

Title (en)

DEVICE FOR DETERMINING AND/OR MONITORING THE VOLUME AND/OR MASS FLOW RATE OF A MEDIUM

Title (de)

VORRICHTUNG ZUR BESTIMMUNG UND/ODER ÜBERWACHUNG DES VOLUMEN- UND/ ODER MASSENDURCHFLUSSES EINES MEDIUMS

Title (fr)

DISPOSITIF DE DETERMINATION ET/OU DE CONTROLE DU DEBIT VOLUMIQUE ET/OU MASSIQUE D'UN FLUIDE

Publication

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Application

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Abstract (en)

[origin: WO2006048395A1] The invention relates to a device for determining and/or monitoring the volume and/or mass flow rate of a medium that flows through a pipe/measuring tube (3) having an inner diameter (D) in a direction of flow (S). Said device comprises at least two ultrasonic transducers (14) that emit and/or receive ultrasonic measuring signals along defined sonic paths and a control/evaluation device (4) which determines the volume flow rate and/or the mass flow rate of the medium to be measured (2) inside said pipe/measuring tube (3) based on the ultrasonic measuring signals according to the principle of the propagation time difference. The aim of the invention is to provide a multichannel ultrasonic flowmeter which has at least one reflector element (5, 9, 10, 11, 12, 13) in the inner space (15) of the pipe/measuring tube (3), whereby the reflector element (5, 9, 10, 11, 12, 13) has a defined distance (d) from the inner wall (6) of the pipe/measuring tube (3) and is placed within the sonic path of the ultrasound measuring signals, which passes through the pipe/measuring tube (3).

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