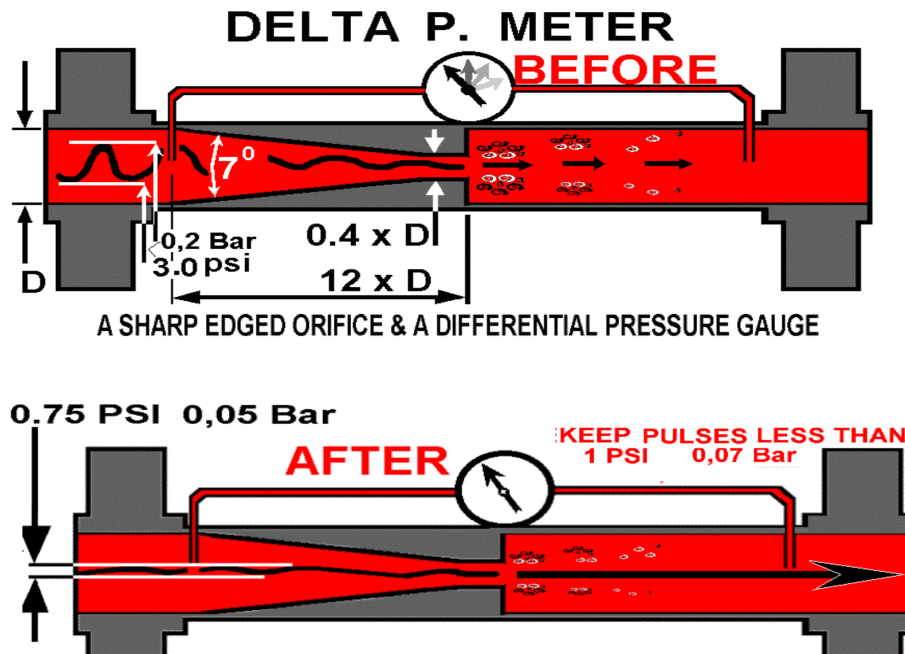


FLOW MEASUREMENT BY ORIFICE AND PRESSURE DROP.



The exquisite method of volumetric flow velocity measurement, the “Delta P” meter, has no moving parts and where the differential pressure is from a solid state device and not a gauge, there is nothing simpler.

However, there is a prerequisite, **STABLE FLOW AND NO PRESSURE PULSATION.**

The orifice, in and of itself, helps to prevent downstream system response pulsation. Pressure excitation from an upstream source, for example a modulating flow control valve in a spill back loop, is reduced by flowing through the orifice into a larger diameter area, BUT this is not enough fluctuation reduction.

Even the vortexes from a local centrifugal pump, or its spin-up surge, a check valve “clacking” down stream, almost any disturbance, can cause a “dp” meter to give a false reading.

To ensure that momentary flow fluctuations, and pressure transients can not produce the wrong environment for “dp” meters, flow through interceptor damper types are required. In and out flow through prevents pressure fluctuation being caused by the need for flow reversal in then out of a single connection.

® *PulseGuard*

