

SENTRY[™] INLET STABILIZERS

With a steadier flow from an inlet stabilizer, pumps can operate closer to their best efficiency point, reducing energy waste, vibration, and the risk of cavitation.

Over time, these benefits translate to less wear and tear on the pump, leading to longer service life and fewer maintenance needs. By investing in an inlet stabilizer, operators can create a more stable and efficient pumping system that runs smoother, uses less energy, and lasts longer.



FEATURES

- Choose between chargeable or automatic air control options
- Offered in a variety of metal and plastic materials in sizes from 10in³ (0.16L) up to 10 gallon (37.85L)
- Available in a full range of chemically resistant materials for even the most corrosive applications
- All SENTRY inlet stabilizers use pressure bodies made in the USA to ensure quality.
- Every dampener is factory pressure tested to ensure proper function and leak-free operation.

BENEFITS

- Minimizes pressure fluctuations and prevents water hammer pressure spikes
- Eliminates acceleration head loss and cavitation
- Extends pump diaphragm life and protects system components from excess stress, vibration, and fatigue
- Smooths inlet fluid flow and ensures complete pump chamber fill
- Improves accuracy of inlet side gauges

HOW IT WORKS

The inlet valve on positive displacement pumps alternately opens and closes creating acceleration and deceleration of fluid flow to the pump, causing alternating drops in pressure and pressure spikes in the inlet piping.

Installed at the pump's inlet, the SENTRY Inlet Stabilizer acts as an accumulator to store fluid and release it back into the line as needed. Virtually all acceleration head loss is eliminated because the pump draws fluid from the dampener instead of the pipeline, avoiding the risk of cavitation and ensuring complete chamber fill on each inlet stroke of the pump.

Decreasing fluid pulsation in this manner will decrease the likelihood of damage being caused to the pump and its components, increasing pump lifespan and ultimately saving money.

SCAN ME!
Blacoh.com

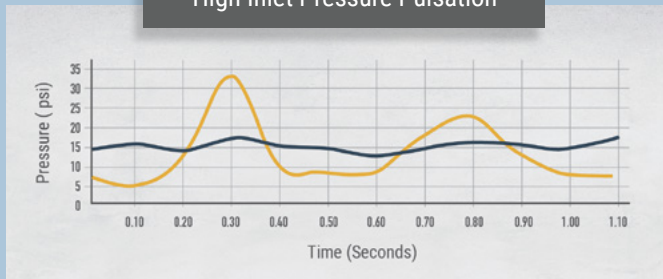


HIGH INLET PRESSURE

- POSITIVE INLET -

When an inlet valve closes, fluid flow is abruptly stopped. This rapid deceleration creates a pressure spike or “water hammer”. Constant repetition puts significant strain on the system and may result in system fatigue or failure. The SENTRY Inlet Stabilizer effectively cushions and absorbs these pressure spikes, increasing overall system life and productivity.

High Inlet Pressure Pulsation



● = Undampened

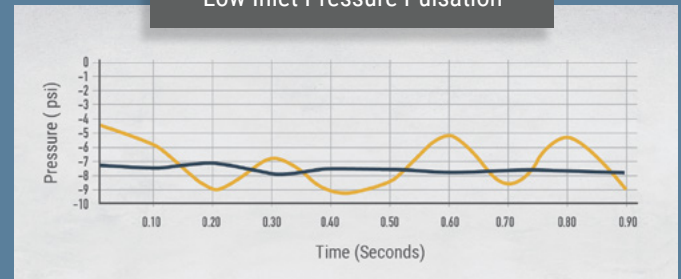
● = Dampened

LOW INLET PRESSURE

- SUCTION LIFT -

When an inlet valve closes, process fluid separates at the pump inlet. Cavitation occurs when pressure in the pump’s inlet drops below the vapor pressure of the fluid being pumped. This causes severe damage to the pump’s suction-end components, severe pitting on pistons and plungers, and drastically reduces diaphragm life. The SENTRY Inlet Stabilizer effectively reduces fluid cavitation by acting as a storage accumulator.

Low Inlet Pressure Pulsation



● = Undampened

● = Dampened

AIR CONTROL OPTIONS



NEW! AUTOMATIC AIR CONTROL

Available on the [Automatic Inlet Stabilizer \(AIS\)](#) for 1.5" & 2" AODD pumps.

Incorporates a fully integrated, automatic venturi valve designed to accommodate negative pressures within the system. While the venturi valve operates exclusively under vacuum conditions, the AIS itself can create positive pressure to counteract excessive system pressures. During vacuum conditions, the valve lifts the bladder to maintain dampening capabilities. While under positive pressure, it forces the bladder down with compressed air. This dual-control mechanism ensures optimal system performance in both suction & positive pressure conditions.



CHARGEABLE INLET STABILIZER

The inlet stabilizer air control allows for pressure or vacuum settings and is adjustable for suction lift or positive inlet conditions. No permanent source of compressed gas is required. Gas fill valve allows dampener to be manually bled or charged to the required pressure setting.