

## Automated System for Distribution of Water under Pressure

### DESCRIPTION

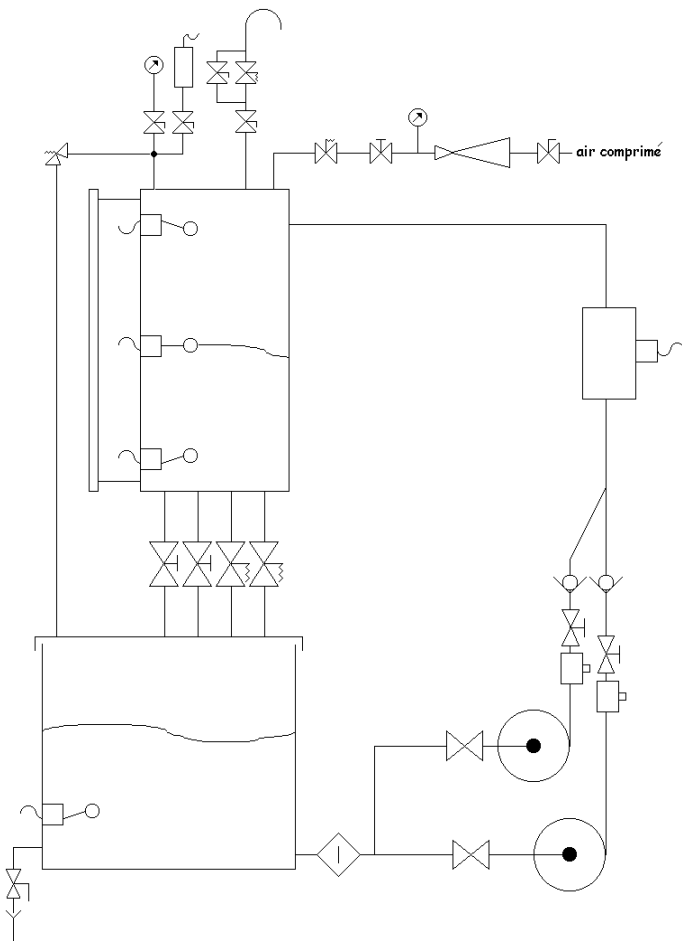
- The unit is delivered complete with instrumentation, technical documentation, and instructions.
- The system includes a tank and two pumps for creating a pressurized water source.
- The transfer of water from the pressurized tank to the receiving tank is adjusted by two automatic and manual valves.
- The cycle is managed by an industrial programmable controller.



### SUGGESTED APPLICATIONS

- Study of the concepts involved in a pressurized water system.
- Measurement of parameters: pressure – flow rate - level.
- Rotation of pumps, management of maintenance.
- P.I.D. Regulation of the pressure by two electro-valves.
- Programming on A.P.I.

# SAD 050



## UTILITIES

400 VAC - three-phase -16 A  
Compressed air – 6 bars (90 psi) maximum

## DIMENSIONS

Length : 1300 mm    Width: 760 mm  
Height: 1850 mm

## SHIPPING SPECIFICATIONS

Volume : 2.8 m<sup>3</sup>    Weight : 180 kg

### Multi-cellular Electro-pumps

Upstream stop and filtering valves  
Downstream adjusting valves  
230 VAC single-phased and 400 VAC three-phased motor with measurement of the motor's currents.

### Tank

Capacity: 75 litres  
Matter: transparent polypropylene  
Detector of lack of water and emptying valve

### Production water flow meter

Axial flow turbine type  
Brass body, flow rate indicator

### Stock tank of pressurized water

Stainless steel  
Capacity: 50 litres  
Level measurement tube  
Three level detectors with floats  
Measurement of pressure by manometer and piezoresistive sensor  
Discharge safety valve for protection against excessive pressures.  
Compressed air electro-valves for pressure regulation

### Water network

Transparent PVC  
Low flow rate valve for simulation of leaks  
High flow rate valve and electro-valves for simulation of distribution and consumption

### Industrial Programmable Controller

Ref. Modicon TSX37  
16 all or nothing inlets – 12 all or nothing outlets  
8-inlets modulus: 4-20 mA 12 bits  
Delivered with PL7 Micro programming software  
Grafcet programming is possible (with contact or literal)

### Safe components

Differential breaker 30 mA  
TBTS handle  
Safety valve  
Detector of lack of water  
CE Certificate and certification by APAVE