

Title (en)
CORIOLIS MASS FLOWMETER

Title (de)
CORIOLIS-MASSSEDURCHFLUSS-MESSGERÄT

Title (fr)
DEBITMETRE MASSIQUE DE CORIOLIS

Publication
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Application
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Abstract (en)
[origin: WO2005057131A2] Disclosed is a Coriolis mass flowmeter/density meter comprising at least one measuring tube (11) through which a two-phase or multiphase medium flows during operation thereof. A supporting means (12) of the Coriolis mass flowmeter/density meter is fixed to an inlet end and an outlet end of the measuring tube (11), thus clamping the same so as to allow the measuring tube (11) to vibrate. The measuring tube (11) is made to vibrate mechanically, particularly to perform bending vibrations, by means of an excitation system (13). The inventive Coriolis mass flowmeter/density meter further comprises means (141, 142) for generating test signals (xs1, xs2) representing vibrations at the inlet end and outlet end of the measuring tube (11). An electronic evaluation unit (2) generates an intermediate value (X'm) that is derived from the test signals (xs1, xs2) and represents an uncorrected mass flow rate as well as a corrected value (XK) for the intermediate value (X m), said corrected value being derived from the test signals (xs1, xs2), especially from a measured value (X<) which is also generated in the electronic evaluation unit (2) and represents a density of the medium. The electronic evaluation unit (2) additionally generates a measured value (Xm) representing a mass flow rate with the aid of the intermediate value (X'm) and the corrected value (XK).

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