# FLOATDYNAMIC® STEAM TRAP

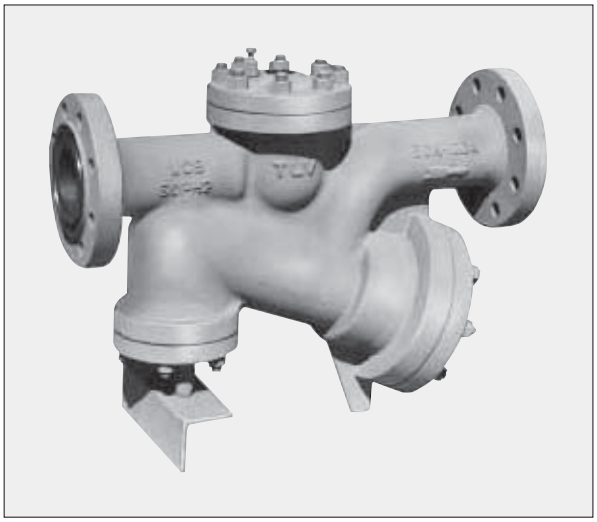
## MODEL JH15 CAST STEEL

**HIGH CAPACITY STEAM TRAP WITH FREE FLOAT PILOT MECHANISM**

## Features

**High pressure, inline maintainable, steam trap with free float and piston combination for discharge of high condensate 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. Two built-in screens with large surface area ensure trouble-free operation.



## Specifications

| Model | | JH15E-21, JH15M-21, JH15S-21 | JH15E-46, JH15M-46, JH15S-46 |
|---|---|---|---|
| Connection | | Flanged | |
| Size (DN) | | DN 100 | |
| Max. Operating Pressure (barg) | PMO | 21 | 46 |
| Max. Differential Pressure (bar) | ΔPMX | 21 | 46 |
| Min. Differential Pressure (bar) | | 0.5 | |
| Max. Operating Temperature (°C) | TMO | 400*/425 | |

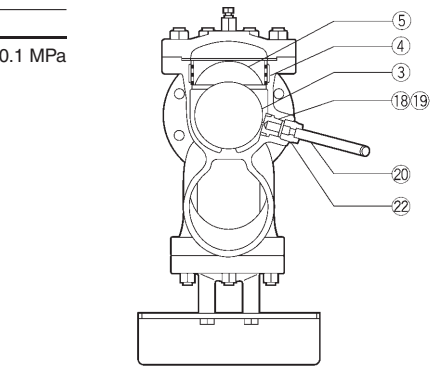
PRESSURE SHELL DESIGN CONDITIONS (**NOT** OPERATING CONDITIONS): 1 bar = 0.1 MPa
Maximum Allowable Pressure (barg) PMA: 50
Maximum Allowable Temperature (°C) TMA: 400*/425
* With PN Flange

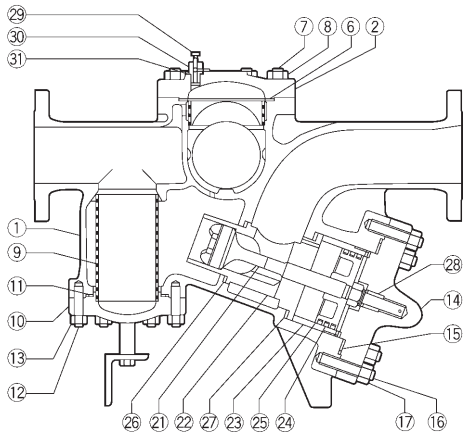
| No. | Description | Material | DIN* | ASTM/AISI* |
|---|---|---|---|---|
| ① | Body | Cast Steel A216 Gr.WCB | 1.0619 | — |
| ② | Cover | Carbon Steel S25C | 1.1158 | AISI1025 |
| ③ | Float | Stainless Steel SUS316L | 1.4404 | AISI316L |
| ④ | Float Screen | Stainless Steel SUS430 | 1.4016 | AISI430 |
| ⑤ | Float Cover | Stainless Steel SUS304 | 1.4301 | AISI304 |
| ⑥ | Cover Gasket | Graphite/Stainless Steel SUS304 | – /1.4301 | – /AISI304 |
| ⑦ | Cover Bolt | Alloy Steel SNB16 | 1.7711 | A193 Gr.B16 |
| ⑧ | Cover Nut | Carbon Steel S45C | 1.0503 | AISI1045 |
| ⑨ | Main Valve Screen inside/outside | Stainless Steel SUS304/430 | 1.4301/1.4016 | AISI304/430 |
| ⑩ | Screen Cover | Cast Steel A216 Gr.WCB | 1.0619 | — |
| ⑪ | Screen Cover Gasket | Graphite/Stainless Steel SUS304 | – /1.4301 | – /AISI304 |
| ⑫ | Screen Cover Bolt | Alloy Steel SNB7 | 1.7225 | A193 Gr.B7 |
| ⑬ | Screen Cover Nut | Carbon Steel S45C | 1.0503 | AISI1045 |
| ⑭ | Valve Cover | Cast Steel A216 Gr.WCB | 1.0619 | — |
| ⑮ | Valve Cover Gasket | Graphite/Stainless Steel SUS304 | – /1.4301 | – /AISI304 |
| ⑯ | Valve Cover Bolt | Alloy Steel SNB7 | 1.7225 | A193 Gr.B7 |
| ⑰ | Valve Cover Nut | Carbon Steel S45C | 1.0503 | AISI1045 |
| ⑱ | Orifice | — | — | — |
| ⑲ | Orifice Gasket | Soft Iron SUYP | 1.1121 | AISI1010 |
| ⑳ | Connector Pipe | Stainless Steel SUS304 | 1.4301 | AISI304 |
| ㉑ | Main Valve | — | — | — |
| ㉒ | Valve Seat | — | — | — |
| ㉓ | Cylinder | — | — | — |
| ㉔ | Piston Ring Set** | Carbon/Stainless Steel SUS304 | – /1.4301 | – /AISI304 |
| ㉕ | Piston | Stainless Steel SUS303 | 1.4305 | AISI303 |
| ㉖ | Small Valve Seat Gasket | Graphite/Stainless Steel SUS304 | – /1.4301 | – /AISI304 |
| ㉗ | Large Valve Seat Gasket | Graphite/Stainless Steel SUS304 | – /1.4301 | – /AISI304 |
| ㉘ | Sleeve | Stainless Steel SUS420F | 1.4028 | AISI420F |
| ㉙ | Air Vent Valve Stem | Stainless Steel SUS304 | 1.4301 | AISI304 |
| ㉚ | Air Vent Valve Body | Stainless Steel SUS303 | 1.4305 | AISI303 |
| ㉛ | Air Vent Valve Gasket | Soft Iron SUYP | 1.1121 | AISI1010 |

* Equivalent materials ** 1 piston ring on JH15-21, 3 on JH15-46

**⚠ CAUTION**

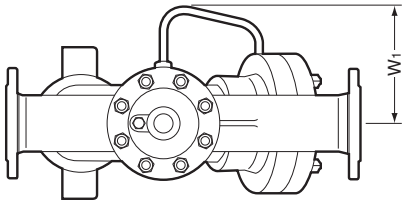
To avoid abnormal operation, accidents or serious injury, do not use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

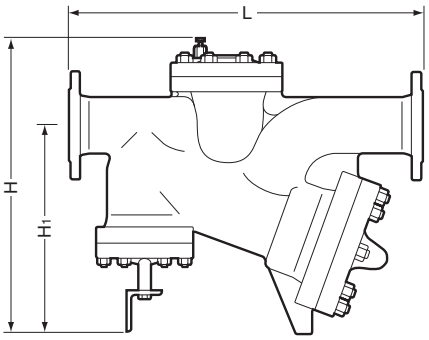


## Dimensions

● **JH15** Flanged



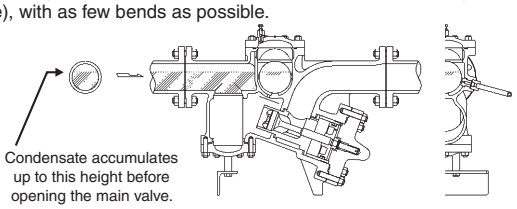

**JH15** Flanged (mm)

| Model | DN | L | | | | | | H | H1 | W1 | Weight* (kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DIN 2501 | | | ASME Class | | | | | | |
| | | PN25/40 | PN63 | PN100 | 150RF | 300RF | 600RF | | | | |
| JH15-21 | 100 | 750 | — | — | 750 | 766 | — | 635 | 440 | 250 | 171 (182) |
| JH15-46 | | | 762 | 774 | — | | 792 | | | | |

Other standards available, but length and weight may vary
* Weight is for DIN PN 25/40, (PN 100)

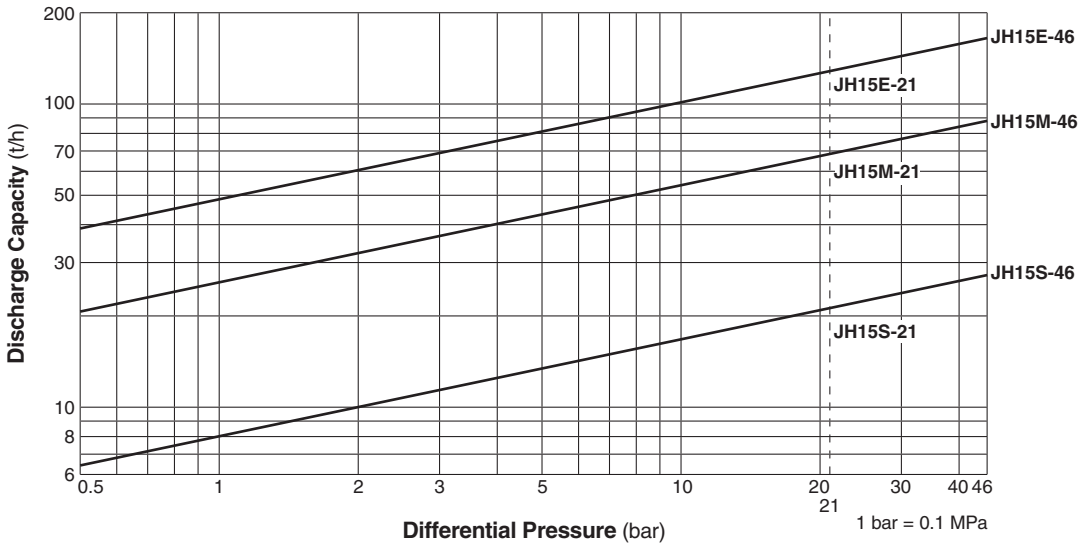
Note: Piping Arrangement

The horizontal length of both sides, inlet and outlet, should be as long as possible (5 m or more), with as few bends as possible.




The inlet pipe operates as part of the main body for JH15. If the inlet pipe is longer, then more condensate can be discharged with each operation cycle. If more condensate is discharged with each cycle, fewer cycles are required to discharge the condensate, reducing wear and extending service life.
Furthermore, due to the force of discharged condensate, the straight horizontal run of the outlet piping should be as long as possible to minimize vibration (shock) to the secondary side piping, etc.
Consult with TLV in case of difficulties with piping arrangement.

## Discharge Capacity




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

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

**Manufacturer**
TLV CO., LTD.
Kakogawa, Japan
is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001/ISO 14001