

Title (en)

METHOD AND DEVICE FOR DETECTING A DYSFUNCTION OF AN ULTRASONIC FLOWMETER

Title (de)

VERFAHREN UND VORRICHTUNG ZUR FEHLERERKENNUNG FÜR EINEN ULTRASCHALLDURCHFLUSSMESSER

Title (fr)

PROCEDE ET DISPOSITIF DE DETECTION D'UN DYSFONCTIONNEMENT POUR UN DEBITMETRE A ULTRASONS

Publication

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Application

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Abstract (en)

[origin: FR2803383A1] The invention relates to a method for detecting a dysfunction such as clogging or ageing in a flowmeter comprising at least one transducer. Said method also enables the generation of a conditioned signal based on an analog signal from said transducer. The method comprises the following steps: measuring the receive signal (VIN) output from the transducer; comparing a characteristic of a received signal with a predetermined reference characteristic (VREF); storing a peak voltage (VPK) of the receive signal (VIN); generating a warning signal (VAL) when a triggering characteristic (VDEC) of the receive signal (VIN) is lower than the predetermined reference characteristic (VREF); defining a threshold voltage (VTH) which is proportionate to the peak amplitude of the receiving signal in such a way that $(VTH) = K \times (VPK)$, K being a factor that is dependent on the transducer; comparing the receive signal (VIN) to the threshold voltage (VTH); generating a conditioned output signal (VOUT) in a first state when a receive signal (VIN) is above a threshold voltage (VTH) and in a second state when the receive signal (VIN) is lower than the threshold voltage (VTH).

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