



# FLOATDYNAMIC® STEAM TRAP

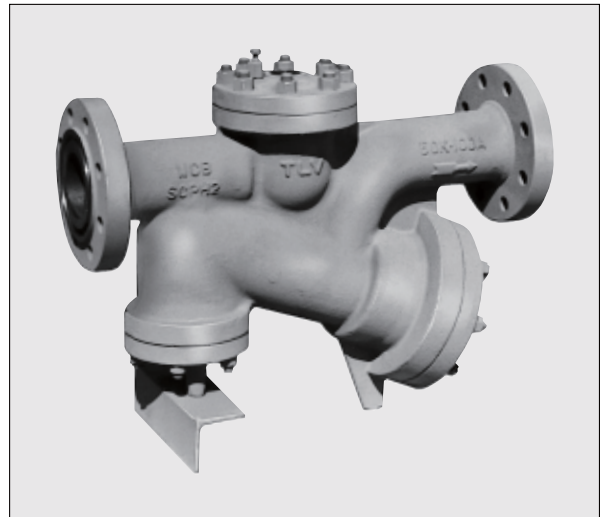
## MODEL JH15

### HIGH CAPACITY CAST STEEL STEAM TRAP WITH FREE FLOAT PILOT MECHANISM

#### Features

High pressure, cast steel, 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 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 (mm)	100	
Max. Operating Pressure (MPaG) PMO	2.1	4.6
Max. Differential Pressure (MPa) ΔPMX	2.1	4.6
Min. Differential Pressure (MPa)	0.05	
Max. Operating Temperature (°C) TMO	425	

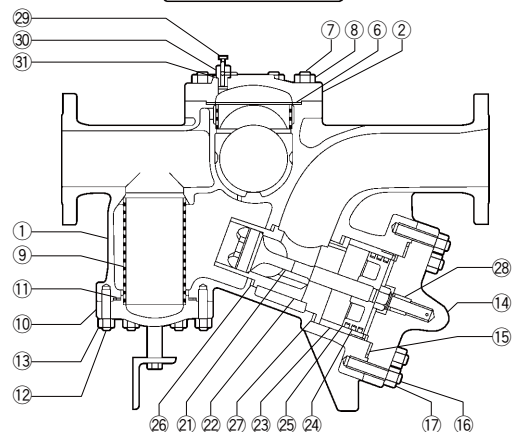
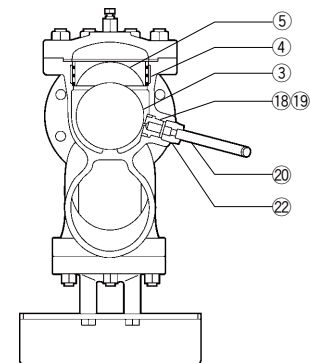


To avoid abnormal operation, accidents or serious injury, do not use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS):  
 Maximum Allowable Pressure (MPaG) PMA: 5.0  
 Maximum Allowable Temperature (°C) TMA: 425

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

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

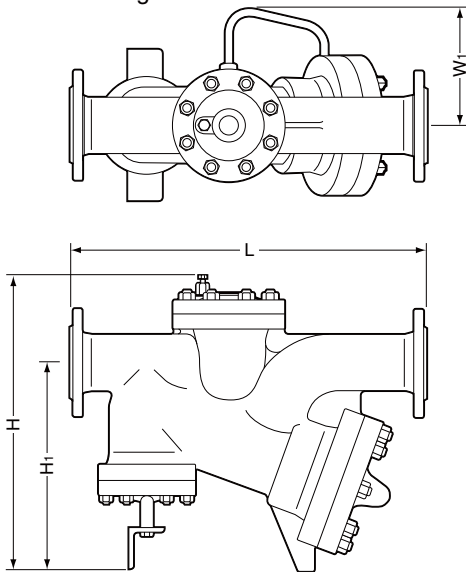


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\* Equivalent \*\* 1 piston ring on JH15-21, 3 on JH15-46

**Dimensions**

● **JH15 Flanged**



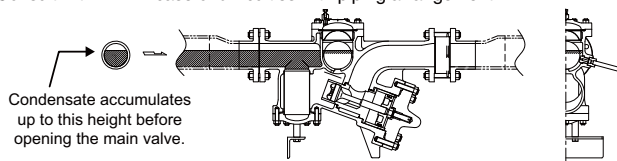
**JH15 Flanged** (mm)

Model	Size	L			H	H <sub>1</sub>	W <sub>1</sub>	Weight* (kg)
		ASME Class						
		150RF	300RF	600RF				
JH15-21	100	750	766	—	635	440	250	176 (195)
JH15-46		—		792				

Other standards available, but length and weight may vary  
 \* Weight is for Class 300 RF (600 RF)

**Note: Piping Arrangement**

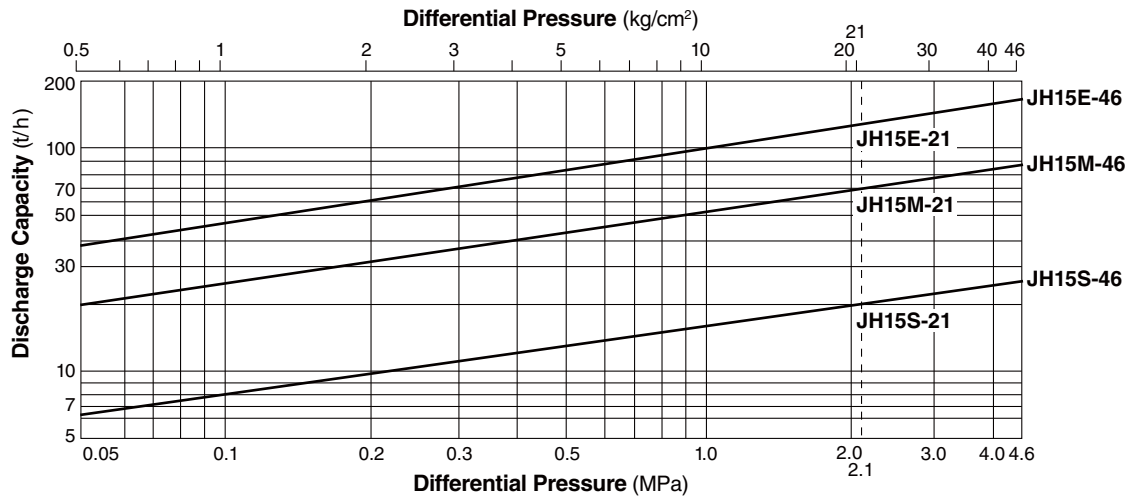
- The horizontal piping sections should be sized according to the condensate load and velocity, without sharp bends, and using eccentric reducers for pipe size adjustment.
- A check valve must be installed on the outlet side.
- Install air bleed line and valve, and discharge safely to grade.
- Consult with TLV in case of difficulties with piping arrangement



Inlet horizontal piping		Outlet piping**
Length (m)	Size (mm)	
1.0*	300*	Size the horizontal and vertical piping sections according to the condensate load and velocity. Use the TLV Engineering Calculator or ToolBox app, "Condensate Recovery Pipe Sizing for Condensate Recovery Line by Velocity" function. Recommended fluid velocities: • Flash steam: approx. 30 to 35 m/s • Condensate component: ≤ 2 m/s
1.25	250	
1.5	200	
2.5	150	
3.5	125	
5.0	100	

\* Recommended by TLV \*\* Schedule 160 piping recommended

**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.



DO NOT use this product 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

