

Differential Pressure Switches

Features



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

	Adjustment range
PL-630-0.02	6 to 20 mbar
PL-630-0.06	15 to 60 mbar
PL-630-0.2	40 to 200 mbar
PL-630-1	0.15 to 1 bar
PL-630-3	1 to 3 bar
PL-630-5.5	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
Electrical connections	Screw terminals
Contact system	Changeover contact
Materials:	
Cover	Plastic
Diaphragm	EPDM
Pressure case	Brass
Dimensions	115 x 65mm
Protection	IP65
Service life	10 ⁶ switching cycles, if the permitted switching difference is respected
Operating range	-10 to 80°C
Origin	Switzerland

Product Codes

PL-630-0.02	Liquid differential pressure switch 6 to 20 mbar
PL-630-0.06	Liquid differential pressure switch 15 to 60 mbar
PL-630-0.2	Liquid differential pressure switch 40 to 200 mbar
PL-630-1	Liquid differential pressure switch 0.15 to 1 bar
PL-630-3	Liquid differential pressure switch 1 to 3 bar
PL-630-5.5	Liquid differential pressure switch 2 to 5.5 bar

Technical Overview

The PL-630 range of differential pressure switches are 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.

Installation

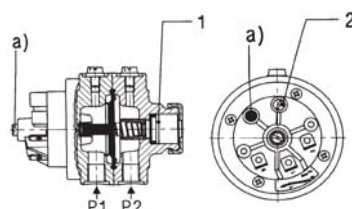
1. The PL-630 should only be installed by a competent, suitably trained technician, experienced in installation with hazardous voltages. ($>50\text{Vac}$ & $<1000\text{Vac}$ or $>75\text{Vdc}$ & 1500Vdc)
2. Ensure that all power is disconnected before carrying out any work on the PL-630.
3. Ensure that the unit is not subjected to ingress by water.
4. The PL-630 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 $\frac{1}{8}$ " BSP male adapters onto the $\frac{1}{8}$ " 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.

Adjustment of Switching Points (continued)

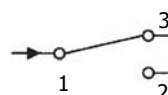
7. After adjustment secure all adjusting screws (1,2) with varnish.



P1 Higher pressure

P2 Lower pressure

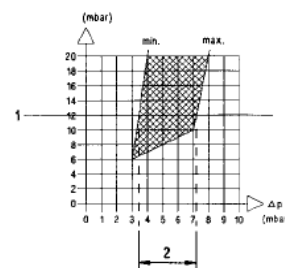
Connections



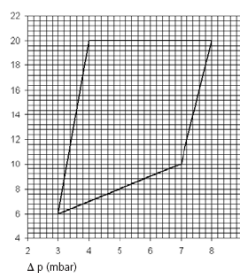
- | | |
|---|------------|
| 1 | Common |
| 2 | NO Contact |
| 3 | NC Contact |

Example of Reading Measurement Values

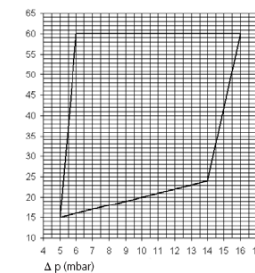
1. Enter upper switching point e.g. 12 mbar.
2. Read the available, adjustable switching difference (in the example 3,4-7,2 mbar).



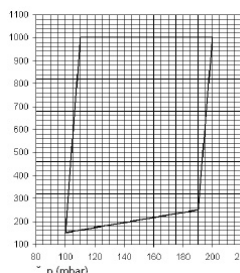
PL-630-0.06:



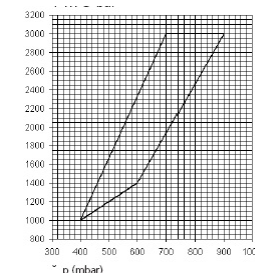
PL-630-0.2:



PL-630-1:



PL-630-3



Reading Measurement Values (continued)

PL-630-5.5:

