

INVERTED BUCKET

This trap uses an inverted bucket that floats when steam is present and sinks when condensate exceeds a predetermined liquid level. When the bucket floats the valve – at the top of the trap – is closed. When it sinks the valve will open. On start up the bucket is down and the valve is wide open, when condensate and air enters the trap it flows directly into the bucket. The condensate falls into the trap body whereas air collects at the top of the bucket and causes it to float thereby closing the valve. Air is released through a vent at the top of the bucket and collects in the top of the trap until the bucket sinks opening the valve and allows the discharge of air and condensate. When steam is formed, it collects in the top of the bucket causing it to float thereby closing the valve. The bucket will sink again when condensate reaches the predetermined level and the cycle starts over.



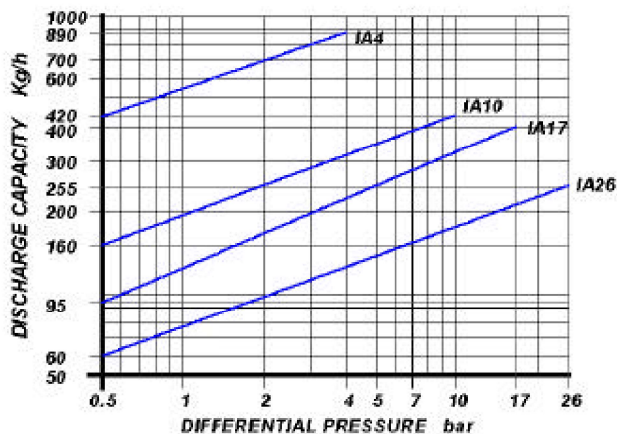
MAIN FEATURES

Discharge of condensate at steam temperature. Simple and reliable construction. Slow discharge of air. Suitable for superheated steam. It withstands waterhammer.

APPLICATIONS

- ☐ Heater batteries
- ☐ Heat exchangers
- ☐ Pans
- ☐ Turbines
- ☐ Drying cylinders
- ☐ Ironing machines

DISCHARGE CAPACITY



Cold water capacities are 2 to 4 times greater than the above.
Safety factor = 1.2 – 1.5

SIZES

½" – ¾" – 1"

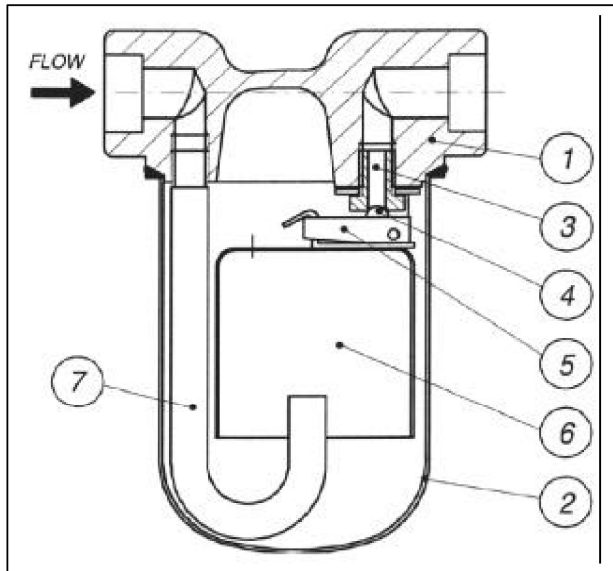
CONNECTIONS

Screwed	BS 21 (BSP) / ANSI B1.20.1 (NPT)
Socket weld	ANSI B 16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

LIMITING CONDITIONS (according to ISO 6552)

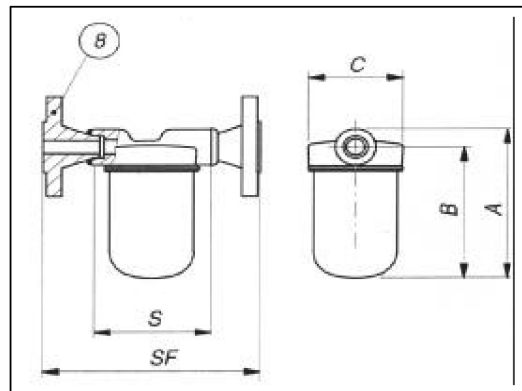
Steam Trap rating	ANSI 300
PMA: Max allowable pressure	50 bar
TMA: max allowable temperature	400°C
PMO: max working pressure	26 bar
TMO: max working temperature	380°C
Max. Differential pressure (IA 4)	4 bar
Max. Differential pressure (IA 10)	10 bar
Max. Differential pressure (IA 17)	17 bar
Max. Differential pressure (IA 26)	26 bar

INVERTED BUCKET STEAM TRAPS IA A105



POS.	DESCRIPTION	MATERIALS	SPARES
1	Cover	ASTM A105	
2	Body	AISI 304	
3	Seat	AISI 410	
4	Valve	AISI 410	
5	Lever	AISI 304	
6	Bucket	AISI 304	
7	Tube	AISI 304	
8	Flange	ASTM A105	

Flanged													
Size (inches)	S	A	B	C	Weight (Kg)	UNI-DIN PN16-25-40		150#		300#		600#	
						SF	Kg	SF	Kg	SF	Kg	SF	Kg
½"	102	145	127	80	1.5	168	3.1	162	2.9	182	3.1	192	3.3
¾"	102	145	127	80	1.5	172	3.8	172	3.1	192	4.3	202	4.7
1"	164	145	127	80	1.8	182	4	214	3.5	226	4.6	239	5.1



INSTALLATION

The steam trap must always be fitted with connections in horizontal position and with the body below them. This type of trap cannot operate in any other position. The steam trap cannot operate without the initial and preservation of the internal water seal. For this reason the trap should be always fitted below the drain point. When this is not possible a check valve should be fitted at the trap inlet. This procedure is also advisable when operating with superheated steam. In some cases it may be necessary to fill the steam trap with water before steam is turned on.

How to order: i.e. IA A105 10 ½" NPT

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