



## AIR VALVE

- With an innovative cartridge design, the air valve assembly can be easily removed and cleaned or replaced if necessary, reducing pump down time.
- Air valve has the fewest moving parts in the industry: no spools, no O-rings. Unique Frictionless Pivot Valve.
- On-Off-On maximum reliability. Patented Smooth Start Shifter (3S) actuator activates the pivot-valve for reliable start on-demand systems, even with reduced air pressure.
- **Air valve cartridge manufactured in aluminum for metal pumps and in conductive polypropylene for non-metal pumps.**

**RUNS WITH DRY, DIRTY OR DAMP AIR.**

**LUBE-FREE OPERATION.**

**LONG LIFE PIVOT-PADS.**

### 1. NO PUMP STALLING

SAMOA UP Series pumps do not stall even with low air pressure, as it can happen with other pumps. The patented «Smooth Start Shifter» (3S) actuator activates the pivot-shaft of the frictionless pivot-valve just when needed and thus prevents stalling.

### 2. NO PUMP FREEZING

The pivot-shaft action exhausts one air chamber to the atmosphere, for fast air evacuation, while compressed air simultaneously fills the opposite air chamber. The two large sides of the exhaust pivot-pad act as fast dump valves to exhaust the used air from each chamber directly through the exhaust port and muffler. This prevents freezing and pump slowdown.

### 3. SMOOTH FLOW

The unique ADS, which combines two end of stroke sensors that send an instantaneous pneumatic signal with the frictionless pivot-valve, provides the fastest reciprocating action in the industry against conventional spool or sliding block valves. This contributes to provide a smoother flow and reduced vibration when compared to many competitor AODD pumps.

### 4. EFFICIENT PUMP

The close tolerances at the ADS air inlet pivot-pad check-valves and the optimized pilot-sensors, avoid internal air leaks, reduce air consumption and optimize the flow delivery versus most of competitors' AODD Pumps.

### 5. SIMPLE MAINTENANCE

The ADS used in the Pivot Universal Pumps has the fewest number of moving parts in the Industry. Its modular and easy to replace design contributes to reduce downtime and simplifies maintenance.

The air valve module is fully accessible and can be replaced in minutes, while the pump is installed in line.