

A

5 steps to flow measurement:



1. Choose a suitable mounting position for the transducer
2. Parameterise your flow transmitter by selecting „Quick Setup“
3. Mount the ultrasonic transducers on to the pipe
4. ZERO SETUP (if possible)
5. Start your flow measurement

B

User Interface:



On/Off button. To switch off press button for approx. 5 sec



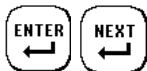
Activates the background lighting



Move cursor



Increase the value



Confirms your settings



Decrease the value



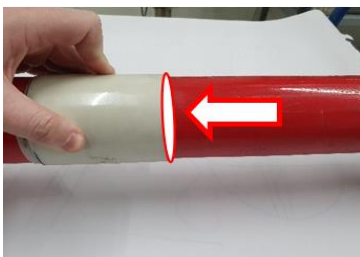
Back to previous menu



Activates a certain function

C

Mounting: With CoG, only a Z-mount is possible. Exact description in the manual.



Wrap the plastic stencil around the tube at the position of the first transducer and draw a circumferential line with a felt-tip pen. Then draw another circumferential line at the sensor distance displayed on the transmitter.

Remove dirt and thick layers of paint from the intended sensor positions.



Install the two mounting rails exactly opposite to each other (measurement of the distance between the mounting rails on both sides). Fix the coupling-equipped transducers at the correct distance (the sensor distance is always measured between the front faces of the transducers) in the mounting rails. A negative sensor distance means an "overlapping" mounting of the ultrasonic transducers.



In case of noisy signals: Finally, cover the free areas between the mounting rails on both sides of the pipe with damping material. In addition, damping material can also be applied before and after the measuring point.

D

Signals:

The following graphs may be displayed in the oscilloscope window



The image in the middle shows a relatively poor signal-to-noise ratio, but a correct measurement in this case is still possible.

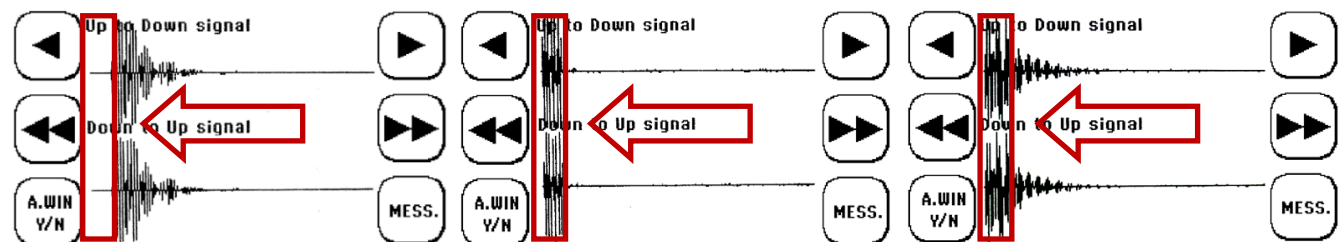
If you do not have a valid signal check if you have used enough Magnalube, if the BNC cables are connected correctly, and if the deltawaveCoG is parameterised properly. Execute sensor test (see below) to test complete signal chain.

E

Sensor test:

Sensor test:

1. Go to the main menu and select "Miscellaneous"
2. Select "Sensor Test"
3. Select "ST Z"
4. You will now be redirected to the oscilloscope window
5. Instead of the speed of sound, "SENSETEST" is now displayed
6. Connect both sensors and apply some coupling gel
7. Hold the transducers as shown on the right (slightly offset!)
8. The sensors are working correctly, if after a short zero line received signals are visible (see picture left)



Picture left: Test OK, you can see that there are no signals at the beginning of the time frame

Picture middle: Test not okay, here the sensors are not connected, signals arrive at the beginning

Picture right: Test not okay, converter connected, but no acoustic contact

Note: The signal illustration may vary depending on the sending code and sensor type