



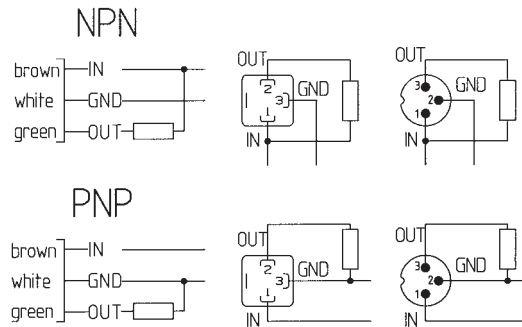
**Warning**

Please read the operating instructions carefully before commissioning the differential pressure switch. The guarantee is invalid in respect of damage resulting from a failure to follow the instructions, incorrect handling or inappropriate use. We accept no responsibility for consequential damages resulting from any of the above.

The device must be installed and dismantled only by qualified personnel.

The relevant country-specific harmonised safety regulations must be observed.

The customer must ensure compliance with device-specific requirements relating to the protection standard.



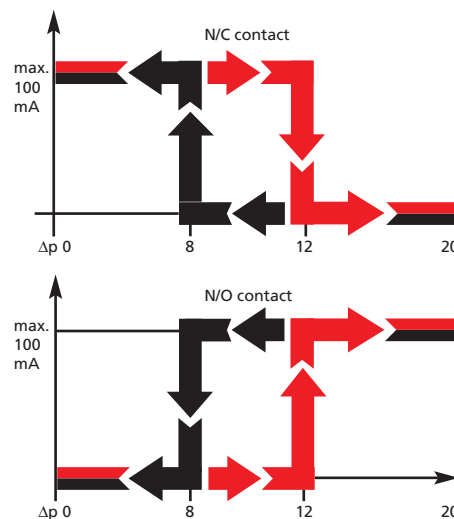
**Operation**

**N/C contact:** When pressure is applied ( $\Delta p_0 \rightarrow \Delta p_{max}$ ) the collector disconnects the applied load at the upper switching threshold (active state). When the pressure is reduced ( $\Delta p_{max} \rightarrow \Delta p_0$ ), the collector connects the load at the lower switching threshold (passive state).

**N/O contact:** When pressure is applied ( $\Delta p_0 \rightarrow p_{max}$ ) the collector connects the applied load at the upper switching threshold (active state). When the pressure is reduced ( $\Delta p_{max} \rightarrow p_0$ ), the collector disconnects the load at the lower switching threshold (passive state).

**Example:  $\Delta p_{fs}$  20 bar**

Upper switching point 12 bar / Lower switching point 8 bar



**Calibration**

NOTE: Only certain models can be calibrated. These are devices with a «0» or «1» in the 7. position of the product code (616.XXXXXX0XX). (Cable IP65/DIN 43650.)

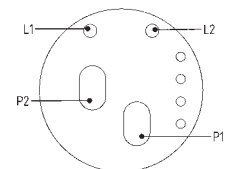
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1. Remove the connector board.
2. Wire as shown in the diagram, Fig. 1.
3. Use the pressure calibrator to apply the desired pressure for the lower switching point to P1.
4. Turn potentiometer P1 until the yellow LED (L1) flickers (it should not light up fully).
5. Use the pressure calibrator to apply the desired pressure for the upper switching point to P1.
6. Turn potentiometer P2 until the red or green LED (L2) flickers (it should not light up fully).
7. Use the output signal to check the switching points. The switch status should change from active to passive below the lower switching threshold, and from passive to active above the upper switching threshold.



**Caution!**

GND and case have only a capacitive, but not an electrical connection.



**Electromagnetic compatibility**

Type of interference	Test standard	Effects
Electrostatic discharge	IEC 1000-4-2 8 kV discharge / 4 kV contact discharge	no failure (criterion B)
High-frequency electromagnetic radiation (HF)	ENV 50140 10 V/m / 80 ... 1 000 MHz	no effect (criterion A)
Conducted HF interference	ENV 50141 10 V/m / 0.15 – 80 MHz	no effect (criterion A)
Fast transients (burst)	IEC 801-4 2 kV	no failure (criterion B)
Magnetic fields	EN 61000-4-8 50 Hz 30 A/m	no effect (criterion A)
Conducted interference Radiation from housing	EN 55022 / 0.15 ... 30 MHz 30 ... 1 000 MHz, 10 meters	no effect no effect