Subject: Re: Diaphragm Mass
Posted by Wayne Parham on Sun, 31 Aug 2003 05:33:59 GMT
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Both mass and inductance are properties that describe something that stores energy. Mass stores kinetic energy and inductance stores magnetism, which acts to store current. Since both of these represent something that stores energy, then both represent things that are resistant to change.These are properties that are interrelated with others to form a system. Response and damping are two things that are affected when mass or inductance change. And raising mass makes the system have more inertia, so it will either take more energy to accelerate or given the same amount of energy, it will accelerate slower.But since the motor can be extremely powerful, mass by itself is not a determinant. It's a part of the equation. Same thing with inductance - It will form a phase relationship with respect to other reactive and resistive components in the system, which also has an impact on response. But again, it is one part of the equation.Still, the point you make is well taken. Both mass and inductance represent properties that require energy to set in motion. If this energy is fixed, then raising mass will make the system more sluggish and raising inductance will make a system slower to charge.