



Liquids:

FAC Training Manual

1. Liquid transducers are usually shear type.
2. Model #: F=Fluid, S=Shear, Next letter is transducer size
3. Pipe size range can usually be expanded

Transducer Type	Pipe Size OD Range	Comments
FSS	¼” to .5”	Use only with thin wall SS below .5”
FSQ	.5” to 4”	
FSP	1” to 4”	Use on small diameter with challenging pipes, high viscosity, wave injector
FSM	3” to 24”	With wastewater applications, K transducer might be necessary even down to 6”. With condenser water and other service water applications, there is usually some internal scaling and K’s might be needed at around 12-16” and above.
FSK	6” to > 144”	Use with challenging pipes that are likely to have scaling or sludge build-up
FSG	12” to 255”	Use with challenging pipes that are likely to have scaling or sludge build-up

Gas:

1. Gas transducers are usually lamb type
2. Model #: G=Gas, L=Lamb, next letter is transducer size
3. ALWAYS match transducer to pipe wall thickness
4. Wall thickness recommendations are for steel pipe. For other materials, consult with Flexim.
5. Check the minimum pipe OD for transducer. If OD is below minimum criteria, consult with Flexim.
6. When in doubt, consult with Flexim product manager, Izzy Rivera. Selecting gas transducers are more complex where pressure and velocity must be considered.
7. When measuring gas, the signal to noise ratio of the transducers to the pipe wall must be greater > 10:1 or the meter will not begin to read. Depending on the type of pipe, the minimum required pressure may be from 0 PSI to 100 PSI. For instance, titanium pipe has 0 pressure requirement, while carbon steel pipes have a requirement of 100 PSI.
8. Please note that the chart below is for steel, stainless steel, and titanium pipes only. For plastic or copper pipes, use gas shear wave transducers and match the OD with the shear wave chart above.

Transducer Type	Wall Thickness Range	Min OD
GLQ	.02” - .04”	.25”
GLP	.04” - .09”	.5”
GLM	.08 - .18”	1”
GLK	.17” - .37”	3”
GLH	.28” - .59”	5”
GLG	.41” - .89”	8”
GLF	.75” – 1.4”	10”
GSK (Shear)	1” – 2”	4”
GSG (Shear)	1” – 3”	15”