

PL-630-A

Liquid Differential Pressure Switch



Features:

- 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 $\pm 10\%$ 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.

Specification:

PL-630-A-0.02	Adjustment range 6 to 20 mbar (0.1-0.3 psi)
PL-630-A-0.06	15 to 60 mbar (0.2-0.9 psi)
PL-630-A-0.2	40 to 200 mbar (0.6-2.9 psi)
PL-630-A-1	0.15 to 1 bar (2.2-14.5 psi)
PL-630-A-3	1 to 3 bar (14.5-43.5 psi)
PL-630-A-5.5	2 to 5.5 bar (29-79.8 psi)
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
Electrical connections	Screw terminals
Contact system	Changeover contact
Materials:	
Cover	Plastic
Diaphragm	EPDM
Pressure case	Anodised aluminium
Dimensions	110 x 65mm (4.33 x 2.56")
Protection	IP65
Service life	10 ⁶ switching cycles, if the permitted switching difference is respected
Operating range	-10 to 80°C (14 to 176°F)
Origin	Switzerland



The products referred to in this data sheet meet the requirements of 2014/35/EU

Part 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



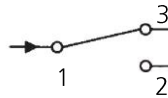
Warning!

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

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.

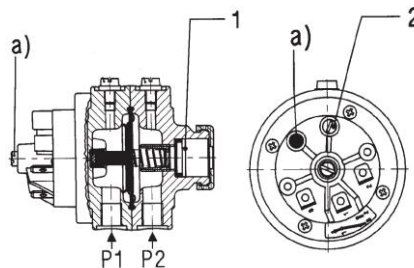
- | | |
|---|------------|
| 1 | Common |
| 2 | NO Contact |
| 3 | NC Contact |



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.

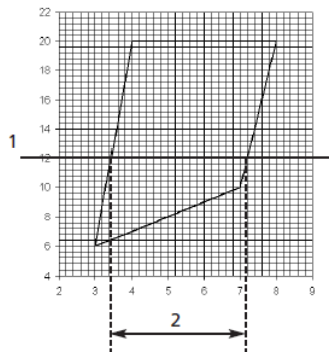
- P1 Higher pressure
- P2 Lower pressure



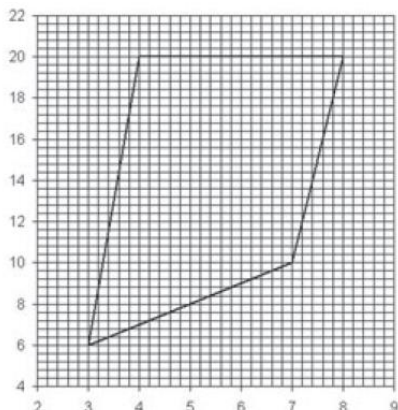
Example of Reading measurement Values:

PL-630-A-0.02:

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

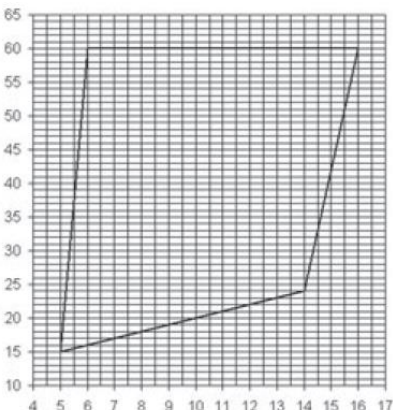


PL-630-A-0.02:



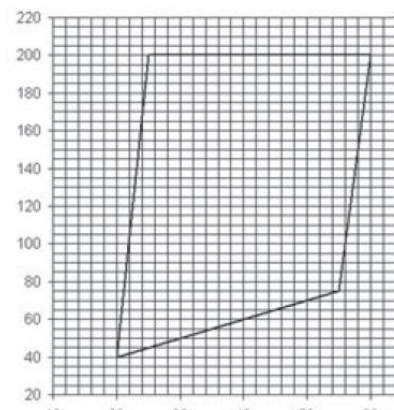
Δp (mbar)

PL-630-A-0.06:



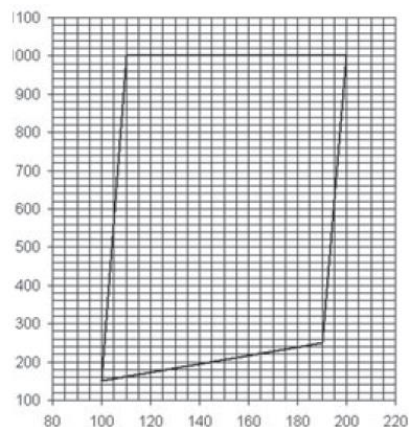
Δp (mbar)

PL-630-A-0.2:



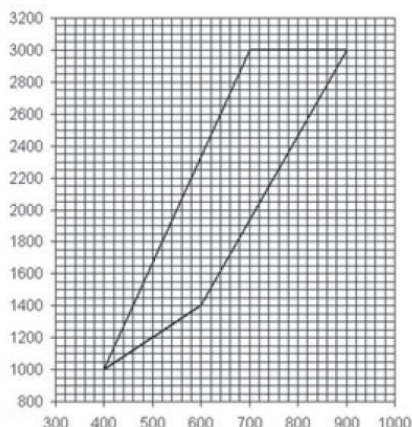
Δp (mbar)

PL-630-A-1



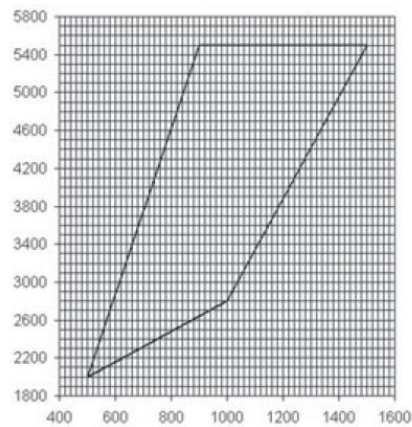
Δp (mbar)

PL-630-A-3:



Δp (mbar)

PL-630-A-5.5:



Δp (mbar)

Whilst every effort has been made to ensure the accuracy of this specification, Sontay cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.