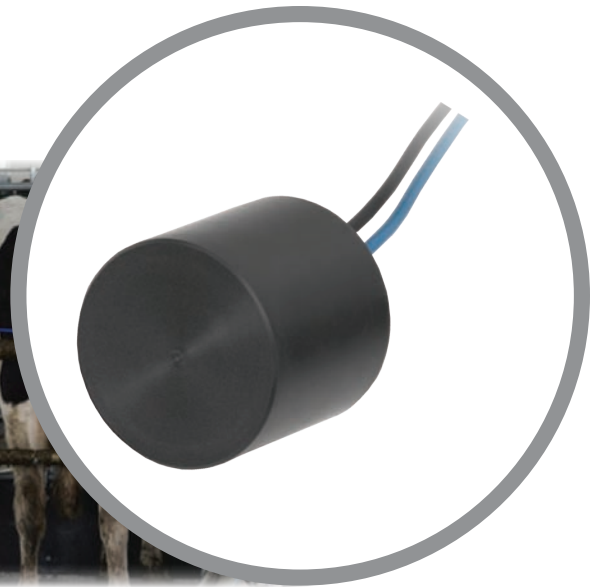


# ATK120

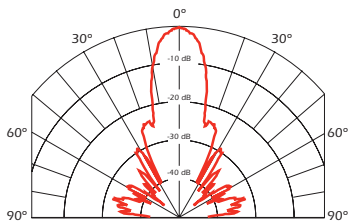


## SPECIFICATIONS

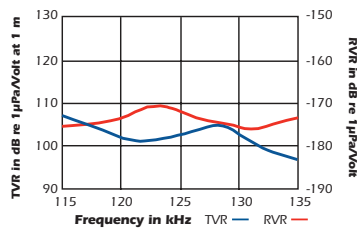
**Best Operating Frequency:** 125 kHz,  $\pm 4\%$   
**Minimum Transmit Sensitivity at Best Transmit Frequency:** 102 dB,  $1 \mu\text{Pa/V}$  at 1 m  
**Minimum Receive Sensitivity at Best Receive Frequency:** -172 dB re  $1\text{V}/\mu\text{Pa}$   
**Minimum Parallel Resistance:** 500  $\Omega$ ,  $\pm 30\%$   
**Minimum and Maximum Sensing Range\*:** 15 cm to 5 m  
**Typical Sensing Range:** 20 cm to 3 m  
**Free (1 kHz) Capacitance:** 1,000 pF,  $\pm 200$  pF  
**Beamwidth (@ -3 dB Full Angle):**  $10^\circ$ ,  $\pm 2^\circ$   
**Maximum Driving Voltage (2% Duty Cycle Tone Burst):** 800  $V_{pp}$   
**Operating Temperature:** -40°C to 90°C  
**Weight:** 30 g  
**Housing Material:** PVDF  
**Acoustic Window:** PVDF

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

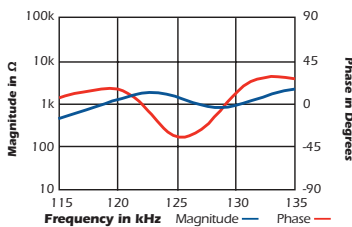
### Directivity Pattern



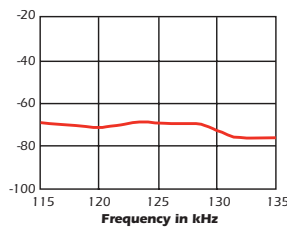
### Transmit & Receive Voltage Response



### Impedance Magnitude & Phase



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



## 125 kHz

AIRDUCER® Ultrasonic Transducer

### Applications

- Level measurement
- Automation control
- Food Processing
- Proximity
- Obstacle avoidance
- Robotics

### Features

- Rugged one-piece PVDF housing
- Resistant to chemically aggressive environments
- Cylindrical design allows for installation in various applications
- Improved deadband

### Options

- Temperature sensor

### Dimensions

