

## INSTALLATION AND MAINTENANCE INSTRUCTIONS

### IB - INVERTED BUCKET STEAM TRAPS

#### (IB12 – IBB12 - IB30 – IB35)

#### GENERAL

- These instructions must be carefully read before any work involving products supplied by VALSTEAM ENGINEERING S.A. is undertaken.
- The installation procedure is a critical stage in a life of a steam trap and care should be taken to avoid damage to the trap or equipment.

#### **Warning!**

- At start up, the presence of small particles in the water (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.
- 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



**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.
- Install the steam trap in the point of the system, where the condensate tends to collect. It must be installed with horizontal connections, with the bucket lever in horizontal plane so that it rises and falls vertically. An ADCA strainer can be installed upstream of the IB30S trap.

BODY LIMITING CONDITIONS - IB12 - IBB12	
THREADED PN16 ALLOW. PRES.	RELATED TEMP.
16 bar	100 °C
15,5 bar	150 °C
14,7 bar	200 °C
13,9 bar	250 °C

PMO - Max. operating pressure 14 bar  
TMO - Max. operating temperature 198 °C

MAX. DIFFERENTIAL PRESSURE	
IB12-4,5 - IBB12-4,5	4 bar
IB12-8 - IBB12-8	8 bar
IB12-12 - IBB12-12	12 bar



BODY LIMITING CONDITIONS				
IB30S - IB35S		IB30SS -IB35SS		RELATED TEMP.
FLANGED PN 40 / ANSI 300 *	FLANGED ANSI 150 **	FLANGED PN 40 / ANSI 300 *	FLANGED ANSI 150 **	
ALLOW. PRES.	ALLOW. PRES.	ALLOW. PRES.	ALLOW. PRES.	
37,1 bar	15,4 bar	40 bar	16 bar	100 °C
33,3 bar	13,8 bar	33,7 bar	13,6 bar	200 °C
25,7 bar	8,4 bar	28,5 bar	8,4 bar	350 °C
23,8 bar	6,5 bar	27,4 bar	6,5 bar	400 °C

PMO - Max. operating pressure 27 bar ; TMO - Max. operating temperature 380 °c

\* According to EN1092-1:2007 ; \*\* Acc. to EN1759-1:2004

Body limiting conditions PN40 or below, depending on the type of connection adopted. Rating PN40 for thread, SW and BW.

MAX. DIFFERENTIAL PRESSURE	
IB30S-4 - IB30SS-4	4 bar
IB30S-8 - IB30SS-8	8 bar
IB30S-12 - IB30SS-12	12 bar

MAX. DIFFERENTIAL PRESSURE	
IB35S-17 - IB35SS-17	17 bar
IB35S-27 - IB35SS-27	27 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 inverted bucket 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 IS (Information Sheet) or consult our Sales Office.

**CE Marking:**

This product has been designed for use on steam and water which are in Group 2 of the PED-European Pressure Equipment Directive 97/23/EC and it comply with those requirements. The product fall within category SEP and must not be CE marked.

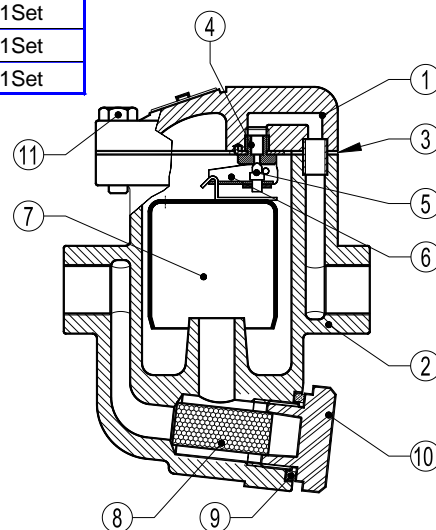
**PARTS LIST FOR IB12:**

CODE	DESIGNATION	TRAP SIZE DN	POS.NR.	QTY.
A.93.2302.015	Main valve, seat, gasket D.P.4bar	DN1/2"-3/4"	3,4,5	1Set
A.93.2303.015	Main valve, seat, gasket D.P.8bar	DN1/2"-3/4"	3,4,5	1Set
A.93.2304.015	Main valve, seat, gasket D.P.12bar	DN1/2"-3/4"	3,4,5	1Set
A.93.2302.115	Bucket & gasket	DN1/2"-3/4"	3,7	1Set
A.93.2302.215	Strainer screen & gasket	DN1/2"-3/4"	8,9	1Set

**Recommended tightening torques IB12:**

POS.NR.	TRAP SIZE DN	Nm
4	1/2"-3/4"	50
10	1/2"-3/4"	50
11	1/2"-3/4"	25

Remarks: Tighten cover bolts uniformly.

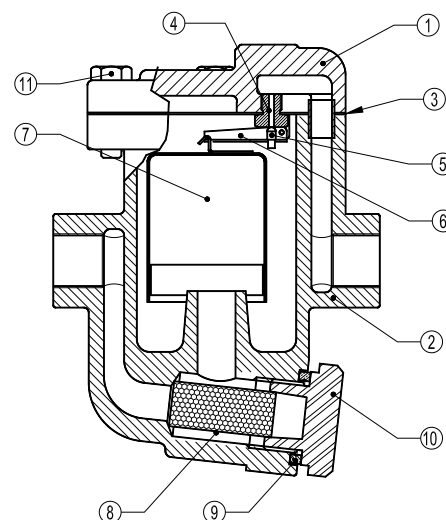

**PARTS LIST FOR IBB12:**

CODE	DESIGNATION	TRAP SIZE DN	POS.NR.	QTY.
A.93.3352.020	Main valve, seat, gasket D.P.4bar	DN3/4"-1"	3,4,5	1Set
A.93.3353.020	Main valve, seat, gasket D.P.8bar	DN3/4"-1"	3,4,5	1Set
A.93.3354.020	Main valve, seat, gasket D.P.12bar	DN3/4"-1"	3,4,5	1Set
A.93.3352.120	Bucket & gasket	DN3/4"-1"	3,7	1Set
A.93.3352.220	Strainer screen & gasket	DN3/4"-1"	8,9	1Set

**Recommended tightening torques IBB12:**

POS.NR.	TRAP SIZE DN	Nm
4	3/4"-1"	85
10	3/4"-1"	60
11	3/4"-1"	25

Remarks: Tighten cover bolts uniformly.



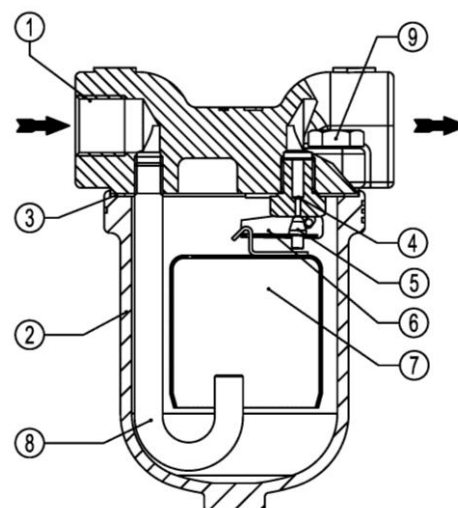
**PARTS LIST FOR IB30:**

CODE	DESIGNATION	TRAP SIZE DN	POS.NR.	QTY.
A.93.4502.015	Main valve,seat,gasket D.P.4bar	DN1/2"-1"	3,4,5	1Set
A.93.4503.015	Main valve,seat,gasket D.P.8bar	DN1/2"-1"	3,4,5	1Set
A.93.4504.015	Main valve,seat,gasket D.P.12bar	DN1/2"-1"	3,4,5	1Set
A.93.4502.115	Bucket & gasket	DN1/2"-1"	3,7	1Set

**Recommended tightening torques IB30:**

POS.NR.	TRAP SIZE DN	Nm
4	1/2"-1"	90

Remarks: Tighten cover bolts uniformly.

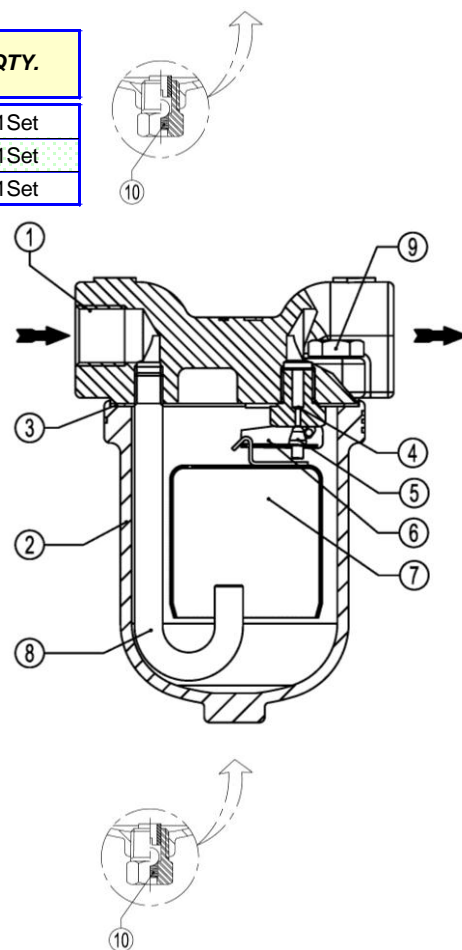

**PARTS LIST FOR IB35:**

CODE	DESIGNATION	TRAP SIZE DN	POS.NR.	QTY.
A.93.4705.015	Main valve,seat,gasket D.P.4bar	DN1/2"-1"	3,4,5	1Set
A.93.4706.015	Main valve,seat,gasket D.P.8bar	DN1/2"-1"	3,4,5	1Set
A.93.4702.115	Bucket & gasket	DN1/2"-1"	3,7	1Set

**Recommended tightening torques IB35:**

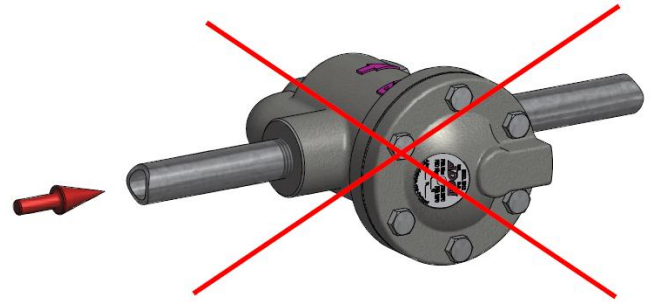
POS.NR.	TRAP SIZE DN	Nm
4	1/2"-1"	90

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.