

# BALANCED PRESSURE THERMOSTATIC STEAM TRAPS **TJ**

### **BALANCED PRESSURE**

The operating principle is based on the expansion and contraction of a temperature sensitive capsule. The elements are filled with a liquid whose saturation temperature is lower then that of water, at the same pressure. With subcooled condensate the elements contract. When steam is formed the pressure inside the element causes expansion to close the valve.



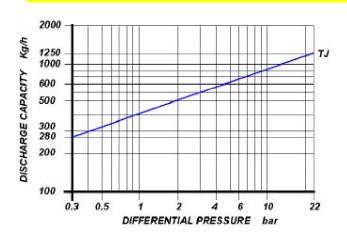
### **MAIN FEATURES**

Free air discharge. It withstands frost. Discharge of condensate slightly below steam temperature. It does not withstand waterhammer

# **APPLICATIONS**

- ☐ Steam mains
- □ Presses
- □ Tanks
- Suction heaters
- Ovens

# **DISCHARGE CAPACITY**



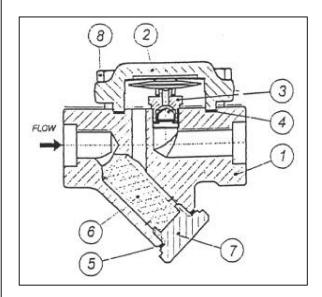
Cold water capacities are 2 to 4 times greater than the above . Safety factor = 1.2-1.5

SIZES	3	
1/2" - 3/4	" – 1"	

CONNECTIONS	
Screwed	ANSI B1.20.1 (NPT) / BS21 (BSP)
Socket Welding	ANSI B16.11
Flanged	ANSI B 16.5 / 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							
Max. operating condition	32 bar - 250°C							
wax. operating condition	14.5 bar - 390°C							
Max. differential pressure	22 bar							

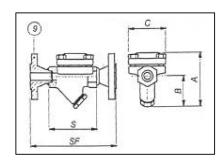
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POS.	DESCRIPTION	MATERIALS	SPARES				
1	Body	ASTM A 105					
2	Cover	ASTM A 105					
3	Seat / Capsule **	STAINLESS STEEL	X				
3	Membrane	HASTELLOY	X				
3	Check valve *	STAINLESS STEEL	X				
4	Cover gasket	316 / GRAPHITE	X				
5	Gasket	316 / GRAPHITE	X				
6	Screen	AISI 304	X				
7	Plug	ASTM A 105					
8	Bolt	ASTM 193 B 7					
* Optional							

\*\* STANDAR CAPSULE : (  $10^{\circ}$ C ) subcooling CAPSULE OPTIONS : (  $5^{\circ}$ C -  $30^{\circ}$ C -  $40^{\circ}$ C ) subcooling

Flanged													
Size (inches)	S	A	В	С	Weight (Kg)		<b>-DIN</b> 140	150#		300#		600#	
						SF	Kg	SF	Kg	SF	Kg	SF	Kg
1/2"	93	105	60	70	1.8	159	4.8	153	4.8	173	4.8	183	4.8
3/4"	93	105	60	70	1.8	163	5	163	5	183	5	193	5
1"	105	115	70	70	3	175	6.5	185	6.5	195	6.5	215	6.5



## **INSTALLATION**

The steam trap can be installed on horizontal or vertical lines. However avoid installation with the body leaning on one side as it is likely that the cover will contain condensate a two different temperatures causing malfunction and possible distortion of the element. Do not fit the trap upside down since this position will not allow the cleaning of the strainer screen.

#### **HOW TO SERVICE**

By installing a new capsule you can bring the TJ steam trap to the "as new from factory" condition. This operation is carried out in a few minutes without removing the trap in the pipeline. Unscrew the 4 screw (8) and remove cover (2) and gasket (4). Unscrew element (3). Clean the inside of the trap and screw in the capsule. Fit a new gasket (4) and reinstall cover (2) tightening the screw (8). To service the strainer, unscrew plug (7), withdraw screen (6) and clean or replace it. Screwing the cover back in place, always fit a new gasket (5).

How to order: i.e. TJ 1/2" NPT

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