



Inverted Bucket Steam Traps IB 12

Description

IB 12 series inverted bucket steam traps are recommended for all services where the most important requirements are overall operating efficiency and long, trouble-free service life.

They operate intermittently, either wide open or tightly closed and are therefore best suited for service at medium and high steam pressures. Connections are female screwed horizontal.

Main Features

Intermittent discharge.

Discharges condensate at steam temperature.

Unaffected by waterhammer and vibrations.

Easy to maintain.

Built-in strainer.

Use: Saturated and superheated steam.

Available

Models : IB 12-4; IB12-8; IB12-12

Sizes : 1/2" and 3/4"

Connections : Female screwed ISO 7/1 Rp (BS21)

Installation : Horizontal installation. See IMI, installation and maintenance instructions.

Max.D.Press : IB12 - 4 - 4 bar

IB12 - 8 - 8 bar

IB12 - 12 - 12 bar

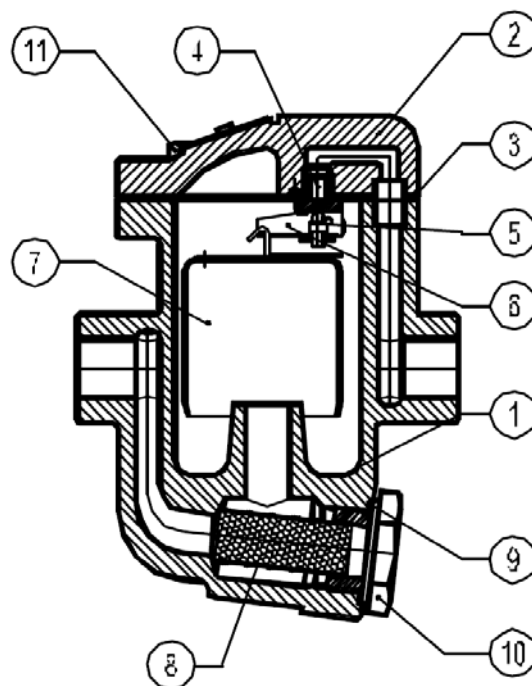
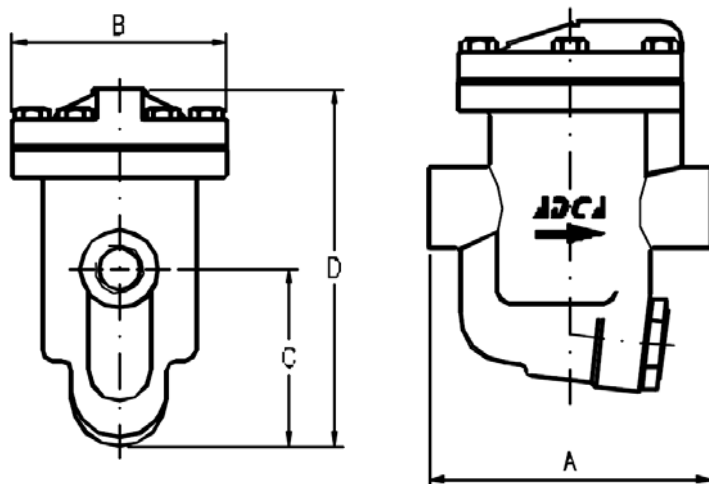
PMA : Max. allowable pressure 16 bar

TMA : Max. allowable temperature 250 °C

PMO : Max. operating pressure 14 bar

TMO : Max. operating temperature 230 °C

How to order : i.e. IB12-12 DN 1/2" BSP



Materials :

Pos.NR.	Designation	Material
1	Body	GGG40
2	Cover	GGG40
3*	Gasket	Non Asbestos
4*	Seat	AISI 410
5*	Valve	AISI 410
6*	Lever	AISI 304
7*	Bucket	AISI 304
8*	Strainer Screen	AISI 304
9	Gasket	316/Graphite
10	Plug	C22.8
11	Bolts	Steel 8.8

* Available spare parts

Dimensions (mm)

Size DN	A	B	C	D	Weight kg
1/2"	130	102	85	170	3.9
3/4"	130	102	85	170	3.9

Flow rate capacity in kg/h

Model	Size	1	2	3	4	5	6	7	8	10	12
IB-12/4	1/2" - 3/4"	280	390	470	530						
IB-12-8	1/2" - 3/4"	190	260	320	360	400	430	460	500		
IB-12-12	1/2" - 3/4"	160	220	260	290	320	360	370	400	440	490

Recommended safety factor : continuous service = 1.2 - 1.5 ; discontinuous service = 2-3.

INSTALLATION AND MAINTENANCE INSTRUCTIONS

IB - INVERTED BUCKET STEAM TRAPS (IB 12- IBB - IB30S)

GENERAL

1. These instructions must be carefully read before any work involving products supplied by VALSTEAM ADCA ENGINEERING S.A. is undertaken.
2. 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 unperfect closure of the seat . If this occur, 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

1. 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.
2. 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.

Limiting conditions IB12 & IBB 12 :

PMA : Max. allowable pressure	16 bar
TMA: Max. allowable temperature	250 °C
PMO: Max. operating pressure	14 bar
TMO: Max. operating temperature	230 °C

Limiting conditions IB30 & IB30SS :

PMA : Max. allowable pressure	40 bar
TMA: Max. allowable temperature	425 °C
PMO: Max. operating pressure	27 bar
TMO: Max. operating temperature	380 °C

Max. differential pressure :

IB12- 4 - 4 bar	IB12- 4 - 4 bar
IB12- 8 - 8 bar	IB12- 8 - 8 bar
IB12- 8 - 8 bar	IB12-12 -12 bar

Max. differential pressure :

IB30- 4 - 4 bar
IB30- 8 - 8 bar
IB30-12 -12 bar
IB30-17 -17 bar
IB30-27 -27 bar

MAINTENANCE

1. 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).
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 IS (Information Sheet) or consult our Sales Office.

CE Marking :

This product have been designed for use on steam and water wich 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.

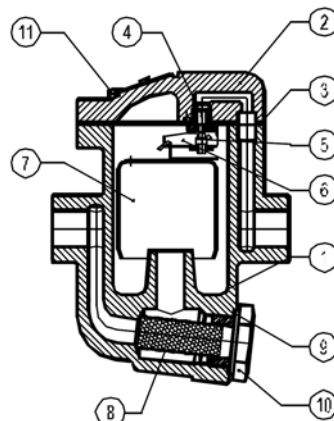
PARTS LIST FOR IB 12 STEAM TRAPS

Code	Designation	SizeTrap	Pos.Nr.	Qty.
A.93.2302.015	Main valve,seat,gasket D.P.4bar	DN 1/2" - 3/4"	3,4,5	1Set
A.93.2303.015	Main valve,seat,gasket D.P.8bar	DN 1/2" - 3/4"	3,4,5	1Set
A.93.2304.015	Main valve,seat,gasket D.P.12bar	DN 1/2" - 3/4"	3,4,5	1Set
A.93.2302.115	Bucket & gasket	DN 1/2" - 3/4"	3,7	1Set
A.93.2302.215	Strainer screen & gasket	DN 1/2" - 3/4"	8,9	1Set

Recommended tightening torques IB 12

Pos.Nr.	Size	Nm
4	1/2" - 3/4"	50
10	1/2" - 3/4"	50
11	1/2" - 3/4"	25

Remarks: Tighten cover bolts uniformly.



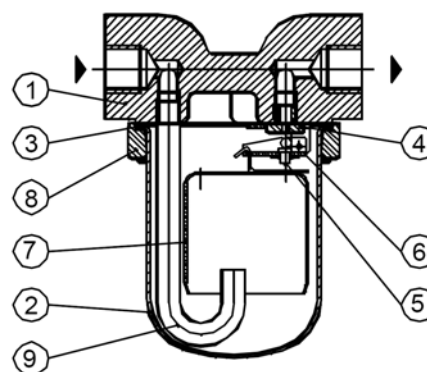
PARTS LIST FOR IB 30S STEAM TRAPS

Code	Designation	SizeTrap	Pos.Nr.	Qty.
A.93.4502.015	Main valve,seat,gasket D.P.4bar	DN 1/2" - 1"	3,4,5	1Set
A.93.4503.015	Main valve,seat,gasket D.P.8bar	DN 1/2" - 1"	3,4,5	1Set
A.93.4504.015	Main valve,seat,gasket D.P.12bar	DN 1/2" - 1"	3,4,5	1Set
A.93.4502.115	Bucket & gasket	DN 1/2" - 1"	3,7	1Set

Recommended tightening torques IB 12

Pos.Nr.	Size	Nm
4	1/2" - 1"	90
10	1/2" - 1"	60

Remarks: Tighten cover bolts uniformly.



PARTS LIST FOR IBB 12 STEAM TRAPS

Code	Designation	SizeTrap	Pos.Nr.	Qty.
A.93.3352.020	Main valve,seat,gasket D.P.4bar	DN 3/4" - 1"	3,4,5	1Set
A.93.3353.020	Main valve,seat,gasket D.P.8bar	DN 3/4" - 1"	3,4,5	1Set
A.93.3354.020	Main valve,seat,gasket D.P.12bar	DN 3/4" - 1"	3,4,5	1Set
A.93.3352.120	Bucket & gasket	DN 3/4" - 1"	3,7	1Set
A.93.3352.220	Strainer screen & gasket	DN 3/4" - 1"	8,9	1Set

Recommended tightening torques IBB 12

Pos.Nr.	Size	Nm
4	3/4" - 1"	85
10	3/4" - 1"	60
11	3/4" - 1"	25

Remarks: Tighten cover bolts uniformly.

