INTRODUCING
AD-101 AIR BUBBLE DETECTOR

- Utilize ultrasonic technology to positively identify the presence of a break in flow of any type of liquid
- Provide visual indication of bubble with integrated LED

Infusion pumps, hemodialysis and blood flow monitoring applications are designed vital for critical medical conditions. TE Connectivity’s (TE) AD-101 air bubble detector for continuous monitoring uses ultrasonic technology to positively identify the presence of a break in flow of any type of liquid. With continuous self-diagnosis and flexibility in packaging, these sensors enable designs for the most critical applications. TE’s AD-101 air bubble detector offers power-on and continuous self-diagnosis to confirm functionality and provide confidence in system performance. Integral electronics enable more compact product design. The sensor’s Transistor-Transistor Logic (TTL) output is easily integrated into the customer’s system.

APPLICATIONS
- Medical infusion pumps
- Pain management pumps
- Food and beverage processing
- Dialysis equipment
- Hydroponic farming
- Pharmaceutical production
- Water treatment equipment
- Semi-conductor processing equipment
- 3D printing

KEY BENEFITS
- Positively identify the presence of a break in flow of any type of liquid with no direct contact to the liquid
- Provide visual indication of bubble with integrated LED
- Handle tube sizes from 3 mm to 10 mm diameter
- Enable more compact product design with integral electronics
- More easily integrate output with TTL
- Support high immunity to EMI/RFI/ESD
- Provide design flexibility with options on both standard ABD models and customized ABD models to fit the packaging of the end application

MARKET INFORMATION
- Sonotec – ABD05
- CeramTec – 09254
- Introtek – AD8/AD9
- MOOG – Lifeguard Series

TARGET MARKET
- Medical
- Industrial
- Agriculture

QUICK PERFORMANCE OVERVIEW

| Input | Red = +5 to +24VDC  
|       | Black = GND        |
| Output| White = Output  
|       | Open Collection NPN, Low When Liquid Present, Open When Bubble Present |
| Response Time | 2 Milliseconds      |
| Temperature Specification | 0°C to 65°C Maximum |
| Material | ABS/PC (55/45) Plastic Blend, Injection Molded Parts, UL 94 V-2 Rated |
| Cable | 3 Conductor 28AWG, 350MM Long  
|       | UL Style Number 2725 |
| Electronics | Integral |

LEARN MORE
- Ultrasonic Liquid Level Sensor and Bubble Detector Landing Page
- Non-invasive Air Bubble Level Detector Landing Page
- AD-101 Air Bubble Detector Sensor Video
- AD-101 Air Bubble Detector Datasheet
- AD-101 Part List