

katronic



Solutions for
Water and
Wastewater

Katronic

Clamp-on Flowmeters for the Water and Wastewater Industry



Clamp-on ultrasonic flowmeters can provide measurement solutions where other devices are either impractical or expensive. No other instrument type offers both portability and such cost-effectiveness on large diameter pipes.

Clamp-on flowmeters are simple to install and are ideal for dealing with extensive pipe networks where large diameter mains as well as smaller supply lines need to be monitored and flow surveys carried out. KATflow meters can be used both for permanent installation on large pipes and as a portable verification tool. Our instruments offer a series of advantages to customers in the water sector:

SIMPLICITY

The ultrasonic transducers are installed by clamping them onto the outside of the pipe. The process is quick and simple. There is no need to cut into the pipe or stop the flow, and as a result no interruption to the water supply or risk of leakage.

ECONOMY

The KATflow meters are suited to large pipes where invasive measurement is not economically viable. The purchase cost of a Katronic flowmeter will be lower than that of an alternative in-line solution and do not incur the further expense of engineering work, down-time and specially trained staff or contractors.

STERILITY

The non-invasive meters we provide ensure that pipe integrity is maintained at all times avoiding the requirement for costly sterilisation of water mains. They also will not suffer from ragging when used on wastewater applications.

EFFICIENCY

Katronic ultrasonic flowmeters can be supplied as dual-channel devices. This allows the measurement of two pipes simultaneously for optimum cost-saving, or to take measurement on different planes for improved accuracy.

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Our Products for Your Applications



The versatility of the KATflow 200 makes it an ideal survey tool. It is simple and easy to use and compact enough to use even in very confined spaces.

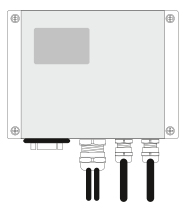
TEAM APPROACH SOLVES WATER PROBLEMS AT MAJOR AIRPORT



When a reliable flow measurement was needed at one of Scotland's busiest airports Katronic were tasked with providing the solution. With up to eight mega litres of water pumping through the 40 year old pipe it was vital the operator was able to monitor, measure and act upon any changes to the flow to avoid major incidents. One of Katronic's partners in Scotland, Processplus Ltd. supplied the required instrumentation in partnership with Syrinix, a leader in intelligent pipeline solutions.

A KATflow 200 portable ultrasonic flowmeter was used at two locations to survey the piping and gain initial flow data. Processplus then provided a package including two KATflow 100 flowmeters to connect to a Syrinix Pipeminder device. This system will give the operator information on changes in the pipe condition and crucially an advanced warning of any potential pipe burst.

SUCCESS FOR KATRONIC FLOWMETERS WITH VIENNA WATER AUTHORITY



Katronic have been chosen as a supplier to the Austrian capital following recent trials of our flowmeters. The tests were done using both a KATflow 200 and a KATflow 100 in a pump house on an 815 mm water main. The results were compared to a trusted flowmeter that the Water Authority was already using. Once the initial setup had been completed with the assistance of the Katronic wall thickness gauge, the measurements obtained were extremely positive.

The KATflow 200 portable flowmeter showed the same flow rates as the reference meter in spite of a disturbed flow condition. There was slight variation seen with the KATflow 100 and K1P sensors but this was accepted as the differences were minor and the pipe 25 % bigger than the recommended diameter for the K1P. The outcome of this testing was that the Vienna Water Authority placed an initial order of flowmeters for use on their network.

KATflow 200

Hand-Held Clamp-On Ultrasonic Flowmeter

SPECIFICATION

- Pipe diameter range 10 mm to 6,500 mm
- Temperature range for sensors
-30 °C to +250 °C (-22 °F to +482 °F)
- Weight 650 g
- Robust IP 65 enclosure with added rubber shock protector
- Selectable three-line LCD display and full keypad
- Battery life up to 24 hours with standard NiMH AA batteries for simple replacement

FEATURES

- Lightweight and tactile for easy one-handed use
- Stainless steel sensors, cable and connectors as standard
- Innovative installation wizard for quick and intuitive programming
- Full instrument diagnostics and scope function
- Large data logger and software for sampling and data transfer
- Optional pipe wall thickness gauge

APPLICATIONS

- Pump testing and inspection
- In-line flowmeter performance verification
- Leakage and blockage detection
- Clean in process system (CIP) testing
- Monitoring of hydraulic systems
- Clean room applications



KATflow 210

Integrated Clamp-On Ultrasonic Flowmeter

SPECIFICATION

- Pipe diameter range 25 mm to 2,500 mm
- Temperature range for sensors
-30 °C to +130 °C (-22 °F to +266 °F)
- Standard operation up to 100 days, longer in power-saving modes
- Rugged integrated IP 67 portable design
- Compact housing 260 (h) x 280 (w) x 200 (d) mm
- Selectable three-line LCD display and full keypad

FEATURES

- Three different measurement modes to maximise battery life
- IP 68 stainless steel sensors, cable and connectors as standard
- Process output options including current, open-collector, relay
- Large data logger and software for sampling and data transfer
- Integrated pipe wall thickness gauge available
- Optional wireless data transmission

APPLICATIONS

- Long-term leakage surveys
- Metering in pits, wells and areas where flooding is likely
- In-line flowmeter inspection verification
- Metering of pipes in exposed locations
- Temporary replacement of conventional in-line flowmeters
- Monitoring of irrigation systems



KATflow 100

Standard Clamp-On Ultrasonic Flow Transmitter

SPECIFICATION

- Pipe diameter range 10 mm to 3,000 mm
- Temperature range for sensors
-30 °C to +80 °C (-22 °F to +176 °F)
- Weight 750 g
- Robust IP 66 aluminium enclosure
- Sturdy unit with LCD display and five-key keypad
- Wall or pipe mounted

FEATURES

- Low cost of ownership
- Process outputs including RS 485, Modbus RTU and HART* compatible output
- PT100 inputs for heat quantity (thermal energy) measurement
- Bi-directional measurement with totaliser function
- Innovative installation wizard for quick and intuitive programming
- Configuration can be changed to suit customer requirements

APPLICATIONS

- Water and wastewater measurements
- Replacement of electromagnetic flowmeters
- Monitoring and controlling of HVAC systems
- Cost-effective solution for large scale projects
- Automated process control
- Shipping applications

* HART® is a registered trademark of the
HART Communication Foundation



KATflow 150

Advanced Clamp-On Ultrasonic Flowmeter

SPECIFICATION

- Pipe diameter range 10 mm to 6,500 mm
- Temperature range for sensors
-30 °C to +250 °C (-22 °F to +482 °F), higher temperatures available on request
- Lockable and sturdy IP 66 polycarbonate flowmeter enclosure
- Selectable three-line LCD display and full keypad
- Up to ten different input or output slots available
- Measurement of two flows simultaneously

FEATURES

- Dual flow monitoring with *sum*, *average*, *difference* and *maximum* calculations
- Process output options including current, open-collector, relay
- Communication options RS 485, Modbus RTU, Profibus PA and HART* compatible output
- Current inputs for temperature, pressure and density compensation
- Large data logger and software for sampling and data transfer
- Optional heat quantity (thermal energy) measurement functionality

APPLICATIONS

- Heating, Ventilation and Air Conditioning (HVAC) measurements
- Large pipe measurement with two sensor pairs in 'X' configuration
- Product recognition and interface detection systems
- ATEX measurements with Ex-certified transducers
- Effluent and wastewater measurements
- Automated process control

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What our Clients say:

“Superb service!”

Peter Hartley – UK EXCHANGERS LTD.

“Thank you for the wonderful support and service I received off of you and your company ... we were in wonderment at what it did for us , and how quickly we were able to trace and rectify the water circuitry problems.”

Philip Guard – PCG CONSULTANCY SERVICES LTD.

“I have been most impressed by both your equipment and your support service.”

Chris Barlow – S.I. SEALY

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