

THERMODYNAMIC

This type of trap uses steam dynamic energy to close the discharge orifice. A disc closes both the inlet and outlet orifice. Condensate can lift the disc and be discharge, but when steam is formed its dynamic energy will create a low pressure area (Bernulli Law) under the disc which draws it towards the seat.

MAIN FEATURES

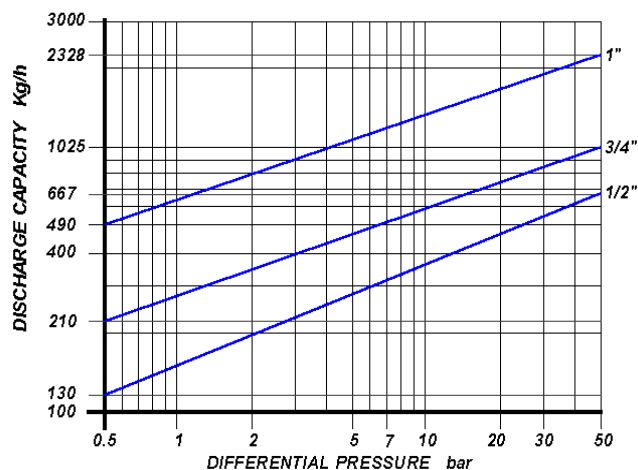
Reduced dimension and weight simple and reliable. It discharges air. It withstands water hammer. Condensate discharge is intermittent. Some loss of live steam.



APPLICATIONS

- ☐ Ironing machines
- ☐ Steam mains
- ☐ Tracing lines
- ☐ Turbines
- ☐ Marine applications
- ☐ Presses

DISCHARGE CAPACITY



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

SIZES

1/2" – 3/4" – 1"

CONNECTIONS

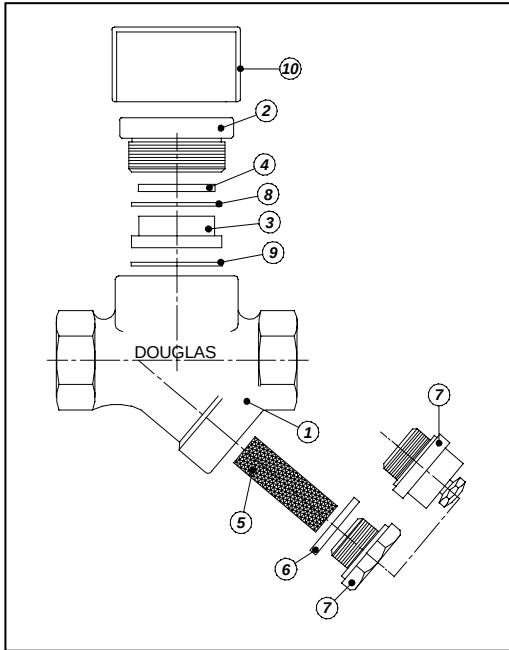
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI 150#/300#/600#/UNI/DIN

LIMITING CONDITIONS (according to ISO 6552)

Steam Trap rating	ANSI 600
PMA: Max allowable pressure	100 bar
TMA: max allowable temperature (acc. To ASME B16.34	425°C
PMO: max working pressure	80 bar
TMO: max working temperature	410°C
Minimum Working Pressure	0.25 bar
Max Differential pressure	50Bar

THERMODYNAMIC STEAM TRAPS

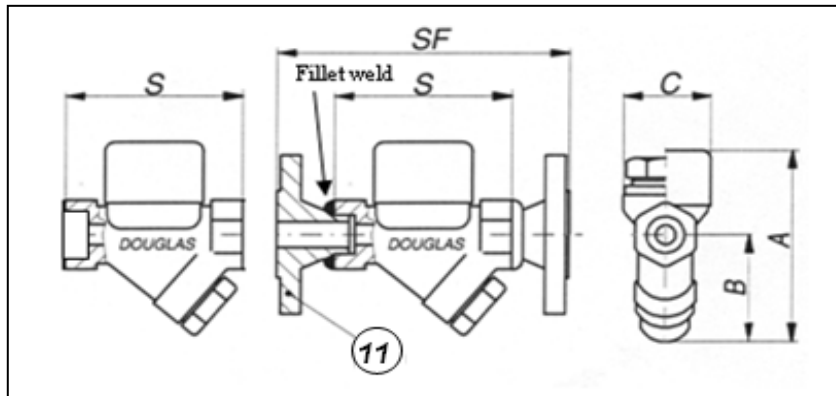
DC50 A105



POS	DESCRIPTION	MATERIALS	SPARES
1	Body	ASTM A105	
2	Cover	AISI 303	
3	Seat	AISI 431-HF	X
4	Disc	AISI 431-HF	X
5	Screen	AISI 316	X
6	Gasket SPW	F-GRAPHITE W-316	X
7	Strainer cap	ASTM A105	
7	Blow off valve*	AISI 416	
8	Gasket Seat	REINFORCED GRAPHITE	X
9	Cover gasket	REINFORCED GRAPHITE	X
10	Insulating cap*	AISI 304	
11	Flange	ASTM A 105	

* optional

Size (inches)	S	A	B	C	Weight (Kg)	Flanged							
						UNI-DIN PN16-25-40		150#		300#		600#	
						SF	Kg	SF	Kg	SF	Kg	SF	Kg
3/8"	85	108	55	48	0.8	151	2.4	145	2.2	165	2.4	175	2.5
1/2"	85	108	55	48	0.8	151	2.4	145	2.2	165	2.4	175	2.5
3/4"	100	120	60	54	1.3	170	3.6	170	3	190	4.1	200	4.5
1"	108	130	70	62	3.4	178	5.2	188	4.6	198	5.8	218	6.2



INSTALLATION

The steam trap can be installed in any position, however it should be preferably fitted on horizontal pipelines.

HOW TO SERVICE

By installing a new seat-disc assembly you can bring the steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing steam trap from the pipeline. Unscrew cover (2) and remove disc(4), seat(3) and clean the inside of the trap. Put in new parts. Screw on cover(2) using a high temperature grease. To service the strainer unscrew cap(8), withdraw screen(5) and clean or replace it. Screwing cover back in place always fit a new gasket(6).