BLACOH™ FLUID CONTROL

MADE IN THE USA

ISO 9001 Registered nqa

INLET STABILIZER

SENTRY INLET STABILIZER WITH UNIQUE J-MODEL AIR CONTROL

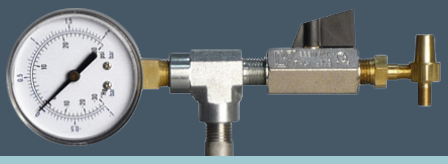
IMPROVE LIQUID FLOW TO THE INLET SIDE OF ANY PUMP AND EXTEND SERVICE LIFE OF ALL INLET SYSTEM COMPONENTS.

USE AN INLET STABILIZER TO:

- Protect pumps, valves, diaphragms and pistons from excess stress and strain.
- Ensure chamber fills completely to maximize component service life.
- Protect inlet components from vibration and fatigue.
- Ensure accuracy of inlet side gauges.
- Prevent premature system component failure.
- Prevent pressure spikes and cavitation.
- Prevent gauge damage due to vibration.
- Ensure steady inlet flow to extend pump diaphragm life.

FEATURES & BEFEFITS:

- Improve inlet flow conditions and maintain steady flow.
- Patented "J-Model" (#6,089,837) allows you to adjust for pressure or vacuum settings.
- Regulates for suction lift or positive inlet pump conditions.
- Available in 10 cu in (.16L) to 10 gallon (37.85L) sizes.
- Acts as a storage accumulator and releases fluid back into the line when needed.



ABOUT

SENTRY Inlet Stabilizers

Positive displacement (PD) pumps contain an inlet valve that alternately opens and closes, creating an acceleration and deceleration of fluid into the pump. Depending on process fluid characteristics and pipe arrangement, there will either be a scarcity or abundance of pressure and/or flow at the pump's inlet. The SENTRY Inlet Stabilizer with the patented J-Model air control effectively works to minimize these pressure fluctuations and acceleration head losses by preventing fluid column separation at the pump's inlet.

SENTRY Inlet Stabilizers come in a full range of chemically resistant materials for even the most corrosive applications.

NSF/ANSI 61, CE, ATEX and CRN certifications available on select models.

All SENTRY housings are made in the USA, and each unit is tested at design pressure or higher to assure proper function and leak-free operation.

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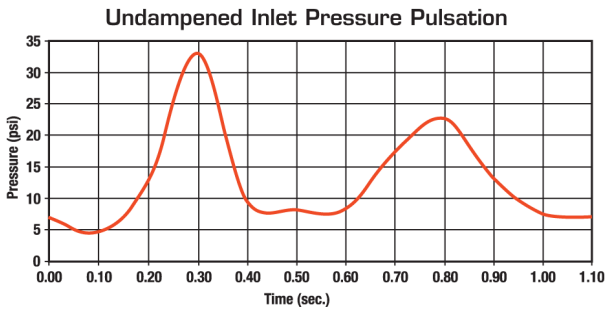
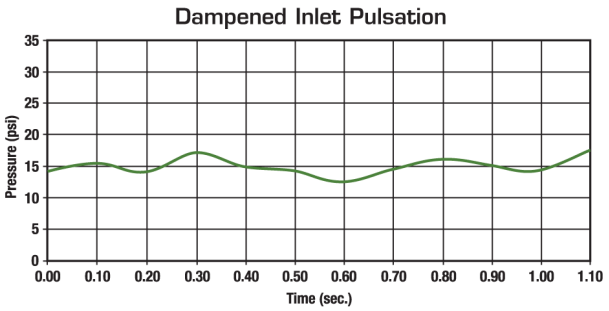
High Inlet Pressure (Positive Inlet)

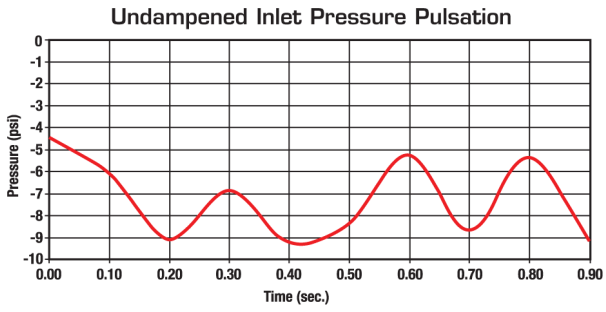
Under high inlet pressure, liquid flow is abruptly stopped as the inlet valve closes. This rapid deceleration creates a pressure spike or "water hammer", with pressures increased by a factor up to five. With higher differential pressures in which inlet valves close even faster, these pressure spikes are further increased. Constant repetition puts significant strain on the system and may result in system fatigue or failure. Air-operated double diaphragm pumps are particularly susceptible to this phenomenon. As one inlet valve closes on an AODD pump, the inlet valve in the opposite chamber opens. The resultant pressure spike travels into the liquid chamber and slams against the diaphragm, stretching and weakening this crucial component. The SENTRY Inlet Stabilizer effectively cushions and absorbs such pressure spikes, increasing overall system life and productivity.

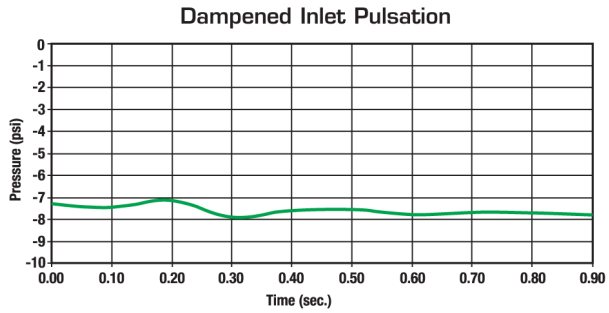




Low Inlet Pressure (Suction Lift)

Under low inlet pressure, process fluid separates at the pump's inlet as the inlet valve closes. Depending on system design, low inlet pressure (NPSH available) may not be enough to meet required inlet pressure (NPSH required). For example, undersized pipes or pipes too lengthy for the viscosity or vapor pressure of the liquid can result in product starvation or "cavitation". Cavitation occurs when pressure in the pump's inlet drops below the vapor pressure of the liquid being pumped. This causes severe damage to the pump's suction-end components, severe pitting on pistons and plungers, and drastically reduces diaphragm life. Multiple head pumps are particularly predisposed to fluid starvation as each fluid chamber pulls product through inlet runners of unequal lengths. The SENTRY Inlet Stabilizer effectively reduces liquid starvation or "cavitation" by acting as a storage accumulator. As such, when the inlet valve opens on the discharge stroke, the Inlet Stabilizer puts fluid back into the line to maintain inlet pressure and constant flow.





HOW THE J-MODEL AIR CONTROL WORKS

The J-Model air control consists of a compound pressure gauge, a vacuum tight ball valve and a Venturi valve. Compressed air passing through the venturi valve at high speeds creates a low pressure area. This evacuates air from the stabilizer to create an internal vacuum. Conversely, when the flow of air through the venturi valve is diverted into the stabilizer, a pressure charge results in optimized pump efficiency and productivity.

Part of the

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family of products

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