

ARK41

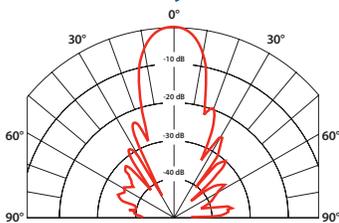


SPECIFICATIONS

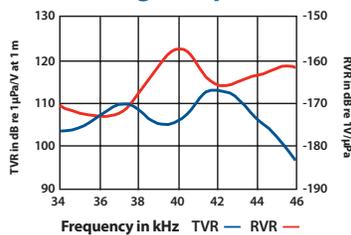
- Best Operating Frequency:** 41 kHz, $\pm 4\%$
- Minimum Transmit Sensitivity at Best Transmit Frequency:** 108 dB re $1\mu\text{Pa/V}$ at 1 m
- Minimum Receive Sensitivity at Best Receive Frequency:** -175 dB re $1\text{V}/\mu\text{Pa}$
- Minimum Parallel Resistance:** 200 Ω , $\pm 30\%$
- Minimum and Maximum Sensing Range*:** 30 cm to 20 m
- Typical Sensing Range:** 35 cm to 15 m
- Free (1 kHz) Capacitance:** 5,000 pF, $\pm 20\%$ 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:** 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

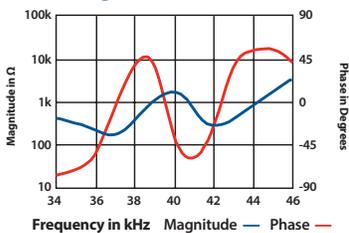
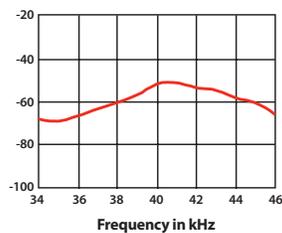


Figure of Merit (Sum of TVR & RVR)



41 kHz

AIRDUCER® Ultrasonic Transducer

Applications

- Level measurement in chemically aggressive environments
- Food and beverage processing
- Flow monitoring

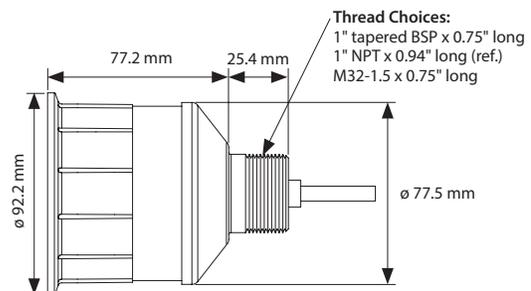
Features

- Rugged one-piece PVDF housing is U.S. FDA compliant
- Housing design will accommodate transceiver and signal processing electronics
- Standard internal shielding

Options

- Complete assembly available with standard cable lengths
- 10 K Ω thermistor available for temperature compensation
- FM approved
- Mounting caps available in BSP, NPT, or M32 threads

Dimensions



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