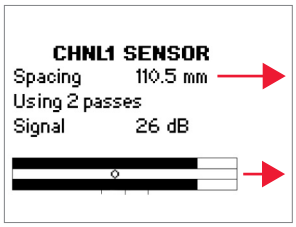
Introduction

- Katronic have equipped every model of their ultrasonic clamp-on flowmeters with the Audible Sensor Positioning Assistant, an unique product innovation which makes correct sensor installation simple and quick.
- The assistant indicates the correct position of the sensors during the installation on the pipe using acoustic signals and graphic instructions. This technology, in combination with the intuitive instrument Setup Wizard, enables even inexperienced users to install the sensors and carry out measurements within a matter of minutes.

Sensor Placement Screen

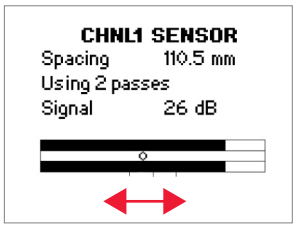


1. Sensor placement screen

The flowmeter recommends the ideal sensor spacing. This is the distance from the inside edge of each sensor.

Graphic instruction bars of the Sensor Positioning Assistant.
Upper bar: Signal-to-noise ratio
Lower bar: Signal quality

- The upper bar indicates the signal-to-noise ratio. The more the bar is filled out towards the right, the higher is the content of usable signal.
- The lower bar indicates the quality of the received signal. It therefore gives information about how well the signal can be used to carry out measurements.
- Ideally, both bars should be the same length and as far to the right as possible. This guarantees a high content of usable and high quality signal.



2. Adjustment of the sensor position

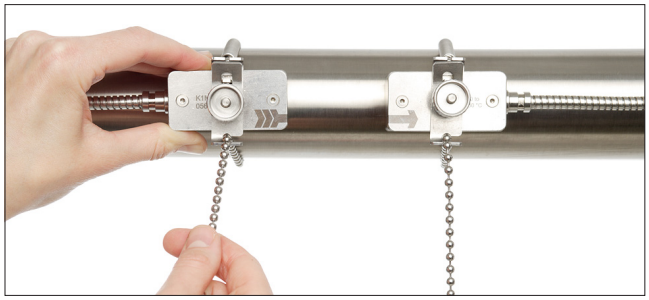
The central cursor is used to adjust the lateral position of the sensors. If the cursor is to the left of centre, the sensors should be moved further apart, with the opposite applying if the cursor is to the right. The correct sensor position has been achieved once the cursor is in the centre of the screen.

- A correct signal-to-noise ratio and signal-to-noise quality are achieved when both signal bars are the same length.
- When using the Audible Sensor Positioning Assistant remember the basic rule:
  - Cursor to the left — sensors too close together
  - Cursor to the right — sensors too far apart.

Features

Finding the correct distance between the sensors is now made even easier:

- The flowmeter has an additional tool to aid with sensor positioning. During sensor alignment the KATflow flowmeters guide the user with an acoustic signal.
- This signal is a fast repeating beeping sound when the sensors are incorrectly positioned. The signal frequency slows the nearer the user comes to achieving the correct sensor alignment. The beeping stops once ideal sensor position is attained.



3. Sensor mounting with chains and clips

- The Audible Sensor Positioning Assistant is a unique feature of the KATflow products and is available on all flowmeter models. This makes commissioning quick and straightforward even on flowmeters for permanent installation.

4. KATflow 200 in operation