

ARK75-THD

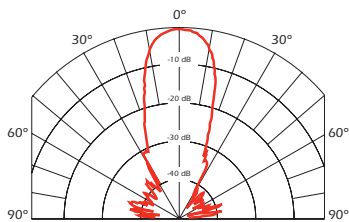


SPECIFICATIONS

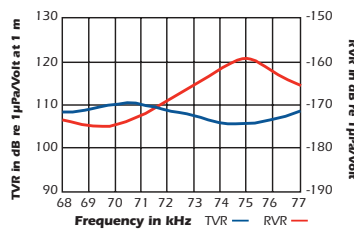
- Best Operating Frequency:** 75 kHz, $\pm 4\%$
- Minimum Transmit Sensitivity at Best Transmit Frequency:** 110 dB, 1 $\mu\text{Pa}/\text{V}$ at 1 m
- Minimum Receive Sensitivity at Best Receive Frequency:** -160 dB re 1V/ μPa
- Minimum Parallel Resistance:** 150 Ω , $\pm 30\%$
- Minimum and Maximum Sensing Range*:** 20 cm to 10 m
- Typical Sensing Range:** 25 cm to 7 m
- Free (1 kHz) Capacitance:** 1,850 pF, ± 200 pF
- Beamwidth (@ -3 dB Full Angle):** 14°, $\pm 2^\circ$
- Maximum Driving Voltage (2% Duty Cycle Tone Burst):** 1,000 V_{pp}
- Operating Temperature:** -40°C to 90°C
- Weight:** 250 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

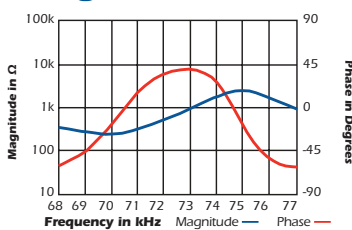
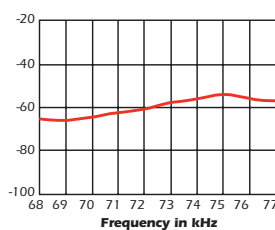


Figure of Merit (Sum of TVR & RVR)



75 kHz

AIRDUCER® Ultrasonic Transducer

Applications

- Level measurement in caustic environments

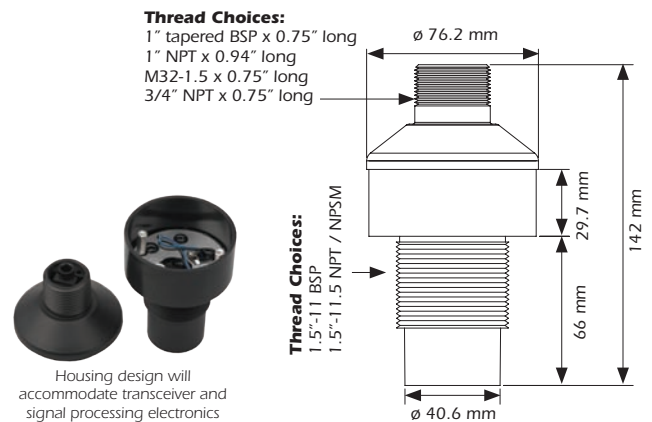
Features

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

Options

- Nut—1.5" BSP thread
- Complete assembly available with standard cable lengths
- 10 K Ω thermistors are optional for temperature compensation
- FM approved

Dimensions



Housing design will accommodate transceiver and signal processing electronics