



VALVE AND CONTROL SPECIALISTS

SERVICE AND RELIABILITY

THERMODYNAMIC TRAP VCS MODEL TD42

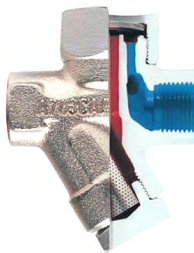
Thermodynamic or Disc Steam Traps operate on the simplistic thermodynamic principle. Incoming condensate lifts the disc of the regulator to the open position, while steam causes it to close immediately. The TD 42 and TD 45 series are correspondingly simple in construction, feature a small, compact body and comparatively low in cost compared to Float/Thermostatic or bucket traps.

When TD traps came onto the market the quality was average, made of cast iron bodies, they had no inbuilt strainer and consistently air locked or known as air binding making the trap inoperable. There are still a number of these traps on the market today to be aware of and avoid as they give the TD a bad rap.

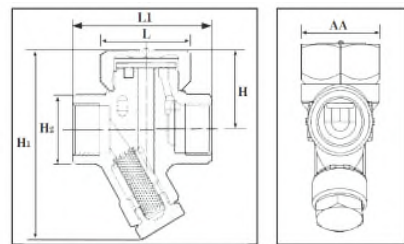
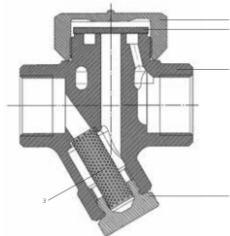
Quality traps start with good materials, stainless steel is a lot less likely to be affected by carbonic acid, a lot more wear resistant, robust and unaffected by water-hammer. An Anti Air binding feature is common place in well manufactured traps. It defies logic to put in a cheap trap that wears prematurely / bodies corrode or fail to work in service.

The TD 42 AND TD 45 series are a PN63 body class and have Stainless bodies, anti-air binding while purging air within the line and a permitted back pressure up to 80% of upstream pressure . There is very little condensate back up due to constant operation. As TD traps are still the most cost effective initial outlay of all the trap designs get the best quality you can.

TD traps have the niche applications such as saturated steam dip legs, superheated steam drip legs, steam tracing, air heaters and small equipment like ironers or pressing units.



MODEL TD 42



DIMENSIONS

Size (inch)	L	L1	H	H1	H2	AA
1/2"	78	95	41	95	33	41
3/4"	90	95	43	110	39	41
1"	95	95	52	124	45	55

Materials

1 Body	Stainless Casting ASTM A743 (CA 40F)
2 Cover	Stainless Steel AISI 304
3 Strainer Screen	* Stainless Steel AISI 304
4 Disc	* Stainless Steel AISI 420
5 Discharge Bolt	Stainless Steel AISI 304

*** Available spare parts**

OPERATING CONDITIONS

Max.Allowable Pressure PMA(bar)	63
Max.Allowable Temperature TMA (°C)	400
Max.Operating Pressure PMO (bar)	42
Max.Operating Temperature TMO (°C)	400

Example of TD trap specification

Steam trap shall be stainless steel thermodynamic type, integral seat, hardened disc and seating surfaces with anti-air binding design. Trap to contain inlet Y strainer, and when required, shall be provided with integral blowdown valve. VCS TD42 or equivalent

Discharge Capacity
(1/2"-1")

