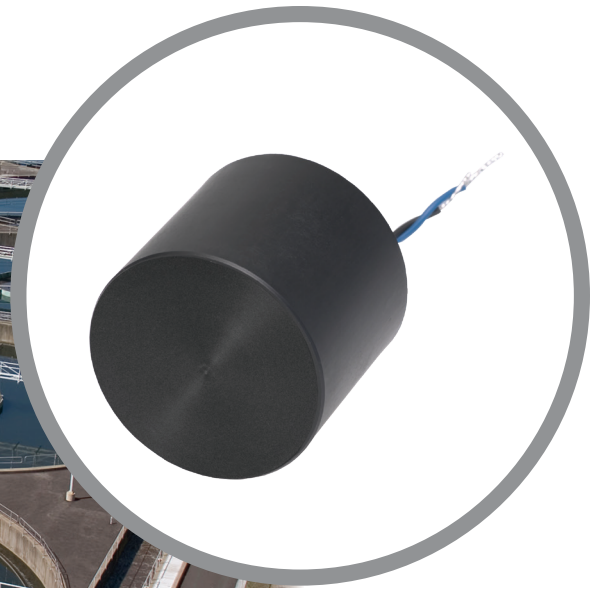


ATK50

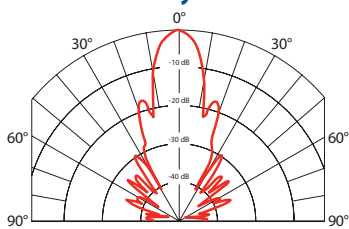


SPECIFICATIONS

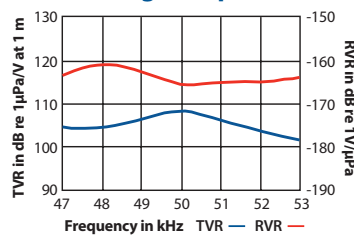
Best Operating Frequency: 50 kHz, $\pm 4\%$
Minimum Transmit Sensitivity at Best Transmit Frequency:
 105 dB re $1\mu\text{Pa}/\text{V}$ at 1 m
Minimum Receive Sensitivity at Best Receive Frequency:
 -170 dB re $1\text{V}/\mu\text{Pa}$
Minimum Parallel Resistance: 350 Ω , $\pm 30\%$
Minimum and Maximum Sensing Range*: 30 cm to 15 m
Typical Sensing Range: 35 cm to 10 m
Free (1 kHz) Capacitance: 5,000 pF, $\pm 20\%$ pF
Beamwidth (@ -3 dB Full Angle): 10° , $\pm 2^\circ$
Maximum Driving Voltage (2% Duty Cycle Tone Burst): 1,000 V_{pp}
Operating Temperature: -40°C to 90°C
Weight: 190 g
Housing Material: Kynar® 720
Acoustic Window: Kynar® 720

*Pulse-Echo Mode. Minimum and maximum ranges are best case scenarios. Actual range may vary, depending on drive circuitry and signal processing.

Directivity Pattern



Transmit & Receive Voltage Response



Impedance Magnitude & Phase

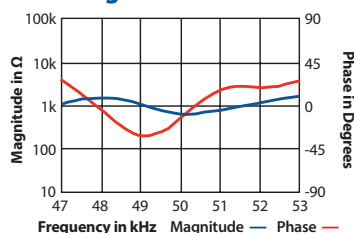
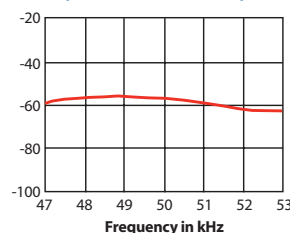


Figure of Merit (Sum of TVR & RVR)



50 kHz

AIRDUCER® Ultrasonic Transducer

Applications

- Level measurement in chemically aggressive environments
- Food and beverage processing
- Proximity sensing
- Obstacle avoidance

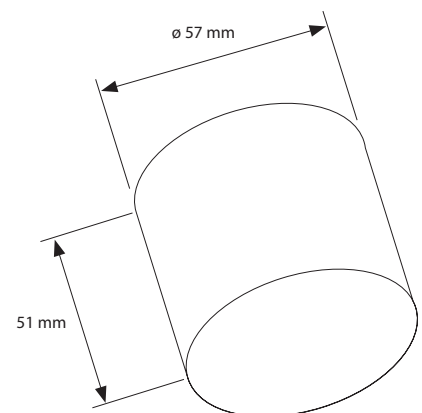
Features

- Rugged one-piece PVDF housing is U.S. FDA compliant
- Cylindrical design allows for installation in various applications

Options

- 10 K Ω thermistor available for temperature compensation

Dimensions



©Airmar Technology Corporation

ATK50_rP 06/26/18

As Airmar constantly improves its products, all specifications are subject to change without notice. All specifications typical at 22°C. AIRDUCER® is a registered trademark of Airmar Technology Corporation. Other company or product names mentioned in this document may be trademarks or registered trademarks of their respective companies, which are not affiliated with Airmar.