

TECHNICAL DATA for 2300 series only

How the Mesurflo Controls the Flow

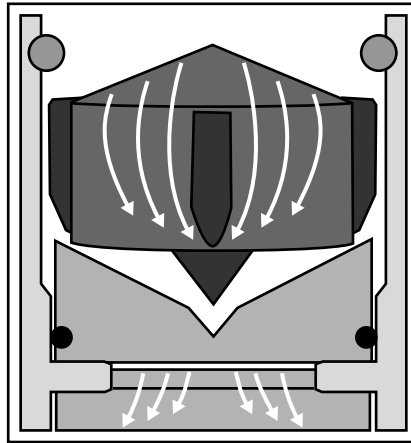


Figure 1 PSID-0
Diaphragm-original shape

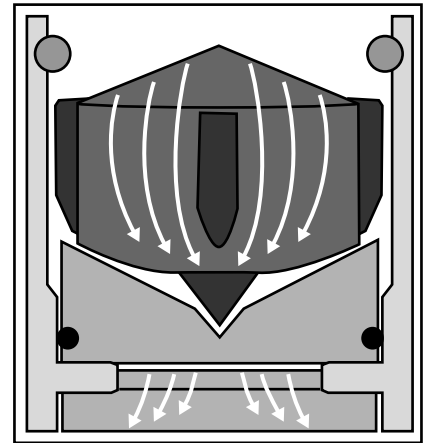


Figure 2 PSID-15
Diaphragm-starting to flex
into contoured orifice plate

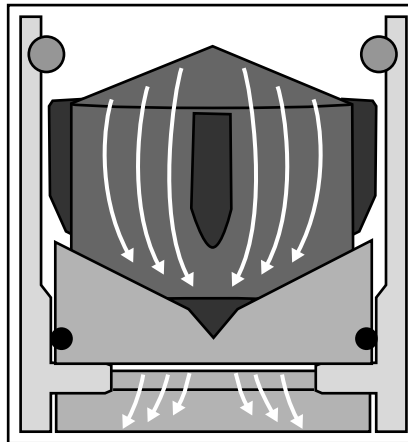


Figure 3 PSID-80
Diaphragm-is fully flexed into
the orifice plate.

For a pressure differential range of 15 to 150 psi, the rubber diaphragm will flex into the contoured orifice plate to increase flow restriction as the pressure drop increases. Both the rubber diaphragm and the contoured orifice plate are rigidly controlled to provide a constant flow rate over the pressure differential range. This “flexing” of the rubber diaphragm against the fixed orifice plate makes the Mesurflo difficult to clog and will not damage due to cavitation. The “flexing” action actually chews up debris preventing clogging. Outside of the pressure drop window, the controller performs similar to a fixed orifice.

Note to piping system designers:

The HAYS Mesurflo is a constant flow rate device. Since it is a variable orifice that changes to govern the flow, it can not be described with a Cv or a pressure drop at a given flow for piping system design purposes. Conversely, the designer may assume a constant flow rate over the pressure differential range of 15 to 150 psid as one uses constant pressure in system design.