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

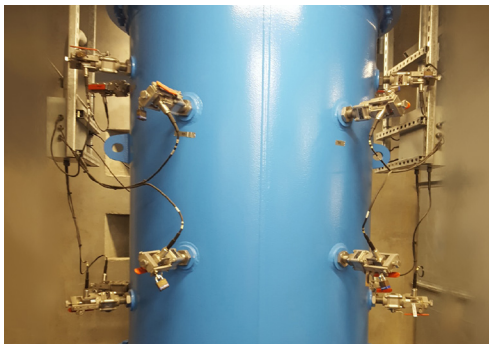
ACCUSONIC® offers a wide range of flowmeter transducers to address the diverse applications requirements of numerous industries. This broad offering allows ACCUSONIC to provide the most appropriate transducer for each application:

- 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.

Transducer Overview

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.



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. *NOTE: Welding may be required
	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 permanantly 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 assemly 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 to permananent 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 arryas 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
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Specifications subject to change without notice.