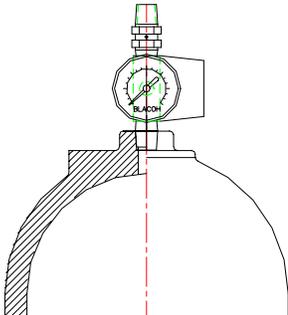
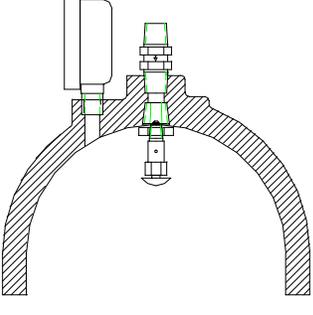


# BLACOH FLUID CONTROL MODEL DESCRIPTIONS

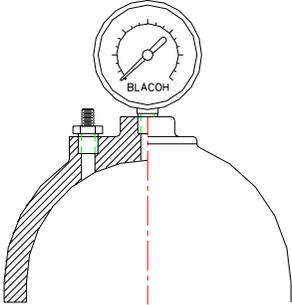
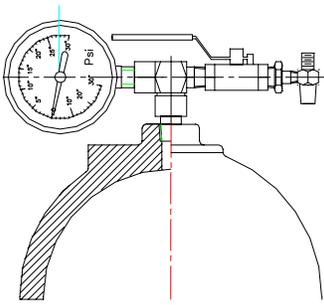
<p align="center"><b>SENTRY ADJUSTABLE/MANUAL</b></p>	<p align="center"><b>SENTRY AUTOMATIC</b></p>
	
<p align="center"><b>CONTROL CONFIGURATION</b></p> <ul style="list-style-type: none"> <li>▪ Units come with an adjustable air regulator assembly, mounted on a single port. Includes a self relieving air regulator, a gauge, and a one-way brass check valve.</li> </ul>	<p align="center"><b>CONTROL CONFIGURATION</b></p> <ul style="list-style-type: none"> <li>▪ Units come with a gauge mounted on its own port, and an automatic valve assembly on a separate port. Includes a one-way brass check valve connected to an internal poppet valve assembly</li> </ul>
<p align="center"><b>MAX OPERATING PRESSURES</b></p> <ul style="list-style-type: none"> <li>▪ Plastics: 150 PSI</li> <li>▪ Metals: 150 PSI</li> </ul>	<p align="center"><b>MAX OPERATING PRESSURES</b></p> <ul style="list-style-type: none"> <li>▪ Plastics: 150 PSI</li> <li>▪ Metals: 150 PSI</li> </ul>
<p align="center"><b>REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>▪ Must have a constant air connection</li> <li>▪ Must be installed within 10 pipe diameters or closer of the pump discharge.</li> <li>▪ Must have charge equal to 80% of the discharge <b>operating</b> pressure.</li> </ul>	<p align="center"><b>REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>▪ Must have a constant air connection</li> <li>▪ Must be installed within 10 pipe diameters or closer of the pump discharge.</li> </ul>
<p align="center"><b>PARTICULARS</b></p> <ul style="list-style-type: none"> <li>▪ Designed for Air Operated Diaphragm Pumps</li> <li>▪ Use on systems with a steady or constant pressure.</li> <li>▪ Adjustable air regulator allows user to manually bleed or charge unit to 80% of system pressure, or to fine tune for the best setting.</li> <li>▪ May be used on any type of positive displacement pump as long as compressed air/gas is available.</li> </ul>	<p align="center"><b>PARTICULARS</b></p> <ul style="list-style-type: none"> <li>▪ Designed for Air Operated Diaphragm Pumps</li> <li>▪ Use on systems with a varying system discharge pressure.</li> <li>▪ Automatic unit is used on applications such as a filter press, where the system pressure will steadily rise.</li> <li>▪ Automatically self adjusts as the system pressure rises or falls. Unit does not require air to be bled out. Unit automatically resets to be ready to start dampening again when the system restarts.</li> </ul>
<p align="center"><b>APPLICATION AREAS &amp; PRESSURE SETTING</b></p> <ul style="list-style-type: none"> <li>➤ Pulsation Dampener at Pump Discharge (80%)</li> </ul>	<p align="center"><b>APPLICATION AREAS &amp; PRESSURE SETTINGS</b></p> <ul style="list-style-type: none"> <li>➤ Pulsation Dampener at Pump Discharge (Just attach constant air-supply &amp; Unit is ready)</li> </ul>

## USE A PULSATION DAMPENERS

- With plastic piping, or to prevent leaking or breakage of metal joints/ fittings
  - To prevent splashing, foaming, or product degradation
    - To accurately use a flow meter or a gauge
      - To produce even spray or filling
      - When pumping to a filter press
      - When pumping through a filter



# BLACOH FLUID CONTROL MODEL DESCRIPTIONS

<h2 style="text-align: center;">SENTRY CHARGEABLE</h2>	<h2 style="text-align: center;">SENTRY INLET STABILIZER</h2>
	
<p style="text-align: center;"><b>CONTROL CONFIGURATION</b></p> <ul style="list-style-type: none"> <li>▪ Units come with a gauge and a Schrader type gas fill valve on separate ports.</li> </ul>	<p style="text-align: center;"><b>CONTROL CONFIGURATION</b></p> <ul style="list-style-type: none"> <li>▪ Units come with an air control assembly consisting of a compound vacuum/pressure gauge, a vacuum tight ball valve, and a venturi valve.</li> </ul>
<p style="text-align: center;"><b>MAX OPERATING PRESSURES</b></p> <ul style="list-style-type: none"> <li>▪ All Plastics Units and Units with Plastic tops: 150 PSI</li> <li>▪ Metal Units with Rubber Bladders: 300 PSI</li> <li>▪ Metal Units with PTFE bellows: 150 &amp; 300 PSI</li> <li>▪ High Pressure Metal Units: 1000 &amp; 2000 PSI</li> <li>▪ High Pressure Metal Units with PTFE Bellows: 600 PSI</li> </ul>	<p style="text-align: center;"><b>MAX OPERATING PRESSURES</b></p> <ul style="list-style-type: none"> <li>▪ Plastics: 30-0-30 PSI</li> <li>▪ Metals: 30-0-30 PSI</li> </ul>
<p style="text-align: center;"><b>REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>▪ Air or Nitrogen for charging unit to required pressure for application. <b>DO NOT USE OXYGEN</b> (Charging kit available from Blacoh)</li> <li>▪ Must be installed within 10 pipe diameters of the pump discharge or valve. (Dampening or Surge)</li> </ul>	<p style="text-align: center;"><b>REQUIREMENTS</b></p> <ul style="list-style-type: none"> <li>▪ A compressed air line &amp; air chuck to pressurize or create a vacuum in the unit.</li> <li>▪ Must be installed within 10 pipe diameters or closer of the pump inlet.</li> </ul>
<p style="text-align: center;"><b>PARTICULARS</b></p> <ul style="list-style-type: none"> <li>▪ Use on systems with a steady or constant discharge pressure.</li> <li>▪ Gas fill valve enables user to manually bleed or charge unit to required pressure setting.</li> </ul>	<p style="text-align: center;"><b>PARTICULARS</b></p> <ul style="list-style-type: none"> <li>▪ Use on any type of positive displacement pump as long as a source of compressed air is available to charge the unit.</li> <li>▪ Designed for dual use on either suction lift, or flooded suction applications.</li> </ul>
<p style="text-align: center;"><b>APPLICATION AREAS &amp; PRESSURE SETTINGS</b></p> <ul style="list-style-type: none"> <li>➤ Pulsation Dampener at pump discharge (80%)</li> <li>➤ Surge Suppressor at a quick closing valve (97%)</li> <li>➤ Surge Suppressor for pump start up/shut down (50%)</li> <li>➤ Surge Suppressor at bottom of high vertical run (97%)</li> <li>➤ Accumulator next to opening/closing valve to maintain system pressure. (Call Blacoh)</li> <li>➤ Thermal expansion chamber on a piping system (Call Blacoh)</li> </ul>	<p style="text-align: center;"><b>APPLICATION AREAS &amp; PRESSURE SETTINGS</b></p> <ul style="list-style-type: none"> <li>➤ Inlet Stabilizer at pump inlet for suction lift (Vacuum charge 5 to 6 inches of mercury)</li> <li>➤ Inlet Stabilizer at pump inlet for flooded suction. (50% of static inlet pump pressure)</li> </ul>

### USE AN INLET STABILIZER

- If a pump is experiencing frequent diaphragm failure
- To maximize the volumetric efficiency of the pump
  - To minimize acceleration head
  - To reduce pump cavitation
    - To increase NPSHA

