

Non-invasive Flow Monitor

KATflow 10

- **Non-invasive ultrasonic measuring principle**
- **No contact between sensor and liquid**
- **Easy and cost effective installation - sensor is simply mounted to the outside of the pipe, no holes to drill, ideal for retrofits**
- **Suitable for high pressure, corrosive, aggressive and toxic media**
- **Liquid must contain gas bubbles and solid particles**
- **Short evaluation time of signals**
- **No wear and tear on sensor**
- **Easy calibration**



Description

The **KATflow 10** device is a non-invasive ultrasonic flow indicator and switch which is able to monitor process liquids without penetrating the surface of the pipe. The sensor is simply attached to the outside of the pipe and measurements are made through the pipewall. There is no need to drill holes or to perform any welding to install the sensor. Installation time and cost are negligible as a result.

The **KATflow 10** utilises ultrasonic Doppler technology to provide cost effective and repeatable switch point outputs for high or low flow alarm. Ultrasonic pulses are transmitted and received by the unit through the pipewall and into the fluid. Signal reflections from particles and air inclusions in the liquid cause a frequency shift of the transmitted ultrasound which is proportional to the flow rate of the medium.

The **KATflow 10** is capable of operating in general purpose flow measurement applications with velocities from 0.3 m/s to 3.5 m/s on many liquids and slurries. It is possible on the majority of liquids, to indicate the flowrate and provide a repeatable switching point on higher or lower than desired flow.

Each unit has ease of installation and calibration as a key feature, having a single button set-up with status feedback during initial calibration from red and green LED's.

The **KATflow 10** has ingress protection of IP67 (equivalent to NEMA 6) and its rugged design provides a high degree of protection from bump, shock and vibration within a typical industrial environment.

Typical industries:

Chemical
Food and drink
Mineral Extraction
Pharmaceutical
Power generation
Pulp and paper
Sewage and water treatment

Typical applications:

Activated carbon slurries
Aerated liquids
Coal slurries
Cooling water circulation
De-ionised water
Filter backwash
Fly ash slurries
Limestone slurries
Oil/coal mixtures
Paint
Paper slurry/stock
Primary sewage and sludge
Raw sewage
Resin slurries
Return activated sludge
River water
Secondary effluent
Soap solutions
Spent acids
Taconite slurries
Tertiary effluent
Tickened or digested sludge

