

Title (en)

Pressure switch for detecting passing of a threshold level of a liquid in a tank

Title (de)

Druckschalter zum Feststellen des Überschreitens eines Schwellenwerts einer Flüssigkeit in einem Tank

Title (fr)

Commutateur de pression pour détecter le passage d'un niveau de seuil d'un liquide dans un réservoir

Publication

EP 1916685 A1 20080430 (EN)

Application

EP 07118477 A 20071015

Priority

IT MI20062041 A 20061024

Abstract (en)

There is disclosed a pressure switch (100) for detecting the passing of a threshold level (301) of a liquid (300) in a tank (200). This pressure switch (100) comprising a chamber (11) that is hermetically divided by an impermeable elastic diaphragm (4) into two compartments (111, 112). The first compartment (111) is fillable with liquid (300) coming from a tank (200). The diaphragm (4) is able to become elastically deformed, varying the volume of the two compartments (111, 112) on the basis of the liquid (300) filling status of the first compartment (111). Inventively, the pressure switch (100) communicates with open vertical conduits (16, 22) suitable for enabling first the air in the chamber (111) and then the liquid (300) to exit in a vertical direction on the basis of a thrust due to the pressure of the liquid (300). In this way, it is possible to overcome the drawbacks created by the presence of air that would become compressed inside the chamber (111), and which in the absence of vertical discharge conduits (16, 22) would be generated, and it is thus possible to use this pressure switch in a simple and reliable manner to detect the variation in the level (302, 303) of liquid (300) in the tank (200) (Fig. 2).

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CPC (source: EP)

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- [A] EP 0017453 A1 19801015 - EATON CORP [US]
- [A] US 5061832 A 19911029 - SQUIRES STEPHEN L [US]

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