

Title (en)

COROLIS MASS FLOWMETER AND METHOD FOR OPERATING IT

Title (de)

COROLIS-MASSENDURCHFLUSSMESSGERÄT UND VERFAHREN ZUM BETREIBEN EINES COROLIS-MASSENDURCHFLUSSMESSGERÄTS

Title (fr)

DEBITMETRE MASSIQUE DU TYPE COROLIS ET PROCEDE POUR L'ACTIONNER

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Application

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Priority

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Abstract (en)

[origin: WO2012016581A1] The invention relates to a Coriolis mass flowmeter and also to a method for operating a Coriolis mass flowmeter (1). The Coriolis mass flowmeter (1) comprises at least one measurement tube (2, 3) through which a medium flows, at least one exciter arrangement (8) which is arranged in the central region of the at least one measurement tube and causes said measurement tube to oscillate, and at least two oscillation pick-ups (9a, 9b) which are arranged in front of and behind the at least one exciter arrangement in the longitudinal direction of the at least one measurement tube. The at least two measurement tubes (2, 3) are additionally each provided with at least one acceleration sensor (15a...15d) which is arranged in front of and/or behind the exciter arrangement in the longitudinal direction of the at least one measurement tube. An evaluation device (11) is designed to receive acceleration signals (14a...14d) from the acceleration sensors and to evaluate said acceleration signals for the purpose of diagnosing an asymmetry in the measurement tubes. As a result, fault states, for example deposits in one of the two measurement tubes, blockage of a tube in a flow divider or asymmetrical changes in the ability of the measurement tubes to oscillate, for example due to cracks or fractures, can advantageously be detected.

IPC 8 full level

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CPC (source: EP US)

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