DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS
IA F304

INVERTED BUCKET

This trap uses an inverted bucket that floats whean 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 end 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 predeterminated level and the cycle starts over.

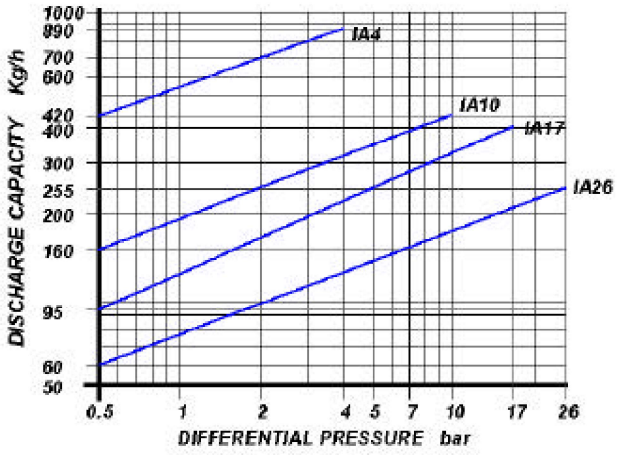
MAIN FEATURES

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

APPLICATIONS

- *Heater batteries*
- *Heat exchangers*
- *Pans*
- *Turbines*
- *Drying cilinders*
- *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		*500°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*

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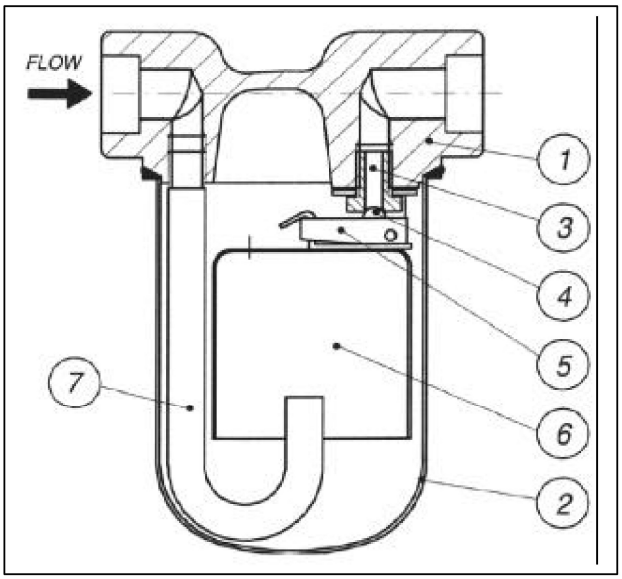
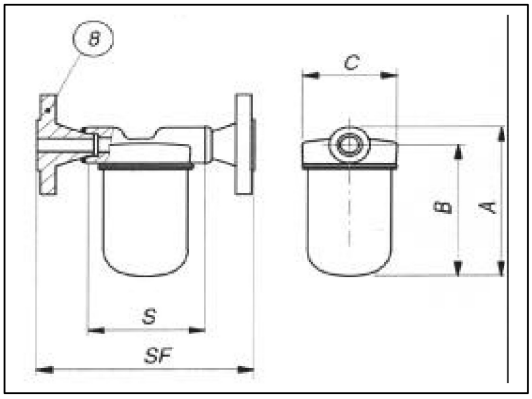


POS.	DESCRIPTION	MATERIALS	SPARES
1	Cover	ASTM A182 F304	
2	Body	AISI 304	
3	Seat	AISI 410	
4	Valve	AISI 410	
5	Lever	AISI 304	
6	Bucket	AISI 304	
7	Tube	AISI 304	
8	Flange	ASTM A182 F304	

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	2.5	182	4	213	3.5	226	4.6	238	5.1



INSTALLATION

The stream trap must always be fitted with connections in horizontal position and with the body below them. Thist 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 F304 10 ½" NPT

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OFFICIAL WEB SITE: www.douglas-italia.com