Model 7656/7655 Explosion-proof Feedthrough Transducer Assembly

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 Model 7656 Explosion-proof Transducer is certified by FM, CSA and ATEX for hazardous area locations. The Model 7656 is a CPVC transducer that can be used with the Model 7655 feedthrough assembly for through-wall mounting in exposed concrete and steel pipes.

Feedthrough-type mounting is used on exposed pipes and channels to allow for transducer removal and maintenance without dewatering the pipe. The Model 7656 can also be internally mounted in large buried pipes or channels. To maintain the explosion-proof rating on an internal-mount installation, the transducer cables must be routed through cable conduit with approved seals.
Applications in water and wastewater pipelines and open channels with path lengths of up to 50 feet (15.2 meters) in hazardous locations when connected to Accusonic Model 8510/7510/7500 series flowmeter. Maximum path length depends on sediment concentration and aeration. Contact Accusonic regarding application suitability.

**Operational Frequency:** 500 kHz  
**Maximum Operating Pressure:** 30 psi (2 bar)  
**Temperature Range:** 32 to 122 F (0 to 50 C) operation  
14 to 122 F (-10 to 50 C) storage  
**Construction Material:** CPVC  
**Hazardous Location Rating:** FM and CSA Class I, Divisions 1 and 2, Groups C and D  
Note: Not approved for use in locations where the vapors of ketones or esters are present  
**Dimensions:** 1.75 inches (45mm) in diameter  
7.5 inches (190mm) long for Model 7656  
Installed length varies with pipe wall thickness for feedthrough applications  
**Conduit Connection:** 1 inch NPT female (Feedthrough)  
1 inch NPT male (Internal Mount)  
**Electrical Connection:** Junction box at rear of feedthrough in nonhazardous areas  
Two conductor underwater-pluggable neoprene connector (Internal Mount)

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