

Features:

- Solid Reliable Construction
- Variety of Housings Available

Applications:

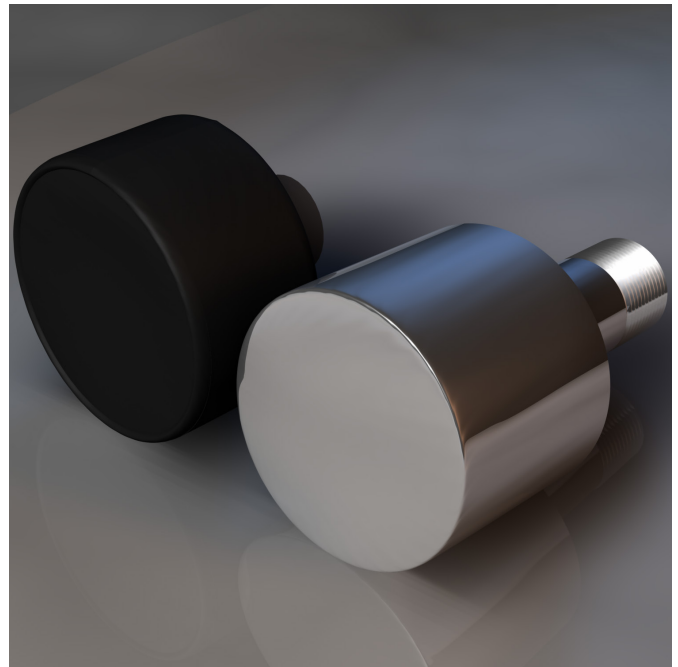
- Level measurement
- Open channel flow
- Obstacle avoidance
- Proximity

The 4012 Series Air Acoustic Transducers enhance the performance of 40 kHz level sensing systems. The transducers feature low electrical impedance and an improved signal-to-noise ratio for strong, clean signals with the controlled damping for reduced dead zone. Models 4012A and 4012B are pre-stressed for operation over a wide range of environmental temperatures. The proprietary design provides the classical beam pattern of a two-inch source without the annoying side lobes of other designs.

The resin filled housings with pipe termination are available in PVC, CPVC, Teflon®, Kynar® and 316 Stainless Steel to make them compatible with most level sensing environments. This compact light-weight design utilizes lead zirconate/titanate elements in a sealed vibration-isolated cell for reduced microphonism in structurally noisy installations.

Specifications:

Best Operating Frequency	40kHz +/- 4%
Min Receive Sensitivity ¹ Insertion loss at 50"	-60 dB
Impedance (Min parallel resistance)	600Ω +/- 30%
Free (1kHz) Capacitance	2300pF +/- 500pF
Min/Max Sensing Range ²	15" – 45'
Beamwidth: (-6dB full angle)	13° +/- 2°
Maximum Driving Voltage: (2% duty cycle tone burst)	500Vp-p
Operating Temperature:	-40°C – 73.9°C (-40°F – 165°F)



Available Housing Materials:

- PVC or CPVC
- Teflon
- Kynar
- Stainless Steel

Cable:

- 3 foot RG62/U
- Other cable lengths up to 500 feet are available

Options:

- Standard thermal sensor is the AD590JH Customer supplied sensors can be installed

Agency Approved Models:

- The 4012BS (Stainless Steel) model is available in a Explosion proof approved version for use in Class 1, Group A, B, C, or D locations.

Accessories:

- Exponential horn to increase range and decrease beam angle can be provided for all PVC models except flush flange units
- Unit with built in drive circuitry available
- Matching drive transformer
- Threaded couplers and gaskets

All specifications typical at 22°C (71.6°F)

¹ By comparing input drive voltage to return echo at 1m. With 30 drive cycles.

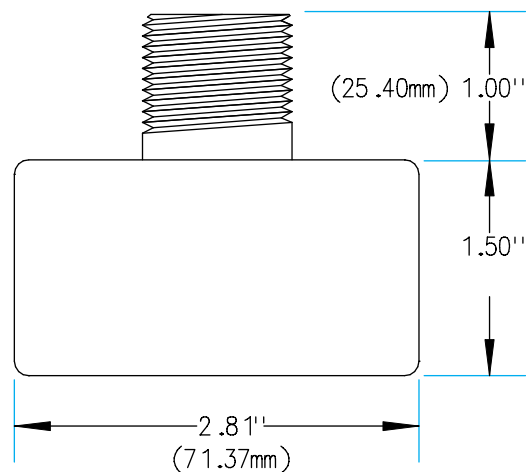
² Pulse-Echo Mode. Min. and Max. ranges are best case scenarios. Actual range may vary, depending on drive circuitry and signal processing.

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®Kynar is a registered trademark of Arkema Inc.

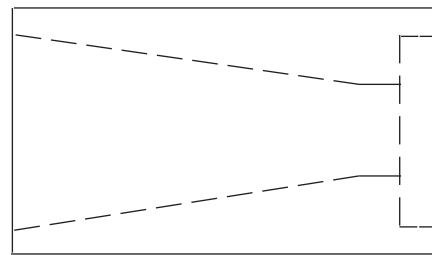
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.75 NPT Thread



Standard Housing

(Custom fittings are available)



Exponential Horn