

Precise measurement of pulsing liquids

DulcoFlow® flow meter



The DulcoFlow® flow meter is designed for the precise measurement of volume flows in metering processes for a measuring range of 0.1 to 80 litres per hour. Based on the ultrasonic measurement method, it records the flow rates of pulsing flows as well as the volume flown through. The DulcoFlow®, in its compact universal housing ideally suited for wall-mounting, is directly installed in the pressure line of the metering pump of the medium to be measured.

Due to the fact that all media contacting parts are made of chemically resistant PVDF/PTFE, also aggressive media can be measured without any problem. Interfering influences, such as air bubbles, are identified by the DulcoFlow® and reported to the analysis unit via fault messages.

Advantages

- Direct display of current flow and cumulative flow in litres or gallons
- Switchable to display current stroke volume
- Safety through display of operating and measurement status using LEDs
- Easy operation with membrane keys

Features

- Compact universal housing
- Media contacting parts made of PVDF/PTFE
- Two-line display
- Frequency output / stroke feedback
- Analogue output 0/4...20 mA, configurable as recorder output or as control output

Flow meter DulcoFlow®

Main applications

Monitoring and recording of chemical dosing in

- water treatment
- wastewater treatment
- the paper industry
- the chemical industry
- electroplating
- power plants and more

Measuring principle

The DulcoFlow® flow meter measures pulsing volume flows based on the ultrasonic method applying the transit time measurement principle. Here, a sound signal is alternately sent both with and against the flow direction. The time difference is then the measure of the mean flow velocity. The synchronous recording rate of measured values of 1 kHz ensures fast measurements at highest reproducibility. The DulcoFlow® records 1,000 measurements per second, where the time interval between two measured values is 1 ms and the measuring range is between 0.1 and 80 litres per hour. Operation without moving parts guarantees a long service life and wear-free operation.

Technical Data

Measuring range:	0.1...80 l/h
Accuracy:	< 2 % calibrated operation
Analogue output:	0/4...20 mA
Frequency output:	Configurable, max. 10 kHz
Protection class:	IP 65
Power supply:	100...230 V AC/ 50/60 Hz
Dimensions:	183.6 x 121 x 122.7 mm (H x W x D)

Media to be measured

Connector:	Hose connection with nominal diameter 6x4, 8x5 or 12x9 mm
Medium pressure:	3...16 bar
Medium temperature :	-10...45 °C