

### **New ultrasonic air bubble detector 300 µm AD-102**

AMSYS GmbH & Co. KG, Mainz ([www.amsys-sensor.com](http://www.amsys-sensor.com)), November 2024 – For 25 years, AMSYS has been advising customers on the use of sensors for industrial and, increasingly, medical applications. With the AD-102, the Mainz-based sales company now offers a high-precision air bubble detector. This is used to detect an interruption in fluid flow in applications such as infusion pumps, hemodialysis, blood flow monitoring, but also in 3D printing and food processing.



AD-102 – the 300 µm Ultrasonic Air Bubble Detector

The compact AD-102 air bubble detector (ABD) is used for non-invasive, continuous monitoring of liquids to detect air bubbles. The AD-102 can clearly detect even the smallest air bubbles of only 25% of the hose diameter and its signal can stop the supply within 0.5 ms.

The air bubble detector is available as standard for hose diameters of 6 mm. Versions for hose diameters from 3 mm to 10 mm are also available on request. This allows air bubbles with a volume of just 0.5 µl or 300 µm radius to be detected.

Sensors used for medical applications must be highly accurate, reliable at all times and resistant to external influences. High demands on sensors place high demands on sensor manufacturers. AMSYS GmbH & Co. KG has been working with selected sensor manufacturers such as TE Connectivity for 25 years in order to be able to detect the smallest air bubbles or interruptions in liquid flow with this new ultrasonic sensor.

You can find more information on our homepage <http://www.amsys-sensor.com> or visit us at the up-coming trade fairs compamed in Düsseldorf from November 11 to 14, 2024 or at electronica in Munich from November 12 to 15, 2024.

# Press Release

## AMSYS GmbH & Co. KG



### Title

New ultrasonic air bubble detector 300 µm AD-102

### Outstanding features

- Detects air bubbles with a size of up to 25% of the inner hose diameter
- Input: 5 VDC
- Output: 5.0 V TTL logic
- 6 mm outer hose diameter as standard (the sensor can optionally be adapted to outer hose diameters between 3 and 10 mm)
- Temperature range: 0°C - 60°C
- Response time: 0.5 ms
- Extended self-test (interrogation plus continuous check)
- Non-invasive design eliminates sterility and fluid compatibility issues
- High noise immunity to EMI/RFI
- No acoustic coupling agent required
- Integrated electronics
- LED indication of sensor status visible through the housing

### Product Page

<https://www.amsys-sensor.com/products/pressure-sensor/ad-102-300-%c2%b5m-ultrasonic-air-bubble-detector/>

### The Company

AMSYS GmbH & Co. KG is a German company specializing in sensor technology, particularly pressure measurement. Its product range includes pressure sensors from 1.25 mbar to 800 bar, as well as humidity, temperature, and inclination sensors, along with wireless solutions. In addition to standard products, AMSYS offers custom adaptations to meet specific customer requirements.

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