

Model 7630/7634 Dual-Element Internal-Mount Transducers

About Accusonic

Accusonic Technologies, a division of ADS LLC, designs and manufactures ultrasonic transit-time flow measurement systems that are renowned for their precise accuracy and reliability in difficult operating environments. Accusonic flowmeters 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. 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.



The Accusonic Models 7630 and 7634 are dual-element, internal-mount transducers designed for installation inside buried or encased pipes. The cables from the transducers are brought through a conduit to a penetration assembly which can be located in a small area of exposed pipe.

Since the internal-mount transducer assembly is used where access to the transducers is not feasible without dewatering, each assembly incorporates two transducer elements, two connectors and two cables. One is the primary element, and the second is a backup which can be activated from outside the pipe in case of failure of the primary element.

The internal-mount transducer assembly consists of mounting blocks, a transducer body, a protective deflector and an assembly tube. The mounting blocks are welded or anchored to the pipe wall at accurately determined locations. The assembly tube containing the transducer body and deflector is bolted to the mounting blocks, while the cable penetration assembly feeds through a hole in the pipe and uses O-rings to seal the assembly to the pipe.

Typically, the Model 7630 1.0 MHz transducers are used in clean water applications where pipe or channel diameter/width is less than 24 feet. For larger pipes or channels, or sediment-laden water applications, the Model 7634 500 kHz transducers are recommended.



DESIGN SPECIFICATIONS

Operational Frequency:	Model 7630 1 MHz	Model 7634 500 kHz
Pipe Diameter:	4 - 24 ft. * (1.2 - 7.3 m)	4 - 60 ft. * (1.2 - 18.3 m)
Path Length:	4 - 34 ft. * (1.2 - 10.4 m)	4 - 85 ft. * (1.2 - 26 m)
Maximum Service Pressure:	450 psi (31 bar)	450 psi (31 bar)
Temperature Limits:	32 to 122 F (0 to 50 C) Operating 14 to 122 F (-10 to 50 C) Storage	32 to 122 F (0 to 50 C) Operating 14 to 122 F (-10 to 50 C) Storage
Construction Material:	PVC	
* Maximum pipe size/path length will be lower for sediment-laden water		

SPECIAL FEATURES

- Primary and backup element configuration
- Hydrodynamic profile
- Rugged design
- Self-purging connectors

Specialized Applications:

- High-pressure
- Internal-mount

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

