

# Precise measurement of pulsing liquids

## DulcoFlow® flow meter



The flow meter DulcoFlow® measures all liquid media by detecting the flow volume of pulsing liquids. The instrument is based on the ultrasonic measurement method. Parts that come into contact with the media are manufactured from chemically resistant PVDF/PTFE. This ensures that aggressive media can also be measured without problem. The instrument is installed directly in the pipe of the medium being measured. Interfering influences, such as air bubbles, are identified by the DulcoFlow® and forwarded to the analysis unit as an error message. The instrument, which is structured for wall mounting, is designed for a measurement range of 0.1 to 13 litres per hour

### Advantages

- Direct display of the current flow and cumulative flow in litres or gallons
- Can be switched over to display the pulsing frequency of the liquid or pump
- Safety and reliability through display of the device operating status using LEDs
- Safety and reliability through display of the measurement status using LEDs

### Features

- Compact universal housing
- Two-line display
- Frequency output
- Analogue output 0/4...20 mA, can be configured as a recorder output or a control output

## Main applications

Monitoring and recording the dosing of chemicals in:

- Water treatment
- Paper industry
- Waste water treatment
- Chemical industry
- Power plants, etc.

## Measuring principle

The DulcoFlow<sup>®</sup> flow meter measures the volume flow of pulsing flows. The ultrasonic, time of flight measurement method is used. For the time of flight measurement, a sound signal is alternately transmitted in and against the direction of flow. The time difference is then a measure of the mean flow velocity.

Use of the ultrasound measurement method automatically compensates any temperature induced changes in the medium. Operation without moving parts guarantees a long service life and wear-free operation.

### Technical Data

|                          |                                    |
|--------------------------|------------------------------------|
| <b>Measuring range:</b>  | 0.1...13 l/h                       |
| <b>Accuracy:</b>         | < 2 % during calibrated            |
| <b>Analogue output:</b>  | 0/4...20 mA                        |
| <b>Frequency output:</b> | Configurable, max. 10 kHz          |
| <b>Protection class:</b> | IP 65                              |
| <b>Power supply:</b>     | 100...230 V AC/ 50/60 Hz           |
| <b>Dimensions:</b>       | 183.6 x 121 x 122.7 mm (H x W x D) |

### Media to be measured

|                             |   |
|-----------------------------|---|
| <b>Connector:</b>           | Hose connection with nominal widths 6/4, 8/5 or 12/9 mm |
| <b>Medium pressure:</b>     | 3...16 bar  |
| <b>Medium temperature :</b> | -10...45 °C   |