ARK120-THD

FM APPROVED

SPECIFICATIONS

Best Operating Frequency: 125 kHz, ±4%

Minimum Transmit Sensitivity at Best Transmit Frequency: 102 dB, 1µPa/V at 1 m

Minimum Receive Sensitivity at Best Receive Frequency: -172 dB re 1V/µPa

Minimum Parallel Resistance: 500 Ω, ±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, ±20% pF

Beamwidth (@ -3 dB Full Angle): 12°, ±2°

Maximum Driving Voltage (2% Duty Cycle Tone Burst): 800 V_{pp}

Operating Temperature: -40°C to 90°C

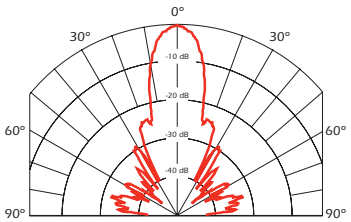
Weight: 30 g

Housing Material: Kynar® 720

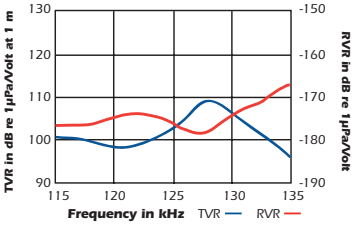
Acoustic Window: Kynar® 720

*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

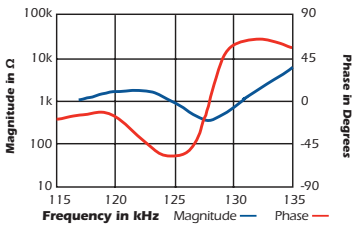
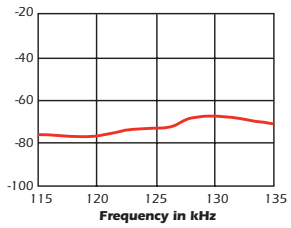


Figure of Merit (Sum of TVR & RVR)



125 kHz

AIRDUCER® Ultrasonic Transducer

Applications

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

Features

- Rugged one-piece PVDF housing is U.S. FDA compliant
- Standard internal shielding
- 8 mm M3 PCB standoffs

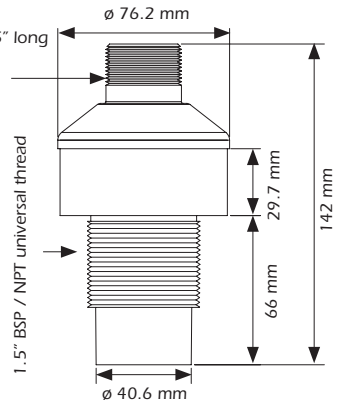
Options

- Nut—1.5" BSP thread
- Complete assembly available with standard cable lengths
- 10 KΩ thermistors for temperature compensation
- FM approved
- 12 mm extension sleeve

Dimensions

Thread Choices:
1" tapered BSP x 0.75" long
1" NPT x 0.94" long
M32-1.5 x 0.75" long

Housing design will accommodate transceiver and signal processing electronics



AIRMAR® TECHNOLOGY CORPORATION
Sensing Technology

RoHS COMPLIANT

ISO CERTIFIED

ARK120_THD_rA 09/24/14

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