

# ATK120

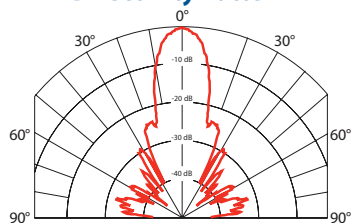


## SPECIFICATIONS

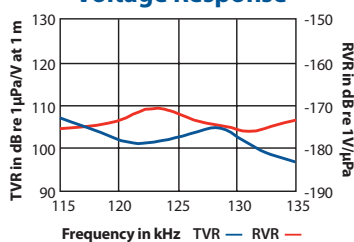
**Best Operating Frequency:** 125 kHz,  $\pm 4\%$   
**Minimum Transmit Sensitivity at Best Transmit Frequency:**  
 102 dB re 1  $\mu\text{Pa}/\text{V}$  at 1 m  
**Minimum Receive Sensitivity at Best Receive Frequency:** -172 dB re 1 V/ $\mu\text{Pa}$   
**Minimum Parallel Resistance:** 500  $\Omega$ ,  $\pm 30\%$   
**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,  $\pm 20\%$  pF  
**Beamwidth (@ -3 dB Full Angle):** 10°,  $\pm 2^\circ$   
**Maximum Driving Voltage (2% Duty Cycle Tone Burst):** 800 V<sub>pp</sub>  
**Operating Temperature:** -40°C to 90°C  
**Weight:** 30 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.

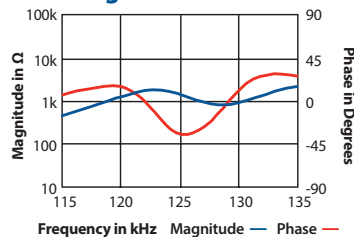
### Directivity Pattern



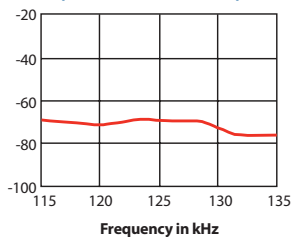
### Transmit & Receive Voltage Response



### Impedance Magnitude & Phase



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



## 125 kHz

## AIRDUCER® Ultrasonic Transducer

### Applications

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

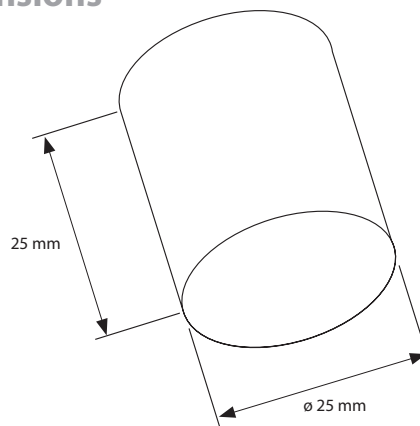
### Features

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

### Options

- 10 K $\Omega$  thermistor available for temperature compensation

### Dimensions



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