

# AT75

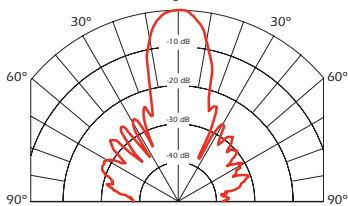


## SPECIFICATIONS

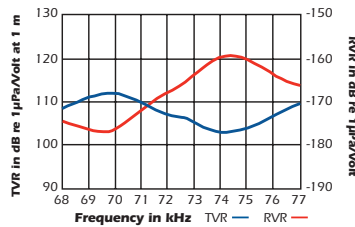
- Best Operating Frequency:** 75 kHz,  $\pm 4\%$
- Minimum Transmit Sensitivity at Best Transmit Frequency:** 111 dB, 1 $\mu$ Pa/V at 1 m
- Minimum Receive Sensitivity at Best Receive Frequency:** -162 dB re 1V/ $\mu$ Pa
- Minimum Parallel Resistance:** 170  $\Omega$ ,  $\pm 30\%$
- Minimum and Maximum Sensing Range\*:** 20 cm to 10 m
- Typical Sensing Range:** 25 cm to 7 m
- Free (1 kHz) Capacitance:** 1,850 pF,  $\pm 200$  pF
- Beamwidth (@ -3 dB Full Angle):** 15°,  $\pm 2^\circ$
- Maximum Driving Voltage (2% Duty Cycle Tone Burst):** 1,000 V<sub>pp</sub>
- Operating Temperature:** -40°C to 90°C
- Weight:** 45 g
- Housing Material:** Glass filled polyester
- Acoustic Window:** Glass reinforced epoxy

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

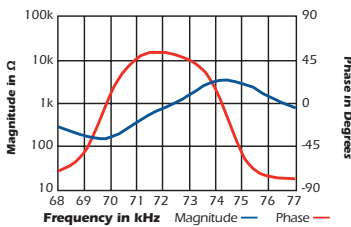
### Directivity Pattern



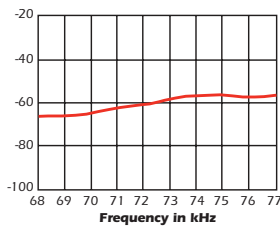
### Transmit & Receive Voltage Response



### Impedance Magnitude & Phase



### Figure of Merit (Sum of TVR & RVR)



## 75 kHz

AIRDUCER® Ultrasonic Transducer

### Applications

- Level measurement
- Open channel flow
- Proximity
- Obstacle avoidance
- Robotics

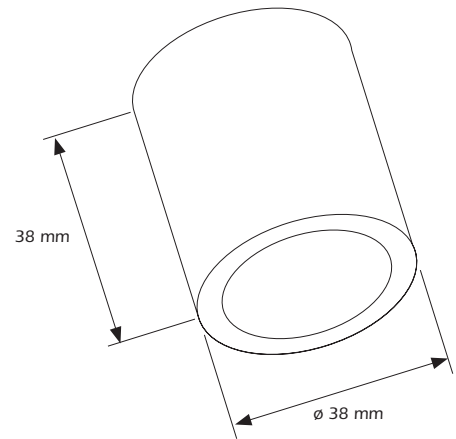
### Features

- Rugged sealed construction
- Cylindrical design allows for installation in various applications

### Options

- AR style with threaded cap available
- Complete assembly or kit versions

### Dimensions



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AT75\_rF 04/13/09

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