

FILL-LEVEL MEASURING DEVICE

Abstract

The invention relates to a fill-level measuring device (1) with a membrane (2), which is placed in such a manner on one of the two end region of a tubular housing (3) that it seals the housing (3) on such end region, with an oscillatable unit (14) placed on the side of the membrane (2) facing away from the housing (3), with a driver/receiver unit (4), which is composed of a plurality of piezoelectric elements (5) arranged in a stack, wherein the driver/receiver unit (4) is placed via a pressure screw unit (6) in such a manner in the housing (3) that it oscillates in the direction of the longitudinal axis (7) of the housing (3) between the membrane (2) and the pressure screw unit (6), whereby it excites the oscillatable unit (14) via the membrane (2) to execute oscillations, with a control/evaluation unit, which evaluates amplitude, frequency and/or phase of the oscillations of the oscillatable unit (14) and with a temperature sensor (8) for determining temperature of the medium. The invention includes that the temperature sensor (8) is integrated in a fill-level measuring device (1) element (12, 9, 6), which is in thermal contact with the medium via the membrane (2) or the housing (3), wherein the element (12, 6, 9) is so selected that the oscillatable unit (14) oscillates unimpaired by the temperature sensor (8).

(Fig. 4)