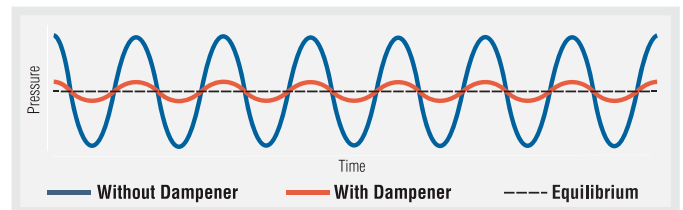


**Pulsation Dampeners** (Attenuators) are designed to minimize the effects of hydraulic line vibration in aircraft caused by cavitation, fluid momentum effects, and variations in pump output.

Essex pulsation dampeners are fluidic devices that use no moving parts. Designed around the principle of Helmholtz resonance, which describes the harmonic frequencies generated when pressure is increased in a cavity, dampeners create a cavity that “cancels” offending pulsations.

By reducing line vibration, pulsation dampeners also decrease audible noise and have been found to increase component life.



Essex pulsation dampeners can be found on all US commercial aircraft and all Airbus aircraft. Military applications include the F-4, C-17, T-50, CH-46 and X-47.

Essex units are available in a variety of off-the-shelf and custom sizes to fit virtually any requirement. Best results are achieved when the unit is mounted directly to, or immediately adjacent to, the pump outlet. Standard tee, inline, or custom fittings may be used.

To size the unit, the desired dampening frequency, media type, pressure, flow, temperature, and interface dimensions, including maximum envelope, should be known. Essex then uses this information as input for a computer based sizing algorithm which automatically generates a configuration best suited for the application.

