



# PREVENT ENSURE PROTECT



Improve Pump and  
Instrumentation Performance  
Throughout Your Entire  
Process System  
while Significantly Extending  
System Component Life.

**SENTRY** Pulsation Dampeners, Surge Suppressors and Inlet Stabilizers – *Protect* pumps and system components from destructive pulsation, surges and hydraulic shock. *Prevent* premature pump failure, pipe breakage, product agitation and system contamination. *Ensure* a steady, continuous fluid flow and increased service life of all system components.

**SPILLSTOP** Spill Prevention and Leak Containment – *Prevent* hazardous and costly spills when pump diaphragms fail. *Protect* against dangerous materials expelled from pump exhaust. *Ensure* automatic failed pump shutdown and minimal system downtime.

**SENTINEL** Diaphragm Seals and Gauge Guards – *Ensure* accuracy and reliability of all pressure instrumentation. *Prevent* damage to process system instruments caused by corrosive process fluids. *Protect* gauges from erratic pressure surges, freezing and slurries.

**SENTINEL** Back Pressure and Pressure Relief Valves – *Protect* pumping systems from over-pressure damage. *Prevent* siphoning and varying dosage rates. *Ensure* a regulated flow and maximum pressure within system limits.

**When pumps behave badly...**

# **DON'T PUMP WITHOUT US!**

The patented **SPILLSTOP Leak Containment System** attaches directly to the exhaust of an air operated diaphragm pump. When pump diaphragms fail, SPILLSTOP captures dangerous and/or expensive process fluid in an internal receptacle while raising a float switch to automatically shut down the pump. SPILLSTOP can also be configured to sound a warning alarm and/or initiate a backup pump switchover.



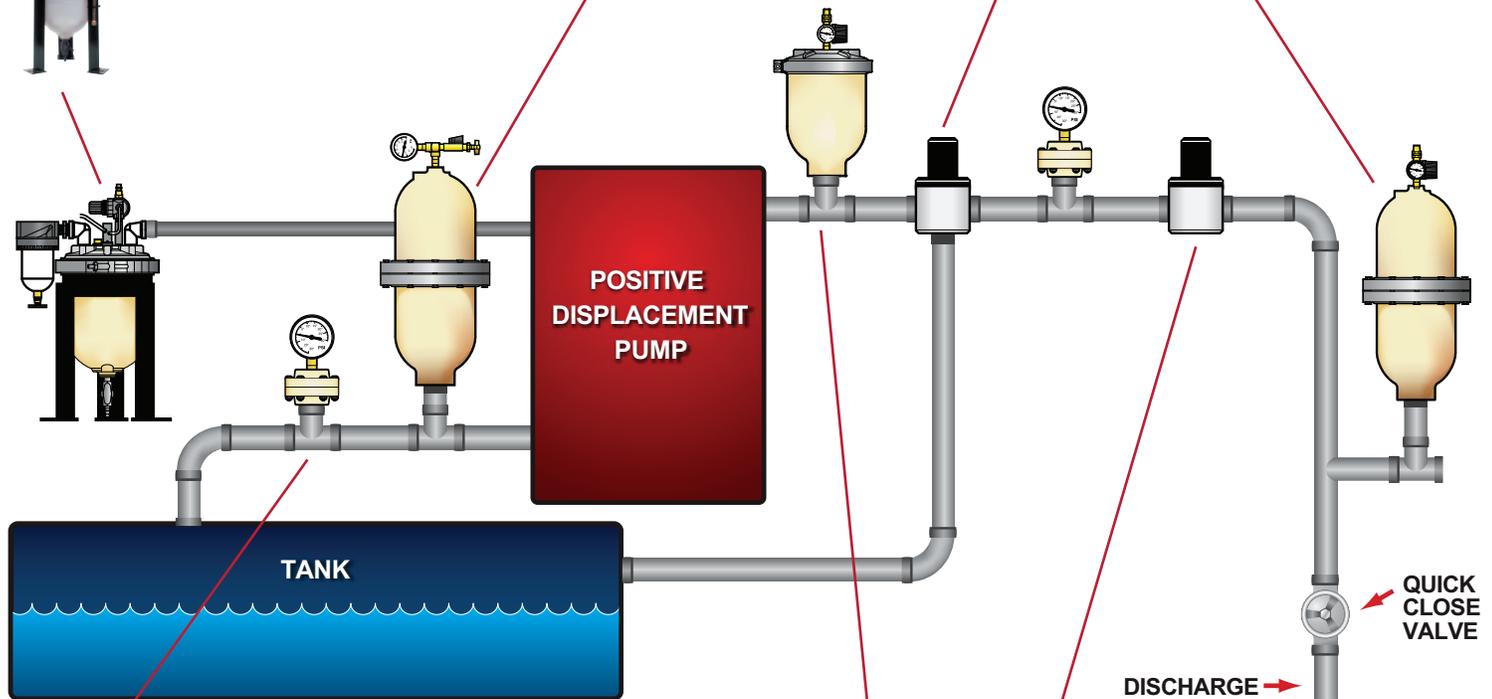
**SENTRY Inlet Stabilizers** accumulate liquid at the pump's inlet to ensure complete chamber fill and extend the service life of all inlet system components. The patented "J" Model air control allows you to adjust for pressure or vacuum settings depending on whether pump operation is under suction lift or positive inlet conditions.



**SENTINEL Pressure Relief Valves** protect pumping systems from over-pressure damage caused by defective equipment or a blockage in the system line. When the pressure in the system exceeds the preset pressure of the valve, the diaphragm is held against the valve seat by an internal spring. When the preset pressure is exceeded, the diaphragm is forced up and the system fluid flows out the relief port and back to the system fluid tank.



**SENTRY Surge Suppressors** eliminate hydraulic shock and water hammer caused by quick-closing valves, back surge and pump startup/shutdown. Without suppression, shock waves will continue to oscillate back and forth until dissipated by friction or system component failure occurs.



**SENTINEL Diaphragm Seals** employ a chemically resistant diaphragm to effectively isolate process fluids from gauges and other process instrumentation. This durable diaphragm allows SENTINEL to accurately transfer process pressure without direct contact with hazardous or corrosive fluids.



**SENTRY Pulsation Dampeners** use a compressed gas separated from the process fluid by a bladder to act as a shock absorber. During the pump's discharge stroke, fluid pressure displaces the bladder compressing the trapped gas. Compressed gas expands during the pump's inlet stroke, forcing the bladder to push accumulated fluid back into the discharge line. This fills the void created by the cycle shift and dampens pulsations and vibration up to 99%.



**SENTINEL Back Pressure Valves** enhance system performance by applying a continuous back pressure to the pump. The diaphragm is held against the valve seat by an internal ring. When the valve's preset pressure is exceeded, the diaphragm is forced up and system fluid flows through the valve to the injection point.



**BLACOH™**  
FLUID CONTROL

601 Columbia Ave, Bldg D, Riverside, CA 92507 USA  
Phone: 951.342.3100 800.603.7867 Fax: 951.342.3101  
www.blacoh.com Email: Sales@blacoh.com

Please call your local distributor:



**standard ship spares** LLC

P.O. Box 13297, Dubai, UAE

Tel: +9714-2807780 Fax: +9714-2808085

ISO 9001:2008 Email: sales@pumpsuae.com website: www.pumpsuae.com