

ARK120-THD

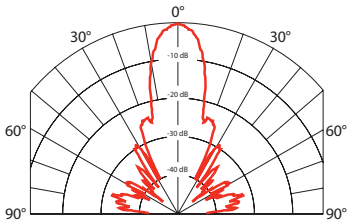


SPECIFICATIONS

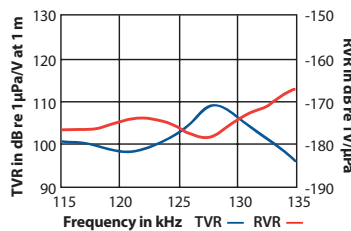
Best Operating Frequency: 125 kHz, $\pm 4\%$
Minimum Transmit Sensitivity at Best Transmit Frequency:
 102 dB re $1\mu\text{Pa/V}$ at 1 m
Minimum Receive Sensitivity at Best Receive Frequency: -172 dB re $1\text{V}/\mu\text{Pa}$
Minimum Parallel Resistance: 500 Ω , $\pm 30\%$
Minimum and Maximum Sensing 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): 12° , $\pm 2^\circ$
Maximum Driving Voltage (2% Duty Cycle Tone Burst): 800 V_{pp}
Operating Temperature: -40°C to 90°C
Weight: 250 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

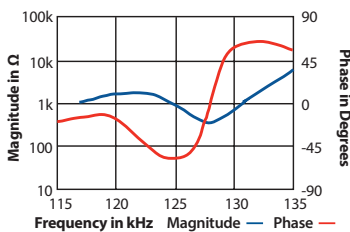
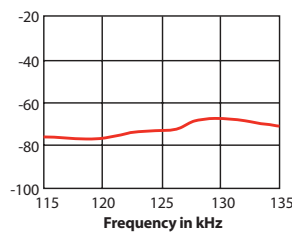


Figure of Merit (Sum of TVR & RVR)



125 kHz

AIRDUCER® Ultrasonic Transducer

Applications

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

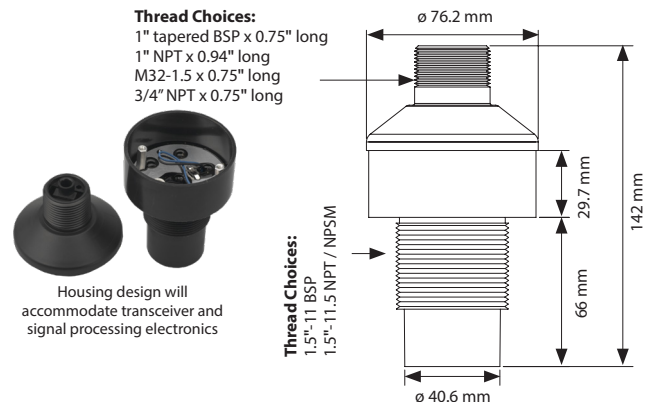
Features

- Rugged one-piece PVDF housing is U.S. FDA compliant
- Threaded design allows for installation in various applications
- Standard internal shielding
- 8 mm M3 PCB standoffs

Options

- Nut—1.5" BSP thread
- Complete assembly available with standard cable lengths
- 10 K Ω thermistor available for temperature compensation
- 12 mm extension sleeve

Dimensions



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ARK120_THD_rE 6/26/18

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