

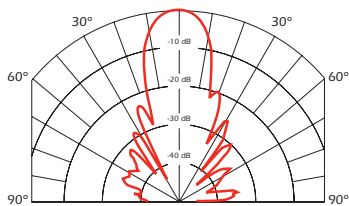


### SPECIFICATIONS

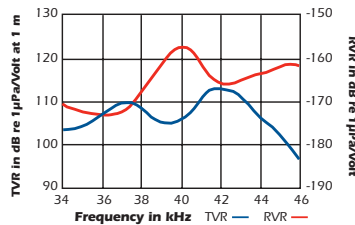
**Best Operating Frequency:** 41 kHz,  $\pm 4\%$   
**Minimum Transmit Sensitivity at Best Transmit Frequency:** 108 dB, 1  $\mu\text{Pa/V}$  at 1 m  
**Minimum Receive Sensitivity at Best Receive Frequency:** -175 dB re 1V/ $\mu\text{Pa}$   
**Minimum Parallel Resistance:** 200  $\Omega$ ,  $\pm 30\%$   
**Minimum and Maximum Sensing Range\*:** 30 cm to 20 m  
**Typical Sensing Range:** 35 cm to 15 m  
**Free (1 kHz) Capacitance:** 5,000 pF,  $\pm 500$  pF  
**Beamwidth (@ -3 dB Full Angle):** 14°,  $\pm 2^\circ$   
**Maximum Driving Voltage (2% Duty Cycle Tone Burst):** 1,800  $V_{pp}$   
**Operating Temperature:** -40°C to 90°C  
**Weight:** 560 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.

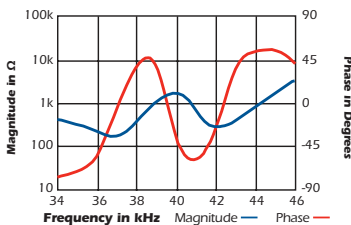
#### Directivity Pattern



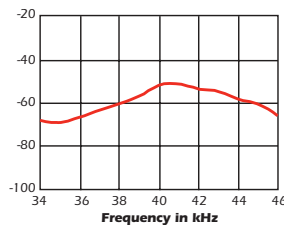
#### Transmit & Receive Voltage Response



#### Impedance Magnitude & Phase



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



## 41 kHz

AIRDUCER® Ultrasonic Transducer

### Applications

- Level measurement

### Features

- Rugged one-piece PVDF housing
- Ideal for chemically aggressive environments
- Housing design will accommodate transceiver and signal processing electronics

### Options

- Complete assembly available with standard cable lengths
- 10 K $\Omega$  thermistors are optional for temperature compensation
- FM approved

### Dimensions

