# ACCUMULATORS FOR THE FLUID POWER MARKET

## ENHANCE SYSTEM PERFORMANCE IN A VARIETY OF APPLICATIONS ACROSS MULTIPLE INDUSTRIES



## Accumulators store fluid as energy to be released on demand and are common components in hydraulic circuits and machinery

- Store pressurized fluid as energy
- Temporarily increase/supplement pump flow
- Auxiliary power for equipment cycling, valve closure and emergency shutdown
- Maintain system pressure

- Makeup fluid for system leakage or bleed down
- Compensate for thermal expansion
- Dampen pulsations and vibrations
- Absorb hydraulic shock/water hammer



#### **Accumulators increase system productivity and lower operating costs**

Accumulators are storage vessels that hold fluid under pressure as energy to be released on demand, and are commonly used in fluid power systems to improve performance. When used in hydraulic circuits and machinery, they are sometimes referred to as hydraulic accumulators or hydropneumatic accumulators. Accumulators are also used to eliminate pulsations for a smooth fluid flow and protect systems from hydraulic shock. The most popular design has an internal bladder that acts as a separator between the stored fluid and a compressed gas charge.

#### BLACOH offers a full line of Accumulators specifically designed for the fluid power market, with single body construction for maximum safety in high pressure systems

- Bladder, Diaphragm and Piston models
- Bottom and Top Repairable options
- Tested at 1.5 times maximum pressure
- Built to meet ASME standards and most international pressure vessel code requirements

### Available in a variety of sizes and materials suitable for the most demanding applications

- Pressure ratings to 5,075 psi (350 bar)
- Carbon Steel and 316L Stainless Steel bodies
- Sizes from 12 cu in to 13.5 gal (.20 to 51L) larger sizes upon request
- Buna, EPDM, Viton and PTFE bladders
- FNPT, BSP and Flange inlet ports

#### **Call BLACOH Today for More Ways to Enhance System Performance**

#### **Prevent Hydraulic Surge / Water Hammer**

SENTRY surge suppressors can be used in both liquid handling and hydraulic systems to increase productivity and eliminate costly downtime by preventing:

- Catastrophic pressure rises in pipe systems caused by quick closing valves
- Back-surge damage to pumps and systems due to rapid shutdown or electrical failure
- Destructive pressure spikes at pump startup/shutdown
- Column separation downstream of quick closing valves, at pipe ends or changes in pipe slope

#### **Solutions for High Pressure Applications**

SENTRY high pressure pulsation dampeners, surge suppressors and accumulators in carbon steel and 316L stainless steel are ideally suited for metering and dosing applications typical in the oil & gas industry.

- Pressure ratings up to 13,500 psi (930.8 bar)
- Sizes available from 4 cubic inch to 100 gallons
- Temperature ranges from -40°F to +350°F
- Full range of chemically resistant materials
- Capable of handling viscous and solids laden fluids



