



## Transducers Overview

### About ACCUSONIC

ACCUSONIC®, a brand of ADS® LLC, designs and manufactures multi-path transit-time flow measurement systems, which are renowned for their precise accuracy and reliability in difficult operating environments.

ACCUSONIC flowmeters can be found in hydroelectric and thermal power plants, water and wastewater treatment facilities, sewage collection systems, and other types of water conveyance pipelines and channels.

Since 1967, ACCUSONIC has installed thousands of systems worldwide, and offers a full range of services including installation and startup, system verification, turbine performance testing services, and field training.

### A Wide Range of Transducers for All Applications



- 1. 7601
- 2. 7601
- 3. 7601 with 7641 Feedthrough Assembly

- 4. 7601P with 7647 Feedthrough Assembly
- 5. 7618
- 6. 7658

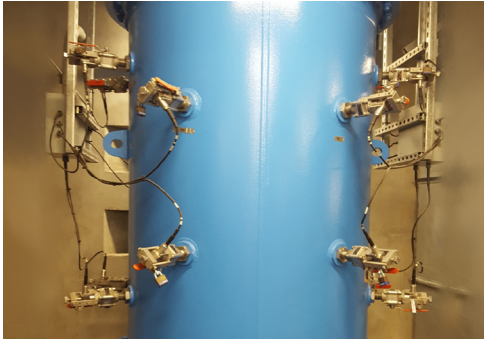
- 7. 7634
- 8. 7625
- 9. 7605

ACCUSONIC® offers a wide range of flowmeter transducers to address the diverse applications requirements of numerous industries. This broad offering allows ACCUSONIC to provide the most appropriate transducer for each application:

- Buried Pipes
- Exposed Pipes
- Open Channels
- Metal/Concrete/Plastic Walls
- Irregular Shaped Pipes & Conduits
- Bi-directional Flow Monitoring

ACCUSONIC flowmeters can achieve the best possible performance even under adverse installation and hydraulic conditions.

Below are the descriptions of ACCUSONIC's line of acoustic flow transducers. To select a transducer type for a specific application, please contact ACCUSONIC directly for recommendations. In addition to the transducers listed below, other application-specific transducer designs are available. Detailed specification sheets for each transducer type can be found at [www.ACCUSONIC.com](http://www.ACCUSONIC.com).



7600 Transducer Installation - External View



Model 7664 Weld-on Cold Tap Installation



Model 7647 Corp-stop Hot Tap Installation



7625 Transducers Installation - Internal View



7634 Transducer Mounted in Concrete Pipe

## Pipelines

### 7600 / 7601 Fully Removeable Feedthrough

Used for exposed pipelines

Completely removeable without dewatering the pipe

Transducers are 316 SS or PVC and are used with Model 7660 or 7641 stainless steel feedthrough assemblies

7600 rated to 1500 psi (103 bar);  
7601 rated to 450 psi (31 bar)

Welding is optional for this installation

### 7600 / 7601 Cold Tap

Used with Model 7664 or 7662 weld-on feedthrough assemblies

Installation process when internal access is unavailable and pipe can be dewatered

7600 and 7601 transducers are fully removeable after installation

### 7601P Hot Tap

7601P transducers with Model 7647 Corporation-Stop assembly may be utilized as a "drill and tap" installation up to approximately 200 psi (14 bar) maximum pipeline pressure

When pipes cannot be dewatered, an integral ball-valve allows removal of transducer under pressure with positive pressure seal

7601P certified for use in hazardous area locations

### 7605 / 7625 Fixed Window Feedthrough

Used for exposed pipelines

Transducer element is removeable for servicing from outside the pipe; the window is permanently fixed

Model 7605 is stainless steel with max pressure of 2000 psi (138 bar); Model 7625 is Delrin with max pressure of 500 psi (34.5)

No welding is required for feedthrough installation

### 7658 and 7634 Internal Mount

For installation in buried or encased pipes

Cable from each transducer is brought through conduit to a penetration assembly which can be located in a small area of exposed pipe

With Model 7634 transducers, each assembly incorporates two transducer elements, two connectors and two cables, providing redundancy for hard-to-access locations

Transducer mounts can be bolted or welded to the pipe walls, making them suitable for steel or concrete pipes





7658 Transducers Installed in Octagon Conduit

## Hazardous Areas / Sewers / CSOs

### 7658 Intrinsically Safe Low-Profile Internal Mount

Certified for use in hazardous area locations

These transducers are ideal for installation in sewer lines and present a low profile when used with the rugged Model 7698 mounts

7658 is also well suited for non-hazardous locations where low profile mounts are desirable



7658 Transducers Mounted on Stainless Steel Band

## Channels / Rectangular Conduits

### Sleeve and Plate Arrays

Many of ACCUSONIC's transducers can be pre-mounted onto permanent sliding plates

Reduce installation time and system down time

Sliding plate arrays are useful for vertical wall or trapezoidal channels, as they allow for easy servicing without dewatering or entering the channel

Sleeve inserts are used in smaller collection system lines to reduce installation time in the sewer

### 7616 and 7658 Surface Mount

Used in rectangular and trapezoidal channels

Usually mounted in prefabricated arrays or on sliding plates secured to the channel wall

### 7618 Adjustable

Used in vertical wall channels or intakes such as those found at low head hydro plants

The transducer element rests like an eyeball within the impact-resistant 7696 mount

The eyeball design allows easy alignment of the transducer regardless of wall shape

The 7618's are usually mounted in arrays with integral conduit protection



7618 Transducers Mounted on Plate



7612 Transducers Installed in Trapezoidal Channel

## Rivers

### 7612 Long Path Length

Used in large channels, canals, and river applications

Its 200kHz frequency is well suited for path length up to 500 feet (150 meters)

**ACCUSONIC takes great pride in its ability to provide superior performing flow measurement systems.**



**Our services reach a diverse range of industries, including the most difficult applications. We are recognized as a leader in the supply and service of transit-time flowmeters for the largest pipes and channels in the world.**



**Learn more about ACCUSONIC at [www.ACCUSONIC.com](http://www.ACCUSONIC.com)**  
**Call: +1(256)430-3366      Email: [accusonicsales@idexcorp.com](mailto:accusonicsales@idexcorp.com)**

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