Air bubble detection
and flow measurement

Clamp-on devices for flow measurement of sound transparent liquids in flexible tubes, such as the SONOFLOW CO.55 are particularly suited for processes with toxic and corrosive mediums and mediums with strict hygienic and contamination-free requirements. The devices of the CO series offer an ideal opportunity for retrofitting during operation without process interruptions. This increases the operational availability, avoids loss of production and saves operating costs. The CO flow meter from SONOTEC stands out due to its compact configuration: The electronics is integrated into the sensor. „It is a plug and play device“, states Peter Köderitzsch, responsible for the sales of SONOTEC sensors. „The user simply inserts the tube, closes the lid, connects the data cable to his control unit and here we go. With the help of clamp-on ultrasonic sensors such as the SONOCHECK ABD05 and ABD06 for contactless detection of air bubbles, the latter can be detected quickly and reliably in liquid filled tubes and measuring units. Besides air bubble detection, the intelligent sensors also allow for level monitoring as well as wet/dry detection. The non-invasive SONOCHECK sensors adapt automatically to dynamically changing acoustic conditions and hence ensure a high stability of the measuring values towards changing environment conditions. The measurement cycle is 200 µs. The typical response time is 1 msec. Bubbles with a minimal size of 1/3 of the inner tube diameter can be reliably detected. The air bubble detectors have a customized programmable microcontroller with extendable functionalities. The sensors can be adapted individually to sensitivity requirements, safety routines and signal outputs. Sonotec, Hall 6, Booth 6131
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