



# INSTALLATION AND MAINTENANCE INSTRUCTIONS ADCAMAT POP-S PRESSURE OPERATED PUMP

#### **GENERAL**

- 1.The POP-S pumps are designed for the pumping of condensate, cold water and other group 2 fluids, without the use of electricity. They are specially recommended to return high temperature condensate back to boiler houses to save and conserve energy.
- 2. The installation procedure is a critical stage in a life of a pump and care should be taken to avoid damage to the pump or equipment.
- 3. The Adcamat automatic pump can lift hot condensate, oils and other liquids as high as 60m (200ft) or discharge against ar equivalent total back pressure. The pump starts when there is something to pump and stops when there isn't.
- 4.Liquid flows by gravity into the pump throught an inlet check valve lifting a float which, at the upper limit of it's travel, opens the supply valve which allows steam or compressed air to enter the pump body. Pressure in the pump builds up untill just sufficient to overcome back pressure. The pressurized liquid opens the outlet check valve and discharge commences. When the float reaches the minimum lower level it closes the steam or compressed air supply valve and opens the vent allowing the liquid to fill the pump again.

## Warning!

- -If malfunction of any other equipment or system opperation failure may result in a dangerous overpressure ,overtemperature or even vacuum condition, a safety device must be included in the system to prevent such situations .
- -Do not touch the equipment without appropriate protection during working operation because it may conduct heat if the used fluid is at high temperature.
- -Before starting maintenance be sure that the equipment is not pressurized or hot .
- -The equipments must be used within the working temperature and pressure limits laid down for them, otherwise they may fail ( refer to nameplate and/or IS- Information Sheet).
- -Do not remove the nameplate attacched to the equipment. Serial number and other useful information is stamped on it.

#### **INSTALLATION**

- 1.Prior to install check that the product is suitable for the intended application: materials and pressure/temperature ratings. 2.Before to install remove plastic covers placed on flanges or connection ends. The equipment has an arrow or Inlet/Outlet designations.Be sure that it will be installed on the appropriate direction.
- 3. The pump must be handled carefully in order to avoid any mechanism damage. The pump must be installed at the lower level of the equipment to be drained and the exhaust DN 1" connection pointing upwards. For correct installation and operating of the pump, Y strainer, isolating valves and steam trap must be provided. Please refer to Information Sheet IS 9.110 E. Special application information can be obtained by contacting the distributer or Valsteam SA directly.
- 4.Be sure that the unit is level for proper operation.

#### **MAINTENANCE**

- 1.We recommend that the pressure operated pumps are serviced as necessary, at least every 12 months. Strainers, steam trap and receiver should be cleaned.
- 2. When reassembling make sure that all gasket faces are clean and always use a new gasket. Tighten cover bolts uniformly in a diagonal sequence.
- 3. For further information refer to the relevant pump brochure or consult our Sales Office.

#### **BODY LIMITING CONDITIONS**

RATING	PRESS.	TEMP.		
	bar	°C		
	16	120		
DIN PN16	14	198		
	13	250		
ANSI CL.150	16	120		
	14	198		

Application limits:

Minimum density: 0.80 kg/dm3

Maximum viscosity: 5° Engler

Max.motive pressure: 0.5 to 8.6 bar

Motive gas: steam or compressed air

### CE Marking:

This product have been designed for use on water, steam, air and other gases wich are in Group 2 of the PED - European Pressure Equipment Directive 97/23/EC and it comply with those requirements. All the sizes fall within category 2. The product carry the CE mark.

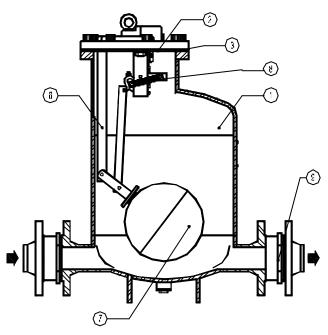
Supply operating pressure: from 0.5 to 8.6 bar

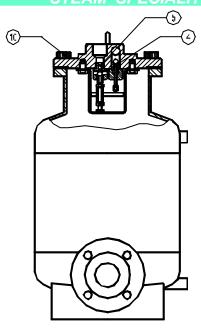






## STEAM SPECIALITIES





## PARTS LIST FOR ADCAMAT PUMP:

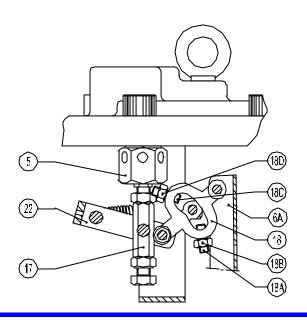
Code	Designation	Pump Size	Pos.Nr.	Qty.	Recommended tightening torques :		
A.95.5800.025	Inlet/Outlet valves	All	4/5	1 set	Pos.Nr.	Pump Size	Nm
A.95.5800.125	Float and gasket	All	3/7	1 set	Nrs.10	All	85-95
A.95.5800.225	Spring set	All	8	1 set	Nrs.4	All	120
A.95.5800.325	Cover gasket	All	3	1	Nrs.5	All	110

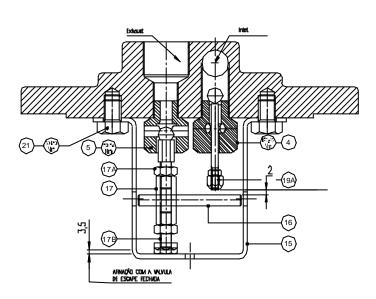
## How to replace Inlet/Outlet valves:

With the float at the lowest position remove the bolts Nr.21 and disassemble the support Nr.15.

The valve set is supplied duly calibrated from the factory.Do not unscrew the nuts Nr.17A and 19A.

After replacing the valves and support, make sure that the mechanism is working correctly by manualy operating the float.





## Adjustment of upper level switch:

Tighten up screw nr.18A - decrease maximum level Untighten the screw nr.18A - increase maximum level

# Adjustment of lower level switch :

Tighten up screw nr.18C - increase lower level Untighten the screw nr.18C - decrease lower level

**IMPORTANT:** The screws must not be adjusted without specific factory information.