Model 7605/7625 Feedthrough Transducer Assembly

About ACCUSONIC

ACCUSONIC, a division 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.



The Model 7605 assembly is installed in a dewatered pipe from the inside. Installation is performed by accurately determining the appropriate transducer locations, drilling holes in the pipe for penetration of the feedthroughs, and measuring the as-built transducer locations. The feedthrough assembly is sealed on the pipe using O-ring inner and outer seals. No welding is required.

The Model 7625 is the same design as the 7605 with the exception that the transducer body material is made from Delrin®. The transducer is offered for applications where cost is an important factor. The Model 7625 is used in medium pressure applications where the transducer is not directly exposed to the outdoors.

The Model 7605 Transducer is a 316 stainless steel assembly with a fixed Plexiglas® window. The active transducer element may be removed and replaced from outside the pipe, while cleaning the transducer face would still require dewatering the pipe. The Model 7605 is a rugged transducer designed for higher pressure and/or exposed outdoor applications.



Typical 4-path installation of Model 7605/7625 Feedthrough Transducers





DESIGN SPECIFICATIONS

Temperature Limits:

Operating Frequency: 1 MHz

 Pipe Diameter:
 3 ft. - 24 ft. (0.9 m - 7.50 m)

 Maximum Service Pressure:
 Model 7625 - 500 psi (34 bar)

Model 7605 - 2000 psi (138 bar) 32 to 122 F (0 to 50 C) Operating

14 to 122 F (-10 to 50 C) Storage

Construction Material: Model 7625 - Delrin

Model 7605 - 316 SS

DIMENSIONAL DATA

Feedthrough Diameter: 1.50 in. (38 mm)

Maximum Pipe Wall Thickness: Model **7625** - 1.375 in. (35 mm)

Model 7605 - 2.5 in. (64 mm)

Clearance Required for Transducer

Element Removal/Replacement: 12 in. (305 mm)

Contact ACCUSONIC for information on transducers recommended for specialized applications.



