Liquid Pressure Switch PS1

Description

The PS1 is a cost effective pressure switch suitable for monitoring pumps, chillers, valves etc. The unit has an adjustable setpoint with adjustable differential and has a gauge to show the liquid pressure.

Features

- Wide Pressure Range
- Suitable for mains voltages
- Visible Setpoint Scale
- SPDT Switch Output

Technical Specification

Range:	0.5...6 bar
Differential:	0.5...4 bar
Pressure Connection:	¼" BSP male
Contact Rating:	12Amps @ 230Vac
Protection:	IP44
Ambient Temperature:	-50...+70°C
Liquid Temperature:	-50...+70°C
Dimensions:	80 x 63 x 48mm

Order Code

PS1	Liquid Pressure Switch –0.5...6 bar

Electrical contacts

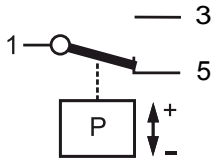
PS1 pressure controls are equipped with high rated double snap action contacts for shatter-free and reliable operation. All contacts throughout this range of controls are designed as Single Pole Double Throw (SPDT) contacts. One contact may be used for control and the other contact for alarm/status indication or auxiliary control.

Contact function

Contacts on PS1 labelled 1-3-5 where'1' refers to the common pole, '5' refers to the lower setpoint and '3' refers to the uppers setpoint. The contact function is as described below.

Automatic reset

On pressure rise above the upper setpoint, contacts 1-5 open and contacts 1-3 close. On decreasing pressure below lower setpoint contacts 1-3 open and contacts 1-5 close.



Automatic reset contact function

Setpoints

PS1 are adjustable controls with internal adjustment spindles for range and differential. By turning the range spindle, the upper setpoint is defined and by adjusting the differential spindle, the differential and hence the lower setpoint is defined.

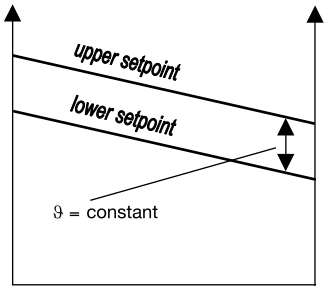
The dependency between upper and lower setpoint is always as follows:

Lower setpoint = Upper setpoint – Differential

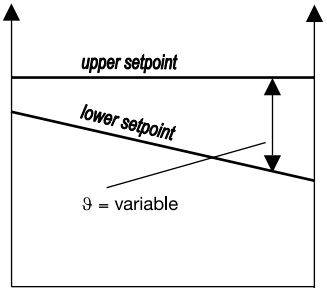
The following two rules should be kept in mind:

- An adjustment of the range spindle always affects both, upper and lower setpoint.
- An adjustment of the differential spindle affects the lower setpoint, only.

The following diagrams depict this dependency:



Effect of turning range spindle



Effect of turning differential spindle

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