

### 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.



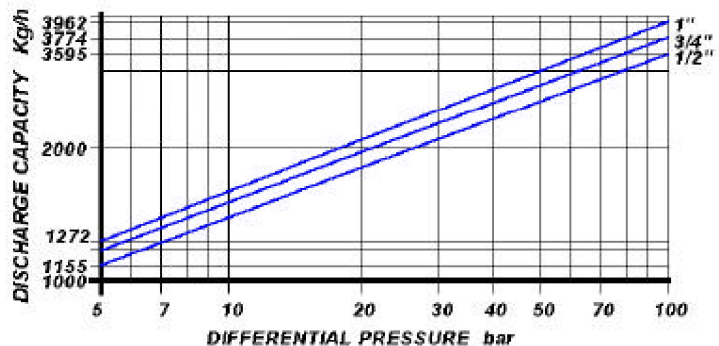
### MAIN FEATURES

Reduced dimension and weight 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

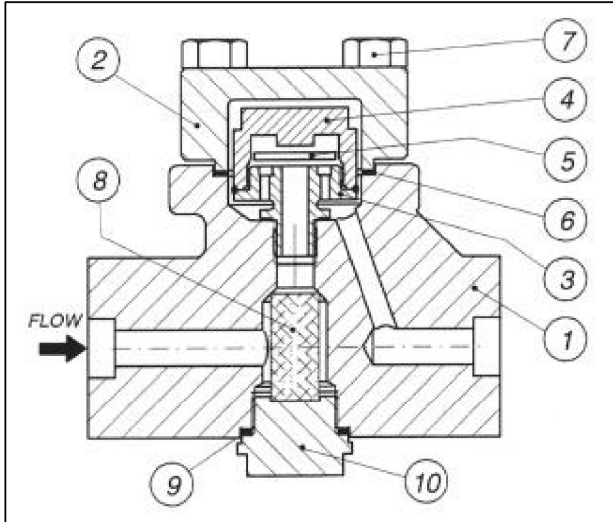
### CONNECTIONS

|             |                         |
|-------------|-------------------------|
| SCREWED     | ANSI B 1.20.1 ( NPT )   |
| BUTTWELD    | ANSI B 16.25            |
| SOCKET WELD | ANSI B 16.11            |
| FLANGED     | ANSI 600#/1500#/UNI/DIN |

### LIMITING CONDITIONS ( according to ISO 6552 )

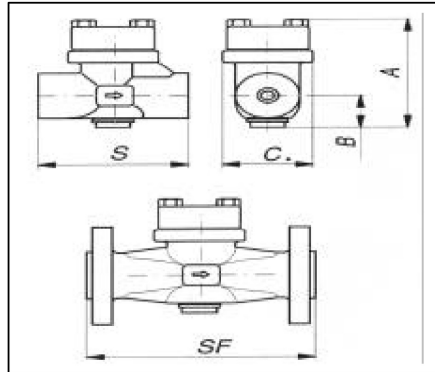
|                                 |         |
|---------------------------------|---------|
| Steam Trap rating               | 1500    |
| PMA: Max allowable pressure     | 260 bar |
| TMA: max allowable temperature  | 510°C   |
| PMO: max working pressure       | 100 bar |
| TMO: max working temperature    | 495°C   |
| Minimum Working Pressure        | 5 bar   |
| PMOB: max working back pressure | 80%     |

## THERMODYNAMIC STEAM TRAPS DK 100 F22



| POS. | DESCRIPTION  | MATERIALS      | SPARES |
|------|--------------|----------------|--------|
| 1    | Body         | ASTM A182 F22  |        |
| 2    | Cover        | ASTM A182 F22  |        |
| 3    | Seat         | AISI 421       | X      |
| 4    | Cover seat   | AISI 431       | X      |
| 5    | Disc         | AIS 431        | X      |
| 6    | Gasket       | 316 / GRAPHITE | X      |
| 7    | Bolts        | ASTM A193 B8   |        |
| 8    | Screen       | AISI 304       | X      |
| 9    | Gasket       | 316 / GRAPHITE | X      |
| 10   | Strainer cap | ASTM A182 F22  |        |

| Size<br>(inches) | S   | A   | B  | C  | Weight<br>(Kg) | Flanged                |      |      |      |       |      |
|------------------|-----|-----|----|----|----------------|------------------------|------|------|------|-------|------|
|                  |     |     |    |    |                | UNI-DIN<br>PN 40 - 100 |      | 600# |      | 1500# |      |
|                  |     |     |    |    |                | SF                     | Kg   | SF   | Kg   | SF    | Kg   |
| ½"               | 155 | 150 | 48 | 94 | 7              | 242                    | 9    | 242  | 8.5  | 242   | 11.3 |
| ¾"               | 155 | 150 | 48 | 94 | 7              | 242                    | 11   | 242  | 9.2  | 242   | 12.5 |
| 1"               | 155 | 150 | 48 | 94 | 7              | 242                    | 12.2 | 242  | 11.2 | 242   | 15   |



### 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. Remove cover(2), unscrew seat-disc assembly and clean the inside of the body. Screw in the new assembly (3-4-5), replace body, cover, gasket (6) and reassemble cover. To service the strainer unscrew the relevant cap (10) and clean or replace the screen. Screwing the cap back always fit a new gasket (9).

**How to order:** i.e. DK 100 1" SW F22

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