DOUGLAS ITALIA S.P.A.

INVERTED BUCKET STEAM TRAPS
IDH

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.

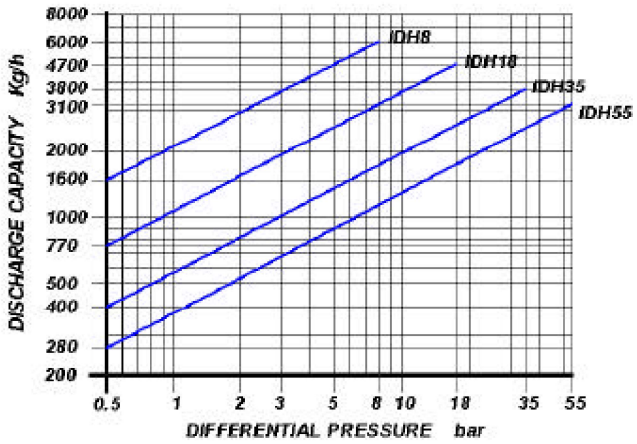
MAIN FEATURES

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

1" – 1½" – 2"

CONNECTIONS

Screwed	*BS 21 (BSP) /ANSI B1.20.1 (NPT)*
Socket weld	*ANSI B 16.11*
Flanged	*ANSI B 16.5 / UNI / DIN*

LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating		*ANSI 600*
PMA: Max allowable pressure		*100 bar*
TMA: max allowable temperature		*400°C*
PMO: max working pressure		*75 bar*
TMO: max working temperature		*350°C*
Max. Differential pressure	*(IDH 8)*	*8 bar*
Max. Differential pressure	*(IDH 18)*	*18 bar*
Max. Differential pressure	*(IDH 35)*	*35 bar*
Max. Differential pressure	*(IDH 55)*	*55 bar*

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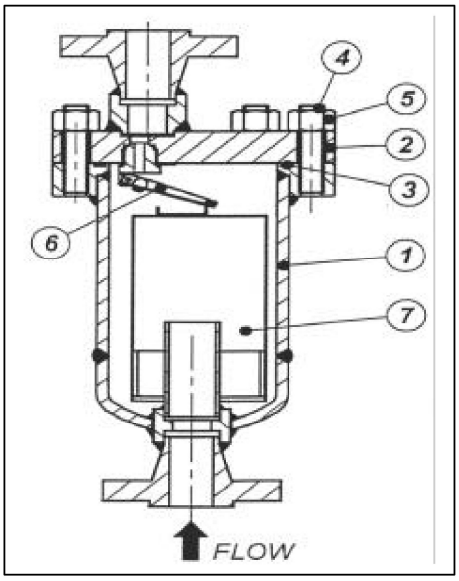
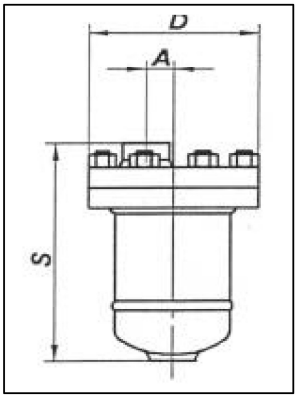
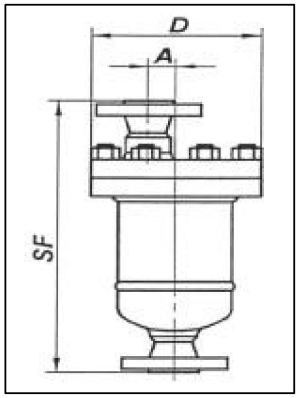


POS.	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A 105	
2	Cover	ASTM A 105	
3	Cover gasket	316 / GRAPHITE	X
4	Studs	ASTM A193 B7	
5	Nuts	ASTM A194 2H	
6	Seat	AISI 410	X
6	Valve	AISI 416	X
6	Lever	AISI 304	X
7	Bucket	AISI 304	X

						Flanged									
Size (inches)	S NPT	S SW	A	B	Weight (Kg)	UNI-DIN PN 25 – 40		150#		300#		600#		1500#	
						SF	Kg	SF	Kg	SF	Kg	SF	Kg	SF	Kg
1"	396	379	250	45	40	446	42	477	42	490	43	503	44	525	48
1½!	406	386	250	40	40	463	44	497	44	510	46	526	47	551	52
2"	415	411	250	35	40	494	46	525	46	538	48	557	50	614	62





INSTALLATION

The trap must be installed vertically. The inlet must be at the bottom with the trap installed below the drain point in order to maintain the water seal around the bucket. A protective strainer is always raccomended upstream of the trap. Always ensure that the trap is properly sized. With very low condensate loads and/or with superheated steam, the installation of a check valve upstream the trap is raccomended

HOW TO SERVICE

Before doing any maintenance work always ensure that the trap is isolated and pressure is dissipated. Undo cover nuts (5), remove cover (2) with all mechanism and cover gasket (3). Unlock the bucket (7) from valve lever (6). Remove the valve guide undoing to the screw. Remove valve seat from cover (2). Screw in a new valve seat. Reinstall valve guide with lever and bucket (7). Refit cover (2), using new gasket (3).

How to order: i.e. *IDH 8 1½" 300 RF*

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OFFICIAL WEB SITE: www.douglas-italia.com