

### THERMODYNAMIC STEAM TRAPS LOW CAPACITIES

DC 50L F 304

#### **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.



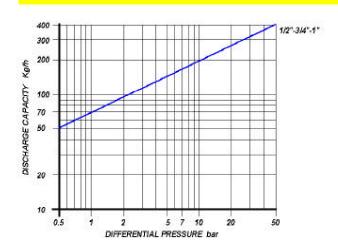
#### **MAIN FEATURES**

Reduced dimension and wheigt simple and reliable. It discharges air. It withstands waterhammer. 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

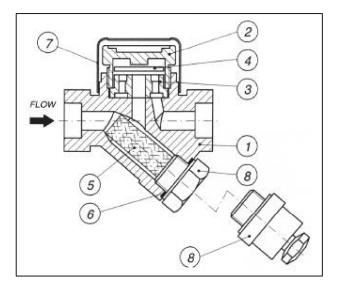
SIZES		
1/2" - 3/4" - 1"		

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	500°C							
PMO: max working pressure	50 bar							
TMO: max working temperature	425°C							
Minimum Working Pressure	0.25 bar							
PMOB: max working back pressure	80%							

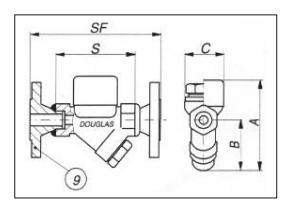
Douglas Italia reserves the right to carry-out any necessary modification without prior notice

# THERMODYNAMIC STEAM TRAPS LOW CAPACITIES DC 50L F 304



POS.	DESCRIPTION	MATERIALS	SPARES					
1	Body	ASTM A182 F304						
2	Cover	AISI 303						
3	Seat	AISI 431	X					
4	Disc	AISI 431	X					
5	Screen	AISI 304	X					
6	Gasket	316/GRAPHITE	X					
7	Insulating cap*	AISI 304						
8	Strainer cap	ASTM A182 F304						
8	Blow off valve*	AISI 416						
9	Flange	ASTM A182 F304						
* option	* optional							

						Flanged							
Size (inches)	S	Α	В	С	Weight (Kg)	<b>UNI-DIN 150#</b> PN16-25-40		<b>O</b> #	300#		600#		
						SF	Kg	SF	Kg	SF	Kg	SF	Kg
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. Scew 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).

How to order: i.e. DC 50L F304 3/4" NPT

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