

Title (en)

MEASURING DEVICE AND METHOD FOR DETERMINING A FLUID VARIABLE

Title (de)

MESSEINRICHTUNG UND VERFAHREN ZUR ERMITTLUNG EINER FLUIDGRÖSSE

Title (fr)

DISPOSITIF DE MESURE ET PROCÉDÉ DE DÉTERMINATION D'UNE GRANDEUR D'UN FLUIDE

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Application

EP 18732248 A 20180611

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Abstract (en)

[origin: WO2019001761A1] The invention relates to a measuring device for determining a fluid variable comprising a control device (2), a measuring tube (3) which receives the fluid and/or through which the fluid flows, and a first and a second ultrasonic transducer (5, 6, 15) arranged on the measuring tube (3), wherein the first and/or the second ultrasonic transducer (5, 6, 15) can be actuated to stimulate a wave conducted through a side wall (9) of the measuring tube (3) and the conducted wave stimulates compression waves of the fluid which can be conducted via the fluid to the respective other ultrasonic transducer (5, 6, 15) and can be detected there for the determining of measurement data, the fluid variable can be determined by the control device (2) according to the measurement data, and either the first and/or the second ultrasonic transducer (5, 6, 15) comprise(s) a respective vibrating element (16), which is coupled to the measuring tube (3) or to a support structure (19, 32, 43), arranged between the measuring tube (3) and the vibrating element (16), in multiple spaced-apart contact regions (17, 18) of the vibrating element (16), or the first and/or the second ultrasonic transducer (5, 6, 15) comprise(s) multiple respective vibrating elements (39; 40), which are coupled to the measuring tube (3) or the support structure (19, 32, 43) in spaced-apart contact regions (41, 42) of the measuring tube (3) or a support structure (19, 32, 43) coupled to the measuring tube (3).

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