# UKL Bi-metallic Thermostatic Steam Trap.

UKL®

The enthalpy in the steam basically has two components : The Latent heat and the Sensible heat. Whereas condensate has only sensible heat. This condensate has to be removed as soon as it is formed, because it hinders to efficient heat transfer as well as leads to water hammer phenomenon as it is hot water (having more Specific Gravity) that moves with high velocity of steam (8 to 10 times higher than water), carrying enough momentum to rupture pipes and which is damaging to the plant pipelines as well as piping equipments. Hence, need to remove condensate from steam and trap steam. This is done by steam trap.

UKL make Bi-metallic steam traps are equipped with corrosion resistant regulator unaffected by water hammer and superheat. The cover features an external adjustment device that can be utilized while in the operation, independent seal and cone valve continues discharge.

The fact that both cone valve and seat be independent and located in allow flow discharge area is controlled by Bimetallic thermostat, continuously adjusting to changes of condensate flow. Automatic air venting. Installation in any position. The independence of the cone valve and seat reduces dramatically the costs of its spare parts joined to the fact that it has an external adjustment device while running makes an extremely low maintenance cost steam trap.

During the start-up, the condensate is cold and the bimetals are flat. When the temperature starts to rise the bimetals will expand producing the progressive closure of the valve. In this way the steam trap is able to adjust itself to changing conditions because if the pressure rises the higher pressure acts on the valve but at the same time the higher temperature will act on bimetals. Its quick automatic air venting prevents air binding. The cone valve is placed on the upper stream far from flash steam zone this avoids erosion and waste contributes to a long effective life and reduces maintenance costs.

#### **MATERIAL OF CONSTRUCTION :-**

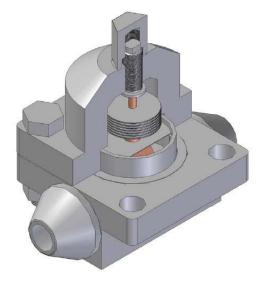
UP64 Ti	:- ASTM A 182 F11
UP110Ti	:- ASTM A 182 F11

#### **OPERATING CONDITIONS :-**

Model	РМО	ТМО	Max Diff. Pressure
UP64 Ti	928 psi	977 °F	928 psi
UP110Ti	1595 psi	977 °F	1595 psi



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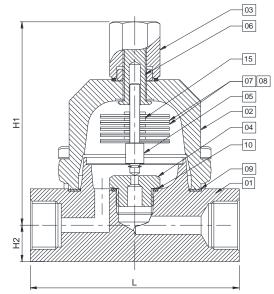
### SIZES AVAILABLE:-1/2", 3/4", and 1"

# **END CONNECTIONS:**

Butt Weld as per ASME B 16.25 Socket Weld as per ASME B 16.11 Flanged End Connections #600/#900/ #1500

**OPTIONAL:-**IBR/Non-IBR

# **BILL OF MATERIAL :-**



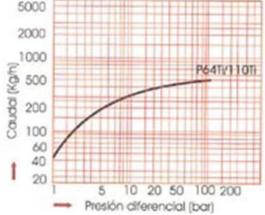
1	Body	Carbon Steel	ASTM A 182 F11 Cl
			3
2	Cover	Carbon Steel	ASTM A 182 F11 Cl
			3
3	Cver Nut	Stainless Steel	AISI 304 / AISI 316
4	Valve Seat	Stainless Steel	AISI 420
5	Stem	Stainless Steel	AISI 440 B
6	Stem Guide	Carbon Steel	AISI 420
7	Bi- Metallic		28/7NiCr-19/7NiCr
8	Controller Plates		
9	Body Gasket	Graphite / CAF	
		/ Non CAF.	
10	Valve Seat	Copper	
	Gasket		

PART NAME | MATERIAL | MATERIAL CODE

### **DIMENSIONS** (in)

No.

# FLOW CAPACITIES :-



Capacities given are continuous discharge capacities of hot condensate. The cold water capacity at start-up condition will be 2.5 of the hot condensate capacity.

Sr.	Size	L	H1	H2
1	1/2"	7.9	4.8	1.1
2	3/4"	7.9	4.8	1.1
3	1"	7.9	4.8	1.1

## **External Adjustment Device:-**

With its external adjustment device, the user can easily modify the conditions of evacuation of condensate. To do this simply remove the top cap, loosen the lock nut and turn as necessary the adjustment screw, up to get the required condensate flow or temperature. Once adjusted, fix the safety nut with soft pressure and place back the top cap, fix tightly to achieve the total sealing. If sealing problems through the gasket are observed replace it with an original new one.

Other Products : ( UCL

Cast / Forged Steel Piston Valves, Bellow seal valves, High Pressure valves (Gate/Globe), Strainers - "Y" Type, ITVS Steam Traps (Thermodynamic, Thermostatic, Ball Float Traps and IBT), Pressure Reducing Station, Condensate Recovery Products. Level Gauges (Reflex, Transparent, Bicolor), Sight Glass, Hot Water Generation System, Safety and Relief Valves. FSD Products : Compressed Asbestos / Non Asbestos Fiber Sheeting / Cut Gaskets, Spiral Wound Gaskets.



In view of technical progress design and dimensions are subjected to change without notice. UNI KLINGER LIMI

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