



Transducers USA Introduces New Custom Ultrasonic Sensors

The non-contact sensing technology used in these Ultrasonic devices measures distance to an object by emitting sound waves and receiving the echo signal using a single ultrasonic element, unlike optical sensors which require both a transmitter and receiver. The ultrasonic speaker emits sound waves at high frequencies (25,000 Hz to 40,000 Hz), which are inaudible.

Transducer USA's Ultrasonic Sensors can detect a wide range of materials: hard, soft, any color, flat or curved. They can also reflect off transparent objects, such as glass or a liquid surface, and are stable for targets such as mesh trays or springs. Detection is not affected by dust or dirt; rugged Ultrasonic Sensors are largely immune to environmental conditions indoors or out. The use of solid state technology eliminates the use of mechanical parts to break, extending the operating life of the device, and prevents dangerous sparking. Unlike traditional proximity sensors, Ultrasonic Sensors operate over longer distances and can be programmed to establish a user-specified distance range.

While Ultrasonic Sensors have a variety of applications, their primary functions include detection and level measurement. They are ideally suited for material handling, food and beverage, fill level measurement or detection at gates and doorways, as well as other diverse applications.

Ultrasonic Sensors can measure dynamically changing diameters, distances, heights, depths and count the number of units. A sample list of applications includes:

- Tank & Silo Measurement – provides level measurement of liquids such as milk, chemicals or lacquer, as well as mud, sludge or bulk goods, such as sand, or gravel
- Counting – detection and counting of bottles or other products on production lines and conveyors; optimizes entry and exit of products in the workflow
- People Detection – identifies and counts humans entering the distance band

Ultrasonic Sensors from Transducers USA include the following specifications and ratings

- Solid sealed aluminum housing or commercial plastic housing
- Sealed epoxy potted construction
- Waterproof – parts with IP 57 and IP67 ratings are available
- Measurement rates from 25,000 Hz to 40,000 Hz
- Compliant with RoHS, REACH and Conflict Minerals law

Transducers USA will customize an Ultrasonic Sensor to meet the specific needs of the customer and the application requirements. Device specifications can be provided within a few days. Standard lead time for samples is two weeks, and production lead time is generally six weeks.

For more information on Ultrasonic Sensors from Transducers USA, please visit: <http://www.tusainc.com> or contact Joe Sieracki at 847-956-1920.



New Custom Ultrasonic
Sensors from Transducers
USA

These new devices include both a proximity sensor and an ultrasonic speaker, providing both detection and an audible alert notifying the occurrence of a specified condition.