

# Model 7601P/7647 Hot-Tap or Cold-Tap Transducer/Feedthrough Assembly



## About Accusonic

Accusonic Technologies, a division of ADS Corporation, designs and manufactures ultrasonic transit-time flow measurement systems that are renowned for their precise accuracy and reliability in difficult operating environments. Accusonic flowmeter systems can be found in hydroelectric plants, thermal power plants, water and wastewater treatment facilities, sewage collection systems, and other types of water flow conveyance pipelines and channels. With over 35 years of experience and over 2500 systems installed worldwide, Accusonic offers a full range of services including installation, system integration, turbine performance testing services, and field training.

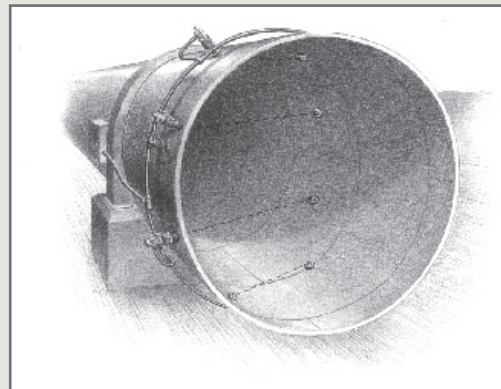


*Model 7601P Transducer, Model 7648-HT Jacking Mechanism (with Model 7647 Corporation Stop Feedthrough attached) and Model 7647 Corporation Stop Feedthrough*

The Accusonic Model 7601P is a PVC transducer designed for use with the Model 7647 Corporation Stop Feedthrough on low-to medium-pressure indoor or outdoor pipeline applications. The 7601P/7647 assembly, which is designed for installation through the pipe wall, may be directly tapped into dewatered pipes or installed on operating, pressurized pipes using the Mueller® Hot-tap System. The Model 7647 contains a 1-in. (25 mm) bronze Corporation Stop Feedthrough with ball valve which allows for complete removal of the 7601P transducer for repair, replacement, or cleaning without dewatering the pipeline.

Models 7601P/7647 are ideal for use on ductile iron or steel pipes with pipe walls ranging from 3/8 in. to 1-in. (9.5 mm - 25.4 mm) thick. The assembly is well-suited for small pipes and pipelines with no internal access.

The Model 7601P Transducer is certified by Factory Mutual (FM) and Canadian Standards Association (CSA) for intrinsically safe installation in NEC Class I, Divisions 1 & 2, Groups C & D and by CENELEC (SIRA) to ATEX requirements for Zones 0 & 1 hazardous locations, when used with approved Accusonic flowmeter configurations.



*Typical 4-path installation of Accusonic Technologies Model 7601P/7647 Hot or Cold-Tap Transducer/Feedthrough Assembly.*

## DESIGN SPECIFICATIONS

<b>Operational Frequency:</b>	1 MHz
<b>Pipe Diameter:</b>	1.5 ft. to 16 ft. (0.5 m to 5 m)
<b>Maximum Service Pressure:</b>	250 psi (17 bar)
<b>Temperature Limits:</b>	32° to 122° F (0° to 50° C) Operating 14° to 122° F (-10° to 50° C) Storage
<b>Hazardous Location Rating:</b>	The Model 7601P Transducer is certified by Factory Mutual (FM) and Canadian Standards Association (CSA) for intrinsically safe installation in NEC Class I, Divisions 1 & 2, Groups C & D and by CENELEC (SIRA) to ATEX requirements for Zones 0 & 1 hazardous locations, when used with approved Accusonic flowmeter configurations with energy barriers. NOTE: Not approved where the vapors of ketones or esters are present.

## DIMENSIONAL DATA

<b>Feedthrough Hole Diameter:</b>	1 in. (25 mm) AWWA Thread
<b>Minimum Pipe Wall Thickness:</b>	3/8 in. (10 mm) iron or steel; <i>Modified systems are available for thicker pipe wall applications - Contact Accusonic with pipe dimensions.</i>
<b>Maximum Pipe Wall Thickness:</b>	1 in. (26 mm) Including mortar lining, etc.
<b>Clearance Required for Transducer Removal/Replacement:</b>	30 in. (760 mm) Using Type 7648-HT Screw Jack
<b>Clearance Required for Tapping Tool:</b>	54 in. (1,400 mm) Radial clearance from outer pipe wall

Contact Accusonic Technologies for information on transducers recommended for specialized applications.

