Options

- Factory setting of the switch point and hysteresis on falling or rising pressure.