

PL-630-A Differential Pressure Switch

1ssue Number 7.1 29/09/2021



Features and Benefits

- Suitable for water, steam (with pig tail) or air
- Suitable for use on vacuum
- 1/8 " BSP female pressure connections

Technical Overview

The PL-630-A range of differential pressure switches is suitable for use with liquids and gases. The unit has adjustable switching threshold.

Reproducibility is ±10% of the switching point, but as a minimum ±0.8 mbar.

The rugged mechanics are the assurance of high operating reliability, even in the presence of percussions or vibrations.

| Product Codes | |
|---------------|---|
| PL-630-A-0.02 | Liquid diff. pressure switch 6 to 20 mbar |
| PL-630-A-0.06 | Liquid diff. pressure switch 15 to 60 mbar |
| PL-630-A-0.2 | Liquid diff. pressure switch 40 to 200 mbar |
| PL-630-A-1 | Liquid diff. pressure switch 0.15 to 1 bar |
| PL-630-A-3 | Liquid diff. pressure switch 1 to 3 bar |
| PL-630-A-5.5 | Liquid diff. pressure switch 2 to 5.5 bar |

Specification

| Adjustment range |
|------------------|
| 6 to 20 mbar |
| 15 to 60 mbar |
| 40 to 200 mbar |
| 0.15 to 1 bar |
| 1 to 3 bar |
| 2 to 5.5 bar |
| |

Max. operating pressure and overload on one side (P1>P2):

Range up to ≤200 mbar = 10 bar Range 150 - 5500 mbar = 20 bar

Pressure connection 1/8" BSP

Media Water, air, steam (with pig tail)
Electrical rating 1A (0.5A) @ 250Vac

1A (0.5A) @ 250Vac Resistive (Inductive) Screw terminals

Electrical connections Screw terminals
Contact system Changeover contact

Materials:

Cover Plastic Diaphragm EPDM

Pressure case Anodised aluminium

Dimensions 110 x 65mm

Protection IP65 Service life 10⁶ s¹

Service life 10⁶ switching cycles, if the permitted switching difference is

respected

Operating range -10 to 80°
Origin Switzerland

Conformity LVD, CE & UKCA Marked



Warning!

When installed, the output contacts may carry 240Vac. Special care must be taken to isolate the switched voltage prior to any work being undertaken.





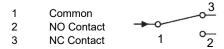
At the end of the products useful life please dispose as per the local regulations.
Do not dispose of with normal household waste Do not burn.

d waste.

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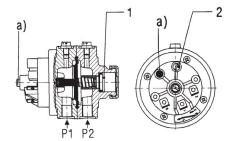
Installation, Connections & Setting of Switching Points

- 1. The PL-630-A should only be installed by a competent, suitably trained technician, experienced in installation with hazardous voltages. (>50Vac & <1000Vac or >75Vdc & 1500Vdc)
- 2. Ensure that all power is disconnected before carrying out any work on the PL-630-A.
- 3. Ensure that the unit is not subjected to ingress by water.
- 4. The PL-630-A will operate in any orientation, but should be positioned with the vent screw at the top when used with liquids in the horizontal position.
- 5. Connect pipe work using a 1/8" BSP male adapters onto the 1/8" BSP female connectors on the switch. Take care not to over tighten.



Adjustment of switching points;

- 1. For the upper switching point (higher pressure) adjust in clockwise direction.
- 2. Do not adjust a) this will void the warranty.
- 3. Allow pressure to increase slowly (observe maximum pressure limit). Adjust the desired upper switching point with the main adjusting screw (1). Decrease pressure slowly and measure lower switching point.
- 4. If the lower switching point is too high (switching differential too small) turn adjusting screw (2) counter clockwise until the desired lower switching point is adjusted.
- 5. If the lower switching point is too low, turn adjusting screw (2) clockwise.
- 6. By raising and lowering the pressure several times check the upper and lower switching points and correct adjustment if necessary.
- 7. After adjustment secure all adjusting screws (1,2) with varnish.
- P1 Higher pressure
- P2 Lower pressure

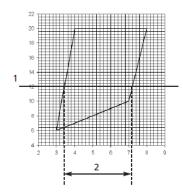




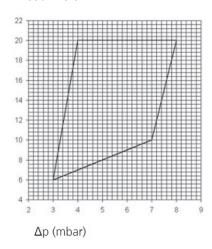
Example of Reading measurement Values

PL-630-A-0.02:

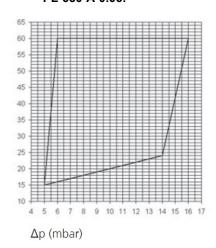
- Enter upper switching point e.g. 12 mbar.
- Read the available, adjustable switching difference (in the example 3,4-7,2 mbar).



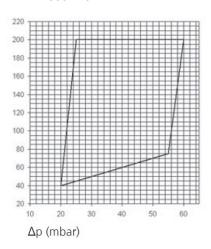
PL-630-A-0.02:



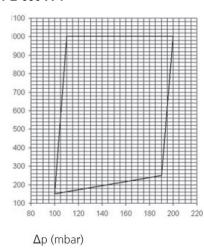
PL-630-A-0.06:



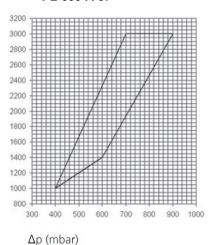
PL-630-A-0.2:



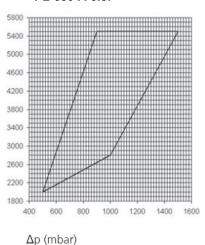
PL-630-A-1



PL-630-A-3:



PL-630-A-5.5:



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