INSTALLATION AND MAINTENANCE INSTRUCTIONS
SELF ACTING VALVES
ADCATROL TR25

GENERAL

- These instructions must be carefully read before any work involving products supplied by VALSTEAM ADCA ENGINEERING S.A. is undertaken.

- The installation procedure is a critical stage in a life of a valve and care should be taken to avoid damage to the valve or equipment.

- Control valves are designed to give accurate control. They give their maximum performance only when the equipment and piping associated with them is correctly sized and installed in accordance with our recommendations.

- Referring to the name-plate located on valve and thermostat, check that the product is suitable for the intended use/application as follows:
  - the body material must be compatible with the process fluid
  - compatibility with the pressure and temperature and their maximum and minimum values

- Adcatrol control valves are not intended to withstand external stresses that may be induced by any system to which they are fitted. It is the responsibility of the installer to consider these stresses and take adequate precautions to minimise them.

ATTENTION

- At start up, the presence of small particles in the fluid (dirt, scale, weld splatters, etc) may cause an imperfect closure of the seat. If this occurs, proceed to an accurate cleaning.
- 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. Even if upstream and downstream isolating valves have been closed care should be taken since fluid under pressure may be trapped between them.
- 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).
- All work must be carried out or be supervised by a suitably competent person.
- Manual handling of products may present a risk of injury. You are advised to assess the risks taking into account the task, the individual, the load and the working environment.
- Before starting work ensure that you have suitable tools and/or consumables available. Use only genuine ADCA replacement parts.
- Do not remove the nameplate attached to the equipment. Serial number and other useful information is stamped on it.

INSTALLATION

ATTENTION

- 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.
- Take care with jointing material to ensure that none may be permitted to block or enter the valve.
- Control valves are recommended to be fitted with the centre line of the valve in a vertical position to ensure that the best results are obtained.
- An ADCA pipeline strainer should be installed upstream of the valve to protect from dirt which could damage the valve or cause mal-functioning.
- The control valve pipe work should be properly supported and free from strain and it should not be subjected to undue surges of pressure.

For steam installations we strong recommend that the control valve is positioned where condensation is unable to collect or that, alternatively, separators and steam traps are fitted so that the pipe work drains correctly. The start up condition should be considered.

- If the system cannot be stopped for maintenance it is recommended that isolating valves are installed upstream and downstream of the control valve together with a by-pass manual regulating valve. The process can be then controlled manually during the control valve maintenance.

Note: local laws may restrict the use of by-pass.

- A safety device should be included in the system to prevent dangerous overpressure or over temperature occurrence, if applicable.
- Self operated control valves can be supplied with different kind of thermostats

All these components has different limiting conditions which are specified on the nameplates and catalogues and they must be respected.

Periodical checking

24 hours after the start up, it is recommended to check pipe connections and verify the tightening of flanges locknuts.

MAINTENANCE

- We recommend that the control valves to be serviced as necessary. Control valves should be checked periodically (at least yearly), to verify that they are operating correctly.
- When reassembling, make sure that all gasket faces are clean and always use a new gasket. Tighten cover bolts uniformly in a diagonal sequence.
- For further information refer to the relevant IS brochure or consult the factory or distributor.

Replacement of thermostat

In reference to the fig.1 proceed as follow:

- Mount the thermostat on the valve or cooling unit ensuring that the gasket (2) provided is in place and tighten the union (1).

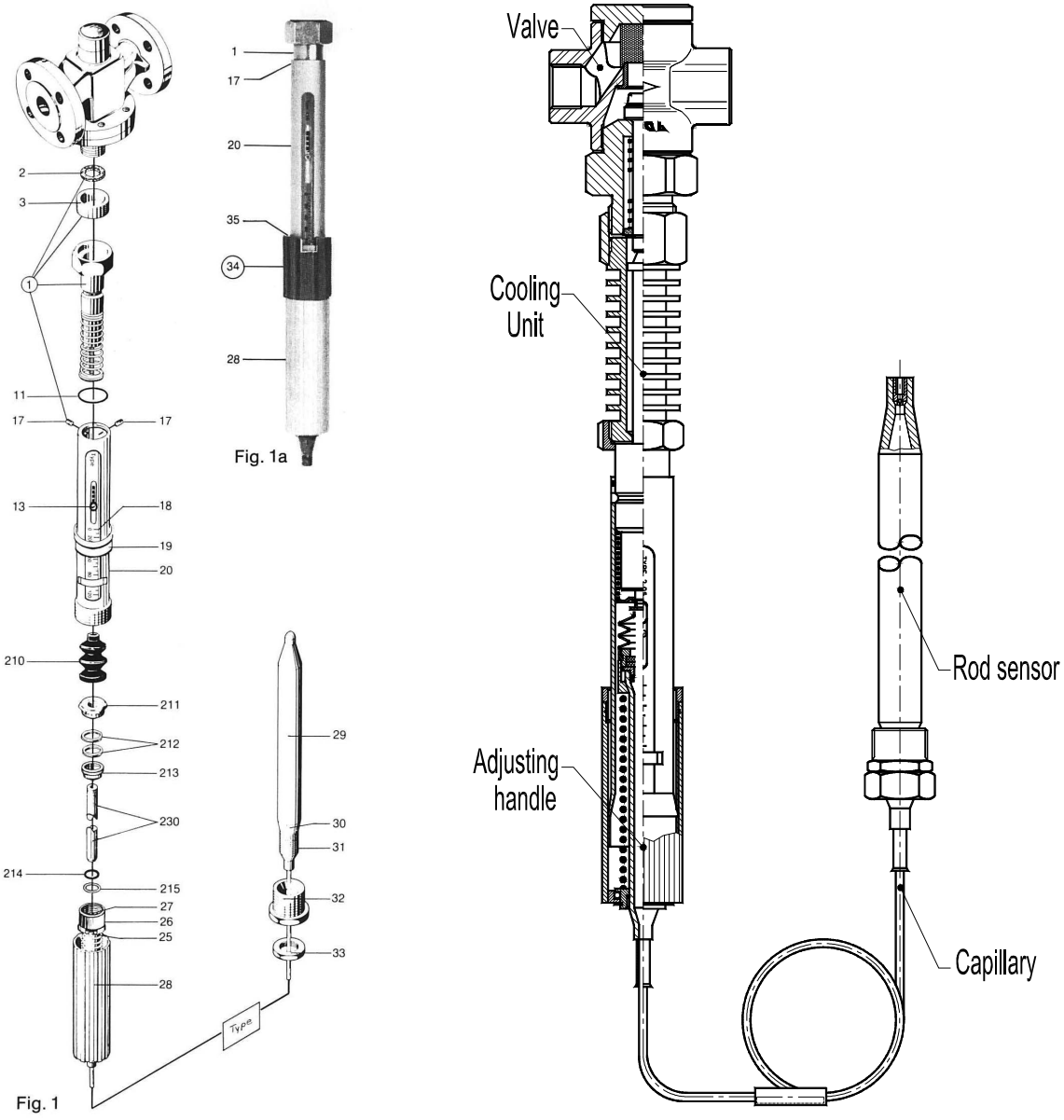

Fig.1

Replacing standard plug

Separate the thermostat from the valve body as described before. In reference to Fig.2 proceed as follow:

- Loosen the threaded bonnet (2).
- Remove the bonnet (2) and from the valve body (1)
- Take off the complete plug stem (4) and spring (6) from the bonnet (2).
- Apply the new complete plug stem and spring.
- Replace the body gasket (3) after cleaning its housing face carefully.
- Re-assemble all the items in reverse order ensuring the alignment of spindles and plug-seat consequently.

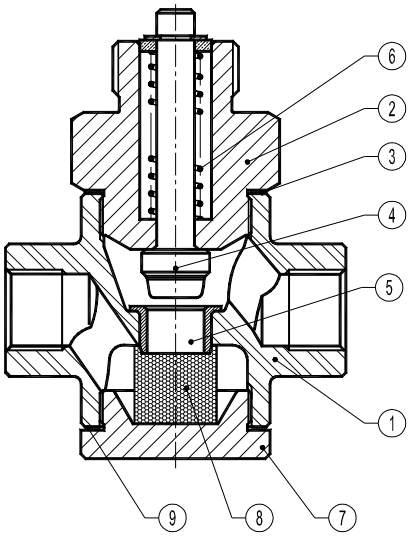

Fig. 2

USEFUL NOTES ON VALVE AND PIPE SIZING

Never size the valve according to the pipe diameter in which it has to be fitted but according to the required actual flow of steam or water. Refer to valve calculation data sheet or consult factory.

TYPICAL INSTALLATION

Please consult the available standard assembling drawings or consult the factory for a specific installation drawing.

ATTENTION

- **LOSS OF WARRANTY: Total or partial disregard of above instructions involves loss of any right to warranty.**