

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. The compact light-weight design utilizes Lead Zirconate / Titanate elements in a sealed vibration-isolated cell for reduced microphone noise in structurally noisy installations.



Specifications:

Best Operating Frequency:	40kHz +/- 4%
Min. Receive Sensitivity ¹ :	-60dB
Insertion Loss at 15"	
Impedance	600Ω +/- 30%
(Min. Parallel Resistance)	
Typical sensing range ² :	1.3ft - 45ft
Beamwidth:	13° +/- 2°
(-6dB full angle)	
Maximum Driving Voltage:	500Vp-p
(2% duty cycle tone burst)	
Operating Temperature:	-40°F to 165°F

All specifications typical at 22°C

1 By comparing input drive voltage to return echo at 15".
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.

Parsonics Corporation

935 Dieckman Street • Woodstock, IL 60098

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:

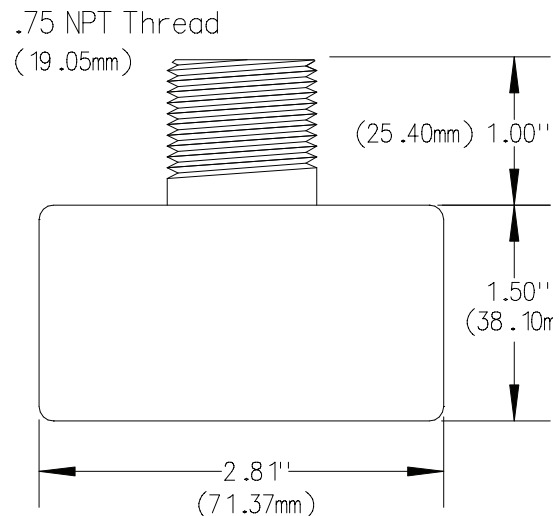
- The 4012BS (Stainless Steel) model is available in a CSA approved version for use in Class 1, Group A, B, C, or D locations

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

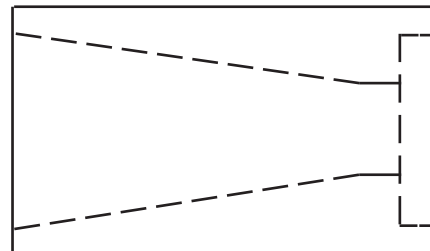
Part Number	Model
PAR-4012 3-A	Teflon Housing
PAR-4012KYN	Kynar Housing
PAR-4012BS	Stainless Steel Housing
PAR-4012T	Optional Transformer
PAR-4012-HORN	Exponential Horn

Drawings



Standard Housing

(Custom fittings are available)



Exponential Horn

Parsonics Corporation

935 Dieckman Street • Woodstock, IL 60098