PS1382/1482 Liquid Differential Pressure Switches

PS1382 and PS1482 Liquid Differential Pressure Switches have been designed for use with liquids and non-aggressive gases. Typical applications include boiler flow and pump monitoring. The pressure switches are also suitable for use with air to monitor for example blocked filters.

PS1382 range includes 2 models with pressures up to 4bar, and PS1482 range includes 2 models with range up to 250mbar. Other ranges are also available on request. The pressure switches have protection rating of IP65. The switches are robust in design and have adjustable switching threshold.

Model Types

Model	Description
PS1382-1	PS1382-1 Liquid Differential Pressure Switch, 0.07 to 1bar
PS1382-4	PS1382-4 Liquid Differential Pressure Switch, 0.2 to 4bar
PS1482-125	PS1482-125 Liquid Differential Pressure Switch, 5 to 125mbar
PS1482-250	PS1482-250 Liquid Differential Pressure Switch, 15 to 250mbar

Technical Data

Max. Line Pressure Pressure	14bar (PS1482-125) 34bar (PS1382-1, PS1382-4, PS1482-250)
Pipe Connections	1/4” BSP Female (PS1382-1, PS1382-4) 1/8” BSP Female (PS1482-125, PS1482-250)
Materials:	
Diaphragm	Beryllium copper
Seal	Nitrile rubber
Base	Brass
Housing	Aluminium / Zinc Diecast
Cover	Glass filled nylon with nitrile seal
Media	Water, air, oil, steam
Operating Temperature	-10…80°C
Accidental Overload	4 x the range (possible shift up to 2% of range)
Protection Class	IP65
Switching Relay	10A 230Vac SPDT
Terminals	Accept 1.5mm^2 wire. Larger sizes are not recommended.
Weight	1.4kg (PS1382) 1.8kg (PS1482)

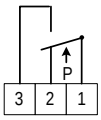
Installation

PS1382 and PS1482 pressure switches can be mounted using a mounting bracket or directly onto a pressure vessel with the connection thread.

The switch can be mounted in any orientation.

Wiring Terminals

Caution. Mains Voltage! The electrical installation, device connection and commissioning can only be carried out by qualified professionals and according to the local wiring regulations!



1 - common
2 - NC contact
3 - NO contact

When pressure increases
1 - 3 closes
1 - 2 opens

1. Ensure that the pressure switch is isolated.
2. Remove the cover.
3. Use terminals 1 and 2 for relay closed below the switching setpoint
4. Use terminals 1 and 3 for relay closed above the switching setpoint
5. Ensure Earth connection is used.

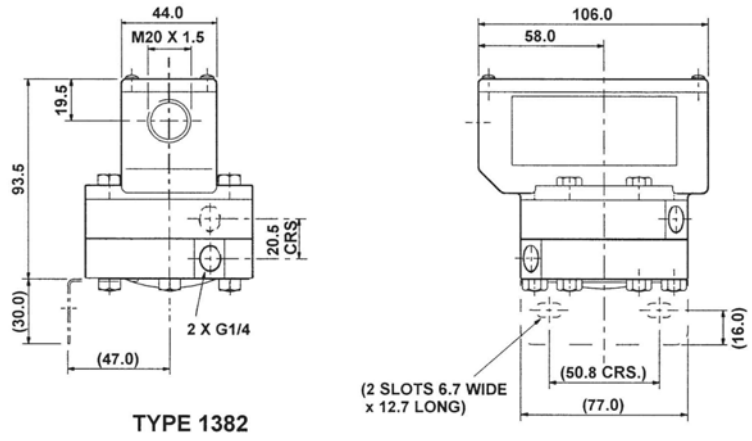
Adjusting Setpoint

Using a pressure gauge apply the pressure at which point the switch is to make or break the relay contacts. Turning the adjusting nut the pressure setpoint for the switch can now be set. A quarter turn of the adjusting nut will give a change in setting of approximately 10% of the switch range.

To set the switch to operate on rising pressure, turn the adjusting nut anticlockwise until contacts 1 and 3 make at the applied pressure. To set the switch to operate on the falling pressure, turn the adjusting nut clockwise until relay contacts 1 and 2 make.

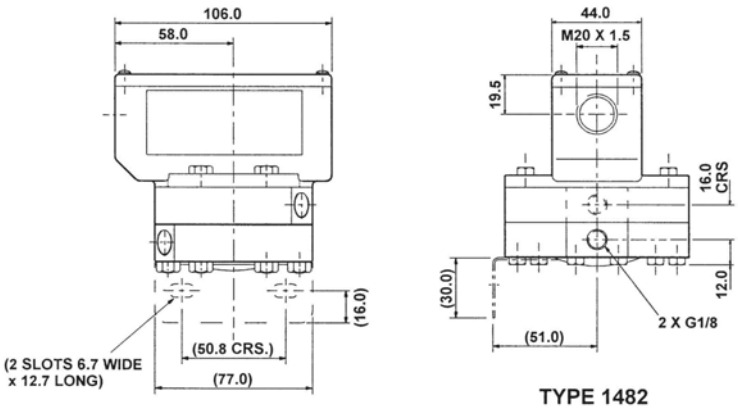
Dimensions

Type 1382



TYPE 1382

Type 1482



TYPE 1482

All dimensions are in millimetres (mm).