

# FLOAT DYNAMIC® STEAM TRAP

## MODEL J10 CAST IRON

#### CAST IRON FLOAT-PISTON TRAP FOR HIGH-CAPACITY PROCESS APPLICATION

#### **Features**

Inline maintainable, float dynamic steam trap capable of discharging condensate at high flow rates. Suitable for large process heat exchangers.

- 1. Self-modulating free float pilot mechanism ensures discharge at near-to-steam temperatures
- 2. Proven piston valve allows "pulsing" discharge of condensate at high flow rates and intermittent discharge at low flow rates.
- 3. Steam chamber design prevents damage to the valve and valve seat on closure.
- 4. All internal parts are easily accessible without having to remove the trap from the line.
- 5. Applicable over a wide pressure range without adjustment.
- 6. Manual lock release valve helps eliminate steam locking and air binding.



## **Specifications**

| Model                               |      | J10-30  | J10-60 |  |
|-------------------------------------|------|---------|--------|--|
| Connection                          |      | Flanged |        |  |
| Size (mm)                           |      | 10      | 00     |  |
| Maximum Operating Pressure (barg)   | PMO  | 1       | 3      |  |
| Maximum Differential Pressure (bar) | ΔΡΜΧ | 1       | 3      |  |
| Minimum Differential Pressure (bar) |      | 0       | .5     |  |
| Maximum Operating Temperature (°C)  | TMO  | 22      | 20     |  |

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 13

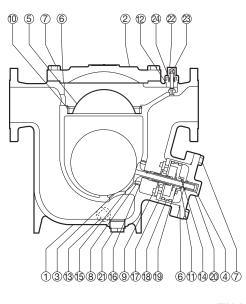
Maximum Allowable Temperature (°C) TMA: 220

1 MPa = 10.197 kg/cm<sup>2</sup>

CAUTION

To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

| No. | Description            | Material                                | DIN*        | ASTM/AISI*   |  |
|-----|------------------------|---|-------------|--------------|--|
| 1   | Body                   | Cast Iron FC250                         | GG-25       | A126 Cl.B    |  |
| 2   | Cover                  | Cast Iron FC250                         | GG-25       | A126 Cl.B    |  |
| 3   | Float                  | Stainless Steel SUS316L                 | 1.4404      | AISI316L     |  |
| 4   | Sleeve                 | Stainless Steel SUS420F                 | 1.4028      | AISI420F     |  |
| (5) | Float Cover            | Stainless Steel SUS304                  | 1.4301      | AISI304      |  |
| 6   | Cover Gasket           | Graphite/Stainl. Stl /SUS316L           | -/1.4404    | - /AISI316L  |  |
| 7   | Cover Bolt             | Carbon Steel SS400                      | 1.0037      | A6           |  |
| 8   | O-Ring                 | Synthetic Rubber EPR                    | EPR         | D2000CA      |  |
| 9   | Main Valve Seat Bolt   | Alloy Steel SCM435                      | 1.7220      | AISI4135     |  |
| 10  | Snap Ring              | Stainless Steel SUS304                  | 1.4301      | AISI304      |  |
| 11) | Stopper Ring           | Stainless Steel SUS420F                 | 1.4028      | AISI420F     |  |
| 12  | Relief Valve Gasket    | Soft Iron SUYP                          | 1.1121      | AISI1010     |  |
| 13  | Drain Plug             | Carbon Steel SS400                      | 1.0037      | A6           |  |
| 14) | Turn Stopper           | Stainless Steel SUS304                  | 1.4301      | AISI304      |  |
| 15  | Main Valve             | _                                       | _           | _            |  |
| 16  | Main Valve Seat        | -                                       |             | _            |  |
| 17  | Cylinder               | Stainless Steel SUS304                  | 1.4301      | AISI304      |  |
| 18  | Piston Ring Set        | Stainl. Stl./Fluorine Resin SUS304/PTFE | 1.4301/PTFE | AISI304/PTFE |  |
| 19  | Piston                 | Stainless Steel SUS304                  | 1.4301      | AISI304      |  |
| 20  | Valve Cover            | Cast Iron FC250                         | GG-25       | A126 Cl.B    |  |
| 21) | Plug                   | Malleable Cast Iron FCMB27-05           | 0.8135      | A47 Gr.32510 |  |
| 22  | Lock Release Valve Cap | Stainless Steel SUS303                  | 1.4305      | AISI303      |  |
| 23  | Lock Release Valve     | Stainless Steel SUS420F                 | 1.4028      | AISI420F     |  |
| 24  | V-Ring Packing         | Fluorine Resin PTFE                     | PTFE        | PTFE         |  |



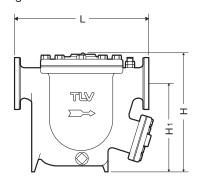
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## **Consulting & Engineering Service**

### **Dimensions**

#### ● J10 Flanged

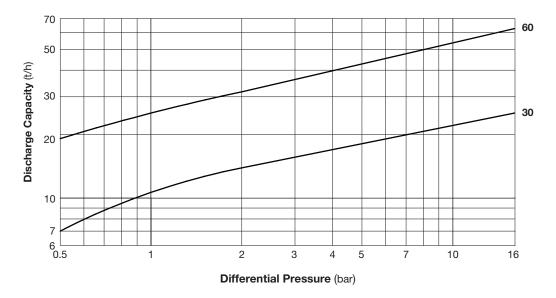


| J10  | Flange   | ed           |         |       |         |     |                | (mm)            |
|------|----------|--------------|---------|-------|---------|-----|----------------|-----------------|
|      | L        |              |         |       |         |     |                | \A/-:           |
| Size | DIN 2501 | 1 ASME Class |         |       |         | Н   | H <sub>1</sub> | Weight*<br>(kg) |
|      | PN16     | 125FF        | (150RF) | 250RF | (300RF) |     |                | (Ng)            |
| 100  | FOF      | FOF          | FOF     | C11   | C11     | E10 | 205            | 101             |

() No ASME standard exists for cast iron; machined to fit steel flanges Class 125 FF can connect to 150 RF, 250 RF can connect to 300 RF Other standards available, but length and weight may vary \* Weight is for Class 250 RF

Installation of a strainer (TLV-Y3/YF/YDF or equivalent) at the trap inlet is recommended.

## **Discharge Capacity**



- 1. Capacities are based on continuous discharge of condensate 6°C below saturated steam temperature.
- 2. Differential pressure is the difference between the inlet and outlet pressure of the trap.
- 3. Select the closest model with a capacity greater than the actual condensate load multiplied by a safety factor of 1.2.



DO NOT use traps under conditions that exceed maximum differential pressure, as condensate backup will occur!



Specifications subject to change without notice.

