

UKL BALL FLOAT TYPE STEAM TRAP.

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 main and trap steam. This is done by steam trap.

UKL Ball Float Trap discharge condensate near to steam saturation temperature, which works on the principle of Buoyancy, [densities difference of Water and Steam].The rising condensate level elevates the Float open the valve and discharges the condensate. When the level of condensate drops, the float falls down and the valve close the trap.

It is commonly used for most process heating applications. Wherever steam is used for indirect heating application, the trap to be used must be of mechanical design. It is a continuous discharge type steam trap. This trap can handle very high condensate loads and the discharge will be proportional to the differential pressure across the trap. There may be other similar process applications where the heat load is small and a mechanical trap can handle small as well as fluctuating loads.

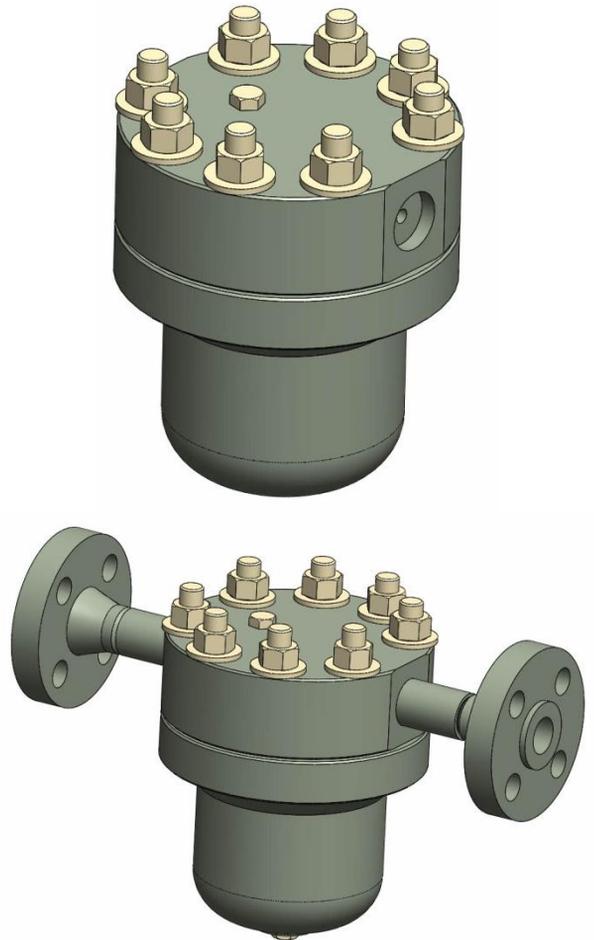
This trap is provided with Bimetallic Vent (TV). The TV will ensure that air and such un dissolved gases will be automatically vented out when present in condensate.

MATERIAL OF CONSTRUCTION:

ASTM A105

SIZES AVAILABLE:-

15 NB , 20 NB, 25 NB, 40 NB SOCKET WELD END / FLANGED END #600 / #900



END CONNECTIONS:

Socket Weld to ASME B 16.11

Flanged End - #600 / #900 to ASME B 16.5

INSTALLATION :-

Horizontal Position

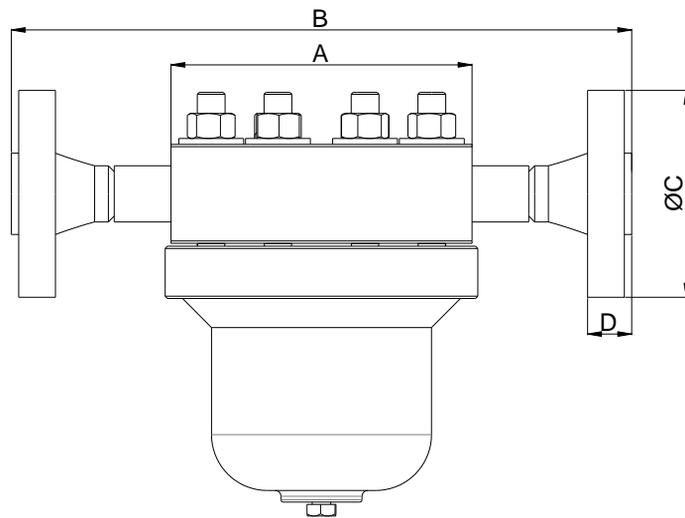
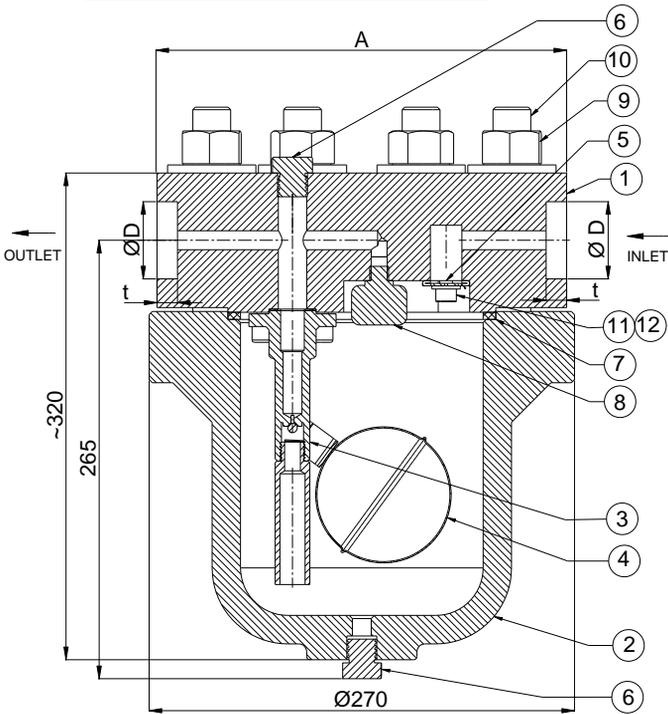
OPTIONAL:-

IBR/Non-IBR

With Bimetallic Air vent

Inbuilt Strainer

GENERAL ARRANGMENT:



RECOMMENDED TIGHTENING TORQUES		
Sr.	PART NAME	TORQUE Nm
2	STUD	80-100
4	NUT	210-240

BILL OF MATERIAL OF UFT-100		
No.	PART NAME	MATERIAL CODE
01	Body	ASTM A 105
02	Cover	ASTM A 105
03	Controller Assembly	AISI 316
04	Float Assembly	AISI 316
05	Strainer	AISI 304
06	NPT End Plug	ASTM A 105
07	Cover Gasket	CAF/ NON CAF/SPW
08	Bimetallic Air Vent	---
09	Hex Nut	ASTM A194 Gr 2H
10	Stud	ASTM A193 Gr. B7
11	Washer	AISI 304
12	Hex Bolt	Gr. 8.8/10.9/ Equivalent or higher grade

GENERAL DIMENSIONS			
SOCKET END (ASME B16.11 #9000)			
SIZE	ØD (mm)	t (mm)	A (mm)
15 NB	21.8	10.0	260
20 NB	27.2	13.0	260
25 NB	33.9	13.0	260
40 NB	48.8	13.0	260
FLANGED END (ASME B16.5 #900)			
SIZE	B	ØC	D
15 NB	505	120	29.3
20 NB	525	130	32.4
25 NB	530	150	35.6
40 NB	550	180	38.8
FLANGED END (ASME B16.5 #600)			
15 NB	490	95	21.3
20 NB	500	115	22.9
25 NB	505	125	24.5
40 NB	525	155	29.3

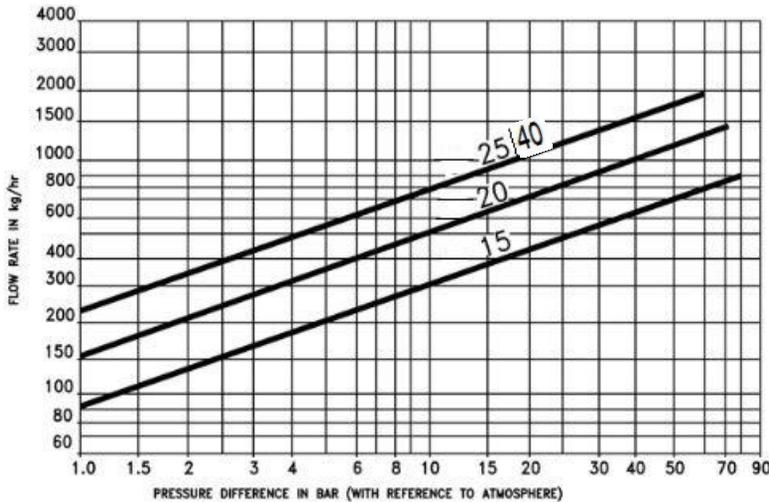
UKL-DS-UFT 100-R00-AUG 2019



OPERATING CONDITIONS :-

DESIGN CONDITIONS		
1	Max Allowable Pressure	153.2 Bar (g) [156.3 Kg/cm2 (g)] @ 38 °C
2	Max Allowable Temperature	425 °C @ 86.3 Bar (g) [88.0 Kg/cm2 (g)]
OPERATING CONDITIONS FOR SW & FE #900		
1	Max Working Pressure	100 Bar (g) [102.0 Kg/cm2] @ 312 °C
2	Max Working Temperature	425 °C @ 86.3 Bar (g) [88.0 Kg/cm2 (g)]
3	COLD HYDRO TEST PRESSURE	
	150 Bar (g) [153 Kg/cm2 (g)] Without Internals	
OPERATING CONDITIONS FOR FE #600		
1	Max Working Pressure	80 Bar (g) [81.6 Kg/cm2] @ 295 °C
2	Max Working Temperature	425 °C @ 57.5 Bar (g) [58.6 Kg/cm2 (g)]
3	COLD HYDRO TEST PRESSURE	
	120 Bar (g) [123 Kg/cm2 (g)] Without Internals	

CAPACITY CHART :-



Installation :-

The trap must be fitted with horizontal plane so that it rises and falls vertically and condensate flow corresponds with arrows on the name plate
If necessary, give support to float trap in the pipeline
Use M12 of tapping given on outer body for lifting the product.

STORAGE

UNI KLINGER UFT and the respective spares should be stored only in enclosed dry rooms in a non-aggressive atmosphere. Fully assembled Ball Float Traps must be stored as supplied by UNI KLINGER. Spare parts must be handled with care and should be stored in their original packing.

SPARES AVAILABLE:

Controller Assembly
Float
Bimetallic Air Vent
Cover Gasket
Strainer

Other Products : 

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.

UKL®

UNI KLINGER LIMITED

A joint venture of the Neterwala group of companies and KLINGER AG. Switzerland.

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