

## INSTALLATION AND MAINTENANCE INSTRUCTIONS FLOAT & THERMOSTATIC STEAM TRAPS FLT16

### 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 float trap and care should be taken to avoid damage to the float trap or equipment.

### **Warning!**

- At start up, the presence of small particles in the water (dirt, scale, weld splatters, etc) may cause an unperfected 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.
- 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 attached to the equipment. Serial number and other useful information is stamped on it.

### INSTALLATION



- 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.
- Install the steam trap in the point of the system, where the condensate tends to collect. It must be installed with the float lever in horizontal plane, so that it rises and falls vertically. An ADCA strainer should be installed upstream of the trap.

| LIMITING CONDITIONS             |        |
|---------------------------------|--------|
| PMA: Max. allowable pressure    | 16 bar |
| TMA: Max. allowable temperature | 250 °C |
| PMO: Max. operating pressure    | 14 bar |
| TMO: Max. operating temperature | 198 °C |

| MAX. DIFFERENTIAL PRESSURE |         |
|----------------------------|---------|
| FLT 16-4,5                 | 4,5 bar |
| FLT 16-10                  | 10 bar  |
| FLT 16-14                  | 14 bar  |

### Installation area requirements:

- The installation area should have easy access and provide enough space for maintenance and removing operations.
- The installation area should have the necessary firing system to prevent damage of the equipment due to over temperature/pressure cause by fire.

**MAINTENANCE**

- We recommend that the float steam traps are serviced as necessary. Steam traps should be checked periodically (at least yearly), to verify that they are operating correctly and to clean the internal parts and screen (if any).
- 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 FLT16 brochure or consult our Sales Office.

**TROUBLESHOOTING**

**ATTENTION**

- If the malfunctions cannot be solved with the help of the following chart, please consult the manufacturer.
- Some of these faults may only occur in some models.

**TROUBLE SHOOTING CHART**

| FAULT   | POSSIBLE REASON                        | SOLUTION  |
|---|--|---|
| Continuous steam discharge                                  | Damaged seat.                          | Substitute seat.  |
|   | Incorrect installation.                | check the installation position (see IMI 1.344 E 08.03).                        |
| The condensate isn't discharged<br>Or not enough discharged | Obstructed strainer.                   | Proceed to an accurate clean and identify the possible reason of contamination. |
|   | Inadequate pressure differential.      | Check the steam trap D.P. and substitute.                                       |
|   | Excessive back pressure.               | Replace the steam trap by a superior DN or use ADCAMAT.                         |
| Temporary condensate accumulation                           | Damaged float.                         | Replace.  |
|   | Steam blocking.                        | Use a steam trap with SLR.  |
|   | Downsizing.                            | Check maximum flow rate (during start-up)                                       |
| Slow initial start up                                       | Damaged air eliminator.                | Replace.  |
|   | The air flow is too high for the trap. | Install an additional air eliminator.   |
|   | Downsizing.                            | Check maximum flow rate (during start-up)                                       |

**CE Marking:**

This product has been designed for use on water and steam which are in Group 2 of the European Pressure Equipment Directive 97/23/EC and it comply with those requirements.

The product carries the CE mark when falling in category 1 and above.

| GROUP 2 GASES CATEGORY |          |          |
|------------------------|----------|----------|
| MODEL                  | SIZES    | CATEGORY |
| FLT 16                 | DN 15-40 | SEP      |
| FLT 16                 | DN 50    | 1        |

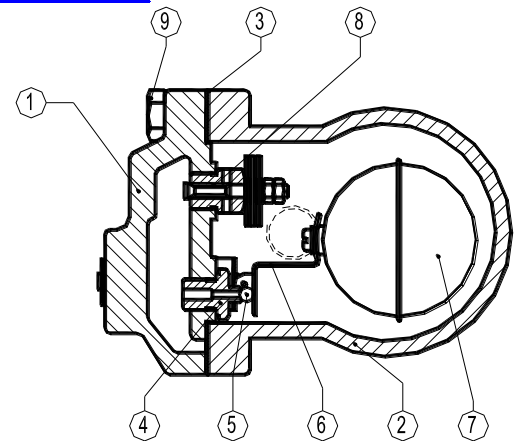
**PARTS LIST FOR FLT16 DN 1/2" – 3/4", DN 15 – 20:**

| CODE          | DESIGNATION                              | TRAP SIZE DN | POS.NR.       | QTY.  |
|---------------|--|--------------|---------------|-------|
| A.92.1402.015 | Valve, seat, float & gasket D.P. 4,5 bar | 1/2" - 3/4"  | 3, 4, 5, 6, 7 | 1 set |
| A.92.1403.015 | Valve, seat, float & gasket D.P. 10 bar  | 1/2" - 3/4"  | 3, 4, 5, 6, 7 | 1 set |
| A.92.1404.015 | Valve, seat, float & gasket D.P. 14 bar  | 1/2" - 3/4"  | 3, 4, 5, 6, 7 | 1 set |
| A.92.1402.115 | Float & gasket                           | 1/2" - 3/4"  | 3, 7          | 1 set |
| A.92.1402.215 | Air vent & gasket                        | 1/2" - 3/4"  | 3, 8          | 1 set |

**Recommended tightening torques FLT16 DN 1/2" – 3/4", DN 15 – 20:**

| POS.NR. | TRAP SIZE DN | Nm    |
|---------|--------------|-------|
| 4       | 1/2" - 3/4"  | 50-55 |
| 8       | 1/2" - 3/4"  | 50-55 |
| 9       | 1/2" - 3/4"  | 40-45 |

Remarks: Tighten cover bolts uniformly.

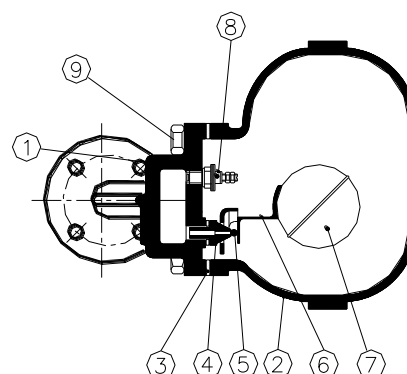

**PARTS LIST FOR FLT16 DN 1", DN 25:**

| CODE          | DESIGNATION                              | TRAP SIZE DN | POS.NR.       | QTY.  |
|---------------|--|--------------|---------------|-------|
| A.92.1402.025 | Valve, seat, float & gasket D.P. 4,5 bar | 1"           | 3, 4, 5, 6, 7 | 1 set |
| A.92.1403.025 | Valve, seat, float & gasket D.P. 10 bar  | 1"           | 3, 4, 5, 6, 7 | 1 set |
| A.92.1404.025 | Valve, seat, float & gasket D.P. 14 bar  | 1"           | 3, 4, 5, 6, 7 | 1 set |
| A.92.1402.125 | Float & gasket                           | 1"           | 3, 7          | 1 set |
| A.92.1402.215 | Air vent & gasket                        | 1"           | 3, 8          | 1 set |

**Recommended tightening torques FLT16 DN 1", DN 25:**

| POS.NR. | TRAP SIZE DN | Nm    |
|---------|--------------|-------|
| 4       | 1"           | 50-55 |
| 8       | 1"           | 50-55 |
| 9       | 1"           | 40-45 |

Remarks: Tighten cover bolts uniformly.



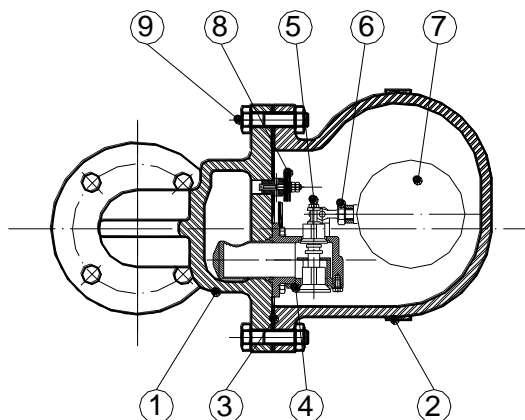
**PARTS LIST FOR FLT16 DN 11/2" - 2", DN 40 - 50:**

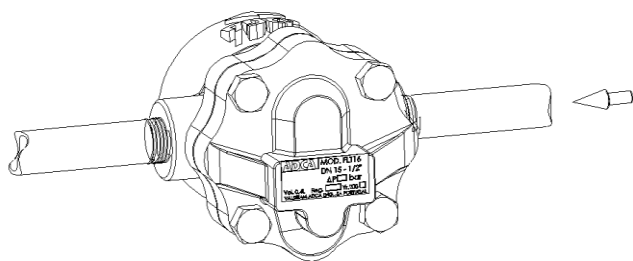
| CODE          | DESIGNATION                              | TRAP SIZE<br>DN | POS.NR.       | QTY.  |
|---------------|--|-----------------|---------------|-------|
| A.92.1402.040 | Valve, seat, float & gasket D.P. 4,5 bar | 11/2"           | 3, 4, 5, 6, 7 | 1 set |
| A.92.1403.040 | Valve, seat, float & gasket D.P. 10 bar  | 11/2"           | 3, 4, 5, 6, 7 | 1 set |
| A.92.1404.040 | Valve, seat, float & gasket D.P. 14 bar  | 11/2"           | 3, 4, 5, 6, 7 | 1 set |
| A.92.1402.140 | Float & gasket                           | 11/2"           | 3, 7          | 1 set |
| A.92.1402.050 | Valve, seat, float & gasket D.P. 4,5 bar | 2"              | 3, 4, 5, 6, 7 | 1 set |
| A.92.1403.050 | Valve, seat, float & gasket D.P. 10 bar  | 2"              | 3, 4, 5, 6, 7 | 1 set |
| A.92.1404.050 | Valve, seat, float & gasket D.P. 14 bar  | 2"              | 3, 4, 5, 6, 7 | 1 set |
| A.92.1402.150 | Float & gasket                           | 2"              | 3, 7          | 1 set |
| A.92.1402.215 | Air vent & gasket                        | 11/2"-2"        | 3, 8          | 1 set |

**Recommended tightening torques FLT16 DN 11/2" - 2", DN 40 - 50:**

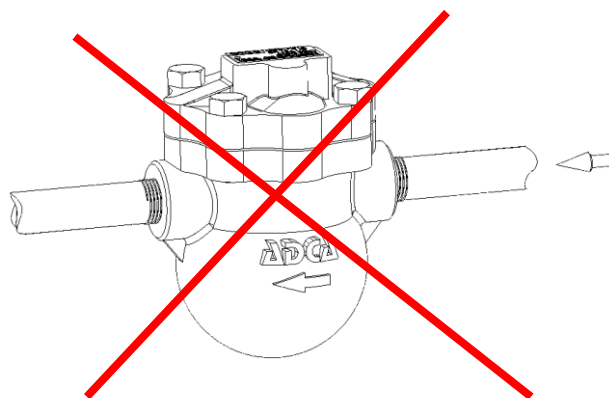
| POS.NR. | TRAP SIZE<br>DN | Nm           |
|---------|-----------------|--------------|
| 4       | 11/2"           | 10-15 (4xM6) |
| 4       | 2"              | 20-25 (4xM8) |
| 8       | 11/2" - 2"      | 50-55        |
| 9       | 11/2"           | 60-65        |
| 9       | 2"              | 80-85        |

Remarks: Tighten cover bolts uniformly.





Correct Installation



Wrong Installation

## PRODUCTS RETURNING



ATTENTION

- Information regarding any hazards and precautions to be considered because of contaminating fluids and residues or mechanical damage that may represent a health, safety or environmental risk, must be provided in writing by the distributors and costumers when returning products to Valsteam ADCA engineering.
- Health and safety data sheets regarding substances identified as hazardous or potentially hazardous must be provided with the information mention above.



ATTENTION

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